

WP 2:

"Business Opportunities in remote regions"

The Latvian Case Study

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1. Introduction

This report is based on a large number of interviews, transport sector reports, foreign trade data and case studies on the Baltic States.

Report includes summary of interviews of transport policy makers, logistics operators, and spatial planners in Latvia about impact of transport system on national economy and people's lives and about the state of co-operation between business, logistics operators and spatial planners in this question.

The main goal of interviews - identification vision of different actors involved in the process of planning and development of transport system and spatial planning on real state and possible decisions in this area.

The main tasks of investigation are identification of:

- ❑ Past and present operations and possible development plans,
- ❑ Needs of transport infrastructure and logistics centres as component of trade development,
- ❑ Problems for development concerning legislation and regulations,
- ❑ Problems in the spatial planning processes and co-operation between logistics operators, transport policymakers and planners,
- ❑ Co-operation between business, logistics operators and authorities in charge of regional and traffic planning etc.

2. Methodology

Personal interviews (face to face), phone-based and Internet-based survey were used as the data collection methods. 37 interviews were conducted.

Within this paragraph the authorities/organisations, that play a role in national and regional spatial planning and freight-transport policy, are listed, short descriptions of their responsibilities and competencies, as well as short descriptions of the formal relations between these authorities are given.

List of contact persons from state and regional transport and spatial planning authorities is presented in Table 1, list of contact persons from transport and logistics organisations is presented in Table 2, list of contact persons from academic and research institutions is presented in Table 3.



Table 1. List of contact persons from state and regional transport and spatial planning authorities.

Name of the Organisation	Website	Name of the contact person	Address	Contact information	Positions of contact persons and responsibilities
Ministry of Transport and Communications of the Republic of Latvia	www.sam.gov.lv	Ainars Slesers	3, Gogoļa Str., Riga, LV-1743, Latvia	(+371) 7028222 satmin@sam.gov.lv	Minister of Transport and Communications of the Republic of Latvia
Ministry of Transport and Communications of the Republic of Latvia	www.sam.gov.lv	Anna Butuzova	3, Gogoļa Str., Riga, LV-1743, Latvia	(+371)7028347 Anna.Butuzova@sam.gov.lv	Transit Policy Department Senior Officer, Intermodal transport issues
Ministry of Transport and Communications of the Republic of Latvia	www.sam.gov.lv	Andris Maldups	3, Gogoļa Str., Riga, LV-1743, Latvia	(+371) 7028320 Andris.Maldups@sam.gov.lv	Transit Policy Department , Director, Logistics and transit
State Stock Company Latvian Railway	www.ldz.lv	Eriks Smuksts	3, Gogoļa Str., Riga, LV-1743, Latvia	(+371) 723-4401 ers@ldz.lv	Director of Freight Shipment Department
Ministry of Regional Development and Local Government	www.rapl.gov.lv	Dzintra Upmace	Lacplesa 27, Riga, LV - 1011, Latvia	(+371)-7770435 dzintra.upmace@rapl.gov.lv	Director of National and regional planning division
Riga City Council	www.riga.lv	Andrejs Pozarnovs	Ratslaukums 1, Riga, LV-1539, Latvia	(+371)-7026208 Andrejs.Pozarnovs@riga.lv	Chairman of Transport Committee of Riga City Council
Riga City Council	www.satdep.lv	Ivars Zarumba	Pertrudes 36, LV - 1011, Latvia	(+371)-7012700 Ivars.Zarumba@satdep.rcc.lv	Director of Transport Department of Riga City Council
Daugavpils City Council	www.daugavpils.lv	Rita Strode	Kr.Valdemara 1, Daugavpils, LV-5400, Latvia	+371-5404331 dome@mbox.latg.lv	Mayor of Daugavpils City

Table 2. List of contact persons from transport and logistics organisations

Name of the Network and Contact person	Transport related activities/role
<p>Latvian Transport Development and Education Association (LTDEA) <i>President - Andris Gutmanis</i> <i>Gogola 3, Riga, Latvia</i> <i>Phone: (+371) 7028295;</i> <i>(+371) 7028294</i> <i>e-mail:</i> <i>gutmanis@sam.gov.lv</i></p>	<p>LTDEA co-ordinates research and educational programmes in the area of transport on the basis of an agreement between the LTDEA, Latvian Ministry of Transport and Latvian Ministry of Science and Education.</p> <p>The goals of LTDEA are:</p> <ul style="list-style-type: none"> to define results and recommendations from research projects as well as demonstration and pilot activities which will further the process of revitalising the transport business; to recommend activities (including new proposals) for implementation.

Name of the Network and	Transport related activities/role
<p>Logistics and Customs Brokers Club <i>President - Vilnis Borskis</i> <i>Kr.Valdemara 123, Riga,</i> <i>LV-1013, Latvia</i> <i>Phone (+371)-92033189</i> vilnis.borskis@lmba.lv</p>	<p>Basic activities are:</p> <ul style="list-style-type: none"> • Create and develop business logistics and customs clearance fields in Latvia both theoretically and in practice; • Establish an effective co-operation platform for all interested parties regarding business logistics and customs clearance; • Define qualification and education standards in the fields of customs clearance and business logistics..
<p>Latvian Association of International Road Haulers (Latvijas Auto) <i>President -Valdis Trezins</i> <i>Vesetas 9, LV-1013, Riga, Latvia</i> <i>Phone: (+371) 7389267</i> <i>e-mail: lauto@lauto.lv</i> http://www.lauto.lv/</p>	<p>«Latvijas Auto» Association embraces Latvia's freight and passenger transporters and forwarders and extends to them the privileges offered by international conventions and treaties regarding the international transport. In 1992, the Association became a full-fledged member of the International Road Transport Union, IRU, and since then it has been the national guarantor of the T.I.R. system in Latvia. The activities of the Association are focussed on the East-West and West-East routes. In the eastern direction, the busiest transport routes are those leading to CIS states, while the main destinations in the West are Germany, the Netherlands, Belgium, France, Italy, Denmark and Eastern European countries.</p>
<p>Latvian Transport Union <i>President: Vladimir Zvonarev</i> <i>Brivibas 48/50, Riga, LV-1011, Latvia, +371-9214708,</i> <i>vz21@navigator.lv</i></p>	<p>Union embraces Latvia's freight and passenger transporters and forwarders and extends to them the privileges offered by international conventions and treaties regarding the international transport.</p>
<p>Logistics and Customs Brokers Association of Latvia (LCBA) <i>Chairman: Aivars Taurins</i> aivars.taurins@schenker.com <i>Phone: 7373300, fax: 7373317</i> www.lmba.lv</p>	<p>LCBA's main goals are:</p> <ul style="list-style-type: none"> • Create and develop business logistics and customs clearance fields in Latvia both theoretically and in practice; • Establish an effective co-operation platform for all interested parties regarding business logistics and customs clearance; • Define qualification and education standards in the fields of customs clearance and business logistics.
<p>Association of Railway International Electronic Documents Circulation Operators (AED) <i>President - Sergey Shvedov</i> <i>Phone:+ 371- 5834949.</i> <i>Fax: + 371 - 5834949.</i> <i>E-mail: aed1@ dzeltr.lv</i> www.aedrail.net/</p>	<p>The aim of AED is to create a uniform information-environment for all participants of international freight transportation process - consignors, ship and port agents, railways, customs and other authorities of border and territorial control, logistic and forwarding organizations, customs brokers and other participants of external economic activity.</p>

Table 3. List of contact persons from academic and research institutions.

Name of the Research Institution and Contact person	Transport related activities/role
<p>Transport and Telecommunication Institute Igor Kabashkin, Lomonosova 1, Riga, LV-1019, Latvia, kiv.tsi.lv, +371-7100594, www.tsi.lv</p>	<p>Transport and Telecommunication Institute is the largest university-type accredited non-state technical higher education and research establishment in Latvia. Main directions of academic activities: Electronics and Telecommunications, Information Technologies and Computer Science, Management and Business Administration, Economics, Transport and Logistics. Main research activities: optimisation and modelling of transport systems, logistics, navigation satellite systems, air traffic control systems, telecommunication, transport telematics, applications of information technologies, business re-engineering. During last four years TTI has been involved in 9 European projects, 4 National research programmes, 8 Municipal research projects and more than 20 bilateral projects with local and foreign companies.</p>
<p>Transport Education and Research Centre, Ltd Indra Verpakovska, Gogola 3, Riga, LV-1743 Latvia, indra.verpakovska@sam.gov.lv, +371-7028294</p>	<p>The promoter and holder of Transport Education and Research Centre, Ltd. Is Latvian Transport Development and Education Association, represented by its Council. Main Activities:</p> <ul style="list-style-type: none"> ▪ Research, consultancy and educational projects in the field of transport for the purpose of implementing the National Transport Development Program 1996-2010 ▪ Organising educational and training courses and seminars in the transport related disciplines ▪ Preparing and publishing informative and educational materials ▪ Cooperation with the Latvian Transport Development and Education Association, transport universities, faculties, research institutes and consultancy firms
<p>Latvia University of Agriculture, Motor Vehicle Institute Gints Birzietis Čakstes bulv. 5 Jelgava LV-3001 Latvia, gbirz@cs.llu.lv, +371 9176304, www.llu.lv/Struktiv/Tehn_f/Tehn_fE.html</p>	<p>Core expertise:</p> <ul style="list-style-type: none"> ▪ Transportation technology and management ▪ Public transport ▪ Transport logistics ▪ Motor vehicle servicing ▪ Usage of motor biofuels
<p>Latvian Maritime Academy Janis Strauhmanis, Kronvalda boulevard, 6 Riga, LV-1206 Latvia, degeus.lma@bkc.lv +371-7320479</p>	<p>Involved in national research programme participation and organisation of conferences or seminars</p>
<p>Riga Technical University, Professors Group "Business Logistics and Transport Economics" Nikolajs Sprancmanis, 1 Kalku St. Riga LV 1050 Latvia, sesmi@adm.rtu.lv, +371- 7089375, www.rtu.lv</p>	<p>Core expertise: Public transport, Transport logistics</p>
<p>Telematics and Logistics Institute, Ltd Igor Kabashkin, Lomonosova 1. Riga, LV-1019, Latvia, tli@tsi.lv, +371-7100595, www.tsi.lv/page.php?Lang=en&T=4&M=0&ID=114</p>	<p>The Telematics and Logistics Institute (TLI) has been developed with the aim of making productive contributions to the continued progress of the transportation industry in Latvia by conducting applied research and development work in contemporary and future transportation issues. The broad objectives are to:</p> <ul style="list-style-type: none"> ▪ identify possible future directions, new designs and techniques for transportation infrastructure development and facility upgrading; ▪ introduce appropriate state-of-the-art technologies and recommend ways and means by which suitable technologies could be incorporated into our transportation systems; ▪ study the characteristics and unique features of our transportation systems, and propose ways to best service and

Name of the Research Institution	Transport related activities/role
	manage the existing infrastructure; <ul style="list-style-type: none"> generate cost-effective solutions to further improve the operational capacity and efficiency of the existing air, sea and land transportation systems.
Transport and Logistics Training and Consulting Centre, Ltd Vladimir Zvonarev, Lomonosova 1. Riga, LV-1019, Latvia, tli@tsi.lv , +371-9214708, vz21@navigator.lv	Business consulting and education activities in the field of transport operations and logistics

3. Policy concerning regional development in the regions

In 2004 Latvia was divided into six statistical regions (see Table 4).

Table 4. Area, Population and Population Density of Latvian Statistical Regions in Early 2005

	Area (% of the total)	Population (% of the total)	Number of inhabitants per km ²
Riga	0.5	31.7	2382.0
Riga region	15.7	15.9	36.1
Vidzeme	23.6	10.6	16.1
Kurzeme	21.1	13.5	22.8
Latgale	22.5	15.8	25.0
Zemgale	16.6	12.5	26.8

Marked social and economic differences between regions exist in Latvia. More than a half of the total **gross domestic product (GDP)** of Latvia is produced in Riga (see Table 5)¹. In 2002 Riga and Riga district together produced 63% of Latvian GDP. Cities of Daugavpils, Liepaja and Ventspils are in equal positions, each producing slightly more than 3% of Latvian GDP. Valmiera district has produced 1.9% of Latvian GDP (as many as Jelgava city) distinguishing itself among districts.

Table 5. GDP of Statistical Regions in 2002

Name of territory	GDP in real prices		GDP per capita	
	total in thousand LVL	% of total	LVL	% against the state average
Latvia	5 689 376	100	2 433	100
including:				
Riga	3 283 356	58	4 418	182
Pierīga	572 612	10	1 596	66
Vidzeme	354 951	6	1 407	58
Kurzeme	637 296	11	2 015	83
Zemgale	394 993	7	1 354	56
Latgale	442 871	8	1 176	48
Produced outside Latvia	3 296	0.1	x	x

¹ Regional GDP in 2002 was calculated in line with the improved methodology of Latvian GDP calculations in compliance with EU requirements. International practice indicates that such way of doing calculations is very labour-consuming and complicated process, for that reason the results are published with a deviation of approximately two years.

Riga is the only region, which exceeds the average level of the 10 new EU member states, reaching 138% against this level. Average indicator for Latvia makes 76% of this level; Kurzeme makes 63% and the poorest region Latgale makes only 37%. Unfortunately, the average level of all EU member states is still unattainable for Latvia (Figure 1).

Figure 1. GDP per Capita in 2002, by Purchasing Power Parity Standards (Provisional calculations, according to Eurostat forecasts)

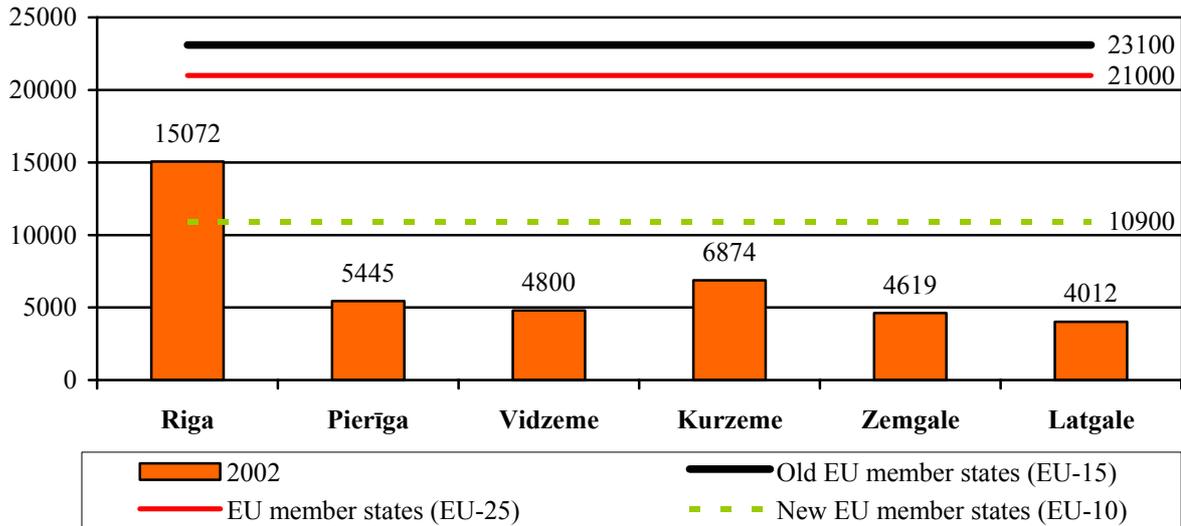
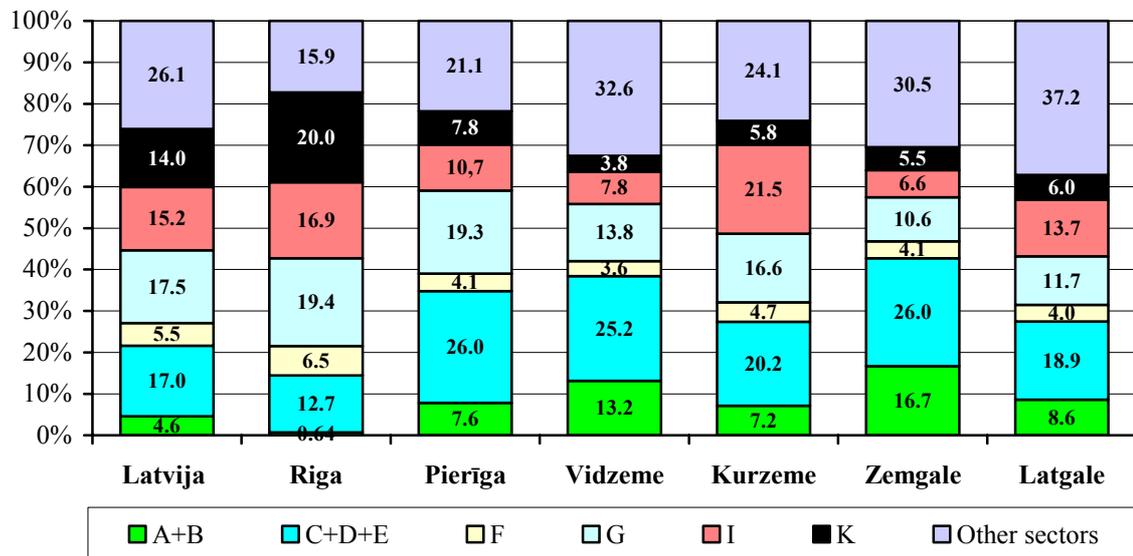


Figure 2. Contribution of Kinds of Activity to GVA in 2002



* A+B - agriculture, forestry and fishery; C+D+E - manufacturing; F - construction; G - trade; H - hotels; I - transport and communications; K - commercial services.

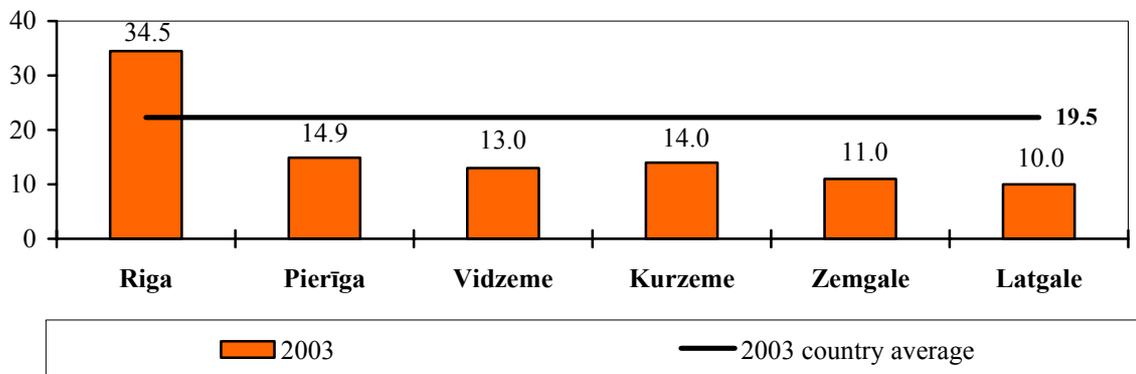
Manufacturing and trade sectors have the biggest proportions in Latvian regions, and trade is one of the most rapidly growing sectors (Figure 2). Big proportion of "other sectors" is characteristic to regions with the lowest GDP per capita. This is mainly



related to the fact that in other sectors the biggest share is made by the so-called public services (services provided by local government administration, education and health care institutions), which are provided to population irrespective of economic activity level.

Most of entrepreneurs prefer Riga region as the most suitable place for developing their business. In 2003 the number of economically active enterprises in Riga region was 25 385 while their total number in Latvia was 45 300. Number of enterprises in Riga region, Vidzeme, Kurzeme, Zemgale and Latgale regions was 5418, 3229, 4389, 3193 and 3686 respectively. In Latgale there were only 10 economically active enterprises per 1000 inhabitants, which was three times less than in Riga (see Figure 3). In 2003 the number of economically active enterprises in Latvia increased by 2766 enterprises, and the most significant increase was characteristic to Riga region (by 2008 enterprises).

Figure 3. Number of Economically Active Enterprises per 1000 Inhabitants



Foreign and intra-regional trade

After the recession in 1999 Latvian trade has been redirected from eastern to western markets. Latvia's economy has rebounded strongly on the back of robust export growth (particularly to the EU), significant foreign direct investment flows (particularly from Nordic countries) and more recently growing consumer spending.

Latvia's most important foreign trade partner in 2004 was Germany. The volume of Latvia's exports in current prices has increased compared to 2003. The declining difference between the total value of exports and imports is a positive sign - it was 77.1 percent in 2004 and 81.1 percent in 2003. The value of commodity exports in 2004 was €3.1 billion, a rise of almost €0.7 billion or 28 percent compared to the previous year. Wood and wood products comprise the most significant commodity group in the Latvian exports and constitute 31 percent of the total exports value. Base metals and articles of base metals 14 percent, as well as textiles and textile articles 11 percent are also important export groups. Compared to 2003, the volume of exports of base metals and articles of base metals raised the most.

The biggest loser in exports was fur skins and leather articles. In 2004 the exports to the EU countries was 77 percent of the total volume of Latvian exports and compared to 2003 it rose over €450 million or 24 percent. The exports of goods to CIS countries reached 12 percent of the total volume of Latvian exports and increased by €115 million. The value of imports in 2004 was €5.4 billion, up by €1.1 billion or 25 percent



compared to the previous year. The most important commodities in Latvian imports were machinery, mechanical appliances and electrical equipment with 20 percent of the total value of imports, as well as mineral products 13 percent and transport vehicles 11 percent. Compared to 2003, the sharpest rise was in imports of mineral products up by 61 percent. The imports of commodities from the EU countries reached 75 percent of the total volume of Latvian imports and increased by €0.8 billion or 25 percent. The imports of commodities from the CIS countries reached 17 percent of the total volume and increased by 44 percent.

4. Framework conditions to maintain and attract new business

4.1 Socio-economic measures

4.1.1. Taxes

Tax policy of Latvian government envisages decreasing the tax burden on entrepreneurship in order to promote economic development and ensure competitiveness of economy. To implement this goal, the following measures have been taken:

- the rate of social security contributions has been reduced from 38% in 1996 to 33.09% in 2003;
- corporate income tax rate has been lowered from 25% in 2001 to 15% in 2004;
- real estate tax rate has been brought down from the maximum level of 4% in 2000 to 1.5%.

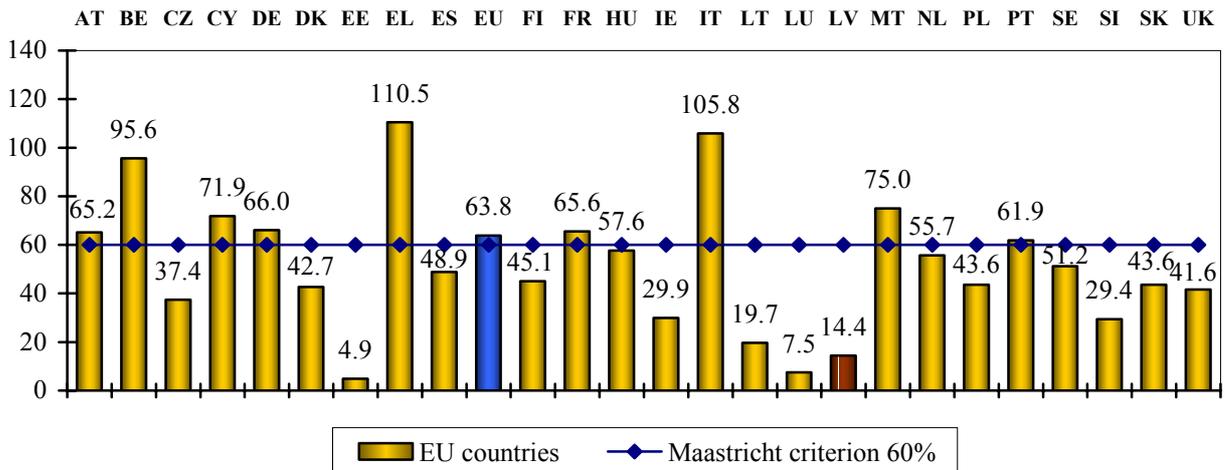
Due to the reduction of tax rates the tax revenues against GDP have dropped from 33% in 1998 to 27.5% in 2004. Meanwhile the tax base has been broadened, excluding taxable exemptions and improving administration of revenues.

The level of the **central government debt** in Latvia is the third lowest in the EU (see Figure 4). In 2004 the EU average level of central government debt was 63.8% of GDP. In 2004 the highest central government debt in percentage of GDP was fixed in Greece (110.5%), Italy (105.8%), Belgium (95.6%), Malta (75%), Cyprus (71.9%), Germany (66%), France (65.6%), Austria (65.2%) and Portugal (61.9%), while the lowest general government debt in percentage of GDP was registered in Estonia (4.9%), Luxembourg (7.5%), Latvia (14.4%) and Lithuania (19.7%).

During the last years the central government debt in Latvia has increased from 571 million LVL at the end of 2000 to 975 million LVL at the end of 2004, or from 12.2% to 13.2% of GDP (see Table 4). At the end of April 2005 the debt amounted to 951.5 million LVL. The law "On the State Budget for 2005" sets down the maximum central government debt in the amount of 1179.6 million LVL at the end of 2005.

Figure 4. Central Government Debt in EU Countries in 2004 (% of GDP)





*According to the ESA95 National Accounts System.

AT - Austria, BE - Belgium, CZ - Czech Republic, CY - Cyprus, DE - Germany, DK - Denmark, EE - Estonia, EL - Greece, ES - Spain, EU - EU-25 countries, FI - Finland, FR - France, HU - Hungary, IE - Ireland, IT - Italy, LT - Lithuania, LV - Latvia, MT - Malta, NL - Netherlands, PL - Poland, PT - Portugal, SE - Sweden, SI - Slovenia, SK - Slovakia, UK - United Kingdom.

To ensure financing of the central government budget deficit, the state attracts resources from internal and external capital markets, using a variety of financial instruments. Up to now Latvia has tapped international capital market several times, issuing Eurobonds in 1999, 2001 and 2004.

In 2004 Latvia issued Eurobonds with the hitherto largest volume (400 million EUR) and longest maturity (10 years). The opportunities to use instrument of Eurobonds in 2006 and 2007 are being evaluated at present. Volumes of borrowings and their maturity terms will depend on state budget performance indicators, situation in the financial market, central government debt portfolio indices and other influencing factors.

Table 6. Dynamics of Central Government Debt
(end of period, million LVL)

	2001	2002	2003	2004
Central government debt	712.9	756.1	846.3	975.0
including:				
internal debt	256.0	291.6	426.7	423.0
of which:				
short-term debt	28.4	37.9	52.7	73.0
medium-term debt	227.6	253.6	224.1	224.1
long-term debt	–	–	97.0	125.8
currency debt	–	–	52.7	–
external debt	456.9	464.5	419.6	552.0
of which:				
loans	222.2	209.2	137.6	133.1
Eurobonds	234.7	255.3	282.1	418.8
	(% of GDP)			
Central government debt	13.8	13.3	13.4	13.2
of which:				
internal debt	5.0	5.1	6.7	5.7
external debt	8.8	8.2	6.6	7.5

Table 7 reflects costs related to the central government debt. These costs are rising with the increase of the debt. According to forecasts, the costs of servicing the central government debt in 2005 will go up by 2.5 million LVL in comparison with the costs projected in 2004.

Table 7. Costs of Servicing the Central Government Debt

	2001	2002	2003	2004	2005 f
Central government debt servicing million LVL	39.3	44.2	46.6	49.0	51.5
% of general government consolidated budget expenditures	2.2	2.2	2.1	1.8	1.7
% of GDP	0.8	0.8	0.7	0.7	0.6

f - forecast of the Ministry of Finance

It is anticipated that in the coming years the costs related to servicing the central government debt will continue to grow, reaching 77 million LVL per year in 2009.

34% of all revenues in Latvian economy are redistributed through budget, including 28% of GDP through taxes. Total tax burden in Latvian economy should not be seen as high, since it is 9 percentage points lower than in the EU-15 countries and 1 percentage points lower than in the new EU member states² on average.

Table 8. General Government Consolidated Budget Revenues
(% of GDP)

	2000	2001	2002	2003	2004
Revenues	34.6	32.8	32.9	33.3	34.4
I Tax revenues	29.3	28.1	28.1	28.2	27.5
1. Indirect taxes	11.0	10.2	10.1	10.9	10.1
– value added tax	7.2	6.8	6.7	7.3	6.6
– excise tax	3.5	3.1	3.1	3.4	3.2
– customs tax	0.3	0.3	0.3	0.3	0.2
2. Income taxes and property taxes	8.1	8.3	8.4	8.1	8.4
– corporate income tax	1.6	1.9	1.9	1.5	1.7
– personal income tax	5.6	5.5	5.6	5.8	5.9
– property taxes	0.9	0.9	0.8	0.8	0.8
3. Social security contributions	10.0	9.3	9.3	8.9	8.7
4. Other taxes	0.2	0.3	0.3	0.3	0.3
II Non-tax revenues	5.3	4.7	4.8	5.2	6.9

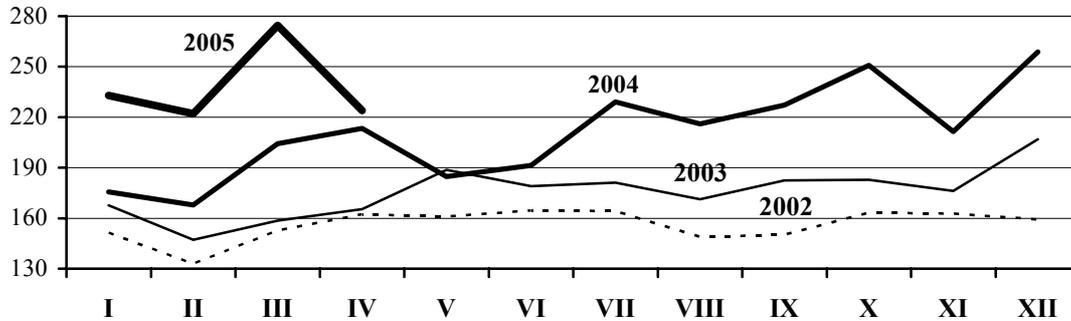
In 2004 the **general government consolidated budget revenues** were 2530.1 million LVL, exceeding the level reached in the preceding year by 20.1%. Growth of tax revenues (by 13.5%) was somewhat faster than the increase of the nominal GDP.

2004 was a successful year for both the central and local government budgets in terms of tax collection. Increase of the budget revenues was mostly influenced by higher collection of corporate income tax (increase by 36.1%) and personal income tax (increase by 18.6%).

² In this Section the data regarding the EU tax structure and rates are taken from the UN survey "Economic Survey of Europe", 2004 No.1.

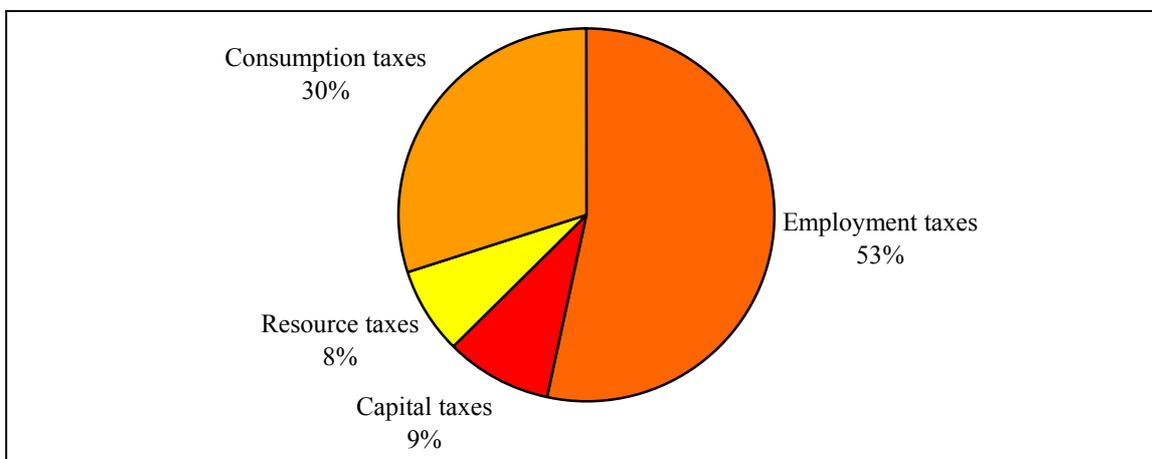
In the 1st quarter of 2005 the tax revenues increased by 20.5% in comparison with the respective period of 2003. The revenue increase was mostly influenced by higher collection of corporate income tax (increase by 47%) and excise tax (increase by 39.9%).

Figure 5. General Government Consolidated Budget Revenues by Months (million LVL)



Considering the structure of tax revenues by separate tax groups, which comprise taxes depending on their influence on production factors and consumption, it should be noted that the share of consumption and resource taxes has grown in 2004.

Figure 6. General Government Consolidated Budget Tax Revenues by Tax Groups in 2004 (%)



Slightly more than a half of all tax revenues or 14.6% of GDP is collection of **employment taxes** (social security contributions and personal income tax). The share of taxes in total labour costs in Latvia equalled to 44% in 2004. This is a relatively high indicator, mostly due to the low level of non-taxable income.

Social security contributions in the majority of the new EU member states are two times higher than collection of personal income taxes, while in the group of EU-15 states they are approximately on the same level. However it should be noted that these proportions differ considerably from state to state.

Among the new EU countries, flat personal income rate is being applied only in the Baltic States. The rest of the bloc's new members apply progressive personal income tax rate.

Starting with January 1, 2003 the new social security contribution rate, which is 2 percentage points lower than in the preceding year, took effect. This rate, which constitutes 33.09% of the gross wage, is one of the lowest in the group of the new EU member states (it was 42.6% in average 2003).

Despite lowering of the compulsory social security contribution rate in 2003, the collection of contributions in the last two years was higher than in the previous years (by 6.3% in 2003 and 14.1% in 2004) due to considerable rise of the average wage. In the 1st quarter of 2005 the collection of social security contributions was by 15.2% higher than in the respective period of the previous year.

Personal income tax revenues also increased by 18.6% in 2004 and 16.1% in the 1st quarter of 2005. Growth rate of personal income tax revenues in the 1st quarter of 2005 went down in comparison with the respective period of 2004 due to increased non-taxable minimum and raised tax allowance for dependent persons as of January 1, 2005.

Volume of state social security contributions and personal income tax payments is mostly affected by fluctuations of employment and wages. According to State Employment Agency data, the number of unemployed persons registered in the country at the end of March 2005 has decreased by 0.6 percentage points in comparison with the end of March 2004 and constitutes 8.6% of economically active population of the country.

The second biggest group of taxes is **consumption taxes** (value added tax, customs duties and excise tax on alcohol, tobacco, soft drinks, coffee and passenger cars).

85% of all taxes in this group are value added tax revenues. VAT rates are very strictly regulated in the EU member states. Two types of rates are allowed - standard rate not lower than 15% and two reduced rates not lower than 5%. Starting with January 1, 2003, alongside the standard VAT rate of 18%, also a reduced rate of 5% is applied in Latvia. This reduced rate may be applied to pharmaceuticals, infant food, press publications, guest accommodation and utilities. It should be noted that the average VAT rate is slightly higher in the new EU member states (20.2% in 2003) than in the EU-15 states (19.6%).

In 2004 the collection of value added tax slightly increased and was by 6% higher than in the preceding year. In the 1st quarter of 2005 the budget revenues from this tax increased very sharply (by 19.2%) in comparison with the respective period of the preceding year. Growth of value added tax in the 1st quarter was basically determined by increased total turnover and consumer price index and changed procedure of tax payment.

Due to Latvia's accession to the EU, customs tax revenues have dropped considerably by 8.7% in 2004 in comparison with the previous year and by 9.7% in the 1st quarter of 2005 in comparison with the respective period of 2004. Starting with May 1, 2004, customs tax is not applied to transportation of goods inside the EU but the customs tariffs set up by the EU are applied to goods imported from countries outside the EU. In 2004 the collection of excise tax on alcohol, tobacco, soft drinks, coffee and passenger cars slightly increased and was by 5.5% higher than in the previous year.



Volume of excise tax revenues in the 1st half of 2005 in comparison with the respective period of 2004 was affected by the change of excise tax rates on particular excise goods in 2004 and from January 1, 2005 as well as the fact that as from May 1, 2004 excise tax on passenger cars and motorcycles is not collected but the passenger car and motorcycle tax is collected; in the 1st quarter of 2005 the collection of passenger car and motorcycle tax amounted to 1.64 million LVL.

Excise tax revenues on tobacco products in the 1st quarter of 2005 were two times higher than in the respective period of 2004. This can be explained by increased combined rate of excise tax on tobacco products as from January 1, 2005; as a result, a big volume of tobacco products was put into circulation in December 2004, creating considerable reserves in the domestic market for future months.

In the 1st quarter of 2005, excise tax revenues on alcoholic beverages increased by 11.9%, excise tax revenues on beer increased by 1.2%, but excise tax revenues on other excise goods decreased by 57.5%.

Capital taxes (corporate income tax and property related taxes) in 2004 amounted to 9% of all taxes, while in 2001 they made 10%. Since 2002 a gradual reduction of the corporate income tax rate was started, bringing the rate down from 25% in 2001 to 15% in 2004. In 2002 the rate was 22% but in 2003 it amounted to 19%.

In 2004 the corporate income tax rate in the new EU member states was substantially lower than in the EU-15 countries (respectively 23.2% and 29.3% on average). Moreover, in the majority of the new member states these rates were reduced in 2004.

Due to lowered corporate income tax rate, the collection of this tax in 2003 dropped by almost 15% in comparison with the preceding year. In 2004 the corporate income tax revenues considerably increased (by 36.1%), compared with 2003. In the 1st quarter of 2005 the corporate income tax revenues have went up by 47% in comparison with the respective period of 2004, and this is related to increased profit of taxpayers.

Resource tax group comprises two taxes, namely, excise tax on oil products and natural resource tax. The excise tax makes the biggest share in the group (95% in 2004). Proportion of these two taxes in the total tax revenues has slightly increased in the last years.

After accession to the EU, a time deviation arose also for the revenues which are made up by excise tax on oil products and for the value added tax, while the total collection in 2004 grew considerably faster (by 15.7%) in comparison with 2003. In the 1st quarter of 2005 the increase of excise tax revenues on oil products was 48.1% in comparison with the respective period of 2004.

Payments of natural resource taxes are directly linked with economic activities of Latvian companies and environmental loads caused by them. Therefore, tax revenues are growing, as the total economic activity increases, and are decreasing, as companies and local governments implement environmental protection measures. Collection of this tax in 2004 was by 16% lower than in 2003, while in the 1st quarter of 2005 it went up and was higher (by 6.6%) than in the respective period of the previous year.

4.1.2. Employment

Economic development in recent years has made a positive impact on the situation in labour market. Although the population of working age (15-64 years) continues diminishing, the number of economically active persons is increasing and the rate of employment is growing. In 2003 the proportion of economically active persons in this age group was 69.2% but in 2004 it increased by 0.5 percentage points.

Table 9. Main Indicators of Employment and Unemployment¹

Indicators	2000	2001	2002	2003	2004
Population aged 15-64 years (thousand)	1597.3	1592.8	1590.4	1588.4	1586.1
Economically active persons aged 15-64 years (thousand)	1074.7	1082.0	1094.8	1099.6	1105.5
Employed persons (thousand)	917.6	937.5	962.5	981.5	988.2
Participation rate (%)	67.2	67.7	68.8	69.2	69.7
Employment rate (%)	57.5	58.6	60.4	61.8	62.3
Unemployed persons (thousand)	158.3	144.6	134.5	119.2	118.6
Unemployment rate (%)	13.7	12.9	12.6	10.4	9.8
Registered unemployed persons (end of year, thousand)	93.3	91.6	89.7	90.6	90.8
Registered unemployment rate (end of year, %) ²	7.8	7.7	8.5	8.6	8.5

¹ In table and further text indicators of employment for population aged 15-64 and unemployment for population aged 15-74.

² Share of registered unemployed persons in economically active population from 2002, according to the new methodology

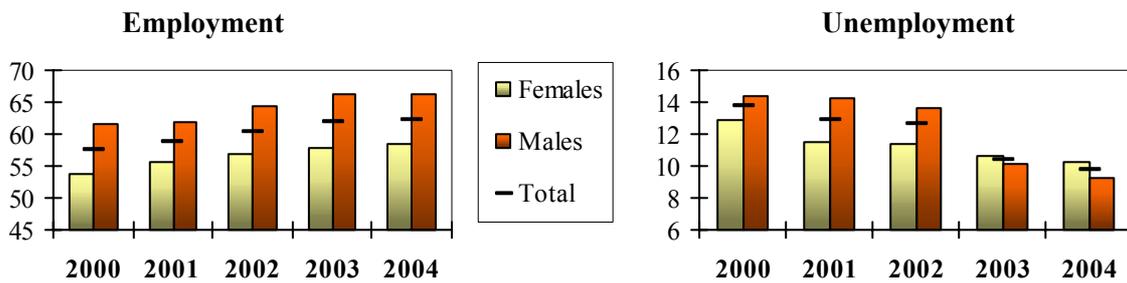
In the last five years (2000-2004) the **employment rate** has increased by 3.5 percentage points. In 2000 the employment rate in Latvia was 5 percentage points lower than the EU-25 average but in 2003 the lag behind was only 1.2 percentage points and in 2004 - only 1 percentage point.

The Lisbon Strategy has set a goal to achieve general employment rate of 70% by 2010. This goal is already achieved by Denmark, Sweden, Netherlands and the United Kingdom. Cyprus, Austria, Finland and Portugal have reached an intermediate goal - employment rate of 67% by 2005.

Female employment in Latvia is still higher than in the EU-25 on average, and this difference tends to grow, as in 2002 the female employment rate in Latvia exceeded the EU-25 rate by 2.1 percentage points but the difference reached 2.8 percentage points in 2003 and 2.7 percentage points in 2004. This can be explained by low proportion of manufacturing in Latvian economy and bigger share of the sectors with higher proportion of women in the number of employed persons (trade, restaurants and other services).

Male employment in Latvia tends to increase every year but still lags behind the average EU-25 rate (by 6.8 percentage points in 2002, 4.8 percentage points in 2003 and 4.5 percentage points in 2004).

Figure 7. Employment and Unemployment in Latvia
(percentage, 2000-2004)



Source: Eurostat, New Cronos, 01.06.2005.

Male employment exceeded female employment by 8.2 percentage points in 2003 and 8 percentage points in 2004.

Male employment increased by 1.8 percentage points in 2003 and 0.3 percentage points in 2004, while female employment went up by 1.1 percentage points in 2003 and 0.5 percentage points in 2004.

Employment rates in Latvian regions still are very different. In 2004 the employment rate in Riga increased by 1.3 percentage points and reached 67.3%, in Kurzeme region it increased by 1.2 percentage points to 62%, while in Latgale region the employment rose by 1.5 percentage points and reached 53.6%. Employment decreased by 0.4 percentage points to 60.2% in Vidzeme region and by 2.6 percentage points to 59.6% in Zemgale region. 70% of all employed persons in 2004 were employed in cities and towns, while 30% were employed in the countryside. The number of employed persons has markedly increased since 2000 (by 7.7%). Still the growth of employment is notably lower than the growth of GDP. These processes are objective for economy of Latvia, given the low level of its productivity. Therefore, also the further growth of economy will be mostly oriented to productivity growth and less to the growth of the number of employed people.

Number of employed persons both in 2003 and 2004 grew at a slower pace than in the previous years; the number increased by 2% in 2003 but by merely 0.7% in 2004. The highest growth in the number of employees in 2004 was observed in the electricity, gas and water supply (by 18.4%), construction sector (by 16.9%) and financial mediation (by 14.7%) (see Table 10).

Table 10. Number of Employed Persons by Kind of Activity
(Labour Force Surveys by CSB, thousand persons, aged 15-64)

	1996	2000	2001	2002	2003	2004
Total	925.6	917.6	937.5	962.5	981.5	988.2
Agriculture	128.4	104.4	107.4	103.4	96.7	88.5
Forestry	20.1	19.4	22.9	34.6	30.6	34.9
Manufacturing	180.9	168.3	164.2	164.0	171.2	161.1
Electricity, gas and water supply	20.9	20.3	19.3	22.0	20.7	24.5
Construction	50.4	55.1	66.6	59.6	73.5	85.9
Wholesale and retail trade; repair of motor vehicles, motorcycles, personal and household goods	116.3	144.7	150.2	146.3	150.4	148.7
Hotels and restaurants	15.6	22.0	22.1	24.2	24.4	25.4
Transport, warehousing and communications	83.3	78.3	77.3	84.8	93.2	93.5

Financial mediation	14.3	12.3	13.7	12.7	15.6	17.9
Commercial services	30.6	43.6	39.5	37.1	40.5	38.4
Public administration and defence; compulsory social security	59.5	69.9	66.9	66.7	66.5	71.6
Education	91.9	83.6	85.8	84.5	75.7	79.2
Health and social care	57.0	46.5	47.9	58.5	57.0	52.8
Other services	48.1	43.3	48.1	51.2	55.2	57.9

In 2004 Latvia was the 16th among EU member states by the employment rate but the **unemployment** rate indicators in Latvia were among the worst in the EU. Only Lithuania, Spain, Slovakia and Poland had higher unemployment rates than Latvia.

Still, an undeniable progress is reached in the last years - the unemployment rate in comparison with 2000 has decreased from 14.4% in 2003 and 10.4% in 2004 (according to data of Labour Force Survey by CSB).

The highest unemployment remains in Latgale region. At the end of 2004 the unemployment rate exceeded 25% level in three districts of Latgale region: Ludza (27.2%), Rzekne (26.2%) and Balvi (25.9%) districts. The high unemployment is determined by poorly developed business, poor self-employment and insufficient traffic infrastructure.

The lowest unemployment levels are in Riga city and Ogre, Riga, Tukums and Saldus districts (4.5%, 5.5%, 5.7%, 6.2%, and 6.5% respectively). Share of the unemployed which have not been able to find a job during one year in the total number of unemployed people is gradually decreasing; this share equalled to 39% in 2004 and 41% in 2003.

The majority of all unemployed are representatives of simple low-skilled professions, while the highest employment rate is among the people with higher education (83.6% of people with higher education were employed in 2004).

More than a half of the unemployed at the end of 2003 was aged 30-49 years. The share of pre-pension age unemployed in the total number of unemployed persons increases every year and this is mostly related to increase of pension age according to the law on pensions.

Registered unemployment rate in Latvia was 8.6% at the end of 2003 and 8.5% at the end of 2004.

4.1.3. Labour Costs

In 2002 and 2003, as wages grew slightly faster than productivity (in nominal terms) in the national economy, labour costs per production unit increased, but in 2004 productivity went up at a more rapid pace. Increase of wages for growth in real terms considerably exceeded growth of productivity.

This process is not equally fast in all sectors of national economy. Labour costs increase much more rapidly in service sectors or so-called non-trading sectors, which are not related to external competition. Unit labour costs in manufacturing decreased instead of growing.



At the current stage of development, the Latvian economy undergoes quite essential structural changes characterised by three main directions. One direction regards the general economic growth, which is mostly based on productivity growth and less related to employment increase.

Figure 8. Labour Costs
(percentage changes against the preceding year)

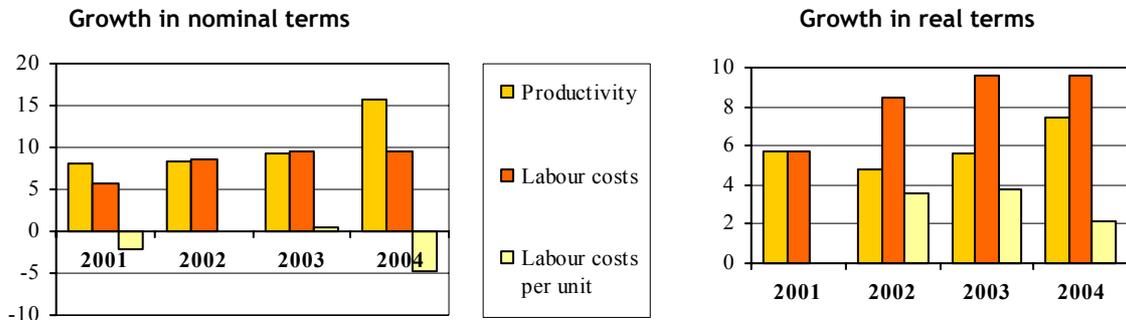
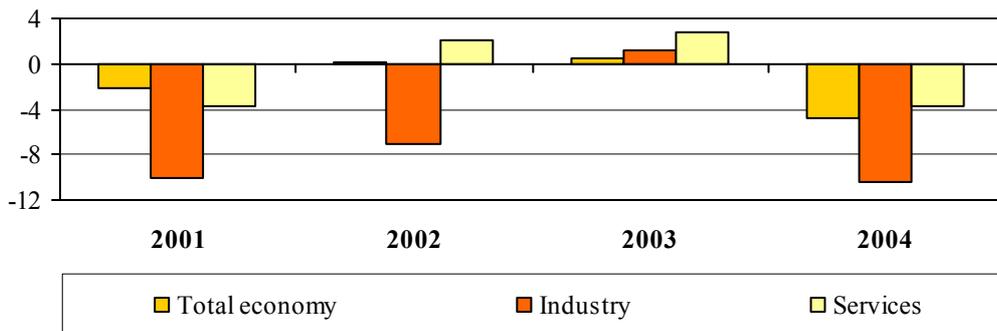


Figure 9. Unit Labour Costs
(percentage changes against the preceding year)



The second process is related to rise of general level of prices. Equalisation of prices mostly pertains to increase in prices for services, which in turn are closely connected with the third process, namely, rise of wages in sectors of services.

Wages of the employed in Latvia are very low in comparison with the EU average indicators. In majority of sectors these wages make 15-20% of the EU average. Therefore, increase of wages objectively may occur faster than dynamics of the other two equalisation (convergence) processes. As productivity in Latvia presently grows more rapidly in industry, increase of wages in this sector is compensated by productivity growth and unit labour costs are decreasing. Such compensation is not so typical in service sectors and unit labour costs in these sectors increased, even though in 2004 labour costs per production unit decreased also in service sectors.

It is clear that equalisation of wages is an objective process to be taken into consideration in the future. The main question is how fast this will happen. It is affected by several factors, and productivity increase in export sectors has the determinant role in long term.

4.1.4. Employment Policy

The key goal of the employment policy in Latvia is to increase the level of employment, in order to reach in future the strategic indicators set by the EU, and to address issues of unemployment on the basis of successful economic growth.

Taking into account the specific situation of Latvia in labour market in relation to employment policy priorities of Latvia, the following tasks have been outlined in employment plans and other documents in the recent years:

- ❑ to develop active and preventive employment policies, with an emphasis on assistance in finding jobs, encouraging geographical mobility and accessibility of training; reducing high unemployment rates, especially among young people and long-term unemployed; modernisation of the State Employment Agency and its services;
- ❑ to reduce regional differences and socio-economic differences between urban and rural areas, including in the fields of employment and unemployment;
- ❑ to encourage faster development of business activities and creation of new jobs, especially in the sector of services and in economically weaker regions;
- ❑ to expand opportunities of joining the labour market for young people, low-skilled and low-educated persons or persons with learning or other problems;
- ❑ to eliminate the present disparity between education and skills and requirements of the labour market, to promote the accessibility of education, professional training and life-long education, to reduce the number of students leaving educational establishments without finishing their courses;
- ❑ to transform the undeclared work into officially registered employment, to carry out measures aimed at decreasing the level of undeclared employment.

The European Commission, assessing results of implementation of the Employment Plan 2004, noted that, despite the positive development of labour market on the whole, Latvia has to pay bigger attention to stimulation of faster inclusion of the unemployed and economically inactive people into employment, improving tax - benefit systems and more widely implementing active labour market policies. The low labour productivity level is a reason for concern. Insufficient formation of inclusive labour market for young people and job seekers with low professional skills was assessed especially critically

The big number of young people leaving educational establishments without finishing their courses, and the insufficiently active employment measures for inclusion of representatives of risk groups into process of general education and vocational training were noted. The Commission pointed at the necessity to solve issues of reducing the regional differences more actively.

At the same time it was acknowledged that the employment policy in the country pays a considerable attention to improvement of business environment, support to creation of new companies, prevention of undeclared employment, improvement of vocational education, and inclusion of people from risk groups into active employment measures.

To implement successfully the requirements of the Lisbon Strategy, Latvia like any other EU member state has to contribute to achieving three goals of the



comprehensive general employment guidelines - full employment, quality of working conditions and productivity, social cohesion and prevention of social exclusion.

In the sphere of increasing the employment rate, the Latvian National Action Plan for Employment sets a target to reach average employment of 67% by 2010 (62% for women and 48% for people aged 55-64 years). This means that reaching Lisbon targets is only envisaged in female employment where Latvia already exceeds the EU average. To achieve *full employment*, public institutions have to promote labour market processes more actively. They have to carry out measures for development of knowledge-based sectors of the national economy, continue structural reforms of labour market more successfully, improve the system of taxes and social benefits, and to promote further development of the welfare of Latvian population.

It is important to ensure growth of employment in all groups of population, especially groups where employment rate is much lower than the country average. With regard to the population ageing issues, public institutions in co-operation with social partners and non-governmental organisations have to take measures supporting growth of employment rates among young people and old people as well as making it easier to become re-employed for persons after long-term unemployment and for economically inactive persons. Employment rate for persons aged 55-64 years is increasing in the recent years and reached 48% in 2004 but it still lags behind the Lisbon target (50%). Situation is worse among young people (aged 15-24 years) where employment rate is only 30.5% and has even decreased by 1 percentage point in comparison with 2003.

To ensure development of knowledge-based economy, greater attention should be paid to improvement of general and vocational education quality, achieving closer link with preparation of required specialists for labour market. At the same time, educational establishments lack financial means. Share of general government consolidated budget expenditures for educational needs even decreases in the last years (it was 6.5% in 2002 and 6% in 2004).

Raising the *labour quality* envisages to ensure life-long learning and promote career, modernise work organisation, balance opportunities of work and out-of-work life, safety at work, gender equality etc. At present the level of labour quality in Latvia falls behind the situation in the EU member states in many aspects. In 2004, less than one-tenth of employees aged 25 to 64 years has participated in vocational training activities or attended some educational establishment. Number of people injured in accidents at work is still very high (154 cases per 100 000 employed in 2004), which has slightly decreased (by 4.3%) in comparison with 2003 but still is among the highest in the EU member countries. Number of people suffering from occupational diseases tends to grow. Total number of first-time occupational patients has increased 1.8 times during this period. It has to be noted that trade unions, strengthening their influence in the sphere of labour protection and safe working environment, keep increasing the number of trustees in labour protection issues.

Task of heightening awareness of employers about observance of gender equality principles in companies and inclusion of women into employment is topical in Latvia. Women often leave work or cannot start working due to inflexible work organisation, lack of childcare institutions or other reasons. This accounts for considerable difference between female and male employment rates. In the last two years this difference has somewhat decreased (from 8.2 to 8 percentage points). Despite a marked difference between female and male wages to women's disadvantage, positive



changes have to be noted because this difference has decreased from 16.1% in 2003 to 14.3% in 2004.

Low level of *productivity* exists in Latvian economy on the whole, especially in agriculture and manufacturing industry. It is being compensated by longer working week. The average working week in 2004 was 41.6 hours (42 hours in 2003), including 42.5 hours for men, and is among the longest in the EU member states. The share of employees working overtime in the total number of employees has also increased.

The main advantage for the current competitiveness of Latvian industry is the low labour costs, which determine the predominance of labour-consuming sectors in industry and the resulting low level of productivity. The task of Latvian economic policy is to foster transition from labour-consuming economy to knowledge-consuming economy, which can be achieved by growing investment into human capital. Developing competitiveness in the main export-oriented sectors of Latvia, i.e., raising their productivity, will increase opportunities to raise incomes in other sectors of services as well, including the majority of service sectors where people with relatively low skills and education are employed.

The governmental policy aimed at strengthening the *social cohesion* and reduction of *social exclusion* is described in the Joint Inclusion Memorandum, which defines the key political objectives, priorities, medium-term and long-term tasks in this area. To ensure social cohesion, Latvia has developed the National Action Plan on reducing poverty and social exclusion, which is harmonised with activities of the National Action Plan for Employment.

To implement Latvian employment policy in close compliance with targets outlined in Lisbon, the National Action Plan for Employment is worked out every year. Development of the plan is co-ordinated by a management group appointed by the Cabinet of Ministers, which includes representatives of ministries and other bodies related to solution of labour market issues and representatives of social partners - Latvian Employers' Confederation and Free Trade Union Confederation of Latvia.

More than 20 million LVL from the budget are earmarked every year for employment promotion measures. After Latvia's accession to the EU, the European Social Fund (ESF) and the European Regional Development Fund are developing into the main source of financial means for this purpose. ESF is the key financial instrument of the EU for development of human resources and improvement of labour market functioning.

Attraction of ESF resources in the amount of approximately 119 million LVL is envisaged for funding the priority "Development of human resources and promotion of employment" in the period of 2004-2006. Activities to be implemented in its framework are harmonised with EU employment policy guidelines and the joint declaration of Latvian government and the European Commission on Latvian employment policy priorities for promotion of employment, development of education and further education, and reduction of social exclusion.

Resources of the European Regional Development Fund in the amount of approximately 26 million LVL are envisaged for attraction to education, development of health care and social infrastructure.



4.1.5. Spatial planning

There are two main state authorities which responsible for spatial planning and logistics development.

1. The Ministry of Transport and Communications of Republic of Latvia

The Ministry of Transport and Communications supervises very significant fields of the national economy - transport (road, rail, sea and air transport), communications (telecommunications and post) and information technologies. The main tasks of the Ministry include the issues of strategic policies, finance and regulation. The efficiency of transport, communications and information technologies is an important prerequisite for the development of any field of the national economy.

The Ministry of Transport and Communications has 10 departments and a number of independent units. There are more than 20 various institutions and organizations under the supervision and jurisdiction of the Ministry. Considering the wide spectrum of the supervised fields of economy, the Ministry of Transport and Communications is one of the most fundamental ministries in Latvia.

Transit Policy Department is the unit of the Ministry of Transport and Communications responsible for transit and logistics development. The main functions of the department are:

- ❑ Includes transit development and transport information issues in state programmes and realizes them;
- ❑ Coordinates and promotes the development of combined, multimodal and intermodal transport;
- ❑ Promotes Latvian transit potential (arranging exhibitions, conferences, seminars, etc.);
- ❑ Maintains contacts and cooperates with state institutions, institutions of local governing, funds and professional organizations;
- ❑ Analyze transit policy of neighboring countries and its influence on Latvian transit competitiveness.

The Unit of Transport Informatics of Transit Policy Department prepares national programs for the development of informatics, state policies in the field of informatics, regulating legislative act projects, ensures introduction of the adopted legislation, controls the process of implementation represents Latvia in international informatics organizations and European Union institutions, prepares international projects in the field of informatics.

2. The Ministry of Regional Development and Local Government

The Ministry of Regional Development and Local Government (MRDLG) is founded on 8th of February year 2003, associating in one structure issues of local governments, regional development, local government territory planning, control and other issues that previous has been under the competence of different ministries. The main functions of Ministry are:

- ❑ To provide the elaboration and realization of regional politics, spatial planning and habitation politics;
- ❑ To monitor performance of assignments determined in laws and regulations in local governments area; to coordinate the elaboration of development strategy as well as the implementation of reform of local governments;



- To organize and coordinate the realization of law and regulations in the area of regional politics, spatial planning, habitation politics, development and action of local governments;
- To manage other functions determined in laws and regulations.

The Ministry of Regional Development and Local Government has 9 departments and 4 divisions. *Spatial Planning Department* develops spatial planning politics and provides its realization in the state, methodically supervises, carries out supervision and coordinates development of National planning, development of planned territories of planned regions and development of planning of development of the program and territory of development of local governments. Problems of department include maintenance of participation of Latvia in the international organizations and the initiatives connected to questions in spatial planning, no less than cooperation with institutions of the government, local governments and not state institutions in sphere of planning of regional territorial planning, development of local governments and territorial planning.

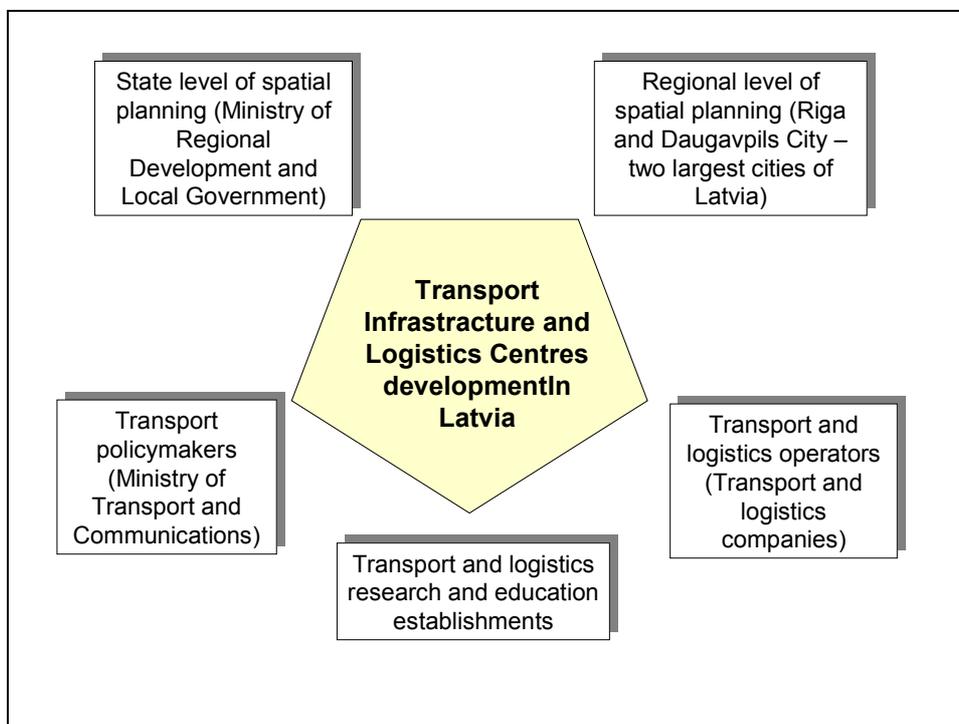


Figure 10. Actors of interview

Analys of the Questionary and Interview

The main purpose of interview is collect opinion on the transport infrastructure and logistics centres development and concerning problems from point of view of different actors (Fig.10). The development of freight terminals and warehouses should be promoted at crossings of transport corridors. In this process the development of logistics is of high importance. As a rule freight distribution centres are developing as joint ventures of private and respective municipal companies. In the future it is planned to set up freight distribution centres in Riga, Ventspils, Liepaja, Rezekne, Daugavpils and at other principal transport junctions.

It is regarded that that one of the most important issues for peripheral regions development is the development of logistics and distribution centres focused on attracting freight from Asia and the Far East. Latvia can serve as a distribution centre for cargo from Asian countries (e.g. China, Korea) not only in the Baltic States but also with equally successful results in Russia and the CIS countries. But today the idea of logistics center is at early stage of development in Latvia.

The main sentences concerning logistics centres, legislation and regulation, land use needs, co-operation between spatial and transport planners and logistics actors are summarised in the next part of report.

A General vision:

1. State spatial planners have not vision on development of logistics centres.
2. Seaport city-regions are key nodes in the global logistics freight transportation network. The maritime activities exploited at the seaport location may promote the regional economic growth of the surrounding because of the circular and cumulative causation a central place is capable to give origin to. The most interesting regions for logistics centres development are ports of Riga, Ventspils and Liepaja.
3. Transport policymakers and logistics operators both stress the necessity to build up an efficient transportation system by promoting the inter-modality patterns through the establishment of distribution and inter-modal centres. The seaport city-region should promote the settlement of such public logistics terminals at the local level in order to promote the local entrepreneurship, as well as to reduce the environmental impact of the freight transport within the urban area. The building of the inland logistics terminal at the more far hinterland locations should increase in efficiency the whole transport system because of the promotion of the inter-modality.
4. The three main goals of co-operation between actors are supposed to achieve can be summarised as following: 1) to establish a more efficient logistics system: 2) to facilitate the implementation of advanced information systems: 3) to promote co-operative freight systems.
5. The LC has to be seen as a meeting point for both public and private logistics operators. The consolidation of the urban logistics activities can be realised at this freight transport node of the transportation network by the application of the most advanced information systems.
6. An efficient co-operative freight transportation system can be implemented at the LC location. This co-operative system enables a large number of shippers or freight carriers to share a jointly freight vehicles system, jointly terminals, as well as common information systems in order to exploit the synergy effects the spatial agglomeration of the logistics operations spread out.
7. The individual economic agent should be able to reduce the costs for collecting and delivering goods due to the exploitation of the economics of space at the LC. The spatial agglomeration enables the co-operative performance of the logistics operations jointly with other entrepreneurs, as well as the supply to the customer of a level of services of better quality.



8. Through the establishment of a spatial multi-function cluster the entrepreneurship in the logistics transport sector may be promoted, and at the same time the negative externalities generated by the road transport modality may be reduced.
9. The establishment of public logistics terminals in the area surrounding a seaport city can be helpful for promoting the co-operative freight transport systems.
10. The general vision of different actors at the problem of logistics centers development is shown in the Table 10.

Table 10. The general vision of different actors at the problem of logistics centers development.

Actors of interview	Relation to idea of logistics centre development	General problems
State level of spatial planning (Ministry of Regional Development and Local Government)	Have not vision on development of logistics centres.	<ul style="list-style-type: none"> ▪ No special legislation and regulations of LC. ▪ No special rules for land use needs. ▪ No principles of cooperation between stakeholders of LC. ▪ No methodological and practical approach for LC establishment. ▪ No cooperation between state level of transport policymakers and regional level of spatial planners. ▪ No practical experience in pilot project of design and development of LC. ▪ Transport transit much more outnumber of distribution at the state level.
Transport policymakers (Ministry of Transport and Communications)	There is a sensation of necessity of creation of the logistical centers, but there is no practical programme of their development.	
Regional level of spatial planning (Riga and Daugavpils City - two largest cities of Latvia)	There is a desire of creation of the logistical centers, but know-how of their design and the practical programme of their development are absent.	
Transport and logistics operators (Transport and logistics companies)	There is a need of creation of the logistical centers, but is absent know-how their creations. The mutual competition and mistrust of transport operators to each other essentially interferes with the decision of practical questions of LC creation.	
Transport and logistics research and education establishments	There is a sensation of necessity of creation of the logistical centers, there is a general vision on development of logistics centres. There is no demand from the other actors.	

The Main Problems of the Optimal Geographical Location and the Optimal Spatial Physical Size of the Logistic Centres

The two main problems are:

- the optimal geographical location and
- the optimal spatial physical size of the LC.

The location choice among different potential sites has to evaluate the trade-off between transportation cost and facility cost. The facility cost is defined by the sum of the construction, maintenance, land and truck operation costs at the LC site.

The land price plays a major role when the potential nodal location is settled nearby the urban agglomeration. In this case, the lower transport costs the logistic operators had to bear for the pick-up/delivery activities between the LC and the urban centers might compensate in such a way the more expensive fixed investments necessary to bin the land, as well as for building the infrastructure.

The public planner should have the role to perform a macroeconomic decision about the more suitable geographical location and dimension of the LC. His aim is to minimise the total cost of the LC. It follows that the accessibility patterns are absolutely relevant (Table 5).

Among all the potential proper places, the location choice of the public planner should be addressed in favour of the geographical site closer to the major inter-modal transport links, which connect the urban agglomerations that had to be served by the new settled LC. If any congestion problem already exists, then an inappropriate location decision of the traffic policy planner might induce a worsening in the road traffic conditions within the region.

The improvement in the efficiency of the road network can significantly help to mitigate the negative economic impact the spatial traffic congestion induces, which is reflected by the increase in the transportation costs.

The public planner has no influence at the microeconomic level of decision, when the distribution and assignment of the freight traffic is considered. At a micro level, where the individual transport operator decides to use his own freight vehicle, the choice of making a stopping call at a certain LC rather than another is supposed to be determined by the behaviour of the single transport operator or company. At this level of choice, the goal is to minimise the transport costs (Table 11).



Table 11. The public logistics terminals and the two levels of decision.

Level of Decision	Kind of Decision	Goals
Macro level: Public planner	Location choice, and optimal size of the LC	Min the total cost = Min (transport cost + facility cost)
Micro level: Every entrepreneur, each company and freight vehicle	Choice of the LC and optimal routing	Min the transport cost

The structure of the transportation sector has not to be forgotten. The freight transport is generally undertaken by individual entrepreneurs and private companies, which operate within a competitive market framework. Hence, the control and regulation measures put in force by the regional public planner should not excessively interfere with the activity of the transport sector.

Besides the transport policy instrument of the LC several other city logistics initiatives have been proposed in order to overcome at the best all the negative externalities the urban freight transport generates.

The freight transport carriers are expected to provide economically efficient just-in-time services. This means that the minimising of the transport and logistics services should be achieved. At the same time, some urgent problems had to be solved, such as the traffic congestion, the environmental impact of the transport activity, as well as the problem of the energy conservation.

The crucial role played by the public-private partnership is always stressed when speaking about the city logistics initiatives. Besides the LC the implementation and diffusion of progressive information systems in order to organise the routing and scheduling of the consignments in advance, the promotion of co-operative freight transport systems, the control of the load factor for the pick up/delivery activities, as well as the planning of the most innovative underground freight transport systems are all potential instruments of transport policy the regional public planner had to consider and properly evaluate.

Advanced Information Systems

The improvement of advanced information systems is one of the most relevant instruments in order to achieve the rationalisation in the logistics activity. By planning in advance the routing and scheduling of the consignments, the efficiency in the transport system may be effectively improved.

The advanced information systems enable both the drivers of the trucks and the control centre to communicate to each other, to provide the information on the traffic



conditions in real time, as well as to store detailed historical data about the pickup/delivery truck operations. In particular the last function plays an important role for rationalising the logistics operations.

The most important findings beyond the particular ease are:

- ❑ Large customers (shippers) require logistics partners (forwarders) to either accept paper input (primarily fax) or to subscribe to customer's choice of technology. Such customers are unlikely to reimburse their partners for related effort, the implementation thus have to bear sufficient saving potential for the forwarder;
- ❑ EDI data transmission and the relating process automation provide the basis for improvements of transport planning and execution. This results not only in commercial benefits but may eventually lead to a reduction in unnecessary transport (e.g. empty legging) and a better utilisation of public and commercial infrastructure (e.g. roads, floor space and terminal equipment);
- ❑ Port community systems provide the technical, managerial and business background to implement EDI systems. While they are normally successful in linking the majority of directly port related companies they are traditionally weak when it comes to hinterland companies;
- ❑ Linking only one additional exporter or importer in the hinterland may have very significant multiplication effects. The company may communicate with additional partners in the same and in other ports. Likewise the resident logistics partner has been enabled to also communicate with other hinterland partners;
- ❑ A success factor is the usage of standardised communication and messages. In transport EDIFACT has the largest user base.

Computer based information systems in transportation chains have several advantages:

- ❑ Increased management options through tracking and tracing and improved quality control of own services and those of subcontractors;
- ❑ Outsourcing of transport services, but staying in control of logistics performance;
- ❑ Increased production-to-order orientation and better transparency of market demand and supply.

The Inter-regional Level

At the inter-regional level, the programme instrument should enable the integration between seaport regions by following the broader issues of network connectivity and logistics. The three fundamental network characteristics of (1) inter-modality, (2) interoperability and (3) interconnectivity should be achieved in order to add value to the seaport network.

A coherent collaboration programme between the seaport regions should particularly emphasise the benefits of its realisation, in order to attract as many potential private/public investors as possible. The regulatory and organisational framework represents a valid tool of transport policy, in particular when the negative externalities generated by the different transport modalities are not completely internalised into the market price of the transport service. The under-pricing in the transport sector occurs when a transport modality hides its full social cost. The structure of the transport sector is typically shaped as an imperfect competitive



market system, which is assumed to allocate inefficiently the economic resources. Hence, the under-pricing in the transport service shows the lack in efficiency of the market instrument of allocation. The larger the share of the full social cost a transport mode is able to hide, the sharper the under-pricing it may get.

The new economic figure of the Multi-modal Transport Operator (MTO) is assumed to exploit the provision of the logistics services within a wholly integrated transport network. The Table 12 summarises the key issues and the critical patterns of success at the inter-regional level of decision.

Table 12 - The inter-regional level of decision.

Level of Decision	Key Issues	Critical Success Factors
Inter-regional Level: <i>Programme</i>	For each transport modality: <ul style="list-style-type: none"> • Inter-regional links • Inter-modality • Interconnectivity • Interoperability • Logistics and networking effects • Competitiveness • Environmental issuer • Information network • Economies of scale • Economies of time • Economies of scope • Economies of networking • Just-in-time requirements 	<ul style="list-style-type: none"> • Functional collaboration and competition • Interchange of complementary functions • Co-ordination for developing the infrastructure transport network • Information and knowledge interchange • Inter-regional management • MTO Multi-modal Transport Operator • Adding value to the interregional network and communications. • Sustainable balanced growth between regions. • Favourable conditions for promoting a New Innovative Space.

The National Level

At the national level, the programme of LC creation is once again a powerful instrument of transport integration and co-ordination. Logistic effects and networking effects have to be considered in order to exploit a sustainable national transport policy. The freight transport by road seems to fit better the new logistics requirements due to the restructuring process in the supply chain of production. The environmental and social impacts of the negative externalities the road transport mode generates are not completely internalised into its market price.

The under-estimation as well as the under-pricing of the road transport modality have a remarkable impact on the modal choice of the economic agents, due to the apparently higher efficiency this environmental unfriendly transport modality shows with respect to the others. A careful estimation of the real impact of the negative externalities on the national economic growth should be estimated in monetary terms to calculate the "green" GDP.

There are three possible different approaches in order to estimate and/or internalise the negative externalities the transport activity generate, as follows: the consumer-pays approach, the taxpayer-pays approach, and the cost-benefit analysis.

Furthermore, the logistics companies look for a central location as basis for their logistics activities directed to their international clients, as well as a departure site in order to enlarge their commercial relationships. A relevant role is played by the technological changing in the loading/discharge operations, as well as the increasing availability of space within the neglected old port areas. At these locations, the logistics service companies may find an interesting supply of space to turn into their activities.

From a functional point of view the three Latvian main ports are involved in an international maritime competition. A complementary set of functions should be promoted at each seaport site in order to lead to a better integration in the transportation chain, as well as in the road and rail links between the three seaports.

In fact, the transport links from the seaport site towards the hinterland have to perform an increasing efficiency in order to attract the shipping companies, and moreover the specialist total logistics provider.

All actors stress the necessity to build up an efficient transportation system by promoting the inter-modality patterns through the establishment of distribution and inter-modal centres. The seaport city-region should promote the settlement of such public logistics terminals at the local level in order to promote the local entrepreneurship, as well as to reduce the environmental impact of the freight transport within the urban area. The building of the inland logistics terminal at the more far hinterland locations should increase in efficiency the whole transport system because of the promotion of the inter-modality.

Many different and interdependent factors usually influence the location choice of an economic agent. Few decisional patterns may not be spatially relocated. such as the transport infrastructure, the urban settlement, or the environment. Others are more flexible and may be subject to spatial relocation, for example the skilled labour force, the research centres, etc.

The accessibility to a seaport site is therefore strictly dependent on the optimal combination of all these elements. A seaport region might be consequently more or less attractive to the establishment of an economic activity or to the foreign investments in order to exploit its own local development potential.

In order to support the overall LC objectives a close co-operation with similar projects and programmes must be established:

- to strengthen the integration of spatial planning and regional transport development and develop a common regional approach to the issue of sustainable logistics solutions,
- to promote the use of transport corridors, modes and technologies which support a sustainable regional development supporting the economic and social development of the regions in the south-east part of the Baltic. The transnational co-operation aims at assessing trade and transport potentials and develops environmentally friendly transport solutions.



Framework for regional action

As it has been analysed it would be inadequate to recommend “one best way” for spatial planning within the context of port related interaction in general and in BSR in particular. The main reasons to be careful with strong recommendations may be summarised as follows:

1. The spatiality of transport and logistics activities has evolved from clearly delimited port areas to functional port regions and to port networks more recently. The functional interdependencies, creating the network, may consist on sequential relations (output of one node is the input for another, e.g., relation between port and in kind container depot), reciprocal relations (actors arc using each others output) and pooled relations (use of common resources). The term network suggests that these interdependencies may not be territorial and that modern port related activities have a strong tendency towards decentralisation.
2. The trend of a spatial decentralisation of port related transport chains is accompanied by attempts of the main actors involved to achieve control over the segments of the chains. Though it is not clear whether one actor will be the most influential one in the future, the entrepreneurial strategies are not predictable in relation to their spatial outcome. But it is rather obvious that the crucial factor within the transport chain will be the customer orientation while the transport space will be organized as flexible as possible. This interpretation supports decentralized hub and spoke concepts with, “footless” or shifting nodes. Based on some standardized norms the question of appropriate IT support will depend on the dominant position of an actor within the transport chain. Or to put it in other words: the inventions and early adoption of new IT depends on the necessities to optimise integrated transport and logistics chains and the economic power of private actor constellations.

Following these lines of argumentation the existing ports have to deal with territorial decentralisation of transport and logistics activities and tendencies of economic centralization of private actors involved. Therefore the frames of independent action become more and more narrow. In more general terms, existing ports do not only have to create and sustain competitive infrastructure including IT but have to be prepared to offer far reaching services for foreign trade, transport and communication in order to be able to react as flexible as possible to new challenges. Beside an effective node of physical interchange successful ports will become LC regions for transport and communication offering systemic knowledge for integrated transport and logistics chains.

This strategy is open only for existing main ports and those medium-sized ports able to promote a certain specialisation because it presupposes very high investments and probably only indirect returns on welfare and employment. Small and the majority of medium-sized ports will function as possible nodes in future transport chains. This implies the latent danger that many ports try to invest in expensive infrastructure in order to compete with each other without being able to realize returns. A crucial element is finding a certain harmony between public investments in infra- and private engagement in the superstructure. Anyway, problems of public disinvestments are already on the agenda and there is a latent danger for continuous planning failures. To reduce an overall port competition in this segment institutionalised forms of information and co-operation between private and public actors should be promoted in order to avoid unnecessary public investments and to improve power balance.



Faced with the imminent enlargement of the European Union and the integration of Latvia as well as further states of the Baltic Sea Region a general strategy of the modernization of the maritime infrastructure is to be recommended including IT. The expected increases of transport will not be manageable country-sided in spite of great infrastructure projects like Via Baltica. The expansion and improvement of sea-based mobility of goods and supporting infrastructures should be emphasized in initiatives of spatial planning within the Baltic Sea Region.

Also in the transport and logistics sector the major players are changing. Former State Enterprises are privatised and must prepare themselves for the sudden competition. Just as the governmental telecommunications monopoly was eliminated in previous years, the state monopoly on the transportation of letters and parcels will now be eliminated too. These modifications of the general conditions lead to hectic activities within the sector. Many re-evaluate their middle- and long-term strategies, reposition themselves, co-operate and merge, withdraw from some markets and set themselves up in others. Co-operation with, or the incorporation of, other companies is the most usual reaction to the new conditions, in the transport and logistics sector as well.

But according to opinion of the actors involved, not only quantitative growth is important; qualitative growth is equally so. The new demands of the information society and the "New Economy" on the transport and logistics sector, make it necessary to increase the "know how" as quickly as possible in the field of IT, and develop information systems with which the logistics chain can be controlled and checked. IT departments of individual companies are no longer able manage such a task, so that big actors (for example, the Latvian Association of Railway International Electronic Documents Circulation Operators) buy up software enterprises throughout the world that develop information systems for the transport and logistics sector, or will be able to do so in the future. All actors participating in the transportation chain are convinced that the future leader of the information system will also dominate the material transportation chain and thereby gain the largest part of the increased value created by transportation. Furthermore, the evolution of such technologies is extremely capital-intensive: markets, which are becoming more and more transparent, involve ever-increasing costs for marketing and distribution. Smaller enterprises, endowed with a more limited capital, are no longer able to make the investments necessary to remain competitive.

The City Logistics Spatial Impact

Inside the port area of Riga, mainly trucks operate the freight movements from a terminal to another. Also road carriers mainly make the distribution of goods towards the metropolitan region. The explanation is given by the higher efficiency of this transport modality on the short distances both in terms of time and of transport flexibility. But the negative externalities in terms of congestion and pollution are social costs, which have absolutely to be taken in account.

The distribution centres play a remarkable role not only from an economic point of view because of the higher efficiency and optimisation in the transport chain they realise, hence the distribution and transport costs are reduced: but also from an ecological point of view because of loosening of the traffic intensity and therefore of the polluting emissions from the motor vehicles.

Early in history Riga developed as a transit centre between the ports of Western Europe and the Russian hinterland. Riga enjoyed continuous growth as a merchant



port. Today is Riga the main administrative, financial, industrial and transportation centre in Latvia. Embassies and consulates, a significant number of international organizations, who work in the Baltic States, have their headquarters located in Riga. Riga is also a significant financial centre in the Baltic region.

As other cities Riga did not have specific strategies and theme plans concerning "urban networks". The member of group from Riga studied following documents: The Riga Official Plan or Master Plan (1995-2005), The Riga Development Strategy, (2005-2018), The Riga Transport System Development Programme (2005-2018), Concept of Riga City Intelligent Transport System (2002-2008) and others placed emphasis on implementation of the transportation planning and economic development.

There was not anything concrete about urban networks in these strategies. These plans also describe advantages of development of Riga, admit a favourable geographical location of the city, determine the importance of Riga in the Baltic Region and also in the BSR. Riga has a remarkable growth potential in the future. To develop Riga as a transit centre is one of the priorities of Latvia's development strategy and it is being promoted by improving elements of infrastructure and services in the Riga area. The main transport elements that make Riga a transit centre are the port, the international airport, and the bus and railway connections. Besides one of the most important tasks is to promote more profound collaboration with cities of the BSR. Finally Riga has to emphasise the environmental dimension of sustainable development.

4.1.6. Impact of e.g. business clusters

The structure of Latvian economy in Sectoral profile has little changed in the last years. The share of service sectors has slightly increased from 72.2% (by added value) in 2000 to 72.7% in 2004 because trade developed faster than other sectors of economy.

Table 13. Structure of Economy (%)

	By added value		By number of employees	
	2000	2004	2000	2003
Primary sectors	4.6	4.5	14.5	12.9
Manufacturing	13.5	14.0	17.9	15.9
Electricity, gas and water supply	3.5	3.0	1.9	2.0
Construction	6.1	5.8	5.9	8.2
Trade, hotels and restaurants	17.6	19.8	17.7	17.3
Transport and communications	14.2	15.7	8.3	9.2
Other commercial services	23.2	22.2	12.3	13.4
Public services	17.2	15.0	21.5	21.1
Total	100.0	100.0	100.0	100.0

The structure of economy in terms of employment is very much different from the structure by added value due to great difference between productivity levels in various sectors of economy.



Rapid economic growth in recent years has been ensured by both increased domestic demand and greater export opportunities. Increase of domestic demand had a direct effect on growth of services but industrial growth was mainly based on rising exports.

Increasing trade (wholesale and retail) contributed nearly one-third to growth in the last three years (2002-2004). The contribution by manufacturing is 3 percentage points smaller. The most stable growth has been observed in three sectors - trade, manufacturing and construction.

The growth of trade as an economic sector has been driven mostly by domestic demand but a little over one-tenth is related to the trade mediation services provided to non-residents, and this share is growing every year.

Table 14. GDP Growth (%)

	Growth rate				Contribution to growth			
	2002	2003	2004	2002-2004 average	2002	2003	2004	2002-2004 total
Primary sectors	5.1	1.3	4.3	3.6	0.2	0.1	0.2	0.5
Manufacturing	8.9	9.1	7.9	8.6	1.2	1.3	1.1	3.8
Electricity, gas and water supply	4.2	2.8	4.9	4.0	0.1	0.1	0.2	0.4
Construction	10.8	13.7	13.0	12.5	0.7	0.9	0.9	2.5
Trade, hotels and restaurants	11.9	11.6	10.3	11.2	2.1	2.2	2.0	6.8
Transport and communications	3.4	8.9	12.9	8.3	0.5	1.2	1.8	3.9
Other commercial services	5.4	4.4	7.7	5.8	1.3	1.0	1.7	4.4
Public services	2.4	2.9	4.0	3.1	0.4	0.4	0.6	1.5
Total	6.4	7.5	8.5	7.4	6.4	7.5	8.5	24.1

Two-thirds at least determines total demand of the transport and communications by domestic demand, which has been stable and growing faster than the external demand in recent years. This refers especially to communications as well as supporting and auxiliary types of transport activity, such as warehousing, parking services, travel agencies. The external demand for transit services is unstable. Due to the discriminatory attitude of Russia as regards transit of oil products through Ventspils port, total amount of cargo sent to ports declined, particularly in the 2nd half of 2002. The situation improved in 2004 mostly due to growth of cargo turnover in other Latvian ports but it should be said that Ventspils port is also recovering as more and more cargo is transported to the port by rail.

Rapid growth in transport and communications in 2004 was ensured by increased transportation of both cargo and passengers as well as development of the communications industry.

In cargo transportation, the amount of cargo transported by motor vehicles grew substantially and contributed most to the overall growth while contributions by railway transport and port services were smaller. Passenger transport services increased substantially, especially in air transport.

Rapid growth of investment has had a favourable impact on development of construction industry, which is growing at a rate much higher than the average in the national economy.



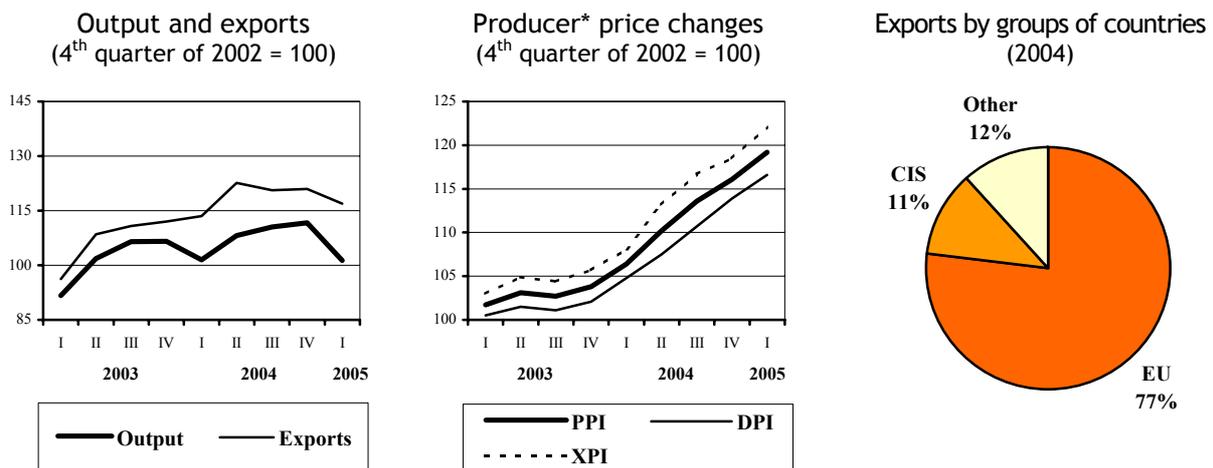
The manufacturing has demonstrated stable growth in the last three years (2002-2004), and average annual growth rate has reached 8.6%, which is well above the average growth in the economy.

Table 15. Key Indicators of Manufacturing by Sectors in 2004 (%)

	Structure (by added value)	Growth	Share of exports in sector's sales
Manufacturing - total	100	6.2	52.2
Food industry	24.7	6.5	21.8
Light industry	8.5	-0.4	79.1
Wood processing	20.1	5.9	68.2
Paper production and publishing	8.3	2.2	20.0
Production of chemical, rubber and plastic products	6.4	19.8	51.9
Production of other non-metallic mineral products	3.5	12.5	35.0
Production of metals and metalwork	11.3	6.9	76.4
Production of machinery and equipment	11.3	5.9	69.3
Other industries	5.8	10.4	68.1

In majority of sectors most of the output is being exported therefore their growth largely depends on expansion of export opportunities. After 2002, producer prices have increased every year, especially for the products meant for export. After Latvia's accession to the EU the growth rate of manufacturing industry has decreased, mostly due to narrowed exports of products of two manufacturing industry sectors - wood processing and textile industry.

Figure 11. Manufacturing Indicators



* PPI - producer price index, DPI - producer price index for products sold in the domestic market, XPI - producer price index for exported products.

Growth in 2004 was faster in sectors with relatively higher added value per one person employed, i.e., in chemical industry and production of construction materials. Low level of productivity is in machinery and in wood processing which is one of the biggest manufacturing sectors in Latvia.

4.1.7. Public Private Partnership

Legal preconditions for PPP have been established also in Latvia. Implementation of PPP projects is regulated by the *Law on Concessions*, which was adopted by the Saeima on January 20, 2000. The procedure of concession agreement registration in the Register of Enterprises of the Republic of Latvia and control over these agreements are established in *Regulations No. 700 "On the Procedure of Registration, Recording and Control of Concession Agreements"* adopted by the Cabinet of Ministers on August 10, 2004.

For all that, PPP is not widespread in Latvia. There are only 14 relatively small concession agreements registered in the Register of Concessions, and individual cases are identified where the PPP structure is being used indirectly in public projects. This is a low indicator in view of the necessity for investments into state infrastructure of Latvia.

According to the *Concept on Promotion of Concessions (Attraction of Private Capital to Perform State Functions)* approved by the Cabinet of Ministers in April 2002:

- ❑ On September 22, 2003 the Concessions Division started its work at the Ministry of Economics with the main task to develop the PPP policy;
- ❑ On May 1, 2004 the Public Private Partnership Unit was established at LIDA; the principal task of the unit is to support PPP projects.

At present the main activities in PPP policy development are carried out in two substantial directions:

1. *Policy planning.* The current situation has been comprehensively analysed, identifying the most essential problems and offering solution in order to put into practice the PPP mechanism in Latvia. In October 2004 the draft policy-planning document "Basic Guidelines of Latvian Public Private Partnership" was submitted to a meeting of state secretaries;
2. *Improvement of legislation.* Taking into account the adoption of new directives of the European Parliament and of the Council (Directive 2004/17/EC co-ordinating the procurement procedures of entities operating in the water, energy, transport and postal services, and Directive 2004/18/EC on the co-ordination of procedures for the award of public works contracts, public supply contracts and public service contracts) and the received instructions of the European Commission's Internal Market Directorate General regarding improvement of particular norms in Latvian legislation, the Ministry of Economics has developed draft proposals for amendments to the Law on Concessions.

At present the work in the area of support for PPP projects is carried out in three essential directions:



1. *Advising public institutions in PPP area.* The Ministry of Economics and LIDA have advised, assessed and submitted proposals on concession terms, concession tender rules and concession agreement for approximately 20 potential PPP projects of state and local governments;
2. *Development of PPP methodology.* Auditing and consulting company "Ernst & Young" has worked out a methodology for selection of the most suitable project-funding model for public investment projects in Latvia ("Criteria and methodology for assessment of value for money"), which was commissioned by the Ministry of Economics. At present the Ministry of Economics develops guidelines for utilisation of PPP in acquirement of EU funding and for accounting of PPP projects. LIDA has worked out standardised contents of PPP agreement;
3. *Improving knowledge of PPP.* In January 2004 sending letters explored the initial interest of public institutions in PPP to Sectoral ministries and biggest local governments with information on PPP and request to identify PPP pilot projects. To acquaint local governments with the point, advantages and problems of implementation of PPP projects, the Ministry of Economics and LIDA have organised several workshops and held presentations. To acquaint Latvian local governments with terms for granting of concession and other related issues, in April 2004 the Ministry of Economics organised a work visit to Vilnius heat Supply Company which is handed over to concession.

According to the set goals, in order to make PPP a significant mechanism in the provision of public services and infrastructure in Latvia, the Ministry of Economics has set the following goals for further work:

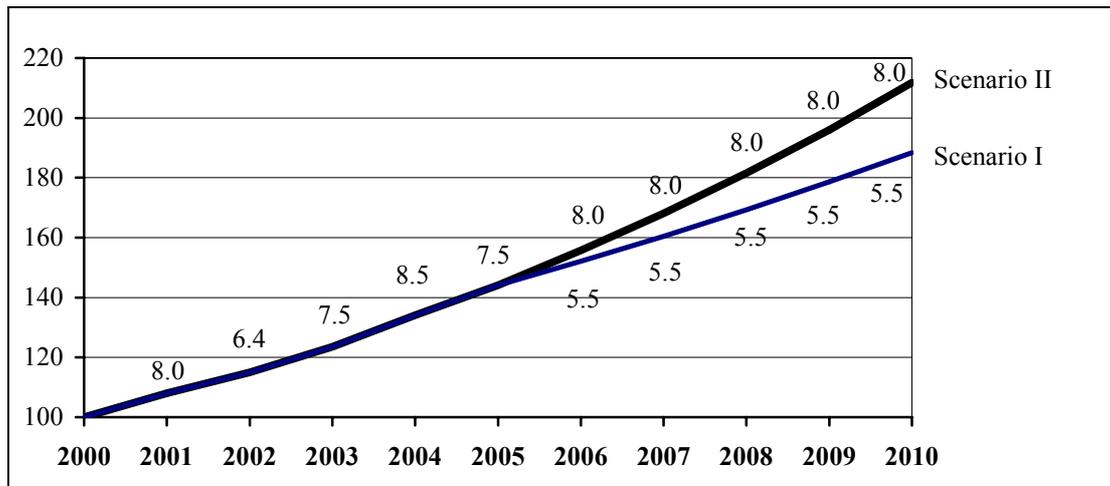
- ❑ after adoption of the Basic Guidelines of Public Private Partnership Policy by the Cabinet of Ministers, to develop and implement the PPP Policy Action Plan for 2005-2009;
- ❑ to improve the Law on Concessions in compliance with requirements of European Parliament and Council directives which regulate the public procurement procedure;
- ❑ to continue development of PPP methodology;
- ❑ to continue supporting public institutions in preparation of PPP projects;
- ❑ to improve knowledge of PPP both in society and in public institutions.

4.1.8. Forecasts

The Ministry of Economics has developed two scenarios of national economy development for medium-term period (until 2010): the slow growth scenario (Scenario I) and the dynamic scenario (Scenario II). The development scenario forecasts are based on possible fluctuations of external and domestic demand, depending on several factors.



Figure 12. Forecast of Latvian GDP (percentage, 2000 = 100)



Development prospects in 2005 and 2006

It is anticipated that the previous trends of development will be in progress also in 2005 and 2006, namely, the stable domestic demand and expansion of export possibilities.

According to forecasts the private consumption and GDP will increase at the same rate. This will be ensured by growing incomes of population but the household demand may be reduced by the fast rise of prices.

Investment will increase faster than the private consumption, which will be affected by the growth of previous years and positive future predictions by entrepreneurs as well as the good crediting conditions. Yet, one must take into account that interest rates on loans might stay at the level of previous years and not diminish due to the high inflation of 2004. Investment growth will be stimulated also by opportunities to use EU funds, which will increase both the public and private sector investments. The growth of domestic demand directly affects development of service sectors but its influence on the growth of industry is smaller.

Growth of *industry* (manufacturing) is closely linked with possibilities to increase export of goods, which should be basically assessed in three sales directions - to the EU, Russia and other CIS countries, and the closest neighbouring countries Lithuania and Estonia.

It should be noted that expansion of Latvian export possibilities in the EU markets is to be associated not only with the growth of demand for imports from these countries (as forecasted by most economists for 2005) but to a great extent also with the ability of Latvian businesses to expand their market by using the economic advantages of offering cheaper products with appropriate quality.

Lithuanian and Estonian markets should be mentioned as an essential possibility to enlarge Latvian exports. Latvia has a negative trade balance with both these countries despite the fact that exports of Latvian goods to these countries go up rather fast every year. It is possible to accelerate Latvian exports to these two neighbouring countries, and particular attention should be given to this task, not forgetting about the competition pressure created by Lithuanian and Estonian businesses on the Latvian



business in the domestic market of Latvia, which has a rather significant impact on the development of certain sectors of Latvian industry.

Expansion of export possibilities to Russia in the next few years may be fostered by agreements between EU and Russia on mutual trade conditions as well as good growth prospects of Russia in the nearest years in connection with high prices of oil products. There are rather good prospects to increase exports also to other CIS countries, such as Belarus, Ukraine, and countries of Central Asia.

Gradual rise of wages, which is a manifestation of the convergence process, has started having a negative impact on development of industry. Rise of wages reduces competitiveness in some sectors of industry, especially those sectors where the present maintenance of competitiveness is mostly linked with use of cheap labour force, such as textile industry, mechanical engineering, etc.

Development of industry is also limited by the so-called extreme factors, such as storms, floods, etc., which are almost impossible to forecast beforehand; as practice shows, they have a rather big impact on sectors of industry. So, at the beginning of 2005 the destruction caused by storm negatively influenced wood markets (demand and prices fell) resulting also in reduction of outputs of wood processing sector.

The rapid development of Russia might also promote Latvian revenues from *transit services*. Hopefully, the situation will improve in Ventspils port, and also Liepaja and Riga ports keep their good growth potential.

Table 16. Forecast of Latvian GDP by Sectors
(real growth in per cent against the preceding year)

	2005	2006*	2007-2010 * (annual average)
Gross domestic product	7.5	5.5 / 8.0	5.5 / 8.0
Primary sectors	0	2.5 / 3.5	2.5 / 3.5
Manufacturing	5.0	7.0 / 10.0	6.7 / 10.0
Electricity, gas and water supply	2.0	2.0 / 2.2	2.0 / 2.2
Construction	15.0	10.0 / 15.0	9.0 / 15.0
Trade, hotels and restaurants	12.0	6.0 / 8.0	6.0 / 7.5
Transport and communications	10.0	6.0 / 9.0	6.0 / 8.0
Other commercial services	6.0	5.5 / 8.5	5.5 / 8.5
Public services	3.0	2.0 / 3.0	2.0 / 3.0

* Scenario I in the numerator, Scenario II in the denominator

Development prospects in 2007-2010

Strengthening of Latvia's competitiveness in the conditions of the EU single market, Latvia's ability to absorb EU structural funds, and external conjuncture conditions will determine the speed of growth in this period.

At the beginning of the post-accession period, drastic changes in the structure of economy and external markets are not anticipated. First of all, investments will go up, which in this period might generate additional demand for imports and therefore not



allow to substantially improving the balance of the current account. Results of structural reforms and investments will become more evident starting with 2007 when growth of industrial production outputs and exports should be quite significant already. In this later period, export-oriented sectors should provide bigger contribution to the growth compared to the sectors, which are stimulated by the domestic demand and made bigger contribution to growth in the preceding periods. Otherwise, the disproportion (high current account deficit, heightened inflation) might subject Latvian economy to strong influence of various external and internal shocks.

The main problems of this period should be associated with potential rise of wages and thereby with decrease of competitiveness of Latvian so-called *cheap sectors* in the world markets. In this regard, textile and food industries and partly metalworking and some sectors of machinery are to be noted. Share of these sectors in Latvian economy is very high; therefore their replacement with manufacturing of other sectors' products is not doable within a short time. Productivity increase in all sectors of economy (both high and low technology sectors) is the only way to retain the high Latvian growth rate.

On the other hand, growth rates of economic activities in Latvia will also be determined by the global development dynamics. If growth rates in the developed countries will be low, the growth of Latvia will be more moderate and will lag behind the dynamic growth scenario by 2-3 percentage points.

In the medium-term development context the main task to ensure stable growth is to make Latvian economy attractive for both foreign and local investors, encouraging them to implement their economic activities.

Table 17. Forecast of Latvian GDP by Expenditure Category
(per cent, in comparison with the preceding year)

	2005		2006*		2007-2010 * (annual average)	
	structure	growth rate	structure	growth rate	structure (in 2010)	growth rate
Gross domestic product	100	7.5	100	5.5 / 8.0	100	5.5 / 8.0
Private consumption	61.7	7.0	61.4 / 62.0	4.5 / 7.0	59.9 / 61.7	4.2 / 7.0
Public consumption	20.2	2.5	20.1 / 19.6	2.5 / 2.7	17.9 / 15.8	2.5 / 2.7
Gross fixed capital formation	27.8	15.0	27.8 / 29.2	7.0 / 10.0	28.2 / 29.4	7.0 / 10.0
Changes in inventories	3.3	-	2.8 / 1.7	-	4.2 / 2.5	-
Exports	43.0	5.7	42.3 / 42.4	5.8 / 9.5	40.9 / 43.0	5.7 / 9.5
Imports	-55.9	4.1	-54.4 / -54.9	6.1 / 8.9	-51.2 / -52.5	6.0 / 8.9
Export-import balance	-12.9	-	-12.1 / -12.5	-	-10.3 / -9.5	-

* Scenario I in the numerator, Scenario II in the denominator

4.1.9. Small and Medium-Sized Enterprises

Small and medium-sized enterprises (SME) comprise a major part of national economy and play a significant role in employment and GDP growth in Latvia like elsewhere in Europe.

In the 1st quarter of 2005 according provisional data, there were 48 252 economically active enterprises in Latvia, of which 47 907 or more than 99% fell in the category of SME



(taking into account only the number of employees). The distribution of economically active SME in Latvia according to their size is similar to the one in the EU member countries: micro enterprises - 76%, small enterprises - 20%, medium-sized enterprises - 4%. 69.9% of private sector employees are employed in SME and create 63.2% of GDP.

Statistical data of the recent years indicate positive trends in growth of the number of newly founded enterprises. Register of enterprises data show that 7690 newly founded enterprises were registered in 2003. 10 228 newly founded enterprises were registered in 2004, which is by 33% more than in 2003, and this growth was the biggest during the last eight years.

The main problems hindering SME development in Latvia are the following.

1. Business environment. Competitiveness of SME sector cannot develop without environment favourable to business activity, and this is greatly determined by competitiveness of the state tax policy, efficiency of capital market, infrastructure, educational system and state aid, alignment and stability of business legislation. Results of business surveys and conclusion reports of meetings and conferences of non-governmental organisations representing SME interests allow drawing a conclusion that many of these factors in Latvia are unfavourable to business development.
2. Availability of finances. Although opportunities to receive external financing have recently increased to a considerable extent, access to current and capital financing is a significant obstacle to increase in business activity and competitiveness of SME and among business beginners. Guarantee and investment funds are not sufficiently developed yet. Problems in the field of external financing availability are more pronounced outside Riga, problem of availability of finances have an explicit territorial dimension.
3. Personnel resources. SME often face problems in choice of personnel: insufficient business management skills, knowledge on management and business and technical knowledge, to be able to develop business plans of high quality and value; insufficient level of knowledge about financial and money flow management; and poor culture of business organisation, while working in global economy.
4. Competitiveness of SME. Latvian enterprises, while working with EU directives on quality, lack information about product standards and new production methods, and this also is a pressing problem. Product quality assessment instruments are not available in Latvia.
5. Regional differences. In the last ten years, negative trends are observed in Latvian socio-economic development, namely, rapid development of Latvian economic centres and stagnation or even regress in development of the other territory at the same time. This created increased differences between cities and rural areas as well as between the central part and periphery of the country. Integrated development of rural territories, including development of non-agricultural business activity, is a necessary precondition for balanced development of the country.
6. Administrative capacity of public and non-governmental organisations for development and implementation of SME policy and for utilisation of the EU Structural Funds is insufficient at present. The main causes of that are: insufficient opportunities of financing from state budget, lack and high changeability of human resources, insufficient competence and qualification of policy developers and implementers, as well as lack of training of the existing and potential specialists.



On January 27, 2004 the Cabinet of Ministers approved the **Basic Guidelines of the SME Development Policy in Latvia**. This document lays down the basic principles of activity of the government, long-term objectives and tasks as well as the main directions of the SME development policy. The goal of the *Basic Guidelines* is to ensure promotion of favourable environment for business activity, to spur initiative of entrepreneurs and lessen the total risk, to prevent obstacles to business activity, to promote stability and effectiveness of financial system and capital market in order to improve competitiveness of the enterprises in the market.

The *Basic Guidelines* foresee implementation of policy, which is based on the best practice of companies of the developed countries, in accordance with the activities outlined in the European Charter for Small Enterprises, simultaneously taking into account also the specifics of the SME development problems in Latvia.

For implementation of the *Basic Guidelines*, on May 25, 2004 the Cabinet of Ministers approved the **Programme on Development of Small and Medium-Sized Enterprises of Latvia in 2004-2006** in order to promote objectives of the SME development policy. To implement the *Programme*, the following actions are envisaged:

- ❑ creation of favourable environment for entrepreneurial activity, especially in relation to SME;
- ❑ promotion of availability of funding for development of small and medium-sized business;
- ❑ development of human resources and new business initiative;
- ❑ promotion of competitiveness of SME;
- ❑ analysis of the business environment and development of additional measures for territories with a relatively low index of socio-economic development. Implementation of these measures is planned in close connection with the plans of utilisation of financial resources from the EU Structural Funds.

For the majority of the entrepreneurial activity assistance measures envisaged in the *Programme*, attraction of co-financing of the EU Structural Funds is planned.

In the 2nd half of 2004, in the framework of the *Programme* and in co-operation with the Ministry of Economics, motivation seminars for businesses and seminars about application of the European Union legislation requirements to Latvian enterprises were organised, information booklets "How to start business?" were made for business beginners, and internet portal www.mazaisbizness.lv for business beginners and businessmen was created.

In 2006 it is planned to continue training businessmen and business beginners and informing them about their pressing issues by organising informative seminars, publishing informative educational materials and implementing businessmen's training programmes. Studies will be done on the administrative procedure, which hinders SME development and identification as well as identification of the tax burden, by indicating factors, which impede development in this field, and comparative analysis of tax application in EU countries will be performed.

In co-operation with the World Bank, it is planned to do a business environment study, identifying potential activities for improvement of business environment; it is also planned to start operation of venture capital funds, thereby businessmen will get



access to additional financial assistance instrument in cases where receiving other loans for improvement of their activity is difficult.

It is possible for Latvian businessmen to attract co-financing from the EU Structural Funds for development and improvement of their activity, by submitting their projects to the following state support programmes for 2004-2006 administered by the Latvian Investment and Development Agency:

- support to consultations and participation of commercial companies in international exhibitions, fairs and trade missions;
- support to development of new products and technologies;
- support to modernisation of commercial activity infrastructure;
- support to raising qualification of employees, their retraining and continued education.

More comprehensive information on state support programmes as well as on guidelines and methodical instructions for getting the support is available on the website www.liaa.gov.lv of the Latvian Investment and Development Agency.

The *Mortgage and Land Bank of Latvia* (hereinafter MLBL) plays an important role in the SME support system. Since 2000 MLBL helps to implement the **Programme of Crediting Latvian SME Development**. The insofar implementation of the programme has essentially promoted accessibility of capital to SME and has encouraged more active involvement of commercial banks in offering loans to SME.

On November 26, 2002 the Cabinet of Ministers approved the Programme of Crediting Latvian SME Development (second phase) for the next three years, foreseeing state guarantees in the amount of 20 million LVL to MLBL in order to enable the bank to borrow the necessary resources for crediting of SME in the financial market. On January 21, 2004 MLBL started crediting in the framework of the Programme of Crediting Latvian SME Development (second phase). Funding projects of specific SME (business beginners, rapidly growing SME, SME in regions requiring special assistance, and female SME) supported within the framework of the EU programmes is continued in the framework of the Programme of Crediting Latvian SME Development (second phase).

Until March 31, 2005 more than 1699 new jobs were created and 97 new enterprises were established within the framework of the Programme (second phase).

Total amount of loans granted within the framework of the second phase of the SME development-crediting project is 24.3 million LVL. Approximately 40% of these loans are granted from state-guaranteed credit lines (14.8 million EUR from the European Investment Bank (EIB) credit line and 3.9 million LVL from the Kreditanstalt fuer Wiederaufbau (KfW) credit line).

Special assistance loans in the framework of special programmes were granted to 273 SME for the total amount of about 10 million LVL. The great part of special assistance loans were granted to SME in regions requiring special assistance (approximately 4.1 million LVL), followed by special assistance loans to business beginners (about 2 million LVL), female enterprises (approximately 1.8 million LVL) and rapidly growing SME (about 2.1 million LVL).



Since June 2003 the **Latvian Guarantee Agency (LGA)** has started its work. LGA is a state-supported institution with a goal to support development of business activities of small and medium-sized enterprises (commercial companies) registered in Latvia by promoting availability of credit resources and issuing medium-term and long-term loan guarantees in its name to financial institutions registered in Latvia or abroad which are financing these enterprises. In 2004 the LGA has issued 20 guarantees for the total amount of 0.66 million LVL.

Since January 1, 2004 the LGA has raised the amount of support for one project up to 50 thousand LVL. The LGA Loan Guarantee Support Programme will be used as one of the instruments for utilisation of the EU Structural Funds. The EU funds attracted in the framework of the programme in the period till 2006 will allow issuing guarantees to entrepreneurs for the amount of approximately 25 million LVL.

In June 19-20, 2000 the European Council meeting in Feira approved the **European Charter for Small Enterprises**. For practical implementation of the Charter, on December 20, 2000 the European Council accepted (by Decision No. 2000/819/EC) the **fourth Multiannual Programme for Enterprise and Entrepreneurship, and in particular for Small and Medium-Sized Enterprises (for 2001-2005)**. Actually, this Programme is an action plan with the following objectives:

- ❑ to enhance the growth and competitiveness of enterprises in a knowledge-based and internationalised economy;
- ❑ to promote entrepreneurship;
- ❑ to simplify and improve the administrative and regulatory framework for business so that research, innovation and business creation can flourish;
- ❑ to improve the financial environment business, especially SME;
- ❑ to give business easier access to Community support services, programmes and networks and to improve the co-ordination of these facilities.

In that way the Programme is directly focused on solution of the principal SME development problems - inaccessibility of start-up capital to launch small and medium-sized business, lack of financial resources to expand activity of already established enterprises, lack of information for the existing and potential entrepreneurs about the EU legislation in the field of business policy, insufficient knowledge of how to express opinion and efficiently influence EU legislative initiatives in this sphere, and existence of barriers hindering business activities.

Latvia joined the European Charter for Small Enterprises by signing the Maribor Declaration on April 23, 2002. In September 2002 Latvia joined also the Multiannual Programme for Enterprise and Entrepreneurship, and in particular for Small and Medium-Sized Enterprises (2001-2005). In the framework of the Multiannual Programme, a range of integrated activities were performed in Latvia within the aforementioned three lines of action, thereby effectively overcoming obstacles to development of small and medium-sized business in Latvia.

Promotion of SME policy development of the Charter's member states through various so-called BEST (Business Environment Simplification Task) and horizontal projects is to be emphasised especially. The goal of these projects is to gain, as a result of active co-operation between the European Commission and national governing institutions, a better insight into various issues concerning business in order to identify best practices and evaluate choice of policies. Also Latvian experts from governmental and non-governmental institutions participate in the working groups of BEST and horizontal



projects; there are 23 projects in total, of which 9 are completed, 3 should be recognised as actually completed, 2 are just started, and the most of them (9) will be completed this year. As a result of these projects, specific problems involving business activities are being explored and potential solutions to these problems are being weighed by comparison of the diverse experience of countries participating in the Multiannual Programme. Thus recommendations of experts involved in the projects become a significant and vitally necessary condition for high-quality development of business policy planning documents and legislative acts affecting business, and this in turn results in improvement of business environment, making it more business-friendly and achieving essential progress in development of total business activities in the country.

The website of the Ministry of Economics includes information on the Multiannual Programme and the projects within its framework, a report on Latvian experts' participation in the working groups of the projects, as well as information on the legislative base for promotion of SME development and Latvian SME support activities.

4.2. Business economic measures

4.2.1. Production processes

The manufacturing has demonstrated stable growth in the last three years (2002-2004), and average annual growth rate has reached 8.6%, which is well above the average growth in the economy.

Table 18. Key Indicators of Manufacturing by Sectors in 2004*
(Per cent)

	Structure (by added value)	Growth	Share of exports in sector's sales
Manufacturing - total	100	6.2	52.2
Food industry	24.7	6.5	21.8
Light industry	8.5	-0.4	79.1
Wood processing	20.1	5.9	68.2
Paper production and publishing	8.3	2.2	20.0
Production of chemical, rubber and plastic products	6.4	19.8	51.9
Production of other non-metallic mineral products	3.5	12.5	35.0
Production of metals and metalwork	11.3	6.9	76.4
Production of machinery and equipment	11.3	5.9	69.3
Other industries	5.8	10.4	68.1

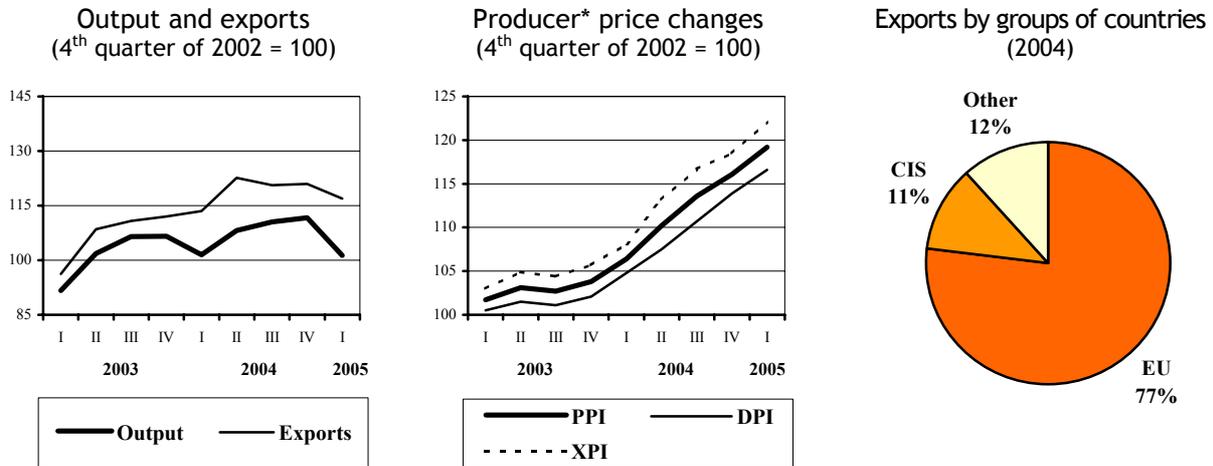
* according to operational data

In majority of sectors most of the output is being exported therefore their growth largely depends on expansion of export opportunities. After 2002, producer prices have increased every year, especially for the products meant for export. After Latvia's accession to the EU the growth rate of manufacturing industry has decreased, mostly



due to narrowed exports of products of two manufacturing industry sectors - wood processing and textile industry.

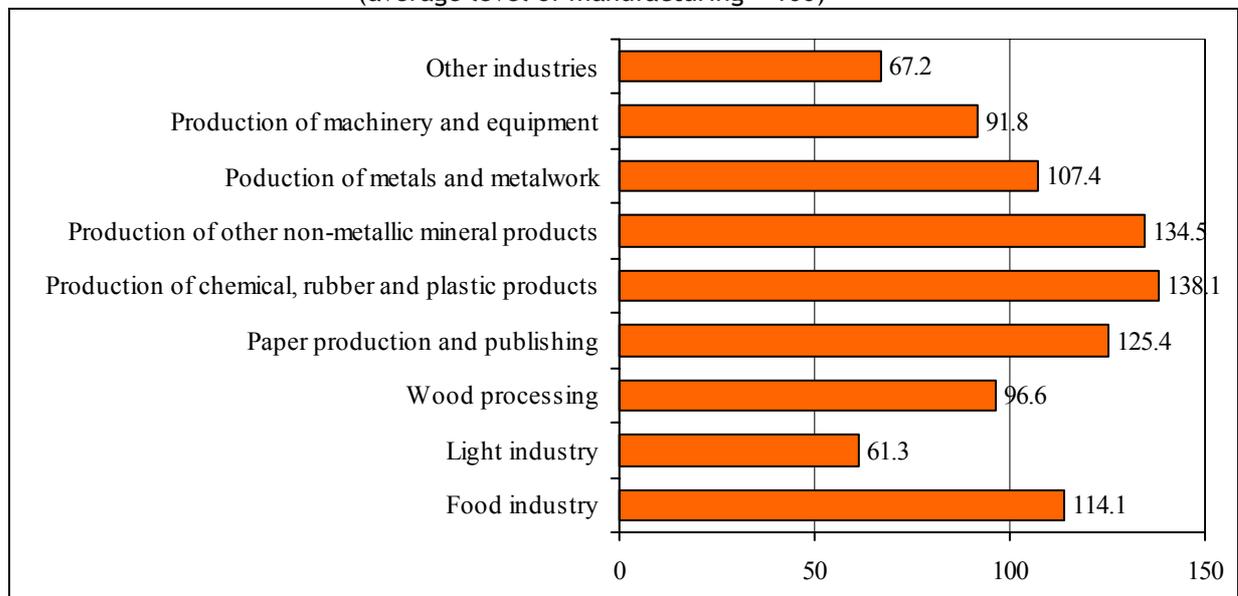
Figure 13. Manufacturing Indicators



* PPI - producer price index, DPI - producer price index for products sold in the domestic market, XPI - producer price index for exported products.

Growth in 2004 was faster in sectors with relatively higher added value per one person employed, i.e., in chemical industry and production of construction materials. Low level of productivity is in machinery and in wood processing which is one of the biggest manufacturing sectors in Latvia.

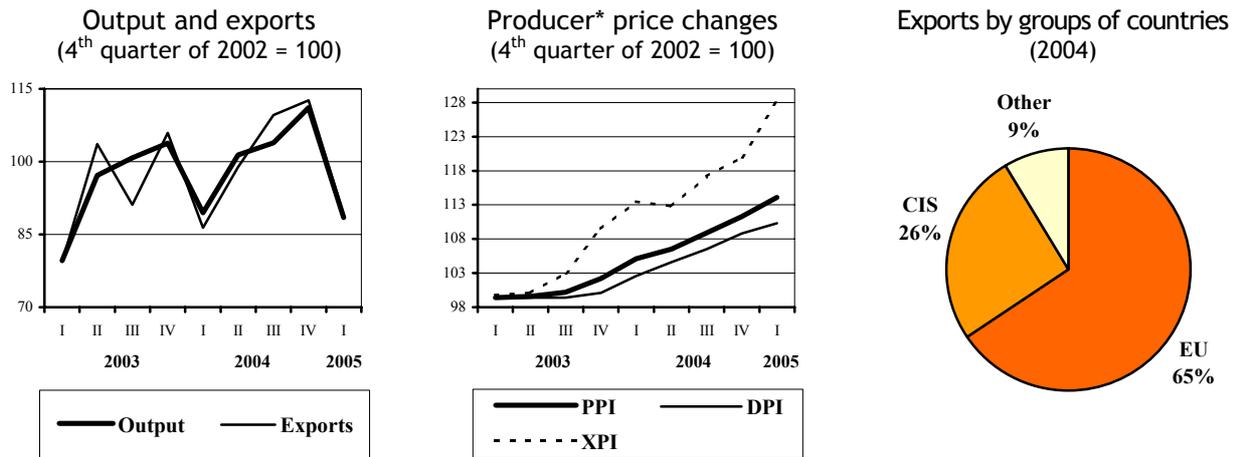
Figure 14. Level of Productivity* in Manufacturing Sectors in 2003 (average level of manufacturing = 100)



* added value per person employed

Food industry is the biggest sector in Latvian manufacturing (accounting for nearly one-fourth of the total added value of manufacturing).

Figure 15. Food Industry Indicators

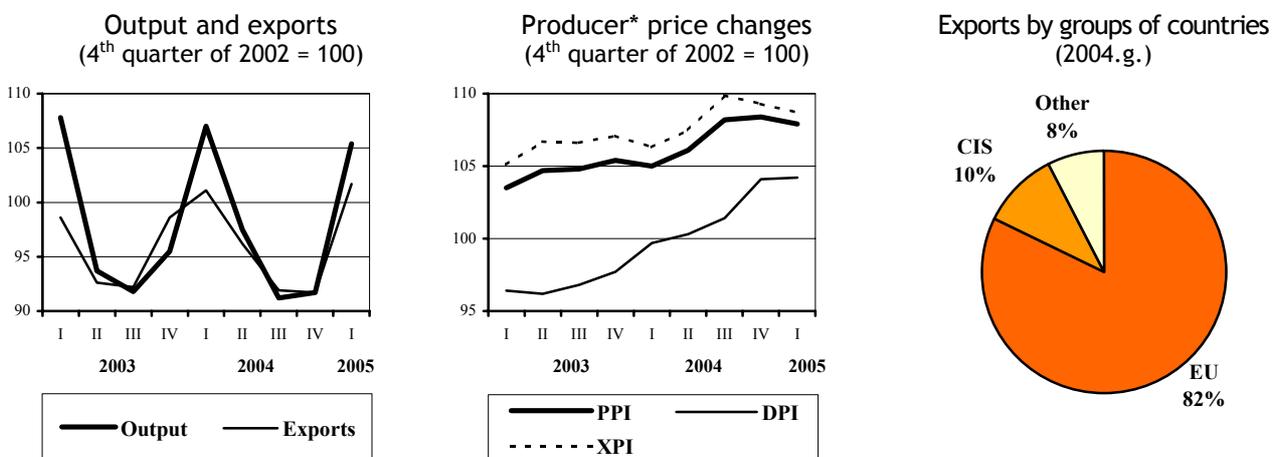


* PPI - producer price index, DPI - producer price index for products sold in the domestic market, XPI - producer price index for exported products

Approximately 80% of the total food industry output is consumed in the domestic market, the rest is exported mostly to Russia, Lithuania and Estonia. Exports of food products to Lithuania and Estonia makes up slightly more than a half of exports of Latvian foodstuffs to the European Union (EU). In 2004 demand for Latvian foodstuffs increased in all trade directions - both to Russia and other CIS countries and to the European Union (EU), and exports to the EU countries increased more than 1.5 times. In 2004 export prices grew very rapidly, while prices for products sold in the domestic market increased more moderately. This trend will continue also in 2005. Export prices in the 1st quarter of 2005 were 15% higher than in the 1st quarter of the preceding year, while producer prices for products sold in the domestic market exceeded the level of the previous year by 8%.

Light industry (textile industry and production of clothing) makes up less than 9% of the total added value of manufacturing. Only about one-fifth of the light industry output remains in Latvia. Most of the output (82% of exports) is exported to the EU member states.

Figure 16. Textile Industry and Production of Clothing Indicators



* PPI - producer price index, DPI - producer price index for products sold in the domestic market, XPI - producer price index for exported products

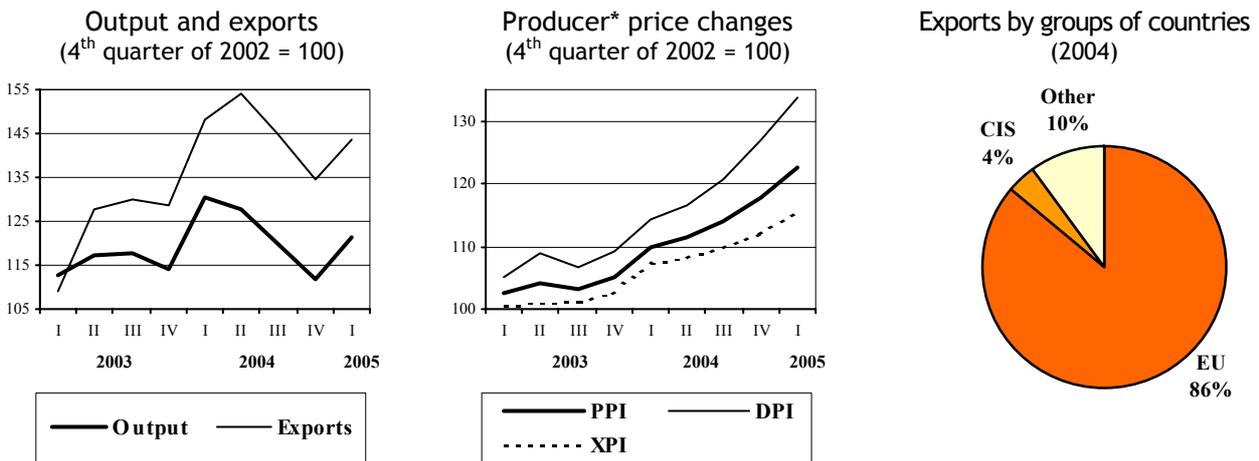


Textile industry outputs and exports have decreased in recent years, especially in the clothing. The main sales markets for Latvian textile industry are in EU countries. Due to the weak demand in EU countries and the high competition in the sector Latvian producers have not been able to expand production outputs despite the rise of prices in the recent years. Narrowing of exports to the EU was partly compensated by growth of exports to the CIS countries.

Wood processing is the second biggest sector in the Latvian industry (approximately one-fifth of the total added value). This sector can boast the fastest growth since restoration of Latvia's independence, almost tripling its output during this period. The sector has shown rapid growth also in the last three years (2002-2004), growing by 9.1% on average annually. High proportion of exported products (almost 70% of the production output) is characteristic to wood processing.

Production output in 2003 went up very rapidly by 16.5%. Producer prices grew significantly during the year due to the high euro exchange rate, as the EU member states are the most important sales markets for Latvian wood processing products. In the 2nd half of 2004 the growth slowed down due to weak external demand.

Figure 17. Wood Processing Indicators



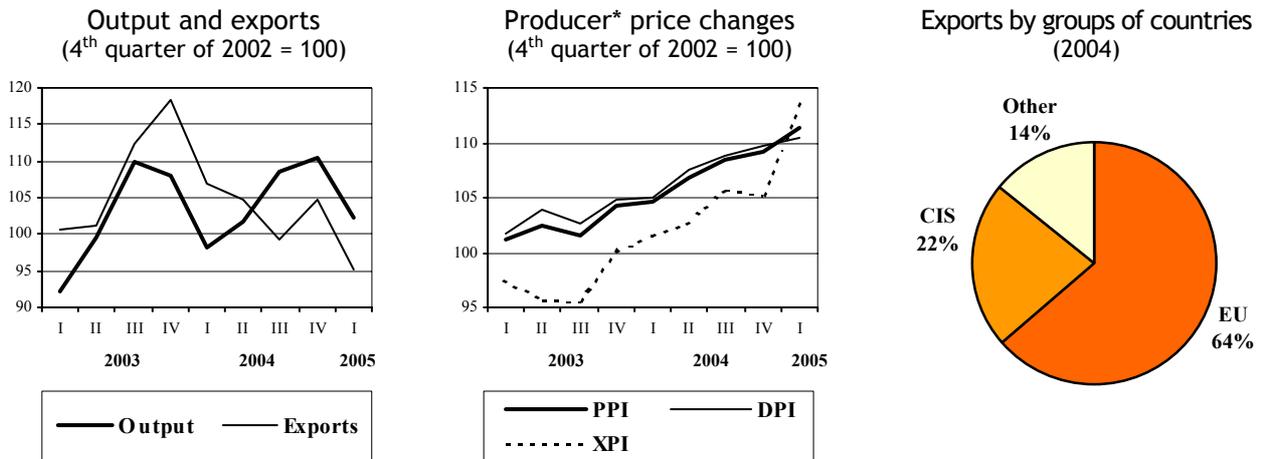
* PPI - producer price index, DPI - producer price index for products sold in the domestic market, XPI - producer price index for exported products

Producer prices in wood processing grow faster for products sold in the domestic market due to rise of domestic demand.

Paper industry, publishing and printing have grown slowly in the last years - on average by 2% annually during the last three years. The sector has a relatively small share of exports. Its competitiveness in the domestic market is decreasing.



Figure 18. Paper Industry, Publishing and Printing Indicators

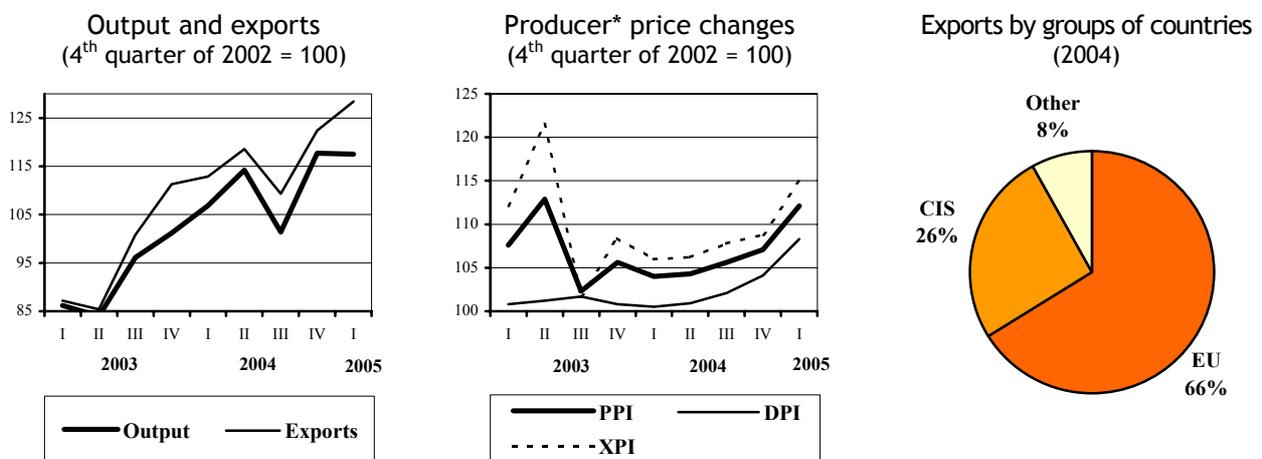


* PPI - producer price index, DPI - producer price index for products sold in the domestic market, XPI - producer price index for exported products

The sector's main export markets are Lithuania and Estonia, whereas chances to expand into markets of other EU countries are weak. Growth of export prices is much slower than the average price growth, as a relatively big share of exports is connected with the CIS countries and trade conditions with these countries worsen due to the low exchange rate of the US dollar, which is one of the main currencies of account in this direction of trade.

Chemical industry in Latvia has stable traditions, highly qualified specialists, long history of producing a wide range of products both for final and intermediary consumption, and a good base for research. Chemical industry accounts for approximately 6% of the total added value of manufacturing. Exports of chemical products go in almost equal shares to all major trading partners of Latvia but this mostly bears evidence to the sector's weak competitiveness in markets of developed countries. Exports to Lithuania and Estonia make up approximately two-thirds of exports to the EU countries.

Figure 19. Chemical, Rubber and Plastic Industry Indicators



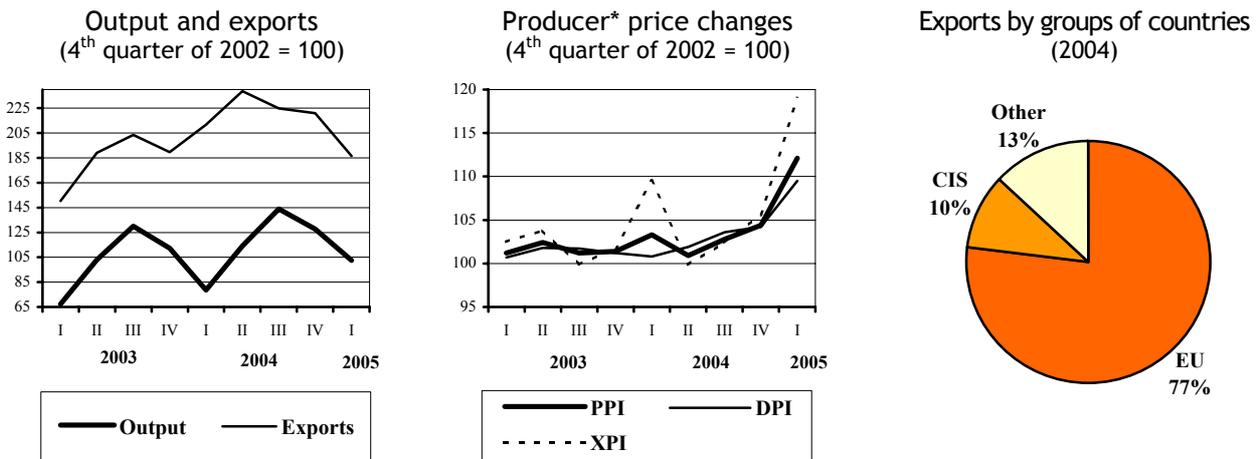
* PPI - producer price index, DPI - producer price index for products sold in the domestic market, XPI - producer price index for exported products



The sector's growth has not been stable in recent years. There have been periods of decline, for example, in 2003 after considerable growth of output in 2002. Rapid growth by almost 20% took place in 2004, mostly due to increased demand in the CIS countries. Incomes from chemical product trade with the CIS countries in 2004 were 1.5 times higher than in the preceding year.

Manufacturings of other non-metallic mineral products (mostly construction materials) have very unstable growth rates; after steep growth by 15.3% in 2002 the growth rate in 2003 was more moderate (by 5.4%) but in 2004 the growth again was rather fast (by 12.5%).

Figure 20. Other Non-Metallic Mineral Products Industry Indicators

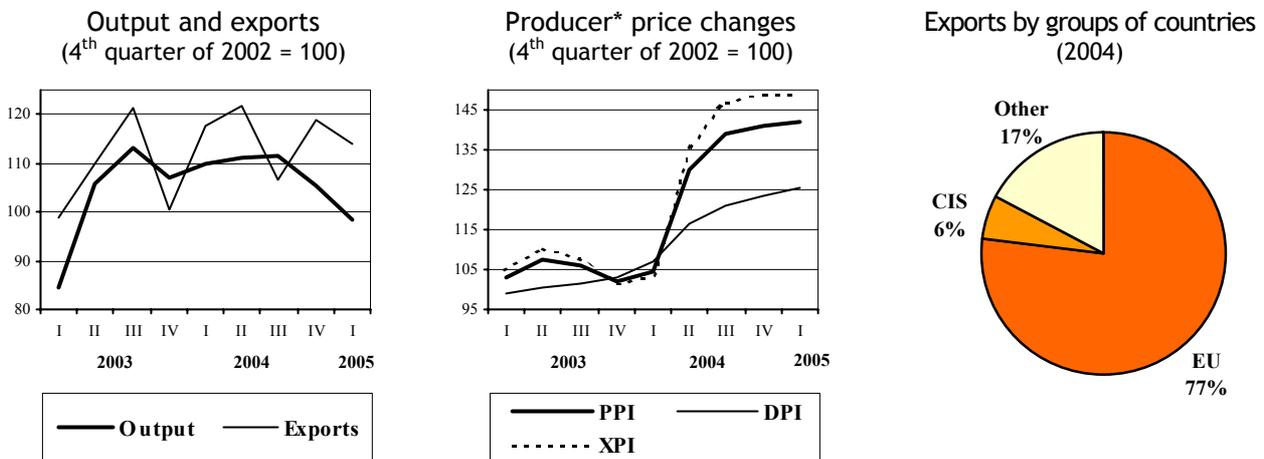


* PPI - producer price index, DPI - producer price index for products sold in the domestic market, XPI - producer price index for exported products

Increase of domestic demand is the main incentive for growth of the sector. Growth of exports is also significant, and rising export prices especially fosters it.

Metal and metalwork sectors constitute more than one-tenth of the total added value of manufacturing. Exports account for almost 80% of the total output of these sectors. The domestic market share tends to expand recently. Development of construction has resulted in increased demand for articles of base metals.

Figure 21. Metal and Metalwork Industry Indicators

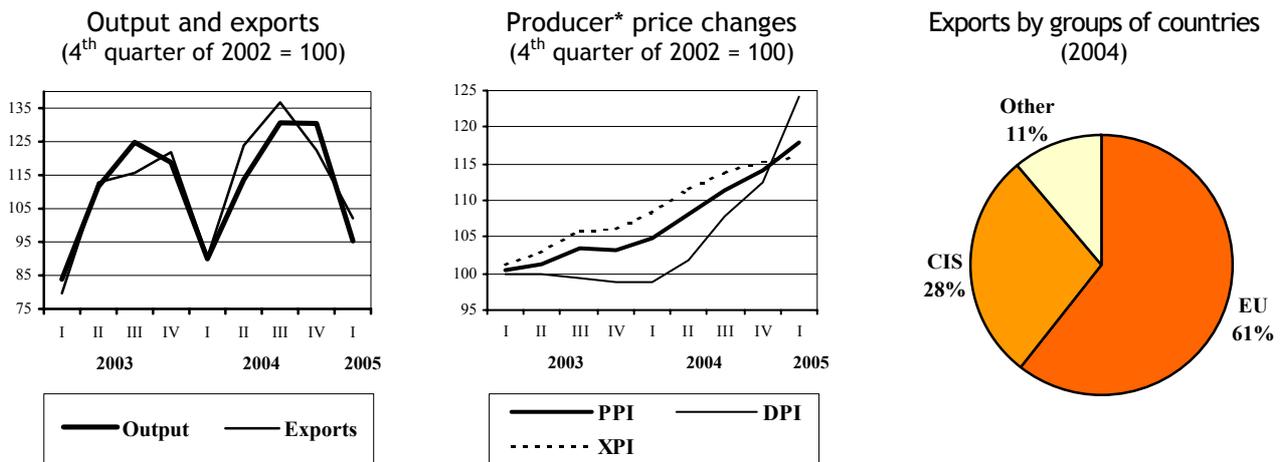


* PPI - producer price index, DPI - producer price index for products sold in the domestic market, XPI - producer price index for exported products

Average growth in the sector in 2002-2003 reached almost 7.7%. Producer prices in the sector practically did not change in 2002 and 2003 but started increasing rapidly in 2004 both for domestically sold and exported products, and the increase was considerably faster for exported products.

Machinery sectors constitute nearly one-tenth of total added value of manufacturing, and the share is growing with every year. Exports make up 70% of the total output in this sector.

Figure 22. Machinery Indicators



* PPI - producer price index, DPI - producer price index for products sold in the domestic market, XPI - producer price index for exported products

Seasonality is clearly present in output and exports by the sector with these indicators falling in the 1st quarter of each year, yet the sector shows significant growth in general. In 2002-2004 the average growth rate exceeded 12.9%, and in 2003 the growth was especially fast.

4.2.2. Transport issues

Long-term objective of the transport development policy is to create effective, safe, competitive, environmentally friendly, balanced and multimodal transport system which is integrated in the European transport system, satisfies economic and social needs of the state for passenger and cargo transportation in domestic and international traffic. Improvement of transport system quality is one of the main preconditions for re-industrialisation and development of innovative economy in Latvia, it encourages regional development and improves competitiveness of Latvian business in European and international market.

The goal of the transport policy is to increase energy effectiveness in the transport sector and to reduce noise and environmental pollution created by transport, encouraging use of means of transport which create smaller emissions of air-polluting substances per unit of cargo or passenger transportation.

The main directions of transport policy development are identified in many documents (Table 19), the main of which is the *National Programme for Transport Development 1996-2010* (updated in 2000-2006).



Table 19. Transport policy development documents

Full title of the document	Date of issue	Publishing authority	Where to obtain the document	Content of the document
National Programme of the Development of Transport of 2000 to 2006	Accepted on 9 of June, 1999; Updated on 25 of February, 2002	Ministry of Transport (MoS)	www.sam.gov.lv	The National Transport Development Programme is a medium term strategic planning document in the transport sector the implementation of which is of vital importance and indispensable for the purpose of balanced development of the society and national economy of Latvia. The goal of the transport development policy of Latvia continues to be setting up of an efficient, safe, environmentally friendly, multimodal, balanced and competitive transport system.
National Programme for the Development of Communications for the Years of 1995 to 2010		(MoS)	www.sam.gov.lv	Providing of universal services: public telecommunications, radio and television, Latvian post. There are goals for maintaining and development of telecommunication sectors.
Universal Strategy for Telecommunication Services	June, 2002	(MoS)	www.sam.gov.lv	Strategy is elaborated for joining the EU.
Policy Guidelines for the Branch of Electronic Communications in the Republic of Latvia for the Years of 2004 to 2008	Accepted on 8 of March, 2004	(MoS)	www.sam.gov.lv	The purpose to continue of the transition process for common and easy controllable e-communication market.
Guidelines for to the Development of Public Transport for the Years of 2005 to 2014	Accepted on 28 of September, 2004	(MoS)	http://ppd.mk.gov.lv/ui/Default.aspx	The main purposes are: <ul style="list-style-type: none"> To improve the public transport services availability; To raise the level of standard for public transport services.
Concept for Passenger Traffic for the Years of 1999 to 2002	Accepted in 1999	(MoS)	www.sam.gov.lv	Concept is elaborated for effective passenger traffic system. There are defined main development directions of inland regular passenger traffic.
Air Transport Policy for the Years of 1999 to 2004	Accepted on 25 of May, 1999	(MoS)	http://ppd.mk.gov.lv/ui/Default.aspx or	The purpose to create safe and effective air transport system.

			www.sam.gov.lv	
Programme of the Development of Latvian Rural Roads for the Years of 2003 to 2004	Accepted on 18 of June, 2002	(MoS)	http://ppd.mk.gov.lv/ui/Default.aspx or www.sam.gov.lv	The main goals of the programme are: <ul style="list-style-type: none"> To promote the realization of administrative territorial reform; To raise the level of living or rural population; To promote the development of distant regions.
National Programme for the Road Traffic Safety		(MoS)	www.sam.gov.lv	For improving safety system on the roads.
Programme for Regional Support of the State 2nd Class Roads	Accepted on 30 of November of 2004	(MoS)	http://ppd.mk.gov.lv/ui/Default.aspx	For promoting development and maintaining of the State 2nd Class Roads (13 347 km).
Concept on the Control of the Road Traffic	Accepted in 2002	(MoS)	http://ppd.mk.gov.lv/ui/Default.aspx	For more effective control of road traffic (traffic safety, control of road haulage, control of licensed/ unlicensed business of carriers).
Concept on Shipping Policy	Accepted on 21 of July, 1998	(MoS)	http://ppd.mk.gov.lv/ui/Default.aspx or www.sam.gov.lv	The main targets of concept are following: <ul style="list-style-type: none"> To create in Latvia shipping activity center of the Baltic region; To create favorable environment for competitive shipping activities; <p>budget incomes from the shipping branch.</p>
State Programme for the Development of Latvian Ports for the Years of 1995 to 2010		(MoS)	www.sam.gov.lv	The main purpose of the Programme is to increase the freight and passenger traffic via Latvian ports.
State Programme for the Development of Safety of Maritime Service		(MoS)	www.sam.gov.lv	The main target or the Programme are: <ul style="list-style-type: none"> The development of maritime safety in Latvian territorial waters and increase of ports efficiency; The development of salvage operations in the sea and the preservation of the maritime environment.
Action Plan of the Ministry of Transport and	2004-2008	(MoS)	www.sam.gov.lv	The purpose is to make officials effective work in the interests of society.



Communications within the Corruption Prevention Programme for the Years of 2004 to 2008				
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The National Transport Development Programme is a medium term strategic planning document in the transport sector the implementation of which is of vital importance and indispensable for the purpose of balanced development of the society and national economy of Latvia. The present programme is an updated plan of the activities, set out at the

The goal of the transport development policy of Latvia continues to be setting up of an efficient, safe, environmentally friendly, multimodal, balanced and competitive transport system. Its integration into the European transport system is anticipated thereby meeting the economic and social needs for high quality transport services as well as increasing possibilities of transport mode choice and flexibility of passenger and goods transport operations. Another goal is to facilitate regional development and to create more favourable environment for Latvian business competitiveness in the European and world markets.

For the full implementation of the National Transport Development Programme there are a range of tasks to be accomplished. Among them maintenance and development of environmentally friendly transport infrastructure, increasing of traffic safety, promoting of national and international passenger and goods transport operations. It is also important to develop transit operations and transit corridors as well as to ensure the integration and competitiveness of the transport system of Latvia in the European transport system.

The central task of the implementation of the National Transport Development Programme is to ensure increase in transport operations performance efficiency, which in its turn could set up preconditions for boom of the national economy and prosperity.

The National Transport Development Programme (1996-2010) is a most general document of plan character that constitutes the activities (actions, tasks, types of activities) of economic, organizational, institutional nature and other-type of programmes falling within one system. It is worked out for 15 years period.

The National Transport Development Programme consists of nine sub-programmes:

- Maintenance and development of transport infrastructure
- Improvement of transport services
- International (export, import, transit) transport operations. Transport corridors, cooperation with neighbouring countries and integration into the European transport network
- Integration of transport systems
- Traffic safety
- Establishment of the environmentally friendly transport system
- Transport statistics and information infrastructure
- Transport legislation and institutional regulations
- Education and science



The main goal of passenger transportation sector development is creation of integrated passenger transportation system to provide population with high-quality and accessible public transport services.

Road Traffic

The objective of the development policy of the sector is an effective maintenance and development of the road network to foster economic progress of the state and rise of the standard of living of the population, and to promote compliance of Latvian international roads to requirements of European road network.

The task of the current period is to preserve and maintain the road network at operative level, stopping its further decay, and to develop the road network in accordance with the most urgent economic and social interests. The main lines of action are:

- ❑ increase in funding for road maintenance by improvement of the funding system;
- ❑ quality improvement and development of international road transport corridors;
- ❑ improvement of traffic safety;
- ❑ raising the load carrying capacity of road surfacing and bridges;
- ❑ optimisation of road network division and improvement of management.

To improve quality of state roads and harmonise their network, several development programmes were developed. *State Programme for Maintenance and Development of State Road Network 2000-2015* (approved by the Co-ordination Council of the National Programme for Transport Development on February 25, 2002) was worked out to promote road maintenance and development and to foster inclusion of Latvian roads into European road network. The programme defines the goal of further improvement of road sector, the strategy and tactics to reach this goal, the most important tasks for the period of 2000-2006 and the further period of 2007-2015. The measures included in the programme mostly deal with the road network managed by the state and somewhat touch the problems of the roads owned by local governments. Fulfilment of these measures depends on the available funding because deviations from the forecasted funding level would inevitably lead to changes in the operation forecast included in the programme.

State Road Daily Maintenance Strategy 2002-2007 (approved by Regulation No 55 of April 12, 2001 of the Minister of Transport and Communications) envisages annual programmes for daily and periodical maintenance, reconstruction, and traffic safety improvement and planning of roads.

Finances for implementation of the two above-mentioned programmes are attracted from state budget appropriations for road programmes.

In the sphere of road traffic, in view of the actual flows of international road transport projects, which promote integration of Latvian transport network into European transport system, stand out as the most significant ones. In these projects, problems of improving the load carrying capacity of road surfacing and bridges, traffic capacity of roads, traffic safety and traffic quality are solved in integrated way. The most important improvements are to be made in TEN-road network; to implement them, State Investment Programme projects "Improvements in Via Baltica route and



Western-Eastern corridor” and “TEN road network” were worked out. EU ISPA funds and investments from basic state budget are attracted for implementation of these projects, and further attraction of finances from EU Cohesion Fund is also foreseen. Attraction of European Regional Development Fund (ERDF) finances to the first-rate state roads which link economic centres and connects them to TEN-road network was started in 2004. To reach this goal, the *National Programme for Development of First-Rate State Roads* was developed. Road transportation control system, which meets EU requirements, is being established.

Taking into account the low level of road traffic safety in Latvia, the *National Programme for Road Traffic Safety 2000-2006* was worked out with a goal to reduce the number of the killed in road traffic accidents to no more than 300 people in 2006. 493 people were killed in road traffic accidents in 2003.

Railway

The objective of the railway development policy is a comprehensive modernisation and development of the sector to achieve successful inclusion in the single European railway transport system and operation in conditions of market economy. Possibility of future electrification of the main transit corridors is being explored. In addition to improvement of operation of the current Eastern-Western transit corridors, it is also planned to foster development of transit corridors in Northern-Southern direction, facilitating movement possibilities of passengers and increasing cargo flows in the single European territory.

Taking into account the trends of European prospective development, it is planned to equip the main transit corridors with electrical traction in the future.

The railway sector policy will continue developing in the directions set by plans approved before and documents developed by the EU (*National Programme for Transport Development 1996-2010*, *National Programme for Administration of EU Structural Funds 2004-2006* and *National Development Plan*).

Restructuring of railway sector will be completed. Since the start of restructuring in 1998, the state joint stock company “Latvijas dzelzceņš” was transformed into a concern and different operations in particular enterprises within the concern were separated. Separation of operations promotes transparency of costs and interest of management in work performance and improves work effectiveness. Restructuring of the sector is carried out in accordance with economic interests of the state and in the directions set by EU legal documents.

Main Pipelines of Oil and Oil Products

Latvia as a transit country in the Baltic Sea region has remarkable advantages concerning transit of oil and oil products. Terminals reloading oil and oil products in Latvian ports are connected by main pipelines to places of oil extracting and oil processing in Russia. The goal of the development is to ensure transit of oil and oil products through territory of Latvia by appropriate system of main pipelines, which would increase capacity of transportation and would offer more flexible services in transportation of oil and products of different quality.



Air Traffic

Successful development of air transport will be associated with competitiveness of infrastructure facilities and air carriers of the sector in international air transportation market also in the future (both in short term and long term).

The main task of air traffic policy is development of Riga airport into significant air traffic centre integrated in EU transport system by updating and developing infrastructure of state joint stock company Riga International Airport and state joint stock company "Latvijas gaisa satiksme", creating homogeneous environment for users of air transport, and by harmonizing operation of Latvian air traffic control service with air traffic control system of other European countries.

Extension of the current runway by 650 metres is a priority in the aspect of air transport and military development of the state because it is impossible to qualitatively provide functions of a state receiving NATO forces without this extension. Besides, with increase in number of passengers and amount of cargo, reception of aircraft with higher number of passenger places and higher freight carrying capacity has become topical; it is impossible to ensure it now because the current runway is not long enough. The mentioned project is significant also from the point of view of safety and reduction of noise level.

Flight safety and aircraft security will be the base and main priority of successful air transport development also in the future.

Ports

The main advantage of Latvian ports is the favourable geographical position. Relatively well-developed transport infrastructure connects Latvian ports with regions of Russia and other CIS countries, creating one of the shortest and economically most advantageous transit corridors between Eastern and Western markets.

The objective of the sector's development is to increase cargo and passenger flow through Latvian ports, creating attractive and up-to-date cargo handling conditions corresponding to the world level and providing high-quality services for passengers. Development of ports and their integration into European transport system is hampered mainly by low quality of infrastructure associated with port operation (roads, railway access roads and other infrastructure); for this reason port development programmes will be more included in EU financial programmes for reception of funding.

Traditionally different modes of transport in Latvia are good balanced. For example, modal shift from trucks to railways for freight is shown in table 20, 21.

Table 20. Modal shift between road and rail transport

	Freight turnover, mill ton km per year		
	2002	2003	2004
Road transport	6160	6763	7249
Rail transport	15019	17603	18814
Total by road and rail transport	21179	24366	26063
Percent of rail transport in modal shift	70,9 %	72,2 %	72,2 %



Table 21. Passenger traffic by type of transport (mln passengers)

Year	Rail	Bus	Trolley-bus	Tram	Air
1990	144.5	573.3	219.7	243.1	2.2
1991	90.7	570.8	224.2	251.6	1.9
1992	83.1	287.5	188.0	193.7	0.4
1993	59.6	186.0	112.4	114.9	0.2
1994	55.6	188.1	110.7	112.8	0.2
1995	42.3	184.5	98.7	101.2	0.2
1996	34.1	148.7	75.9	79.5	0.2
1997	33.0	151.4	83.8	88.4	0.3
1998	30.1	164.2	96.1	98.0	0.3
1999	24.9	167.4	92.2	93.8	0.2
2000	18.2	165.9	86.5	88.9	0.3
2001	20.1	169.4	84.8	86.9	0.3
2002	22.0	173.5	82.6	88.2	0.3
2003	23.0	179.6	82.3	84.6	0.4
2004	23.9	195.8	89.0	87.9	0.5

Utilization of European Union Structural Funds and Cohesion Fund

As a European Union (EU) member state Latvia has access to financial aid from the EU Structural Funds, which is an instrument for implementation of the EU regional cohesion policy.

The goals regarding the planned use by Latvia of the Structural Funds are set out under Development Plan or the Single Programming Document whose final version was bilaterally coordinated by the Cabinet of Ministers of the Republic of Latvia and the European Commission in December 2003.

The aggregate amount of financing accessible to Latvia from the Structural Funds to which the final beneficiaries will be able to apply is made up of financing from the EU Structural Funds (75%) and co-financing from Latvia's national budget and budgets of local authorities (25%). To apply for resources from structural funds the final beneficiaries will also have to provide their own co-financing.

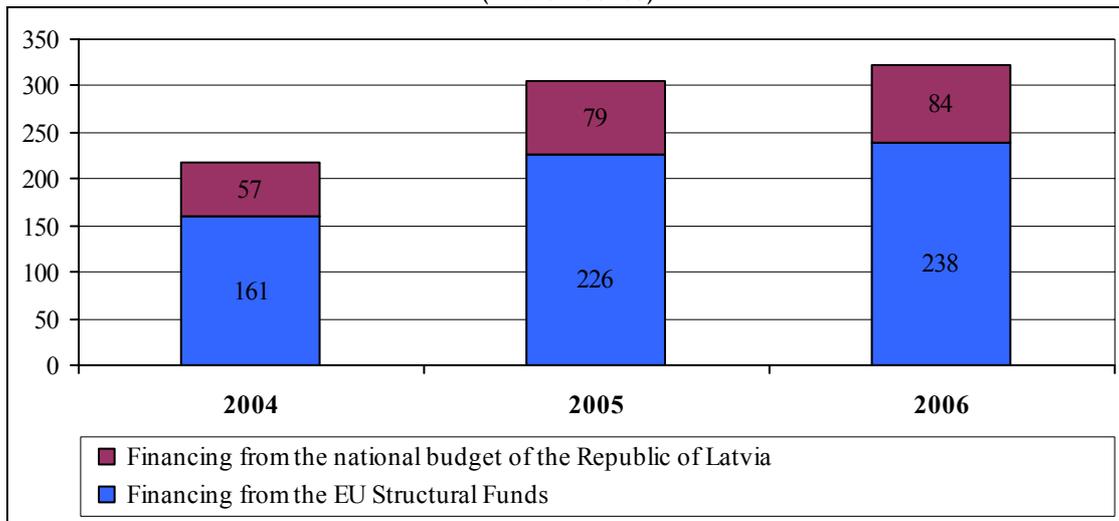
The aggregate financing from structural funds to which Latvia will have access in the period from 2004 through 2006 amounts to 845 million euros (including 626 million euros financing from the EU Structural Funds and EUR 220 million euros financing from Latvia's national budget).

The financing of 626 million euros from the EU Structural Funds is made up of resources from four funds:

- ❑ European Regional Development Fund (369 million euros);
- ❑ European Social Fund (139 million euros);
- ❑ European Agricultural Guidance and Guarantee Fund's management division (93 million euros);
- ❑ Fisheries Management financing instrument (24 million euros).



Fig.23. Financing from Structural Funds to which Latvia has access, broken down by years (million euros)



Regulations No 200 of March 30, 2004 of the Cabinet of Ministers "Regulations on the Management of the European Union Structural Funds" enumerate institutions involved in handling the structural funds as well as outline their rights and responsibilities. The institutional system for handling the structural funds is presented below.

The managing authority and the 1st level intermediate bodies (Sectoral ministries) are responsible for management of structural funds and the measures and activities financed thereof as well as efficiency and legality of the aid granted.

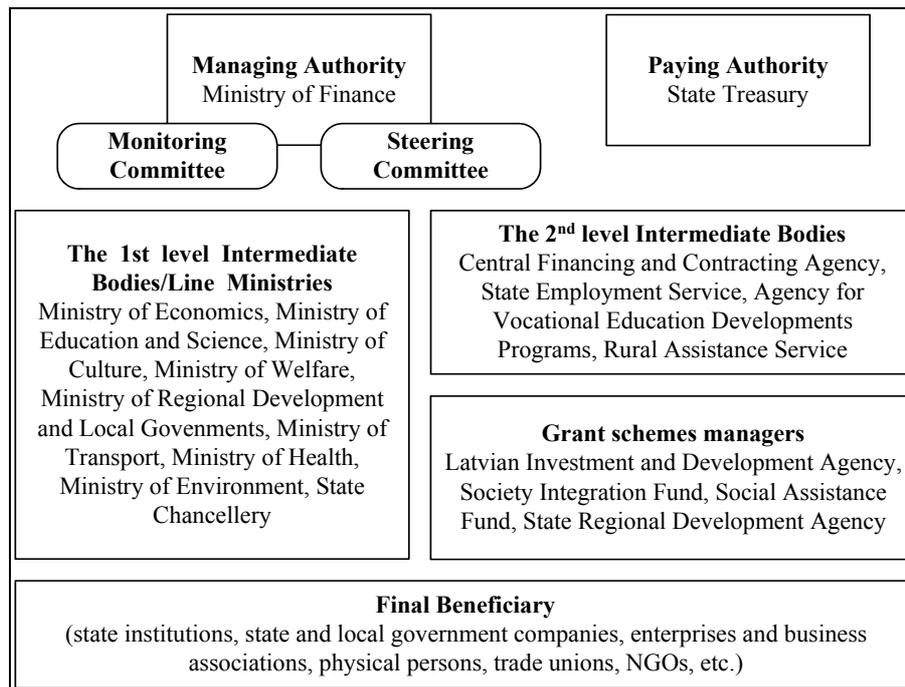
The paying authority, the 2nd level intermediate bodies and institutions handling the schemes of grants are responsible for implementation and financial management of projects financed from the Structural Funds.

For the institutional system of the structural fund handling to be able to operate smoothly the involved institutions have to undergo accreditation and enter into contracts on the administration of structural fund resources.

At present the accreditation of all 1st and 2nd level intermediate bodies has been accomplished with all these institutions now allowed to start handling the structural funds.

The managing authority has closed contracts with the 2nd level intermediate bodies on utilization of structural funds - the Central Financing and Contracting Unit and Rural Assistance Service - thereby the two bodies have in fact launched administration of structural funds.

Fig.24. Institutional system for handling the Structural Funds



Decisions on the project assessment criteria and approval of guidelines are made by the Monitoring Committee and fund steering committees. By June 1, 2004 the Monitoring Committee had approved specific project assessment criteria for 52 out of a total of 101 activities. The fund steering committees meanwhile had approved 32 out of 55 guidelines for open tenders, 9 out of 28 national programmes and 4 out of 18 grant schemes.

To level out differences between the member states Latvia, after accession to the EU, has access to resources from Cohesion Fund, which replace the ISPA funds that were available to Latvia before the accession. Resources from the Cohesion Fund are available to member states in which the GDP per capita is below 90% of the EU average. The principal goal of the Cohesion Fund is to provide support to environmental protection measures and transport infrastructure improvement.

Like with the structural funds, the resources from the Cohesion Fund are also granted only as co-financing for measures supported financially by the member state. The EU co-financing from this fund is set at 80-85% with the EU contribution able to reach even up to 90% of the total project costs where financing is raised from the structural funds as well.

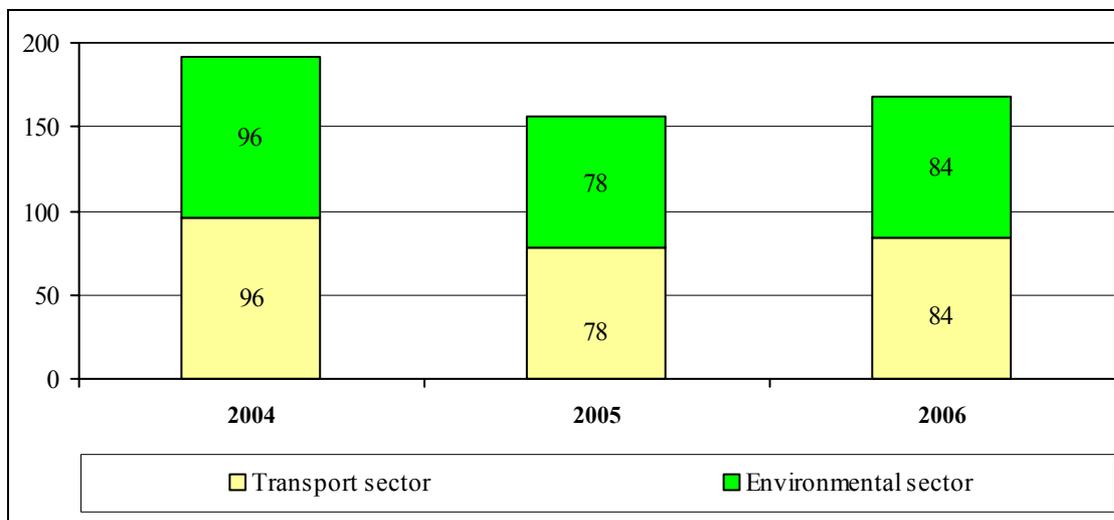
The utilization of resources from the Cohesion Fund is set out under the Reference Framework Document, which has been coordinated with the European Commission in December 2003. In contrast to Development Plan, which only sets out priority areas for aid, the Reference Framework Document enumerates specific projects to which the financing will be granted. The Cohesion Fund has broader range of investment as compared to ISPA:

- ❑ transport sector - highways, railways, ports, airports, public transport;
- ❑ environmental sector - development of household waste (regional waste landfill sites), effluent treatment, drinking water supply.

Latvia will have access to 516 million euros from the Cohesion Fund during 2004-2006 planning period, including ISPA projects approved by the European Commission, which are to be treated as Cohesion Fund projects as of May 1, 2004. A half of the Cohesion Fund resources are earmarked for the transport sector and the other half for environmental sector.

The institutional system for the implementation of Cohesion Fund is very much like the system for implementation of the Structural Funds with only the number of institutions involved being lower. The managing authority is the Ministry of Finance; the paying authority is the State Treasury. There are only two intermediate bodies, namely, the Ministry of Transport and the Ministry of Environment. The beneficiaries meanwhile will be state and municipal institutions and enterprises.

Fig.25. Planned financing from Cohesion Fund, broken down by years (million euros)



Border crossing of goods

Road transport

The EU membership has significantly changed both border control and customs practices. Since May 1, 2004 the Baltic States have been a part of the common EU customs zone, which facilitated considerably the Intra-EU trade. The Baltic States are not yet part of the Schengen agreement, which means that the national border control checkpoints still remain in operation.

The impact of the EU membership is particularly noticeable at border crossing points within the Baltic States. Before joining, waiting times for trucks often exceeded 10 hours, especially at border crossing posts between Latvia and Lithuania. Since May 1, 2004, these queues have practically disappeared. Due to the improved situation at the Intra-EU borders, only border crossing points with Russia and Belarus are covered more detailed in the report.

In general, all the border crossing points are modern and relatively recently built or reconstructed. The facilities include proper office premises for customs and border guard personnel, customs inspection posts and veterinary/phyto-sanitary control

points. Services for traders such as customs brokerage, insurances, customs guarantees and money exchange is well available.

Terehova and Grebneva BCPs are geographically located on an advantageous route for transit cargo from Central Europe to two major cities in Russia: Terehova for Moscow and Grebneva for Saint Petersburg. Foreign transport companies favor Latvia as a road transit passage to Russia. In June 2004, approximately 80% of the truck units/drivers were non-Latvians: 50 % of the units are Lithuanian and 20% Polish.

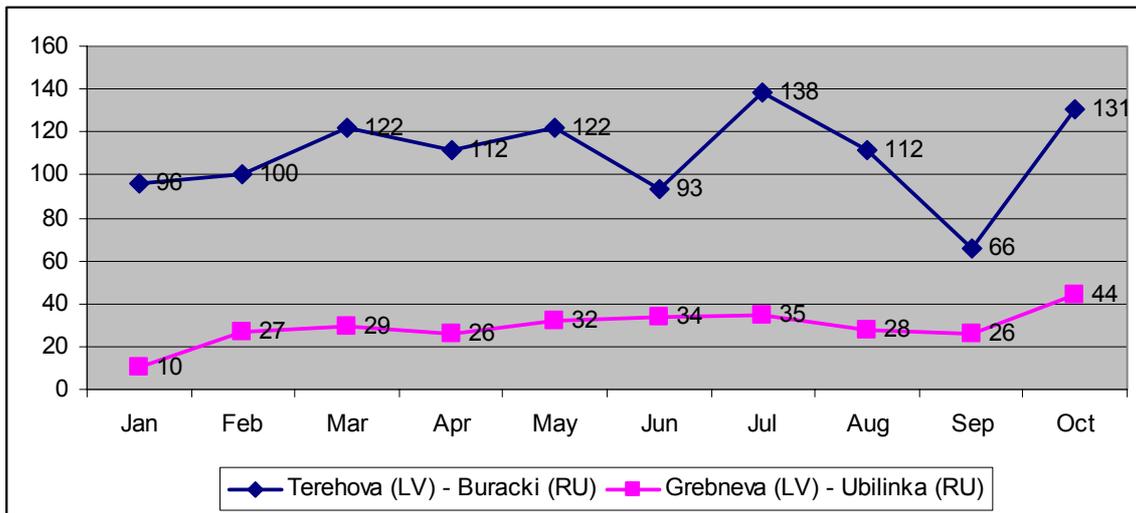


Figure 26. Daily average waiting times for trucks to access the border control at Terehova and Grebneva border crossing points (Source: Latvijas Auto).

Another underlying factor behind hauliers' unwillingness to use Belarus as a transit country can be found indirectly in Russian customs practices. Some Russian importers prefer using an unofficial method of clearing goods through customs by paying a fixed amount of USD 20,000 for a truck load of goods as customs payments. For shippers, it is therefore important to load the transport unit as full as possible. If the tax value of the transported goods exceeds the limit of USD 50,000, which is covered by TIR-insurance, the Belarus customs requires the unit to be transited in a customs convoy through Belarus. For a road haulier, a customs convoy means an extra cost of USD 500, which may be up to one third of the total transport cost (Vilnius - Moscow). To avoid the extra costs road hauliers prefer a longer transport route via Latvian BCP, which provides a direct access to Russia. This practice has been reported by numerous independent sources from shippers, freight forwarders and the EU customs executives in EU countries. The procedure was widely used for import of high-value cargoes such as consumer electronics before year 2004. According to multiple independent sources, this practice, illegal under the current customs code, seems to be used even today on a regular basis. It is clear that this type of illegal arrangements are likely to cause a far more negative impact on Russian Government in decreased income from taxes and duties. At Baltic borders the impact can be seen in high concentration of traffic on Latvian BCPs of Terehova and Grebneva.

The high concentration of international transit traffic into two BCPs seems to overload especially the Russian side, where technical facilities are not on as high level as on the Latvian side: particularly the Russian side lacks proper premises for customs inspection posts.

Significant investments have been made to the new EU external border crossing posts between the Baltic States and Russia/Belarus. In addition to the national funding, the European Union has allocated funds mostly through PHARE program. The overall target of the PHARE funding to in the Baltic States has been to develop the border control systems in accordance with the requirements of the Schengen acquis and facilitate implementation of the recommendations stated in the Integrated Border Management Strategy. Table 1.exemplifies the case of Latvia.

Table 22. Phare program’s fund allocations to Latvia’s border crossing points

PHARE program year	Allocation target	PHARE funding (m EUR)
1993-2004	Building of Terehova BCP	2.90
	Building of Paternieki BCP	1.35
	Building of Grebneva BCP	1.55
	Building of Silene BCP	1.30
1998	Training of 1 200 border guards	1.00
1999	Building of 3 simplified BCP with Belarus	4.50
2003	Building of 2 border guard stations with Russia	1.75
2000	Improving co-operation between state officials	1.20
2001	Veterinary/Phyto sanitary control at rail/sea BCPs	7.13
	Asylum and Migration Management System	2.27
Total	Million euros	24.95

Total length of the State Border of Latvia is 1864 km including 933 km of the future EU external border: 437 km of Eastern land border with Russia and Belarus and 496 km of sea border. There are altogether 78 border control/crossing points on Latvian State border including 31 on the external border: 18 - on Eastern border, 9 seaports, 4 airports.

Bilateral Agreement between Finland -Latvia border guard services. Due to several large seaports consists of several terminals (e.g. passenger port, trade port, oil terminal, fishery port) at present the total amount of border crossings on external borders are 42 belonging to six regional boards of the State Border Guard: Vilaka and Ludza board (Russian border), Daugavpils board (Belarus border + 1 airport), Riga, Ventspils and Liepaja board (sea border, airports) with a total staff up to 2200 persons.

The Baltic States have received also considerable material and training assistance through bilateral agreements int. al a number of courses on document checking using modern control equipment (such as Bilateral Agreement between Finland -Latvia border guard services). Likewise, the USA has provided the border guard services with radiation control equipment in order to improve the radiometric control on the Baltic-Eastern borders.

Rail transport

Veterinary checkpoints on railways in Latvia (in the towns Daugavpils and Rezekne) was certified and announced at the EU by November 2004.



Aviation

In Riga there are no phytosanitary inspection facilities required for the import of food and animals from non-EU countries. However, these shortcomings were not seen as a major obstacle. Airfreight imports from non-EU countries are usually imported via a major hub in Central-Europe where these facilities are available and goods can be inspected.

Transit issues

Problems faced at the implementation phase of the New Computerized Transit System in rail transport. As from the May 1, 2004 all new EU member countries were to be ready for accession to the New Computerized Transit System (NCTS). All three Baltic countries faced some difficulties during the first couple of weeks but these problems are expected to be only temporary by nature. In Latvia difficulties was related to lack of knowledge and information provided by the national customs to the railway operators and rail forwarders. In addition, the NCTS system applied to transit on the railways was apparently originally designed for road transportation and thus poorly meets the requirements for rail transport.

Interoperability of two legal systems (CIM and SMGS) is one of the greatest concerns in rail transport. The Baltic States are at the junction of these two legal regimes. All Western countries as well as some African countries are working under COTIF (Convention concerning International Carriage by Rail) convention and using CIM Bill of Lading, while Russia, China, and CIS and some Eastern European countries are working in SMGS (International Goods Transport by Rail) system. Latvia joined COTIF convention in 1999.

Latvia still operates mainly in the SMGS regime while after accession to the EU they should be ready to operate in COTIF system too. On full integration to the COTIF system the cargo shipped to Western Europe will use COTIF system, and cargo shipped eastwards will be presented in the SMGS. Still most of the cargo is transported from/to east using SMGS Bill of Lading. Latvia was granted a transition period by the EU until July 1, 2004.

Russia's implementation of new tariff policies in August 2001 aimed at channelling more cargo towards Russian ports has hindered transit by rail through the Baltic States. Since autumn 2001, Russia has adopted new tariff policy that prefers domestic ports handling and shipping. The aim is that Russia's own port capacity will allow handling up to 85% of the total foreign trade (in 2003 - 75%), while the remaining part will be transported through international ports. New tariff policy had an immediate impact on the volumes transported by Baltic railways as well as through Baltic ports.

The new tariff system adopted by Russian railways means that tariffs to Baltic ports are approximately three to four times higher than the tariffs applied to shipments going to Russian ports.

At the moment European Commission (EC) considers ways for eliminating Russia's discriminatory railway tariff policy. The EC is considering legal solutions, within the World Trade Organization (WTO), to call Russia accountable on the behalf of the European Union member states over discriminatory railway tariff policy. According to the EC, Russia's current tariff policy creates conditions of unequal competition in the ports of the EU member states and Russia.



Long Russian cargo trains create pressure for the Baltic marshalling yards. It is very difficult for the Baltic countries to influence on the transporting politics of Russian railways. Russian railways tend to prefer to transport as long trains as possible and as long distances as possible. This has at least in the past created problems for the marshalling yards in the Baltic States. In Latvia, the new reception yard along with the construction of the Rezekne II freight junction is being built.

4.3. Market economic measure

4.3.1. Competition perspectives

There are different levels of competition of the actors in the transport chain:

- ❑ The ports compete against each other to attract the shipping lines regarding the seaside access, the transport companies (road, rail, inland navigation) for the hinterland access and the manufacturers and distributors for additional services.
- ❑ The shipping lines as the customers of the ports compete against each other to attract shippers/forwarders/ hauliers/ passengers or other shipping lines as their customers
- ❑ The transport users as the customers of the shipping lines (shippers/forwarders/ hauliers/ passengers/ other shipping lines) are able to use a large number of alternative transport possibilities, especially in long distance transport (the longer the distance the more route and modal choices exist).

This competition framework becomes even more complex taking into account all the interdependencies between all the involved actors. Freight operators and private and business travellers have a large number of alternative transport possibilities, which are often only marginally different in respect to parameters, like transport costs, total transport time, schedules, reliability, flexibility, safety, comfort, etc.

The larger the average transport distances, the more route choices, and also the more transport mode combination and services are available. This choice leads to continuous transport chain optimisations and substitutions.

4.3.2. Increasing globalisation (opportunities and threats)

International organizations follow the developments of business environment by monitoring and evaluating the current state, changes of background factors and indicators, as well as businessmen's experiences from doing business. Generally, in these international comparisons, Estonia has qualified significantly better than Latvia and Lithuania. Ranking by countries is presented in Figure 26.

Index of Economic Freedom aims to compare the most important institutional background factors for economic growth. This empirical study is based on the 50 variables, which are grouped into 10 categories (Figure 27). In the latest comparison Latvia's rank was 29th.

Transparency International's Corruption Perception Index charts levels of corruption in 133 countries. Finland has been the least corrupted country in this comparison. In



2003 Latvia's ranking was 57th, and among new EU countries, only Poland placed after Latvia. Results from World Bank's study are very similar.

According to World Economic Forum's Growth Competitiveness Index 2003-2004, Finland is the most competitive country in the world and United States is the second best. Estonia's ranking was 22nd, Latvia's 37th and Lithuania's 40th among 102 countries. Correspondingly Finland was also the best in Business Competitiveness Index rankings, Estonia 28th, Latvia 29th and Lithuania 40th among 92 countries.

Table 23 presents the most problematic factors for doing business in the Baltic States. We can summarize that the mentioned problems (by nature) concerning Estonia as "inadequate educated workforce" are quite different compared to Latvia and Lithuania. On the other hand, for example "inefficient bureaucracy" has been addressed in the each three Baltic States.

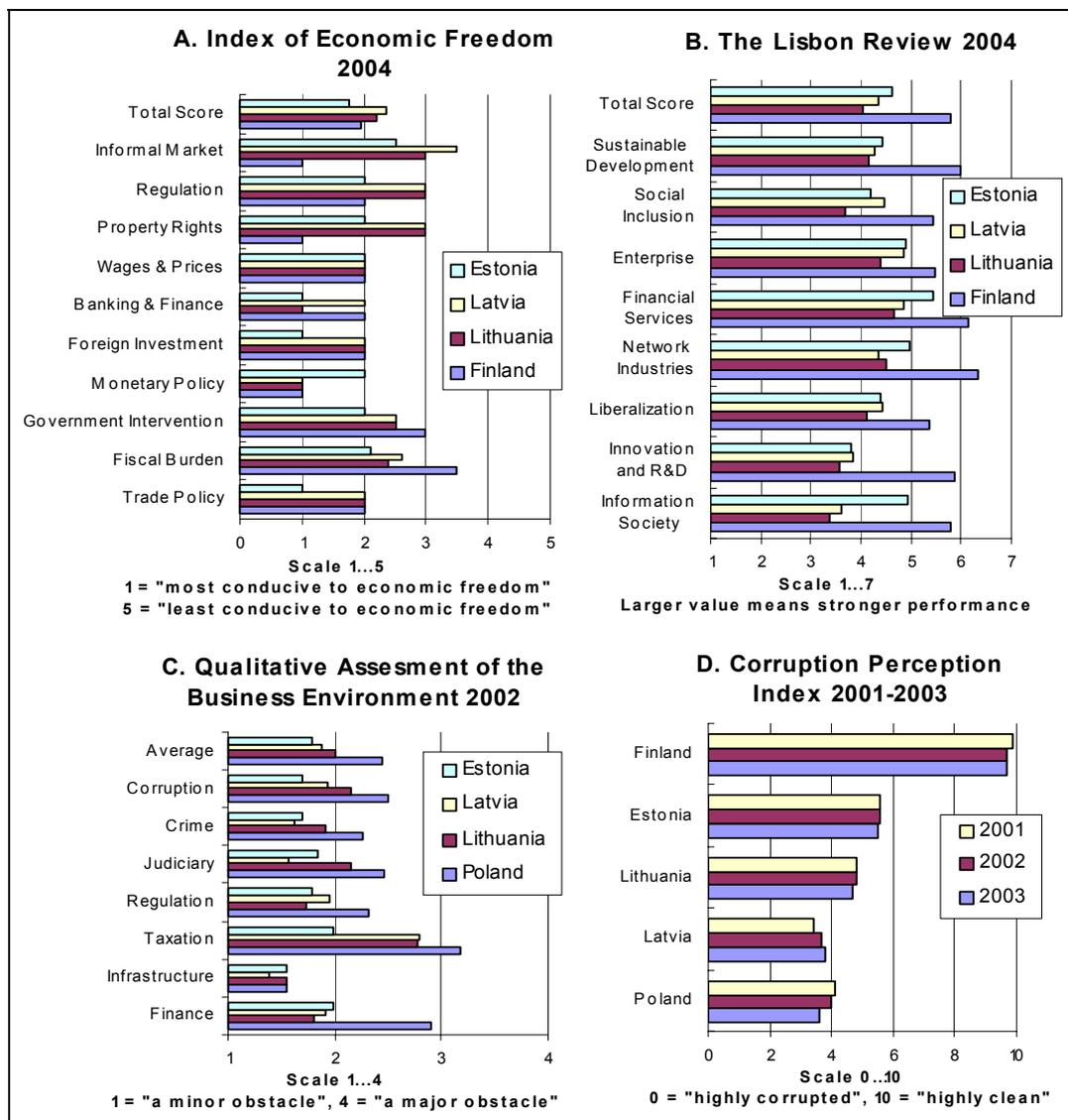


Figure 26. International comparison of the business environment. Sources: A: The Heritage Foundation; B: World Economic Forum; C: World Bank; D: Transparency International.

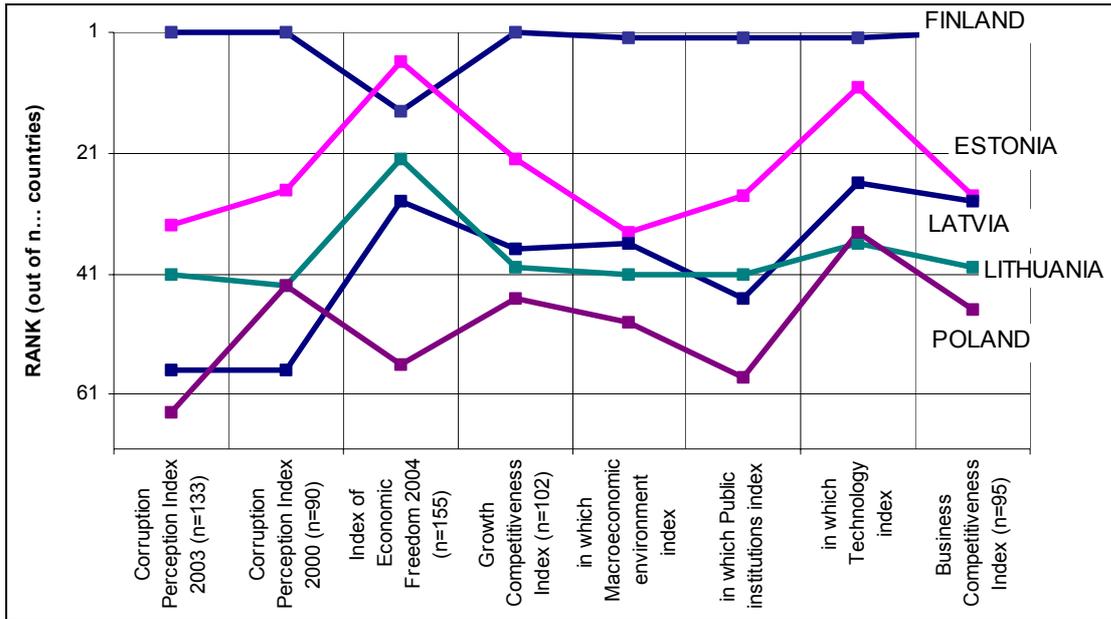


Figure 27. Ranking of countries; selected development indicators. Sources: The Heritage Foundation (Economic Freedom), Transparency International (CPI), World Economic Forum (all others).

Table 23. Top 5 - The Most problematic Factors for doing Business in The Baltic States. Source: World Economic Forum, Executive Opinion Survey (2003)

Rank	Estonia	Latvia	Lithuania
1.	Inadequately educated workforce	Corruption	Tax rates
2.	Inefficient bureaucracy	Inefficient bureaucracy	Inefficient bureaucracy
3.	Access to financing	Tax rates	Tax regulations
4.	Inadequate infrastructure	Tax regulations	Corruption
5.	Poor work ethic	Access to financing	Access to financing

A Logistics Friendliness Survey was conducted in November 2003 - January 2004 among international freight forwarders in order to illustrate how "easy" or "difficult" individual countries are perceived to be from a logistical point of view. The respondents answered on a 7-point scale according to whether they agreed with the statement (7 = totally agree...1 = totally disagree). The statements were formulated positive by nature, such as "Overall, I consider these countries logistically easy to cope with". Figure 15. presents the survey results of the overall evaluation of "logistics friendliness" of countries against the data on Gross National Income per capita corrected for purchasing power.

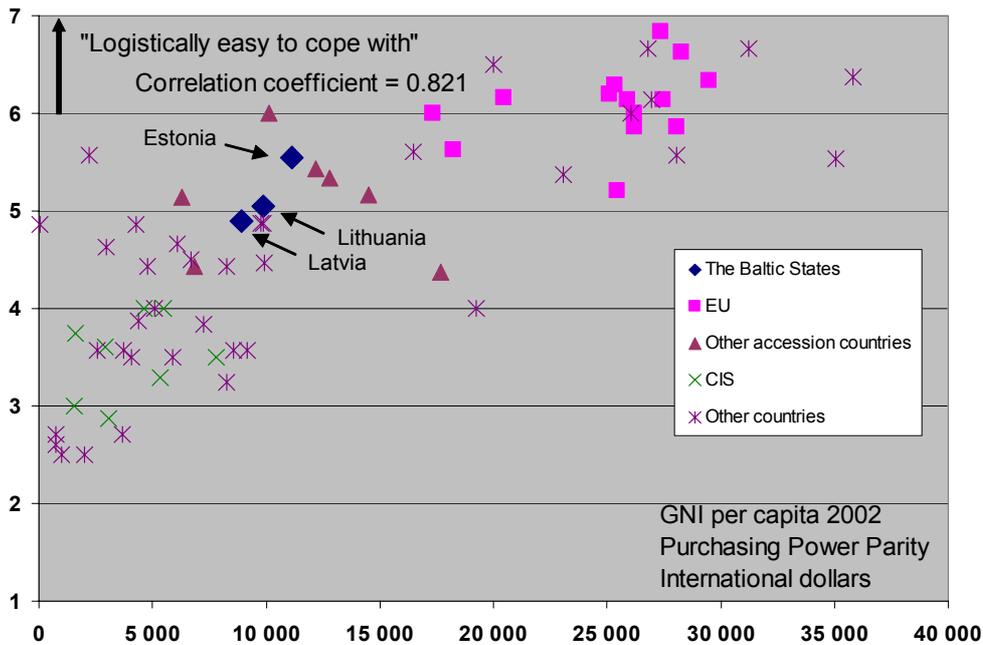


Figure 28. The ranking of countries in the Logistics Friendliness Survey 2003 against their GNI/capita in PPP terms in 2002. Sources: The World Bank, Data and Statistics (GNI data); Naula and Ojala 2004 (survey data).

Despite the simplified concept used, the correlation between logistics friendliness and the GNI per capita is striking. The higher per capita GNI there is in a country, the easier it is to arrange the logistical practicalities with that country. This is no surprise, but the strong correlation between the logistical friendliness and GNI/capita (0.821) is noteworthy.

The results are indicative, since they are based on a small number of observations (68 responses, up to nine evaluations per country), which are subjective assessments by professional freight forwarders. According to the survey results, the Baltic States are perceived as fairly easy countries in a logistical sense. Compared against the GNI/capita data, the Baltic States show exceptionally good performance.

4.3.3. International firms' logistics operations in the Baltic States

In the early phase of market entrance international firms preferred to operate from outside the Baltic States when distributing their products to the Baltic States markets. Exporting individual shipments via customs terminals seemed to be a suitable pattern for market entry, but much less used in later business stages.

When establishing market position, some of the case firms moved slightly more into warehousing on Baltic regional and country level. In the EU time the case firms prefer direct physical distribution often directly from factories and central European warehouses. Such patterns have significantly increased in the very recent years.

Faster border crossing enabled firms to distribute from one Baltic regional stock in the mid 1990'. In the pre EU period, customs documentation made this option very complicated and expensive to operate and therefore it was little used. Customs rules in intra-EU trade reduced the steps in this process from 15 to eight.

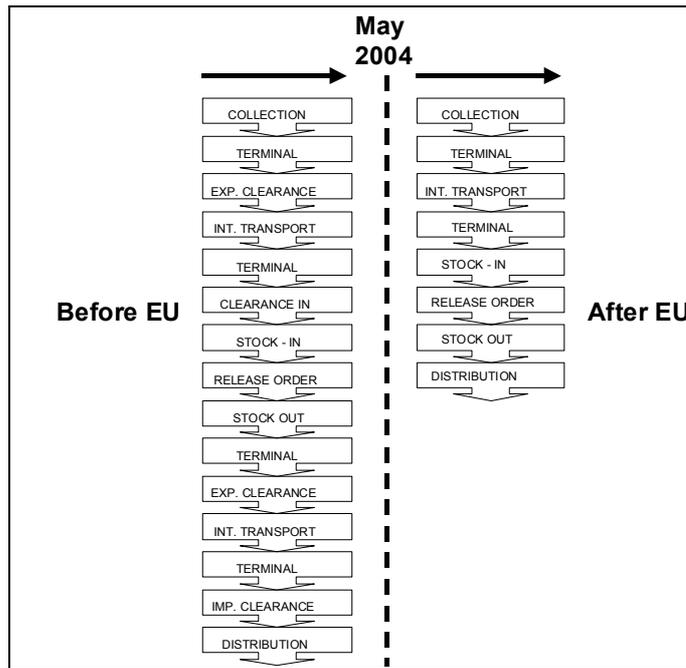


Figure 29. Distributing goods via a warehouse in one of the Baltic States serving all three countries. Comparison of the steps of the process before and after EU membership. Source: Naula and Ojala 2002

Riga's dominance is striking: roughly 80 % of the case firms' Latvian import volumes are destined here. The next most important regions are Daugavpils and Ventspils.

The high concentration may lead to inefficiencies in domestic distribution. The case firms have typically outsourced domestic transportation to logistics service providers. These consolidate several consignments in one transportation unit. The volumes destined outside the capital Riga may not be sufficient to offer affordable and frequent distribution services.

Already prior to the EU membership international firms tended to centralize their logistics organizations into regional and European distribution centres (RDCs and EDCs, respectively). The motives were mostly business driven, such as altering business culture of the firms, changes in market demand and efforts to reach cost efficiency. At the market entrance stage (for many firms during 1994 - 1996), all business functions (sales, administration, warehousing, logistics) were typically present locally. Very often, a local agent was used. This is feasible when entering a small, new market. A shift towards a more centralized organization followed. Nine out of the 15 case firms considered centralizing all functions other than operational sales outside the Baltic States in the anticipated EU time.

The development of the logistics organization was also closely linked to the distribution channel in general. In some cases a firm needed to have certain functions present locally because of a relatively fragmented customer base with large number of customers.

4.3.4. Baltic Wholesaling and Retailing firms

EU membership was not anticipated to change respondent firms' first priority marketing channels. More changes were mentioned as to their second priority marketing channels. However, these shifts are incoherent and do not follow any specific pattern. EU membership may well increase the share of Baltic regional warehousing compared to country based warehousing. In such cases, Latvia would offer the ideal geographic location, but a number of other criteria naturally affect decision making in firms.

Some of the firms that currently distribute directly from a factory or a distribution centre outside the Baltic States expected to expand distribution to other Baltic States. This indicates a move towards a multinational integrated logistics configuration. This is a likely solution for multinational firms, for which the Baltic States comprise only a small proportion of the firms' European market.

4.3.5. Shifting Focus from Transport Infrastructure to Efficient Logistics

The level of transport and telecommunications infrastructure is no longer a hindering factor for logistics buyers. In the early 1990's the key issues in logistics was to find the access to transportation capacity and how to cope with border crossing formalities. Today, the focus is clearly on adopting efficient logistics solutions in accordance with corporate policy - powered by reliable and high-quality logistics services.

The international logistics users still perceive the regulatory environment somewhat hindering logistics in Latvia and Lithuania but not in Estonia. Small and medium sized firms also see these issues more as an impediment to their business than the internationally operating ones; two thirds of the studied SMEs considered the regulatory environment still as hindering.

The results suggest that joining the EU facilitate logistic operations and favours firms, which are already familiar with doing business in the EU. However, EU membership substantially increased regulation and bureaucracy for domestic firms. Firms in the Baltic States have been accustomed to very low level of regulation in, for example, social, health, safety and competition issues.

4.3.6. From transport infrastructure to advanced logistics

Freight transport is often presented as a multi-layer model that illustrates the hierarchical nature of a transport system. The layers are in interaction through market relations involving demand and supply sides. The lowest level, the transportation *infrastructure* provides capacity to traffic markets. Market operators, such as shipping lines, form the demand side of the traffic market by using the infrastructure and operating the *transport flow* with vessels, vehicles and other transportation units. The *materials flow* of individual logistics buyers forms the demand on the transportation market.

The model is added with a fourth layer - logistics concepts. The materials flow, the information flow, the logistics organization and the distribution channel are integral parts of these concepts. Market conditions prevail also between the upper two layers. An advanced logistics solution typically requires active involvement of a third party logistics provider together with firms' internal resources.

Infrastructure issues and availability of logistics services were not any longer seen as problematic issues for the logistics users in the Baltic States. The key issue now is the



possibility to integrate logistics operations into their European-wide supply chains. EU membership will make this task much easier.

The removal of customs borders in EU trade enables firms to centralize physical distribution activities and connect their supply chains better. The results indicate that major logistics buyers in the Baltic States are in process of implementing major changes in the EU time. Direct distribution from European logistics centres by using cross-docking concepts is a likely model in the near future for large firms. Fewer products will be kept available in country specific warehouses.

The presented trend exhibits the overall positive development in the logistics environment of the Baltic States. Today's situation is challenging for policymakers, because many of the actions that further improve the logistics environment seem to be out of the immediate sphere of political influence. Active involvement and co-operation with non-governmental organizations on industry level is therefore likely to be the fruitful way to maintain the connection to the end users of advanced logistics services. A concrete co-operation project could be to start systematically monitoring firms' logistics efficiency. A periodically conducted survey would serve as a valuable source of information for identifying needs for further improvement.

The EU membership is likely to increase intra-Baltic trade and regional cooperation in distribution. It is yet unknown to what extent firms will centralize their logistical business activities to be managed from distribution centers outside the Baltic States.

5. Correlation between Transport and the Economy

Traditionally, transport has been thought of in terms of derived demand, implying that the basic causality runs from the level of activity in the economy to the demand for transport. People and businesses demand transport in order to enable them to carry out desired activities. This is too simple, however, since changing the provision of transport enables changes in the location and composition of activities. For individuals, this might be reflected in changes in commuting patterns or holiday destinations. For businesses, the impact might be felt in terms of new sources of supplies, reorganisation of production or access to more distant markets.

The efficiency aspects, stemming from the role that improved transport can have in promoting increases in total factor productivity, are central to assessing the importance of transport to the economy. These form the basis of the claim that improving transport provision will improve competitiveness or raise the rate of economic growth. This argument has, for example, been widely used at an EU level in the context of increasing integration of markets through projects such as the Trans-European Networks. The next section sets out the analytic underpinnings of these arguments.

5.1. The Need to Understand the Relationship between Transport and the Economy

There are good reasons why the Government should seek to understand the nature of the relationship between transport provision and economic growth as fully and as clearly as possible. Government is committed to promoting sustainable development, embracing environmental, economic and social objectives. It is important that the economic justification for transport schemes is as robust as possible alongside



consideration of their environmental and social impacts to ensure effective decision-making.

Equally, in promoting economic growth, Government is often concerned about the distribution of such growth. Transport improvements, for example, can form part of public policy packages deliberately aimed at stimulating regeneration in a particular area - sometimes even at the expense of other areas. Government needs to be clear that such action is effective in meeting its goals.

Government also directly and indirectly finances significant investment in transport. Where investment is justified on the basis of promoting economic growth, Government needs to know that such aims are being achieved, and in the most cost-effective manner, particularly given the scarcity of public funds.

Finally, Government is a key player in the planning process. Promoters of schemes often claim wider economic benefits would arise from their projects when seeking planning permission. Government needs to have a clear understanding of these arguments to enable it to balance them against other considerations and so come to effective planning decisions.

5.2. The Nature of the Debate about Transport and the Economy

Developing a clear understanding about transport and the economy is a difficult task. Asking questions about that relationship challenges what for some is a fundamental and obvious assumption: that economic growth, the need for movement and the need to invest to facilitate that movement go hand in hand. The result has been an often quite polarised debate, in both academic and non-academic circles.

Business argues that an efficient transport network is vital to a strong economy - locally, regionally and nationally - by providing high quality access to labour, suppliers and customers. Business has consistently argued that substantial investment is needed to improve the existing network, focusing mainly on road transport, but also on heavy rail, urban public transport and airports.

Other commentators argue that there is scant evidence for a causal link between transport improvements and economic growth. Some claim that a transport scheme can in fact "suck out" economic activity from an area, rather than attract it. Concern about the environmental impacts of transport and the need to balance competing claims on the public purse have also raised questions about the validity of calls for greater transport investment.

Nor is the debate simply a question of whether there are net positive or negative economic impacts arising from transport improvements. The question of size of effect is also important. Some commentators query whether the journey time savings generated, for example, by road improvements, provide anything more than marginal economic benefit. Others argue that transport improvements, for example, help enable firms to re-organise their operations, yielding significant benefits beyond those conventionally identified in investment appraisal.

The debate about transport and the economy is frequently made even less clear by a confusion of terms. The relationship between the two is sometimes taken to embrace different things: transport investment, transport infrastructure, transport



improvement (however achieved - ie, by infrastructure development or through other policies), road traffic, etc. Even the term "economic growth" can mean different things to different people and is often confused with loosely defined discussions of competitiveness. Issues surrounding the definition of terms are addressed in Chapter 3.

A further complication is the difficulty in isolating the effect of transport provision on economic activity, be it at the national, regional or local level. The difficulty with, for example, before and after studies of transport projects is that we simply do not know what might have happened to the economy if a scheme had not gone ahead and the money had been put to some other use instead.

5.3. Micro-Level Relationship between Transport and the Economy

Transport, as one factor in the production of goods and services, represents a cost to individual businesses. A traditional theoretical view suggests that a transport improvement, which reduces transport costs (through shorter journey times and lower vehicle operating costs) enables firms to sell their products more cheaply. This stimulates greater demand, so that as firms enjoy enhanced scale economies, a virtuous circle of further cost reductions and sales growth is set in motion.

Latvian businesses themselves appear strongly to perceive that transport improvements would enhance their ability to compete. Better transport was considered to be among the top three factors in each region.

The importance attached by business to the need for transport improvements has been questioned. Some commentators argue that the small transport cost reductions usually associated with schemes means they will only ever be of limited benefit to businesses. Others have called into question whether the small time savings for individual journeys can in practice be translated by business into enhanced productive capacity.

Critics have, however, raised concerns about the centralisation of logistics operations made possible by, among other things, road improvements. It is argued that, by serving markets from fewer distribution centres, additional traffic is induced, thus increasing environmental externalities, such as pollution. Since the cost of these externalities is paid for by society at large, and not by the businesses responsible for causing them, the result is deemed to be economically sub-optimal. Businesses respond that improved efficiency of distribution operations has reduced fuel consumption, and consequently reduced the level of their emissions.

Another criticism sometimes voiced derives from the view that traffic generated by new road building means that any benefits to business and, indeed, other road users are transient, if not actually negative. It is argued by proponents of this view that any time savings generated by a scheme are soon lost as the new road fills with traffic and congestion returns; while at the same time the additional traffic generates greater external costs such as pollution.



5.4. Spatial Issues

A key aspect of the debate about the relationship between transport and the economy are the claims made about the impact of a transport project on a local area or region. Claims can emphasise the value of transport improvements to an area - large or small - as a means of overcoming what are, in effect, barriers to trade with other areas of economic activity.

Removing trade barriers by improving transport links is also argued to be a key part of policies to promote economic regeneration in areas of particular poverty. These areas are characterised by under-utilisation of a range of resources, such as labour and/or land. Transport improvements are often seen as a way of 'unlocking' these resources, for example, by providing access to derelict sites or to new job opportunities for the unemployed, so contributing to the typical high-level aims of removing deprivation, and enhancing economic development and social cohesion.

Removing barriers to trade can also be seen as important to other, wider areas than simply black spots of economic deprivation. Poor transport links between one region and another, it is argued, can protect uncompetitive indigenous firms, enabling them to charge prices higher than those, which are efficient. Removing that effective barrier through improved links could benefit the wider regional economy by reducing prices to end consumers and producers.

Supporters of schemes themselves recognise that, while transport improvements may be necessary, they are rarely, if ever, a sufficient condition for stimulating economic activity.

Initiatives to promote regeneration also recognise that the degree to which a transport scheme is complementary to other policy tools is essential to maximising the contribution of that scheme.

Even where a transport improvement does have a positive impact on more than one area, it does not necessarily follow that all affected areas will benefit to the same extent.

5.5. Macro-Level Relationship between Transport and the Economy

The debate about the relationship between transport and the economy focuses not only on the impacts on individual businesses and of local or regional areas, but also on the economy as a whole. The close correlation between economic growth and increased movement - and, since 1945, the correlation in particular between road traffic growth and economic growth - is seen as evidence of a close link between transport and the economy. But this does not help clarify the direction of cause and effect - whether increased movement is a sign of economic growth stimulated by other factors; whether traffic growth, facilitated by transport improvements, itself stimulates economic activity; or whether there is some iteration of the two.

Nevertheless, commentators point to the historical contribution of transport improvements to economic development. This is particularly true of the case of developing countries, where the transition from a fragmented communications system to even a poorly developed network is of great importance.



In this sense, the complete absence of a well-developed transport system acts as a serious constraint on growth. It helps explain why up to 40% of World Bank loans have been used on transport projects (Hilling, 1996) and why the UN designated the ten years to 1988 as the transport decade. Similar emphasis on transport can be found in the portfolio of the European Investment Bank (Pinder, Edwards and Wise, 1995).

5.6. Transport improvements considered as reductions to trade barriers

Such considerations led to a new strand of theoretical analysis in which transport costs are treated as analogous to “trade barriers” in general (e.g., duties imposed on imports to protect home producers). Such barriers are often thought to have a big effect on international trade, especially where markets are not assumed to be perfectly competitive. For example, the removal of barriers in Europe connected with the ‘single market’ were estimated by the European Commission to have the potential to raise EU gross domestic product, by 4%-6%, because of the efficiency of larger scale production, greater competitive pressure, concentration of some products in the countries most suited to produce them, and transfer of new technologies. In addition, some have pointed to longer run impacts on growth through favourable impacts on innovation and investment.

It may be suggest that this analogy seems most plausible when considering very large investments, or combinations of investments, which have a large cumulative effect on the transport network, or address particularly inaccessible areas. With this caveat, the analogy produces a number of insights, which have not been emphasised previously:

- ❑ Not all the effects of market integration will be favourable for a given geographical area. There will be winners and losers as some activities expand while others contract. Moreover, the stronger competitive pressures arising from freer trade could involve losses of profits to domestic producers, which outweigh gains for domestic consumers. Market size or market access effects may encourage some firms to relocate towards more centrally located regions, while changed cost differentials may draw others to the periphery.
- ❑ The potential for a transport improvement to promote growth through market integration may be dampened if the potential benefits of reduced transport costs are offset by rises in other business costs and increased congestion.
- ❑ “Imports and exports” are a much greater proportion of the activity of a city or region than of a nation, so that the smaller the geographical area considered, the larger the part of the local effects which is likely to consist of redistributing benefits, rather than increasing them overall.

5.7. Freight and logistics

Analysis of the effect of transport changes on firms' freight and logistics operations suggests that:

- ❑ direct savings in a firm's existing transport costs as the result of a transport improvement are typically seen as too small to improve productivity enough to induce increased output; but



- transport improvements do present firms with a range of opportunities for reorganisation from which cost savings significantly in excess of the initial transport cost savings may be achieved, for example, from a reduction in the number of production locations or depots and from lower stock levels; and
- other opportunities to improve efficiency and/or output include improved vehicle utilisation, the opportunity to source supplies more widely, leading to better quality and or more competitive prices, and to compete for sales in more distant markets.

These effects are marked, at the level of the firm, by thresholds below which little or no change is warranted, but above which quite large changes in production or distribution may be triggered. If firms are very similar to each other, then threshold effects at the level of the firm will result in pronounced discontinuities of effect when they are aggregated together.

5.8. Labour markets

Labour is a major input to all activities and is generally location specific. One of the specific mechanisms whereby transport improvements can have an effect on labour productivity is by reducing the time spent travelling both for travel in the course of work, and for commuting to work. In addition, firms may be able to access better skills through easier access to a wider labour market. Some of this gain might be allocated to the employees themselves in higher wages, and some to customers in lower prices. On the other hand, some commuters may respond to easier commuting by increasing their area of job search, as they can travel further for the same generalised cost. The effect of this on wages might go either way: competition for local jobs by distant employees would tend to reduce local wages, while competition for workers by distant employers would tend to increase wages for local residents. The outcome may not be the same for all skills and sectors.

These labour market effects allow increased specialisation of the labour force with consequent benefits for productivity. This is the main premise upon which a number of recent modelling studies produce findings of large-scale continuing productivity and growth effects from major transport improvements. Although we find the existence of such an impact plausible, there is so far a lack of robust, transparent evidence to back up the scale of the claims that have been made.

5.9. Housing market

A further linkage is from the labour market to the housing market. A common response of commuters to transport improvements is to move house to an area more distant from their work in search of lower house prices or a better quality of life. This migration response will have a number of effects, sometimes operating to dampen the direct effect of the commuting responses just discussed:

- there will be an increase in the potential labour supply of the new area, which will tend to raise unemployment or exert downward pressure on wages paid by local firms, in the opposite direction to the effect of extra competition from firms in that original area; and
- the migration of extra workers to the new area will raise the demand for housing and, especially if there are constraints preventing a ready



increase in the supply of housing, will put upward pressure on local house prices, which will lead to upward pressure on wage rates to compensate.

The housing market is known to display fairly close relationships with transport improvements, and indeed house prices, and land values may rise speculatively in anticipation of transport improvements. It may be that much of the benefit arising from a reduced generalised cost of commuting are captured in the housing market rather than the labour market, especially where there are severe housing supply constraints. These are typically treated as double-counting and therefore ignored, but we suspect that there may be more complex linkages at work here which could have additional impacts to those measured in the direct transport benefits.

5.10. Local and regional effects

When transport costs between a region and the outside world are high, firms within that region serving their own regional market are protected from competition from firms in other regions, and also find it difficult to compete in those outside markets. A reduction in transport costs will not automatically ensure larger markets: lower transport costs may benefit firms with the potential to achieve larger scale economies, but they may also benefit firms which have lower input costs which they can use to undercut the costs of larger firms. Such firms may either be located within the region where the improvement in transport has been implemented, or in another region.

This process can have ambiguous effects on the relative development of different regions:

- where there are efficiency advantages in large scale production, there will be a tendency for economic activity to concentrate in central core regions, up to the point where these regions become too crowded; and
- where lower costs of inputs, such as labour or rents, dominate, there may be a deconcentration of economic activity.

This analysis helps to explain the problem, which we call “the two way road”. Claims that the impact of improved transport facilities will arise at one end of facility ignore the competitive impact on other regions served. Which end of the link gets the greater benefit will depend on whether either region has unique assets to exploit (such as natural resources), the relative configuration of scale economies, the size of the local markets, local labour and land market conditions, and the nature and scale of backward and forward linkages in local sectors.

The model developed by Venables and Gasiorek (1998) was used to explore the effects of different assumptions on which region would benefit from transport improvements between two or three regions engaging in imperfect competition. The results confirm that the effects are complex, and may go in different directions sometimes favouring a large central region and sometimes a small peripheral region. While the specific results depend on the assumptions made, the exercise confirms that the approach is capable of producing quantitative estimates of inter-regional effects, and we judge that it would be worthwhile to carry out further work with the model especially in including empirical data on imperfect competition, external costs, and the specific trade among some real regions.



Land-Use/Transport Interaction (LUTI) models offer an alternative route into some of the spatial effects. There have recently been significant developments in this field, though there are reservations about them in relation to:

- ❑ the treatment of market mechanisms, in particular where there is imperfect competition;
- ❑ problems of consistency in the treatment of all aspects of all markets, the models were designed to focus just on the transport elements of decisions;
- ❑ the assumption of convergence to equilibrium and the lack of a genuine dynamic response, although models do deal with a quasi-dynamics that allows a period by period iteration;
- ❑ substantial data and estimation problems; and
- ❑ their ability, even when land-use effects are accurately forecast, to express these in terms of changes in economic welfare.

6. Conclusions and recommendations

As discussed earlier in this report, it is important to remember the market forces, even when discussing the development of sustainable transport solutions from a spatial planning perspective. The demand for freight transport services is generated and formulated by individual entrepreneurs and private companies, which operate on highly competitive markets. This obviously limits the possibilities to guide the development in a specific geographical area. It puts high demands on planning to be flexible and on the foresight of the planners. On the other hand good public infrastructure, e.g. the road system, also helps to attract business and to improve efficiency.

An attractive and competitive port is often considered as a regional, if not a national objective supporting the economic development of the region or the nation. Traditionally, the consequence of this view was that the port operation and the related infrastructure was a public responsibility. Today, port operation is no more considered as a suitable or even acceptable task for public services. Some regions are starting to question the need for any public involvement in port business. Why should a city own a port? It does not own the marshalling yard or the truck freight terminal.

Such ideas do not mean that the city should not plan for or care for its port, only that it must distinguish between public and business objectives. Local political opinions, competition with neighbouring regions and lack of overview might induce the city or the region to invest too much in relation to a realistic assessment of the commercial outcome.

Waterborne transport of high value goods needs to offer high frequency of regular services and stability over several years in order to be competitive to other modes and to really allow for the emergence of solid trade relations. A few well-served ports also make it easier to focus national investments in the hinterland infrastructure, which normally cannot be spread out to cater for too many alternatives. Competition between regions in this respect often delays the investment decisions. In addition, stable and big transport volumes also on land open for more attractive intermodal services.

In this context it might be worthwhile to question the benefit of transit traffic; through the port, the city or the region. The issue was raised in relation to the Russian



transit traffic, but is also valid elsewhere. Investment needs and environmental impacts have to be assessed in relation to job opportunities and revenues against an appraisal of the stability of the traffic. Transit transport might help to develop new and highly needed services and skills, but it might also deviate resources better used elsewhere and might create e.g. environmental damages difficult to repair.

Co-operation between the parties in a transport chain, between ports, regions and authorities can give concrete improvements to everyday practical problems and thus contribute to the goals of cohesion and economic development in the BSR. The results have been achieved in a highly competitive environment and indicate that there are areas for co-operation, which do not distort competition, but promote a sustainable transport system to the benefit for the society as well as the private players. Such areas are for example:

- ❑ Promotion of the use of IT among the port community and between the port and the world outside. Introducing IT in the business process is a complex issue affecting internal and external procedures, core business ideas and market positions. Building efficient IT relations between authorities and private organisations requires special attention. E-business development suggests that internet will speed up the reorganisation of commercial relations and market behaviour. Apart from infrastructure, companies need some basic agreements on standards. The public sector on a national, regional or local level can act as a catalyst in this process.
- ❑ Co-operation between customs and other authorities in specific transport corridors. Goodwill and mutual trust is a good basis for solving practical problems within an existing regulatory framework. Regional authorities along a transport corridor sector can together create the platform for such facilitation work. They can bring in all parties and moderate the work of creating a common understanding of the problem and hopefully also of finding a practical solution.
- ❑ Regional co-operation between public bodies and private companies in order to understand spatial needs based on the assessment of long term commercial trends for waterborne transport and other factors affecting future transport demand. A port is acting and reacting on developments far beyond the region in which it is situated. Infrastructure investments in competing transport corridors have to be assessed as well as new commercial constellations and technical development. Spatial and economic planners have to understand the port needs and prospects in order to be able to assess the consequences for the region.
- ❑ Implementing new networks between transport companies, scientific organisations and port cities.

A modern LC can be characterised as an important node in a learning region, which in addition implies the need for co-operation with other, similar regions. What has been said earlier also indicates that there are other reasons for networking. A "market watch" in a wide sense is required not only by the commercial players, but also by other institutions in the region in order to be able to assess planning and investment needs. An other need for networking is generated by the many practical problems of becoming a true European Union. Knowledge, trust and common objectives across former borders can best be developed through co-operation around concrete problems.



The port region logistics restructuring process moved towards the development of new economic functions inside the port region itself. The aim of the local authorities has now become to offer a set of value added logistics services in order to integrate the port site into the transport logistics chain. The port location has not to be only a container floodgate but has to be transformed also in a logistics service centre.

It is not surprising, that logistics centres tend to be located near the transport corridors. Access to all transport modes is vital for the success of logistics centres. The closeness to ports and sea transportation is natural for establishing a logistics centre in Latvia.

Many aspects of the operation environment need to be taken into account in the planning of logistics centres. Co-operation between the logistics centres and the actors responsible for the design and production of infrastructure is important especially in planning infrastructure projects to be carried out on routes near logistics centres.

Attention should be paid to environmental protection and legislation at the early stages of the planning of logistics operations and infrastructure. Land use conflicts based on environmental regulations may otherwise delay the logistics development projects considerably. This is one of the main challenges for the development of the logistics centres in the Latvia. The possibilities for co-operation at the municipal level for the promotion of logistics should be thoroughly analysed.

Based on corridor analysis, there seems to be many possibilities for new logistics centres. Such locations are the important port cities of Riga, Ventspils and Liepaja. The success of these ports and logistics development projects depends strongly on the development of transit traffic.

Using waterborne transport implies to also use other modes. This means that integrated transport concepts must be developed providing efficient interfaces between transportation means, organisations and authorities. Computer based communication and information systems must be used to provide the necessary management and business support.

The harbour will form a core area in a wider concept of activities in the adjacent area of the city. Such activities might be many kinds of international, national and local commercial activities, logistic firms, consulting and transport services etc. Together with the harbour itself, this will form a logistic centre in the region as well as a transport hub (multi modal centre).

The port region logistics restructuring process moved towards the development of new economic functions inside the port region itself. The aim of the local authorities has now become to offer a set of value added logistics services in order to integrate the port site into the transport logistics chain. The port location has not to be only a container floodgate but has to be transformed also in a logistics service centre.

Theoretical considerations suggest that the main mechanism by which changes in transport could have an effect on the economy is by a change in the costs of movement. Transport improvement can be defined as any intervention - whether by infrastructure investment, more efficient transport management, or otherwise - which successfully produces sustained reductions in transport costs, or equivalent improvement in service delivered.



These cost reductions accrue to different categories of traffic, some clearly contributing more directly to economic activity than others, which in some cases will be reflected in their higher valuation of savings in travel time. But while focusing mainly on the traded transactions measured in GDP, we must also make allowance for some important activities, producing economic welfare, which take place outside the market context.

There are a number of important mechanisms by which such transport improvements could, in principle, improve economic performance. These include:

- ❑ reorganisation or rationalisation of production, distribution and land use;
- ❑ effects on labour market catchment areas and hence on labour costs;
- ❑ increases in output resulting from lower costs of production;
- ❑ stimulation of inward investment;
- ❑ unlocking inaccessible sites for development; and
- ❑ triggering growth which in turn stimulates further growth.

Thus measures, which reduce transport costs, could encourage economic performance in various ways. Businesses can pass on the benefit of lower production costs to consumers in the form of lower prices, or they can implement further efficiency improvements by reorganising production and distribution. The economy can also benefit if lower transport costs help stimulate easier transfer between jobs, or greater competition among firms.

Many commentators have found a strong correlation between economic growth and road traffic growth, though there is not a consensus on the causes of this correlation. Recent discussion has observed that they have not been growing at the same pace, but traffic has been growing faster than the economy as a whole. The result is that the “transport intensity” of the economy has been increasing, ie, each unit of output is associated with a greater amount of movement of people or goods. The concept of transport intensity has some problems of definition and measurement which make it inappropriate as a target in its own right, but it has usefully focused concern about the economic and environmental costs of this road traffic growth by raising the question of whether it is possible and desirable to separate the two trends, in order to obtain the benefits of economic growth while reducing the costs imposed by traffic.

Income growth does have a strong effect on traffic growth, but that the amount of traffic is also influenced by the price, speed and quality of transport. An extensive literature of empirical studies suggests that this sensitivity is sufficient to result in a significant degree of variation in how much traffic will arise from any given level of national income. This leads us to conclude that policies intended to change the volume of traffic that will arise from any particular level of economic activity are, in principle, feasible.

“Transport costs” are not identical with “transport prices” - the real resource costs that transport imposes on the economy include the hidden or “external” costs of congestion, accidents, pollution and other environmental impacts. When these are included, the overall marginal cost of a trip to society may be quite different from the direct money cost of car use, or public transport fares, paid by each individual traveller. The circumstances where reducing traffic levels could contribute usefully to economic performance are, in general, those where transport prices are currently below marginal social costs, primarily because of the existence of external costs of congestion and environmental damage.



In these circumstances, traffic reduction policies which result in a better alignment of prices and costs not only reduce the incidence of such external costs, but also, in doing so, can increase economic welfare. Conversely, where transport prices already fully include, or exceed, all internal and external marginal costs, measures to reduce traffic are likely to entail some sacrifice of economic welfare. Accepting that the full money valuation of all external environmental costs is not in prospect, it is still unavoidably necessary to make a case-by-case judgement about whether these costs are likely to be large enough to make the marginal social cost greater than the price, since this is critical to the whole analytical framework.

In practice, it is often the case that traffic reducing measures are implemented using non-price methods, such as reallocation of road capacity, some forms of parking control, pedestrian zones, selective bans on certain categories of vehicle or certain times, etc, since these can have significant operational advantages, as well as having a history of tried and tested experience. The economic analysis of these methods is more complex, as in such cases direct net revenues will not be generated, so that this mechanism for influencing the incidence of benefits is not available. The economic effect will therefore tend to be determined by the precision with which the policies can be targeted on appropriate classes of traffic, in specific parts of the network: for example, scarce road capacity may be more effectively utilised if space is reserved for specific categories of vehicles (eg, buses, lorries, high occupancy cars, emergency services) and some cities make special arrangements for delivery lorry access at convenient times to areas where vehicles are otherwise excluded. Empirical evidence exists of many cases where some non-price measures, especially pedestrianisation of town centres, have had successful local economic effects, but provides no information on whether there are any net effects at a national level.

The underlying assumption in the appraisal of most transport improvements is that direct benefits and costs (such as reductions in travel time) may be converted into wider economic effects (such as reduced wage costs or higher property values) by the operation of the market. Crucially, these final effects are assumed to have the same total value as the initial impacts, and not to be additional to them: this implies that in general, the value of direct transport benefits must decline if indirect economic benefits are to grow. The identity of initial and final benefits is a theoretical proposition arising logically from the assumption of 'perfect competition' in the economy as a whole - that is, an economy where all prices are correctly aligned to the costs of production by (among other conditions) active competition among enough firms to ensure that none can dominate the market.

If these conditions hold, we concur that the value of the estimated costs and benefits to transport users (notably time savings, operating costs and accident reduction), and to non-users (notably environmental impacts - provided that they have all been identified and a money value attributed to them) would give a full and unbiased estimate of the value of the overall economic impact. This is equivalent to the statement that no "additional" economic value exists. However, the incidence may change, as the initial transport benefits may accrue to different people from those who receive the final economic benefits.

In such cases, a high-quality assessment of the transport and environmental costs and benefits will be the best practical approach to assessing the value of the overall economic effects. If the estimated transport costs and benefits are complete, and conditions in the economy are of all-round perfect competition, it will not be possible



to demonstrate credible proof that there are additional benefits from wider economic effects.

Having clarified the basis of the conventional assumptions, we now move to a major part of our work, which has been the identification and analysis of three important general cases where the calculation of transport costs and benefits will not give the full economic impact. These relate to the completeness of the transport appraisal itself, the existence of imperfections in the economy, and the spatial incidence of impacts.

The calculation of the transport effects needs to take account of all sources of transport costs, and all the important direct and indirect behavioural responses of individuals and firms, in the short and long run, to changes in those costs. This is necessary in order to make an accurate assessment of the resulting pattern and conditions of travel and environmental effects. These conditions are not usually fulfilled: in practice, simplified assumptions are used which leave out some important responses.

Even if the transport effects are fully estimated, the identity of their value with the final economic value can then only apply if all those transport impacts are correctly expressed in terms of their money values. This condition is also not usually met, and is not in prospect. Money values are attributed only to some of the known transport impacts. In particular, conventional transport appraisal will usually describe the physical impacts of environmental effects, but not their economic costs. Similarly, the effects of transport changes on land-use - when they are systematically estimated at all, which is rare - are not expressed as user benefits in money terms.

Real economies may not be perfectly competitive. There are two main classes of imperfection, both of which are marked by a difference between the prices charged, and the real economic value of the resources used:

- ❑ price levels for goods and services which differ from efficient resource costs if there are distortions caused by imperfectly competitive product, labour or other markets, subsidies and taxes; and
- ❑ external costs, such as congestion and environmental damage, both in the transport sector and from economic activities in general, which have not been included in the price charged.

If these imperfections exist, analysis demonstrates that the value of initial "transport" impacts will not be the same as the value of final "economic" impacts. In that case, even the most complete conventional appraisal method that could, theoretically, be devised (which we have called a 'fully-specified' cost benefit analysis) would still leave out some wider economic impacts. These are the circumstances where claims for additional economic impacts, with a value, which is not captured in the calculation of direct transport benefits and costs, may be valid. Thus even if the uncharged cost of congestion, say, is included in the conventional assessment of transport benefits, it will still be necessary to make further allowance for the effects such imperfections have on the operation of the economy as a whole.

These additional economic impacts, over and above the value of direct transport impacts, may be either positive or negative, depending on whether prices are higher or lower than marginal social costs, which in turn depends on the combined effect of divergences between price and marginal cost of output, taxes and subsidies, and



uncharged external costs. Therefore there will be some conditions where including wider economic impacts would lead to an increase in the value for money of a transport improvement, compared with a conventional appraisal, and other conditions where including these wider impacts will lead to a reduction in the value for money.

For example, if local prices are in general too high due to monopoly power, then a transport improvement, if it successfully opened the area to external competition, could lead to additional benefits for the economy. Conversely, if transport prices are currently too low due to uncharged congestion or environmental effects, then a transport improvement could lead to additional costs for the economy.

These two examples illustrate a potential effect of prices, which are too high in the transport-using sector, or too low in the transport sector, but these are not the only conditions, which could apply. We have identified at least eight different hypothetical conditions, which are defined by different combinations of price imperfections in the transport-using and transport-providing sectors. None of these cases could be ruled out on grounds of logic or inherent implausibility, so we searched for empirical evidence on the likely occurrence of each of the cases.

The direct transport effects are often assessed, for practical reasons, only for a defined area in the neighbourhood of the transport improvement. Studies in economic geography confirm that there is no guarantee that transport improvements will benefit the local or regional economy at only one end of the route - roads operate in two directions, and in some circumstances the benefits will accrue to other, competing, regions. Thus in the important case discussed above where monopoly prices in a sector may be reduced by competition from outside, some benefits, such as increased employment, may accrue to the distant competitors rather than the local producers. Assessment of whether economic impacts will actually benefit the intended target area will need to consider impacts outside the immediate neighbourhood. This is the case whether or not imperfect competition applies. Therefore greater attention should be paid to the question of where the impacts will occur, and on whom they will fall.

This analysis highlights the importance of considering the "winners and the losers" separately, in addition to the usual procedure of adding them all together into an overall impact. This is particularly important if it is indeed the case that the initial transport impacts will be converted into different effects on the economy, since the initial and final beneficiaries of the intervention may be quite different: the initial winners may end up losers. It follows that where transport interventions are expected, or intended, to have economic impacts in any particular area, there should also be consideration of the impacts on other competing areas as an integral part of the appraisal.

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