Baltic Sea Ports and Russian Foreign Trade

- Studies in the Economic and Political Geography of Transition

Alf Brodin

Abstract

Brodin, A. (2003) **Baltic Sea Ports and Russian Foreign Trade – Studies in the Economic and Political Geography of Transition**
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The aim of this study is to describe how the changing geopolitical environment in the former Soviet Union (FSU) has created a new transport geography, and thereby resulted in new patterns of foreign trade routes, port competition and market economic adaptation in the Baltic Sea fringe.

The geographical limitation is the western part of the FSU and the Baltic Sea. The time-span is from the beginning of the 1990's until the beginning of 2003. The role of, and situation in, the port sector is here used to describe the difficulties that have faced primarily Russia in the years of transition. In its current extension, Russia faces severe limitations in port capacity compared to the demand generated by domestic industry and raw material producers. Meanwhile, the Baltic states possess a port capacity that vastly exceeds local demand.

A number of proposed Russian projects for new port capacity are described and the Russian North West is set in relation to the Baltic Sea region as a possible competitor. In addition, other changes and developments within the Russian transport- and port-sectors during the years of transition are described.

The thesis shows that the current large-scale development of new Russian port capacity, although economically hard to motivate, has coincided with higher oil prices since 1999. As traded volumes have increased even more than capacity, Russian dependence in the port-sector upon foreign ports continues uninterrupted.

The results of a five-year longitudinal Port Survey of Swedish foreign trade with the FSU countries 1993 – 1997, conducted by the author, complemented by a similar study by Statistics Sweden 1998 – 2001 in Swedish ports, is also presented. The purpose has been to thoroughly study the actual flow of cargoes between Sweden and the FSU and, at the same time, evaluate the official trade statistics presented for this trade relation, which has uncovered substantial discrepancies.

Keywords: Port, transition, Baltic Sea, transport geography, geopolitics, Russia, Estonia, Latvia, Lithuania, former Soviet Union, transit trade, trade statistics.

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Sammanfattning

Brodin, A. (2003) **Östersjöns hamnar och den ryska utrikeshandeln – Studier i ekonomisk och politisk geografi under transition**.
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Syftet med denna avhandling är att beskriva hur den förändrade geopolitiska situationen i det forna Sovjet har skapat en ny transportgeografi, och därmed resulterat i nya mönster för utrikeshandelsflöden, hamnkonkurrens och marknadsekonomisk anpassning vid Östersjöns östra rand.

Geografiskt behandlas den västra delen av det forna Sovjet och Östersjön. Tidsmässigt täcks perioden från början av 1990-talet fram till början av 2003. Hamnsektorn används för att beskriva de omställningssvårigheter som framförallt Ryssland har haft under den senaste tioårsperioden. I sin nuvarande utbredning har Ryssland varit och är ännu kraftigt hämmat med avseende på tillgången till hamnar. Samtidigt har de baltiska länderna en hamnkapacitet som vida överstiger de inhemska behoven.

Ett antal föreslagna ryska hamnprojekt för utökande av kapaciteten beskrivs och den nordvästra delen av Ryssland sätts i relation till de baltiska staterna såsom en möjlig konkurrent. I tillägg till detta beskrivs också förändringar och utvecklingen inom den ryska transport- och hamnnäringen under transitionsperioden.

Avhandlingen visar att den sentida storskaliga utbyggnaden av rysk hamnkapacitet har sammanfallit med den högre oljeprisnivå som råder sedan 1999, men är trots det troligen svår att ekonomiskt motivera. Eftersom de hanterade godsvolymerna har ökat ännu snabbare än kapaciteten kvarstår dock det höga ryska beroendet av utlandet inom hamnsektorn i motsvarande grad som tidigare.

Även resultaten från en flerårig *hamnenkät* avseende svensk utrikeshandel med det forna Sovjet under åren 1993 – 1997 som författaren utfört, kompletterad med SCB material för åren 1998 – 2001, ges en detaljerad presentation. Avsikten är att närmare presentera de faktiska flödena av gods mellan Sverige och länder i det forna Sovjet genom hamnarna. Samtidigt har det insamlade statistiska materialet gjort det möjligt att kunna utvärdera den officiella statistik som presenteras för denna handel, vilket har blottlagt avsevärda avvikelser.

Nyckelord: Hamnar, transition, Östersjön, transportgeografi, geopolitik, Ryssland, Estland, Lettland, Litauen, Baltikum, fd. Sovjetunionen, handelsstatistik, transithandel.

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The work presented here has over the last four years been conducted within the framework of the Doctoral Program of the Department of Human and Economic Geography at the School of Economics and Commercial Law, Göteborg University. Financial contributions to research projects conducted and travel expenses incurred during these years have come from The Swedish Institute on four different occasions, Axel och Margaret Ax:son Johnson Foundation, The Royal Academy of Science, Mary von Sydow's, ne' Wijk, donation to Göteborg University, KFB, Svenska Sällskapet för Antropologi och Geografi, The Adelbertska Foundation, Centre for European Studies at Göteborg University - CERGU, The Royal Academy of Science, through the Margit Althins fund and from the Port of Göteborg.

Göteborg 2003 – 03 – 25
Alf.B.

In memory of two dear friends, and extra fathers, who helped keeping me on track during some turbulent teenage years, but who unexpectedly left us in the run-up to the completion of the thesis:

Janne Brandberg

and

Leif Zackrisson

- - Baltic Sea Ports and Russian Foreign Trade - -

4. THE TRANSIT STATES

5. SWEDISH TRADE WITH THE FSU 1993 – 2001

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Wenn heutigestags die Darstellung irgend eines Landes,
so hat die von Osteuropa ihre besonderen Schwierigkeiten.
Eine alte Welt ist zerschlagen und versunken,
eine neue aber aus all den Trümmern noch nicht erstanden.
Alle Anzeichen sprechen indessen dafür,
dass der Aufbau des Neuen doch nur in engerer Anlehnung
an das Alte geschehen kann.
Der Umschwung kann sich vielleicht schon sehr bald vollziehen.
Eine gewisse politische Festigung ist bereits eingetreten,
östlich vom Randstaatenwall.

Köln/Rhein, im Mai 1922

Walther Tuckermann

Aus die Vorbemerkung von
"Osteuropa – Die Landschaften"

1. INTRODUCTION

1.1. Background

This thesis is about the development of ports in Russia and the Baltic states from a number of aspects. It covers the period since the disintegration of the former Soviet Union (FSU) and concentrates upon the flow of trade to and from Russia in the ports of the FSU area in the Baltic Sea.

The process prior to the initiation of this final study has been a long one. Initially, my interest was focused upon the wider aspects of transport issues from a general point of departure, concentrating upon the inland waterway sector. From there to the port sector, the shift in focus was not far-fetched as ports came into focus when the USSR unexpectedly fell apart. Already at that time it was not difficult to understand that this initial interest in studying the FSU area, also came to coincide with an important geopolitical shift of the highest order. Something that gave additional inspiration to try to follow this process over an extended period of time, an interest that now has lasted for 14 years. These geopolitical changes have lead to dramatic changes in the port and shipping sectors as well as in the patterns of foreign trade flows. The way trade flows have changed, the way volumes of different cargo types have come to increase or decrease and how the geopolitical interplay between the different countries has come to influence development have all become a highly interesting field to explore.

Competition between individual ports is much dependent on the transport arteries/corridors that the port is set to serve, and that in turn are dependent upon their hinterlands as generators of the cargo flow[1]. It is generally the economic performances of different regions, or even countries, in this hinterland, and the demand on the world market for the commodities or goods produced, that generate work in the port. To study the performance of ports based on a large empirical material where both the kind of cargoes handled as well as the importance of ports themselves can shift dramatically over time, draws on a long tradition in Swedish economic geography (Lind 1915, Jonasson 1934, Nordin 1937, Settervik 1947, Hölcke 1952, Godlund 1974, Alvstam and Lundin 1981, Layton 1981, Bergman 1999). The shifts for the port within the geographical area covered in this thesis are the result of the development over time of the transport-generating industries in the hinterland area of the port and the national transport patterns over time, but the patterns are here made yet more complicated by a new geopolitical setting. This is a hinterland that will be proved to cover much more than the western part of the FSU and where economic development has, during the transition years, come to be clearly unevenly distributed between the different countries and regions concerned.

[1] Hinterland is here defined as the geographical area of origin of out-bound and the destination of in-bound cargo flows through a port.

1.2. Aim of this study

The dissolution of the FSU has constituted a new situation for the organisation of foreign trade between the Russian Federation and Western Europe. Since the falling apart of the FSU, goods have, to a large extent, had to be carried through the independent Baltic states to reach ports that previously were parts of the Soviet Union, thus giving rise to a trade flow that will be paid much attention to in this thesis; that of "transit trade"[2]. Transit trade is a trade flow that originates in other countries than that in which the port is located and that here make use of ports that were originally outlined and built within the framework of a centrally planned economy and received their cargo volumes through administrative directives[3]. Now these ports have to compete against each other by offering the best possible solution for different kinds of cargo owners trying to make sure that the transport chain from seller to buyer includes the use of the port in question.

It is the position of these ports, and indirectly the towns that surround them, as nodes in the transport arteries leading through them that will be evaluated from different perspectives. Russian dependence upon these ports will be shown as being one of the most important reasons, if not "*the*" most important reason, behind the fact that for so long after the break-up of the USSR Russia's relations with the Baltic states, especially with Latvia and Estonia, have continued to be tense. This tension derives from Russia's dependence upon these ports and which has been given a strong symbolic meaning. The disintegration of the FSU was a geopolitical change of a magnitude that has been slow to find acceptance, although the long-lasting conflicts between neighbours have seen practically no bloodshed[4]. In the aspects studied here, the outcome has been that the different states have instead been involved in a geopolitical "game" while the individual ports have uninterruptedly been working on their commercial position as ports. The ports constitute a minuscule sector of the Russian economy, but, for the Baltic states, the ports and activities related to transit trade in the early 1990's constituted a considerable part of the national economies. Therefore, both these larger frameworks, national economic situations and the development within the transport sector, must be covered before going into greater detail about the development of individual ports.

At the same time as the individual port is focused upon here, the intention is to make the approach include both geopolitics and trade flows that generate much of the work in the transport sector. It is intended to consider the port as just one of the links in a longer transport chain rather than as an independent entity, especially when discussing the importance of ports in relation to one another. This approach

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[2] The expression *"the Baltic states"* refers to Estonia, Latvia and Lithuania.

[3] Transit should be understood as defined by Vigarié (1979) - the transport of cargoes passing the port area en route to a customer in the hinterland of the port, or to a ship in the port.

[4] The two incidents that caused bloodshed, in Lithuania and Latvia during January 1991, both happened before the falling apart of the FSU (Hiden 1994).

should be seen as an attempt to not only focus on the discussion about the prosperity of one or the other of the Baltic ports in relation to Russian alternatives, but also as a discussion about the overall performance and development of the Russian / Baltic port sector. Principally, this approach to port development and competition between ports, with the increasing ease of relocation within the shipping- and transport industry to which ports are just a service provider could be seen as controversial (Rodrigue, Slack and Comtois 1996, van Klink and van Winden 1998). In an attempt to secure a much enhanced background knowledge of the hinterland that is being served by each of these coastal port regions/countries detailed studies have been made to establish the origin of the trade that transits the ports concerned. To further enhance the reliability of the study, it will also be shown empirically how FSU ports all along the Baltic Sea coastline have developed in cargo turnover and show the geographical origin of transit trade within them. It will also be shown how Swedish foreign trade volumes handled by FSU ports have changed during the years of transition[5]. The intention is to show, using the empirical material the actual development of countries, ports and different types of cargoes[6].

Taking its point of departure in the presented background, the aim of this thesis is to describe how the changing geopolitical environment in the FSU has created a new transport geography, and thereby resulted in new patterns of foreign trade routes, port competition and statistical problems in the wake of adaptation to the new situation in the Baltic Sea fringe.

In order to fulfil the given aims, the thesis is being presented in three steps:

The first step: - This includes a description of the geopolitical situation that reigned before the transition process in this region came to be initiated by the falling apart of the FSU. Changes occurred that came to have fundamental repercussions on the Russian foreign trade pattern and the port sector. This was also a process of large-scale geopolitical turmoil that in its turn has come to incur major political and transport geographical changes in the western FSU area.

The second step: - To clarify the background of the current development, a description of the ports, and related sectors in the FSU will be given. The port sector serves as a very good example of a sector where Russia, as the largest neighbour of the Baltic states, came to face an extremely large deficit in domestic capacity after

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[5] In this text, the term *"transition"* refers to the process induced when formerly centrally planned economies transform their economic system in order to adapt to the principles of a market economic system in line with Sachs (1990). The word "transition" is emphasising the economic change, as opposed to the term "transformation" reflecting a stronger influence of social science (Hamilton 1999). The ongoing debate related to the use of the terms transformation / transition will not be referred to here.

[6] Strongly related to the operation of ports is the development within the shipping sector which has intentionally been omitted here. Excellent coverage of East European changes in this field during the years of transition can be found in "Baltic Maritime Outlook" (Swedish Maritime Adm. 1999:b)

the break up of the FSU. The existence of surplus capacity in foreign locations and deficits domestically has forced the parties, albeit very reluctantly at times, to share the use of already existing ports, but also to prepare for domestic expansion that gained momentum during the last years of the 1990's. As a way of studying the geographical origin of the westbound transit trade that constitutes the largest part of the handling in ports of the region, separate studies have been conducted for each of the three Baltic states plus for the Kaliningrad Oblast and the Russian North West region.

The third step: - Through an in-depth analysis of the development of Swedish foreign trade with the countries of the FSU, changes during the early 1990's, from both a geographical as well as a volume perspective, will be exemplified[7]. The most commonly used method to show the importance, and development, of a port is to follow up the volumes handled. On this level, the traded volumes of cargo and the trade relations between Sweden and the countries of the FSU will be analysed. The results of a yearly survey conducted in Swedish ports since 1992 combined with official statistical surveys in Swedish ports, which is a unique empirical material that includes the volumes handled in this trade relation, will be used to evaluate the development. Sweden has for practical reasons been used here, serving as an example of most countries in Western Europe with a volume over-weight on imports from the FSU area.

1.3. Method

1.3.1. Collection of primary and secondary data

To carry out a project of this kind will, by its nature, come to include the use of a multitude of methods to find and combine all the different facts needed. The information base for the material presented here has been drawn from a wide range of different sources in an attempt to find a solid ground for the fulfilment of the aim given above.

However, the method used to approach this field of research is, by its nature, both conventional and unconventional. Most of the facts presented have been based on secondary written sources of both Scandinavian, Russian, Baltic and international origin. In the parts that cover trade in Swedish ports with the FSU, sources are nearly exclusively domestic, and primary to their nature, while in other parts they are nearly exclusively international and secondary. Furthermore, statistical sources, academic journals, periodicals, newspapers and in later years also different home pages on the Internet have been used as sources of information.

[7] The reason why a volume perspective is used is because the emphasis here is put on the transport sector, and for transport, volume is more important than the more common denominator, value.

What makes the general method used in this study somewhat unconventional in relation to other studies, presenting similar types of material concerning Eastern Europe, is the extensive fieldwork that has been an integrated part of the fact-finding process. A large number of visits have been made before, as well as after, the transition process was initiated in the FSU. Every single one of the important ports and cities mentioned in this study have been visited in person, first in 1993 and up to 2002. The Russian Arctic coastline in Arkhangelsk, and all the ports on the Baltic Sea have been visited a large number of times, the ports in the Black Sea like Novorossiysk, as well as the three major export ports of Nakhodka, Vostochny and Vladivostok on the Pacific coast have also been visited. As a result of this extensive fieldwork, it has been possible to include the knowledge from a large number of primary sources. In this respect, information has been collected in personal interviews, but more often in less formal meetings and conversations, often during study tours of port areas with people working within the port and transport sector.

The selection of what material was important to note at these kinds of meetings during the first years covered was much easier than what it has become in later years. During the more than ten years of studies of ports and transport in the FSU area that this project has been running, almost incomprehensible changes in the accessibility to information has occurred. In 1993, more or less everything that was obtained in the form of statistics and information concerning intended projects was most often nearly unique information. In the years to come, the openness increased at the same time as the number of available sources increased, with, for example some monthly magazines appearing together with the first homepages for ports near the end of the century. Around 1998 - 1999, the availability of information probably stood at its peak, as people in all positions of society had not really started to consider whether information should be given away and everyone was still happy to give. In later years, and especially in Russia, it has not been uncommon that a potential source indicates that this must not be quoted, which practically never happened five years ago.

At the same time, the reliability has probably increased over the years, as initially it was practically impossible to double-check on information obtained, because of its uniqueness. From this point of departure, much has become easier over the years covered. Today, there are more internet-based newslines reporting on-line in English alone about events in the FSU/Baltic area, for free, than what can be checked on by one person alone. From a previous state of scarcity of information, the situation is instead approaching one of near information overflow. All of the more important ports mentioned here now have homepages of their own where information is made official in the form of press releases. To add to this, since approximately two years back, all Russian ministries have homepages with a constant flow of updated information, and most often in English. Something that seemed to be un-thinkable until it really appeared. It is against this background, and many years of constant follow-up on a large number of information channels, that a

"Fingerspitzen Gefühl" for right and wrong as well as the possible and the impossible has been built up. This flow of information has been constantly tapped for all kinds of information of interest, which increasingly has often come to make it possible to double-check on information by way of alternative sources. All this adds up to a richness in information and that "Gefühl" has hopefully been used to its best in this thesis.

In the attempts to establish the geographical origins of the transit trade, that have been studied in detail in five different transit regions/countries, the primary statistical material has had to be sought from different sources. In the ideal case, the same kind of source, e.g. local or domestic detailed foreign trade statistics would have been the best source to use. It soon proved impossible however, to find a more or less identical base material to use, and the different studies have therefore had to be conducted slightly differently. Despite this, it has proved possible to access a reliable primary material for each geographical area included here. Together with the presentation of each study a brief methodological discussion has been included before the results that conclude each geographical section are presented. In all, five different studies were carried out in co-operation with academic colleagues from St. Petersburg, Tallinn, Riga, Klaipeda and Kaliningrad. The results have been published in-extenso in Brodin (2002) and some shorter condensed versions have also been included. However, during the initial stages of these studies a tendency that complicates the access to both the primary and secondary data, even in Western Europe and not only in this region, is the increasing commercialism of statistical departments in all the countries involved. It has become increasingly frequent that access to basic data has been given a price, making it unavailable to researchers without considerable funding. In a way, this could be looked upon as understandable in times of restructuring, but it is a tendency that will have dramatic effects as it will probably be more and more difficult to do surveys of this kind without solid financial backing. In three cases, some data used have been partly paid for through official channels, although other "possible openings" and "alternative ways" to get hold of statistics have sometimes been suggested, but not used.

Additionally, together with each of the studies of transit trade in the different Baltic countries and in the two Russian regions presented here, a brief methodological section has also been included in the introduction to each such study, as some aspects are unique for each of these studies due to local circumstances.

In chapter 5, where the empirical example of Swedish seaborne trade with the FSU is presented, another separate methodological discussion can be found. It has been limited to the special research problems that relate primarily to the collection and use of the empirical material which is presented in the chapter.

1.3.2. Secondary sources

A general problem when writing about a subject related to the FSU area during Soviet years and especially during the early years of transition, is that of the reliability of sources. Official statistics during these years could easily be questioned. The general quality of trade statistics, and other forms of data, are problems that cannot be over-stressed. In addition, previous routines that recorded trade, transport volumes, production and many other fields of economic activity in the Soviet Union, as well as in post-Soviet Russia, were highly inefficient, which has led to a high degree of uncertainty concerning statistics (World Development Report, 1996 p. 19)[8]. Russia today is an example of a state with a previously weak and still often questionable administrative apparatus which here, as in most other countries in the same situation, leads to frequent underreporting of economic activities. The Tax Police has indicated that at the end of 2001 it believes that about 60% of Russian business entities avoid paying taxes or other obligatory duties, and thus constitute a "shadow segment of the national economy" (RFE 2002-01-10). Despite the questionability of some statistical data, there is rarely any other material that can be used for a study of this kind and the statistical material remains an weak spot[9]. Simultaneously a number of monographs by prominent international organisations whose creditability can hardly be doubted despite relying on Soviet/Russian statistical material, have been published in recent years. Such examples that are also referred to in other parts in this study are e.g. from the EBRD - *Transition Report* (1996, 1997, 1998, 1999, 2000, 2001, 2002) and publications from both the OECD and the EU. With this background, the method of comparing official statistics and data from alternative sources that is presented in chapter 3 and 4, based on Russian and Baltic state sources, as well as the statistics used in chapter 5 should also be seen as an attempted initiative to find and test a different methodological approach to make use of trade statistics. This way of working can be partly seen as a full-scale test of a possible way to extend the statistical base under insecure circumstances.

After having studied a number of papers and reports dealing with different aspects of the use of the ports and transport arteries in great detail, many have been found to contain very detailed information. Often with very positive conclusions regarding the aspect studied. Few of the papers have attempted to draw conclusions that are more general about the near future developments regarding ports, and an often neglected aspect has been competition between ports. Instead, reports have often shown that initiatives are technically possible and the costs of investments needed to realise these intentions have been calculated. Little is said about the viability of the proposed projects in relation to other alternatives[10].

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[8] This is not a new phenomenon and was already observed forty-five years ago (Godlund 1958).

[9] Several additional, and confusing, examples can be found in Nikolaenko (2002).

[10] Some such examples can be found in the list of references

Not only in the early 1990's was it problematic to illustrate and describe the present and the near future setting, because much in a Russian environment could suddenly be made invalid due to unexpected changes in basic assumptions. This also includes predictions aimed at summarising what, at the time of writing, can be considered as "*facts*". The difficulties in making projections about development in the Russian environment are considerable and not even the most professional of organisations manages to foresee the quick turns of events that characterise the Russian market. These difficulties also relates to the statements made in this thesis, for the same reasons. There is always a possibility that some new arrangements have been made, either very recently or have not been made reasonably public, which offset what is being stated. In the current century, things have somewhat improved but it is still frequent that when projects are presented in Russia indications are made that everything has been negotiated and that binding contracts have been signed. In reality, this could well be the case, but such official statements can seldom be double–checked, and experience has repeatedly proved that the "*very-little-will-happen*" rule is the most likely outcome of presented intentions.

For information concerning the Barents region and the Russian Arctic coastline that are presented here, the long series of INSROP working papers have been found to be the most encompassing, and up to date, of sources[11]. Several such INSROP papers have been consulted for reference.

1.3.3. Interviews

An important part of the primary fact-finding has been done in the form of different types of interviews. The structures of these have, dependent upon the occasion, been anything from completely free and unprepared to well-prepared and structured. Contact and information-seeking missions have, in some cases, just been door-knocking and keeping your fingers crossed that someone will find time to give information. In other cases, interviews have been well-prepared by fax/letters in advance and included a booked meeting with a person at a certain time. The first kind was more common in the early stages, often leading to another meeting at a later stage. On such occasions, it has also been an advantage to be a foreigner as that simple fact has made people less inclined to deny a short "*door opening*" conversation. On the next occasion, a form of semi-structured meeting (interview) has often followed where the conversation with the appropriate person has been prepared. Not seldom though, higher-ranking persons are pressed for time, and have delegated a mid-rank official to look for more material or to show, e.g. the port area, a line of action that gives a possibility to discreetly double check information from the first interview. Over the years of visiting commercial structures in the FSU area, a gradual, but clearly distinct process starting in reluctance about revealing

[11] INSROP - is the acronym for *"The International Northern Sea Route Program"*, administrated by the Fridtjof Nansen Institute in Lysaker, Norway, that by late 2002 included about 170 working papers.

information towards a surprisingly large openness, then towards a trend during the last few years of a clearly increasing reluctance again, slowly approaching the level of suspiciousness, has been noted. This tendency has become especially obvious from the fact that business people, much more often decline to have their name included in a text like this, even as a source of a seemingly trivial kinds of information. Some such facts have, nevertheless, been included in the text with a reference written as (interview 2002).

Initially, interviewees in the FSU area have often shown certain reluctance towards an interested visitor from a university. Often because research in this form was never performed by universities during USSR years. Research was instead the interest of different research institutes, often organised under the appropriate Ministry. It has not been less surprising that the visitor has been a foreigner taking an interest in ports and shipping-related issues. To somewhat compensate for the fact that the time spent by the interviewee answering questions has not been revenue generating, the interviewer has always tried to include a component of information sharing about issues discussed. A thin line to walk however, as discussions have mostly become smoother when the interviewee has come to understand that the visitor also possesses a certain knowledge about the line of business being discussed and has visited a lot of places and ports. At the same time it has been important not to inform about the sources of the information which could considered to be secrets or only sensitive matters, thereby making the present interviewee believe that the same could happen to any sensitive material that he might reveal[12]. In all these situations, the interviewer's previous working experiences, that includes several years as a travelling sales representative and being of above average PhD student age, have probably been of invaluable importance to become accepted as a creditable "*partner*" by the interviewees.

A drawback for any interviewer approaching a commercial structure, not representing a potential customer, is always the fact that what can be hoped for is that the interviewee, for one reason or an other, finds it interesting enough to ignore normal duties during an interview/conversation. Being exposed to the mercy of others, it has not been possible to organise meetings / interviews with certain key people who would have been of great interest to meet. This is especially so for high-level decision-makers, both on the state and commercial side.

The language used during meetings has, in nearly all cases, been English and in some cases German. The use of English has been inevitable, because the interviewer's knowledge of Russian is far from sufficient to keep up a longer conversation. In probably less than 10% of the cases, interviews have been translated from Russian, by company interpreters to English. The use of a language that is foreign to both parties involved is not positive for mutual understanding. What is positive, when it comes to the use of foreign language in the port sector, is

[12] *"He"* has been used here as probably well over 90% of the interviewees and conversation partners over the years have been men.

that all through the Soviet Union years, foreign contacts have been relatively frequent in ports, due to visiting foreign ships. The process of selecting people to meet has generally come be steered towards officials who are English-speaking. Knowledge of English is generally widespread in the administrative circles of the port sector, and is continuously becoming even more so among younger middle management, although sometimes at a low level. If seen as a selection criterion for people to be interviewed, language knowledge has to an only limited extent negatively affected the possibility to conduct this kind of research, and the results obtained. The most severe effect is probably that it has slowed down the process and made it more difficult to carry out.

As for the reliability of verbal sources, this is a difficult issue. With time, it is probably so that the sources have become increasingly reliable. First, from an ever increasing knowledge on the interviewer's side allowing for better understanding of the subject. Time has also increased the awareness on behalf of the interviewees that the fact-seeking in this case has been a constant process over several years giving the interviewer increasing credibility. After all, very little of the material collected and the notes taken during interviews will turn up as statements in this text. Instead, the large number of meetings with people in different lines of business related to ports, and people working in ports, adds-up to a much stronger general knowledge, as well as a spontaneous feeling for what is reasonable and probable in different situations. The influence of any type of misunderstandings during interviews, e.g. because of deficiencies in translation or lack of English knowledge, will most probably have been well compensated for by later experiences.

To sum up, the general impression is that the reliability of different sources can often be questioned. To somewhat compensate for this, the area of study has been visited many times during the years of study, including all the ports mentioned. These visits have then been made to include the actual port areas where the physical handling is performed. Another way of compensating for possible deficiencies in reliability is that a wide range of other written sources has been used, thus widening the understanding of the subject studied.

1.4. Delimitations

1.4.1. Time

In relation to time, the processes that are focused upon in this study were initiated shortly before the disintegration of the FSU. This period of time is often referred to by its two slogan-like words "*glasnost and perestroika*", words that are more associated with the early stages of this transition process[13]. The transition

[13] *Glasnost and perestroika* (*openness and restructuring)* are often associated with President Gorbachev, 1985 - 1991, but several *"perestroika"* came to be initiated during Soviet years by different leaders, e.g. by both Brezhnev and Khrushchev. The *"glasnost"* initiative, on the other hand, was quite unique in its approach and nothing similar had previously been tested during Soviet times.

accelerated after the attempted *coup d´état* against President Gorbachev in August 1991, an incident that triggered the final breaking up of the Soviet Union in November of the same year and the forming of the 15 new states, among them Estonia, Latvia and Lithuania. Material used here has been continuously collected during this process, with most of the written material referred to as sources having been issued during the period 1996 – 2002. The personal interviews, and those by telephone or fax/letter, in most cases refer to the same period of time. The overall time-span covered is, more or less, from the beginning of the 1990's until the beginning of 2003. To find specific kinds of background information, a number of invaluable older sources have also been used when needed.

With the aim of using comparable statistics for all different aspects included, it has been attempted to use as up-to-date statistics as possible, and when possible figures for the full year 2002, even though the figures are sometimes preliminary in character. In the cases of the two trade studies presented, these have focused upon statistics for 2001. However, the statistics for Swedish trade with Russia in chapter 5 covers all the years of transition, including 2001.

1.4.2. Geographical limitations: Russia and the Baltic Sea[14]

This study is limited to the parts of the FSU port sector directly affected by the geopolitical changes that have taken place in areas adjacent to the Baltic Sea. The more detailed descriptions given of ports in this study have been focused upon ports in Russia and only Russian ports and projects are therefore described in greater detail. The surveys of transit trade that are presented, on the other hand, are aimed at documenting outbound Russian foreign trade in the Baltic Sea region and therefore also include ports in the Baltic states.

There is a somewhat unique, geographical problem that arises when studying ports and foreign trade in this part of the world. In the former Soviet system, central decisions steered the cargo flow to the available port. Depending on the type of products, average transport distances could be anything up to 2000 or 3000 kilometres (Mellor 1982, North 1996). Therefore, the border between the regional and the national has become blurred for the ports. The habit among hinterland shippers to use very distant ports in relation to the site of production has not changed much, largely due to the relative scarcity of ports. Therefore it has long been problematic to establish the origin of cargoes as large raw material resources and other transport-generating activities, located very far away from the ports, continue to be important. The transit trade surveys presented here are aimed therefore at reducing such deficites in knowledge.

[14] A basic map over the FSU area can be found in appendix.

The hinterland of Russian, the Baltic and many of the larger European ports has become increasingly hard to demarcate in the way that has traditionally been done by foreign scholars like Mayer (1957). The increasing influence of factors other than just the price, particularly under increased competition, has made it increasingly difficult to establish the hinterland of a particular port (Hoare 1986, Klaassen 1987, Haralambides 2002). Consequently, it has become a more delicate matter to make estimations about the present and near future potential of a port. The number of factors that must be considered when comparing its competitors has increased dramatically. Since approximately ten years ago this has been the case in this region too, as competition, since the beginning of the transition, has come to reign over the whole of the FSU area. For these reasons, port development in regions that are over 1000 km away, especially in the Russian North, but also the Black Sea region, will also be briefly covered here[15]. This is because the development in e.g. the Baltic Sea area, is likely to influence the development of the ports in other Russian regions. However, the fact that so many new port projects have been proposed on the short of Russian coast line in the Gulf of Finland is in itself proof that the dynamics, and the demand, in the Russian port sector is directed towards the Baltic Sea[16].

1.5. Outline of the thesis

Chapter 1 gives an INTRODUCTION to the thesis. The chapter presents the basic structure and aim of the thesis, the methodology used in gathering information and the limitations applied.

Chapter 2 introduces the concepts used in a THEORETICAL FRAMEWORK. The term geopolitics will be used as a mean to assess the relation between the formerly important Soviet Union/Russia and its superpower contender USA, and Russia's much smaller and newly-formed neighbours, Estonia, Latvia and Lithuania. Transport geography and ports as transport nodes are thereafter introduced from a theoretical point of view, before the discussion is concentrated more specifically on the FSU region. The chapter summarises possible Russian transport routes to the West, based on present constraints, derived from the ports, and includes a discussion about how ports can influence the flow of cargo to the port.

Chapter 3 examines THE RUSSIAN ECONOMIC GEOGRAPHIC CONTEXT in detail in order to further prepare the fundament for the understanding of the more specific port issues. This description includes the domestic economic situation, international relations and a short economic-geographical assessment of some raw-

[15] The expression *"North"* is here only used to denote four regions: Republic of Karelia, Murmansk Oblast, Arkhangelsk Oblast and the Nenets Autonomous Okrug; i.e. only the northern part of what, in chapter 3, is referred to as the Russian North West.

[16] A number of proposed projects in the Sea of Azov have been identified, but as it only offers a water depth of less than 5 meters at its biggest port in Taganrog, such projects must be considered to be of only local importance. The only exceptions are the two ports of Tuapse and Novorossiysk that have pipeline connections to fields in Siberia and the latter port also to north-western Kazakhstan.

material resources that are important for the turnover in the ports. This is followed by a presentation of the relevant existing ports, including case studies of Russian transit trade in the ports in the Russian North West and in Kaliningrad.

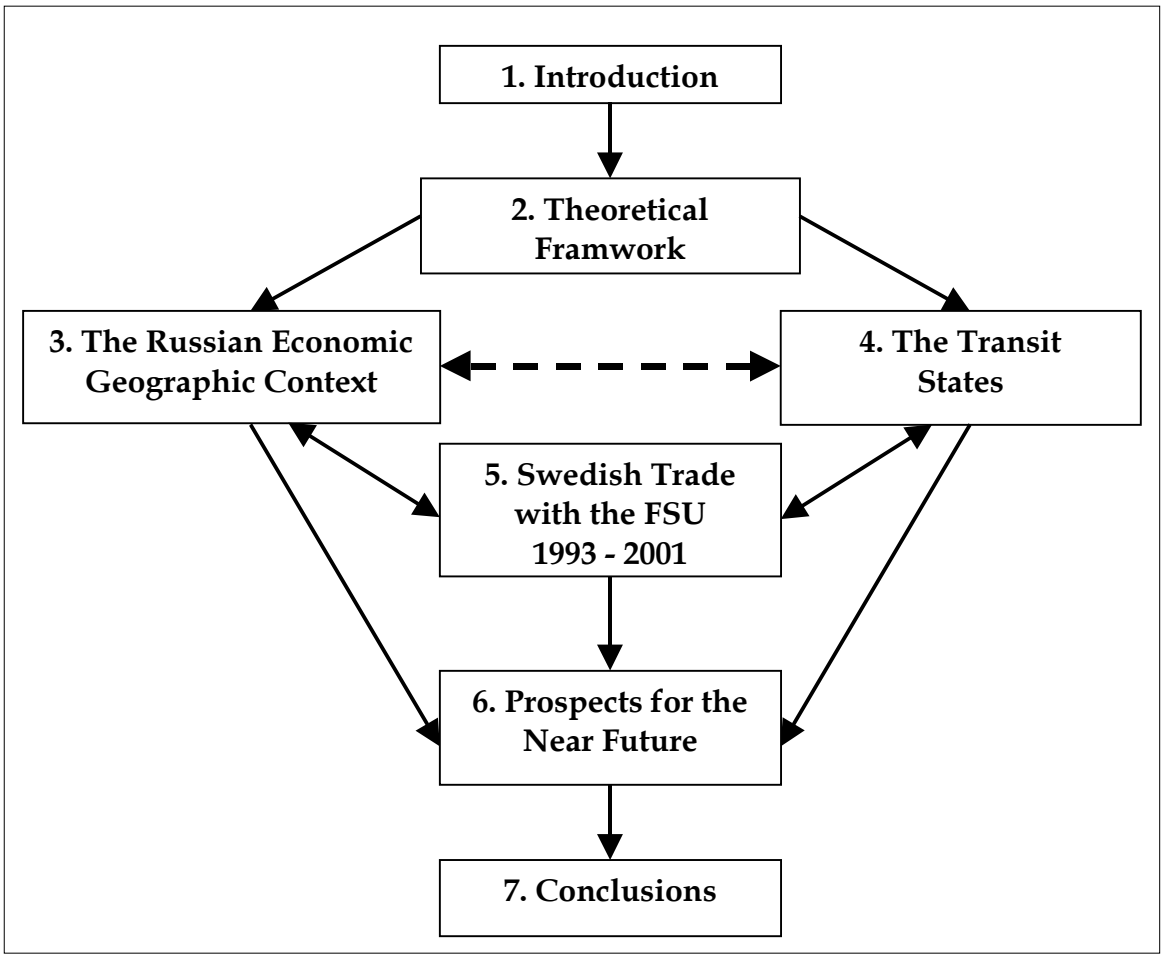

Figure 1.1. Outline of the thesis

Source: Author

Chapter 4 examines THE TRANSIT STATES and introduces the economic situation in the Baltic states. The description of the ports focuses on the legacy from having served as FSU ports and their changing competitive situation in relation to Russian ports and other possible transport corridors in the region, including Finland as the "outsider". Following this, a presentation is given of three case studies of transit trade through Estonia, Latvia and Lithuania that has its origin in other FSU states.

Chapter 5 examines the SWEDISH TRADE WITH THE FSU 1993 – 2001 as an empirical example of FSU trade with EU countries. The focus is primarily on how geographical changes in foreign trade from the FSU also creates shifts in the

geography of Swedish foreign trade with its Baltic neighbours. The severe imbalance in bilateral trade is given a detailed description, including the changes in commodity composition measured in physical volume.

Chapter 6 examines the PROSPECTS FOR THE NEAR FUTURE where all the loose ends from previous chapters are converted into a logical, forward-looking synthesis. The chapter aims at recapturing and revitalising earlier discussions, but with a setting in the present and near future time.

Chapter 7 is devoted to the author's CONCLUSIONS based upon the facts presented in previous chapters.

The relation between these seven chapters is outlined in Figure 1.1 where Chapter 1 introduces the subject and the methods applied. Chapter 2 presents the general outline of the theoretical framework upon which the three chapters that follow, that include the empirical investigations, are based. Chapter 3 and 4 are two similar and parallel chapters describing the prerequisites for transit trade in Russia and the Baltic states respectively; although interdependent, indicated by the dotted line, the content in each of the two chapters is not based on each other. Chapter 5 describes the receiving end, with Sweden as an example, of the outbound trade from the ports in Russia and the Baltic states. The last two chapters make up the analytical part, where the most important facts and ideas from the previous chapters are summed up and connected in Chapter 6, resulting in the conclusions given in Chapter 7.

The geographical coverage of the empirical chapters 3, 4 and 5 is summarised in Figure 1.2. One of the basic ideas of this thesis is to study transit trade and these three chapters have been included in the same order as the transit trade is generated. Chapter 3 covers Russia and the CIS, as the by far most important origin for the transit trade, and discusses related aspects from a Russian perspective as "seller"(supplier) of the transit cargoes. In Chapter 4, the descriptions of the Baltic transit countries as "middlemen" for cargoes transiting from the eastern border to the handling in the ports are given. In Chapter 5, the cargo flows described are that of the transit trade described in the previous chapters. Now however, the cargo has arrived in a port, e.g., on the other side of the Baltic Sea in Sweden, where the "buyers"(consumers) of the cargo volumes can be found.

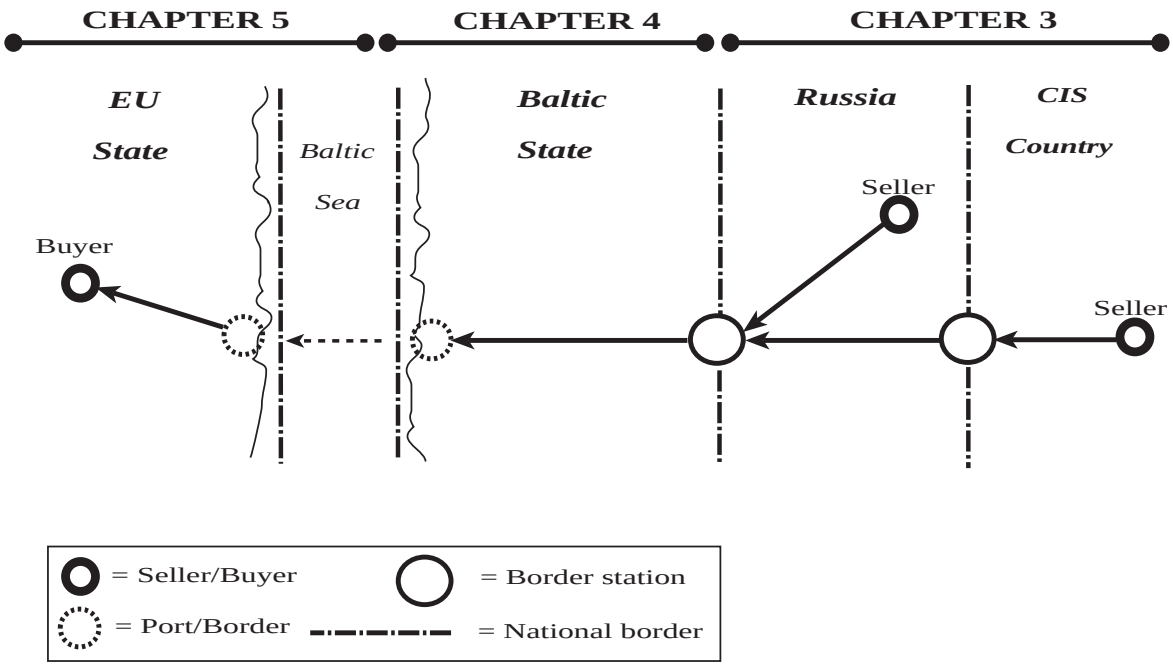

Figure 1.2. Geographical coverage of empirical chapters

Source: Author

2. THEORETICAL FRAMEWORK

This chapter will be devoted to a general and brief outline of a number of theoretical concepts that will serve as a base for later discussions; primarily related to geopolitics and transport geography.

2.1. Introduction

As noted in the introduction, the disintegration of the FSU came to initiate the changes that are focused upon in this study, a dismantling of a political system that begins in the late 1980's and slowly improves what had been a tense, but stable, state of relationship between the superpowers. It is during this period of time that the Baltic states re-appear as self-governing states and that the important port and transport geographical changes dealt with here will take shape. How this seemingly stable and relatively long-lasting state of relations between the USSR and the USA, the system's main actors, came to be formed and developed from WW II and onwards is the first issue that will be dealt with, from a geopolitical perspective, including references to writers whose concepts have influenced the thinking in this field.

In the following parts of this chapter, a theoretical background to transport geography is also given. What is concentrated upon is the situation facing ports and the transport corridors used to reach these ports, including a summing up of possible Russian transport corridors to/from Western Europe, in order to highlight the increasing importance of the Baltic Sea region.

2.2. Geopolitics – with applications

2.2.1. Conceptions and their inherited meaning

Any concept introduced in a text carries an inherited meaning, but the meaning might vary for each reader depending on the reader's background and previous experiences (Holme & Solvang 1991, Sayer 1992). Therefore, this first part will introduce some of the concepts related to geopolitics that will be briefly commented upon.

> *"The first thing that appears in our minds when thinking about a foreign power is, without doubt, the picture of a map" (Kjellén, 1917, p. 20, author's translation)*[17]

[17] In Swedish: *"Det första som kommer upp i vår fantasi vid tanken på en främmande makt, är utan tvifel en kartbild"*. Rudolf Kjellén (1864-1922) is said to be one of the writers who introduced the term, geopolitics. Quotation from the book *"Staten som Lifsform"* (1917, originally written and published in German, with the title: *"Der Staat als Lebensform"*.

This quotation shows how strongly we relate a state to the land surface it dominates. These words by Kjellén are still as valid as ever, but what is often forgotten is the fact that the pattern shown on a map is only a static picture of the world as it looked at the time when the map was drawn. This pattern, as illustrated by borders between countries, has over time been constantly changing. The region under study here, e.g. what today is the Baltic states, serves as a very illustrative example of this. During this century the number of border adjustments has not decreased in proportion to e.g. increased level of economic and social well-being in the countries involved, as e.g. two wars in Europe has shown.

This constant process of change, when strong states extend their sphere of influence relative to weaker states, has over time been given different names. Geopolitics could well be compared to the older, and more negatively sounding term, Imperialism. The often violent expansion of the Spanish and the British empires in the 16th to 18th centuries were given the label imperialistic. In the 20th century, the long and worldwide struggle for influence between the superpowers has instead been staged under the label, geopolitics. An attempt to structure the use of the two expressions in a simple way is given in figure 2.1.

Conception:	***Geopolitics***	***Imperialism***
Signal:	***Rivalry***	***Dominance***
Where:	***Between East and West***	***Between North and South***

Figure 2.1. Interpretation of concepts within political geography

Source: Author's adaptation of Taylor (1993)

2.2.2. Geopolitical changes and the Baltic states

Academically, geopolitics could be defined as a subject on the borderland between political science and geography, a definition that is hardly controversial. The intention here is not to define the domain of Geopolitics, but it could for simplicity be said to cover studies of the importance of the geographical factors on the political process.

Perhaps the first writer to become internationally renowned outside the German-spoken world in this field was Halford Mackinder, contemporary to the previously quoted Kjellén. Mackinder was a British scientist, famous for his long discussed, and later twice revised, *"Heartland Theory"* (Mackinder 1904). This theory came to have a strong influence on international (geo-) politics, and the actions of the superpowers of the world up to the end of the cold war. Fundamental to his line of thinking was that the British Empire had to see to that Germany, in collaboration with Russia, later the Soviet Union, would not come to dominate, what Mackinder had called, the "*Heartland of the world*". However, it was the US, instead of the

British Empire as Mackinder had assumed, that came to play the role as the leading power in the West. In his definition, the Baltic states were included in what Mackinder called the *"Rimlands"*, indicating an area directly bordering Mackinder´s *"Heartland"*. He expressed his anxiety and fear about the development in three famous sentences from the above article[18]:

"Who rules Eastern Europe rules the Heartland
Who rules the Heartland commands the world-island
Who rules the world-island rules the world" (Mackinder 1904, p. 106)

During the Cold War period, deterrence came to be complemented by other ways of obtaining a *"containment"* of the enemy, in what came to be called the *"Kennan Doctrine"* (Kennan 1947)[19]. Much due to the technological development of different weapon systems, the level of *"deterrence"* came to influence the relation between the superpowers of the world through their mutual *"balance of power"*. The ultimate aim of this balance, that came to result in an *"arms race"*, was for each of the contestants to create for himself a position superior to the position of the opponent. This was in line with Mackinder's Heartland theory that the position of the Soviet Union, especially after WW II, was superior as most of the Heartland was still to be found within the Soviet sphere of influence. Consequently, countries in the West needed nuclear arms in order to stop any possible further expansion of the *"communist threat"*. At the same time the Soviet Union could, from a completely opposing point of view, argue along the same lines to motivate, e.g. its own needs of nuclear arms. A conclusion to this political lecture could be that:

"Some ideas never seem to go away as long as they continue to have
an ideological utility" (Gray, 1977)

As the Heartland was under the jurisdiction of the potential enemy, from a US point of view, it was seen as a necessity to restrict, as far as possible, any further enemy expansion. One way to obtain this for the US was to foster the relations to, and to secure strong influence in, a number of countries in what Mackinder called *"rimlands"*. It was here, in the rimland with different political movements and governments as agents, that the battle between the two superpowers indirectly came to be staged. The whole rimland had to be supported simultaneously so that the influence of the enemy could be contained. The theory about the falling domino pieces fitted in very well to explain why the wars in Korea and Vietnam had to be fought. Wars fought to stop the spread of communist ideological influence in a rimland of crucial importance.

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[18] *"The Heartland"* should be understood as the great landmasses of the world that could not be reached from the sea, with its centre approximately in today's Central Asia. In the first version of his theory, from 1904, the heartland excluded what today is the Baltic states, included in his more detailed 1916 version, but again excluded in his 1944 version (Mackinder 1919 and 1943). Whether the Baltic states were included in the heartland or the rimlands was somewhat ambivalent, as the borders of the heartland area did not follow national borders.

[19] The article first appeared in Foreign Affairs 1947 under pseudonym: *"X"*.

A number of writers in geopolitics, following decades after Mackinder, have also based their theses on the global level and have attempted to further explain the factors that influence global processes. A more functional approach was introduced by e.g. Gottman (1973), among others. The geopolitical thinking of this group focused on forces that could break up or unite a state, but with the state as a given unit.

Wallerstein (1984), however, argued that the whole world should be considered as one unit. A logic result of Wallerstein´s first thesis was that social changes in one country could only be understood as an integrated part of a larger system. At the same time, Wallerstein presupposes the existence of a "*world system*" and that the world only consists of one single market and that this market is capitalistic. The production that takes place is not to be consumed by the producer himself, but is supposed to be traded.

Braudel (1984) argued for the influence of a global process where fundamental changes in the character of a state could be explained through slow and irreversible changes in economic and social roots. These changes lead to what Braudel called "*longue durée*".

Another, not as strictly defined line of thinking, described as "*Containment by Integration",* was about to become an alternative to the superpowers just after the end of WW II (Gaddis 1982). An approach that could have manifested itself in different ways, e.g. by offering close ties on different levels and that could have been tried earlier and more persistently. Alternatively this approach should have been organised through international organisations like e.g. the League of Nations, or later the UN. Instead, this form of integration approach never came to be given a full-scale test until after the end of the Cold War when Russia slowly broke with its traditional way of seeing the world as bi-polar (Bundeszentrale... 1992). The relations between East and West that for the most part reigned from the last years of the 1980's and through the 1990's could be seen as the first full-scale test of this theory. If the transition period has been only positive to the development of, and stability in, the world remains to be evaluated by geopolitical scientists.

When turning our attention to contemporary Europe in the field of geopolitics, one writer, especially, needs to be mentioned; the influential English scholar, Peter Taylor. He gives his view about the purpose of the subject in the preface to his best selling book, *Political Geography*:

> *"Political Geography is at the centre stage in attempts to unravel the complexities of our modern world" (Taylor 1993 p. x)*

If the interpretation about what should be dealt with within the subject of geopolitics that Taylor made is correct, then this study does exactly that. It focuses on the present situation of the larger of the FSU ports and the geopolitical and

transport geographical changes that have taken place in the Baltic Sea region during this decade. The real impact of these changes will probably not be fully understood by the parties involved for another decade. The fact that the economic co-operation in the East under the auspices of the CMEA, the Warsaw Pact and the entire Soviet Union could disintegrate so quickly, and peacefully, was difficult to anticipate[20]. In a way it was surprising that some major "*astonishing events*" in the former East could occur without having been correctly anticipated by the West, as had been the case with the Hungarian rebellion, China's break with the Soviet Union and the Soviet crack-down in Czechoslovakia in 1968 (Billington 1968).

Nevertheless, the re-creation of the Baltic states initiated definitely the final disintegration of the Soviet Union. These geopolitical changes around the Baltic Sea also came to materialise in the form of fundamental changes in the transport geography of the region, among many other kinds of changes. A number of ports in the Baltic Sea have come to be given an increased importance as nodes in the centre of these changes in transport geography. These ports will continue to stay in focus in the following chapters, but will then be approached from a number of angles.

2.2.3. The Russian containment of the Baltic states

So why then have a few ports in the Baltic Sea become so important to such a large country as Russia at the turn of the millennium?

Russia, in the geographical form it had during the late 19th century, as well as during the times when it was the centre of world communism, has always had its economic centre of gravity placed well west of the southern Ural Mountains (Popova 1974, p.191). This relatively densely populated and heavily industrialised part of the country has always been the centre of industrial production, agriculture as well as the origin of most of its foreign trade. It is in this part of Russia, and by raw material producers east of it, that transport volumes are generated that are either imported or exported and thereby creating a demand for port capacity.

The contour that the Russian borders have after the break-up of the USSR can be seen as the result of a political process in space. In its current shape, Russia has natural access to open sea in all four cardinal directions. A brief evaluation of the situation along these outer borders shows that the access to open sea, that could look advantageous, is in reality more of an illusion. In the north, Russia has only two major international ports, Murmansk and Arkhangelsk, but practically only

[20] The former US presidential security advisor Brzezinski in his book; "*Game plan: a geostrategic framework for the conduct of the US - -Soviet contest"*, could be said to have foreseen the break-up *"...changes are inevitable. The only question is whether change will be deliberately facilitated by the powers that are in a position to enhance this process, or whether it will be inhibited and obstructed, and therefore take place through revolutionary upheaval"* (Brzezinski 1986 p. 70).

Murmansk can handle regular all year traffic[21]. East of these two ports along the Arctic coastline, a lot of mostly very small, but locally important ports, can be found. In the Far East there is a number of ports located along the Pacific coastline, but most of them have severe ice-problems and only a few of them have an inland rail-connection. Of possibly ten different alternatives, only the three southernmost ones, Vladivostok, Vostochny and Nakhodka can be considered to be operating efficiently, and with Vanino handling the ferry traffic to Sakhalin. The main problem for these ports is that they are located thousands of kilometres away from their main markets in central Siberia, and some two weeks away from Moscow by regular freight train – 9300 km. A severe problem along the whole of the Russian south-eastern land border is an exceptionally practical problem for transport. The width of the railway-gauge in the FSU area was already from the time the Tsars made wider than in its neighbouring countries; 1524 mm instead of the more commonly used standard of 1435 mm. Along all outer land borders of the FSU, this same problem occurs, with Finland and Mongolia as the two exceptions. Along the southern coastline in the Black Sea, only Novorossiysk, the largest of the FSU ports, and the port in Tuapse remain under Russian control. All other important ports in the Black Sea, like Odessa and Nikolayev, are now Ukrainian, while some smaller ports, like Batumi and Suchumi, are situated in Georgia. Finally, the access to the Baltic Sea, that has been a crucial geopolitical fundament throughout Russian history has once again, and for the third time, been severely curbed by the loss of direct access to most of the Baltic Sea coastline to the Baltic states that all share most of their borders with Russia and Belarus[22]. The incurred Russian deficits in port infrastructure came to increase the desire to maintain jurisdiction over the scarce resources available, and possibly also over lost ones, and thereby enhancing the geopolitical importance of infrastructure.

Because of the Russian transport problems described above it is along the western borders that the bulk of Russian exports and imports are transiting, and most probably will continue to transit.

2.2.4. The containment of Russia by the Baltic states

Since the break-up of the FSU, the three Baltic states have a number of, according to their own needs, well-oversized ports. If seen from a Russian perspective several very important ports, that at present are foreign, have as a result of the formation of the Baltic states come to be an infrastructure beyond direct Russian control[23]. The geopolitical importance of these ports is given by the fact that they, to 70 - 95%, handle cargoes "*en route*" from or to Russia. The most important of these ports in

[21] The detour needed to reach e.g. Hamburg from Moscow via Murmansk instead of St. Petersburg add some 850 km, or nearly doubles the sea distance, and 1300 km, and nearly triples the land distance (Lloyd's Maritime Atlas 1998 and Atlas Avtomobilnykh Dorog 1998).

[22] Losses of access to the Baltic Sea that have occurred in 1918, 1940 and in 1991.

[23] A perspective that sees Russia as the natural bearer of the Soviet heritage.

the Baltic states, from north to south, are Tallinn, Riga, Ventspils, Liepaja and Klaipeda (see Figure 4.1). As a result of these changes, the Baltic states now house a number of ports that, after the dissolution of the FSU, have come to be exposed in an enhanced and bright geopolitical focus. It is this Russian dependence that constitutes the basis for the discussion about the geopolitical situation and again the writings of Kjellén fit in well to describe the complexity of the situation:

> "*Even statebodies have their Achilles heels and their hearts. Such vital parts are primarily the capitals and the big arteries of trade*"
> *(Kjellén, 1917, s. 50, author's translation)*[24]

It is without any doubt the case that the Baltic states, of course involuntarily, have come to hurt the Achilles heel of their big neighbour and this will remain a constant source of irritation, even when all other reasons for conflicts have been sorted out[25]. To hurt the Achilles of a state like Russia has, during the years of transition, been extra sensitive, as Russia has passed through long years in general disorder and has experienced periods of deep economic crises. At the same time, it is a State with a constantly increasing dependence on world trade, and in which the westbound trade routes will continue to be of great importance for foreign currency earnings. It is as break-bulk points on these important routes that the ports of the Baltic states have become key-players in a large-scale geopolitical game. Russian transport problems, the factor that is being stressed here, are not the only problems taken into consideration when the Russian side evaluates its relation towards the Baltic states. There are, of course, many other aspects that can be considered as problematic from a Russian angle, than just questions connected to transport issues. Transit issues and the steering of flows of cargo have been used by the Russian side as a way of executing pressure on the Baltic states for results during negotiations, or as a form of punishment, no matter what has been negotiated.

Such is the situation still, by early 2003, for the world's largest, but when it comes to the access to ports, severely restricted country. It is a country that for over ten years now has been forced to use what have become foreign ports in the Baltic states, which puts both the control of and the handling of cargo in foreign hands. All costs for the use of these transit routes, the cargo handling and all other transport expenses, must now be paid in hard earned foreign currency by Russian cargo owners. Russia has not only lost the above mentioned transit routes and infrastructure, but also, and not least important, direct control over transports "*within*" the country, which is an important psychological factor for the national self-confidence.

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[24] In Swedish: *"Äfven statskropparna ha sina Achilleshälar och sina hjärtan. Sådana vitala delar äro främst hufvudstäderna och samfärdselns stora pulsådror".*

[25] What is often referred to is the large Russian ethnic minorities in Estonia of approximately 20% (Stat. Office 2002 www) and in Latvia of approximately 29% (Central Stat Bur. 2002 www). Another unsettled issue is the border disputes between the same three countries.

2.3. Roles of ports in an economic geographical context

2.3.1. A theoretical introduction to transport geography

Regardless of the political system applied, the need for transport is generated by the desire to move goods from one location to another. The main generators of transport have traditionally been industry, with its need to move bulky raw materials to be processed and then to transfer the semi-finished goods to other locations, or to distribute finished goods to consumers. The three main types of transport needs could then be summarised as:

-- Re-allocation of raw materials and power resources
-- Transfer of semi-finished goods
-- Distribution

The essence of the academic interest, from a geographical point of view, in transport studies is well summed up by Ullman (1956):

> *"Transportation is a measure of the relations between areas and is therefore an essential part of geography"*

A century ago, however, the academic approach to study processes in transport geography often concentrated upon the prerequisites given by nature for the routing of transport (White 1977), which has also left its mark on many Soviet studies (Mathieson 1975). Later approaches attempted to explain the compromise between infrastructure construction costs and the costs of operations. This angle was in line with the work of Alfred Weber (1929) who thoroughly studied the effects of different factors on industrial location and saw transport costs as one of the decisive factors. Decades later, however, new methods and techniques allowed complicated networks which had come to be developed in the meantime, to be described in greater detail. Ever more complicated transport needs, e.g. in the military sphere during the two world wars, came to initiate new approaches to transport research and logistic solutions (Trolley and Turton 1995). Behavioural principles as an approach to transport geography in more recent times have come to foster advanced studies in new directions, such as studies of supply-demand relations and mobility (Hoyle and Knowles 1992).

In most cases of transport, and in line with the general principles of "*economies of scale*", transport costs per distance-unit and per weight-unit will fall up to a certain volume and distance. Other factors, than pure transport cost per unit should also be considered, as the longer the distance the longer the transport time, and normally also the risk involved. The modal decision from a transport buyer's point of view is often based on the desired combination of factors like volumes to be moved, frequency, timing, length of haul, availability and price[26]. In Figure 2.2, the

[26] What is considered here is only freight. When passenger transport is being studied, e.g. the purpose of the journey would be among the most important factors to study.

difference between three common carriers has been outlined to show that the longer the distance the more likely is the use of water transport[27]. This figure indicates a linear correlation between cost and distance that, of course, only under perfect conditions is as clear cut as is indicated. Besides, the price quoted for a transport service is not necessarily enough to cover the costs involved. This shortfall could be compensated for by a subsidy to cover some of the fixed and/or variable costs, or a combination of the two.

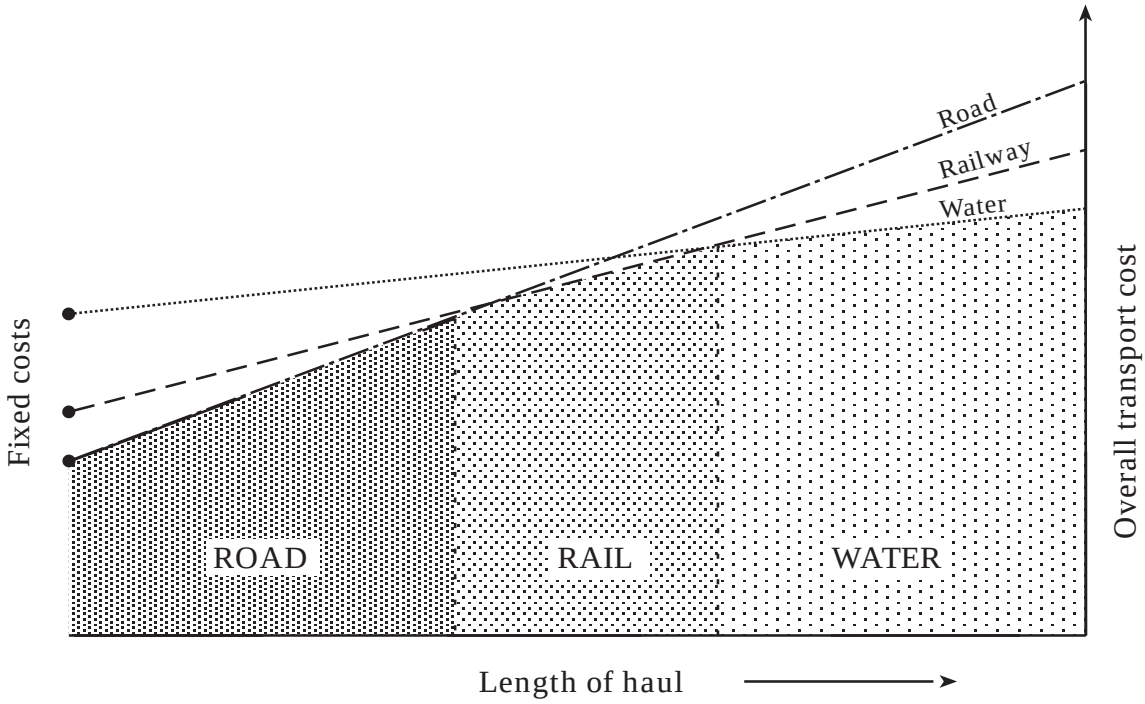

Figure 2.2. Relation between fixed and variable costs relative to distance

Source: Author's adaptation of figure in Smith (1971 p. 72)

A subsidy can be given by e.g. the state on social grounds or by a private operator that can "*subsidise*" in the form of under-pricing, to e.g. encourage the use of a service. It must be remembered, however, that the prices quoted depend not only on the combined cost structure for the transport service rendered, fixed as well as variable, but in a market economy, as much on the competitive environment in which the transport company operates. As mentioned, the inclinations and where the different lines cross each other can be influenced by the state, and was indeed so in the FSU. The extreme domination of the railways came to be created from what often was a lack of alternatives, a situation created by an extremely strong railway lobby, but also from the fact that large subsidies nearly always made rail the best alternative.

[27] Any reference to the influence of the size of the shipment has, deliberately, not been included in the figure.

A current tendency in industrial production is that the cost of the raw material input in the sales price of goods is continuously declining. This is one factor that contributes to make longer hauls of relatively low-priced goods possible, even though it has long since been known that generally it is more expensive goods that move further than cheaper goods (Haggett 1965). At the same time, a continuous shift in the location of manufacture, away from the main markets, and to fewer production and distribution centres will inevitably increase average transport distances between manufacture and consumption. This process is eroding the strengths of the findings of Weber, who emphasised the importance of transport costs as a factor of location. Costs of transport continue to be of importance, but new manufacturing processes and an ever-increasing average goods value per weight unit forces transport buyers to seriously evaluate the importance of other factors like transport time, cargo safety and the quality of both the transport operation as such as well as its administration. This tendency has opened up a new field of logistic services for both specialised smaller companies and larger international operators that both, as a part of their business idea, try to be present in as many markets as possible.

2.3.2. Ports and corridor competitiveness

The previous paragraphs discussed transport geography and transport economics from a more general point of departure, but here the position of the main subject of this study, the port, will be discussed from a geographic perspective.

A port is most often just one of many links, although important, in a long transport chain where several types of haulage's can be involved[28]. In this transport chain it is commonly so that a port alone cannot decide its possible success. Each port remains dependent on other actors in the chain and the competitiveness in terms of quality and cost of the whole transport chain used by a transport buyer[29].

In any situation a port can, of course, positively contribute to the competitiveness of certain transport corridors, where it serves as a node, by offering reliable basic services like:

-- Deep enough waters
-- Good availability of quays
-- Suitable/compatible equipment
-- Efficient handling including a good general service level

[28] A transport chain is here defined as the routing of transport used for the transport of a consignment by a cargo owner. Transport corridors, on the other hand, are the results of a concentration of transport chains to certain corridors. Larger corridors originate / terminate in transport generating / absorbing points that are relatively limited in number.

[29] *"Havnens rolle i transportkorridorer"* (*"A port's role in transport corridors"*; author's translation) is an extensive Norwegian study that uses this point of departure (NITE 1998:a).

If a suitable mix of the factors mentioned above could be offered it will certainly enhance the possibility that a specific port will be used, i.e. be included in the transport chain. The situation for the port becomes problematic though, when several other ports in a region can simultaneously offer the same set of factors or services. The decision of a consignee as to which of these ports and/or corridors to use can therefore, in the end, come down to a negotiation about the handling price charged by the different ports.

For a port, as with any other kind of business undertaking, there are a lot of factors in the surrounding milieu that influence the future of the operation, which is exemplified in Figure 2.3.

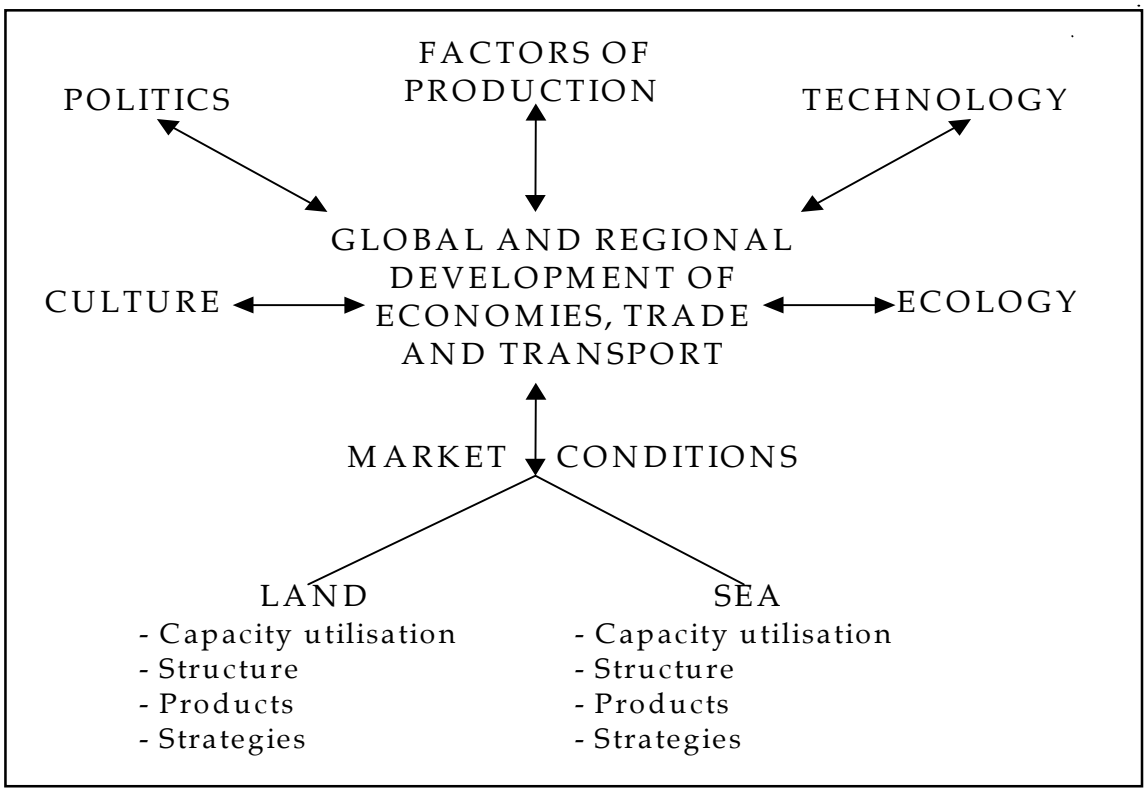

Figure 2.3. Generation of transport demand

Source: Author's elaboration of a figure developed by SAI (1998)

Some of these factors can directly, or indirectly, strengthen the position of a certain port, in both economic and turnover terms, while others can prove to be negative for the development. The port itself can indirectly influence some such factors, while the effects of others must be seen as beyond the control of an individual port. How the port should position itself in relation to changes depends on the commercial decisions taken by the management in each individual port. As demonstrated by Figure 2.3, a large number of factors that all influence the performance of a transport system can be identified, which makes decision making complicated.

With focus upon a number of sub-factors, as outlined in Figure 2.4, a port's relation to several external forces and development trends, important in its planning for the future, is of great interest. Present development trends can show different faces in different ports, but will largely depend on the set of factors shown in Figure 2.4. The importance of the factors for the individual ports can often be derived from e.g. history and its current geographical position, which will also influence the future development of the port. Still, these trends force management to take strategic decisions, as do factors like rivalry among existing ports and the appearance of new entrants into the market. Through their geographical position, ports are an interface between sea and land, but also a point where compatibility between handling systems is put to both an economic and practical test. A test where much time and money can be saved if handling is optimised correctly, and considerable competitiveness could be won.

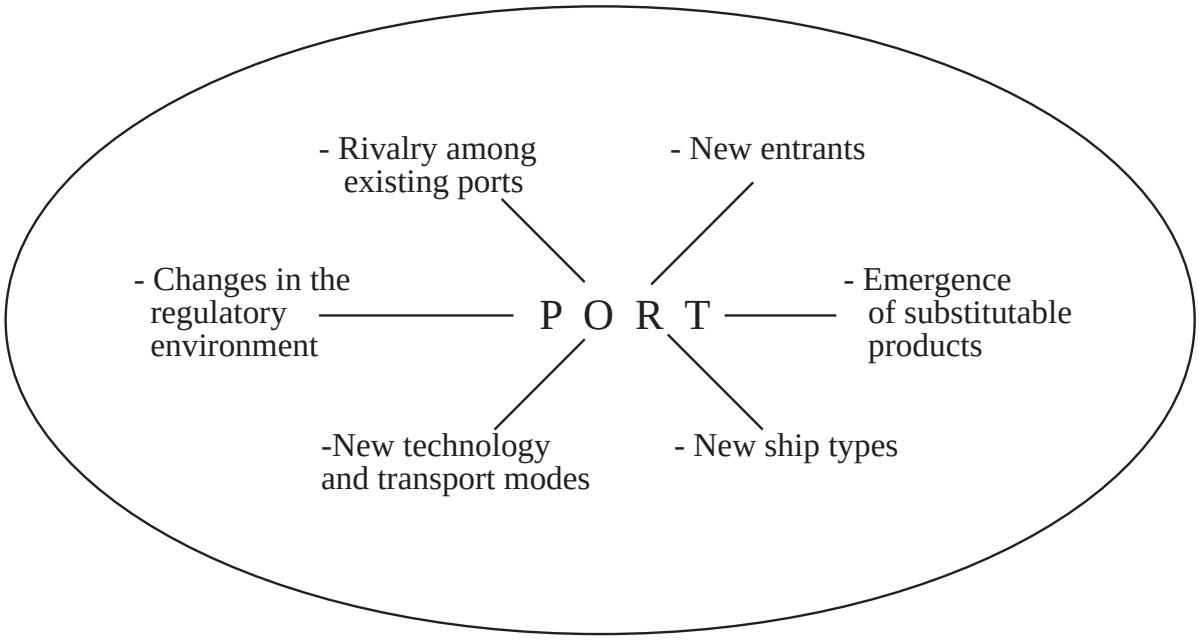

Figure 2.4. External forces, influencing ports

Source: Author's elaboration of a model by Östergaard (1998)

Figure 2.4 emphasises a number of factors that will most probably influence the situation for ports in the near future, especially in an FSU setting. These factors will all be commented on separately in the following.

During the years of economic transition changes in the regulatory environment have been frequent for Russian ports, and more often then not, unexpected. National legislation concerning ports should constitute the same kind of restraint on all ports and ought not to result in competitive advantages or disadvantages for one port in relation to other ports. If this has been the case in today's Russia is beyond the scope of this study and would probably not be possible to fully establish, but a tentative reply must be negative. Changes in the regulatory

environment also refer more to regional and local regulations that, of course, can be both advantageous and restrict the freedom of the port operator. In this respect the situation in the Baltic states has been much more stable and has instead been focused on improvements in the competitiveness of domestic ports in relation to those of the neighbouring countries.

The two items at the top of the figure, rivalry among existing ports and new entrants, are two factors that are much dealt with in this survey. Both are of great interest for the possibility of evaluating the future of Russian and Baltic ports.

Rivalry among existing ports is fierce in this region, but has only become so during the transition years. In the previous centralised system, ports in the FSU did not compete due to the centralised division of cargo between the different ports. After the break-up of the FSU, it took time for the prerequisites for a more open competition to come into being. In the last few years of the 1980's and the first years of the 1990's, total volumes handled in Russian ports were on the decline and during the first years of Baltic liberation, this trend continued. During the past 10 years, this has completely changed and competition in the Baltic Sea region is as aggressive as in other important port regions, e.g. in the North Sea range.

New entrants are generally not very common in the port sector, as the barriers to entry are much larger than in most other sectors of business society. Ports are first of all extremely long-term investments that need large waterfront areas. Areas are expensive to acquire, their development is most often sensitive from an environmental point of view and, often, suitable sites are located adjacent to population centres due to the need of connecting transport infrastructure. The most common practice is therefore that already existing ports open up a new, or re-developed/equipped, terminal that can become what here is called, a "*new entrant*".

Since a number of years the relatively short Russian coastline in the Baltic Sea in the Gulf of Finland has been literally scattered by proposed port projects. As so often, few of these projects have materialised, but some few have. Their entrance into the market have in some cases severely disturbed the existing balance between ports and further increased competition – a fact that will be dealt with in more detail in later parts.

New entrants can also be found in other shapes, and an ever-expanding net of direct cargo-train connections to distant ports is one such type (Nuhn 1996; van Klink and van den Berg 1998). During the years of transition this system has been expanded to connect the biggest European ports, such as the ports in Rotterdam and Hamburg, with especially countries in Central Europe, but has also attempted to expand into the former FSU area. These systems are intended to primarily attract containerised and other valuable cargoes directly to the ports in the North Sea range, and is constantly finding new customers. The fact that these competing systems attract the most valuable cargoes where transport time can be assumed to be valued highly makes this form of competition extra sensitive in relation to ports.

The emergence of substitutable products does not relate so much to the actual port as to the type of cargoes handled in the port. An example is the appearance of new products, or substitutes to products that are handled in the port. Eventually, the result of could result in the loss of cargo volumes for the port as trade routes are re-directed locally and/or internationally. Shifts in trade can also be forced upon a business by regulations, e.g. if the use of potassium fertilisers was to be restricted inside the EU, this would be a hard blow to many, including port terminals. Active ports must constantly be aware of and prepare for such developments, e.g. by way of investing in more expensive, but double-use equipment. This is best done by maintaining a close relation to important customers and by being aware of development trends in the port's most important customer's lines of business. Such an awareness includes a continuos search for, attraction, and development of new business opportunities whenever possible.

New ship types that are being developed could mean that a port must invest in new equipment to be able to handle cargo to and from these ships. A common need of new ship types is often deeper waters, which could call for expensive dredging of approach channels to the port, extended turning areas for larger ships and the reconstruction as well as strengthening of quays. A decision not to deepen the waters in the port, when requested by shipping lines as a prerequisite for continued use of a port, often puts the port in a very awkward situation, risking the loss of traffic. Another typical example of new needs is the special equipment or quays needed to service special ship types or to increase the capacity of different kinds of handling equipment[30].

Such choices should be seen in the light of the fact that these days ports have far fewer possibilities to remain attractive for cargo owners over a long period of time than traditionally which has been shown by previous writers (Slater 1993; Rodrigue, Slack and Comtois 1996). Ports often have to invest heavily in new equipment and new terminals to stay attractive, but still find it very difficult to bind shipping lines and cargo owners to them for more than a year or two at the time. One possibility is to invite external ownership, in part or full, in order to become terminal operators, which would then serve as an incentive to secure continued use of a certain port or terminal. What is otherwise at risk is that shipping lines and/or cargo owners make different transport alternatives, including ports, bid for the handling of cargoes in smaller lots, or for a shorter period of time, and in that way keep changing the port of call; "*hop-around*". The aim of this practise is to bind less capital and to make use of the port and the transport alternative that, for the time being, proves to be the most attractive or cheapest.

New technology and transport modes are problems facing all Russian and Baltic ports today. As far as new technology is concerned, it refers to all types of technology, not only handling equipment like cranes and straddle carriers that are

[30] Many ports, e.g. Göteborg in Sweden, have faced such choices in later years. In this case, either to invest in the latest generation of Post-Panmax container cranes, or maybe lose some major calls.

visible on the quays of the port, but also less visible equipment, e.g. administrative systems and cargo control systems. To make a port appear creditable in the eyes of long-term users, advanced new administrative computer systems have become a must, both to improve internal administration, like work planning and invoicing, but also to increase the standard on the handling side to international standards e.g. by the introduction of cargo tracking systems. The trend in many ports of the former East to have a large number of smaller handling companies working in the port has proved positive in creating competition relatively quickly, but makes the introduction of these kinds of systems problematic. To make such upgrading economically viable a critical mass in handling is needed, which may be difficult to achieve under a system that promotes a widely dispersed ownership of the companies working in the port.

Another big change is in the modal split with an increasing share of cargo arriving/departing on different vessel types, e.g. more RoRo and less bulk. To have a larger share of the cargoes transported by trucks to and from the port can prove to be a giant challenge to ports that have originally been designed to just lift cargoes in and out of railway cars. An extended use of RoRo and trucks could, in certain cases, force ports to reconsider the whole present layout of the port area, as new and larger areas will be needed to allow increased driving and storing on the port premises, especially if the handling of containers is expected to increase[31].

Of the six factors dealt with here, new entrants constitute the most severe threat to existing ports in the region under study in the near future. A fact that should make ports think twice before taking decisions to expand existing capacity. Not only will increased competition lower profit levels, at least theoretically, but can also induce other changes that can be difficult to foresee.

2.3.3. Possible Russian transport corridors to the West[32]

In the introduction to this thesis, Russia's transport containment was mentioned as an often-neglected fact. In several of the potential transport corridors to and from Russia, the use of ports is inevitable, which enhances the international interest in free and fair competition in the FSU port sector. In previous parts, this Russian containment has only been indicated, but what will be elaborated upon here is the problematic situation of finding suitable transport routes confronting Russian international trade.

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[31] The possible implication of such changes is one of many dimensions related to morphological changes faced by several Baltic port cities. The most dramatic changes will occur where the port is located in the city centre, like in the two biggest cities St. Petersburg and Riga. This is an interesting subject in itself, but falls outside the aim of this study.

[32] In the following, the text, for simplicity, only refers to Russian export transactions. The reason for this is that export volumes are normally many times larger than import volumes, but the discussion could simultaneously be said to cover even import transactions, in the opposite direction.

An attempted illustration of this is given by Figure 2.5. What is indicated in the figure is an outline of all major Russian trade corridors to countries in the West. In principle, ten different transport corridors can be identified, but as a simplification, these have been grouped into three main categories, being numbered from 1 to 3. Each of the three main categories indicated portray one of the possible types of trade routes that are presently available from a Russian horizon.

-- 1 - Direct link from a Russian port to markets in the West.

1A - *direct from a Russian port in the Gulf of Finland*

1B - *direct from a Russian port in the Barents Sea*

1C - *direct from a Russian port in the Black Sea*

The biggest advantage, from a domestic point of view, related to these three alternatives is that they completely avoid the involvement of a third country for transhipment[33]. The ideal corridor of the three is, of course, 1A. Not even this is a route without drawbacks though, largely in the form of capacity restraints in the few existing Russian ports in the area; Vyborg, Vysotsk, Primorsk and St. Petersburg. This route, over existing ports, is what has been indicated by 1Aa, while the lower leg of the arrow, 1Ab, indicates a possible future flow over what still are ports under construction or only proposed ports in the Gulf of Finland. Detailed descriptions of both existing, as well as the proposed ports will be given in later chapters, but what is stressed here is that the *would-have-been* ideal export route for the time being much remains a *could-have-been* ideal export route due to capacity restraints. The 1B alternative indicates the use of ports in the Russian Barents Sea, like Murmansk and Arkhangelsk. These two corridors, 1A and 1B, are also those of the Russian alternatives that will be most extensively covered in later chapters, as both have their natural direction towards the West.

For the third of the corridors, 1C, its use not only results in longer transport distances on land and at sea that are negative, but also the passage of the Bosporos Strait. After a number of incidents in the Turkish strait, strong resistance is mounting against the use of this corridor for larger transit volumes, of especially crude and oil products[34].

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[33] A possible 1 D, 1E and a 1F route would be through Caucasus, overland through the Central Asian republics and China and finally shipments over ports in the Russian Far East, but such routes include too long de-tours to be considered further.

[34] When international passage rights in the Bosphorus Strait were negotiated in 1931, on average of three commercial ships per day passed, whereas in 2002 the average was approaching 200 with near 50,000 yearly ship movements in the strait. From 1985 to the end of 2001, nearly 250 accidents and groundings have been registered (Turkishpilots 2002 www). The risks are highlighted by the fact that in 1936, Istanbul had less than 1 million inhabitants and today an estimated 10 - 12 millions live in the metropolitan area surrounding the 500 meters wide strait with at least 60 mt of oil passing during 2001 in nearly 5000 tankers (Greenpeace www 2002).

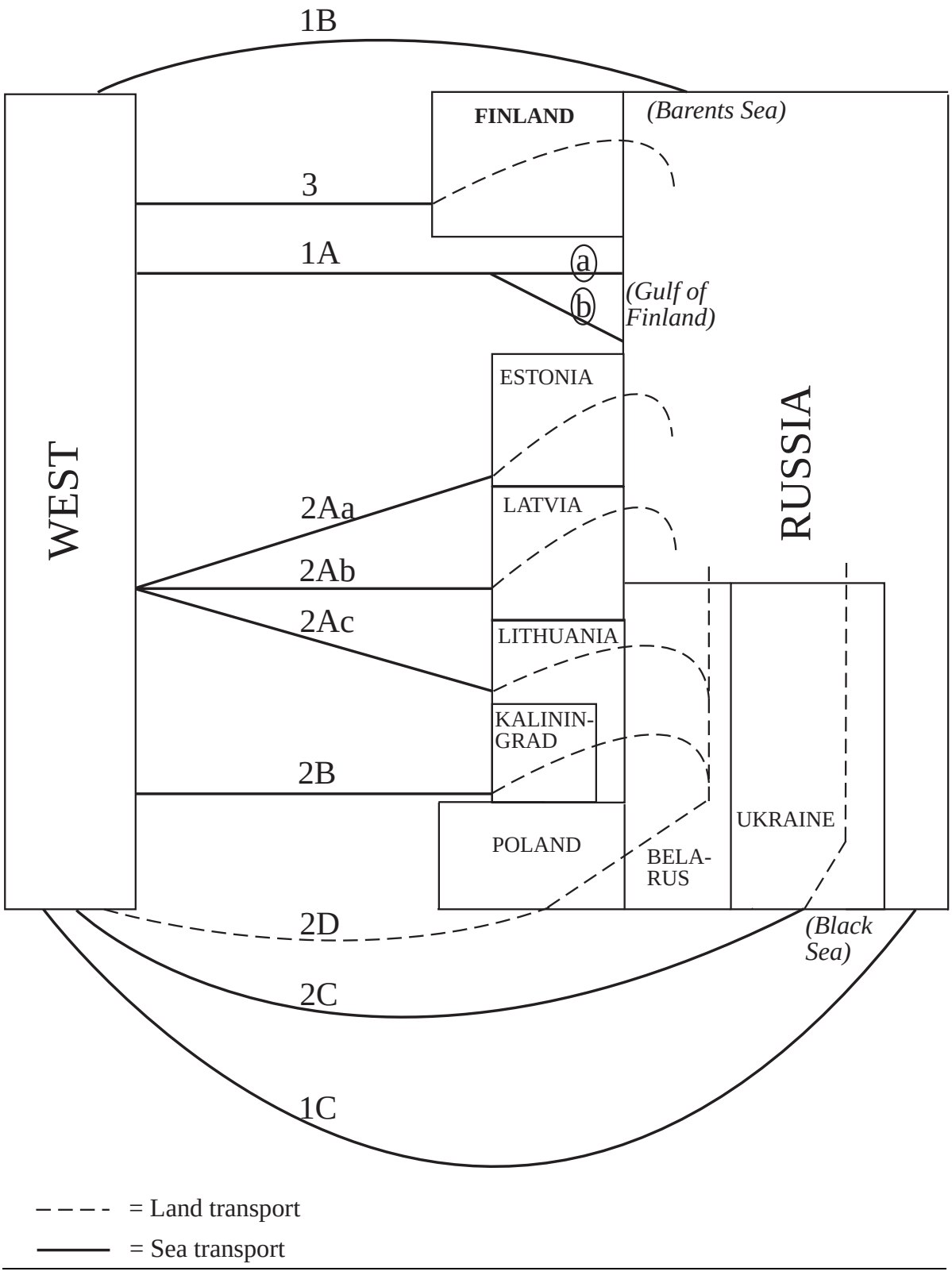

Figure 2.5. Russian alternative transport corridors to the West

Source: Author

-- 2 - The six different corridors being grouped under 2 all indicate a transport corridor between Russia and the markets in the West that include the crossing of one, or more, extra foreign border for cargoes transported before reaching a port.

2A – *exported from one of the Baltic states*
- 2Aa – from a port in Estonia
- 2Ab – from a port in Latvia
- 2Ac – from a port in Lithuania

2B - *exported from Kaliningrad, in Russia, but cargoes must cross the borders of Belarus / Lithuania, alternatively Belarus / Poland before reaching a port.*

2C – *exported from a port in the Ukraine crossing one border and an often long overland transport to reach a port.*

2D - *cargoes could transit practically any country bordering Russia being transported overland, through e.g. Belarus, the Ukraine, Poland, on to any destination in mainland Europe.*

From a domestic Russian point of view, none of these four alternative corridors could be said to be ideal. All involve the crossing of one or more foreign borders, a process that during transition, presently, and for the near future, will remain a time-consuming and often insecure process. Depending on the kind of products transported and applicable customs regulations, taxes, transit fees a s o must be paid in foreign currency. Which of the different corridors that can be said to be the best suitable could probably not be determined without deep knowledge of the type of cargoes and volumes involved, but what could be said is that only 2B is officially recommended. The 2A alternative remains the most widely used, 2B is in limited but increasing use, 2C is restrained by the problematic economic and administrative situation in the Ukraine but still increasing, while 2D is used mainly by trucks carrying import cargoes, but less so for export[35].

-- 3 – The Finnish corridor

3 - *indicates a transport corridor through Finland from Russia and on to markets in the West, but still includes the crossing of a foreign border.*

In addition, for this alternative, cargoes must cross the border of an EU member state, before reaching a port[36]. Having once crossed an EU border, there will be a less complicated access to other member countries to which much of the Russian export is destined. This is also the only important transit corridor through a western country, and a corridor that was in use even during the years of the FSU.

[35] It should not be forgotten though, but is outside the field of study here, that the overland export route is very important for the Russian export of oil and gas through several pipelines that cross e.g. Belarus, Ukrainian and Polish territory.

[36] Something that is most likely to relate also to ports in the Baltic states from mid 2004.

Of all the alternatives described above only the very first one, 1Aa (existing ports in the Gulf of Finland), and to some extent 1B (Russian North West), could be said to genuinely correspond to Russian needs. All other alternatives show serious drawbacks by way of dependence on other countries, money outlays or longer transport distances, or combinations of these. From this respect, it could be understood that Russia since the early 1990's has argued that new port capacity should be added in the Gulf of Finland to enhance capacity where it is best needed.

The arguments brought forward so far stress the present geopolitical situation in the Baltic Sea region and argue that the relations between the countries remains tense much due to the complicated Russian transport situation. This situation can be exemplified by the different alternative transport corridors as outlined in Figure 2.5. The current transport and port situation in this region is rarely mentioned in books, works and reports, perhaps because many writers have not come to understand how severe a strain on the Russian economy and the current self-esteem this situation is or because the focus in much written material is purely technical and quantitative. As the aim is to use a wider perspective and relate the development in the field of geography, centred upon ports, considerations concerning different transport corridors and the ports at their most important nodes in the region will continuously be dealt with here.

2.3.4. Forced and necessary organisational changes

In the West, questions concerning privatisation and competition are being discussed from several angles, and institutional changes have been carried out in the port sector of the FSU, as this and the following passages intend to show. The purpose of this section is also to show that port competition is a controversial and far from easily resolvable issue, even in a long-established market economic system.

During the Soviet years, the transport sector, including the ports, had large difficulties in achieving efficiency. Many reforms and large investments were directed to the sector to lift efficiency, but the payoff proved to be much lower than expected (EBRD 1996; Holt 1993; North 1995). Privatisation of public utilities to raise efficiency, in ports as well as for other transport-related infrastructure, have long been discussed and partly initiated both in the West and in the East, despite the fact that this raises very complex questions that do not apply to other industries. Entities discussed for privatisation are typically large and capital intensive, often critical to the functioning of the whole of the local, regional and in some cases the national economy. Utilities, like ports, are hence often viewed as being of strategic interest. Some ports, or parts of ports, are also natural monopolies in which competition is technically impossible, or at least very difficult, to achieve. For largely political reasons such public utility companies have often charged low centrally controlled prices, compensated for by direct or indirect subsides. However, operations have still resulted in financial losses for the operator, i.e. mostly the state - a situation in the transport sector that does not refer to ports only.

To make way for competition and market economic thinking is not the same as converting former state assets into joint-stock-companies (JSC) which is the step initially taken in Russia[37]. It requires much more than that. Russian ports have since 1993 been administrated by a Maritime/Port Authority (Administration) that in turn lease facilities to what, during the first years, was mostly state-owned handling companies[38]. To achieve competition, companies should first of all be removed from the control of Ministries when converted into self-governing and profit-seeking JSCs, JSCs that report to a board of directors, not completely put in place by the state, or other structures controlled by the state. This has, in a way, already been done in Russia, as JSCs' that work in the port lease the installations from the Port Authority. This port operator, often called "*Sea Commercial Port of Any-Town*", has been converted into a JSC where the state often remains an important owner of the company through the Property or Privatisation funds with some 20 - 50% of the shares[39]. Of the remaining shares the employees initially often possessed a large share, but most of this has now landed in the hands of management, or to management-related investors. For 2003 there will be a proposal in the Ministry of Transport to reform the management system in Russian ports under the federal authority responsible in this field, Rosmorport. The idea is to better adjust legislation to international conventions, where Russia has signed practically all existing legislation, and to better streamline the three functions, waterway/canal management, the responsibility for the hydraulic structures and the cargo handling activities. Lease agreement with stevedorer's should thereafter have their time limits set and approved centrally, and not by each local authority as is the case today. The length of the lease term should depend upon eventual development of the infrastructure to be undertaken in the section of the port leased (Ruksha 2002-12-08 www). This reform is intended to have been put in practice by the last quarter of 2003. In this respect Russia is just one example out of several of the former centrally planned economies that have joined the trend in the West towards infrastructure privatisation; that is if the Russian measures can be called privatisations.

Even in the West, the understanding of the true cost of port operations has often been hidden by subsidies, leading to user charges having rarely been cost covering. If this sector applied free-competition, an optimal allocation of handling in ports could perhaps be established although this remains a largely theoretical hypothesis. Steps in the right direction have been taken, but a breakthrough in this respect still seems years distant.

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[37] "JSC" is supposed to correspond to what in the West is called a company with limited liability, often abbreviated as Ltd. If that really is the case in a Russian setting is a juridical question, well beyond the scope of this study to establish - for further explanations see e.g. Ernst & Young (2002).

[38] The creation of Sea Commercial Port Administrations was made according to the Russian Federation Governmental Resolution no. 1299, from December 1993, named *"Organisation of the State Governing Sea Commercial Ports"*(Text copied from official documents presented in a Russian port).

[39] The two most important administrators of property are: "Ministry of State Property" (before 1997 - State Committee for Managing State Property) and the "Russian Fund for Federal Property". A description of the restructuring and operation of these can be found in (Muravyev 2002).

The arguments used for a conservation of the present system are often:

- other ports are also being subsidised, or use some form of "*creative-pricing*", and therefore have a bigger share of traffic that is being taken from competitors
- indirect effects that are generated by a port are such that subsidies can always be justified

Among others, Klaassen and Vanhove (1991 p. 546) criticise such lines of arguing by stating that the first of the two statements "*is circular*" by nature and that the second is, "*quite frankly, false*". However, all ports in their everyday operations face an as complex reality as was outlined in Figure 2.3 and 2.4. For many operators, the easy way out of a difficult situation will, at times, continue to be to call for state or regional subsidies or protection. As long as such procedures continue to be viable options, these types of solutions will probably stay in use. Creating local employment could be a useful spin-off "*..., but it is not, and should never be, the overriding objective or decision making criteria to "justify" public sector investments...*", in the port sector (Baird 2002 p.9).

To change a long standing tradition of subsidies, direct as well as indirect, in transition countries will not be possible in a short period of time despite EU pressure. The same way as it has taken a long time to initiate a public discussion in Western Europe about these issues. Still, the sooner such complicated matters are attended to, the better. The privatisation of infrastructure could, or should, be one of several measures taken to facilitate fair competition. A restructuring should at least be made to include the following four steps (of which the first has largely been fulfilled):

- Some form of commercialisation of the enterprises
- Attracting private sector participation through e.g. privatisation
- Attempts to introduce competition by separating the monopoly parts from the competitive parts, allowing new firms to enter in the competitive parts and possibly restructuring the monopoly parts
- Establishing laws and institutions to regulate price and quality in the parts that constitute the monopolies

The process of introducing these kinds of changes has advanced in the Baltic countries, but much less so in Russian ports although the first step has been fulfilled. The need to introduce changes has been strong in the Baltic countries, often because of their intense attempts to adjust to the EU by way of showing an open-minded attitude towards reforms and pressure from the competitive environment they work in. The reason behind this is that the European Commission has over the last few years started to tighten regulations when it comes to the avoidance of competition in ports and the demand for a meaningful set of state aid guidelines, and stricter application of Competition Law in port infrastructure investments has found also found strong academic support (Haralambides 2002). The intention is

that even ports must open up to increased competition and that indirect aid to ports must be made into a form of pure public service – equally available to all potential users. In perspective, these are regulations that will have to be introduced in both Russian and the Baltic state ports. To be called free competition from a Commission perspective, the aspects as shown in Figure 2.7 should be fulfilled.

Aspect:	Example:
Ports must not receive discriminatory aid	Within the EU, state aid may not be given without pre-approval of the EC
No abuse of a dominant position	e.g. this could be in regard to a special market forcing customers to take a service not needed a s o
Anti-competitive arrangements	e.g. alertingother parts about price increases, any form of discriminatory arrangements a s o
Essential facilities and an operation of such a facility may not, without an objectively valid reason, refuse to supply a service	

Figure 2.7. Aspects of free port competition[40]

Source: Commission Green Paper on *Ports and Infrastructure for Shipping* 1997[41];

The privatisation of ports is not a new phenomenon internationally, far from it, but still not very common either and the world has probably seen some 300 port privatisation projects. P&O is one of the biggest international private port operators and one early such privatisation for P&O was also the first in Russia. The privatisation of the container terminal at port Vostochny in the Russian Far East that was signed as early as in 1994 (Morskie Porti 3:1997). The other foreign partner in that project, Sea Land of the US, is also involved in the operation of a terminal in St. Petersburg[42]. These are just two examples of an increasing number included here to show that foreign involvement in Russian port projects is possible and could be a possible future option for the restructure of ports in the region. In a Russian setting, it could sometimes be questioned whether enterprises can be restructured as interviews and conversations with westerners active in Russia stress factors like constant and unpredictable changes in legislation and that costs neither can be isolated, nor analysed, properly within companies, as restrictions to take-overs. In turn, this forces investment decisions to be based on less rational information than

[40] It is still debated and e.g. FEPORT (Federation of Europe's Private Ports) view there should be "as much competition as possible and as much co-operation as necessary to stay in business and to remain competitive" (FEPORT www 2002).

[41] Followed-up by the White Paper covering the same subjects in September 2001

[42] Sea Land later came to be taken over by what in 2002 is the world's largest shipping line that was to be renamed Maersk Sealand (Maersk Sealand www 2002).

should be the case. Different forms of "*creative bookkeeping*" make it yet more difficult to set a real value to assets, but also to find out the exact future cost of liabilities carried by a commercial structure. From the Russian side these problems seems finally to have been understood as from the beginning of 2003, some branches of the economy will have to show their figures according to western standards, but still by mid 2002, only 24 of Russia's 42 biggest companies had adopted western accounting standards (Standard & Poor's 2002 www).

It is still not so that good availability of private funds and long established market conditions, as in the West, are a guarantee that the privatisation of ports and the expansion of ports are issues that are easy to handle but rather the contrary. One of the largest attempts to privatise ports, in later years, was the port privatisation plan for the UK, initiated in 1983. The plan came to be introduced after changes, and reversals to similar plans had been discussed over several decades (Goss 1998). Pre-privatisation criticism focused on the fact that the selling price set by the government was far too low and the results of the privatisation have been given a relatively wide coverage in academic circles. What happened after the privatisation was that, on several occasions, the winners of the tenders were able to re-sell their assets at a substantially higher value within just two to three years, without having made any larger investments (Baird 1995). It is not only for economic reasons that it can prove problematic to privatise port assets, as initiatives by the new operators can spill over and create political turmoil in the region (Basset 1993). Evaluations of the British privatisation process show that the outcome has produced both positive and negative results as in the form of job losses, increased job flexibility, increased productivity as well as company profits (Turnball 1991). Other, non-European, examples of port privatisations can be found in India and Argentina. The Indian experience has been similar to the British with difficulties in transferring the operation of port property to private companies (Shashikumar 1998). In Argentina, on the other hand, large freedom and public bidding for the rent of infrastructure and equipment have generated increased productivity, higher volumes and large tariff reductions (Estache and Carbajo 1996).

It is obvious that port privatisation, attempts to introduce transparency of accounts and the giving of undercover public financial support, have stirred up a very infected debate in Western Europe. There are still two groups of countries in Europe, one where the state finance investments and where revenues find their way back to the state budget, represented by e.g. Netherlands, Belgium, Italy and France, while in the second group investments are financed by the ports themselves but they can keep the revenues, a group represented by e.g. Finland, Sweden, Portugal and Ireland. Then there is the special case again with the fully private British ports[43]. Still, it is perhaps utopian to believe that port and infrastructure privatisation could be initiated, on any larger scale, in transition countries for many years to come without a number of both pros and cons that must be sorted out

[43] A classification done by W. Elsner from DG TREN, Head of Unit for Short Sea Shipping and Ports, being the most central of EU authorities in the attempts to push forward port competition.

carefully first. By issuing its Green Paper on *Ports and Infrastructure for Shipping* in 1997, followed up by the White Paper in 2001, the European Commission has at least set a stone in motion that is rolling, although it has still a long way to roll before it will gain momentum in the East.

2.4. Actors in the international flow of trade

The flow of goods through ports in the region under study here is in most cases related to exports and imports and there is a considerable number of companies involved in the physical handling of this cargo, but these companies could also be used as sources of information about transactions. To somewhat sort this out before coming discussions, a theoretical presentation is given here about the role of different actors, followed by a discussion seen from a port perspective as to how, or if, these can be made to favour one port through conventional marketing.

2.4.1. Actors in a (transit-) trade flow

As just mentioned, a large number of actors and possible sources of statistical information can be identified in a trade flow that combines a number of countries and that includes the use of a port. In Figure 2.8, an attempt is made to sketch a typical trade flow from a point of origin in Russia or Kazakhstan to a final destination in EU with an in-built transit route through a Baltic state. The procedure is also valid, but then much less complicated, if the same flow is directed from a Russian origin and through a Russian port without passing any additional borders. The nodes and links of the integrated flow as sketched here at the same time represent different possible sources of information in order to trace and to describe the flow in detail.

In Figure 2.8, the Russian producer of the described commodity (1) may or may not know its final customer (14). In this constructed case, a domestic haulier transports the cargo to a domestic intermediary (2) which could be a trading house or a specialised exporter. Consequently, this actor is probably better informed about the future destination of the cargo than the manufacturer. A second domestic haulier takes responsibility for the cargo to the national border, where it is declared and cleared by the customs authorities (5). In the case where the original manufacturer is located in another FSU republic of the present CIS (1), the cargo has already passed through an additional border point (3, 4), and thereafter been shipped to the Russian intermediary (2).

After crossing the border, the cargo is recorded, by what, in Figure 2.8, is assumed to be the customs authorities of a Baltic state (6), as being imports-in-transit from Russia or Kazakhstan. Thus, in theory the export figure compiled by Russian authorities (5) should equal the import figure in the Baltic country. In reality

however there can be remarkable incongruities between such mirror data, a fact that will be dealt with further in chapter 5.

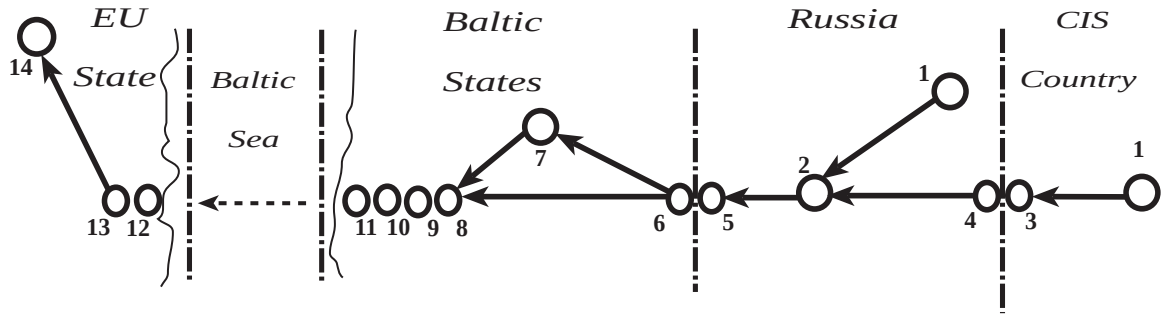

Figure 2.8. Actors and control points in a constructed Russian/CIS transit flow

Source: Author's own elaboration

After the passage into the Baltic states, a transit haulier will either bring the cargo to yet another intermediary (7), or bring the cargo directly to the export terminal. At the port it may be taken care of by the local forwarder (8) and/or an independent shipbroker or handling agency (9) and is finally cleared for export by the customs authority (10). It is also recorded and registered by the port authority for the collecting of fees (11). The next actor involved is the shipping company that brings the cargo across the Baltic Sea to an EU border port in which the goods will be declared by the custom authority (12) according to EU statistical principles, and registered by the port authority (13). Finally, the domestic forwarder/haulier will take charge of the cargo for delivery to the final consignee (14).

Possible explanations of the incongruities in the statistics are probably as numerous as the number of actors. According to the statistical principles of general trade established within the UN standard, imports-in-transit should be reported separately within the general trade statistics, while in reality transit goods are often excluded from national trade statistics and sometimes not even reported at all. Furthermore, the fact that the cargo may have been exported from another CIS state, through an intermediary in Russia, may cause additional confusion. This discrepancy between theory and reality is probably the most important explanation as to why trade figures differ.

Each of the here mentioned 14 actors could also be looked upon as sources of information in this constructed case. Each one, however, often possesses a limited knowledge of the previous and forthcoming whereabouts of the shipment. The customs authorities (3, 4, 5, 6, 10, 12) are the primary sources of official external trade statistics that are compiled at the national level and further elaborated by supranational statistical bodies within UN, IMF, EU etc. Russian official export statistics, derived from source (5), do not publish the more precise geographical

origins of trade. Information in the later passages in chapter 3 and 4 that directly relates to transit trade volumes have been retrieved at their custom sources through special investigations conducted in St. Petersburg and Kaliningrad, where it has been possible to compile such data. Regarding the presented transit trade volumes through the Baltic republics, Estonia, Latvia and Lithuania, the main information source has been domestic hauliers (7), complemented by port authorities (11), shipbrokers/ forwarders/ handling agencies/stevedoring companies (8, 9) and the customs authorities (10). The full data set for the Russian North West will be presented in section 3.8, while only some basic data will be given for the others, with full data available in Brodin (2002).

It proved impossible, however, to collect information of this kind in the ports alone. In each port there are a number of handling companies responsible for the goods handling in the port (here no 8), although, normally, only 3-4 companies seem to account for 70% or more of the total turnover. It should also be remembered that the port authority, as with most other commercial actors involved in this theoretical transport chain, has no particular interest in compiling data regarding the initial origin of its cargo for other purposes than tracing its own competitive position in different geographical areas and when (and if) this is being done it is most unlikely that the result of such an internal investigation will be made public. However, it is at different points along the line of movement of cargoes in Figure 2.8 that trade statistics are collected. Generally, the statistics presented here could have been collected at the points 3, 4, 5, 6, 10, and 12 and should, at least in theory, more or less match in value on both sides of the border. An overview of how the aspects mentioned here, and in the following, turn out in the statistical reality will be given in the regional surveys for the Russian North West region and Kaliningrad in chapter 3, for the different Baltic states in chapter 4, and even for Sweden's trade with the FSU area in chapter 5.

2.4.2. Companies participating in international shipments

If the above presentation identified actors involved in the full flow of trade, a more detailed identification will be made here of actors that, in Figure 2.8, were numbered in the range of 8 – 11. Here the focus is set on actors more directly involved in the handling and administration of the cargo when in the port ready for export/import.

The diagram, as shown in Figure 2.9, owes its pattern to the interplay of actors in a "standard" transaction, but this can vary considerably depending upon delivery terms. The contact pattern shown has been based on CIF terms, often referred to as INCOTERMS. As can be seen in Figure 2.9, a large number of participants are engaged in the process, and each one of the participants will not be discussed, but only the port itself and its main clients such as cargo forwarders and ships agents.

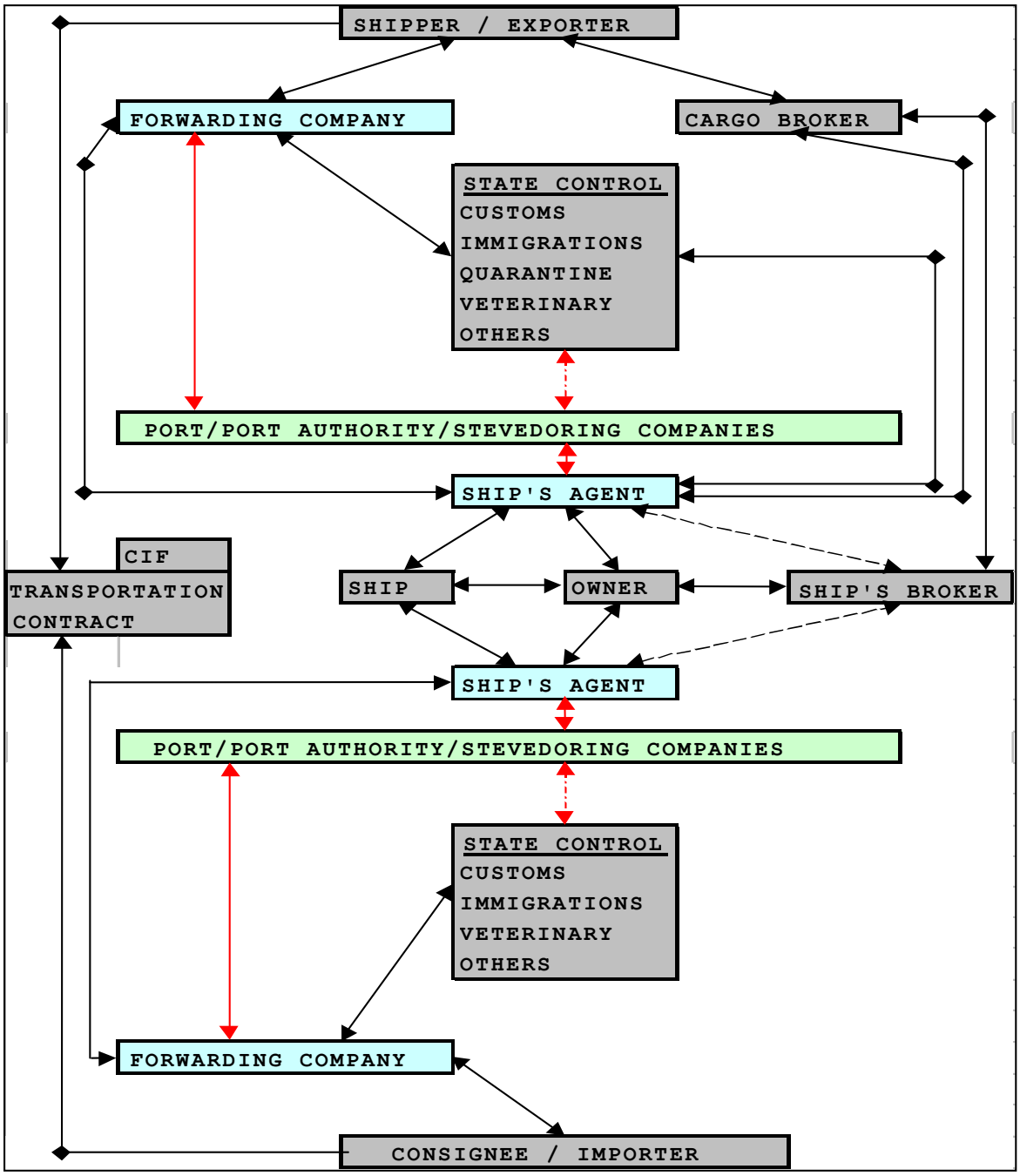

Figure 2.9. Participants in international shipments

Source: Figure created by Almantas Tranyzas (Brodin 2002)

First, just a few words about the principal institutions involved here. In this line of business, it is a well-known fact that what is mostly referred to as the "principal" is the body who authorises a person or a company to act on his behalf and to protect his interests[44]. In this case, the principal of the forwarder is most often the shipper /

[44] The "principal" could be the "real" owner of the cargo, but also the person or company that is temporarily in possession of some kind of cargo that needs to be transported.

exporter or consignee / importer. Seen from an agent's position, the principal is the ship owner / manager / broker. The shipper / consignee authorises the forwarding company to deliver cargo from one place to another. The forwarder than has to choose the best transport route taking into account the most important factors in each case. These could be factors such as price, time, cargo security or other factors that are important to the principal at that specific moment. It can be concluded, however, that when presenting a transport route, the forwarder both directly and indirectly influences his principal's opinion about the port and other connected participants in the transport chain. It is also obvious, and shown in the figure, that there is not a very direct relationship between the port and the cargo owner / contractor.

It comes natural here that agents and forwarding companies involved in a transaction will try to give the best possible advisers for a ship owner, operator and manager, all with the aim of being commissioned to take care of future transactions for the same principal. The forwarder will also act as the main principal's advisor and will answer questions when it comes to all kinds of services supplied, he will also supply the information needed by the port and other companies in the port. In fact, the forwarder is not only the most important source of information for the principal; he is also very influential as regards the principal's decision-making process. So, the same could be said of the agent, as he is the port's most important marketing channel and presentation source on the ship owner's side. There is also an underlying preference for bigger ports from the agent's side, because if the cargo in question will be dispatched to a different destination, or even by, or to, a different customer, then the cargo can be picked up by a larger variety of ship types if handled in a bigger port. The port itself has only three conjunctions with other actors: two of them are with forwarding and ships agency companies and are the most important ones. The third connection is with the control authorities of the state, which in this case is a compulsory connection.

Taking into consideration the above, it is not unreasonable to say that the port is very dependant on its cargo forwarding and ship's agency companies, because these two are the main opinion-makers within the transport business when it comes to creating an attractive image of a port. As the port itself is so relatively distant from the decision-making process of the shippers and ship's owners, it can be concluded that the opinions of cargo-forwarding and ships agency companies are probably the main indicator when it comes to measuring the attractiveness of a port. With this in mind, it is probable that the port's main marketing and presentation tool in relation to outsiders is the professional cargo forwarding companies working in the port, even though these can also have business in other ports, i.e. as well as, for instance, be organising shipments through the port of Riga although their office is located to Klaipeda. This way of working has become increasingly common with improvements of ICT in ports and among companies during later years, although much remains to be done in this field.

2.4.3. The marketing of a port

Discussions in earlier paragraphs have dealt with the attractiveness of ports in competition with other ports, but also about the attractiveness of both ports and transport corridors. A general way to enhance attractiveness of a product is through the use of marketing, and from a management point of view, marketing is the process of planning and executing the conception, pricing, promotion and distribution of ideas and services to create exchanges that satisfy individual and/or organisational goals (Bennett 1995).

The field of activity of a port is a typical example of a service industry. It means that the product "port service" cannot be stored if there is overproduction, or sold from the stock if there is underproduction (Kotler 2000). At the same time, port services are specific for a number of reasons:

1. The seaport services are only one small part in the chain of transport from the shippers' warehouses to the receiver's premises. So the market position of a port is to a high degree dependent on the conditions of the hinterland transport system serving the port, but also on a number of other service companies which play an essential role in the evaluation of the customers' delivered value.

2. The strong influence on port services from other institutional factors beyond the control of the port such as e.g. the tax system, state subsidies and other public sector services along with access to banking services.

3. The demand for port services is always a derived demand. It could be derived from foreign trade with overseas nations, but also trade within a region can generate coastal trade. For this reason, demand for port services is to a high degree dependent upon international factors, which cannot be directly influenced by the ports themselves such as world market conditions, currency rates, prices on international commodity markets etc.

4. Ports try increasingly to market themselves, not only as a point of cargo handing service, but more as suppliers of a service package, i.e. a combination of agencies functioning in a variety of areas. One of the most important characteristics of this "package approach" is the interconnection of many individual services into a complete service package. The cost structure, seen as total costs, and the integration of different services into an efficient transport chain are becoming an ever more distinctive feature of seaport service.

5. The direct customers of port services are in most cases not the owner of cargo, but an intermediary, i.e. agents and forwarding companies. Instead these intermediaries have become the main decision-makers, evaluating the alternative service packages offered by different ports of which they themselves are often an active part.

In practice, port marketing efforts have therefore come to be concentrated on two levels. Actions at company level such as the different stevedoring companies working in the port, that actively market according to their own interests while at a higher level, port authorities level, other interest steer. The port authority, being a state structure, must also take state interests into account, such as macroeconomic policy and future strategic interests, and not only that of private companies (Wijnolst, Wergeland 1997). The motives of the private port companies, on the other hand, are purely market-oriented, with the aim of showing their own superiority over other competing companies, not seldom in the same port, and only secondly the general advantages of using their own particular port.

The structure of the marketing organisation of the port authorities is determined by the structure of the port and the independent private companies working in the port. These companies are themselves responsible for their commercial results and almost every company has its own marketing department, or at least some staff that are responsible for attracting and retaining customers. However, the Port Authority's income and, indirectly, the state's income from port activities, also depend upon the cargo flow via the port and the port dues that can be collected directly through this flow.

There is often no official body that co-ordinates marketing activities, neither a marketing association nor a marketing council. The Port Authority's marketing activity is more like an umbrella for the port companies' marketing process and there are often just a few persons inside the Port Authority structure that are responsible for this task. However, any such authority is restricted when it comes to the use of different marketing tools. The authority itself is seldom involved in the direct creation of the products of the port, which is primarily done by the companies that handle cargo in the port. Neither can the port authority directly regulate the price nor the quality of the "products" delivered by these operators. Therefore, the marketing activities of the port authorities can only be directed towards the promotion of the entire port as an attractive place for cargo handling for potential port customers. On the other hand the stevedoring companies, that execute the actual cargo handling, direct their marketing efforts towards specific customers, cargo owners, carriers or forwarders. For that reason, the port companies marketing activities are often strongly related to the port product, the price of handling and the quality of service, while few efforts are made to promote the port in general.

The combined result of the marketing activities of a port, when trying to influence the flow of cargo in the different corridors as was illustrated in Figure 2.2, becomes relatively limited, which is also shown when studying how different port authorities present themselves and their port(-s) in public brochures and on Web sites (Brodin 2002).

2.5. Organisational changes and trade restructuring

Parallel to all the above-mentioned processes, there are also other processes at work in the world that are likely to accelerate and strongly influence the port sector. Important such examples are the economic transformation and industrial upgrading that is currently forcing adaptations at all levels of any society and even to the way in which countries will trade. On the political level, these issues are often being addressed as something positive and urgent and are well mirrored in the Russian anxiety to enter the WTO, which is matched by strong resistance from other circles in society, much due to the number of uncertainties involved. Generally, this trend in the world points towards a continuous shift away from a raw material-based production towards a production of higher-value goods, an increased share for the service sector and an increased involvement by active regions of the world in future information technology networks.

In the region under study here, a dramatic trend towards trade re-orientation is underway, especially so in the Baltic states. Since the early 1990's, the Baltic states have shifted their trade from a strong dependence on today's CIS states to an equally strong dependence on the countries of the EU which is fully in line with their 2004 EU membership. From having directed over 80% of "foreign trade" eastwards in the late 1980's, the share towards the West is now approaching this level. With all the three countries having applied a liberal trade regime for many years, the Baltic countries already trade more with each other than what could have been predicted (Alho 2000). Baltic foreign trade has been supported by the fact that the comparative advantages of this group of countries are quite similar, but very different from that of their main trade partners; the Scandinavian countries and other EU countries.

When transit trade is studied, it should be remembered that cargo shipments are an integrated and important part of the process of being (re-) introduced into the global economy for the individual oblasts or FSU countries, within which the cargo originates[45]. Here, transit trade is used as an example showing a geographical realignment of trade that, in turn, as is the case of most trade transactions, is based on economic factors. In the case of the Russian oblasts that appear here as origins and destinations for the transit trade, they cannot really be said to be included in a form of global trading system as they are influenced to a very limited degree by changes in global production systems. Many Russian oblasts still have a production system where only a certain, and often very limited, part of their production is destined for export, and with a non-existent global influence. It is probably true that these oblasts see the outcome of, and their continued involvement in, a global economy as an opportunity to build future hopes through currency incomes. The

[45] Oblast is the most common of the basic administrative unit of the Russian Federation. Other administrative units, with a slightly different freedom of decision-making, are: Autonomous Republic, Autonomous Oblast, Kray, Okrug, and Autonomous Okrug. This system is inherited from the Soviet Union and well explained in Symons (1990) p. 1 - 5 and 245 ff.

contents of the transit trade, however, show the one-sidedness of many of these oblasts (Brodin 2002)[46]. Their involvement in transit trade, although varying in scale, often has far-reaching positive economic implications locally. Political opinions represented in different oblasts, as well as in different CIS countries, as to which economic paradigm would give the best possible result for the future of these Russian oblasts and CIS countries, differ widely. The political point of departure also results in very different views on the possible advantages of development and change that can be the result of a continued, or future, involvement in the globalisation process that can, perhaps and possibly, be initiated by currency incomes earned from transit trade.

In the small and open economies of the Baltic states, this restructuring process has got well under way, but in the neighbouring Pskov Oblast, in more distant Kursk Oblast or in any oblast in northern Kazakhstan to just give some examples, the preconditions are entirely different. Of a wide range of possible factors to be considered, only the low quality of goods and the lack of the necessary knowledge and market economic experience among companies from the former centrally administrated economies, will be mentioned here. Soon after the falling apart of the FSU, it proved much easier to reorient imports than to find new markets for exports. Imports however, are in most cases small volume goods of a much higher unit value, being widely distributed, while exports often remained, and still remain, large volume goods, handled in bulk, and destined for one and the same consumer, not seldom in volumes of ship-loads. It is beyond the scope here to discuss the risks involved in such a dependence on foreign currency incomes and what, in that case, the effects could be of sudden negative changes in the western markets for the few export-oriented products.

During the turbulent years of the early 1990's, transit trade was one of the seemingly few stable and income bringing activities that many in the Baltic Sea region adhered to. The national policies of the different Baltic states has not reflected neighbouring countries' positions in trade-related questions and especially not in the case of transit trade from Russia and other CIS states. Transit trade has been obstructed by the Russian side a number of times during the last decade owing to administrative changes of a number of border procedures, many of which have occurred in an unpredictable way. Over and above such complications, occasional tariff discrimination by the Russian railway directed against one or the other of the Baltic states has also occurred.

Not long after the initiation of the transition period, it came to be understood at ministerial level in Russia that the idea of diverting all cargoes via Russian ports was technically impossible, no matter how desired such a change would have been. This understanding emerged quite simply due to the fact that Russia lacked enough domestic capacity in this field. For several years, few actions came to be taken to initiate any changes as most of the Yeltsin-years as head of state were signified by

[46] This will be clearly exemplified in the empirical examples that will follow in chapter 3 and 4.

an unpredictable state of the economy. That certain volumes of transit, reasonable from an economic point of view, would inevitably be diverted to the ports of other countries was probably understood, but hopes were built up that most cargo could eventually be transferred to domestic ports. Increased Russian handling was seen as a way to increase competition in this sphere. Moreover, to live up to the "only via Russian ports" statement would probably have had a too strong impact on the quality and price of services and would only have recreated the once abolished monopoly situation.

2.6. Connecting influential factors to port and trade development

What has been discussed so far is geopolitics, transport corridors for foreign trade and port development in very general terms where the co-existence of the different combinations of geopolitical and transport economic considerations have been repeated. In Figure 2.10, a number of broad factors have been listed as inputs into the symbolic funnel, where the resulting pattern of transport geography has been placed in the centre of the analysis. Some factors are not possible to cover in detail and e.g. the results of political processes can be interpreted in various ways. As a result, these factors are not given any detailed description, despite being inputs in the analysis, and leave the funnel in the direction of "Qualitative factors – not covered". Some political processes are dealt with in later chapters, but the interpretations made are based on the way decisions are being implemented and rarely on how the decision came to be formed.

Other factors that will be dealt with, and that are leaving the figure horizontally as "factors covered", are transported volumes, transit trade and the development of ports, which have been interpreted as more quantitative. The same could be said about Russian factor endowment, e.g. in the form of major raw material resources.

At the same time, there are a large number of quantitative factors that influence the analysis, like the carrying capacity of different railway lines, the loading capacity per hour of equipment in ports, port dues and the probability of ice cover and its extension, etc. These factors are, unavoidably, an important part of the analysis, although they are not treated separately and are factors that must be seen as outside the focus of the analysis process, thus coming to be regarded as "Quantitative factors – not covered".

Still, there will be a continuous interaction between factors, no matter if analysed in more detail in or not. As a result of political decisions, such as, for instance, not allocating additional funding within state railways, and thus, perhaps, increasing railway efficiency, the competitiveness within national ports may be indirectly decreased. Not only do the "factors covered" interact with the two groups "Qualitative" and "Quantitative" factors not analysed, but they also interact between themselves.

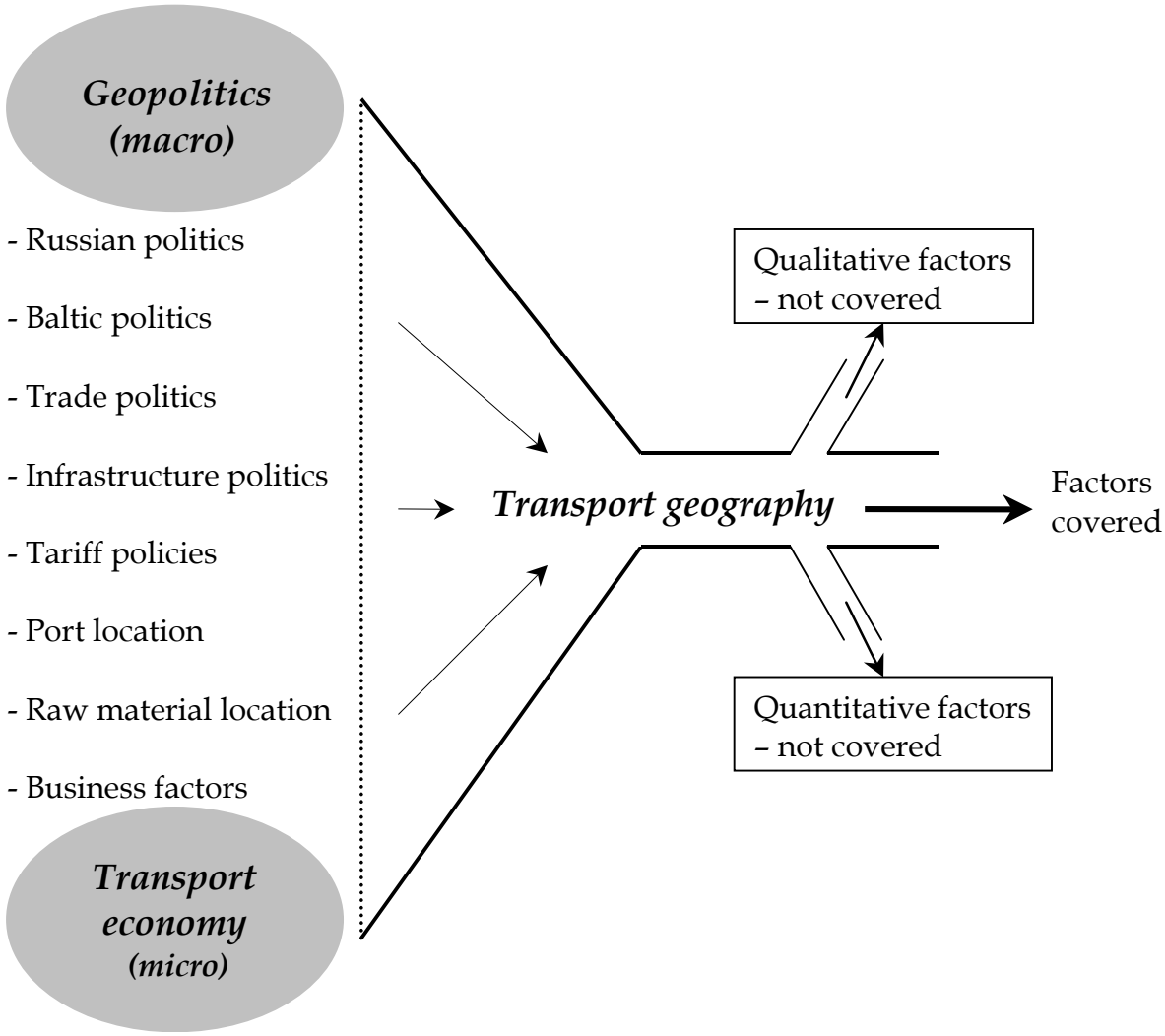

Figure 2.10. The conceptual relation between factors influencing the analysis

Source: Author

The importance of the different factors included in the model is also related to when in time the analysis is being made. As mentioned in the background part of the thesis, the time frame is roughly ten years and during this time a lot has happened when it comes to relations between countries included and in the transport sector. The order of factors listed to the left in the figure would probably have been different if it had been made to represent the situation ten years ago. The figure as outlined here could be said to represent the situation during the last few years.

The influence of different types of factors on the development of the geographical pattern of freight flows will be exemplified in the following chapters, from different points of departure. A number of examples will be given where geopolitical considerations interact with economic considerations. In the next chapter, these matters will be discussed from a Russian standpoint, while in the following chapter, the Baltic states will be in focus.

3. THE RUSSIAN ECONOMIC GEOGRAPHIC CONTEXT

3.1. Introduction

Since the late 1980's, Russia has gone through fundamental political and economical changes. With the appointment of Gorbachev as General Secretary of the Soviet Communist Party in 1985, he became the fourth leader in just 28 months; a revolution in itself. He took over a country that, at the time, was the world's leading producer of steel, minerals, raw materials and energy, while its malfunctioning economy ensured that shortages were commonplace (Aldcroft and Morewood 1995). From this point, economic reforms were from then on slowly implemented in the FSU, as a part of the "*perestroika*" program. However, the real transformation of the Russian economy in the direction of market economic reforms did not start until January 1992 with the first liberalisation of the price system. A number of different measures have since then been adopted that display a mixture of advances and setbacks. Reforms introduced during Yeltsin years put an end to central planning, but have only to a limited extent created real markets. The unpredictability of the process can be seen as reflections of an often complete lack of national political consensus. This refers not only to the direction of the transition, the goal of the transition, but also to the speed with which it should proceed. What are probably unwanted side effects of this process, for the average Russian citizen, can be noticed everywhere in society. The economic- and social climate of the society in which the transport sector works will be on display here before concentrating on the transport sector and port issues.

3.2. Developments during the 1990's in different sectors

3.2.1. The political development process

Early transition years stability in Russian political life was for years often said to be related to the physical well-being of its president Boris Yeltsin and it was not until the turn of the new millennium that this expression was to lose it value. The change came when President Yeltsin used his constitutional right to cede his presidency to Putin that served as Prime Minister at the time. The appointment of Putin as President and the later naming of Kasyanov as Prime Minister, the sixth inside 26 months, marked the end of a turbulent political process. A turn of events that had started in March 1998, with the unexpected dismissal of the long-serving Prime Minister Chernomyrdin. This was followed by a long struggle between the president and the Duma to get his predecessor, the relatively young and inexperienced Kiriyenko, into office. Few could have expected him to be dismissed as early as in August the same year. Next to take office was the ex-Minister of Foreign Affairs, Primakov, who inherited a Rouble in free fall, after the Central Bank had given up attempts to defend its value in August of 1998, which meant that both the Rouble exchange rate and the economic situation eroded rapidly.

Primakov was given ten months in office, that, considering the point of departure, had resulted in a relative stability of the economy but his administration had not injected stability into already deeply worried economic markets. Next in the office was the former Minister of the Interior, Stepashin, that had a record short carrier as Premier Minister, lasting for only three months until Putin, seen as more loyal to President Yeltsin, was promoted to lead the government in August 1999.

Seen from such a point of departure, with a Duma that had often been obstructing all presidential initiatives, but having been converted into an institution that more often than not just rubber-stamp presidential initiatives, the presidential reform proposals have become far more frequent and effective. The steps forward towards a working market economy have still by many been considered as too slow in many aspects. Nevertheless, the general direction that has been followed over the last decade has still been mostly reformist. The year 2003 - 2004 can well again prove decisive for the future, as there are upcoming Duma elections in December 2003 and presidential elections to follow, probably in March 2004.

3.2.2. The economic development process

1997 was to become the first year, since the break-up of the FSU, that the Russian GDP development was positive. During the first half of 1998, a positive trend was more or less maintained, and even during the Kiriyenko crises in March 1998, inflation remained relatively low and stable. These advancements were to be completely wiped out during the autumn by the Rouble crisis that erupted on August 17 1998. As can be seen in Table 3.1, the full year GDP figure for 1998 came to –4.6%, far short of expectations. The outlook for 1999 was negative indeed with both the IMF (1999) and the EBRD (1999) expecting a fall in GDP, –7% and –5% respectively, but the year instead ended in a 5.4% growth. The crises that broke out in 1998 forced much of the transition process to restart again, but the speed of recovery proved to be surprisingly quick. The economy has changed considerably over the few years up until today when the service sector comprised 60% of the GDP at the end of 2002, from having been a neglected sector during the years of central planning (Bofit:a 7:2003 www). Currently, the Russian government and the EBRD expects a growth of GDP for 2003 of 4%.

To maintain a positive development in the future, it was important that inflation, one of Russia's major economic problems during the transition period, was curbed during late 1997 and the first half of 1998. From a level of 195% inflation in 1995 it had come down to 47% in 1996 and by January 1998 to 10%, but was by mid 1999 back at around 100% per. Year 2000 ended with a 22% inflation, 19% in 2001, and 15% in 2002, with a target for 2003 set at 10-12%. Another result of the August 1998 crisis, and the free fall of the Rouble, was the sharp fall in purchasing power of the Rouble, relative to other currencies[47]. By the end of July 1999, the Rouble had lost

[47] RUR is the ISO abbreviation for the Russian Rouble that was adopted along with the introduction of the new Rouble, 1998-01-01, when its value was increased 1000 times by taking away three zeros.

approximately 75% (from 6.3 to 24.2 RUR/USD; Bofit 34:1998 and 26:1999) of its August 1998 value to the US dollar and average wages had fallen from a level of USD 300/month to just above USD 100/month (RFE 1999-02-18 www). The low Rouble value came in handy to support a revitalisation of the long-time (tr-)ailing domestic industry. A pick-up that in turn has generated a slowly expanding household income that has lifted consumer spendings to a level that has supported a further expansion of the GDP.

Today it has become widely accepted that debt servicing is a very important indicator of economic stability in a country. As a result of the August 1998 crises, Russia defaulted on several scheduled interest payments on loans to international institutions. However, the recovery has been quick even in this field and by mid December 2002 Moody's upgraded Russian foreign debt one step on its scale to Ba3, because of "rising reserves and falling debt service risk" (Moody's 2002-12-18 www). In March 2002, Russian country risk was ranked at 98th place out of 180 countries listed by Euromoney, a slight fall from a year earlier, but still a considerable improvement compared to only three or five years ago earlier (Euromoney March 2002)[48]. It must, of course, be remembered that there are a number of methodological problems around credit ratings and financial indicators, but the trend is more than clear about how negatively international credit rating institutes have been looking upon Russian creditworthiness, and that the trend has again become positive. A lack of creditworthiness over the years has clearly restricted the possibility of finding investment capital for, e.g., Russian port projects discussed elsewhere in this book[49]. After having reduced its debt principal by USD 7 bn and paid as much in interest during 2002, Russia is planning to borrow money on the international market during coming years to assist in repayments and interests of international debts, that amount to USD 17.3 bn for 2003, with 14.5 bn and 17.2 bn respectively for the two coming years (Kudrin, PrimeTass 2002-12-16 www). Total foreign debt in late 2002 stood at USD 120 bn, or about 40% of GDP, to be compared to three years ago when it topped USD 160 bn, or 130% of GDP (Goskomstat 2002 www).

Generally, the development in the business community is not very positive as during January – September 2002, 45% of all Russian companies were unprofitable, an increase of 8% over the same period 2001, with the agricultural sector showing figures well below average (Bofit:b 11:2002 www). As no well-established accounting system, as known in the West, has been fully established, and a presentation of financial statements in a "western" way was done by only 24 of the 42 largest enterprises for 2001, the term "*unprofitable*" probably includes a good margin of what could be defined as subjective opinion. With an often very concentrated and closely connected ownership structure in companies, and a

[48] Previous rankings were March 1997 - 66; December 1997 - 75; March 1998 – 127, March 1999 – 161, March 2000 - 133, March 2001 - 94, March 2002 - 98. The positions for the Baltic states in March 2002 (1999) were Estonia – 45 (50); Latvia - 52 (62) and Lithuania – 62 (63).

[49] In Russia, only 9% of capital in business come from domestic banks (Russia/Central Eur. 2002).

limited disclosure of information that is of interest to potential investors, judgements become somewhat insecure (Standard & Poor's 2002-09-13 www). In a corporate governance survey in Q2, 2002, 22 of the 25 biggest Russian companies had violated the law or interfered with shareholders' rights at their annual meeting (Bofit:a 44:2002 www). When reading these figures, it must also be kept in mind that, during transition years, a disproportionally large share of the economic activity in Russia is not being recorded (Starrel 1992, Åslund 1995, EBRD 1998:b). In recent years, the grey sector is often said to have lost some of its importance, much due to the corporate tax reform from 2001 (the introduction of a 24% flat-tax for companies), but the share of the grey sector of the economy is still accounting for 37% of the economy, a decline from its peak with 45% in 1998 (Russia Journal 2002-12-28). Since the corporate tax reform and the private reform from 2002, the tax system has been much simplified and incomes from both corporate and private taxes have increased considerably. The positive outcome of the corporate reform has to a certain extent coincided with a decline in the use of barter between companies, in the form of IOU's, securities and pure barter, as money incomes are less complicated to tax. The level of barter was estimated by the State Statistical Committee at nearly 50% in 1998, to have fallen to below 20% by early 2002 (Bofit:a 32:2002 www).

Table 3.1. Russian economic indicators 1992 – 2002

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
GDP	-14.5	-8.7	-12.6	-4.2	-3.5	0.8	-4.6	5.4	9.0	5.0	4.3
Industrial Prod. %	-18.2	-14.2	-20.9	-3.0	-4.0	1.9	-5.2	11.0	11.9	4.9	3.7
Unempl. % (*)	4.9	5.5	7.5	8.2	9.3	9.0	11.8	11.7	10.2	9.0	7.1
Exports, USD bn	53.6	59.7	68.1	81.3	88.4	86.7	133.3	115.4	105.5	103.0	105.9
Imports, USD bn	43.0	44.3	50.5	60.9	61.5	66.9	74.2	74.3	44.9	53.4	59.0

* = end of period[50]

Source: Goskomstat (2003 www)

Another negative fact is that foreign companies, when making FDI's in Russia, deliberately locate close to the centres of power, whose approval they require to do business. Proximity becomes extra important in Russia as the twists and turns in direction from central authorities have proved so hard to anticipate. This is the result of what appear to be chronic problems for foreign companies operating in Russia, the weak legal system and the poorly defined property rights (Boyko, Shleifer and Vishny 1995; Sachs, Pistor and Olin 1997). Taken together this results in a further concentration of FDI's in and around the Moscow and St. Petersburg areas, areas that already receive a disproportionate share of FDI's (Bradshaw 1997).

[50] Official statistics are based on registered unemployment while labour force surveys conducted, e.g. by the ILO, during the early 1990´s often indicated 50 - 100% higher unemployment levels.

The need for FDI's in Russia to maintain a positive growth becomes extra strong as domestic companies' policies are very often to finance investments by way of own means, to 55%, and only to 18% out of credits, which dramatically restricts openings for expansion (Bofit:a 24:2002 www). FDI's in Russia have so far concentrated upon the service and the financial sectors. Although the problems have been evident for central authorities for several years now, little has happened in terms of improvements as Russia, in the yearly ranking of Economic Freedom, released in mid November 2002, placed Russia on place 135 of 153, and with a score that has remained unchanged for three years, 3.7 on a ten point scale. Russia and Yemen had the same score, while nearly all CIS were placed higher, with Estonia coming as high as sixth (Fraser Institute 2002 www). In the World Economic Forum ranking of competitiveness, also published in November 2002, Russia came in as number 64 of 80 in the forecast for growth during the coming five years, because of poor legislation and a social situation that is expected to hold back the positive recovery of the country (World Economic Forum 2002 www). During the first nine months of 2002, total foreign investment rose 30%, to a total of USD 13 bn, with only 2.6 bn being FDI, and accumulated foreign investments, having reached USD 39.8 bn; with Germany, US and Cyprus accounting for 17%, 14% and 13% respectively (PrimeTass 2002-11-19 www)[51].

When the time comes for FDI's in Russia and in the Commonwealth of Independent States (CIS), to gain momentum, the pure size and diversity of the region is such that the FSU can probably not be expected to be jump-started by FDI's alone. What will be even more important for the economic comeback is a general improvement in the local conditions for enterprising, which could lead to new investments. Ex-domestic capital has continuously fled the region during the years of transition and this flight of capital has been estimated to have exceeded USD 150 bn from the start of transition including 1999. This figure is equal to approximately four times the average yearly pay for all Russian workers in 1998 (Pirani 1999). During 2002 the flight of capital from Russia has been estimated at a level of USD 11 - 12 bn, to be compared to the 2001 and 2000 figures of USD 16 bn and USD 24 bn respectively (Interfax 2003-01-28 www). The incredible size of those figures is better understood if compared to the Russian levels of FDI's mentioned above and trade surpluses in the next passage.

As can be seen in Table 3.1, Russian foreign trade during the transition years has been marked by exports well exceeding imports, generating steady surpluses of USD 15 and 25 bn before 1999[52]. From 1999, and as a direct result of sharply increasing world energy prices, surpluses have more than doubled reaching USD 60 bn in 2000 to decline by 10 to 5 bn per year the following two years due to

[51] PrimeTass quoting Stat. Stat. Com., while total stock according to other sources, at the end of 2001, was under USD 22 bn and estimated inward FDI's during 2001 totalled 2.5 bn; marginally below(!) Russian outward FDI's (UNCTAD 2002 www). Total FDI in Russia for 2002 was given as USD 4bn (+3% over 2001) in Vedomosti (2003-02-19)

[52] The highly overvalued Rouble lifting exports, before the August crises, makes 1998 a special year.

increased imports. Energy dependence remains strong, as crude oil alone represented over 30% of exports during the first ten months of 2002 and energy items together made up 57% of exports (Reuters 2002-12-10). On the import side, about 60% were cars and machinery, with EU countries supplying 39% of overall trade, while the Germany share of 10% made it the most important trading partner. What make these official trade figures uncertain are the different forms of barter trade, especially in-between CIS countries and between Russia and China, where unofficial shuttle trade by private entrepreneurs is not fully registered in trade figures. Contraband trade is currently estimated by the Ministry of the Interior, to be in the range of USD 20 bn, of which most has its origin in South East Asia with an emphasis on fake goods and counterfeit foodstuffs (PrimeTass 2002-12-06 www). Despite these continuous positive foreign trade balances, it is not unreasonable to also expect future competition in Russian State administrative circles between those in favour of protectionism and self-sufficiency and those in favour of continued international integration with e.g. the WTO. Nor is it unreasonable to expect this to spill over into international co-operation and generate friction in the relation to foreign countries and organisations like the EU, other CIS countries, as well as the Baltic countries. The proposed Russian re-unification with the economically very weak Belarus, being less likely today than a few years ago, is one such issue.

The last problem that must be considered is corruption, with all the negative effects corruption has on growth (Tanzi and Davoodi 1998). In another form, widespread corruption existed even during the years of communism. Corruption has now emerged, in a new and more direct form, on many levels in former Soviet societies together with a growing influence from the influential grey sector of the economy. These kinds of problems can be found in most sectors of society, not only in national and regional administrations, but have in recent years spread into the private sector. As rules and regulations are often too complicated, or open to interpretation, both enterprises and individuals often see bribing authorities as a way to avoid difficulties. In the annual evaluation of worldwide corruption by Transparency International for 2002, the four Nordic countries considered practically corruption free with all four being ranked among the top six. Russia, on the other hand, has since several years been ranked around 75, on par with India and Tanzania. (Transparency International 2002, www). A number of legislative amendments have been introduced to reduce, or counter-act corruption but so far this has not had any noticeable effect. As summed up by Sutela: "Implementation, as always, remains the problem, but the least one can say is that without legislation there would be precious little to implement" (Sutela 2002:a p.19). Together with the think tank INDEM in Moscow, the cost of corruption to society in Russia has been estimated to USD 16 bn per year. Over 80% of police students, in a an early 2002 survey, believed Russia to be the most corrupt country in the world, while one of the problems is that Russian law does not have the clear definition of corruption which 60% of police officers and 50% of normal people believed it offers (Barsov 2002). Even in the Duma, corruption is said to be widespread and People's Deputy Shashurin even claims that "we are ruled by the Mafia" and he claims that none of the people about

whom he has raised claims, ”which are many present and previously leading persons” (e.g. Moscow mayor Luzhkov - authors amendment), have sued him for defamation. The deputies themselves work for payment from dubious sources to write a request for an inquiry by the tax-authorities into a company, sell appointments they can organise, receive payment to vote ”correctly” and even sell their parking stickers expensively. Over 20,000 are said to work as ”assistants” to the 450 deputies in the Duma (RFE 2002-11-21 www)

As understood from the above, neither the political nor the economic life in Russia has been running especially smoothly during transition years. The transport sector is affected directly by these societal problems, facing a lower than normal demand from strained manufacturing and retail sectors. Also indirectly the sector must allocate resources to meet and operate under these insecure circumstances which severely restrict the availability of investment resources.

3.2.3. The social development process

If the effects of the transition process have been dramatic in the above mentioned fields they have been perhaps even more so in the social sphere. The current Czech President Vaclav Klaus has distinctly summarised the distribution of the costs of transition and the assistance the former communist East has received from the West as:

"These costs have to be paid by the citizens of the transforming countries themselves (with the exception of Germany) while the contribution of the rest of the world is marginal (if any, and if not a negative one)" (Klaus 1999 p. 5)

Any interested visitor to Russia these days, can see the effects that the political and economic turmoil has had on the life of ordinary people, and how the outcome of the processes have come to spread the welfare extremely differently. Despite a long agenda of problem areas that should, but have not, been attended to by the central authorities during the first years of transition, development in general seemed to move forward relatively positively during the early years of transition. The August 1998 crisis strongly worsened the situation for common people, and according to official statistics, 44% of the population were poor in the beginning of 1999 (64 millions) compared to 24% in early 2002 (35 millions). By late 2002, 25% of the working population have incomes below the subsistence minimum of RUR 1700 (USD 55) set by the State Stat. Com. (RFE 2002-11-13 www). At the same time, the richest 10% earn 13.7 times the income of the poorest 10% in early 2002, or 32% and 2.3% of available incomes respectively (Trud 2002-02-21 www). At the same time, the formation of a middles class in Russia is accelerating with an estimated 10 – 12 million families having incomes of USD 6,000 – 40,000 by the end of 2002, with 40% of the Moscovites belonging to this group (Moscow Times 2002-11-21 www). The

highest wages are currently being paid in the oil and gas sector, 4 – 5 times the average, while agriculture pays only 44% of the gross average, that the State Statistical Committee in June 2002 set to RUR 4,520 (USD 145) (Bofit:c 10:2002 www)[53]. Pensions though have faired better than wages during later years and had, by September 2002, reached a level only 5% below the pre-1998 crisis level, being 5% above the subsistence calculated for pensioners (Bofit:c 10:2002 www)

Another alarming example of how badly the administration of public and private finances has been are public and private wage arrears. The end of wage arrears and the prompt payment of wages was one of many promises that helped president Yeltsin to stay in office in the 1996 presidential election[54]. Wage arrears have again risen by 20% during 2002 to approximately USD 1,4 bn, although 85% are not under state budget control, it is what is owed by oblast administrations that is rising the fastest. The inability of the government to solve this problem has strongly influenced the every day life of the Russian population, and provoked several organised protests in the form of street demonstrations, but also numerous desperate hunger strikes (ILO 1999 - 2002 www). On the other hand, the Minister of Labour announced a sharp fall in strikes during 2002, from some 800 per year in 1996 to only 80 during the first eleven months of 2002, - said to be the lowest figure in Europe (PrimeTass 2002-12-28 www)[55].

Many Russians have, in despair, sought support from alcohol and, during the last five years, consumption has increased by 30% resulting in 37,000 deaths directly related to alcohol during 2001, with an estimated million having reached the stage of alcoholism. Worst of all however is that the age of introduction to alcohol has fallen from 16 years in 1991 to 11 years during 2001, being more or less the same for both boys and girls (Nezavisimaya Gazeta 2002-11-20 www). One of the major changes in this field is the beer's break-through on the Russian market. Beer is now being widely consumed, all hours of the day and by all age groups, often in a manner that gives the impression that it is a softdrink. By the end of 2002 total sales of beer is expected to, for the first time, surpass vodka with both selling over USD 6 bn (baltic-consult 2002-10-07 www)

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[53] According to the Governments Rural Development Program, in 2001, 40 million Russians, (28%), live in rural/agri- areas where fewer than half have central heating, indoor plumbing or sewage, with a third living off paved roads and as many off the general telephone network (Bofit:a 24 2002 www). The same year as two Russians were estimated as possessing above USD 7.2 and 4.2 bn respectively (Fortune 2002-09-06 www).

[54] The same problem that was one of the top domestic issues for the Primakov administration that took office in October 1998, remained so for both the short-lived Stepashin and has remained so for the present Putin administration. The printing of new money has relieved the pressure, but instead inflation has further reduced the value of the often year-old non-paid wages.

[55] The new labour code, adopted in August 2002, gives workers a 40 hours working week, 28 days holiday, minimum wage at poverty line, makes him easier to dismiss and allows workers to stop working if wages are not paid within 15 days (Bofit:b 9:2002 www) – which few will dear to try.

As if the problems with alcohol were not enough, other problems also increased in Russia during 2002, with nearly 1 million people in prison, of which 730,000 are convicts and 220,000 inmates are under investigation, including nearly 20,000 minors and 50,000 women, with an additional 650,000 on probation (RFE 2002-01-08 www). In 1990, 16,000 were murdered in Russia and in 2001, 33,500 murders were registered, together with 1,900 suicides; four times, what is registered in the US. The number of homeless children is estimated to 3 millions and over 1 million were arrested last year, with 17,000 being criminal, 345,000 never having attended school and 300,000 children under the age of 13 (Ria-Novosti 2002-02-19 www). Russians marry less, 900,000 in 2002 (1.1 million in 1995) and divorce more, 700,000 in 2002 (655,000 in 1995) (RFE 2002-02-15 www). Over 60% of pregnant women decided to terminate pregnancies, while nearly 60% of the children born had some kind of disease (Interfax 2002-10-18 www). The number of sales of girls and women for prostitution from Russia, Ukraine, and the other post-Soviet countries reached 10 million during the ten years since 1991 (RFE 2002-02-20 www). Of Russia's industrial enterprises, only 45% comply with the most basic safety regulations, which results in about 500,000 workers sustaining some degree of invalidity each year (RFE 2002-04-24 www). There are about 220,000 officially registered cases of HIV infection in Russia while the real number is likely to be close to 1 million. The state spends about 6 million rubels (about USD 200,000) per year on AIDS treatment and diagnostics (RFE 2002-12-01 (Int. AIDS day) www). The illegal drugs trade in Russia is estimated to be worth USD 15 bn to USD 20 bn, with official statistics showing 500,000 drug addicts, while the real number of drug addicts is probably between 3 and 4 millions. More than 60% of drug addicts are under the age of 30, and some 20% are of school age (RFE 2002-12-10).

The national census, that was conducted during October of 2002, came to the preliminary conclusion that the population of the Russian Federation is slightly above 145 millions. A figure of about 2 million above what demographers had predicted. Moscow's permanent population was 10.4 million residents, with an additional 3 million living in the city as non-residents. 3 million people are estimated to live in Russia illegally. The full results of the census, the first since 1989, will be made public in late March 2003 (PrimeTass 2002-11-16 www).

3.3. International economic relations

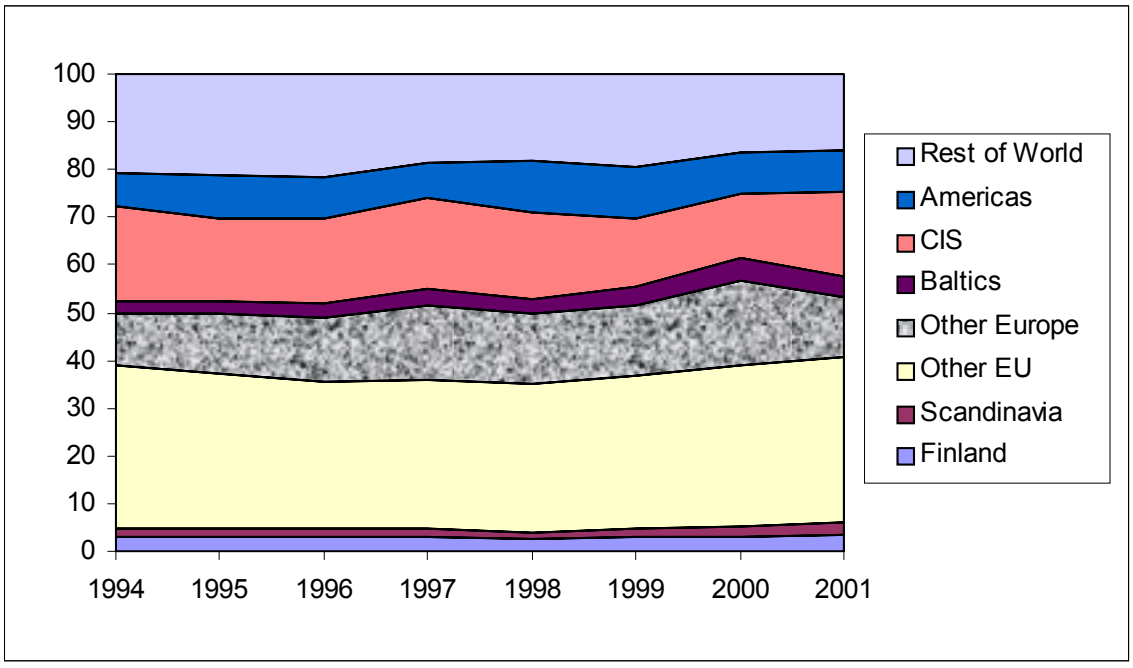
One of the main newly-emerging elements in the economic transition process that followed the collapse of the USSR in the early 1990s has been the gradual transformation of the foreign trade system of the former Soviet republics in the direction of a complete adaptation to the general principles of multilateralism and free-trade practices that dominate today's world economy.

One effect of the measures adapted during the process of transition is that Russian economic dependence on the West has increased sharply and has become more interrelated in the field of trade policies, which is directly related to the flow of

cargo in ports. Despite contentions between EU and the US on one side and Russia on the other, it is primarily in the field of trade policies that the parties have shown willingness to discuss positions and seek mutually acceptable solutions. From the West's standpoint, the reason behind the extended co-operation with Russia is to secure a stable economic and democratic development, now and in the foreseeable future. Indirectly, this is hoped to result in enhanced long-term European security.

3.3.1. The Russian perspective

If Russia is to carry out its ambition to have an influential position on the world scene, attempting in some sense to fill the vacuum left by the Soviet Union, it should build good relations with its economically most influential neighbour; the EU. Russia's long term goal is not to integrate in, but with, the EU. Since 1995, Russia has had 1300 km of its border in common with the EU. This integration includes not only political but also economic relations, and the latter goal is probably best achieved by proving to be a reliable and stable trade partner. If Russia remains a small trading partner for the EU, the opposite is true when seen from a Russian perspective. As can be seen in Figure 3.1, the share held by the EU countries has been kept relatively stable around 40% since 1994. The share of EU (15) in the Russian foreign trade has since 1990 varied within the interval of 35-45% of exports and 33-55 % of imports, i.e. well above ten times the EU dependence on Russia.

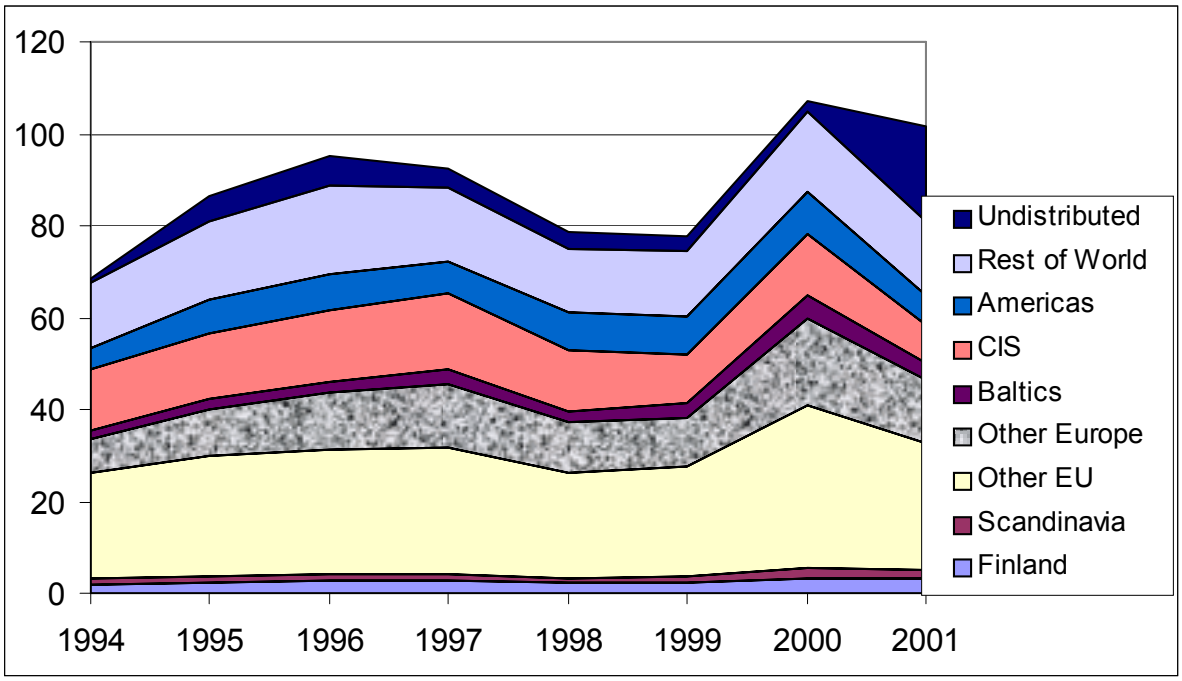


NB. Scandinavia includes Sweden, Denmark and Norway, of which Norway is not an EU member, constituting <0.3% of the trade.

Figure 3.1. Share of Russian exports by countries of destination (1994 – 2001)

Source: IMF Direction of Trade Statistics Yearbook 1994 – 2001.

Figure 3.1 also shows that the spread of Russian trade partners is relatively wide, but also that there have been a number of dramatic changes during the last ten years. The above-mentioned EU dependence has actually contracted somewhat since the beginning of the 1990's. At the same time, the group, "Baltics" has emerged as new trading partners, reaching nearly 5% by 2001. Out of the group of countries that comprise CIS, only Belarus can be found in the direction of the Baltic Sea. About 30% of exports to CIS from 1994 onwards went to Belarus and since then the figure has been slowly approaching a level in the range of 50%. The figures for both Belarus and the Baltic states can of course be questioned bearing in mind the comments made in relation to what will be mentioned in later sections, but will be acceptable for now. It must also be remembered that even before the falling apart of the FSU there was considerable "trade" taking place between these countries, although not registered as foreign-trade. The other two important shifts among Russian export destinations that more or less counter-balance each other is the noticeable increase towards the countries of Other Europe and the simultaneous decline for the countries of the CIS - Commonwealth of Independent States.



NB. According to Int. Fin. Stat. Russian exports amounted to 103 bn. USD in 2001; undistributed exports of this amounted to 20.5 bn. USD (set out in black at the top).

Figure 3.2. Value of Russian exports by countries of destination (1994 – 2001)
(absolute values in bn. USD)

Source: IMF, Direction of Trade Statistics, Yearbooks 1994 - 2002

This shift can be largely explained by a more rapid rate of restructuring in the first group of countries than for the second, that instead, during years of the 1990's, have had large difficulties in developing their foreign trade due to meagre, or even negative, economic growth.

It can be noted in Figure 3.2 that total trade has more than doubled during the 1990's and this has given room for a more or less continuous increase in Russian trade with its partners, e.g. the EU, during the period under study. At the same time, it is also evident that to increase market shares in a quickly growing market, it becomes necessary to achieve exceptional growth figures, and not "only" 10 – 15% per year. It should also be remembered that the second stage of strong growth in the Russian export value coincides not only with the recovery after the August 1998 currency crises, but also with a period of a near tripling of oil prices during 1999. Indirectly, this had a similar, and also very positive, effect on the prices of other Russian energy export items. The trend for the development of Russian exports, as indicated in Figure 3.2, is very positive indeed and the already ongoing preparations for a future Russian WTO membership can be expected to further boost both export and foreign trade.

3.3.2. The EU perspective

The initial reason why EU supported trade with the countries of the FSU from the early 1990's was to support economic and political transition in this region of the world as a way of promoting security on the outskirts of the core EU area. Not only has the EU supported Russia and other CIS countries with considerable amounts via long term loans, but has also funded large scale aid programs in the eastern Europe through its *Phare* program and in the FSU area through *Tacis*. All these initiatives have been taken with the aim of promoting openness and market reforms in general and to support education and exchange programs. The relative political and economical stability that has been achieved on the Russian scene since the Putin rise to power in 2000 has partly been built upon this and has also surprisingly quickly helped to give Russia a much improved image in the west.

The EU-Russian co-operation is based on the "Partnership and Co-operation Agreement" (PCA) from June 1994 that entered into force from 1997-12-01 (Hamilton 2002). It is on the basis of the PCA, that the EU administrates its' TACIS program, which is the single largest aid program. Apart from the TACIS, it is under the Barents Co-operation Council and other bilateral arrangements that many smaller projects are being carried out with the good intention of improving e.g. often grossly neglected west-east/east-west transport links. A long term neglect that is deeply rooted, and that has led to the current situation where the volumes of both freight and passengers crossing the national borders are considerably lower than what could be expected from a geographical point of view.

The general political and economic insecurity in the Russian market has given rise to a "*wait-and-see*" attitude that also affects the establishment and development of transport-links, which in turn adds to the already existing international hesitation as regards developing long-term business relations with Russian partners; an attitude that could be slowly disappearing in the light of recent years' developments.

However, EU views its trade with the FSU and Russia in an entirely different way and despite its large physical size, Russia remains a small trading partner for the EU. As a result of the historical as well as more recent historical circumstances, the current bilateral trade between the FSU republics and Western Europe is characterised by an asymmetric relationship. Even though the share of EU (15) foreign trade with Russia grew remarkably from 2.3% in 1992 to 4.9% in 1997, Russia has remained a rather insignificant external trade partner for the EU and the share tumbled again during the financial crisis in 1998, and amounted in 2001 to only 3.2%. How unequal the bilateral trade relation is could also be demonstrated by the imbalances regarding commodity composition. While 57% of Russian exports to the EU consists of energy and other raw materials and only 20% of transport equipment and manufactures, EU exports to Russia represent the reverse pattern with 3% energy and raw materials while 68% is transport equipment and manufactures[56]. In the ongoing process of the eastward enlargement of EU, the asymmetric relationship will become even more evident after the enlargement has been confirmed. This is because Russian foreign trade with the ten candidate countries in East/Central Europe in 2001 amounted to an additional 14.4% of Russian exports, but only 4.5 % of its imports (IMF DOTS Yearbook 2002).

Since 1995, both Sweden and Finland are members of the EU and their trade figures, as presented above, have been included in the EU figures. However, in both Finland and Sweden, the domestic discussion about relations to their big eastern neighbour has been much focused upon the importance of this huge market, its potential, as well as the sharply increasing trade with Russia. In both countries, certain interest groups have, for many years, foreseen an important entrepôt (gate-keeper) position for their country relative to Europe and the rest of the world vis-à-vis Russia. As is shown in Figure 3.1 and 3.2, the Finnish and Scandinavian importance is very marginal when compared to total Russian exports. Furthermore, the situation has hardly changed over the last ten years. Trade with Russia by non-Nordic countries has so far been conducted in mostly bilateral relations and less than expected has passed through these intended Nordic entrepôts.

While the EU summit in Gothenburg in June 2001 put a timetable target for the accession of at least eight of the ten Central/East European candidate countries to 2004, which was confirmed by the Copenhagen summit in December 2002, the future of the formal relations between Russia and the enlarged EU remains more uncertain. One important step taken by the EU and the US during 2002 has been to grant market economy status to Russia, which is hoped to reduce tensions around complaints of price dumping from the Russian side, and to be an important step in the direction of WTO membership. The Russian government has given a clear

[56] The interest in energy exports remains strong as the available profit margin could be huge in this field. By the beginning of April 2002, one mega-watt hour of electricity on the Russian market fetched $.013 while export electricity to Europe from Russia had an average price of $20 per megawatt-hour. Likewise, Russia sells natural gas domestically for $21 for 1,000 cubic meters, but export gas for between $90 and $105 for 1,000 cubic meters (RFE 2002-04-09 www).

priority towards a membership of the WTO, having understood that it could better defend some of its interest from "the inside" than from its current position, and a membership would also be an important step towards the normalisation of its economic contacts with the outside world. With Russia having become an increasingly important part of the world economy, it is important to be a participant in the setting up of international trade rules. The present timetable has recently been speeded up, following the improved relations with the USA after the September 11 events, which was furthermore confirmed through the visit by the US President to Russia in May 2002.

After the restoration of national independence in 1991, one of the main strategic economic objectives of all the Baltic states has been the firm intention to become members of NATO and the European Union. Real membership negotiations with the EU did not get underway until 2000 for Latvia and Lithuania and in 1999 for Estonia. Despite this late start, all three were able to catch up and completed the negotiations successfully in 2002. Depending upon the processes within the EU, Lithuania and the other accession countries could then become full members of the EU in 2004. No doubt, one of the most important factors in the future that will influence the transport system in the region is the integration process into the EU. Difficulties that can be foreseen are the results of the future liberalisation of local markets, new standards of regulation of these markets and the implementation of possible investment projects.

Since the WTO accession remains the highest priority of the Russian government, a potential upgrading of its current bilateral agreement with the EU will be reassessed only after 2003-2004, with the Baltic countries and the Eastern European former CMEA member states on the opposite side of the negotiation table. The present level of relations is formalised within the PCA, effective since December 1997. The short-term objective of the PCA is generally to establish a free trade area between EU and Russia. In addition, the EU "Common Strategy of Russia" of 1999, aiming at creating an "ever closer co-operation" between EU and Russia, declares the objective of a "Common Economic Area", which could be interpreted as an extension of the FTA to Russia's long-term accession to the EES/EEA. This ambition was, in general terms, confirmed by the Russian side in its "Mid-term strategy towards the EU", published in 2000 (Hamilton 2002). Whether or not these objectives are realistic in the foreseeable future, or whether the "business-as-usual" interpretation of the development of Russia's foreign trade relations with the rest of the world in general and with an enlarged European Union in particular during the next 5-10 years, should be one of a gradually growing economic integration and expansion of foreign trade can be questioned. The Russian side has, in the PCA, agreed to ensure that its legislation approaches the Acquis, but little has happened. The Russian incentives to comply are weak, as no future membership or transfers are set out, and also because parts of the legislation are seen as too strict, such as those of the environment and social affairs. Adapting only selected parts would give the EU reason to view Russia as engaged in social and environmental dumping and

restrict its access to the EU market accordingly (Sutela 2002:b). Accordingly, there will also be an ever increasing pressure to find solutions to the issue of how to find suitable trade routes for such an expansion of trade, maintaining the intricate balance between security-policy objectives and the technical/economic realities managing the physical trade flows. It should also be noted that the economic system that has emerged after the breaking up of the USSR also implies an important element of competition.

The existing hope that EU enlargement will make ports in the Baltic states starting points for Russian export - import flows needs more examination / research. Some attempts have already been made to predict some of the aspects of transit transport's influence upon the development of the transport sector, such as those by Baublys (2000) and by Paulauskas (1999), that emphasise the need to develop integrated transport chains, where road transport, railway transport and waterborne transport all participate. To evaluate possible changes in Russian and other FSU states' cargo transit patterns after the Baltic states entry into the EU, a much wider research approach than that used in the above examples will be needed.

3.3.3. Russian approaches to the possible WTO co-operation and the EU

One cornerstone when discussing future Russian development in the fields of trade and transport development is the possible Russian membership in the WTO. A decision of the Russian President Vladimir Putin to apply for membership of the WTO as quickly as possible has divided the Russian business community. The Russian President sees membership as another step towards the integration of his country into the world economy. Some of the leading Russian industrialists, whose original position towards entering WTO was rather passive when Russia first applied for WTO membership in 1995, are now making up their minds. Even former well-known proponents of the membership are now speaking about entering the organisation only when Russia will be ready for it[57]. The driving force in the process seems to be the Russian President himself, even though he has demonstrated flexibility towards the interests of business community of his country a number of times. It would therefore be reasonable to predict a rather long period of negotiations if it had not been for the fact that a final agreement must be concluded by late 2003, to be agreed at the upcoming WTO ministerial conference in September 2003. This would make it possible for Russia to be adopted as a full member of the 144 country WTO group of countries by 2004 – 2005. Otherwise, the next upcoming summit is another two years away. On the other hand it should not be doubted that the President will succeed in pushing his plan through. That the question is sensitive can be understood from the fact that the President, in June

[57] Which becomes understandable from the point of view of the very limited knowledge about the WTO, and the possible effects of a membership, that has been shown by heads of companies when surveyed in 2002 (EastWest Institute, Russian Regional Report Vol 7 no 22; 2002 www).

2002, indicated that a new strategy towards WTO could be in the making, but six months later, Minister of Finance, Kudrin, said Russia plans to intensify its efforts to become a member (Bofit:a 29-2002 www, and WTO 2002-12-16 www) [58].

There are several important issues that still have to be resolved in the negotiations such as in the area of agriculture, financial services, foreign ownership, the reduction of export subsidies, custom codes, intellectual property and domestic energy prices[59]. There is a general consensus in Russia, that the immediate consequences of entering WTO will be rather negative for several of the leading sectors within the Russian economy, including the energy, banking and financial sectors. On the other hand there is also a consensus that mid-term, and especially long-term, results should be positive. This is because of the forced structural transformation of old-styled Russian industry and its growing service sector, where a further development of the transport sector is just one example. A general growth of the competitiveness of industrial production and better access to foreign markets for Russian producers will, of course, be positive for all sectors of the economy. The impact on the agricultural sector could be problematic though, but it is rather clear that Russian agriculture is in a deep crisis and there is a need for something like a powerful external chock to start reforms in this sector. Estimations indicate that a membership in the WTO will lead to a growth in exports for Russia by billions of USD, but there will also be a growth in imports. Currently it is up to the government, in its negotiations in preparation for a possible WTO membership, to focus on the creation of restrictions(barriers) to offset a too large growth in imports.

If Russia's membership of the WTO is important for the long-term prospects of its economic development, the eastward enlargement of the EU is one of the most important political and economic problems for Russia and must be included in the analysis when discussing WTO. The first reaction of Moscow was of total support for the EU enlargement, by contrast to its total opposition to NATO enlargement. These positions have slowly been adjusted in official circles towards a much more cautious, wait-and-see approach. As regards NATO, the position remained negative until the release of the news, from Reykjavik in mid May 2002, about the creation of the Russian - NATO Council. The Russian reaction when the seven former east-block countries were invited as new members to NATO at the summit in Prague was purposely very "low profile". Still, this is a large step forward in the relations between Russia and NATO, and the creation of the Council was mentioned by Foreign Minister Ivanov as "the single most important foreign policy event of the year" (ORT 2002-12-22). What kind of real influence the new Council will have in

[58] Even though energy prices have been much focused upon as a problem area by western leaders, the final hurdle to be passed before a future treaty can be signed is that it must be approved by the Russian Duma before entering into force.

[59] Among the changes, WTO could force Russia to raise internal oil prices to a level that better reflects the real energy costs for other member states. Something that is regarded by the Russian negotiators as being a Russian "natural advantage". To raise prices by the 30 – 40% per year necessary and to adjust the level inside five years will force a considerable number of large and energy inefficient companies to close and will be met by fierce domestic resistance.

practice remains to be seen. There is possibly also a slow change in attitude taking place towards the EU, due to the transformation of the EU into more of a supranational institution with a common security and defence policy. The latest evidence of this is the harsh criticism from President Putin towards the lack of flexibility shown by the EU side in dealing with the Kaliningrad issue, although an agreement was signed some months later. Despite this slight change in approach, Moscow is continuously in support of the enlargement of EU's internal market. The EU market is by far the single most important are for Russia and its growth is hoped to lead to a growth in turnover of EU-Russia trade. Consequently, more transport infrastructure will be needed to handle the growth in exports and imports. As a combined outcome of this process, it could be expected that there will be a significant growth in transit trade via the North Western part of Russia and possibly also in the Baltic states. If the Russian government continues to follow its recently adapted hard line towards the Baltic states, aimed at reorienting transit trade in the direction of St. Petersburg and the new sea terminals in Leningrad Oblast, the consequences for the Baltic states will be less optimistic. Current Russian attempts to create new terminals in Baltic Sea and Black Sea may be seen as Russia's preparations for the inevitable EU enlargement to countries of Central and Eastern Europe and a future membership of the WTO.

3.4. Natural resources

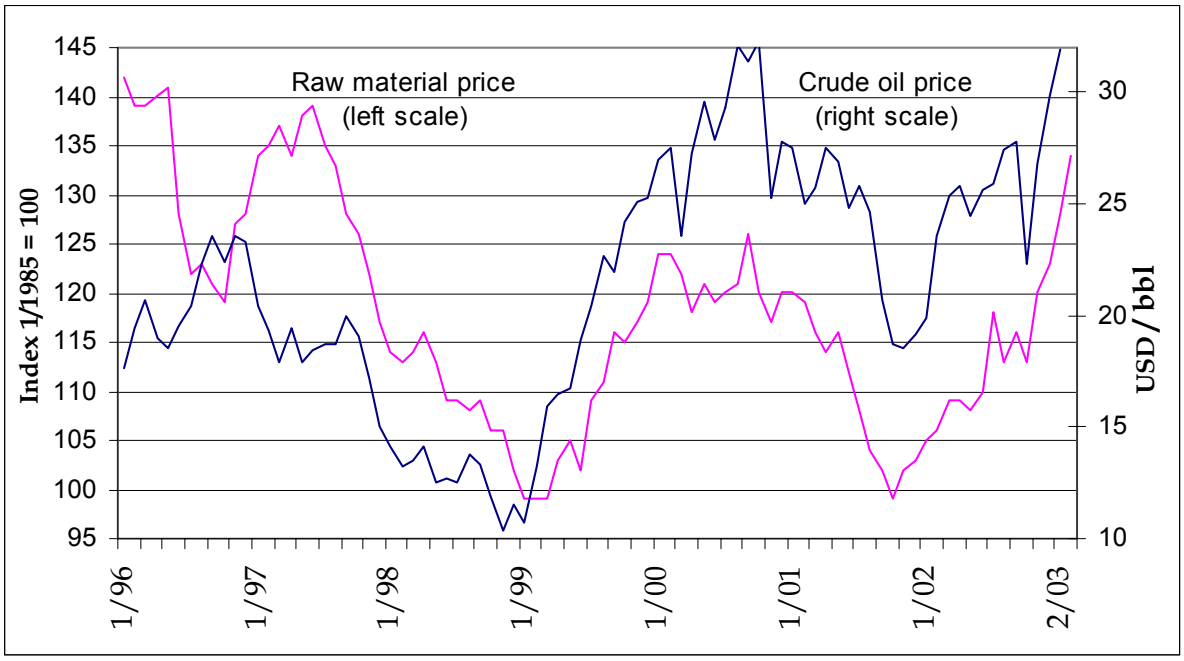
As understood from previous sections, the export of raw materials remains a major income for several of the FSU states. Accordingly, all countries that show such a one-sidedness in the composition of exports are left exposed to price fluctuations on the world market, with Russia being just one of many examples. Furthermore, raw material transport accounts for the absolute majority of the total ton-kilometre transport work performed in the whole FSU region. Primarily for domestic consumption, but also for export, and as a generator of goods turnover in the ports. This Soviet-time dependence on natural resources has continued in a situation where very few products from the domestic industry are internationally competitive. It continues to be products of a low level of elaboration, various raw materials, that in raw or semi-treated form find their way onto the international market.

3.4.1. Development of world market prices

The Soviet Union was often been referred to as the only country in the world that within its borders houses practically all elements that can be found in the periodical table. Several regions are extremely rich in minerals and only in the Murmansk Oblast, over 700 different minerals can be found, in more or less recoverable quantities (Finnish Barents Group 1995). It is this richness in natural resources and the possibility to exploit them, together with a large and well-educated population

that initially attracted foreign companies to enter the Russian market. A strong belief in the turn of the economic tide has made companies, time after time, shrug off the economic setbacks incurred during the years of the 1990's and continue their impatient wait for the expected Russian economic break-through.

Simultaneously, the hard-pressed government uses this export of raw- and basic materials as a cash-cow by levying a number of export tariffs on first of all oil, but also on e.g. aluminium, fertilisers, ferrous and non-ferrous metals. Products, that together with raw materials, have been large-volume exports during the years of transition. In the export markets though, it is a drawback for the FSU that several producers are located in the interior with long over-land hauling distances to export terminals (Eronen 1998). This makes them extra vulnerable and, as can be seen in Figure 3.3, both average world raw material and oil prices were falling until early 1999. Raw materials have remained low until mid 1999 while the oil price rocketed from its March 1999 level in just ten months to three times that value. Despite fluctuations, the oil price had remained constantly high well into 2003.



Raw-materials = Average of 17 quotations for minerals, ores and metals
Crude oil = Average of the price for Dubai, Brent and Texas

Figure 3.3. Raw material and oil price on the world market, monthly[60]
(1996 – 2003)

Sources: UNCTAD Commodity Price Bulletin 2003-01-18 www
Financial Times for values 2002-07 – 2003-01

[60] Values 07-2002 - - 02-2003 averages from Financial Times quotations on 15th of each month, with June average set at 108, for nickel, copper, aluminium. Oil averages from 15th; Dubai, Brent, IPE

3.4.2. Oil resources[61]

The first oil in the FSU area came from the western coast of the Caspian Sea, around Baku, in today's Azerbaiyan. When large oilfields were found east of Volga in the southern Urals, the area came to be called *"Second Baku"*. It is here and later further to the North East, deep into northern Siberia, where the lion share of oil production has been concentrated since the late 1950´s. The most important area in Russia for hydrocarbon extraction is West-Siberia, providing approximately 70% of oil and 90% of Russian gas production (2001 - 2002). To estimate the size of today's oil and gas reserves is a delicate business and estimations are often contradictionary. Total proved Russian reserves at the end of 2001 stood at about 6,7 bn tons of oil that corresponds to approximately 4.6% of world reserves, while the combined figures for the other FSU states was 2.4 bn and 1.4% receptively[62].

Proven reserves for gas are 48 trillion cubic meters, which corresponds to 31% of world reserves, while the combined figures for the other FSU states was 7.7 trillion cubic meters and 5.2% receptively (BP 2002 www)[63]. When broken down further, these large reserves of Russian oil and gas resources show a considerable degree of geographical concentration where the Khanty-Mansi Autonomous Okrug contains less than 1% of the population, but supplies over 50% of oil production and controls nearly 40% of the reserves. In the same way, Yamalo-Nenets Autonomous Okrug accounts for over 80% of gas production and controls over 70% of reserves with 0.3% of the population (Moe and Kryukov 1998).

The domestic Russian oil sector has over the last ten years been characterised by a number of fundamental changes. The elements of these changes consist of major state privatisation's and giant mergers between oil companies in a sector where large companies used to live under deep stress from record-low world oil prices. Prices reached a four-year low of USD 10 per barrel by February/March 1999, but have since early 2000 remained nearly all the time above USD 25 per barrel. The low oil prices made oil-companies press hard for tax-breaks up until the beginning of 1999 when the government had imposed an extra export tariff on crude exports by ECU 2.50 – 5.00 as a way to find additional incomes for the state coffer.

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[61] Conversion factors for oil and gas volumes can be found in appendix.

[62] BP (2002 p. 4) definition of proved reserves reads: *"Proved reserves of oil are generally taken to be those quantities which geologically and engineering information indicates with reasonable certainty can be recovered in the future from known reservoirs under existing economic and operating conditions".*

[63] Gas has largely been excluded from the coverage here which is due to the fact that all production and transportation is under control of the fully state-owned gas giant Gazprom, being Russia's biggest company with over 300,000 employees, and its vast pipeline network. A company which is currently extremely profitable, despite a large stock of non-paying customers. Russian gas production is often closely related to oil production, but gas is nearly exclusively transported in pipelines to both domestic and international consumers. Presently Russia has no LNG or LPG export that makes this is a product with very limited influences on ports and shipping. Russia has a vast medium term potential in this field though, but findings are often located in the inner and northern parts of Siberia, offshore in the Barents Sea or around the island of Sakhalin (BP 2002).

Table 3.2. Oil production in the FSU area 1940 – 2001 (mt)

Area	1940	1960	1970	1980	1985	1990	1995	1998	2000	2001
Volga/Ural	2	104	223	191	139	n.a.*	n.a.*	n.a.*	n.a.*	n.a.*
Russia - other	31	147	353	603	595	516	307	304	323	348
Azerbj.	22	18	20	14	12	13	9	11	14	15
Kazakh.	1	2	13	18	23	26	20	26	35	40
Other FSU repub.	2	0	0	0	0	16	19	20	22	22
Total FSU	56	271	609	826	769	571	355	361	394	424

* = not available - Volga /Ural value included in the Russian Fed. value

Sources: Figures for 1940 – 1970 Mathissen (1975), for 1980 Hove (1983), for 1985 Symons (1990) and for 1990 – 2001 BP (2002 www)

Parallel to this, the state has forced oil companies to pay taxes in cash instead of goods (i.e. oil), by indirect orders from the IMF, a line of action that for a time nearly bankrupted some of the larger oil companies (Bofit:a 14:1999 www)[64]. In line with the high oil price, Russian oil companies have managed to increase production to the highest level in many years passing the milestone of 8 mbd (1.1 mt day) by late November 2002 and come close to produce 380 mt during 2002 (GulfNews 2002 www). The high prices have also converted the companies into extreme profitmakers, being very active in company take-overs, which has converted them to stock favourites and put some of their directors in positions among the richest men in the world (Forbes 2002-03-18).

Oil and gas from Russian reserves are generally transported in pipelines to consumer markets in central Russia, port terminals or to customers elsewhere in Europe. Long distance rail transport of oil and oil products are still in use though, e.g. to what has become large export terminals like Tallinn and St. Petersburg, which have no pipeline connections. The operation of the large state grid of 46,000 km oil-pipelines has remained in the hands of the still fully state-owned company Transneft, that remains a near monopoly operator.

Among several oil-bearing regions there is for instance the Timan-Pechora area, in the Arkhangelsk Oblast and Nenets Autonomous Okrug that is of interest here both for its potential to influence the developments of ports in the Baltic Sea, but also along the Russian Arctic coastline. In this region, oil was found as early as in the first years of the 1930's and limited production had started before WW II. During

[64] At a price below USD 9.80/barrel no additional federal charge is made, but from December 1 2002 the export tariff to non-CIS was set at USD 29.8/ton, but again adjusted from January 1 to USD 26.8, and said to cover all kinds of oil products at 90% of the crude tariff (Bofit:a 5:2003 www). It should be noted though that the Russian Ural Blend often fetches an average price about USD 1 below the North Sea Brent price quoted. This is because it is not often sulphur-rich (Sassen et. al. 1995).

the 1960's, several new and very large fields were discovered and production increased. As an example of the size of the investments needed here, it can be mentioned that an 1800-km pipeline of 720-mm diameter from Ukhta to the Moscow region was laid and could be opened in 1974. This pipeline is just one example among many that was built during the most expansive period for the energy grid[65].

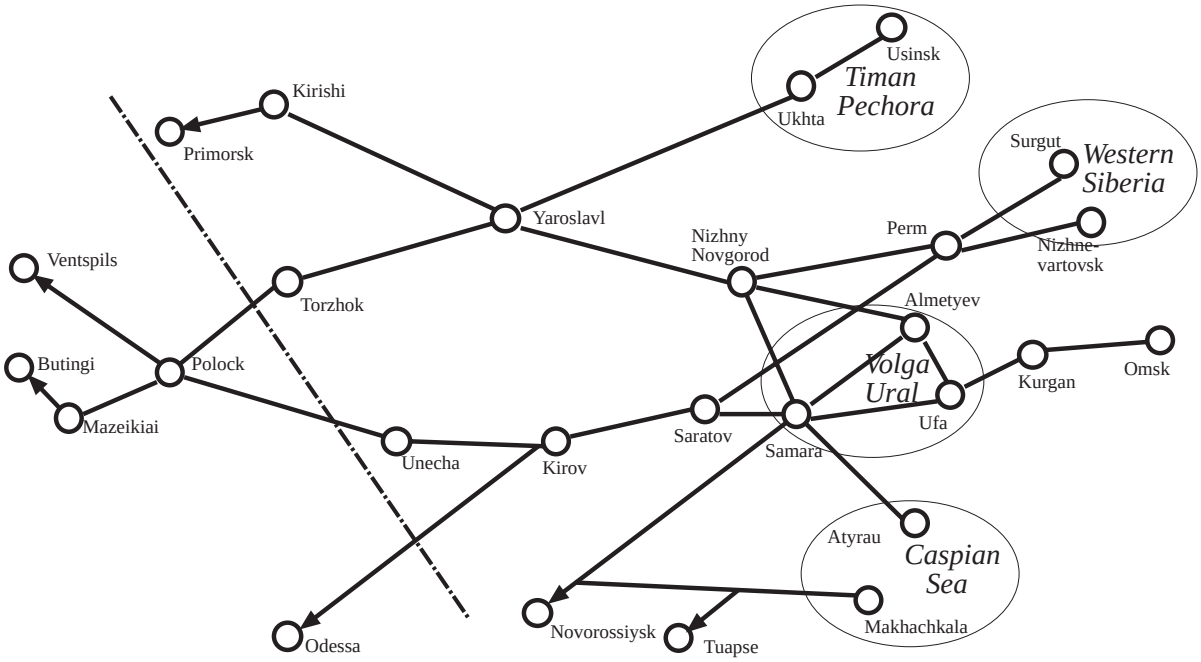

Figure 3.4. Major oil pipelines, production areas and export terminals[66]
(Map not to scale)

Source: Drawn by the author, based on various sources

By the middle of the 1990's, known oil and gas reserves in the Timan-Pechora region equalled known reserves in Norway, but, again, estimates are contradictionary (Wood and Martin 1996). Although the size of the reserves has not been fully established, they are still large enough to motivate one, or perhaps several export terminals. These terminals could be, e.g. in the Gulf of Finland, but also shipments of oil and gas in ice-strengthened tankers along the Northern Sea Route (NSR). Both a northbound and a southbound alternative will require large scale laying of pipelines, either to export terminals along the Arctic coast or to terminals in the Gulf of Finland. Both alternatives will be extremely costly, at

[65] It was in December 1995 that common public attention in the West was first brought to the oil fields in the Timan-Pechora region and the low quality of Russian pipelines. A spill of some 2 million tons in an area west of Usinsk from a pipeline that had been partly broken for over a year before it broke completely. An emergency that took large scale foreign assistance to be controlled.

[66] Gigantic projects for the near future could extend this map: From Western Siberia, Angarsk to Daquing in China; Angarsk to Nakhodka or Sakhalin to Japan; From Timan-Pechora to Murmansk (RussianJournal 2002-12-28 www), but also south-west, from Samara to Europe/Croatia.

approximately USD 3 - 4 million per km pipeline (Andresen and Backlund 1996, Isakov et al 1997:a)[67]. Until 1995, only 8% of oil reserves and 15% of gas reserves had been recovered in this region and what has been recovered since has well been compensated for by new findings. These figures can be seen as indicators of the difficulties involved in oil and gas exploration in semi-arctic or arctic areas in northern Russia, not only physically, geographically, administratively but also financially. Another negative factor is that most fields probably contain heavy oils with a high content of paraffin that makes it somewhat less attractive (Sassen 1995). The peak figures in production in the area is from 1983, when oil production was 20 mt, by 1993, production had fallen to 11 mt, but has since risen sharply and by 2001 had surpassed 15 mt (Wood and Martin 1996; major Russian oil companies 2002 www).

The possible exploitation of different arctic minerals and hydrocarbon resources are of great interest, not only to the oil industry but also to the transport industry as it will require a wide range of specialised logistic services, often imported. During the exploitation stage there is a need to transport people, building materials and components as well as fuel to building sites. When the production stage has been reached, the transportation of production to customers is the big challenge, but also the constant supply of spare parts and provisions will have to be secured. Evaluations from other large-scale oil development areas have shown that cargo handling related to exploration can not be expected to more than marginally increase the turnover of ports in concerned and nearby regions (Wood and Martin 1996). What can still be hoped for are other positive side-effects generated by the offshore exploration, but these will probably have to be waited for even longer than on-shore operations.

For a long time the pre-March 1999 oil price level meant falling revenues for the large oil-companies and not only had a dramatic effect on the share values at the stock exchange, but also their ability to push forward with new prospecting. Low oil prices made oil companies less interested in proceeding with expensive and adventurous development projects in the Russian interior, and especially in the north. Regions with large extraction and well established as oil districts become extra vulnerable to low prices, as the oil industry is often the only large employer, and taxpayer, in one-sided economies, and as mentioned above, some are extremely one-sided. Projects in the north were not completely cancelled, but continued on a go-slow basis until prices had picked up again by the beginning of 2000. At an oil price above the USD 25/barrel range, Russian oil companies have proved eager to export oil to earn foreign currency, but also to start prospecting new fields again. In recent years oil companies have been blamed for having caused a domestic shortage, but also a manifold increases in domestic fuel prices that occurred during the summer of 1999 as well as parts of several of the fuel/heating crises that has

[67] With gas and gas condensate volumes in only the largest of all fields in the Barents Sea, Shtokmanovskoye, being estimated to 3.2 trillion m^3 and 31 mt, respectively the potential is definitely there also for offshore extraction (Cherov 2002).

occurred due to limited local supplies during every winter since. One explanation of this turbulence in the domestic market is that domestic prices have been kept regulated, even during transition, and have been maintained well below world market levels. Therefore, suppliers have all the time been tempted to focus more on foreign markets, especially in times of both high prices and high demand abroad, resulting in ever increasing export volumes, as will be further discussed in coming passages.

In Figure 3.5, each of the curves included displays an important trend during the years 1992 – 2001. First of all in production, where the 1992 figure is already at the low end of a sharply falling curve that had been heading downwards since the middle of the 1980's and that was not to flatten out completely until 1995 (see Table 3.2). This was followed by four stable years until production again started to climb slowly. During the years of falling production, exactly the same pattern could be seen on the consumption side with demand from major consumers in the industrial sector also being in a state of deep crisis. Consumption continued to fall beyond 1995 up until 1999, from when a marginal increase in consumption has been registered.

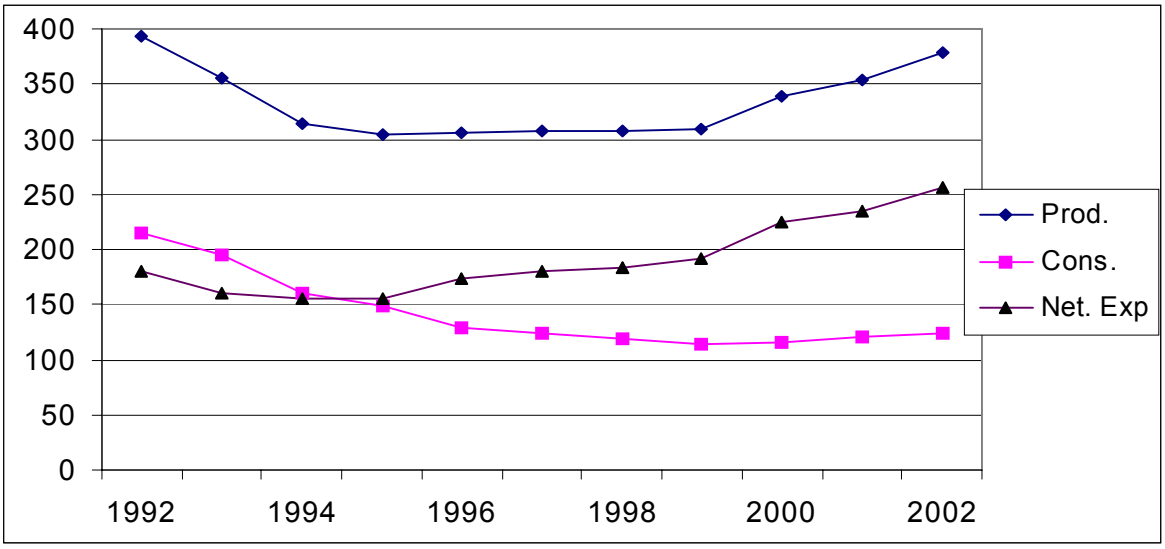

Figure 3.5. Russian oil production, consumption and exports 1992–2002 (mt)

Source: IEA - International Energy Agency (2002:a www)
2002 values from various sources

3.4.3. The transit of Russian oil and the Baltic Pipeline System (BPS).

Russia is presently the world's second-largest oil exporter, and if its considerable exports of natural gas are included in the total, Russian energy exports are slightly higher than Saudi Arabia's (BP 2002 www). The transport of the growing Russian output of oil to world markets is becoming a strategic issue for the Russian

government as well as for oblasts and oil companies. The construction of the "Baltiyskie magistral'nie nefteprovodi" (Baltic oil pipe-lines) BPS, that was first decided upon in 1997 (but not initiated until 1999) can be seen as an action taken in reply to this new and strategically important situation for Russia. The BPS will, in its full length, be about 2 700 km, starting near the village of Harjaga in Nenets Autonomous Okrug, going through the Republic of Komi, to the Gulf of Finland. The BPS consists not only of the existing oil main-line along the section Usa–Uhta – Yaroslavl - Kirishi, but also the newly-constructed oil-pipe lines Harjaga - Usa and Kirishi – Primorsk, Primorsk being the newly-opened export terminal on the coastline of the Gulf of Finland. The construction of the here mentioned parts of the BPS was undertaken by the state pipe-line monopoly, Transneft, but the Baltic part of the BPS will be run by a subsidiary to Transneft that was established in October of 2001. At the beginning of 2003, this company is still 100% state-owned, but in accordance with statements that have been made by the company, it can become partly privatised in a not too distant future. The government also wants to hand over other parts of the oil pipe-line system, such as the Yaroslavl – Kirishi and Yaroslavl – Polock connections to this company, thus making it a large company which could be an attractive co-operation partner for private companies.

That this is a project of strategic geopolitical importance was reinforced by President Putin when he called the BPS:

> *"one of the most important political projects for the Russian future, seen both from a perspective of the Russian strategy for Northern Europe, but also as an important part of Russia's European strategy"* (Kremlin 2001:1).

The completion of the first stage of the project was viewed by President Putin in terms of both geopolitics and geo-economy:

> *"Russia will get not only its own "window" in this part of Europe to transport oil, but also a new opportunity to manoeuvre between the Mediterranean market and the market of Western and Northern Europe"*(ibid.).

These statements by the President can be interpreted from his standpoint regarding the problem of Russian economic security when it comes to the transport possibilities of its export, that can be looked upon as a series of conflicts inside and outside the country. During the opening ceremony of the first stage of the BPS at the port of Primorsk in the last days of December 2001, the President mentioned that there had been "heated discussion in the government" about the necessity of the BPS's construction when he was a Prime Minister[68].

> *"I can recall such harsh words in the government when I had to say openly: "This project is sabotaged and saboteurs are in this hall." "*(ibid.)

[68] The current President served as Prime Minister between August and December of 1999.

These "harsh words" came from the fact that a large group of functionaries in the Russian Ministry of Trade had been lobbying for the idea of constructing the BPS's not to Primorsk, but to the Finnish port of Sköldvik/Poorvo. This was seen as defending the interests of another state. Some journalists wrote openly that the representatives of the Ministry defended the interests of Finland, which modernised the oil terminal in Sköldvik to transit Russian oil[69].

Russian private companies had significant financial reasons to lobby for the construction of the BPS. It is estimated that they can save about USD 5 / ton for Russia at the same time as the BPS will contribute about USD 20 millions per year in taxes to the state budget. Most of this money will go to the budgets of oblasts located along the BPS, with Leningrad Oblast being the largest receiver (Nezavisimaya Gazeta 2001-12-25 www). As mentioned above, this was only the first phase and at the end of October 2001, Raiffeisenbank Austria allowed Transneft a syndicated credit of USD 150 millions aimed at the construction of the second phase of the Baltic pipeline system (Nezavisimoye Neftyanoe Obozreniye; 2001-10-31 www)[70].

In order to pay for the first phase of the BPS construction, the Government of Russia orchestrated the financing and implemented a special duty for all oil companies to be paid when using the pipeline system. Construction of the second stage of the BPS has been organised differently. An essential role in the process of financing is now played by an alliance of Russian oil companies, headed by Transneft, and an alliance of foreign banks headed by Austrian Raiffeisenbank (Nezavisimaya Gazeta, 2001-10-24 www). Banks of leading European states have now established relations with the BPS and will have a direct interest in a large project that may have considerable consequences for Russia's economy. The reason for this is the inability of the federal and/or oblast budgets to provide the needed investments, but also for the state to generate incomes from privatisations.

In the end, a new port on Russian territory was build in Primorsk, that will mainly be used for the export of oil from the Timan-Pechora area. Its new General Director, Viktor Popov, stressed that the tariffs for crude oil-handling in Primorsk will be much lower than in the ports of the Baltic countries; about USD 1.5 / ton instead of USD 2 / ton. At Primorsk, it will be possible for Russia to export 12 million tons of crude, which was reached even slightly ahead of target[71]. When the second and the third stages have been built, the handling capacity at Primorsk, i.e. export capacity of oil and oil products, will increase up to 35 - 65 million tons / year, with different values from different sources. To have the possibility of exporting large volumes on its own soil will strengthen the geopolitical position of Russia on the whole territory

[69] This conflict became one of the most important reasons for the dissolution of this ministry in 2000 and the creation of a Ministry of Economic Development and Trade with vague functions.

[70] A project that is probably impossible to finance through domestic banks because of the small Russian banking sector "roughly 10% of any of the largest banks in Europe" (Bofit:c 6:2002 www)

[71] During 2002, the oil terminal in Primorsk loaded 12.5 mt into 138 tankers, indicating that Primorsk has well lived up to its capacity of 12 mty during its first year (SeaNews 2002-12-29 www).

of the former USSR. Before the inauguration of Primorsk and the BPS, Russia had only two major oil terminals; both located on the Black Sea; in Novorossiysk and Tuapse[72]. The handling at both these has constantly been on the increase during the last ten years. Turkey, which has been, and still is, trying to control the oil flows in the Black Sea region, has many times threatened that it will close the Strait of Bosporos for large oil tankers. Such an act would severely effect the Russian economy and immediately de-stabilise its southern frontiers. As for other Russian frontiers, the position of Moscow in the sphere of energy export was extremely weak in the European direction, a direction which is perhaps the most important for Russia. Primarily this concerns the gas export through the Ukraine which, in the opinion of the Russian gas monopoly Gazprom, is overpriced and that much gas is stolen during transit. There is also the desire of the Ukrainian government to tie the discussion of the gas transit problems to other questions of bilateral relations that have nothing in common with gas. This has forced Moscow to evaluate the transit of energy in geopolitical and economical terms, although even large volumes of oil are exported over ports in the Ukraine, and after having declined since the falling apart of the FSU, the transit volumes of Russian oil exports over the Ukraine has again increased since 1998. Transit volumes, which stood at 24 mt in 1998, came to about 36 mt for 2001 and near 40 mt for 2002 (Panin 2002 and SeaNews 2003-01-17 www) [73]. It should be remembered, however, that Russian relations with Latvia and Estonia in the early 1990's seemed to be even more tens than what is currently the case in relation to the Ukraine.

Besides the transportation to the terminal in Primorsk, oil transportation to the Baltic Sea coast for further export has a large economic importance. However, in the near future, it is the Leningrad Oblast that is settling down as the most important player in this market. Experts at Transnefteproduct developed the projects of the terminal in Primorsk for oil products for exports, and in a few years, ports in the oblast will be as important for the export of Russia's oil products as Novorossiysk.

3.4.4. Russian oil exports in the Baltic Sea direction

It has been stated here that a considerable part of the recent years' economic recovery in Russia has been fuelled by rising energy prices. As was mentioned in 3.3.2, the Russian dependence on oil and other types of energy in its export has continued to increase, with a sensitivity of the Russian GDP to a USD 1 change in average world oil price having been estimated to 2.2% (Rautava 2002)[74]. It is

[72] Tuapse was the first port in Russia to have a pipeline connection from an oilfield - from Grozny, opened as early as in 1928 (War Department 1942). Currently, the pipeline connection has a capacity of approximately 8 mty (Antonov 2002 www).

[73] If this is due to the low prices or not is difficult to tell as in SeaNews 2002-11-11 "Russian and Ukrainian Sea Ports May Co-operate" the handling price of rolled metal in Odessa was given as USD 5.3 /ton compared to USD 10.8 / ton in Novorossiysk. Antonov (2002 www) sets the average handling rate in the Russian ports to some USD 2, and in the Ukrainian ports to over USD 5 / ton.

[74] The same study also estimates the positive effects on the Russian GDP of a 10% depreciation of the Rouble to the USD to 2.4%; and the RUR has for a long time slowly depreciated against the USD.

inevitable that an equally positive effect upon the Russian economy can be expected if this USD 1, or perhaps yet another dollar, could be saved on transport / transit costs. One effect of this would be to make Russian oil and other export products more attractive on the world market.

"Oil and oil products" is the cargo category for which the largest deficit in handling capacity in ports emerged for Russia after the falling apart of the FSU. Not only did Russia lose most of its transport capacity at sea, but the effects were even more severe when it came to oil loading capacity. For oil, this was because two of the three biggest oil terminals, Odessa in the Ukraine and Ventspils in Latvia, came to end up outside Russian territory and Russian control, with only Novorossiysk remaining. Due to the incurred deficit of domestic capacity, a continued use of ports in the Baltic states and the Ukraine for Russia's export of oil and oil products during the first part of the 1990's was unavoidable. Soon, however, the previously discussed argumentation from the Russian side about the large losses incurred to the Russian economy through transit trade using ports in foreign states became louder. Without further considering the real motives behind the arguments, that were anything from pure geopolitics to arguments in favour of oblasts that would profit from a change in policy, this issue is too complex to be given a short answer. Motivated or not, a wild flora of Russian port projects came to be presented by different interest groups, with many of these proposals focusing on export facilities for energy products. These projects would, together, have more than doubled Russian oil export capacity in a relatively short period of time, if they had been realised. The financing of these projects soon proved to be the port projects' weak spot, especially as the reorganisation of the large energy companies on the Russian market had just begun, or were just about to begin, at the time. The Russian economy during the Yeltsin era seldom tempted investors, domestic as well as foreign, to make any kind of large scale and long term investments, including port upgrading. Restructuring, privatisations and payment defaults in the transport and port sector during the 1990's also contributed to the fact that a number of projects were initiated and then came to a standstill. The most obvious example of this is the port project in Ust-Luga that was initiated in 1992 and where full-scale inauguration finally took place at the same time as in Primorsk, late December 2001. It was hoped that the port would be operational after the summer of 2002, but as a port of much smaller dimensions than the one originally planned. By early 2003, the operation of the first coal terminal in the port has still to commence.

As can be seen in Figure 3.4, there were only two Russian export terminals connected to the pipeline grid after the falling apart of FSU, as both Ventspils and Odessa were foreign, while Primorsk is the newcomer from 2001. This leaves the Black Sea ports of Novorossiysk and Tuapse as the only export outlets. Both with long established pipeline connections to the production areas in the Volga basin and, since 2001, to the Tengiz region in north-western Kazakhstan from Novorossiysk.

What primarily fuelled the Russian initiatives to build new terminals was the latest boom in oil prices that had gained momentum during the spring of 1999, when crude prices rose from around USD 10 to over 20 per barrel in just six months. It was now that the prerequisites fell into place making it possible to fulfil the repeated requests from more nationalistic political circles and, for natural reasons, with strong support from oblasts that stood to gain from changes. At this stage, the arguments about the costs to the Russian economy that the use of foreign ports was incurring had been kept alive. Three product groups, in particular, had been in focus; oil and oil products, steel and fertilisers, with the first being the one with by far the largest volumes. With first rising and then with continued high oil prices, the still state monopoly pipeline operator, Transneft, could start to collect additional user fees in the pipeline system from exports. With the large volumes running through the system, this soon came to add up to considerable "unpublished" public funds[75]. Fees were first used to build the by-pass around Chechnya in the direction of Novorossiysk and then to initiate the construction of the Baltic Pipeline System and its outlet in the port terminal for crude oil export in Primorsk that was ready to be opened in the last week of 2001. Domestic handling has increased, both through the building of new devoted terminals and by steering the flow by way of making the railway monopoly set special, i.e. lower, rail tariffs when the destination has been domestic ports compared to foreign. With the often very large transport distances from the production area to the port of export, a seemingly small difference in per tonkm quotation makes a large difference in total transport cost.

However, it is not an explosive growth in the production of oil that has freed volumes for export. On the contrary, it is much more a question of a fall in domestic demand that has freed volumes for export. This has occurred in a period when the development of production figures had been negative for a number of years. During 2001 and the beginning of 2002, restrictions on exports have had the effect that the Russian domestic market has been more or less flooded with crude oil and oil products, which has caused local prices to plummet. The situation has made oil companies even more eager to export and press the authorities for export permits. Despite federal agreements with OPEC to limit exports during the first half of 2002 the export of oil continued to increase and instead of a 150,000 bpd (app. 20,000tons) reduction in exports, that volume instead proved to be how much exports increased.

However, it is in the oil sector that the largest growth in the volumes handled in the ports has been seen in recent years, and will probably continue to be so in coming years. Transneft, as operator of the pipelines, has started to invest in ports and can thus be said to have chosen direction. The price Russia must pay to achieve a level of near self sufficiency in oil exporting capacity is probably very high, especially so as expansion costs at existing, but foreign, terminals would have been much lower than the cost of the new-building that Russia has, and currently is, financing. To

[75] A user fee of USD 1.43/ton of oil transported in the pipelines was initially collected by Transneft for a special fund for construction purposes; e.g. the BPS. At a sales price in the market of USD 25/ barrel, this corresponds to approximately 1% of the value of the oil.

expand pipeline capacity in the direction of the biggest foreign terminals, e.g. in Ventspils and Odessa, would probably have proved very much cheaper than the alternative to build domestic terminals that was chosen by the Russian side. At the time of writing, the use of e.g. the BPS and domestic ports in general is favoured by Russian companies, as long as the Baltic countries charge the high user fees that they currently do. It remains to be seen, however, what will happen if the Baltic states come up with more favourable offers to their Russian users. How long will the Russian government structures be able to interfere in what, from the one side, could be seen as strict business matters. Alternatively, how long will it be worthwhile for central structures to cover the costs, i.e. to directly or indirectly subsidise transport towards Russian ports. This is a system that the state is unlikely to be able to maintain after the country has been accepted as member of the WTO, which may happen within 2 – 3 years' time.

3.4.5. Other raw material resources

Coal

The historic centre of coal mining in the FSU was the Donets basin (Donbas) in today's Ukraine providing nearly 90% of production at the time of the revolution in 1917 (Mathieson 1975). The coal production of the Soviet Union reached its peak in 1985 when 726 mt were mined with nearly 400 mt coming from mines in today's Russia, which by 2001 had fallen to 120 mt mined in Russia and 34 mt in the Ukraine and in Kazakstan (BP 2002 www). Coal extraction under Soviet years, but also during transition, has been a typical area of heavy subsidies and in 1993 was still receiving about 1% of GDP in the form of production subsidies, which helped to maintain a high production, even at chronically loss-making mines (World Bank:a 1997 www). Restructuring has still a long way to go in reducing production at the same time as miners have been among the most active protesters during transition years.

The long term trend in production has since WWII been a slow shift from high quality, but difficult to mine, coal in Donbas to easily accessible open pit mining of lower quality coal in Siberia and Kazakhstan. There is still a large interchange taking place between the CIS states in coal, with Russian exports of 41 mt in 2001 and imports of 28 mt, mainly from Kazakstan and the Ukraine (IEA 2002:b www).

With the disintegration of the union, some of the largest mines, such as in Ekibastuz and Karaganda in today's Kazakhstan, were disconnected from their consumers in the southern Urals, and all parties involved came to face the problems that arouse from the erection of new national borders. The two most well-known Russian coal mining districts today are probably Kemerovo and Vorkuta, but not for the volumes and quality of the coal mined, but rather for being districts with the largest wage arrears and the most frequent workers protests, by way of e.g. railway blockades. Kemerovo is also the coal region that will be most mentioned in later parts here, and remains a region where much of the mining is still underground. A

common problem for mines is also that some of their biggest consumers, communal heating plants and the steel industry, were both hard hit by non-paying customers in the beginning of transition which in turn created huge debts to mines that in most cases have never had a real chance to make up arrears. During privatisation some of the better mines have been taken over by steel producers and been integrated in large holding companies.

Russian reserves are enormous, however, with 157,000 mt, or 16%, of world reserves, but are often located in remote areas of Siberia that are difficult to access and will, at current production levels, last for over 500 years more (BP 2002). About 80% of coal reserves occur in the Siberian part, while 80% of demand is in Russia's European parts (Arsky et al 1993).

At a time when world coal consumption is increasing coal mining in Russia is on the rise, but there is also a critical deficit of export terminals for coal within Russia. Currently, a major share of the Russian coal export goes to the Far East and to the large coal terminal in Vostochny, where 2/3 of the sea-born export of 15 mty in 2002, is handled. In Russia, large metallurgical companies and important financial industrial groups who have business interests in different industrial sectors, and especially metals, have shown an interest in coal mining. Severstaltrans has bought 60% of the port in Vostochny, Novolipetsk Metalurgical Combine has moved into Vladivostok, Evrazkholding has taken over 60% of the port of Nakhodka and the MDM Financial Group, having large coal assets, acquired the Poset port, near the Korean border [76]. In addition, other outlets to the sea in other directions will be of interest for metal producers, as this is a way of securing an outlet to the Mediterranean market over south Russian deep-water ports. A good example of this is the port in Tuapse, which, since February 2002, is under 51% control by the Severstal group of companies. (Vedomosti 2002-03-01 www).

The most important projects aimed at increasing coal export over the North West region are connected to the new sea port that is being build not far from the Estonian border on the southern coast of the Gulf of Finland, in Ust-Luga. The construction of a coal terminal in Ust-Luga was first started in 1996, but the formal opening-ceremony of the terminal took place in the last week of December 2001, when the first ship departed from the port. However, the equipment at the port is still to be assembled, and the railway line to the port has to be completed. Therefore, the Ust-Luga coal terminal was not expected to become fully operational until late 2002, at the earliest, but by early 2003, such an announcement has still to be made.

[76] The Severstal steel company, from Cherepovets, is the biggest company of the Russian North West (with about 8500 km from the port), Evrazholding is a major Siberian steel producer while the MDM group holds large coal findings (Russian Regional Report 2002-01-23 www). There is a strong link between the coal and metal sector in the way that the latter is the largest consumer of coal.

The biggest of the export terminals is in Vostochny, in Primorie, where 10 mt were handled in 2002 and an extension for another 10 mty capacity has been both decided and initiated (Vostochny 2002 www). In the spring of 2002, the construction of another export terminal for coal started in the Far East port of Vanino, where an investment of USD 120 million, will give a loading capacity of 10 mty by early 2004. With a 21 meter natural depth in the bay it will allow ships up to approximately 160,000 dwt to take full load at the terminal (interviews 2002, SeaNews 2002-12-17 www). The distance by train from what are, currently, the biggest mining oblasts, Kemerovo and Altay, is in the range of 6,000 – 7,000 km from these export terminals. Both the above new terminals will be needed to achieve the Ministry of Transport and Railways intention that Russia will have capacity to export 55 mt by sea terminals in 2010 (SeaNews 2002-11-29).

The export potential to the West is practically unlimited, but is complicated due to long over-land transport distances before reaching potential export terminals in e.g. the Baltic Sea or, in this case the more important but also more distant, export terminals in the Far East. The internal Russian coal price, which, in 2002, stood at USD 13-16 per ton, is clearly lower than the US export average price for coal that stood at near USD 35 per ton in 2000 (Gazeta Raketa 2002, US Department of Commerce 2001). This fact makes the sector dependent on high world prices for exports to be lifted from what, today, is a near chronic state of crises in Russia - and worse yet in other CIS states.

Iron ore

Mineral resources have previously been of great importance to the FSU states. The most important of the FSU deposits of iron ore are Krivoy Rog, in the Ukraine, together with mines in the south and west of the Urals like Kursk, Novokuznetsk and Zheleznogorsk. Iron ores are normally metal bearing to 50-60% when mined, but when easily accessible, i.e. for open cast mining, concentrations as low as 25-35% were often mined in the FSU area (Metal Bulletin 1997). In the first years of the 1990's, about 7000 mines were in operation in the Soviet Union, working about half of known export metal deposits and producing, among other minerals, nearly 240 mt of iron ore. Over 70% of the volume mined in 1992 came from the European parts of the FSU, but approximately 70% of that volume of iron ore came from fields in what today is the Ukraine. Of existing iron ore resources, 86% of FSU deposits were located in Russia with 11% being classified as easily accessible (Arsky et al 1993).

Mining has been hard hit by the fall in demand from the iron and steel industry that has contracted by over 50% between 1990 and 1995 (Sager 1996). As for coal, iron ore extraction was also severely affected by the disintegration of traditional supply patterns, being cut off by new state borders. The massive payment crises among potential customers triggered this collapse. Since then, low price steel exports from Russian, that have been growing in later years, have also come under

pressure and Russia has been forced to accept Voluntary Export Restraints (VER's) in relation to both the US and EU with almost constant negotiations about quotas. Production costs in Russian mines have been estimated to be on a level with Australian mines, i.e. more expensive than Brazil, but less expensive than in e.g. Sweden (Hellmer 1999).

Declining domestic demand for ore should, at least theoretically, free large volumes for export, but strong competition from other large-scale ore exporters, like Brazil, together with Russian difficulties in timing supplies have so far limited export volumes. The bulk of Soviet, and post-Soviet Russian, iron ore exports were transported by rail to other CMEA countries in Europe, or exported overseas to other like-minded nations that had a domestic deficit. In addition, this export has decreased, as well as the exports of unrefined metal ores in general. The volume exported to former CMEA countries in central Europe has fallen back from 45 mt in 1987 to 30 mt in 1996 has by 2000 had recovered only slightly to 33 mt[77]. This coincided with a sharply falling production volume in the FSU area, that reached 130 mt in 1995 (-45% from 1992), nearly exactly the fall incurred in crude steel production for the same period of time, while total exports fell by only 15% to 14 mt. Between 1995 and 2000, both production and export have recovered, production by about 10% and exports by 30%. Again, this is well-correlated to crude steel production that has risen by 13%, to near 60 mt (UNCTAD Commodity 2002 www).

Export potential to the West in this sector is considerable, but hampered by long over-land transport distances before reaching potential export terminals in e.g. the Baltic Sea, or other overland markets. The potential and the resource base is there, however, especially for the high quality ore (with above 60% iron content) that is mined at the few mines in western Russia that have managed to continue to export. The capacity to market and deliver is still restricting what, potentially, could be developed into an important export product and, at the same time, generate large volumes in the port sector.

Forest products

The combined timber resource in Soviet forests was in the range of 80 bn m3 (Howe 1983 and Backman 1999)[78]. The area needed to house this, the worlds largest forest reserve, is above 800 million hectares which constitutes 25% of the world's forested area and 52% of world's coniferous area (US Dept. of Trade 1999, www).

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[77] During the years 1990 - 1993 the trade between the former CMEA members collapsed. Russian exports to this group of countries fell from USD 31 bn to 8 from 1990 to 1993 and imports from 36 bn to just 3 bn (Ferreira 1996 p. 25).

[78] Howe discusses the problems of the definition of *"forest"* among different writers. The variation in area for the different definitions is 581 million hectares. The more generous definition of *"forest"* indicates 916 million hectares, while *"timber producing areas"* (defined as *"where industrial extraction can be undertaken"*) indicates an area of 328 million hectares.

The geographical distribution of the forested area in the FSU corresponds roughly to the shape of the country, with around 25% of forest resources in the European part, with the remaining part east of the Urals[79]. Total annual growth is set to 600 million m^3 (mm3) of which 70%, or 400 mm3 is accessible (Backman 1999) and set to 225 mm^3 by Runar (1999 www). Annual forest harvests in Russia have been continuously falling during transition from 336 mm3 in 1989 to approximately 75 mm^3 in 1998, before figures stated a slow climb reaching 87 mm^3 in 2001, at the same time as the Russian share in world production has fallen to a third of the 1989 level (Interfax Business Service 2002) [80].

During the late Soviet period, the annual wood harvests in just the three regions, Karelia, Murmansk and Arkhangelsk, were larger than the harvest in any single European country (Tykkyläinen 1996). This immense availability of wood resources leaves its mark in the regional trade pattern. Presently, the most important item in the Barents trade relation, measured in volume, is pulpwood, products from sawmills and the paper and pulp industry. Irkutsk has always been the most important region in forest and wood processing, followed by Arkhangelsk as the second most important region in Russia, with an approximate share of 15% and 8% respectively for the forest sector in the local economy (Huber et. al 1996 and Backman 1999).

The malfunctioning of many of the institutions administrating the Russian forest sector continues to be an important reason that hampers a development towards market adaptation in the forest sector (Malmlöf 1998). Smuggling and underreporting in this sector are continuously mentioned by writers and others, where, locally, well over 50% of cutting, as well as for the volumes reported as exported, could go unreported. Revenues from taxes and customs for the state reached USD 1 bn in 2001, of which less than 30 million was returned to the forest sector over the state budget, and it is high taxes that are often given as the reason for the large grey sector (Interfax Business Service 2002). Total export revenue from the sector in 2001 reached USD 4.5 bn, while Finland with the forest resource of only Karelia exported for over USD 10 bn, which makes the Ministry of Forestry hope that the sector will generate USD 70 bn inside 15 – 20 years(ibid.). In order to do so forest-related transports will have to increase in importance considerably, even in ports.

Of the around 10 mty of pulp wood a year that, from the late 1990s up-until today, has been shipped from FSU ports to Western Europe, especially Sweden, an estimated 80-85% has had its origin in the Baltic states and has been felled in the

[79] Eronen (1984 p. 53) gives the figure 147 million hectares for the European part of Russia (somewhat lower than Howe) and explains the large increase of deciduous forest, by 40 million hectare over 40 years, by low replanting levels.

[80] Symons (1990) indicates that forest fires, but also careless handling of timber, causes losses in the range of 160 million m3 per year. For a visitor that has travelled extensively by rail in Russia and seen all the damage done by fire and careless rail handling, such a figure is no surprise.

Baltic states (Brodin 1999)[81]. Pulp wood and forest products are very important items in several of the smaller ports and often the only product for those located along rivers and canals. Ports that now load large volumes of pulpwood, which is a product that neither requires a very sophisticated, nor careful, handling. During the years of transition, the handling of pulpwood and forest products has expanded rapidly in many of bigger ports as well, while the sector as such has contracted sharply. From the very low investment level in the forest sector, of which 3% in 2001 was foreign, the hoped dramatic improvement seems doubtful. There is no doubt, as the figures above have demonstrated, that the potential is there for both a continuous rise in exports parallel to a sharp future rise in both domestic consumption and production.

3.4.6. Chemical products

The production of chemical fertilisers is one of the basic and most prosperous branches of the Russian chemical industry. It consists of around 40 plants, producing just over 20 million tons of nitric, potash and phosphoric fertilisers in 2000. This line of business produces some 20% of the whole production value of the chemical industry, and its share of the export structure of chemical goods is about 45% (Ekspert 2001-12-24). Since the 1998 devaluation of the rouble, the competitiveness of Russian potassium fertilisers in particular has increased greatly, and now constitutes 60-70% of the whole fertiliser export. Nowadays, there is also competition between different Russian oblasts for the handling of the shipment of fertilisers. In 2002, over 3 million tons of potash fertilisers were exported via Sea Port of St. Petersburg, and the Joint-Stock Company Uralkaliy will invest another USD 34 million to increase capacity up to 5 - 7 million tones of potash fertilisers (Sea Port of St. Petersburg 2002-01-22 and 2003-01-18 www). Earlier, approximately 2 – 3 million mty has been exported via ports in Finland, but as a result of a USD 65 million investment in the construction of a new fertiliser port terminal, exports have increased dramatically in St. Petersburg. However, there is principally only one major Russian source of potash fertiliser; the Verhnekamskoe deposit in Perm Oblast. The fertiliser is produced by two nearby firms, *Silvinit* and *Uralkaliy*, which are both under the control of the same bank; Ural Financial House. This can serve as a good example of the high level of monopolisation of the extraction and production within this line of business inside the chemical industry.

Russia faces almost the same concentration in the sphere of the production and transportation of a phosphate fertiliser as for phosphoric . Raw material is extracted by two companies: Apatity, supplying some 85% and Kovdorskiy GOK with 15%. The company Fosagro, affiliated to one of the leading financial-industrial groups –

[81] The export of round wood and pulpwood is also considerable in the Russian Far East. Gareyev (1998) states that, *"since 1993, Russian exports of unprocessed timber in the East have grown from 4 million m3 to nearly 18 million m3 in 1997"*.

Rosprom, controls both producers (Ekspert 37:2001). Nowadays, it is trying to create a vertically integrated holding company for the production of phosphate fertiliser (Ekspert 2001-12-24). There is a different situation as regards to the production and export of nitrogen fertiliser. The price competitiveness of Russian nitrogen fertiliser is lower than for potash fertilisers, but the share of the nitrogen fertiliser is steadily increasing in the overall volume of fertiliser production in the world, at the expense of potash and phosphate fertilisers and this can dramatically come to affect Russian exports in the future. The absence of a dominant company in this sector is also important. It gives an opportunity for Russian companies, and foreign investors, to penetrate this sphere and to determine routes for the export of the nitrogen fertiliser. This is very important for the oblasts of the North West because they can get gas, which is an important component in the production of nitrogen fertilisers, supplied via pipeline or even extract their own natural gas in the future. Such examples can be found in the Komi Republic and Murmansk Oblast or any of the other oblasts that are situated along the routes of current or near future gas pipelines to the European market.

3.5. Russian transport infrastructure

The location and volumes of the most important Russian transport generating raw materials have just been described, but it is often the existing transport infrastructure that limits the extraction and export of these, and that is what will be concentrated upon here.

3.5.1. Introduction

Comparing a map over Russia with most other countries, the sheer size of the country and the enormous distances involved are the features that stand out the most. In his early writing, even Lenin argued for more research in the field of industrial location, motivated by the country's transport-geography and a desire to minimise transport work (Ådahl and Perlowski 1976 p. 330 ff.; Sjöberg 1982 p. 79). Karl Marx showed his opinion in the field of transport:

> *"the absolute amount of value added to goods by transportation is, other things equal, inversely proportional to the distance over which the good is transported"*
> Marx Works, Vol 24 p. 170; (quoted in Popova 1974 p. 230)

The ever-ongoing attempts to better organise what was called "*the unified transport system*" should be seen against a background of attempts to profit from possible advantages of scale and agglomeration[82].

[82] What was inherited when forming the Soviet Union was a market-oriented railway system. Foreign investment capital from France and the United Kingdom had helped to finance Russian infrastructure, e.g. the building of the railways, before and after the turn of this century (Nove 1992).

Many resources were, theoretically, to be set free by the fact that each entity in the system worked for the common good, avoiding competition. From an ideological point of view, competition within, or between, different means of transport was seen as nothing but negative and indicated a wasting of scarce resources. Centralised decision-making could therefore only generate positive results. Theoretically, central planning would give considerable advantages of scale while the entire negative wasting of resources, e.g. due to competition and marketing activities could be avoided under centralised supervision. The importance of military considerations, different ideological arguments like national self-sufficiency and an even spread of development among all the greatly dispersed regions were other factors taken under serious consideration and that sometimes were given too much attention (North 1990).

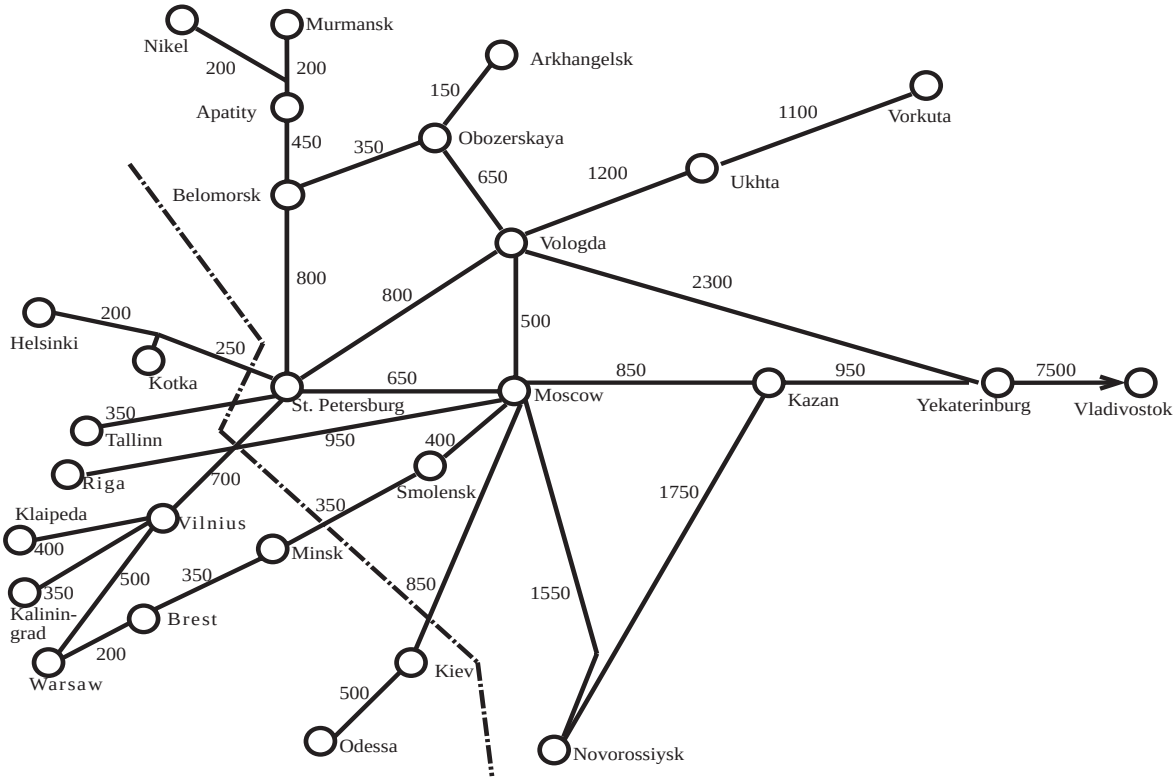

Figure 3.6. Topologic map of railway distances between larger cities and ports
(Map not to scale)

Source: Compiled by the author. Based on distances in km from Yates (1996)

During the Soviet years, Weberian ideas of cost minimisation were ideologically unsuitable as a location criterion and therefore negative effects of location often came to be compensated for by subsidies (Eronen 1998). Largely as a result of the escalating "*departmentalism*" within the different branches of both industry and the transport sectors, all the presented theories remained just rhetoric[83]. The model of

[83] This as a result of the fact that each of the many central ministries increasingly came to focus its activities on what in the first place served the interest of the ministries, e.g. to meet given plan targets, instead of the common good of the Union.

central economic planning used during the Soviet era was characterised by a limited involvement in the international division of labour and specialisation outside the CMEA. The consequent policies of self-reliance, together with the impact of cold war trade policies imposed by the Western countries, resulted in a marginalisation of the general significance of the USSR in the rapid growth of the international economy after the second World War.

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The CMEA in itself was to a large extent hierarchical in its structure, giving the utmost priority to the objectives of the central planning authorities within the USSR rather than to the creation of a more equal and balanced economic growth in the countries of Central and Eastern Europe. The role of the USSR in the international division of labour within the CMEA came, to an ever increasing degree, to serve the other member economies with cheap raw materials, with heavily subsidised transport costs, to distant customers through a tariff policy taking real freight costs into only limited consideration.

This shows a pattern of a country where the cost of transport came to be subordinate to a number of other considerations that were regarded as more important. As a result of the combined effects of the mentioned considerations, the former Soviet transport system, and today's Russian, can be reasonably to considered it to be a special case (Holt 1993). Long distances, ideological considerations, industrial location and large subsidies to transport have caused an exceptional modal split where over 90% of all transport work is made by train when in European countries about 70% is made by truck and trailers (North 1995 - and still valid). The depth, and duration, of the economic recession in recent years has postponed a change and the share for lorries in transport, will continue to rise, probably far from the 40% by the year 2015 as some have predicted, but it will rise as the transport system continues to adapt to a life guided by market economical principles (MTC 1993:b).

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[84] This as a result of the fact that each of the many central ministries increasingly came to focus its activities on what in the first place served the interest of the ministries, e.g. to meet given plan targets, instead of the common good of the Union.

The desire during the Soviet period to concentrate and centralise also left its mark in the port sector. To obtain maximum advantages of scale in goods handling, only a few of the ports in the FSU concentrated on the handling of each type of cargo (Holt 1993, several interviews). In each of the different ports, this came to be seen as a possible answer to the needs of enhanced capacity. During the 1970´s and the 1980´s, the export of different raw materials e.g. oil, ore, coal over these Baltic ports grew rapidly in line with an increased world demand (National Maritime... 1992). This led to the concentration of the handling of bulk cargoes, like coal and ores in one port, oil in another, chemical bulk in a third and so on. This concentration was made possible by the fact that the steering of cargo flows was centrally administrated during the Soviet era. From central authorities, it was decreed which port a domestic organisation had to use when exporting or importing cargoes[85]. In this way, all ports involved came to work on the basis of central orders and never came to look upon a nearby port as a potential competitor. No company could, on their own, change ports for the handling of their products, even when they were not satisfied with the service offered in their assigned port. The incomes obtained in foreign currency from exports came to pay for much of the necessary Soviet import of advanced technology during this period, of which little came back to the exporter, the port or shipping industry[86].

During Soviet years, the transport system worked at a level well above that performed today. Now, the existing facilities often suffer from long neglected maintenance and replacement investments over past decades and are therefore building up an ever-increasing need of large-scale upgrading. The current investment needs are also the result of previous neglect, which was emphasised by Tismer, Ambler and Symons as early as 15 years ago:

> *"Comparisons of the rate of growth of the volume of traffic and transport capacity (Transport routes, tractive power, rolling stock) during specific planning periods repeatedly led to the conclusion that in the countries concerned there has not been enough investments in the transport system" (Tismer, Ambler and Symons 1987, p. xiii)[87].*

What is indicated above about the status of the transport system refers to the mid 1980's and any interested visitor today travelling over land can easily find more than enough evidence that the situation, at large, has only changed slowly during the past 15 years.

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[85] The word *"domestic"* has been used because export and import operations during Soviet times, as far as possible used domestic carriers and domestic organisations (North 1996).

[86] Certain kinds of equipment used in ports were imported, however, but mainly from other CMEA members. TAKRAF cranes of GDR origin were (are) as common in ports all over the FSU area, as Hungarian Ikarus buses in the streets of the cities (author's observations).

[87] A statement supported by Hall (1993), while North (1996 p.2) additionally notes that *"after the mid-1970´s, however, investments funds became scarce. Those available were eaten up by a few big projects, principally gas pipelines from north-western Siberia and the BAM railway".*

With the disintegration of the Soviet Union not only domestic transport but also the previously prevailing transport pattern for what was Soviet foreign trade has come to change dramatically as a result of a slow, continued breakdown of an already shaky logistic system (Byrne, Paramonov, Bouis 1995). Long established Soviet-time supply-patterns were broken when, what used to be administrative borders between national republics, became national borders. This, over night, converted formerly domestic suppliers to foreign trade partners. An additional problem has been to fulfil payments between new and unstable currencies, which, at times, came to be a severe problem that restricted trade further. In a simultaneous process, all the newly-established nations strived to carry out an as far-reaching foreign trade reorientation towards the West as possible.

3.5.2. The Market for Transport Services in the Russian Federation.

The Russian market for transport services is now said to have entered its third phase of development (Ekspert 27:2001). During its first phase, in the times of the Soviet Union, the transport services for export and import operations were monopolised by two state-controlled organisations – "Soyuzvneshtrans" and "Soyuztransit". During its second phase of development, after the disintegration of the USSR and the collapse of the planned economy, about one thousand small companies established themselves in this field. Many of these were created for just one operation, and sometimes even with a clearly criminal purpose of illegally exporting or importing different types of goods. In the current, third phase of development in transport services, different market segments are related to the creation of some dozens of big private companies. These companies normally specialise in one fixed type of cargo such as metals, oil, wood, containers, etc. There are currently about 200 transport companies in St. Petersburg alone, but only some 50 of them are really working with moving goods.

Nowadays, Russian transport companies have no obligations or face any administrative limitations that restrict them in geography to one, or just a few regions and thus may operate nation-wide. In reality, however, they mostly operate in the oblast where they were established, or are working in close co-operation with a large company, which is involved in export, or import services. In the future, the market for transport will probably face a new phase of further concentration as in the West, which will probably open up for a number of smaller specialised operators. It could be expected that the development will lead to the domination of a limited number of transport companies, affiliated to leading sectors of industry and the biggest producers of export goods. These companies will then perform their services all around the Russian territory and provide all kinds of export and import services.

When describing problems related to the transportation of export and import goods, it should be remembered that there are a lot of examples of difficulties in the relations between Russian oblasts, as well as between governmental institutions. For

several years there has been open rivalry between leading economic ministries in Russia about the right to fix prices for services, for the control of the right to issue different types of licenses on foreign economic activities, for the setting of rules for financial transactions etc. The most important players here are the Ministry of Finances, the Ministry of Economic Development and Trade, the Federal Commission on Energy, the Ministry of Taxation and the State Customs Committee. It is also important to remember that the competition between these governmental institutions occurs, not only on the federal level in Moscow, but on the Russian regional level as well. For example, after a number of indications of irregularities by the North Western Customs Administration, the Ministry of Finances together with the Central Office of the State Customs Committee and the Ministry of Interior sent a special commission, from Moscow, to do fact-finding and a thorough analysis of the situation. The investigation that was to follow, locally called "*The Italian strike*", was organised by staff of the North Western Administration of the State Customs Committee in November-December 2001. The investigation effectively blocked, for several weeks, foreign trade operations in the whole North Western region and especially in St. Petersburg and Leningrad Oblast. It was probably the port in St. Petersburg that suffered the most from the activities of the custom officials, and the long delays in handling that this caused. Consequently, the trust of clients and the attractiveness of St. Petersburg in general for exporters and importers of goods suffered a severe setback that will probably take years to fully overcome.

Another near devastating blow to international transport was the problems encountered during the negotiations with the International Road Transport Union – IRU, about the use of the TIR system for trucks, which involves about 60% of road shipments to Russia. The problems occurred because of Russian violations of custom inspections and liability for insurance companies as to declarations that are not correct, but an agreement came to be signed in the last hours before the final dead-line (DVZ 2002-12-03 + 13). There are other state regulations that limit both trade and the development of the domestic transport sector. Only two important problems that are a result of shortcomings within the Russian administrative system will be mentioned here, although the list could have been made longer.

1) The non-existence of free storage facilities.

Until now, there are no free customs zones, or so-called free storage facilities in Russia. In theory, Russia's Customs Code provides for their creation, but in practice, it has not really happened. Such storage facilities are widespread across the world, and it is much due to the lack of such storage in Russia that Finland handles thousands of containers from the Far East region, which were mostly designated to Russia. The competitiveness of the, since December 2002, fully electrified Transsib is also seriously damaged compared with the sea route from the Pacific Region to Europe via the Indian Ocean.

2) The imperfection of the VAT repayment procedure for exported cargoes.
In case of export by land, the right for VAT repayment is made possible at the same moment as the goods in question cross the border; that is when a customs officer puts a stamp on an invoice. This procedure is much more difficult when goods are exported via Russian seaports. In this case, VAT repayment is possible only after the cargo has been loaded onto a ship and some special documents requested by the customs authority are filled in. As a rule, large-scale exported freight is stored in the seaports for weeks before shipment and, consequently, VAT repayment is delayed. This delay in VAT repayment is an important reason why exporters prefer to use land routes. This situation could be partly avoided if VAT repayment was possible from the moment the goods in question are accepted into the storage of the seaport. However, this practice had not yet been introduced in Russia.

Both these shortcomings along with e.g. "The Italian Strike" are clear examples of actions taken by the different branches of the executive power that completely contradict the official idea of Russian goods in Russian ports.

3.5.3. The rivalry for transit between Russian regions.

Rivalry between Russian oblasts for the opportunity to serve as a transit territory for foreign trade could potentially developed into a conflict-generating sphere of the internal politics of the Russian Federation. Over the last few years, there have been a growing number of examples of sharp disputes between different Russian oblasts concerning the obtaining of governmental support for development projects. It could, for example, be about new routes for foreign trade with the assistance of federal funds and some corresponding changes in the taxation regime or the budget procedures for the oblast(s) under consideration. An illustrative example of this could be the long-standing disputes between the City of St. Petersburg and Leningrad Oblast. First, for the construction of a number of seaport terminals, and then the dispute over the construction of the Circular Highway around St. Petersburg[88].

The administration of the City of St. Petersburg has always been attentively watching the construction of seaport terminals along the coast of the Gulf of Finland. Despite the obvious fact that Leningrad Oblast is much better located for such construction than St. Petersburg, the St. Petersburg administration has made very energetic attempts to switch the attention of the federal government of Russia to port facilities in the city area instead. As an alternative to a seaport in Primorsk, Ust-Luga and Batareynaya Bay, the St. Petersburg administration has suggested the upgrading of several smaller terminals on its own coast line as substitutes for new

[88] It should be remembered that the City of St. Petersburg and Leningrad Oblast, where Vyborg and Vysotsk are located, are two strictly separate administrative units, and when it comes to ports, competing actors. St. Petersburg and Moscow are the two city-states within the Russian Federation while Leningrad Oblast is one of the 87 oblasts.

seaports. The idea was first and foremost to receive more funding for the modernisation of the St. Petersburg port, but, as mentioned, there were also other possibilities. Another suggested location for the deployment of a new terminal was not far from the settlement of Volodarskiy (south-western part of the city) and another at the City of Lomonosovo, both of which are officially located inside the borders of St. Petersburg.

In 1999 – 2000, and much in reaction to the energetic work in this field by the City Administration, the government of Leningrad Oblast intensified its own lobbying in Moscow for the construction of new seaport terminals. This was done simultaneously in the Government, the Presidential Administration and the State Duma. Another alternative line of defence used by the authorities of the Leningrad Oblast was to suggest a major modernisation of the only two seaports that existed in the oblast – the two seaports in the Gulf of Vyborg; Vyborg and Vysotsk[89]. The main specialisation in handling for both these ports has so far been coal, pulp wood and ore with handling, but compared to the Greater port of St. Petersburg and the new terminals under construction in the Finnish Gulf, the ports in Vyborg and Vysotsk are rather small. Nevertheless, they remain important for the export of Russian coal and pulp wood.

The need for new roads also increased when several hundred thousands of tones of transit cargo per year began to move by truck to and from the Russian market to and from Finland. This passed near the historical centre of St. Petersburg and in combination with an ever more difficult traffic and ecological situation, the city traffic become even more dangerous and congested. This is especially so as the number of private cars in St. Petersburg had trebled during the 1990's, with the national figure having increased from 70 to 150 cars per 1000 inhabitants. That is why the idea to construct a Circular Highway (KAD – Koltsevaya Avto Doroga) was being reactivated. This plan was introduced for the first time in 1965 in the General Plan of Development of Leningrad and was even officially approved by the *Gosstroy* (State Committee on Construction) (Ekspert 7:2001). Despite having been alive in the form of a project for many decades, it is still very far from full implementation.

It was over the control of the revenues from the construction and the maintenance of 66 km of the highway in the KAD, from Moskovsky Prospect to the railway station Gorskaya, that the City of St. Petersburg and Leningrad Oblast staged a war of words which reached the federal level in 2001. St. Petersburg came out as the winner of this particular conflict, much due to the fact that about 60% of the highway will be build on the city's territory. The city budget will therefore get a major share during the next 20 years of the RUR 180 bn (approx. USD 6 bn) of socio-

[89] The two ports had previously a sea port administration of their own also incorporating Ust-Luga on the other side of the Gulf. Since the opening of the new oil terminal in Primorsk during the last days of 2001, the whole Russian part of the Gulf of Finland area was to be organised under one Sea Port Administration – in St. Petersburg, but responsibility has not been fully decided.

economic benefits, which are estimated to follow from the construction and maintenance of the KAD[90].

Despite the dramatic increase in car ownership, only some 4,400 km of roads were built in Russia during 2002; up 20% compared to the year before. The same kind of struggle between regions, as over KAD, can be expected to continue to occur all over the country as some 600,000 km of roads are said to be "missing", and with 39,000 smaller settlement still not connected to roads at all. USD 20 bn has been earmarked from the Government for new road investments up until 2010 (DVZ 2002-07-25). As of 2001, the Russian transport infrastructure net comprised 86,000 km of general railways, 910,000 km of roads, including 585,000 km of general roads, and 85,000 km of navigable inland waterways (SeaNews 2002-07-03).

3.5.4. Relations between the regions and the Federal Authorities

Relations between the Russian oblasts and the central federal powers in Moscow include a lot of examples of almost non-stop competition and even of struggles between the two levels. Four principal fields of such competition will be mentioned, but the list could have been made longer:

- for the powers to utilise funds that have been received from the collection of taxes in the oblast,
- to receive maximum funding from the federal budget[91]
- for the important control over natural resources like oil, diamonds, ore, etc.
- for local control over advantages of geographical location on the border, with important trade flows

During the whole of the 1990's, this kind of competition led to a weakening of the central power structures in the Russian Federation, and in its worst scenario, it could have led to a disintegration of the Russian Federation into several independent republics which was a very real threat for Russia during a number of years (Shaw 1999). When Vladimir Putin was appointed Acting President of the Russian Federation, one of his first initiatives was to try to reverse this process. He even formulated it as one of the main tasks of the federal authorities in general, and for himself as President in particular, "to re-establish the vertical line (axes) of power". The idea of the new team of Russian leadership, which came to power along with the new President, was to put a limit on the freedom of a number of Russian oblasts. This policy was in stark contrast to the previous policy and came to replace the one of Boris Yeltsin and the first generation of Russian home-made democrats and (criminalised) oligarchs. About 60 Russian oblasts that had secured

[90] The project was granted an additional USD 600 million in the beginning of 2002, but has also been marked by several large scandals concerning how money have been squandered and misused.

[91] These kinds of transfers of funds from the federal budget to oblasts are known in Russia as "federal transfers". For some oblasts these transfers provide up to 85% of the whole regional budget.

for themselves excessive economic powers under the previous President were to be reformed. These powers could have led to a disintegration of the nation's common economic space and, in fact, to both increased economic and political separatism[92].

Another sign of the growing pressure from the federal powers of Russia during recent years is the reform of the Council of the Federation which has made it into a forum for the selected representatives of the heads of oblast executives and legislative powers. These representatives are equally dependent on the oblast leaders who appointed them as they are upon the federal authorities. This is because the latter of the two provides them with the facilities needed to fulfil their functions and pay them their salaries. Since the reform, oblast leaders are no longer politicians at the federal level, but rather managers in their oblasts, managers whose whole well-being is dependent upon the good will of the federal government and the Administration of the President. Instead, a State Council was created, with the oblast leaders as members, but without any real powers other than the opportunity of meeting every three months to talk to the President, accompanied by approximately 100 other officials.

The president also established a new administrative level consisting of seven Federal Districts with plenipotentiary representatives between the federal authorities and the 89 Russian oblasts[93]. The seven new officials were made responsible for the organisation of these new Federal Districts, and very soon became members of the Security Council of Russia. Through this appointment, they got an opportunity to meet the President on a regular basis – which is a very important institution in a presidential republic like Russia. The seven new representatives of the President in their Federal Districts immediately started to establish their control over such essential issues for the 89 oblasts as the control over the spending of federal money transfers in support of the local budgets. This goes hand in hand with the strengthening of federal control over incomes that originate from the exploitation and export of natural resources.

The federal authorities also started to interfere in the elections of oblast leaders. This gave Moscow a chance to remove some of the most outspoken opponents from their offices. Examples of outspoken governors that lost their powers, more or less obviously due to actions from the centre were: Nikolay Nazdratenko in Primorskii Kray, the governor of Kursk Oblast, Aleksander Rutskoy, the head of the Komi Republic, Yuri Spiridonov, and a number of others. Still, it is not in more than about 50% of the elections during the last three years that the candidate with Kremlin support has managed to win (EastWest Institute 12:2002 www)

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[92] The shifting power from the federal authorities to the oblast administration was known as "Treaty on Limitation of Powers" This treaty between the federal authorities and the city of St. Petersburg, e.g., was signed on June 13, 1996.

[93] In Russian economic and social geography, Russia is traditionally divided into 11 economic regions. For the composition of oblasts inside the economic regions, see Appendix. ER's are not to be confused with the 7 federal districts introduced by President Putin in May 2000.

In addition, in the sphere of cargo transit via the custom border of the Russian North West, the decisions taken by the federal government remain the most important, although there are many public and private institutions involved, whose activities nowadays also play an important role. This is why so many of the decisions made by the government must be focused upon when studying transit trade. Defining the second player according to influence on the general situation in the field of transit of cargo is a rather difficult task. There are several types of candidates for the role. Regional authorities are practically everywhere a good candidate, but even large private and public/private companies who take an interest in exporting their products to the world market could be good candidates. This is because the big companies are very eager to control the transportation of their export products via the national transport system. A rather new development in this sphere is recent attempts by Russian companies to establish control over the transport infrastructure of the territory of neighbouring countries. Sizeable investments by a number of Russian companies in the Baltic states and other countries of Central and Eastern Europe, demonstrate the growing importance of these kinds of investments[94].

3.5.5. Russian infrastructure development for exports / imports

As a consequence of the disintegration of the FSU, borders came to be erected between former union republics and the introduction of new and unstable currencies in the different countries came to severely hamper the development of transport and trade. With more than a decade having passed since the formal break-up of the FSU, trade has now started to find new patterns. It is still the common rule in the whole of the FSU region that foreign trade remains very small in per capita terms (see Table 3.3). Seen from this perspective, nothing other than future growth in trade can be predicted. As understood from Table 3.3, the potential for future growth in trade is very large indeed for some of the countries in the Baltic Sea region, not least for the two biggest, Russia and Poland. The potential should by no means be compared to the Nordic countries, as a normal trend is that the bigger the country and the national economy, the less involved the country is in trade: as is clearly shown by the figure for the largest economy of the world, the US. It is true however that as long as the current economic progress is kept up in Russia, there is probably room for a two-digit growth in trade in a shorter perspective. At what stage growth in this field could level out is perhaps too early to predict, but under stable political conditions, growth looks inevitable. To predict the implications in terms of the volume of possible increases in trade is much more complicated and, as indicated in some of the previous sections, trade growth for some products can be offset by a decline for others, while a decline in volume will not necessarily must lead to a falling value of trade, if only the value per weight unit ratio increases sufficiently.

[94] This refers to oil, gas, steel and chemical companies like Yukos and Gazprom.

Table 3.3. Foreign trade per capita in selected countries (USD; 2001)

Ukraine	500	Kazakhstan	800
Russia	1.000	Poland	2.000
Lithuania	3.000	Latvia	3.000
US	6.000	Estonia	6.000
Germany	13.000	Finland	16.000
Denmark	18.000	Sweden	18.000

Source: IMF 2002

Since the years of the CMEA, the foreign trade of the FSU, as well as today's Russia, has shown a dramatic imbalance in volume with most of its trading partners. However, the imbalance in weight in the Russian foreign trade that exists, is largely generated by the fact that different kinds of energy resources are dominant in the Russian export to the EU, at the same time as energy is one of the fields where the EU must import a large share of its consumption from countries outside the community. A possible mutual dependence in a sector where it could be logical to foresee an important role to be filled by the still largely untapped Russian energy resources.

Hence, after the first two oil crises in 1973 - 1974 and 1979 - 1980 respectively, and the subsequent steep rise in raw material prices to a new level during the following years, the overcapacity that came to be built up within the sector of raw material extraction was to an increasing extent used for the export of oil and gas to Western countries in order to earn hard currency. The growing export volumes of oil and gas to Central as well as to Western Europe were partly transported directly through an extensive new network of pipelines, symbolically named "*Druzhba*" (Friendship), "*Bratstvo*" (Brotherhood) etc, and partly via seaborne transport from terminals in the republics along the Baltic coastline. The large investments in port capacity in Estonia, Latvia and Lithuania were also utilised for the export of other raw materials; mainly different minerals. At its peak in 1981/82, the share of fuels and other raw materials in the imports of the OECD -countries from the USSR exceeded 85 percent of the total import value (OECD; Franklin, 1983). The tumbling raw material prices in 1985-86 meant that in order to maintain income levels, the Soviet authorities decided to further increase the exported volumes, thus contributing to the maintenance of low world market prices. The exports of manufactured products to Western Europe were insignificant at that time, generating a relatively low demand for container capacity in the ports, and the decline in hard currency income during the second part of the 1980s also resulted in decreasing volumes of imports of manufactured products from Western Europe.

Accordingly, at the time of the collapse of the USSR and the recreation of three new independent states along the Baltic coast, east-west trade was at its lowest level

since the cold war, measured in relative terms. Active measurements were therefore taken in the initial economic transition policies of the new government of the Russian Federation to restore foreign trade with Western Europe. At the same time, the three newly independent Baltic republics aimed at rapidly shifting their trade dependence upon the former USSR and re-orientating their trade relations in the direction of the European Union, formally applying for membership in 1995. Such a reorientation implied a revolutionary upheaval of the existing industrial structure that, during the Soviet period, had been completely integrated with the rest of the USSR and only partially served the local population. Despite the efforts of the Baltic countries to free themselves from the economic dependence upon the FSU, the parallel process of the expansion of the Russian trade with Western Europe implied an ever higher pressure upon the use of the Baltic Sea as an important channel for exports, relying on the existing transport infrastructure much due to the lack of other realistic opportunities. Thus, the need of the Russian Federation to make use of the Baltic Sea as its main gateway to the West, including its dependence on the sovereign Baltic states to secure transit routes, was even higher when the first new port in the Gulf of Finland opened, ten years after the breaking up of the Soviet system, than it was during the Soviet period. The geopolitical implications of the loss of what, from a Russian perspective, is seen as its natural coastline, are large and there is a delicate balancing act between what is acceptable from a foreign policy/security policy perspective on the one hand and what on the other hand is efficient and affordable from a transport economic perspective.

For Russia as a trading nation, the continued use of Ukrainian and Baltic ports during the years of transition has probably been economically profitable, because of the well-developed infrastructure in these ports, their relatively low tariffs and - most important - the lack of a suitable infrastructure in the Western part of Russia. Until the economic crisis of 1998 the political will to construct alternative port facilities on Russian territory was perhaps not very serious, apart from a desire of some Russian politicians to use the transit problems as a way of putting pressure on the Baltic states. Two important arguments came arose as a result of the crisis:

- a rise of prices for Rouble denominated transit of goods through foreign ports.
- more attention to the problems of the North Western border oblasts of Russia.

These factors have resulted in a growing belief in the importance of state and private investments in the development of transit trade and the modernisation of port facilities as a part of a strategy to give a strong boost to the economy of the Russian North West. This is true despite the fact that the building of ports in the North West is probably less profitable for the country's budget, as well as for private companies, than making use of ports in the Baltic countries.

The importance of the Greater port of St. Petersburg has grown considerably during the 1990's. Soviet foreign trade in a westerly direction was traditionally served by ports in the Baltic countries and by ports in the Ukraine. The future of the City of St.

Petersburg is becoming increasingly linked to its advantageous geographical position making the city an influential place in the development of international trade. The ever-growing importance of international trade in the Russian economy is therefore very promising for the economic revival of the city and the surrounding oblast. Today, the City of St. Petersburg is turning into a major transit centre for the flows of cargoes from virtually all other oblasts in the country.

Much of the infrastructure of the Greater port of St. Petersburg is still out-of date. Due to this fact, hundreds of thousands of tons of cargo are unnecessarily being accumulated in the port and stay for weeks without being handled. This is a sign that the port would more or less be paralysed if all types of export and import cargoes that currently use ports in the three Baltic countries were to be directed to the ports in the St. Petersburg and Leningrad Oblast. This scenario is slowly materialising due to the fact that, by late 2001, the Russian government introduced a special "flexible" tariff for the transportation of goods to the three Baltic states. This tariff is higher than the average tariff for Russia in general and, consequently, the advantage of using ports in the Baltic states for Russian companies declined. But in a possible situation in the near future where the available Russian ports are unable to handle the growing quantities of cargo, transport companies will be forced to return to Baltic and Finnish options and the current initiatives of the Russian government will then make little sense.

Responsibility for the inability to use this unique situation must, to a certain extent, be borne by the Sea Port Administration of the city because it did not invest necessary resources into the infrastructure of the port during the early 1990's. It is very important to emphasise that 29% of the shares in the Joint Stock Company "Sea Port of St. Petersburg", the biggest handling company in the port, are public property[95]. Despite protection from governmental institutions and its attractiveness for both domestic and foreign investments, the port has for a number of years not been able to maintain an appropriate level of services to its customers, and earnt a rather bad reputation among users. This has been especially apparent as regards the transit of containers.

3.5.6. Alternative ports for export/import for the Russian Federation

In recent years, some noticeable new characteristics have been appearing, typical for many transit-related projects in the Russian Federation. Projects of this kind now include the active participation of the oblast authorities combined with foreign interests. One such initiative that is a very typical example of this process could be the port in Arkhangelsk. Located on the White Sea and three centuries ago the most important Russian sea port for European trade, it is currently ready to implement its

[95] The voting rights of shares have still to be formally settled between the two biggest owners, Nasdor Inc. from Liechtenstein, owning 49% of the shares and the State Property Management Committee controlling 29% of the shares.

own project for a radical modernisation of the port. In the late autumn of 2001, representatives of the sea ports in Arkhangelsk and Kirkenes, in the north of Norway, proposed before the session of the regional council of the Barents Euro-Arctic Region, a new outline for the transportation of cargo from Russia to South East Asia and America. The outline was named "Pomor Line". According to the initial suggestions of its authors, products from Russian metallurgical companies, as well as other general cargo, would be delivered to Arkhangelsk by railway and would then during a first stage be transported to Kirkenes by ships no larger than 25,000 dwt. From Kirkenes in Norway and on to destinations in Asia and America, Russian cargo would then be carried by ships with a dead weight of 75,000 or more. The new project has been designed to increase the utilisation of the port in Arkhangelsk. The port is currently using only 25% of its capacity, and the same is the case for the Northern Russian Railway, which also has considerable spare capacity (Ekspert 32:2001). The two mentioned trends that the "Pomor Line" well exemplifies can be explained as follows.

The first characteristic is the increasing competition between Russian oblasts for the transit and conveyance of export cargo. Numerous examples of this type of strained relationships are to be found e.g. between the administrations of the Krasnodar Kray and Rostov Oblast; as agents for the sea ports in Novorossiysk and Tuapse versus ports in the Azov Sea. Another such example is between the Republic of Kalmykia and Stavropol Kray for the routing of the Caspian Pipe-Line Consortia (CPC), and between Leningrad Oblast and the City of St. Petersburg for the attractive prize of Russian foreign trade over domestic ports.

The second characteristic is the active participation of foreign states and companies in the Russian market for export/import of goods. Despite the evidently artificial nature of the "Pomor Line" project, as the Arkhangelsk sea port is not able to act as a full partner and there is no need for a reloading of cargoes, still the Arkhangelsk Oblast strongly intends to reinforce its involvement into transit trade. This initiative was immediately supported by oblast authorities and private capital in the nearest foreign country – Norway. Nowadays, only a few Russian oblasts have opportunities to attract foreign direct investments for solving one of the most difficult problems of the national economy – the development of a modern transport infrastructure. In the near future, the presence of foreign capital in the market of transportation services will grow, especially after (or when) Russia has become a full member of the WTO.

Russia plans to pursue an active policy in the sphere of export and transit by rail too, and Russia is putting in a lot of effort to finish the construction of *the Baykalo-Amurskaya-Magistral* (BAM) railway. At the end of 2001, the construction of the largest railway tunnel, the Severomuyskiy, was finally finished and this makes it possible to make more active use of the potential of the Trans Siberian railway. The regions that can be foreseen to find it advantageous to use this land-bridge for transports to Europe are the provinces of northern China that are becoming

increasingly industrial. Today the capacity of the railway is 150,000 TEU per year and after modernisation it is estimated that the capacity will increase to up to 300,000 TEU per year.

Of special significance for the Russian federation in general, and for the North Western parts of the country in particular, is to get the project of the newly introduced trans-continental transport corridor "North-South" into operation. This corridor is intended to follow the line: European Union – St. Petersburg(and/or Kaliningrad) – Astrakhan – Caspian Sea – Iran – Persian Gulf – India[96]. The new transport corridor will be designed to serve a, hopefully, quickly growing volume of cargo between India and both Russia and the European Union. As a consequence of the EU recognition of the special status of India as an economic partner during 2000, allowing India to play a more important role in the EU's foreign economic relations, the flow of cargo is expected to increase. The attention that Moscow pays to the project was demonstrated by the fact that the Prime-Minister of Russia, Mikhail Kasyanov, took part in the ceremony of signing a special treaty for the construction of the Transport Corridor "North-South" between India, Iran and Russia in September 2000 in St. Petersburg. According to the opinion of the Russian Prime-Minister, full realisation of the project may bring into the Russian federal budget, and the budgets of many Russian oblasts along the corridor, up to USD 3 bn per year (Nezavisimaya Gazeta 2001-09-13 www). To show continued support for the project and to discuss its further implementation, the Ministers of Transport of Russia, Iran and India met again in St. Petersburg on May 21 2002, when the agreement from 2000 came into force (RIA-Novosti 2002-05-21 www)[97].

3.6. Russian ports in the Baltic Sea area

3.6.1. Present handling in perspective

In a 25 year perspective, Soviet seaborne export volumes peaked in 1977 reaching 154 million tons (mt) and then slumped during the following years. In 1983 the export volume had recovered and reached a new high of 166 mt, or 47% of total exports (Lydolph 1987 p. 148). Average export volume of bulk cargoes over the period 1990 - 1996 was in the range of 95 - 110 mty of which around 50 mty have been handled in foreign ports due to lack of domestic capacity. According to a larger World Bank mission studying Russian ports in 1996, possible Russian port capacity was at the time estimated to 275 mty, compared to the Russian figure of 145 mt, but to reach this figure a number of changes in operations were needed. Capacity was estimated to be sufficient for most types of cargoes, but not adequate for containers and neither did enough capacity exist for the handling of oil.

[96] Special decision by the Russian government: "On the International Transport Corridor North-South" ; May 30, 2001.

[97] When the corridor was presented in DVZ 2002-05-23 a "missing link" of 800 km, unbuilt, railway in Iran is discussed which has never been mentioned elsewhere, which makes prospects less bright.

"The 100% difference in capacity estimation comes from the fact that the Russian figure is set, based on Russian norms of handling, no margin for improvement has been included, no floating transhipment facilities are used and the Russian figure does not have any allowance for changes in operation"
(Hayter interview 1997-09-09).

During the years of transition the focus in Russian ports has often been set on increasing the volumes handled and the most important ports in 2002 together handled 260 mt of cargo (203 mt in 2001) of which approximately 90% was exports and of which 155 - 160 mt was liquid exports (see also Table 3.3)[98]. Russian volumes have, as seen from the figures, recovered to reach nearly the Hayter capacity figures in just seven years. This has been achieved despite the fact that Russian practise when it comes to the handling of cargo in ports is burdened by two typical Soviet peculiarities that must be mentioned, but also the non-existence of a third is of importance. The first of these is a result of the FSU dependence upon the railways for long-distance transport:

"It is the Russian practice to load and unload directly into rail cars which has strongly linked, and links, port performance to railway performance and makes ports much less flexible. The port in St. Petersburg is just one example of this typically Russian phenomenon"
(Holt 1993 p. 131)

To avoid this **first** phenomenon, ports in the West have depots of the cargo in question in the port area and use high capacity handling equipment to load/unload departing or arriving ships with the intention of shortening the turn-around time of ships. This method of handling was not, as understood, been common in FSU ports, although recent year's investments have often been directed towards compensating for this. The **second** feature typical for Russian ports is the imbalance in volume between loading and unloading. As the turnover in most ports is based on bulk handling, which a result of the concentration of Russian foreign trade on the export of basic raw materials, this is inevitable. Therefore, the volumes loaded in the bigger ports were, and still are, often 10 - 20 times larger than the volume unloaded (Brodin 1996). The **third** of the features, the non-existence of "value-add" in the port, that has become an international trend in other ports, but has so far not been introduced in any scale in this region. The "value-adding" at source mentioned could of course be done by the manufacturer, or raw material extractor. For many types of products, this is performed in or near the port area, as a way for the port to add-value to the products handled, and to generate more work for the port and intensified use of the port's land ownership, a phenomenon which is still absent in Russian ports.

[98] In an interview on 2002-12-08 First Deputy Minister of Transport, Ruksha, stated the turnover in Russian ports 2001 to 271 mt (SeaNews 2002-12-08 www) while a three months later the volume was given as 260 mt (SeaNews 2003-03-05 www) – which looks far to high.

The cost to Russia for the use of foreign ports is valued very differently by different sources and figures ranging between 700 million to USD 3 bn have been presented (Morskie Porti various issues 1997 -2001). In none of these articles have any calculations been included, so nothing can be said about the price tags that have been set to different factors and about what costs have been included. It would be of great interest to know if such calculations include only transport costs or have been set to include e.g. even "*lost*" taxes and intended dues and fees. The figure USD 3 bn has been used Parfenov, General Director of Russia's most important maritime research institute, Lenmorniiproekt, while the figure most often used by the Federal Authorities, such as by Prime Minister Kasyanov, has been USD 1.5 bn.

Table 3.4. Turnover in larger Russian ports 2002 (1000-tons)[99]

	HANDLING			TRADE		
	Dry cargo	Liquid**	Cabotage*	Export	Import	Total
(Baltic Sea)						
Vyborg	1,2	0,0	0,0	1,2	0,0	1,2
Vysotsk	3,3	0,0	0,0	3,3	0,0	3,3
Primorsk	0,0	12,4	0,0	12,4	0,0	12,4
St. Petersburg	30,7	10,6	0,2	35,4	4,7	41,3
Kaliningrad	4,9	4,7	0,3	9,0	0,6	9,9
(North West)						
Murmansk	9,3	0,0	0,3	8,7	0,3	9,3
Arkhangelsk	3,0	1,9	0,4	4,4	0,1	4,9
(Black Sea)						
Tuapse	4,3	13,6	0,0	17,1	0,8	17,9
Novorossiysk	14,9	48,4	0,1	59,9	3,3	63,3
(Far East)						
Vostochny	16,2	0,0	0,7	13,5	2,0	16,2
Nakhodka	4,7	5,3	0,1	8,9	1,0	10,0
Vladivostok	6,0	0,0	0,7	4,8	0,5	6,0
Vanino	4,6	2,0	2,2	3,9	0,5	6,6
Total 12 above	103,1	98,9	5,0	182,5	13,8	202,3

* = Cabotage handling is recorded both as goods loaded and unloaded
** = Nearly exclusively export

Source: Statistics in most cases from the Port Authorities directly, or SeaNews of different dates

[99] Figures about oil export for a period during the summer of 2002 has been kept secret, where the income was to cover the costs of the dismantling of the radar warning base on Cuba, complicates figures that do not match. The difference between the turnover for the 12 biggest and the national total is therefore(?) much larger than other years. Also loading of oil at sea, e.g. in Murmansk, is not included, but lifts the totals figure. The same statistics for 1996 and 1998 can be found in appendix.

Today, Russian foreign trade is dominated by trade with Western Europe and transport routes towards Europe in particular have changed and have had to be revitalised. For transports between Russia and Western Europe, a number of different transport routes can be distinguished. Which of these a forwarder will choose depends on the type of cargo that is to be moved and the prices quoted. Generally, the route going through Finland, (no. 3 in figure 2.5) has for long been considered to be the safest of the three major west-bound alternatives while the inland route through Poland has been considered the cheapest. All three alternatives have an estimated transit time between Rotterdam and Moscow of about one week. That is if the transport for the Baltic and Finnish alternatives are co-ordinated with a departing ship. Large-scale studies have clearly indicated that Russian companies generally regard transport costs to be the key issue in their choice of route (VTT 1997).

For the near future turnover in the ports the Ministry of Transport has made estimations that indicate an increase in handling by over 30% from 260 mt in 2002 to 340 mt in 2005. The domestic need is set at 357 mt, where the balance will be handled in foreign ports, compared to about 75 mt tones being handled in foreign ports during 2002. In 2005, the distribution between the three geographical directions is planned to become 34% in the Baltic (115 mt), 39% in the Black Sea and Azov Sea direction (130 mt), and 17% via ports in the Far East (60 mt) (SeaNews 2002-12-23 www).

3.6.2. Common reasons to build new port capacity

Before describing the individual Russian port projects being planned in the Gulf of Finland, some general arguments for new port investments should first be mentioned. As investments in new or extended ports often involve huge sums of money, it must therefore also be possible to identify a number of positive effects from such investments. The crucial question is whether the positive effects will be large enough in the end to make these investments pay for the costs incurred, especially when enhanced competition from new capacity will make possible profit margins shrink for the whole line of business. Some of the effects that are likely to lower unit costs for cargo can easily be identified as:

- larger ships can be accepted
- a result of shorter transport distances for customers
- more up-to-date equipment is introduced
- traffic is not lost to other foreign ports
- the port attracts extra traffic
- with larger volumes to carry fixed costs

If the above set of statements can be fulfilled by a project, it is definitely a good beginning, but there are more factors that also must be evaluated. When new investments are made, it should be remembered that lowered transaction costs,

which are what port developments are often hoped to result in, must be shared between the developer and users. It is rarely the case that a developer can isolate all positive effects for himself. Instead, these benefits must be shared with domestic cargo owners and in an international port, which is what is discussed here, possible welfare effects must also be shared with foreign users. During most of the transition years, there has not been any funds available in the Russian state budget for larger investments, and practically the only kind of support given has been verbal and in the form of state guarantees. Here it is again time to come back to the fact that it was not until the turn of the oil price that a new "window of opportunity" opened.

To be able to calculate which of the investors in a port project that will benefit the most takes deep knowledge, e.g. about the price elasticity of the cargoes handled, and cargoes that are expected to be handled. It would probably be more accurate to discuss a kind of "*combined – elasticity*". Such calculations should also include the competitive situation in the regional port sector, the near future development for the cargoes in question as well as general economic development trends, both in the national market and in the consumer markets for the products in question. We are unlikely to possess enough information to give acceptable answers to these kind of questions. It is therefore understandable that the long-term benefit of port investment projects can easily, and often rightly, be questioned. Especially in an environment where an minimum of the background information is made public.

To open up several new ports will pave the way for another risk factor; the "*hop-around*" of shipping lines between terminals. This is a factor that can come to constitute a most severe risk for the ports in this part of the Baltic region. This is already happening, to a certain extent, but will increase if and when new ports open up in the Gulf of Finland. The new volumes of cargo that will appear in the market just because of the availability of new port capacity are probably fairly limited. Even if transported volumes were to grow, e.g. 10% per year over the next five years; it would still be outgrown by the probable increase in capacity among existing ports for most cargoes outside oil. This capacity already exists and development projects only within existing ports can be expected to well outgrow even such an increase in demand. How much new capacity that will be added, depends on how many of the planned projects that materialise and how many stages of these projects that materialise. That is unless outside factors, e.g. Russian railway fares favouring domestic alternatives, distort the market. The effects of public transport infrastructure development on regional and national economic development has been a highly debated topic in economic geography for decades and was touched upon in 2.3.4. Evidence though, has demonstrated, that:

> "*linkages are more complex than specified heretofore in the literature and that previous estimates of these linkages are likely to be subject to specification -error and simultaneous- equation bias*"
> *(Tally 1996, p. 1)*

Some scholars emphasise the positive side and see transport investments as a "*catalyst for growth*" (Garrison 1994) while others (Harvey 1990) show that such investments, despite their good intentions, run the risk of "*crowding out*" other more rewarding investments. Some writers, however, are very optimistic about the positive effects of infrastructure investments:

> "*Public infrastructure investments and private-sector growth are strongly complementary, and the contribution of public investment to private productivity is rarely disputed. Efficient investments in transport and other infrastructure can make a significant difference in supply response*"
> *(Dervis et al 1996, p. 13)*

It should be observed that this statement refers to improvements of the whole transport sector, and not only the port sector, as sometimes seem to be planned in Russia. When only a part of the transport sector is focused upon, it is probable so that the arguments used by Harvey (1990) are supported.

From a pure analysis of cargo flows, as presented in other parts of this thesis, compared to existing Russian port capacity, it could perhaps be placed beyond doubt that Russia needs more port capacity in the Baltic Sea. In these kinds of sweeping Russian economic estimations, however, it is not stated from whose position the arguments for more capacity should be seen and who will benefit from it. If such an analysis concentrates on short-term benefits for the port authority involved, it can always be expected to be positive. If what is at stake is the common good of Russia and its citizens, in a social cost benefit analysis, then the answer is far from as clear cut and leaves large headroom for subjective arguments[100].

The first decision to build new ports in the Gulf of Finland was taken as early as in 1992, in conjunction with the presidential decree "*On Measures for the Revitalisation of the Russian Commercial Fleet*". Despite this, it was not until 1997 that the first concrete steps were taken in the direction of fulfilling the decree. The revitalisation of the initiatives concerning the building of new port structures in the Leningrad Oblast derives largely from the appointment of a new Governor, Vadim Gustov, in 1996[101]. Strong lobbying in Moscow followed his appointment, which led to President Yeltsin signing a decree to build three new ports in the Gulf of Finland when he visited St. Petersburg on June 6, 1997[102]. Two of these, Primorsk and

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[100] A good example of how port development projects could be handled publicly could be given from Norway (NITE 1998:b) *"Cost-benefit analysis for the extension of the port of Oslo and two alternative port solutions"* -authors translation. Title in Norwegian: *"Nyttekostnadsanalys av utbyggning av Oslo havn og to alternative havnelösningar"*.

[101] In August 1998, Gustov withdrew as Governor to serve as First Deputy Prime Minister in the Primakov administration, only to be dismissed 1999-04-27, along with the rest of the cabinet. He then lost in his re-election bid to become Governor, against stand-in Governor Valery Serdyukov.

[102] The decree was called: "*Transport and Technological Provisions for Freight Transport Through Shorepoints on the Gulf of Finland*".

Bukhta Batareinaya, should primarily handle oil, while the third, Ust-Luga, has changed direction several times.

It could here be worthwhile to remind ourselves of what Holmgren and Williamson (1984) observed as early as in the early 1980's, in a study regarding Swedish port planning:

> "*Harbour policies and harbour planning to date have had very little effect on actual harbour development, owing, e.g. to the lack of means of control. This situation is not expected to change in the foreseeable future."*
> *(Holmgren, Williamson 1984 p. 9)*

Moreover, that old truths are slow to change will once more be shown in the following presentation of the different projects. To organise the preconditions needed for the construction of a new port, from just a juridical point of view, have, in all the below examples, proved very difficult and unpredictable.

One such example is the construction of the Primorsk oil port where the OBIP Company filed an arbitration court complaint against the then governor of the Leningrad Oblast, Vadim Gustov[103]. OBIP argued that the expropriation of 110 hectare of land that once belonged to an OBIP majority-owned company, called Baltport, locks them out of the project. OBIP argued that the land area was included in the area claimed for port construction and that the money spent on a feasibility study by Baltport would be wasted (SPT 1997-11-24 www). In March 1998, an arbitration court turned down the complaint and a construction permit was given to the developer. The next step taken by OBIP was then to include the large German industrial company, Preussag AG, in their bid. Preussag made public that they are prepared to invest USD 180 millions in the project, if the local government gives them a green light to take it over (SPT 1998-02-22 www). This did not impress enough either and the project continued to be run by the initiators. The next hurdle to pass was the environmental examination of the projects that also came to end up in court, resulting in months of delays. The port in Ust-Luga is another example of exactly this procedure and several court appeals had to be gone through before construction started.

Despite these problems, the legal issues surrounding these projects have proved to be a minor problem compared to the finding of financial support. However, the two factors are most probably strongly interlinked in such a way as to it resemble a Catch-22 situation. Under the conditions that reigned in Russia during the 1990's, few investors were willing to pour money into large-scale long-term projects under unclear/insecure legal conditions. On the other hand, a project with secured funding and official support, would surely have found its way through all kinds of bureaucracy rather smoothly. The only difficulty is that it is probably impossible to

[103] OBIP (Organisation of Banks Investing in Ports) is the same company that at the time was majority owner of the Sea Port of St. Petersburg.

predict how much extra cash that is needed to make the latter of the two procedures reasonably quick. To foreign investors, arguments about Russian cargoes in Russian ports probably have a very low goodwill value, in a pre investment study and different indeed from the value that will be set if the point of departure is geopolitical for the same investment study. The full complexity of the problems related to port investments has been well summarised by Baird from a point of view that is closer to the first calculation, based on competitiveness:

"While seaport policy is still decided at national-state level, today's economic reality suggests policymakers really need to consider the bigger picture when making major seaport investment decisions"
(Baird 2002 p.13)

3.6.3. Russian ports in the Gulf of Finland

Of the 40 Russian sea ports for which in 2002 official statistics are presented, only five can be found in the Baltic Sea area and two of the bigger ports in the North West (see Table 3.4). During Soviet times, another five ports in the Baltic Sea could have been added to such a list. The turnover relation between the ports of the Baltic countries and the named Russian competitor ports was 1.63 to 1 in 2002. A striking difference that gives an indication of the Russian deficit, but also indicates a marked decline in Russian dependence from 3.3 in 1996[104]. With a Russian port sector in the Baltic Sea with limited capacity, it is not difficult to understand the excitement showed by many foreign companies and institutional investors for port projects in the only Russian outlet in the Baltic Sea, the Gulf of Finland. A number of factors that point in favour of new Russian ports and terminals are:

- competition from other Russian ports in the East, South and North is not very strong
- the flow of imports from the West is normally destined for the most populated and densely industrialised parts of western and central Russia
- export cargoes transiting westwards most often originate in locations in western and central parts of Russia
- cargo owners routing of cargo to/from Russian ports would prefer to avoid the additional insecurity of border crossings
- national policies have long favoured this alternative
- in recent years the surrounding Leningrad Oblast has become one of the most investor friendly and quickest expanding oblasts in Russia[105]

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[104] Calculated form the statistics as presented in Table 4.2 (Tallinn, Riga, Ventspils, Liepaja Butinge and Klaipeda) and Table 3.4 (Arkhangelsk, Murmansk, Vyborg, Vysotsk, Primorsk and St. Petersburg) resulting in the summed up figures; 115.0/ 70.4 = 1.63. For 1998, the same figure was 2.35 (1996 – 3.3)(see appendix for 1998 and 1996 years Russian turnover statistics).

[105] Leningrad Oblast was named Oblast of the Year 2002 for Investors by the American Chamber of Commerce in Moscow and has attracted an increasing share of FDI's (AmCham 2002 www).

At the same time as this is a description that could well be aimed at attracting investors to different port projects that will be covered separately below, this is the environment where the four existing ports Vyborg, Vysotsk, Primorsk and St. Petersburg already operate. It is location that, without deeper knowledge of the local situation, could be seen as predominantly positive. Therefore, the position of these ports will be described here in greater detail than has been the case in previous parts of this study[106].

Vyborg and Vysotsk

Two, of the three existing Russian ports in the Gulf of Finland, are Vyborg and Vysotsk[107]. Since 2001 the two ports are organised under the Port Authority of St. Petersburg, but the Sea Administration of Ports in Vyborg and Vysotsk is still active, so the sharing of responsibilities of the two ports remains somewhat unclear.

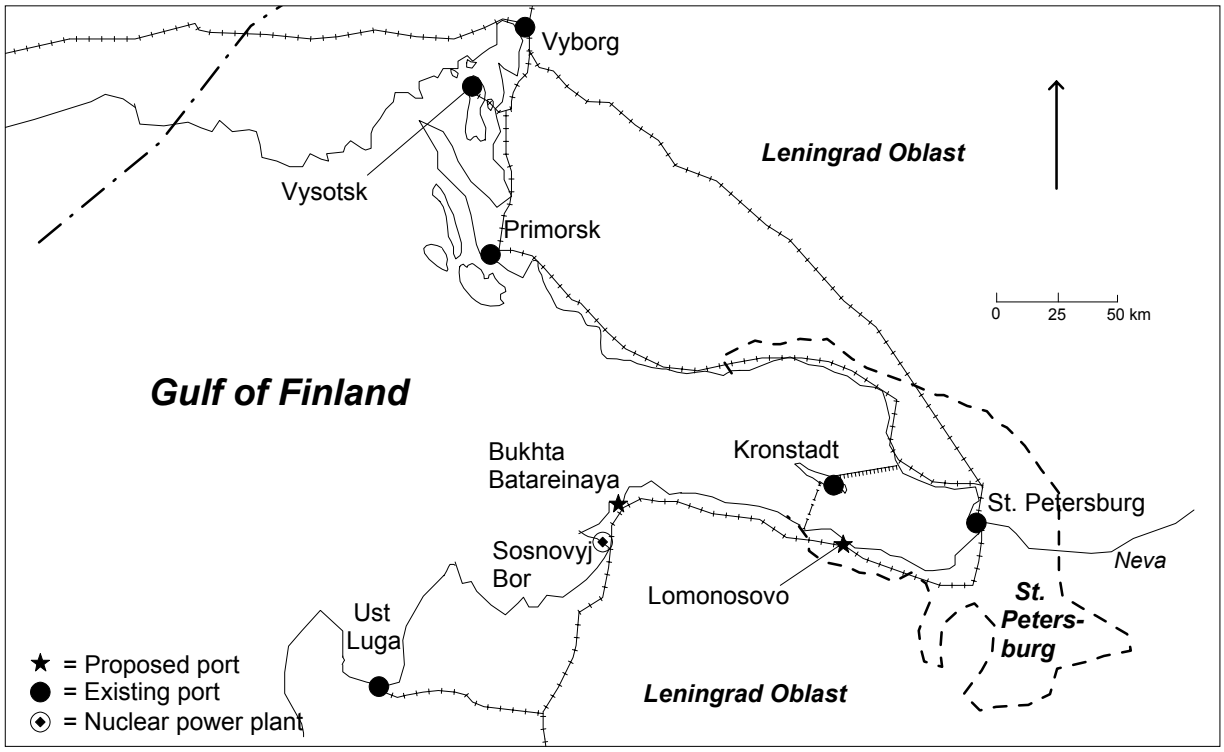

Figure 3.7. Existing and proposed Russian ports in the Gulf of Finland

Source: Compiled by the author from various sources

[106] The re-unification of the two oblasts (separated in 1931), has several times been on the agenda but practically not since late 1999.

[107] The port in Vyborg, including the island where the port of Vysotsk is located, was declared *"zone of free entrepreneurship"* in July 1990. An initiative described in Brodin (1994:b). Until the end of 2002 this had, by no means, led to the benefits for the Vyborg Rayon that was hoped in 1990.

Both ports are located in the Gulf of Vyborg, on what was Finnish territory until the end of WW II. The Gulf of Vyborg is a northern off-shoot of the Gulf of Finland, with Vyborg located at the north-eastern shore of the gulf while the port of Vysotsk has been build on an island on the eastern shore of the Gulf, at its most narrow passage[108]. The port in the city of Vyborg on the other hand is located in the city centre and handles mostly general cargo[109]. Today, the port in Vyborg is completely surrounded by the city itself while both ports are located at the mouth of the Finnish Saimaa Canal. Vysotsk is adjacent to a smaller navy base, but the port has practically no physical restrictions to a future expansion in the eastern and southern direction and its most important products are currently coal and pulp wood.

The city of Vyborg has the advantage of having both the main highway and railway between the Finnish border and St. Petersburg passing near the port, which is not the case in Vysotsk. Being located some 50 km south of Vyborg, the port is serviced by a non-electrified branch line of the railway and a currently upgraded road that until the end of 2001 was in a very bad state. A major problem for both ports is the limited draught in the Gulf of Vyborg, with maximum depth in Vyborg of 6.5 meters and maximum shiplength of 135 meters while for Vysotsk the same parameters are 7.5 and 150 respectively (Vyborg 2002-11-25 www)[110]. In 2002, the two ports had a turnover of 0.8 (1998 – 0.6 and 1.1 in 1996) and 3.2 mty (1998 – 1.8 and 0.9 in 1996) respectively, with an extreme dependence on exports, 99% (see Table 3.4)[111]. Both ports have locally presented plans for an expansion that would lift their turnover of conventional cargoes to 3.5 and 4.5 mty, respectively (Vyborg Rayon 1999:b www).[112].

The near future prospects for the port in Vysotsk has changed dramatically since the announcement by LUKoil in June 2002 of the establishment of an export terminal in Vysotsk for oil products with an designed capacity of 10 - 12 mt and the intention to invest USD 150 million in the project. Already during 2003, an export volume of

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[108] Because the strait was narrow, some 100 meters, Vysotsk was called Trångsund during the Swedish years, which translates to "*The Narrow Strait*". This was the most important wood exporting port in Scandinavia in 1920 and much used for reloading from the Saimaa canal, opened in 1856, but none of the two ports seem to profit from the 2 mty cargo traffic on the canal (FMA 2002 www).

[109] In Soviet terminology, the English *"general cargo"* corresponds to *"non-unitised cargo"*; i.e. cargo where each piece of cargo must be handled; e.g machinery parts, pallets, rolls or big-bags.

[110] Regarding draught in the Baltic Sea, the deepest waters available for entry into the Baltic Sea are found in the passages under the Danish Great and Little Belts bridges, 17.0 meters, allowing ships loaded to a draught of a maximum of 15.0 meters to pass. In the Drogden Strait it is 8.0 m and in the Flint passage under the Öresund bridge it is 8.0 m, but a ship should have a 10 - 20% clearance. The international passage right to the Baltic Sea is based on an agreement dating back to 1857.

[111] Local information material states slightly higher turnover figures for both ports all years.

[112] When this statement is made here, and on the following pages, there is always a possibility that some arrangements have been made, either very recently or that some kind of arrangements exist that have not been made reasonably public. On the other hand, it is more a rule that when projects are presented in Russia, it is often indicated that everything has been arranged. In reality it is rarely the case, but official statements can seldom be double–checked, and experience has, time and time over, proved the *"very-little-will-happen"* rule a not un-likely outcome of presented intentions.

5 mt will be reached and full capacity by 2005, during this time the terminal will have its capacity extended and waters dredged to be able to accept tankers up to 80,000 dwt (LUKoil 2002-06-28 www). As the full volume will be railed to the terminal an agreement has also been signed with the Ministry of Railway stating that LUKoil will build the necessary tracks on the Vysotsk island while the Oktyaberskaya Railway will extend capacity in the direction of Vysotsk (LUKoil 2002-07-20 www). On January 17 2003 the project passed another important hurdle, that frequently has been a stumbling block for port projects, when it was acknowledged that the environmental impact was "admissible" and a go-ahead was given (SeaNews 2003-01-20 www). With a company behind the project that showed a net profit for 2001 of USD 2.1 bn, after tax, it must be seen as most likely that it will be fulfilled more or less as planned – i.e. the first tanker should be loaded by late September 2003.

Primorsk

The port, just east of the village of Primorsk, is located on the north-eastern shore of the Gulf of Finland about 170 km west of St. Petersburg and 80 km south-east of Vyborg. The plans here are to build a port in several steps, primarily for the handling of oil and other liquid bulk cargoes. It is here in Primorsk that the before mentioned pipeline from the Timan-Pechora fields have their export outlet (see also chapter 3.6). Primorsk has previously served as a fishing village and minor naval base and it offers a 20 meter deep approach and can accommodate ships up to 307 meters in length, up to 150,000 dwt and with a draft up to 15 meters, with a minimal depth at berths of 17.5 meters (Kochkin 2002). As forecasted by many ice has been a problem, as the big size ships are subject to a considerable pressure from the ice that can make the ship drift at the same time as no icebreaker is wide enough to break a canal in one go. Compared to other alternatives, both presented and that will be presented, the port at Primorsk has needed only minor or modest investments in dredging and is probably one of the most suitable sites for a new deep-water port in the Russian part of the Gulf of Finland from that respect. In its first phase, the capacity of the port should reach a turnover of 12 mty of crude oil. In the second phase, capacities will be extended to 29 mty and at full development 45 mty. During the first phase, the port will only handle crude oil and the second phase expansion will primarily be based on oil products. In the third phase, another 10 mty of crude oil handling will be added together with both smaller volumes of liquefied gas and general cargo. All crude oil will be delivered by pipeline while other cargoes will be shipped by rail. Construction work begun in the summer of 1999 by creating a small number of storage tanks, and the first tanker docked at the port on Christmas day 2001[113]. The first shipment of crude oil was loaded onto the Sovkomflot-deployed 106,000 dwt tanker "Petrokrepost" that sailed on December 28, after President Putin had inaugurated the port.

[113] To approach Primorsk the Port Authority has four pilots at its disposal given the extra education needed to navigate tankers of 100,000 to 150,000 dwt (Port Authority of St. P. 2002:b)

Parallel to the legal process described above, the interests of the originally nine different Russian oil companies that initiated and initially backed the project in 1996, along with some foreign newcomers, have also proved hard to co-ordinate. During the spring of 1999, the government finally ordered the pipeline operator Transneft to build both the 2700 km of pipeline needed, from Usa to Primorsk, as well as a terminal in Primorsk. Transneft had then, from the summer of 1999, been authorised to collect an extra tax of USD 1.5 / ton via the pipelines that was to be set aside to pay for pipeline construction from the Timan-Pechora area[114].

An expansion plan for another terminal with the capacity to handle another 6 mt had already been approved, but the Government in March 2003 decided to support plans that had been put forward to extend the capacity to 30 mt, with a future expansion to 50 mt in perspective (SeaNews 2003-03-17 www).

Greater port of St. Petersburg[115]

The history of the port and the city is strongly interlinked in a city that was first established to become the new port and navy base towards the West, as well as the new capital of Russia. This was in the first years of the 18th century, and the city came to be named after the ruling tsar, Tsar Peter. At that time, it was a good strategic choice to have the capital located on several smaller islands at the innermost part of the gulf. The location was directly at the mouth of the river Neva, which also connects the city to the two biggest lakes in Europe, north east of the city, Ladoga and Onega. Relatively soon, however, the island of Kotlin, with the port, Kronstadt, located in the inner reaches of the Gulf of Finland, about 25 km to the west of St. Petersburg, emerged as Russia's early naval-base in the Baltic Sea. Kronstadt was also the port where cargoes, in the 18th and 19th century, were transhipped from ocean-going ships to smaller barges that could be used in the shallow canals of the town or be taken upstream to the lakes and further into the river system. Relatively soon the depth in the inner part of the gulf had to be attended to as water depth was in the range of two meters. As early as in 1877 - 1885, a 27 kilometre long channel was dug, which starts near Kronstadt and ends in what is the port of St. Petersburg. Initially the depth of the channel was 8.5 meters, which in later years has been deepend to 11 meters and a widening of the channel to allow two way movements of vessels is under way, but a date of completion has not been given.

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[114] The Gulf of Finland is far from the only region in the FSU where the construction of pipelines and new ports for the export of oil, gas and other raw materials has proved to be a difficult question to solve. The transit of oil and gas from Central Asia to consumers in the West and China/India is another, near usolvable, example in the FSU. Expansion of ports like Anakalia and Susha in Georgia compete with an expansion of the Russian port in Novorossiysk and the decided pipeline, in the summer of 2002, from Baku in Azerbaiyan to Ceyhan in the eastern Mediterranean Turkey.

[115] Greater Port of St. Petersburg – this expression refers to all companies handling cargo at port terminals inside the City of St. Petersburg area. The Sea Port of St. Petersburg, is the biggest of the companies working in this line of business in the port. The Sea Port of St. Petersburg company had an approximate market share of 55% during both 2001 and 2002.

What from the beginning looked like the best available location would later prove to have a number of disadvantages, especially from a sea-transport point of view. Being located at the innermost part of the Gulf of Finland, the city has been subject to several floodings and the water is relatively shallow and sweet. As a consequence, even fairly mild winters can lead to severe ice conditions that hamper the shipping industry, with the winter of 2002 – 2003 as a very good, or bad, example. The regularly prevailing westerly winds contribute to worsen these problems by lifting the water level and by packing together drifting ice in the inner part of the gulf. It is only during this century that, at times of ice problems, the assistance of ships by icebreakers has been developed, but even today, the use of icebreakers is a time consuming and costly undertaking. A big problem that still remains in this part of the Gulf of Finland is that constant dredging is needed to compensate for the sedimentation from the river Neva, especially in the port basin and in the inner part of the channel. Currently, the by-law of the port sets a limit to draught at 11 meters and the maximum length of ships to 260 meters, which while earlier was an acceptable measure for an approach to a large port, it has now become a restriction to shipping. Today a ship with a dead weight of over 40 – 50,000 tons normally needs deeper waters to enter a port[116].

The kind of problems faced by the port in St. Petersburg did not have any real national implications, as long as ship sizes and foreign trade was small in volume and several ports shared the large Soviet hinterland. It was when Soviet's international trade started to grow, at first with the expanding trade with what was often ideologically like-minded nations of the world, that more port capacity had to be developed and water depth became a restriction. The Soviet need for port expansion was also an effect of the emerging raw material crisis in the western world that together with high raw-material prices came to act as strong pull factors on Soviet export.

In the late 1960's and early 1970's, a number of ports in e.g. the Baltic states were greatly expanded and gradually came to be of national importance to the Soviet Union, offsetting the position of St. Petersburg in this respect. As can be seen in Table 3.3, St. Petersburg is the most important Russian port, but compared to the ports in the Baltic states it is, since 1997, second in terms of tonnage turnover with 20.6 mt in turnover, while for 2002 the turnover reached 41.3 mt. Before 1997, figures for St. Petersburg were in the 10 mty range and have since then more than tripled, but mostly because several port areas are now summed up to give the total and that large volumes of liquid cargoes are being handled at the port which was not the case before 1997.

[116] To give a rough indication of the depth needed in a port a few examples will be given, but it must be remembered though, that draught for larger ships can vary with several meters due to ship-design, and that a ship must be given at least a meter of margin under the bow. A larger ferry has a draught of about 8 meters(m), a 10,000 dwt Ro/Ro vessel about 7 m, a 70,000 dwt bulk carrier around 13 m, a 1,500 TEU container carrier around 10 m and a 5,000 TEU one around 14 m, an Aframax crude carrier (tanker app. 100,000 dwt) 15 m (Wijnolst and Wergeland 1996).

St. Petersburg has another geographical disadvantage, i.e. the port is also completely circumvented by the city itself, limiting most plans for expansion. On the other hand, St. Petersburg has one advantage that none of the competing ports in the Baltic Sea can match, which is its direct access to the Russian canal system. With the European tendency of increasingly using canals for long-distance bulk transport, this could prove to be a considerable advantage for the port in the future (Rissoan 1994). That is if the canal-system can be kept in an acceptable working order while waiting for an upswing for this mode of transport, as its potential to accept ships up to 6,400 dwt, 140 meters long 16 meters wide and 3.6 draught, could become an extraordinary advantageous. The Volga-Baltic Waterway is in extensive use and during 2002, 15.9 mt were transported; 11.7 westward and 4.2 mt eastward. If some factors coincide positively this could perhaps happen inside 2 - 3 years (Kluyev interview 2003-01-03)

One explanation to the fact that St. Petersburg has had difficulties in attracting cargo is probably that during the early years of transition, St. Petersburg has been considered to be an expensive port for shippers to call at[117]. During these years, most dues and fees have been set at a level well above comparable dues and fees in competing ports in the Baltic countries (County Administrative..., 1997). On the initiative of the Minister of Interior at the time, Stepashin, a plan was decided upon to free the port from destructive elements. In a report to the minister it was stated that: "*today the port is severely affected by organised crimes like smuggling, fraud, and embezzlement*" and that the measures that will be taken, but not made public, will soon end this state of affairs (Izvestia 1999-04-05). Corruption and bureaucracy are definitely not new phenomenons and the Russian system was even crowned "*a paradise for intermediaries*" during these years (Byrne, Paramonov, Bouis 1995)[118]. It is the misfortune of the city to have been led in an as corrupt way and not to have been able to profit in full from its "window to Europe" position and act as the "locomotive for Russia's European drive" the way it could have (Trenin 2002). Today, the port is considered cheaper to call at than competing ports in the Baltic states, but customs handling in particular is still very slow (DVZ 2002-09-21).

The by far most important company in the port, taking around 55% of the handling, is JSC Sea Port of St. Petersburg that rents 8 km of quayage, approximately 40 berths, from the Maritime Administration. This company has been under long controversy as the St. Petersburg State Property Committee possesses 29% of the shares, but these shares have become non-voting, and the large public ownership has not been able to influence the running of the company. With the introduction of the latest change in privatisation legislation, this controversy came up in court again in December 2002, but an arbitrage committee disapproved the conversion of

[117] A comprehensive and complementary description of the transition period with a regional economic focus on St. Petersburg, can be found in MTI (1994) and in Kirkow (1997).

[118] That corruption in the port of St. Petersburg, as well as in most other ports, was widespread even during the Soviet years is well documented. Especially hard hit was the US Food Aid Program during the late 1980's and early 1990´s as shown in Forbes (1993).

this block of shares into voting shares (Sea Port of St. Petersburg 2002 www). The port authority in St. Petersburg, on the other hand, has been successful in leasing terminals in the port to operators in a way that few others have. Today, there are some 28 different stevedoring companies that have a licence to work in the port and competition between the 23 that actually operate is fierce. The number of licences issued to companies of different kinds to work in port-related activities in the port is around 400. The maritime cluster around the port has expanded quickly and today over 35 container destinations can be reached using direct shippinglines from the port, and the list of companies supplying services related directly to trade and cargo handling, as listed by the Port Authority, had reached above 250 by the end of 2001 (Port Auth. of St. Petersburg 2001 and 2002:a).

By examining the custom statistics that show the cargoes that go through the port, it is possible to identify three very important characteristics for transit trade via the Greater Port of St. Petersburg[119]. Nearly 25% of the whole export via the ports in St. Petersburg originate from the city itself, comprising cargo to a declared value of USD 990 millions during 2001. Another example of an important oblast is the neighbouring Leningrad Oblast from where another 5% of the exports originate. In this case, it is mostly oil products from the KINEF refinery in Kirishi that make up the USD 180 million that this part of the export was valued to. Two much more distant oblasts that are important are the Krasnoyarsk Kray and Kemerovo Oblast. The cargoes exported are metals of different kinds and coal, with 4% of the total coming from Krasnoyarsk to a USD 160 million value, while from Kemerovo, coal constituting 3% of the volume, and USD 120 millions in value is exported.

During 2001, the most important countries of destination for the Russian export of goods through the Greater port of St. Petersburg were the United States and The Netherlands. Both are the destination for the same share of the exported value, 23%, or USD 920 millions. Sweden was the only other country in this context that had a higher share over 5%.

The combined statistics, however, show that it is countries inside Europe that are the most important partners for the oblasts that transit their export goods via St.-Petersburg. The only exception among the top six of the export destinations is the US, where the most important buyers of steel and steel products and of non-ferrous metals from Siberian oblasts can be found. If instead the home-countries of the companies that are trading with the mentioned volumes of Russian export goods, it is, perhaps, surprising that such a list shows only a few of the big trading nations and is more a listing of well-known banking centres like Switzerland, Gibraltar and Cyprus. The explanation to the leading role for Switzerland in this respect, followed by Gibraltar and Cyprus, could be that Russian companies use the tax-facilities of these countries and their developed banking infrastructures when exporting their goods. It is only Sweden that has a share of export and origin of trading nation that is similar; 5% for both.

[119] Statistically, this refers to the custom point "Baltiyskaya Tamozhnya" – the Baltic Custom Office

The statistics for 2002, indicate that the volume of cargo handled by the Greater port of St. Petersburg well surpassed the best results of the Soviet era, reaching 41.3 mt for the full year of 2002. As far as the commodity composition is concerned, the dominating cargoes that were handled during the year were oil and oil products 10.6 mt, ferrous and non-ferrous metals 9.1 mt, containers 6.8 mt and chemicals 4.3 mt (mostly fertilisers), with just these four commodity groups making up 75% of total turnover in the port. Still, the type of commodities that are being handled in the port has gradually diversified, where one such example is the opening of the Baltiysk Balkerny Terminal (BBT) devoted to the handling of mineral fertilisers, where the main investor is JSC "Uralkaliy" (see also 3.4.6). Even more ambitious plans have been presented by the Governor of St. Petersburg, Vladimir Yakovlev, who several times has suggested that there are good possibilities of increasing the turnover of the port to 60 - 62 mty by year 2010 (abnews 2002-12-24 www). In order not to exceed this prediction, the rate of increase must decline sharply, or this will be achieved by 2006 – 2007. It is too early to discuss the probability of this scenario, but it should be remembered that in 1991, the turnover of the port was around 12 mty, and in 2002 had reached 41.3 mt. For Governor Yakovlev, another important problem with the port, besides the general growth of turnover, is its diversification in handling. In addition to metals and fertilisers, existing plans include an expansion of oil-products handling, and more fertilisers and containers.

Container handling has shown the strongest growth in recent years and the port had a turnover of 480,000 TEU in 2001, (already 52% over 2000) reaching 580,000 for the full year of 2002. Plans for the transit of containers foresee a continued growth of the same magnitude up to 1.6 million in 2010, and for 2003 the Ministry of Transport has indicated support for the expansion of the container terminal at PetroLesPort from 100,000 TEU per year to a 350,000 TEU capacity (SeaNews 2003-01-27 www). By just studying the number of investments made in new equipment by the two biggest operators during 2002 alone, any projections for the future look likely to be within reach (Sea Port of St. Petersburg 2002, Petrolesport 2002, www)[120]. A clear indication of the growing container transit via St. Petersburg is also the hundreds of carriages that are waiting to be unloaded at the Avtovo and Noviy Port railway. St. Petersburg urgently needs a reconstruction and extension of its railway stations and a modernisation of highways in and around the port area[121]. The railway remains about 10 times more important than the roads for cargo transport to/from the Leningrad Oblast and the City of St. Petersburg. According to the Leningrad Oblast Transport Committee, the railways carried 38 mt tons

[120] A major problem in the port's container handling is the long clearing time for incoming containers. The port's average of approximately five days, and not seldom 12, can be compared to 5 – 10 hours in the larger European ports (DVZ 2002-09-12).

[121] This problem has not eased due to the impressive growth in turnover showed by the port, and as by early April 2002, 2,000 – 3,000 wagons were waiting daily for reloading on the approaches to St. Petersburg. (Transport@Business Russia 2002-04-10 www). During the sever ice conditions in January, the number reached over 4,000. There is an awareness in the city about these problems and investments have been outlined up until 2010 in branch lines and roads in the port area to a value of USD 250 millions and USD 1.15 bn in port infrastructure (DVZ 2002-05-22)

to/from the two oblasts during 2002 while road transport handled 3.4 mt (SeaNews Analytics 2003-01-24 www). In perspective, St. Petersburg should become the main Russian gate for containers with a turnover of about 2,5 million TEU per year by 2010, or more than five times the turnover in 2001 and one million above the estimation by Mintrans (Rusu, 2002-01-08 www)[122]. One of the issues that is intended to support this phenomenal growth is the rebirth of the Trans-Siberian-Landbridge project where 150,000 TEU is hoped to transit inside some years; using St. Petersburg as both a point of departure and arrival in the west[123]. The competitiveness of the railways is not strong in the container business despite a 10-15% price advantage compared to trucking in the St. Petersburg - Moscow relation. This is mainly because a container will return in seven days by train, but in only 2 - 3 by truck. The growth of the railway service in 2002 is still impressive, +123%, but without the above mentioned problems it would probably have been higher, as the 700 km to Moscow should give the railway a considerable competitive advantage (Kopytov 2002).

A relatively new development of the port is the large number of cruise ships that visit the port and that bring with them passengers of a considerable purchasing power. In 2001 alone, the port saw 221 visiting ships of this kind, bringing with them 163,000 visitors to the city. The biggest ship ever to have visited the port can be found in this group; the Millennium, with its 294 meters length and 32 meters breadth that brought 2400 with it passengers (Port Authority of St P. 2002:a).

Port Lomonosovo

Lomonosovo is located on the south-eastern shore of the Gulf of Finland, only some 40-km west of St. Petersburg, just inside the Kotlin barrier. The plans here are to enlarge a smaller existing port, partly by way of land reclamation east-ward from the present port area. The largest part of the new port will be primarily for containers, refrigerated cargoes and exports of metals, but also a RoRo terminal where a line to Mukran in Germany has been discussed. In 2000, the small existing port had a turnover in the range of 500,000 tons of primarily general cargoes and approximately a third of the turnover was timber. Depth has been dredged to 7 meters and considerable dredging will be needed for the port and an approach-canal to reach the planned 12 meter depth. In a first stage, the capacity of the port is hoped to reach a turnover of some 2 mty of which nearly 50% is planned to be containerised cargoes and 40% metals. As for the other alternatives, financing has proved to be the biggest problem. By mid January 2003, no official financing for the USD 230 million project, with an estimated construction time of 2-3 years, had been organised by the two companies that work in the port, Port Lomonosovo and

[122] Background to, and possible realism in, these assessments can be found in SAI (2002).

[123] The expression *"Trans Siberian Landbridge"* refers to the use of the Trans Siberian railway as a transport alternative to and from Japan/Korea and Europe. In its peak year, 1981, it handled 140,000 TEU, in 1997 22,000 (Morskie Porti 3:1998) and during 2002 48,000 (SeaNews 2003-01-22 www). To be compared to approximately 7.5 million TEU by sea in 2000-01.

Fregat (interview 2002). As understood, nothing has happened at the location for years, but this changed in late January 2003 when the Ministry of Transport presented its port development plans for the year. Unexpectedly, the launching of a new project in the port will receive support from the Ministry, with the goal of building a dry cargo terminal with a 6 mty capacity; no further details given (SeaNews 2003-01-27 www)

The Finnish oil company, Neste, has invested FIM 180 million near the port, to secure own storage facilities for the supply of oil products to filling stations in the Russian North West region area from late 1997. It proved a slow process to get the project started, but tank facilities, with a yearly capacity of 500,000 tons per year, could finally be built by Fortum (ex. Neste) St. Petersburg. By late 1999, the facility were fully functional, but with rail and road connections only. Due to the slow process of getting permission from the local authorities, the facilities needed to unload from ships are still waiting to be build (Kilpelainen interview 2002-11-20). In addition, Swedish Nynäs has long been discussing an investment in a Bitumen facility near the port, but the process is similar to the Fortum one (interview 2002).

Bukhta Batareynaya

Bukhta Batareinaya is located on the south-eastern shore of the Gulf of Finland, about 60 km west of St. Petersburg. Plans were presented in 1997 to build a smaller port for the handling of oil products, mainly from the Surgutneftgas refinery in Kirishi east of St. Petersburg. These products will be delivered in a, still-to-be-built, 150-km long pipeline. The site is in a small bay facing westward, but the shape of the landscape does not indicate deep waters in the bay, which is confirmed by a nautical chart over the area. This port is not planned to become as large as the others, and is a site that will probably need considerable dredging to reach the proposed depth of 12 - 14 meters. In the first version, the capacity of the port should reach a turnover of 6 - 8 mty. In late 2002, new plans were presented for a port of 10 mt for USD 200 millions that should be build in parallel to the extension of hydrocracking at the Kineft refinery in Kirishi[124]. Both projects should be operational by 2005 and do not include a pipeline for the time being (SeaNews 2002-12-10 www). A drawback for the Bukhta Batareinaya alternative is the fact that the chosen location is only some 6 km north of the nuclear power plant of Sosnovyj Bor. If connected by pipeline or having its oil transported by rail, the port is still planned to be laid in the vicinity of the nuclear power plant, which has been criticised by environmental circles. Due to the power plant, this is a special zone and an area of some 30 km around the site can only be visited by bearers of a special permit, which goes for Russians as well as foreigners[125].

[124] A city that is the biggest in the oblast, with an app. 60,000 pop. and built around an air-polluting refinery, that is the biggest taxpayer in the ablest (own visit, Russian Reg. Rep. 2002-12-10 www).

[125] Having been allowed into the area, by mistake, but not out, resulted in the only longer military interrogation experienced during all the fact finding done in Russia.

No construction work was started as was first intended. Little has happened on the site, and as the oil companies continue to export most of the production over Tallinn, that is continuously upgrading and extending its facilities, as does the port in St. Petersburg, it looks more and more unlikely that this project will take off in the foreseeable future.

Ust-Luga

Ust-Luga is located on the south-eastern shore of the Gulf of Finland about 120 km west of St. Petersburg and 220 km east of Tallinn. The plans were initially to build a new large port, primarily for the handling of general cargo, east of the mouth of the river Luga, near a smaller timber port and a fishing village[126]. Its location is in a larger bay facing north in the direction of the Gulf of Finland where the site has been chosen because of the deep waters in the bay, which should be 11.5 m according to the information issued, but also because the ice situation is much less problematic than in e.g. St. Petersburg. As for the other of the mentioned alternative ports, this judgement is not supported by nautical charts over the bay, where water depth near the coastline falls in the category "*less than 7 meters*". After full development, the intended capacity will reach over 30 mty. Basic construction work began as early as in 1992, but the building of a port at Ust-Luga has, right from the planning stage, been under fierce criticism from environmentalists. As for all the other alternatives, financing has also been the biggest problem in Ust-Luga. What was initially raised lasted only for some six months of construction and construction work has continued on a stop-go basis during many years since then[127].

A considerable state funded dredging effort has been undertaken for an approach-channel, including the installation of the necessary navigation equipment for the port currently allowing 20,000 dwt ships to enter. Dredging will continue in both the entrance channel and at certain terminals that are scheduled to have a 16 m depth alongside, and the port should be able to accept Panamax vessels, and after completion of the first terminals, a turnover of over 10 mty. Presently, construction work of an important first stage has been completed with 350 m of quayage for a coal terminal, with an intended 8 mty capacity. The inauguration took place in December 2001, at the same time as the crude oil terminal in Primorsk even though e.g. the rail connection was still to be completed. It has been the Rosterminalugol company that has been leading investor in later years. The next terminal to become operational, for which construction work started during 2001, is a 2.5 mty fertiliser terminal. In the southern part of the port, near the railway station, a general cargo and container terminal will be built, to be in operation within 2.5 to 3 years with a capacity of 500,000 TEU, in its first stage, and 1 million in a longer perspective.

[126] The first initiative to build a port in Ust-Luga was taken by the St. Petersburg financier and initial director of the project Ilya Baskin in 1991. Baskin has now lost his former influence in the project.

[127] E.g. a large share of the construction workers came instead to be involved in construction work aimed at extending the port in Muuga (Raudsalu interview 1998-10-31).

During 2002, it was also made public that a grain terminal will be built in the port with equipment that could be used for both loading and unloading. Even here, a company in the Severstal group has invested, but together with one of the companies that belongs to the Sea Port of St. Petersburg group, First Quantum, and discussions with major foreign investors are said to be under way (SeaNews, 2002-12-23)[128]. When the domestic line to Kaliningrad/Baltiysk will start sailing again, in late March 2003, after its winter break (having done just one single voyage!), it is scheduled to sail from Ust Luga and when three ferries have been put in operation, the line will also include Mukran. The port is currently being developed under the new company Commercial Sea Port of Ust-Luga JSC. The nearest competitor to the port looks to become the nearby small port of Peregruzochny Port, located just west of where the river Luga enters the Gulf of Luga. It is here that the Leningrad Oblast administration is considering an expansion of the current handling of pulp wood and some fertilisers, to handle 2.5 mty, and to include a number of different cargo categories. A project to have a construction time of 2 – 3 years, but for which financing remains unclear.

3.7. The Russian North

During the years since the disintegration of the FSU, transport and port issues in the Baltic countries and the Russian regions around St. Petersburg and Kaliningrad have been much more focused upon from the West. The Baltic countries for their unique situation as reborn states, St. Petersburg for its size as well as its cultural and industrial importance and Kaliningrad for its strategic location. The sparsely populated Russian North on the other hand has often been sidelined.

Therefore, a short description of the regional setting in which the two major ports in the region, in Murmansk and Arkhangelsk, operate in now presented. The reason for the inclusion of these ports in the analysis is that there are no other potential domestic competitors in the direction of western Europe on Russian territory. It is only in the Russian North that, at present, existing port structures can be found with a potential to have an influence on the development of the port sector in the Baltic Sea region.

3.7.1. Introduction

The two most important coastal oblasts in the Russian North West are Murmansk and Arkhangelsk. The population in Murmansk Oblast is 980,000 and 1.4 million live in Arkhangelsk Oblast, with 370,000 and 330,000 respectively in their two main cities with the same names. The surface of Murmansk is 145,000 km^2 and in Arkhangelsk 560,000 km^2 (Murmansk Oblast 2002 and Arkhangelsk Oblast 2002

[128] Severstal, the steel maker from Cherepovets, is the biggest company in the Russian North West and has invested in ports of the Far East (see 3.4.5), but also in the port of Tuapse at the Black Sea.

www). It has also been shown that the Russian North, at the beginning of the 1990's, had a population density that was 20% to 30% higher than other northern latitudes of the world, like Canada and Alaska, and northern transport was: "*far in excess of anything in the Scandinavian or American North*" (North 1996 p.3). There are good reasons to believe that the development of the regions of the north, during Soviet years, was neither economically nor environmentally sustainable. Under a market economic system, Russia has for a long time not been able to fully subsidise, and thereby maintain, its northern regions at the previous level (Transition, October 1997 p.18). For example Murmansk, the more prosperous of the two oblasts, saw its population fall in all of the ten biggest cities, in all a 14,000 drop, during 2001 while total population in the oblast has fallen by 20% during the last ten years. At the same time as deaths have exceeded births in combination with continuous negative migration (Murmansk Region in Figures 2002).

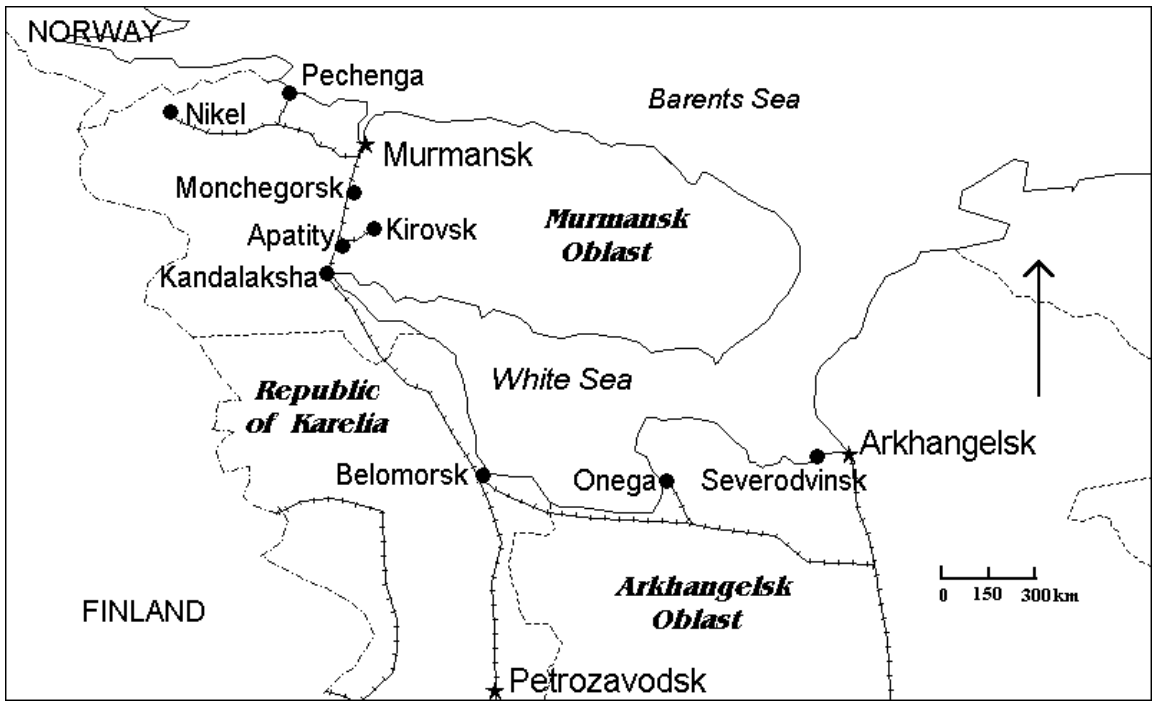

Figure 3.8. Larger Cities and railways in the Russian North[129]

Source: Compiled by the author from various sources

For the inhabitants of these oblasts and in the Far North, food and fuel are the two most essential supplies needed and both must be brought in from the south. Subsidies from the federal government used to be heavy in this field and so far, problems related to this have not been fully solved by market forces and therefore the state supported so called "Northern Delivery Program" is still in operation. For the most part, recipients in the Far North do not have the means to pay for seasonal

[129] The main St. Petersburg – Murmansk railway has been electrified, apart from approximately 450 km southwards from near the Karelia / Murmansk Oblast border (own observations).

deliveries, especially not in advance as they often have incomes based on raw-material extraction or processing. Suppliers in the south thereby take great risks in delivering goods due to non-, or delayed payments and transporting supplies in the northern areas, includes complicated transport logistics[130].

To support the energy intensive industry that has come to be located in Murmansk Oblast, the northernmost nuclear power plant in Russia can be found here. The plant in Poliarnye Zori, just south of Apatity, has now been in use since the middle of the 1970's. Apart from electricity from nuclear energy for industry and households, oil is the energy base for other uses, such as heating and transport, and is delivered to the region by railway[131]. The most important industries are the ones working mineral deposits in the Khibiny Mountains, centred in Kirovsk and Apatity, as well as the metallurgical centres in Monchegorsk and Nikel. The environmental side of this type of large-scale industrial production, of Russian type, especially on the Kola Peninsula and in Norilsk, should rightly be questioned[132]. The few larger urbanised areas often have one large mine, processing industry or metal smelter as the sole employer. These smelters and industries are heavy polluters, using processes that in their present standards result in levels of SO_2 emissions, as e.g. in Nikel and Monchegorsk, that have been registered to be 50 times the emissions registered for other northern towns like Kemi in Finland, and nearly 250 times the emissions from Kirkenes in Norway (Geological Survey 1999 www). The result is that the surrounding areas are left in a horrid state with often only dead vegetation in the wind direction, and the ground blackened from dust. Air pollution is far from being the only environmental problem in larger conglomerations in the area; other such pressing problems are solid waste management and wastewater treatment.

3.7.2. Major Barents ports and transport routes

The cargo volumes that pass the two major ports of the Russian North West, Arkhangelsk and Murmansk, are small compared to the volumes handled in the ports along the coast of the Baltic Sea. In 2001 this came to some 10 mt in the north, compared to approximately 150 mt in the FSU Baltic ports in (9 and 120mt in 1998 respectively). However, these northern ports are from time to time referred to as competitors with a considerable potential (Morskie Porti 1:1999 and Kasyanov 2003-01-10 www). The two major ports are mainly used for locally-generated transport needs, but could well be, and are in fact being, used for the transit of

130 A more detailed description of supply-problems in the north can be found in Granberg (1997).

131 Energy supplies for the winter remain a constant worry in all northern territories and for the winter of 2002 the Murmansk Oblast has only been able to source 50% of the oil it had last year - due to increased prices in the market (bizBarents 2002-11-22 www).

132 Norilsk Nikel is a large producer of nickel and copper, but its strategical importance is in the production of other rare metals. One example is palladium for which it was the only Russian producer in 1998, and supplied nearly 70% of world production (RFE 1999-03-04 www).

cargo to/from other parts of Russia. For this reason, they will continue to be of strategic importance, and there must be a federal interest in seeing that they are kept in acceptable working order, despite having relatively small turnovers. Three major domestic transport routes can be identified that lead to and from these ports, and the Russian part of the Barents region. These main routes are:

- The Northern Sea Route[133]
- The railway St. Petersburg - Petrozavodsk - Murmansk
- The railway Yaroslavl - Arkhangelsk[134]

On the Russian side, there is also the alternative of using the White Sea Canal. Freight volumes have been falling dramatically during the years of the 1990's and the negotiations concerning the possible international use of the canal (as well as all other Russian inland waterways) initiated by the EC are advancing very slowly (Sundström 2002-10-10)[135]. A continued low level of utilisation of this, and other canals can only result in further downgrading of Russian canals in general and the White Sea Canal in particular. Future use of the canals is just one example of often contradicting interests between western partners and domestic Russian interests. Cabotage shipping in Russia is also strictly regulated and has to date remained forbidden territory for foreign transport companies (ibid.).

Murmansk

Before the opening of the railway connection from St. Petersburg in 1916, the Murmansk region was of minor importance to Russia and stood instead under certain Norwegian and Finnish influence. The same year as the railway line opened, the town privileges were given, but as a result of the revolution and the years of civil war the region was never given a chance to enhance its importance. By the late 1920's when the large mineral deposits in the Khibiny Mountains were discovered, the town still held only 30,000 inhabitants. From this point, however, it started to grow in both size and importance. To many people in the West, the existence of a port in Murmansk is only known as a destination for the Allied convoys during WW II. These shipments commenced in 1941 and continued until the end of the war. By the end of the war, the town was nearly completely in ruins, which was not compensated for until the next big expansion that came in the 1960's and 1970's.

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133 For a description of the early development of the Northern Sea Route see Armstrong (1980).

134 Murmansk and Arkhangelsk Oblasts are also connected via a non-electrified railway south of the White Sea (see Figure 3.7).

135 The canal was built under extreme hardship by forced labour and was opened for traffic in 1933. It has not been very well maintained, albeit larger reconstruction works that were started in 1977 which involved the reconstruction of 14 of a total of 19 locks. The traffic on the White Sea Canal in 1988 was 7.5 mt, a volume that had fallen to 2.5 mt in 1992 and to 1 mt in 1998 (MTC 1993:a, p. 63 and Tärling 1999-05-10). One of the reasons behind falling volumes is that the locks in the canal, north of lake Onega, are only 70 meters in length and would need to be enlarged to make the canal more competitive. Such an enlargement would also promote the use of ports in the White Sea. The yearly five months' winter closure is another considerable drawback for the canal.

The port in Murmansk is primarily commercial, but in Severomorsk, just north of Murmansk, the Gulf of Kolskiy also houses large navy installations. Among them a navy base that services a considerable number of conventional navy vessels, some aircraft carriers, but also over 50 nuclear submarines, some half sunken (SPT 1998-01-30 www). These vessels have attracted a lot of media attention in the West. The commercial port in Murmansk is located about 25 nautical miles south of the Barents Sea, on the eastern shore of the Gulf of Kolskiy. The physical appearance of the gulf is more like a fjord, with 3 – 400 meter high hills along both sides. The Gulf of Kolskiy does not freeze, even in very severe winters. Instead, the relatively warm water in the gulf, in combination with the moving water due to the over two meters of tide, can give rise to long spells of dense fog during the winter-season[136].

It is not difficult to find a number of factors that are often brought forward in favour of the port in Murmansk as the best and most easily accessible in the northern region[137]. The most frequently mentioned such examples are:

- the only ice-free deep-water port in North Western Russia
- the port has direct and free access to maritime routes – primarily to the US
- has existing transport links with central Russia
- the relative proximity to other West-European ports

1989 long remained the year with the highest turnover ever recorded in the port, 8.8 mt. In the following years, turnover fell constantly until 1993 when 4.1 mt was recorded. In 1994 turnover recovered strongly, and reached 5.7 mt. Since then total turnover has showed a continued increase to reach 8 mt in 1998 and has been maintained between over 7 mty and up to 9 mt, which was recorded for 2002. Over the years since 1992, dry bulk has normally constituted around 70 - 80% (95% for 2002) of the turnover, with general cargo making up the rest.

Much of the handling in the port of Murmansk is of various minerals, a handling which has changed character of the last five years. Earlier all handling was done using cranes equipped with grabbers, while today most cranes stand idle on the quays at the same time as the port turnover has increased. One such example is the apatite export where the port has, with the help of US investors, built a new high-capacity loading terminal where a few efficient shiploaders, many times more efficient than cranes, now take care of the loading. Of the different minerals only the apatite, metal concentrate arriving from Norilsk along the NSR and coal can be said to be long-standing transit cargoes. The coal handling, however, has changed from inbound coal from Spetsbergen to outbound transit from Kemerovo (see also Table 3.9). Meanwhile, several other bulk cargoes handled in the port are

[136] To have stood on the quays of the port and see the gulf covered in dense fog at a temperature below -30 degrees is probably a rather unique experience for Murmansk.

[137] The main drawback for these ports is their location. Distance at sea from Murmansk to Rotterdam is approximately 3000 km (1600 nm) and from Arkhangelsk another 800 km must be added. From St. Petersburg to Rotterdam the distance is 2500 (1400 nm) and 2000 km when using the Kiel-canal.

newcomers like the exports of fertilisers and imports of alumina for mainly Siberian aluminium smelters (see Figure 3.6 for distances). The last two are pure transit cargoes in the oblast and could very well disappear as quickly as they appeared. However, the handling during 2002 reached a record volume of 9.3 mt tons, +2% from 2001. Export of coal remains the most important cargo with an unchanged volume of 5.7 mt while the apatite export is again increasing, by 8%, to 2.6 mt in 2002. Import handling increased from 130,000 tons in 2001 to 335,000 in 2002, of which 90% was alumina. Cabotage handling in the port fell during the year to 318,000 tons of which 55% were matte from Dudinka westbound from Norilsk to the same company's smelters such as in Nikel and Monchegorsk, with the remaining cabotage volume being was various supplies eastbound. The most important change in the port during 2002 was that the LUKoil company bought 22% of the shares in the dominating handling company at the beginning of the year, that later proved to include potential future plans for the port (see the end of the section)(bizBarents 2002-02-28 www).

In the gulf, that is ice-free around the year, depth is around 25 - 40 meters with a 13.5 meters as a maximum at the deepest quays, but for other quays the permitted draught is in the range of 8 - 12 meters, while the maximum allowed ship length has been set to 220 meter[138].

Arkhangelsk

The first economic expansion in the Arkhangelsk Oblast came with the opening of the port in the late 17th century and the second expansion phase of the area started in the 1860's with the opening of the railway from Moscow. By the turn of the 20th century, Arkhangelsk was one of the biggest cities in Russia and at the time saw a quickly expanding timber trade. At its height in 1920, the region held 400,000 inhabitants, but it was also now that the competition from Murmansk started to be felt. From then on, the port in Murmansk came to take over much of the quickly expanding cargo traffic. During the Soviet years, the region came to be much dependent upon military production, like the two big shipyards in Severodvinsk, and the satellite base in Plesetsk (app. 40 km W and 250 km SW of Arkhangelsk respectively). The second biggest town in the Oblast is Severodvinsk, built around its shipyards, and that specialised in e.g. nuclear submarines, but that has over the last ten years also been trying to diversify into offshore construction for the development of oil and gas in the Barents and Kara Sea. The mentioned concentration on military installations led to the fact that the whole Oblast used to be practically closed to foreigners during the Soviet years.

138 The southern part of the quays belongs to the Fishing Port that has lost most of its importance in the 1990's and turnover has fallen from over 1 mt to less than 100,000 tons in 1998, but the port has managed to recover somewhat, and came to handle approximately 250,000 tons in 2001.

The Arkhangelsk region is not very rich in minerals, apart from late findings of oil and gas plus very large findings of diamonds just some 100 km from the city, a finding dating back to the early 1980's, but still waiting to be explored[139]. It has its historical base rather in the forest industry and timber was shipped from the port long before the revolution. Arkhangelsk remains the only major port in the Oblast and the commercial port is located on the mouth of the Severnaya Dvina river. Today the port has come to be spread out over several different terminals along the shores of the river, as the port over its history has moved several times between different locations along the banks of the river (SSG 18-19:1980). The Ekonomia terminal is the deepest of the terminals with 9 meters, and is the only one that can accommodate the maximum allowed ship size in the port, 175 meters, which other terminals further up-river cannot. During the winter season in Arkhangelsk, that starts in late October and lasts until the beginning of May, icebreaker assistance is mostly needed and meter-thick ice, or more, is frequent.

As in Murmansk, 1989 was the year when the turnover in Arkhangelsk reached its highest level ever, 6.1 mt. In the following years, turnover fell constantly to decline to a low of just 650,000 tons in 1996. Since, developments have again started to look positive and in 2002 turnover has again passed the 3 mt mark. That turnover has increased by over 100% in one year is due to a comeback of oil in the port, that made up 50% of the turnover during the year. 60% of the oil was cabotage while other cabotage cargoes were down by 30% and timber export by 5%.

What makes the competitive situation problematic for Arkhangelsk, apart from its geographical location, is that the railway north of Yaroslavl has not been electrified which dramatically reduces its capacity. As a direct result of decreased handling in the port, and on the railway, it has become both easier and cheaper to find rail freight capacity on the line to Arkhangelsk.

Other Northern ports

The last region that will be mentioned is the Nenets Autonomous Okrug and the most important ports along the North coast, and the main tributaries of cargo shipped on, what is often referred to as "the Northern Sea Route", Noviy Port, Dudinka and Igarka[140].

The Nenets AO was administrated under the Arkhangelsk Oblast until September 1996, when it formed an administration of its own. Through a greater autonomy, the regional administration's intention was to gain better control over the revenues that future oil and gas developments in the northern parts of the Timan-Pechora

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[139] Recent valuations have set the content to 830 million carat and the Russian, diamond-monopoly Arosa is said to have invested USD 15 million in the field that is still far from production (*Barentsnet 2002-08-20 www)*

[140] In 1997 6.6 mt used the Northern Sea Route, falling to 1.5 mt in 1998 and still the same in 2002 (DVZ 2003-01-14). This development is comparable with the fall in turnover in Dudinka and Igarka.

region are hoped to generate[141]. Nenets AO is a poorly developed and sparsely inhabited region, with only some 40,000 inhabitants and with large parts situated in the permafrost zone. Here, as in all of northern Siberia, only the top layer of the ground melts during a short summer period, which makes living conditions, and the future of oil and gas exploration, very difficult. The region has no industrial base of its own and without Soviet strategic interest in keeping the northern coastline militarised and populated, it is doubtful that it would have held a five digit population before the large oil findings[142]. What makes the region interesting is that it boasts extensive oil and gas reserves that could be developed if a good investment climate existed and sufficient capital, domestic or foreign, could be found. A search and extraction operation for oil and gas was originally initiated, on a smaller scale, as well as in the 1960's and oil is being extracted, but volumes in 2002 are still restricted by the lack of export facilities (Gerloff and Zimm 1978). The number of confirmed oil- and gas fields in the region are about 200, often relatively small, but the combined reserves are expected to correspond to the Norwegian findings in the North Sea. To this could be added approximately 125 identified offshore fields in the Pechora Sea, off the coast of the Okrug[143].

The two most important of the ports along the northern Arctic coast east of Arkhangelsk, are Noviy Port, Dudinka and Igarka, located in the Gulf of Ob and 350 and 700 kilometres respectively upstream in the Yenisey river. Noviy Port is a developing oil terminal with restricted access due to both water depth and ice conditions. Dudinka serves as a port for the Norilsk Nickel metalurgical plant and has, despite very difficult winter conditions, year-round traffic in the range of 1 million tons. Igarka is the smaller of the two, handling mostly timber, with a turnover well below 500,000 tons[144].

Another port that can become important in the North West in the near future, is the proposed port in Pechenga. It is located some 50 km east of the Norwegian border, and Gazprom plans to use it as an important oil-reloading point, drawing on its location in a deep fjord. The intention is to use the port that has served as a marine base, as the transhipment base from smaller ice-strengthened tankers. These tankers can reach and load crude oil at terminals along the northern coastline, like Noviy

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141 A parallel development to what has happened in two other oil- respectively gas-rich regions, Khanty-Mansi and Yamalo-Nenets Autonomous Okrugs in the oil-rich Tyumen Oblast.

142 The Nenets Autonomous Okrug has an extremely low density of population, about 0.1 person per km2 (still above average for northern Siberia), and nearly half the population lives in the administrative centre Naryan Mar. Administratively, the two groups of islands, Novaya Zemlya and Franz Josefs Land, are included in the Okrug which contributes to its large size, 170,000 km2.

143 To give a brief estimation of the assets theoretically available just in Nenets, Rosbalt has set the value of the oil assets to USD 50 bn which would give a value per the 40,000 inhabitants in the okrug to about USD 120 million, from a hoped future production of 50 mty (Rosbalt 2003 WWW).

144 Due to the melting ice and snow in the southern reaches of the river, the quays of the ports in both are flooded every year during 6 - 8 weeks, beginning in late April. Detailed descriptions of smaller ports along the Russian arctic coastline can be found in Granberg (1997) and Isakov (1997:a). A general description of conditions in the Russian Arctic can be found in Armstrong (1978).

Port and reload at Pechenga to VLCC's that could approach this deep water port[145]. As for many other large-scale oil projects in the Russian north, these kinds of projects would probably need a stable, and high oil price over a long time to become viable. The first larger westward shipment of crude from the Arctic coast was undertaken in 1987, but has still to reach any larger volumes (Artikmorneftegasrazvedka 2002). The basic reason for this is that shipping costs alone for a smaller ice-strengthened tanker of 12,000 dwt came to roughly USD 60/ton (app. USD 6,5/barrel) for an EU sponsored experimental voyage, during winter conditions in 1998, from Murmansk to the Noviy Port oil terminal in the mouth of the river Ob (Ivanov interview 1999-06-18).

Since 1999, the extension of many new oil and gas fields in the region has been better established and it has more or less been concluded that the transport of as large volumes as are found here cannot be handled by pipelines in the direction of the Gulf of Finland only – like the BPS. Instead, Murmansk Shipping Company and Gazprom have build a shipping terminal that can be placed along the arctic coastline, from where oil should be shipped by ice-strengthened tankers in the 40 – 70,000 dwt category to reload somewhere in the western Kola, e.g. Pechenga, to larger ships (Komlev 2002, Volkov et. al. 2002). During 2002 Yukos has done a number of such shipments of crude to the US when reloading has been done in the Gulf of Kolskiy (Yukos 2002-11-10 www). With that background it was surprising that LUKoil put up for sale all its relatively newly-built ice strengthened tankers in late October 2002. Only weeks later, however, a joint press release by four of the largest oil companies, LUKoil, Yukos, Sibneft and TNK, made public that they were about to sign a memorandum of understanding to jointly build a pipeline from the Timan-Pechora region to a projected terminal in the Gulf of Kolskiy; 2,500 km if crossing the White Sea or 3,600 km if going around it. This undertaking is estimated to cost USD 3.4 to 4.5 bn, depending on the route (Published by all the involved companies, 2002-11-27 www). This project would give thousands of new jobs in the region and USD billions in tax revenues. Before this announcement, the most promising field for development was the giant Shtokmanovskoe gas-condensate field, located 650 km north-west of Murmansk at a sea depth of 320 meters, that is expected to contain 3.2 trillion cubic meters of gas and 30 mt of condensate. The infrastructures needed for development are gigantic, e.g. a pipeline from the field that will probably pass near Murmansk and continue in the direction of the Gulf of Finland – approximately 2,000 km when starting from the field. Investments become as huge with an expected development cost of the field of USD 7.5 bn, sea-pipeline and condensate terminal USD 3.6 bn and the onshore, 1m diameter pipeline to the St. Petersburg region, at USD 7.6 bn (Chernov 2002).

[145] A port that was Finnish from 1918 until 1940; then named Petsamo.

3.8. (Transit -) Trade in the Russian North West region in March 2001

Against the background of transport economics, the localisation of major raw material resources and the picture of the available port capacity in North Western Russia the flow of transit trade in the Russian North West gives a picture of the geopolitical and economic-geographical interrelationship demonstrated by foreign trade.

3.8.1. Introduction

The purpose here is not purely descriptive as it is also extended to incorporate attempts to demonstrate an appropriate methodology for the approach to the limited knowledge of geographical origins of transit trade. This issue, as far as is known, has been addressed only once previously in a similar study, and therefore, the research design has been developed in an explorative and innovative way. The work that most closely attempts to put together the diverse pictures of the three Baltic states as transit countries, is the study by Arkonsuo (2000). In the Arkonsuo study, data had been collected with the aim of demonstrating the importance of transit trade in relation to flows to/from the EU and the US. No oblast origins are exhibited, however.

The transit trade figures presented here is one out of five similar surveys that are presented in detail in Brodin (2002). Other areas than the Russian North West will be covered in the same way in sections after other aspects around each of the four countries/oblasts in question have been dealt with. In the case of the Russian North West, the State Customs Committee in St. Petersburg has made it possible to produce empirical material describing the export and import operations in the Russian North West that could be analysed[146]. Apart from the official statistics of the State Customs Committee for the month of March 2001, other official documents have also been used to support statements in the text.

By using statistics from the administration of the Russian North West region, it has been possible to retrieve trade data as collected by the Customs Committee of the Russian North West Federal District. The statistics used here include all foreign trade that has passed, or been registered for export at border points inside the North West region during the month under study. In all, there are 21 such custom points in the region generally located on, or near, foreign borders, but e.g. Syktyvkar, in the capital in the Republic of Komi, is one of several inland points in use[147]. What is presented here is the summed-up values for what has been registered at these border points. Administratively, the region also includes Kaliningrad Oblast, albeit the fact that this oblast, with its unique and interesting characteristics, has no

[146] North West: The City of St. Petersburg, Murmansk, Arkhangelsk, Leningrad, Pskov and Novgorod Oblasts, Karelia and Komi Republics and finally the Nenets Autonomous Okrug.

[147] For a full listing of the border points and their location, please see appendix.

natural geographic connection to the region. Therefore the Kaliningrad Oblast was focused upon in a separate study by Zverev and Brodin presented in Brodin (2002), but some trade data will also appear in this section.

All cargo included, a total volume of 11.4 million tons was declared at the custom authorities of the Russian North West during March 2001, with 9.9 mt being exports and 1.5 mt imports. In value, the difference between the two directions is smaller as goods to a value of USD 1.8 bn were exported and USD 1.2 bn were imported. To declare this trade it took a large number of transactions at the custom points, 54,000 for export transactions and 133,000 on the import side[148]. On average, the import transactions are much smaller in both value and volume, USD 8,800 and 11.2 tons, while the same figures for the average export transaction is USD 33,000 and 182 tons. These figures probably reflect the existence of a large number of import transactions conducted by private persons and others involved in small-scale retail business activities.

If the trade flows in this region are compared to the total for the country during the same month, imports in value correspond to 31% of the national figure and in volume to 59% of the national figure. These figures indicate a much lower than average import value per weight unit in the North West region than the national average. On the export side, the same figures are 21% of the total exports in value and 57% of total weight, indicating that the average export transaction in the North West is relatively low priced compared to the national average[149]. However, the month of March is generally, measured in volume, an above average month compared to the monthly turnover for other months during the first half of 2001. During March, both imports and exports in value are also above the national average, with none of the values mentioned showing a more than 4% deviation from comparable averages in terms of value and volume for 2001.

The methodology used when breaking down the foreign trade in the North West region into different categories of import and export cargoes in the following subsections has been based on the standard used in Brodin (2000) and Brodin (2002) for which a more detailed explanation can be found in section 5.3.5. A systematisation that, as a basis for the grouping together of items from the official trade statistics, focuses on how different items are handled in a port.

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148 Without being specific about which oblasts are most affected, in late 2001 the Central Bank of Russia made public estimations that during the first three quarters of the year, 23% of all imports were not being recorded in the national statistics www.cbr.ru/eng/dates_standart/ (2001-10-12).

149 National imports during March 2001 were USD 3.8 bn and exports USD 8.4 bn (St.Petersburg Customs Authority 2001). The volumes have been calculated as 1/12 of the 2001 imports of 31mt and exports of 240mt. Deviations in volume of foreign trade have been considerable in different sources, and difficult to find, with the highest being 660mt and the lowest 220mt. 271mt for 2001 was used by First Deputy Minister of Transport, V. V. Ruksha (Nezavisimaya Gazeta 2002-06-07).

3.8.2. Methodological aspects

The figures here are based on statistics collected at customs border points, which in turn are based on the origins given by the exporter in his written registration. In most cases, this gives a clear indication as to which oblast the cargo originates from. In some cases, however, it seems that the exporter, for some reason, reports the origin as being the border post. If the transaction in question is pulp wood exported by truck over the Viartsilskaya border station between Karelia and Finland, then it is highly likely that the timber in question has it origin in Karelia and the point of registration does not affect the accuracy of the statistics. A problem arises however, in the not uncommon case of oil that is transported from some other Russian oblast to St. Petersburg and registered at a customs station there, being registered as originating in St. Petersburg. It is evident that no oil has its origins in the City of St. Petersburg. In the case of a product like oil, but even for others like coal and ore, this lack of accuracy can be detected, but for other categories, such as General Cargo or Scrap, this is impossible. On the other hand, for all categories other than Oil, the origins given look more or less to be inside the range of what can be seen as reasonable for each category. However, the most important oblast for the North West region as far as the origin of outbound (i.e. export) cargoes is concerned is the city oblast of St. Petersburg.

As was briefly mentioned above, a large share of the outbound Oil and oil product volume from the North West has been given St. Petersburg as the somewhat disputable place of origin in the Custom Statistics. The volume declared in this way is more than a third of the volume within the oil category. This volume should probably have been spread over the other oblasts listed in Table 3.7. The probable reason behind the difference is that what has been registered as having its origin in St. Petersburg, instead of the genuine oblast of origin, are oil volumes that have been traded inside the country and for which the last owner has registered the export transaction. At the time of registration for export, the cargo quantity has either already arrived in the North West or is already being transported there, being somewhere in the pipeline system or in railway wagons when the export permission is granted. This example only refers to the Oil and oil product category, but is again repeated for the Pulp wood category. The same kind of procedure could of course take place inside all categories, to a smaller or larger extent, but has not been so clearly indicated in the basic data. However, the given point of registration does not automatically mean that the volume registered for export in St. Petersburg will be exported from the port, far from it. Of the oil and oil product volume registered for export in St. Petersburg, 65% leaves the region by train in the direction of Estonia.

In the following, a presentation of the different cargo categories will be made focusing on the most important oblasts for each category. The categories with the largest volumes come first and despite its importance, the General Cargo category will be presented last. The reason for this is that General Cargo has been extracted

as a residual category for all types of products that have not been included in other categories. This means that the figures presented as General Cargo are the total registered outbound volume minus what has been classified in other categories. The reason for this is that out of the thousands of cargo groups in which traded cargoes are officially classified, over 90% fall inside the General Cargo category, while the number of cargo groups that fall inside each of the other cargo categories used here is relatively limited.

3.8.3. The empirical results

When this breakdown of the foreign trade into categories has been done, a number of characteristics emerge. The largest number of transactions take place in the General Cargo category and these products also represent more than half the value, despite representing only 17% of the volume in tons. The category with the by far largest volume is Oil & oil products, with more or less the same importance in value, and handled with a relatively small number of transactions. Bulk, Coal and Ore are the three with the smallest number of transactions, representing a low value, while being several times more important in volume. Pulp wood stands out here as a category with a high number of transactions, with a lower value, but still generating a 15% share of the volume.

Table 3.5. Outbound cargoes from the Russian North West (March 2001)

Category	No. Trans.	% of Tran.	Value	% of Value	Volume	% of Volume
General Cargo	31 614	59	993 341	55	1 625	17
Metal	1 456	3	74 481	4	421	4
Pulp wood	16 488	31	75 037	4	1 459	15
Bulk	1 098	2	41 211	2	856	9
Coal	926	2	34 470	2	1 250	13
Ore & scrap	394	1	20 030	1	350	4
Oil & oil prod.	1 961	4	569 159	32	3 836	39
Total	53 938		1 805 552		9 837	

NB. Value in USD 1000 and Volume in 1000 tons

Source: Statistics derived from the data base of the St. Petersburg Customs Auth.

In general, five of the ten most important oblasts that appear on the list of oblasts using the North West region as transit area are not located in the region and use it as transit only (See Table 3.6).

Table 3.6. Main oblasts of origin for outbound cargoes (March 2001)[150]

No.	Region of origin*	Outbound	
		Volume in tons	% of total
1	St. Petersburg City	2 150 000	21,8
2	Kemerovo Obl.	1 219 000	12,4
3	Yaroslavl Obl.	705 000	7,2
4	Perm Obl.	688 000	7,0
5	Vologda Obl.	676 000	6,9
6	Karelia, Rep. of	560 000	5,7
7	Murmansk Obl.	340 000	3,4
8	Leningrad Obl.	319 000	3,2
9	Ryazan Obl.	298 000	3,0
10	Orenburg Obl.	294 000	3,0
11	Novgorod Obl.	276 000	2,8
12	Komi, Rep. of	256 000	2,6
13	Kaliningrad Obl.	238 000	2,4
14	Moskva City / Obl.**	204 000	2,1
15	Arkhangelsk Obl.	193 000	2,0
16	Samara Obl.	187 000	1,9
17	Bashkortostan, Rep. of	97 000	1,0
18	Kirov Obl.	90 000	0,9
19	Chelyabinsk Obl.	88 000	0,9
20	Nizhniy Novgorod Obl.	78 000	0,8
	Other obl. (45)	911 000	9,2
	Total	9 857 000	100,0

*= listing includes oblasts that generate 75,000 tons of outbound cargo
**= exact location has not been given

Source: Statistics derived from the data base of the St. Petersburg Customs Auth.

Some of these oblasts like Orenburg Oblast and especially Kemerovo Oblast have very long over land transport distances to reach the North West region, but producers in these oblasts still find it worthwhile, for one reason or the other, to let their cargo transit in the North West. The large number of oblasts that appear on the list is also worth noticing, in all 66, out of the existing 89, Russian oblasts export cargo over the North West region during just one month of 2001. The group outside the ten most important suppliers generates 28% of the total volume, while the 39 least important together generate less than half the cargo volume that originates from the City of St. Petersburg itself. To give a better picture of the most important regional origins shown in e.g. Table 3.6 here and for some of the other relations a few maps have been included in Appendix from Brodin (2002). These maps show the major oblast origins for different categories of transit cargoes in the North West.

[150] The most important fact from the table can also be seen as a map in the appendix

OIL is the by far most important of the cargo categories and its volumes transiting via the Russian North West and the most important origins for the outbound oil has been listed in Table 3.7. The City of St. Petersburg emerges as the most important origin, while the other oblasts in the table are all large-scale oil producers or have considerable refining capacity. The most important of the oblasts, Yaroslavl, is also the oblast that has the shortest transport distance to the Gulf of Finland, while Orenburg, Perm and Samara Oblasts are all at a distance of 1,700 – 2,000 kilometres from possible ports of export in the North West region. The average transaction in this category involves just less than 2,000 tons, with an average value of USD 148/ton.

Table 3.7. Outbound Oil via the Russian North West (March 2001)

No.	Oblasts of origin*	Outbound	
		Volume in tons	% of total
1	St. Petersburg City	1 324 000	34,5
2	Yaroslavl Obl.	690 000	18,0
3	Ryazan Obl.	288 000	7,5
4	Orenburg Obl.	287 000	7,5
5	Komi, Rep. of	200 000	5,2
6	Perm Obl.	190 000	5,0
7	Moskva City / Obl.**	154 000	4,0
8	Leningrad Obl.	145 000	3,8
9	Samara Obl.	132 000	3,4
10	Kaliningrad Obl.	74 000	1,9
11	Nizhniy Novgorod Obl.	52 000	1,4
	Other obl. (12)	299 000	7,8
	Total	3 835 000	100,0

*= listing includes oblasts with over 50,000 tons of outbound Oil & oil products
**= exact location has not been given

Source: Statistics derived from the data base of the St. Petersburg Customs Auth.

Pulp wood is the third largest of the categories as per volume, as is shown in Table 3.8. The same phenomenon that was observed for Oil & oil products can also be seen in this category. The most important oblast of origin is the City of St. Petersburg, which is as disputable as in the case of Oil and oil products. Here, 35% of the registered volume of Pulp wood leave the North West over the border point in Vyborg. As for the second most important oblast of origin, Karelia, the whole volume has its origin in the oblast with practically the full volume being exported over the border points of the oblast with Finland. The other exporting oblasts are all located relatively close to the North West, probably indicating that, normally, a product with a low value, such as Pulp wood cannot be transported over too long

distances. Having said this, it is still a fact that among the large number of oblasts outside the listing, in all 29 different, 12,000 tons come from Krasnoyarsk Kray and another 8,000 from Perm Oblast. Pulp wood is the second most widespread product as per origin with a total of 39 different oblasts acting as suppliers in this category. The Pulp wood category is also noteworthy for the fact that it is here that the second largest number of transactions has been registered. The most likely explanation for this could be the fact that much of the Pulp wood is transported by truck to Finland, a conclusion that is supported by the fact that the vast majority of the transactions are small and can be found at the border stations with Finland. The average transaction in this category involves only 91 tons, the second lowest after General Cargo, and is valued at USD 50/ton. An average transaction at the Vyborg border station with Finland is even lower than the average on both parameters and involves only 78 tons at a value of USD 33/ ton.

Table 3.8. Outbound Pulp wood from the Russian North West (March 2001)[151]

Oblasts of origin*	Outbound	
	Volume in tons	% of total
St. Petersburg City	433 000	29,7
Karelia, Rep. of	361 000	24,7
Leningrad Obl.	107 000	7,3
Vologda Obl.	97 000	6,6
Novgorod Obl.	92 000	6,3
Kostroma Obl.	51 000	3,5
Pskov Obl.	46 000	3,2
Kirov Obl.	41 000	2,8
Tver Obl.	36 000	2,5
Kaliningrad Obl.	16 000	1,1
Other obl. (29)	179 000	12,3
Total	1 459 000	100,0

*= listing includes oblasts with over 10,000 tons of outbound Pulp wood

Source: Statistics derived from the data base of the St. Petersburg Customs Auth.

Coal is a relatively large category of outbound cargoes in the North West region representing 13% of the total volume. As can be seen in Table 3.9, over 90% of the volume has its origin in one single oblast; Kemerovo Oblast, making it very dominant indeed of the only 12 oblasts that export coal during the month under study. The large volume from Kemerovo can be split up into four major export points; 42% leaving the North West region in Murmansk, 20% in Vyborg, 18% towards Latvia and 14% through the port of St. Petersburg. For the first three of these, the average transaction, as far as Kemerovian coal is involved, is also very

[151] The most important parts of the table can also be seen as a map in the appendix

large, nearly 5000 tons at a value of nearly USD 135,000 for each transaction – or USD 27/ton. Other transactions show a large variation in both size and value per ton.

Table 3.9. Outbound Coal from the Russian North West (March 2001)

Oblasts of origin*	Outbound	
	Volume in tons	% of total
Kemerovo Obl.	1 158 000	92,7
Komi, Rep. of	30 000	2,4
Chelyabinsk Obl.	25 000	2,0
Vologda Obl.	10 000	0,8
Other obl. (8)	26 000	2,1
Total	1 249 000	100,0

*= listing includes oblasts with over 10,000 tons of outbound Coal

Source: Statistics derived from the data base of the St. Petersburg Customs Auth.

Table 3.10. Outbound Bulk from the Russian North West (March 2001)

Oblasts of origin*	Outbound	
	Volume in tons	% of total
Perm Obl.	455 000	51,0
Murmansk Obl.	221 000	24,8
Novgorod Obl.	161 000	18,0
Leningrad Obl.	19 000	2,1
Other obl. (24)	36 000	4,0
Total	892 000	100,0

*= listing includes oblasts with over 10,000 tons of outbound Bulk products

Source: Statistics derived from the data base of the St. Petersburg Customs Auth.

Bulk is a category where only four oblasts supply 96% of the total. In general, a category like Bulk would include a large number of different products but is dominated by different types of fertilisers (see Table 3.10). The listed oblasts are also a shortlist of the most important of the big fertiliser-producing oblasts. Half of the volume has its origin in the distant Perm Oblast, while the other three oblasts are all located inside the North West. In the case of the export of Fertilisers from Murmansk, nearly the full volume is generated in the oblast itself and then exported via the port, while the other oblasts show a wider spread of border points, with the port in St. Petersburg and the border with Estonia as the most important ones. The

average transaction in this category is relatively large and involves over 800 tons with an average value of USD 42/ton[152].

Ore and Scrap is the smallest in volume of the categories included here, generating a total volume of below 10% of the oil volume (see Table 3.11). As the name given to the category indicates, it can be further divided. For Ore, Karelia and Murmansk are practically the only two oblasts of origin. Nearly the full Murmansk volume is shipped by train to Belarus while over 70% of the Karelian volume cross the Finnish border by train at the border stations in Karelia. Scrap has its origin in The City of St. Petersburg and in Kaliningrad, but even most of what has been registered as coming from other oblasts is also scrap. The average size of a transaction in the category Ore is the largest for all categories, over 4500 tons (400 for scrap) at an average value of USD 34/ton (80 for scarp).

Table 3.11. Outbound Ore / Scrap from Russian North West (March 2001)

Oblasts of origin*	Outbound	
	Volume in tons	% of total
Karelia, Rep.	178 000	50,9
St Petersburg City	103 000 **	29,4
Murmansk Obl.	36 000	10,3
Kaliningrad Obl.	21 000 **	6,0
Other obl. (11)	12 000	3,4
Total	350 000	100,0

* = listing includes oblasts with over 10,000 tons of outbound Ore / Scarp
** = the full volume is scrap

Source: Statistics derived from the data base of the St. Petersburg Customs Auth.

Metals is a category where the dominance of one of Russia's biggest producers, the Severstal company in Vologda, is one of the most important exporters in the North West. As can be seen in Table 3.12 for the category Metal, this dominance is clearly shown as Vologda Oblast is the origin of nearly 75% of the metal products. The other three oblasts included are all well-known production areas of metals in Russia, but located a long way from the North West region. Vologda's dominance should probably have been much larger than what can be observed here. In the following category, General Cargo; Vologda stands for a large share there too. No known production in the oblast, apart from the metal industry, is likely to be able to supply such a large volume of any "general-cargo-like" product. As unlimited access to the statistical base material has not been granted, it has not been possible to fully investigate this point, and therefore no firm statement can be made. The average transactions of metals are surprisingly small, with just under 300 tons at a

[152] Many transactions in this category are well below 10 tons.

value of USD 175/ton. In this category, as for Bulk above, there are a large number of smaller transactions that strongly influence the calculations of average transaction in value and volume.

Table 3.12. Outbound Metals from the Russian North West (March 2001)

Oblasts of origin*	Outbound	
	Volume in tons	% of total
Vologda Obl.	309 000	73,4
Chelyabinsk Obl.	50 000	11,9
Lipetsk Obl.	31 000	7,4
Perm Obl.	12 000	2,9
Other obl. (7)	19 000	4,5
Total	421 000	100,0

*= listing includes oblasts with over 10,000 tons of outbound Metals

Source: Statistics derived from the data base of the St. Petersburg Customs Auth.

General Cargo is the last of the categories in this presentation, being a residual category for all types of products that have not been included in the already presented categories. General Cargo is looked upon as the type of cargo that is handled individually in the port, on pallets, or transported as unit loads in the form of trailers or in some kind of container. As mentioned in the presentation of Metal products above, there is probably one or two cargo groups where outbound cargo from Vologda Oblast are unexpectedly being registered, but have some kind of correlation with metal products. As can be seen in Table 3.13, it is not very likely that Vologda Oblast would generate as much General Cargo as the City of St. Petersburg. In this category, the kind of products that are produced in a large city can be expected to dominate and therefore it is not unreasonable to find The City of St. Petersburg as the most important place of origin. The same can also be said for the Kaliningrad Oblast, but in this case it is unsure how the free-trade regime of the oblast influences the flow of cargo through the region, but also how the registration of the origin of these products is being conducted. After the three biggest oblasts of origin follow a large number of oblasts that are origins for considerable volumes of General Cargo, some of which, as for the likes of Bashkortostan and Tatarstan, are surprisingly important origins. As the full data base has not been made accessible, it has not been possible to follow up on this in as much detail as would have been preferred from a scientific point of view. The most likely explanation is that there are large volumes to be found in the export of e.g. wood in processed form, perhaps as special planks, which in this type of classification came to be looked upon as General Cargo. The reason for this is that bundles of planks are handled individually in the port and when shipped, and not in (semi-) bulk form as e.g. Pulp wood.

Table 3.13. Outbound General Cargo from Russian North West (March 2001)[153]

No.	Oblasts of origin*	Outbound	
		Volume in tons	% of total
1	St Petersburg City	265 000	16,3
2	Vologda Obl.	260 000	16,0
3	Kaliningrad Obl.	121 000	7,4
4	Bashkortostan, Rep.	76 000	4,7
5	Tatarstan, Rep.	66 000	4,1
6	Arkhangelsk Obl.	64 000	3,9
7	Sverdlovsk Obl.	64 000	3,9
8	Kemerovo Obl.	61 000	3,8
9	Saratov Obl.	60 000	3,7
10	Kirov Obl.	49 000	3,0
11	Leningrad Obl.	43 000	2,6
12	Murmansk Obl.	37 000	2,3
13	Krasnoyarsk Kray	35 000	2,2
14	Moscow City / Obl.**	33 000	2,0
15	Smolensk Obl.	24 000	1,5
16	Perm Obl.	23 000	1,4
17	Komi, Rep. of	22 000	1,4
18	Karelia Rep. of	21 000	1,3
19	Nizhniy Novgorod Obl.	21 000	1,3
	Other obl. (46)	280 000	17,2
	Total	1 625 000	100,0

*= listing includes oblasts generating > 20,000 tons of outbound General Cargo
**= exact location has not been given

Source: Statistics derived from the data base of the St. Petersburg Customs Auth.

It is in the General Cargo category that a majority of the customs transactions takes place, 31,614 during the month under study, or near 60% of the total, but still generating only 16% of the cargo volume. The average transaction involves just 51 tons, but the average value per ton is much higher than for other categories; USD 615.

3.8.4. The geography of inbound transit trade

If the focus is instead put on the side of inbound transit, there is a clear dominance by General Cargo (see Table 3.14). As regards volume, the import in categories other than General Cargo is in the range of just some trainloads. The most important of the other categories is Ore because of alumina imports for Siberian smelters.

[153] The most important parts of the table can also be found as map in appendix

Table 3.14. Inbound cargoes to the Russian North West (March 2001)

Category	No. Trans.	% of Tran.	Value	% of Value	Volume	% of Volume
General Cargo	131 097	99	1 159 501	99	1 384	92
Metal	573	0	4 758	0	9	1
Pulp Wood	207	0	546	0	12	1
Bulk	331	0	1 205	0	15	1
Coal	30	0	1 500	0	6	0
Ore & scrap	48	0	3 900	0	44	3
Oil & oil prod.	783	1	7 335	1	25	2
Total	133 069		1 178 743		1 495	

NB. Value in USD 1000 and Volume in 1000 tons

Source: Statistics derived from the data base of the St. Petersburg Customs Auth.

In the same way as a share of exports has been registered as originating at the custom station where it is exported much the same process occurs on the import side. As the total volume on the import side is relatively small, any wider coverage will only be given for the category, General Cargo, which stands for some 93% of the total volume of imported cargo. Out of the total, 660,000 tons, or 47%, have a destination inside the City of St. Petersburg (see Table 3.15). It should then also be observed that of the 179,000 tons imported through the three stations in Kaliningrad, 94% has a destination in the region. The third biggest oblast of destination for inbound cargoes is Moscow, which takes 160,000 tons, or nearly 11%, of the total import in the North West region. The three mentioned regions that take a large share of the inbound transit are in two cases the biggest consumer concentrations in Russia for imported General Cargo (that to a large extent can be assumed to a high percentage consist of consumer goods) and in all three cases they can be expected to serve as distribution centres for wider regions. As can be expected, practically all Russian oblasts are represented as destinations for General Cargo, but in numerous cases with volumes much smaller than one truckload. It is also in this category that the number of registered transactions is by far the largest for the import, 131,000 or 98.5% of the total. It is also to register the import of General cargo in this category that the largest number of different custom points has been used; no less than 20 out of the 21 available.

As for other categories of import, only two will be specifically mentioned, Ore and Oil, as these show a reasonable concentration as regards destinations, while this is well spread out in the other categories. There are three custom stations that are the registration point of nearly the full volume of the ore import, with Yekaterinburg taking 20,000 tons and nearby Nizhniyttagil another 20,000 of the 44,000 being imported, and the Murmansk Oblast receiving the remaining 4,000. Nearly half the volume of oil imports, 11,500 tons, has Krasnoyarsk Kray as its destination, with Bratsk in the Irkutsk Oblast taking another 9,000 out of the total of 25,000 being imported.

Table 3.15. Main destinations for inbound cargoes (March 2001)

No.	Region of destination*	Inbound	
		Volume in tons	% of total
1	St. Petersburg City	674 000	45,1
2	Kaliningrad Obl.	179 000	12,0
3	Moskva City/Obl.**	160 000	10,7
4	Murmansk Obl.	82 000	5,5
5	Krasnoyarsk Kray	56 000	3,7
6	Pskov Obl.	40 000	2,7
7	Volgograd Obl.	33 000	2,2
8	Nizhniy Novgorod Obl.	28 000	1,9
9	Kursk Obl.	24 000	1,6
10	Leningrad Obl.	20 000	1,3
	Other obl. (52)	200 000	13,4
	Total	1 496 000	100,0

*= listing includes oblasts receiving > 10,000 tons of inbound cargo
**= exact location has not been given

Source: Statistics derived from the data base of the St. Petersburg Customs Auth.

3.9. Kaliningrad

Kaliningrad Oblast is administratively one of the territorial units inside the Russian North West region. With its distinct characteristics as Russia's only exclave it will not only be described geographically, focusing on transport and ports, but a special survey has also been conducted to analyse the transit trade passing through Kaliningrad.

3.9.1. The geography of the Kaliningrad Oblast

The Kaliningrad Oblast is the Russian exclave in the southern Baltic Sea Region. Formed in 1946 and named after the former Russian President Kalinin, it is located in the northeastern part of former German East Prussia (Königsberg), but did not have its borders with, e.g. Poland, demarcated until 1958 (Poulsen-Hansen 2002). In its present exclave form, the oblast borders only Lithuania and Poland and has an all-sand beach coastline towards the Baltic Sea. The area of the oblast is 15,100 km^2, with a population at the beginning of 2002 of 940,000. 77% of the population is urban and the oblast has a population density of 63/km^2. The administrative centre of the oblast is the city of Kaliningrad with population of 420,000.

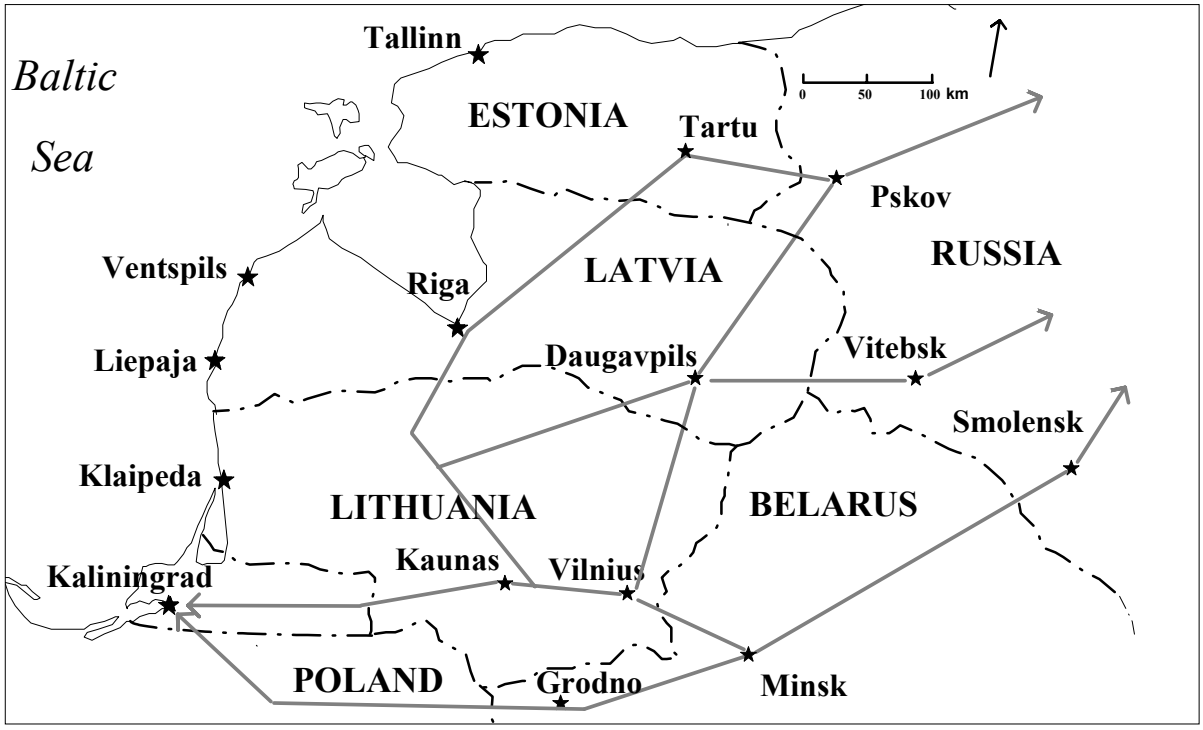
The main branches of industry in the oblast are fish processing, paper and pulp and mechanical engineering with local agriculture focused on meat and milk. Some petroleum is also extracted in the oblast. Sea transport, mainly transit, is of great importance to the oblast, with ports and port terminals in Kaliningrad, Svetly, Pionersk and increasingly in the naval base of Baltiysk. The oblast has had the status of Special Economic Zone "Yantar" since 1991, initially called Free Economic Zone, but this has only been much talked about and not very successful. Svetlogorsk and Zelenogradsk, in the north-west of the oblast, are famous seaside resorts of all-Russian importance attracting a lot of summer visitors from the Russian mainland.

Everywhere in Soviet society, the interests of the armed forces were often pivotal for the decisions about the location, construction and use of infrastructure. In few other areas were the effects of the strong barging power of the armed forces shown as clearly as in their influence within certain port cities. Kaliningrad, with its strategic position as the south-western-most corner of the Soviet Union, is a very good example of this. After WW II the Kaliningrad Oblast became a stronghold for the armed forces and an area where much of its activities in the Baltic Sea came to be concentrated. It was preliminary the navy that came to centre its activities to Kaliningrad. On the remains of what used to be a small Prussian naval-base, previously named Pillau and renamed Baltiysk, the Soviet navy from 1945 built what was to become the centre for the Soviet Baltic Fleet. The harbour at the base, located on the tip of a peninsula, was deepened to 11 meters and extended to house 20 - 50,000 sailors, many of them with families. During the years of troop-withdrawal from the countries in Eastern Europe in the early 1990´s, the Kaliningrad area, under shorter or longer periods of time, is said to have held well over 100,000 soldiers. As a result of the military dominance, the Oblast was forbidden territory for foreigners during Soviet years, and practically continued to be so until 1993 - 1994. At the same time the Oblast's present position, as the last remaining Russian fortress closest to the west and as en exclave, has strongly enhanced Kaliningrad's geopolitical position.

Kaliningrad's position as an exclave, that arose when the Soviet Union fell apart, has proved to be problematic from several points of view. This is because all passenger and goods movements by train or road between the Kaliningrad Oblast and mainland Russia must now cross foreign territory. As suggested in Figure 3.9 the routing either includes the crossing of the borders of e.g. Lithuania and Belarus, or other similar combinations.

It is not only from a transport point of view that Kaliningrad's position has proved problematic. It has also proved difficult to manage the Oblast politically, in relation to the central authorities in Moscow. Major local initiatives in the Kaliningrad area,

like the development of the "*Yantar*" special economic zone, have for years been counteracted by the central administration in Moscow[154].



(NB. Lines represent the most important railway lines in the Kaliningrad direction)

Figure 3.9. Possible transit routes between Kaliningrad and Russia

Since the break up of the Soviet Union, a number of different proposals have been discussed concerning the future of the Oblast. Anything from business as usual, the forming of the Yantar free-zone (to become the Hong-Kong of Europe), the forming of some kind of loosely connected federative part of Lithuania, being re-integrated with Germany (at least economically), the forming of an independent fourth Baltic State or an independent unit within the Russian Federation. It can be assumed that, again, it is the geopolitical considerations that will be given the upper hand over what could be considered to be the best strategy from a local Kaliningrad perspective.

3.9.2. The ports of Kaliningrad Oblast[155]

The more peaceful and trade-related port activities are concentrated in the Kaliningrad city centre where the main commercial port is located, at the mouth of the river Pregol and about 35 km off the high sea. Kaliningrad has a long, important

[154] One reason for this has been that fraudulent certificates have been issued in Kaliningrad on domestic goods qualifying them for duty-free status (Kushnirsky 1997). The name Yantar (Russian for amber) has been chosen because some 90% of the world's findings of amber come from the Kaliningrad Oblast with its centre of extraction near the settlement of Yantarniy.

[155] Only the major operators will be mentioned here, while a full listing can be found in Appendix.

tradition as a port under German rule, and at the outbreak of WW I, it was the second largest in the Baltic Sea, a position it achieved thanks to the export of Russian agricultural products (Hiden 1987). By the 1930's, conditions had changed completely, the port was still a transit port but now exports were slightly less than a third of imports that were traded in its hinterland.

The present history of the merchant port of Kaliningrad as regards its effective involvement in international trade starts as late as in May 1991, when the port was opened for international shipping. During Soviet years, the port had been closed to foreign ships, although the Soviet merchant fleet could call at the ports in Kaliningrad Oblast. The next major step in the commercialisation of the port was taken in March of 1994 when the state organisation, Port Authority of Kaliningrad (MAP), was founded with two branches in Baltiysk and Svetly with responsibility for e.g. the water area of the port and the Kaliningrad Maritime Canal (KMC) that has remained federal property. At present, the Port Authority of Kaliningrad controls more than 5 km of quayage in the Kaliningrad port, but these are currently being rented by the Sea Commercial Port of Kaliningrad and by the River Port. The ports in Kaliningrad are in use all year around and there is practically no ice formation in the oblast during winter. Mooring depth in the ports does not exceed 9 m and in the River port it is only 6 m. It is not only the depth at the quays that limits access to the port, also the canal limits the size of vessels.

As the main commercial port in the Kaliningrad Oblast is located in the capital city, the port has been connected with the Baltic Sea by the KMC which was first dug as early as 1901. The canal is 42 km long and for its first 4 km from the high sea it is 10 m deep and for the remaining 38 km, it is 9 m deep restricting it to ships with a maximum draught of 8 meters. For the first 15 km, the width of the canal is 80 m, while for the remaining part it is 50 m wide, limiting ship length to 170 meters with restrictions as for dead-weight to below 24,000 dwt. The reconstruction, i.e. widening and deepening, of the KMC was started as early as 1979, but the reconstruction of the KMC was only completed to about 35 % when it was stopped in 1986, due to the lack of necessary state funding. Since 2000, the Port Authority has spent some USD 8 million of the 32 that has been estimated as being necessary for further dredging, and on some sections of the canal, ships can now meet (Port Authority 2002 www).

Crude oil and oil-products, fertilisers, coal and coke together with metals are the dominating export products in the cargo turnover of the port, while fish-products dominate on the import side. Altogether, the handling of export cargoes in the port strongly exceeds that of import. Over the years 1998 – 2001, the share of exports has been nearly exactly 86% of total cargo turnover each year, but the sharp increase in oil exports in 2002 has increased this to 94% (see Table 3.16). The dependence of the port on the turnover of the five mentioned products is also strong as these together have had a share of between 70 – 80% of turnover over the years 1998 - 2001.

Table 3.16. Handling in the ports of Kaliningrad, 1998 - 2002 (1000 tons)

	1998	1999	2000	2001	2002*
Export	**3832**	**3578**	**3703**	**5075**	**9420**
Oil products	854	882	950	1874	4900
Chemical fertilizers	1016	833	895	1064	..
Coal, coke	868	925	847	796	550
Metal & metal pipes	66	40	109	532	1600
Scrap metal	311	441	372	179	..
Grain	228	86	172	146	200
Timber	55	75	76	69	..
Pulp, paper	77	58	65	52	..
RoRo	24	6	0	5	..
Ore	3	17	-	-	..
Others	330	215	217	358	2070
Import	**626**	**562**	**683**	**725**	**570**
Fish products	206	290	308	250	.
Refrigerated cargoes	33	36	27	78	..
Grain	58	71	91	46	..
Sugar in sacks	40	16	4	24	..
Ro-Ro	64	15	0	4	..
Other	225	134	253	323	570

*= Preliminary figures from different sources. ".." in the column only indicates that no detailed information was available as of end of March 2003.

Source: Department of Transport Development; Kaliningrad Oblast Administration

The description of the activities in the Kaliningrad ports would not be complete without the regular shipping lines being mentioned. Linear and RoRo handling in Kaliningrad has also developed during recent years, as is the case with other ports on the eastern fringe of the Baltic Sea. The importance of these lines is not so much to enhance cargo volumes, as to provide frequent connections for the flow of more valuable types of cargoes.

Table 3.17. Regular shipping line connecting Kaliningrad in early 2003

Route of Shipping Line	Type	Regularity
Kaliningrad - Kiel	Container	Once weekly
Kaliningrad - Gdynia - Bremerhaven - Antwerp	Container	Once weekly
Kaliningrad - Rotterdam - Antwerp - Felixstowe	Container	1 / nine days
Kaliningrad - Aarhus	RoRo	Twice weekly
Kaliningrad - Lübeck	RoRo	1/ five days
Kaliningrad - US ports - Canadian ports	RoRo	Twice monthly
Kaliningrad - (Mukran / Kiel) - St. Petersburg*	RoRo	Once weekly

*= the ferry made only one voyage before being cancelled for six months – Mukran and/or Kiel will be called at when there are three ferries in service.

Source: Port Authority of Kaliningrad, 2003-01-02 www

3.9.3. Ownership in the port

The ownership in the port sector of Kaliningrad has also gone through some major changes since the early 1990's, from previous state ownership to its present state with private ownership dominating, but with a certain amount of state involvement.

In the early 1990s, a labour co-operative of workers in the Sea Commercial Port of Kaliningrad was given the right to rent the port on the condition that the state retained the right of redemption. Later, the workers were given a majority of shares in the company, and a limited partnership was established. In this way, the Sea Commercial Port of Kaliningrad became a unique port in Russia, as the state has fully privatised the port and does not own any shares. Later, however, most of the shares in the company were sold by the workers to other private companies and persons. In the beginning of 1998, a closed company, "Sea Commercial Port of Kaliningrad", controlling 100 % of the shares was established. It is this stevedoring company which owns the existing loading equipment, warehouses, all port infrastructure and that rents existing berths for 20 years. Currently there are two other private handling companies that sub-rent terminals inside the area of the Commercial Port; the closed company, Terminal GMB, and the public company, Port Elevator.

Table 3.18. Cargo handling in Kaliningrad Oblast ports (1000 tons)

Port Sector	2000	2001	2002*	2002/2001 %
Sea Commercial Port of Kaliningrad	2 294	2 719	3 600	32
Sea Fishery Port of Kaliningrad	809	787	650	-17
River Port of Kaliningrad	160	205	250	22
Port Elevator	172	146	210	44
Port's Petroleum Storage Depot	456	445	1 400	210
Baltic Oil Transshipment Company	488	358	500	40
LUKoil-Kaliningradmorneft	-	947	2 800	195
Pionersk	-	25	n.a.	-
Svetlyy Industrial Company	-	43	n.a.	-
GRES-2 Electric Power Station	6	124	n.a.	-
Total	4 385	5 800	9 900	71

*=figures remain preliminary and unknown for the lower three; app. 9.4 mt included

Source: Department of Transport Development; Kaliningrad Oblast Administration
For 2002 also SeaNews and others

During the same period, the River Port of Kaliningrad was also privatised, although the state remained an important owner in the new closed company, controlling 25% of the shares. However, in late June 2002, a Kaliningrad company, Gamma, together with the Moscow River Steamship Line bought 100% of the shares of the Kaliningrad river port (Kaliningrad Oblast Administration 2002). Only the River Port Company handles cargo in the area of the River Port. Both the River Port and the Commercial Port have been under the jurisdiction of the Port Authority of Kaliningrad since this authority, a state structure subordinate to the Russian Ministry of Transport, was formed in 1994. The other big port in the oblast, The Sea Fishery Port of Kaliningrad, has remained a state enterprise under the State Committee of Fishery (i.e. Ministry of Agriculture) and, as such, it has its own Port Authority. It is during the last three years that the other port companies in Table 3.18 have been established which has led to a sharp increase in handling.

3.9.4. Possible explanations of Kaliningrad's low transit turnover

There are several different factors that together can perhaps explain the previous relatively limited use of the port in Kaliningrad. The exact impact of each of the following four factors is difficult to estimate and one factor is probably more important for a certain type of cargo than other factors. It is also likely that the impact fluctuates to a certain degree over the years, but also during the months of any given year. Four of the more important of such explanatory factors deserve to be mentioned.

For a long time, the tariff policy of the Lithuanian railway has been looked upon as being discriminative for shipments to and from the Kaliningrad Oblast. This is because the transit tariffs established by the Lithuanian Railway for Kaliningrad transit was, up until November 2001, almost twice as high as for the same transit in the direction of the port in Klaipeda.

As far as its geographical location is concerned, Kaliningrad is probably less favourable for shippers in mainland Russia than its competitors in St. Petersburg and the Baltic states. This is because transport distances to Kaliningrad are longer for Russian cargo consignors and consignees. Moreover, Kaliningrad is isolated from the rest of the Russian territory by two state borders that create additional difficulties for cargo movements.

In addition to this, the level of technical development and the equipment of ports in Kaliningrad Oblast is poor. This is because, as mentioned previously, up until 1991 the Kaliningrad port could not be used by foreign vessels and thus it had developed with certain limitations. During a period when the Soviet state invested in its ports along the Baltic fringe, such investments were not directed towards Kaliningrad. Consequently, other ports have been developed more intensively and came to be better positioned for future development into commercial ports when the FSU fell apart. The certain kind of specialisation as regards commercial cargoes that can be seen in other ports during later Soviet years, cannot be seen in Kaliningrad. The port in Klaipeda, for instance, was designed for the trans-shipment of oil and metal and later a train ferry, Klaipeda – Mukran, in Germany, was added; Ventspils was made into the largest Soviet oil-export port on the Baltic Sea as well as for the export of bulked fertiliser; Riga port was given an important position in container transfer and the handling of coal; the new Muuga port in Tallinn was constructed for the trans-shipment of grain and general cargo. As a result of being left out of this development, the port sector in Kaliningrad, at the time of collapse of the Soviet Union, was less well-equipped for commercial handling compared to its contemporary competitors and yearly turnover has therefore remained low (see Table 4.2 for turnover in all Baltic FSU ports).

Last but not least, it must be mentioned that the exclave location of Kaliningrad Oblast gives rise to a difficult custom-supervision procedure. This is because the contemporary Russian tariff legislation has not been adapted to take into account the exclave location of Kaliningrad Oblast. For most of the post-Soviet years, Kaliningrad has had similar but stricter regulations to obey than other ports. Export cargo shipped from mainland Russia through the Kaliningrad port, for instance, has to change its custom regime when passing the border of Belarus (common tariff zone) from an «export» to a «transit» status. This procedure, of course, requires the filling in of additional forms, i.e. extra time and money. Moreover, «transit» regime makes inspection more rigid as well as creating other restrictions for cargo owners. Exporters who use Kaliningrad Oblast as a transit point cannot get a confirmation of cargo export until the cargo has been shipped out of the Russian tariff zone. This is

regardless of the fact that the export regime was closed when the cargo crossed the Belarus - Lithuanian border. This circumstance substantially extends the time of VAT-privilege return for freight exporters. There are no such problems with Russian export cargo shipments through other Russian and foreign ports.

In addition to this, the Kaliningrad Oblast itself operates a long, formal and difficult procedure for custom control towards export and import shipments which leads to the fact that cargoes owners prefer to use other routes. The complete custom examination of containers and other import cargoes causes losses in time and additional expenses. This is notwithstanding the fact that, in most cases, import cargo in the port will not be registered for a «free sale» regime. Instead, it will be transferred to a final consignee where the cargo will face a complete customs examination and customs clearance. Only since 2001 has the situation that is still far from ideal, started to improve[156]. The above is just a short list of some of the problems and the results have all the time been the same – many clients prefer to use ports in the Baltic states and St. Petersburg instead of Kaliningrad.

On the positive side, however, it should be mentioned that in the port sector the forwarding department of the Sea Commercial Port of Kaliningrad has been made, through a direct agreement with the Ministry of Railways, into one of only two ports in Russia with the right to offer a special railway rate, allowing them to offer lower rail freight rates for the users of the port[157]. However, in spite of the problems mentioned above, Kaliningrad Oblast ports also hold some indubitable advantages. First of all the sailing distance to any port in Western Europe is shorter from Kaliningrad than from ports in the Baltic states and Russian Baltic ports.

In recent years, less than one third of the theoretical working capacity of the ports of nearly 18 mty has been used. Low cargo turnover does not only restrict investments and technical development in the port, it also severely affects the tax inflow to the oblast budget of which the port sector is one of the major contributors. In the beginning of the 1990s, Kaliningrad ports' cargo turnover started to fall but by the mid-1990s things began to change for the better at the same time as the port became a part of the preferential policy of the Government and the Ministry of Communications. By 1997, a maximum of 6.2 million tons was reached. However, the economic crisis in August 1998 caused a sharp fall in cargo turnover, which meant that only 4.1 million tons were handled in 1999. During 2000 and 2001, shipment volumes have started to increase again, and even more so during 2002 when a phenomenal increase in turnover was registered, +71%. The turnover for the full year came in at 9,9 mt (Port Administration of Kaliningrad 2003 www). A figure that would puts the cargo turnover in the port at more than twice the volume of a year as recent as 1998.

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156 A more relaxed custom procedure for the registration of transit cargo through Kaliningrad has been in operation since July 2001 only.

157 The only other port with such rights is the port in Vostochny (1520mm 2001 www)

As has been shown earlier, the ports in Kaliningrad Oblast have for many years served as one of many important transit points for the export and import of cargo from/to all countries of the FSU. The majority of this transit passes through the port, but a minor share also transits the oblast over land borders, and a detailed presentation of this will be given in 3.10.4.

3.9.5. Modernisation projects in the port

At present, ports in Kaliningrad substantially lag behind e.g. ports in St. Petersburg as regards investments, when it comes to the traditional operators. In this respect, capital investments by only the JSC Sea Port of Petersburg company accounted to 700 million rubels in 2000 alone, while total investments during 1997 - 2000 for the three major ports in Kaliningrad accounted to just 149 million rubles (Port Authority of Kaliningrad 2001).

A genuine understanding of this by leading political circles has led to the initiation of active work from the side of the Administration of Kaliningrad Oblast that took office in 2000, and as a result Kaliningrad Oblast has become a subject of Russian Federal interest and has received more attention and support. Improvements in the oblast's transport infrastructure, the ports in particular, are being considered by the appropriate federal authorities with the aim of lifting the infrastructure status to an international level. The new infrastructure improvement plan for the transport system in Kaliningrad Oblast, including no less than 55 measures, has been agreed upon. In mid July 2001, the first results of the mentioned measures were examined at a session of the Board of the Ministry of Transport with participation from the Kaliningrad Oblast Administration. The measures considered were also consolidated by an agreement between the Ministry of Transport and the Kaliningrad Oblast Administration at the end of September the same year[158].

In November 2001, the Federal target program for Kaliningrad Oblast development until 2010 was passed and included a number of projects concerning ports in the Kaliningrad Oblast (see Table 3.19). The most expensive, and perhaps most important of these is the construction of a deep-water port at what is today the home of the Russian navy's Baltic Fleet and its facility at Baltiysk, where a conversion that has been long discussed will take place. This conversion, however, will take 15 years to compete (DVZ 2002-12-12). Things sometimes change quickly, though, and on 2003-03-05, a decision by the State Marine Fleet Services Board, under the chairmanship of the Senior Vice-Minister of Transport, Ruksha, made public that a part of both land areas and quage of the navy base at Baltiysk will be placed under the jurisdiction of the Port Authority for 15 years (SeaNews 2003-03-05 www). The new and much talked about ferry connection with St. Petersburg came into operation on December 27 2002, using basin number 3 at Baltiysk. This came

[158] Most details were made public in May of 2001 (Mintrans 2001). Some of the discussed projects have been listed in appendix.

about after much discussion in the government during the year and this ferry between St Petersburg/Ust-Luga – Baltiysk – and Mukran and/or Kiel in Germany has been given the status of National Gurantee by the Program of Russia and EBRD Co-operation for 2002 - 2004[159].

Table 3.19. Projects in the federal target program for Kaliningrad until 2010

Project & location	Years	RUR mil.	Expected results
Cargo-passenger sea line Ust Luga– Baltiysk– Germany	2002 - 2006	1,400	100,000 pass., 25,000 tons of cargo 2,000 cars, 2,000 trucks/ year
Reconstruction of container terminal at the Com. port	2003 - 2006	255	70,000 TEU, 20,000 trailers, 200,000 tons of general cargo per year
Construction of a commercial deep-water port at Baltiysk	2003 - 2009	5,200	2 million tons of cargo per year
Dredging on the south canal of the Neman River	2003	6*	Providing domestic ships with a passage Sovetsk - Kaliningrad

*= The figure RUR 6 million for dredging is the one given in the original document – although it looks completely unrealistic

Source: Department of Transport Development; Kaliningrad Oblast Administration.

If Kaliningrad is to maintain a positive development as a transit port in the future, serving both Russia and other neighbouring countries, a number of factors must, or at least should, be attended to. Some of these factors will be examined below. It is not probable that all of these initiatives will work out for the best, but some of them probably have to, if a positive future development in the port sector is to be maintained.

The limited territory available to the Kaliningrad ports is one of the fundamental factors that restrict the possibility of increasing the volume of cargo. From time-to-time, cargoes have been refused for this very reason. This is mainly due to the fact that the total area of the two major operators in the port, the Commercial Port and the Fishing Port, is limited to 116 hectare and 114 hectare respectively. This can be compared with the area of the port in Klaipeda, which is 415 hectare.

Another restricting factor for the port as regards increased turnover is the ageing handling equipment in the port. In 2001, the average age of cranes, both in the Commercial and Fishing ports, was 23 years, and in the River port, 21 years. There is only one high capacity crane in the Commercial Port, a Condor, with a lifting

[159] The estimations about the cargo turnover for this connection look unrealistically positive - about 6 mty (St. Petersburg Stroy 2001 www). A delegation from Kaliningrad visited Kiel on March 20 to discuss the new ferry line with the port authorities (Sea News 2002-03-21 www).

capacity of 40 tons. The capacities of the cranes are generally around 10 tons and in the River port, only 5-7 tons. This could be compared with the port in Klaipeda where there are eight 40 tons Condor-type cranes and two container cranes in operation. To be able to increase the lifting capacity of the cranes, the berths in the River Port, as in the other Kaliningrad ports, need to be fundamentally reconstructed, not only for functional reasons, but also to be able to carry larger cranes with higher lifting capacity[160].

Outside the area of the port, the port railway station in Kaliningrad has inadequate handling capacity for increased cargo volumes. Its reconstruction, which was planned as early as in 1970's, has still to be realised. Local estimates have shown that if the three major ports, the Commercial port, the Fishing port and the River port, were to handle over 7 million tons, the near-port shunting zone of the railways would not be able to cope with the number of wagons that this would generate, thus hampering the work of the ports[161]. Even today, the entrance to the port for vehicles is very busy and cannot cope with the traffic flow at peak-hours. There are currently five railway crossings on the main street of the port, (Portovaya Street), and motor traffic can sometimes become paralysed in the port area.

In an attempt to co-ordinate the activities of the two neighbouring ports of Klaipeda and Kaliningrad, the international project "2K" (Klaipeda + Kaliningrad) was started in May 2001. The main aim of the activities of the 2K project is to co-operate and share the available freight base. This would mean that the traditional handling companies in the ports of Kaliningrad Oblast would be approaching the levels of 1993, i.e. 8mt (RZD-Partner 2001:2). In this context the co-operation with Belarus, which borders both countries, becomes of especially important[162].

3.9.6. Developments of future cargo flows

In the future, it is important that Kaliningrad becomes a natural and integral part of the Russian Government's Infrastructure Program for 2001 - 2010, a program that intends to provide for a systematic development of Russian transport corridors. The final goal is full integration into the united Europe - Asian transport networks and to use the advantages of geographic location. One example is the development of national communications in the East - West and North – South directions, which includes the use of the Transsib (Trans Siberian Railway). This is not only a Russian affair as it is also a question of the maintenance of the EU and the Asian - Pacific regions transit flows, their future and their development. The most important

[160] One 50 ton capacity crane, to be in use in 2004, was ordered in mid Jan. 2003 (DVZ 2003-01-29)

[161] By mid January 2003 there were about 3,700 rail wagons waiting on the approaches to the port due to the increase in handling in combination with cold weather (SeaNews 2003-01-15 www).

[162] The intentions of the 2K project have been far from fulfilled and this has been recognised by both the Lithuanian and Russian side. At a common conference 2002-06-01, numerous calls for intergovernmental actions were made from both ports and other parties involved. Again, much of the discussion, from both sides, focused on rail tariffs.

question in relation to the Kaliningrad Oblast is that of the transit to and from the Asian - Pacific region by the route EU –> Kaliningrad by rail -> European Russia and Transsib –> Russian Pacific Coast and its ports -> ports of Japan or Korea (or reverse). At present the Transsib's share of the total annual volume of European containerised shipments to and from the Asian - Pacific countries is less than 1% (Mikhailov 2000). Even without modernisation, the Transsib is able to carry up to 150,000 TEU annually, and up to 300,000 in the future. In comparison with sea routes, it is hoped that cargo transport by the Transsib will reach its destination 15-20 days quicker, and that the cost per TEU shipped would be around 30% lower (Frank 2000)[163].

Another transit route that could be envisaged is a part of the flow of cargo to and from the Indian Ocean basin. At present, only some 100 TEU per month from Iran to central Russia or Western Europe are shipped by sea through Russia. Current shipments are done through the territory of Turkey, and then on by the Samsun - Novorossiysk ferry and then by truck to Moscow or destinations in Europe. Estimates indicate that cargoes originating in Iran, but intended for export to Russia and other European countries, could make use of the route through Kaliningrad.

During intergovernmental meetings between Russia and India it was proposed to work out alternative Indian cargo transit options for, in particular, tea from India and Sri Lanka bound for Western Europe. This cargo route would include Bombay –> Bandar-e'Abbās (Iran) then overland transport -> Anzalī port (Iran) over the Caspian Sea –> the Olya port (Russia) then overland –> Kaliningrad ports[164]**.** There are some other options that could mean additional transit volumes for the Kaliningrad Oblast. The development of the Iranian Anzalī port on the Caspian Sea is also of interest to Malaysian and Singaporean investors, as other cargoes could also be shipped along the route. Forecasts for this route, on the condition that a complete technical modernisation of the Caspian transport sector is carried out, are that the volume of shipment through this «North-South» corridor could reach 8 million tons by 2010 (Lugovcov 2000). In September 2000, Russia, India and Iran signed an agreement about the development of this transport corridor. This route would allow containers to be shipped in 20 days, which would be 25 days quicker than the traditional route through the Suez Canal. After its full development, the corridor is estimated to be able to yield up to USD 3 bn of additional incomes to the Russian budget annually (Ekspert 2001-09-23 www)[165].

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[163] It is hoped that transit times on the Trans Siberian Railway could come down to two weeks for a container from Pusan in South Korea to Europe, to be compared to 35 – 40 days by sea via the Suez Canal. The cost by railway should also be about USD 200 less.

[164] The Olya port is located approximately 80 km south-west of Astrakhan, near the border of the Astrakhan Oblast and Kalmykia. It is a small port with a turnover of about 200,000 tons per year, but in accordance with the Federal program "Modernization of transport system of Russia" a new port will be constructed here to service the "North –South corridor" (Volga-Vaster 2001 www).

[165] May 21 in St. Petersburg, the Ministers of Transport Frank, Goel from Indian and Khorram from Iranian signed an agreement for the joint development of this route(RFE 2002-05-23 www).

A similar alternative is the transit by train from China, via the route China –> Kazakhstan –> Russia –> Western Europe; the so-called Northern corridor of the Trans-Asian Railway (TAR)[166]. Shipments by sea from the Chinese port of Lianyungang, in eastern China take 20 - 30 days, while only 11 days if shipped via the Northern Corridor (Razumov 2002-10-10 www; Unescap 2002-07-13 www) [167].

Even now, before the realisation of the above-mentioned projects that could be fully operational within 2-3 years, it would be quite possible to increase the volume of export and import transhipment through Kaliningrad by some 2.5 million tons. That is if an advantageous rail transport coefficient could be achieved. This could come to include some 600,000 tons of fertilisers (bulk, liquid and packed in bags) some additional 400,000 tons of non-ferrous metal, no less than 800,000 tons of coal and up to 700,000 tons of other kinds of cargo (oil products, fish products, containers, grain etc.). To a large extent, these volume increases would be at the expense of a major re-orientation from other Baltic state ports. The Ministry of Transport is also examining the question of exporting non-ferrous metals only through Russian ports in the Baltic Sea.

This issue is always towards the top of the agenda at high-level meetings between the Kaliningrad Oblast and Belarusian authorities. According to a 1999 agreement concerning a long-term co-operation between Kaliningrad Oblast and the Belarus Republic, Ministries and state authorities of the two countries agreed to co-ordinate their transport policies in the direction of Kaliningrad. This agreement could also result, not only in a joint construction of new port facilities in the Kaliningrad Oblast on leased territory, but also the establishment of a Belarus Shipping Company in Kaliningrad.

In 1999, a commercial contract for the delivery of chemical fertilisers through Kaliningrad port was signed between the Belarus JSC Azot (a producer of nitric fertilisers in Grodno) and Russian, JSC Gazoil, to develop a terminal in Kaliningrad which could be used for some of the 2,5 – 4 mt that currently transit in the Baltic states[168]. In the opinion of the Belarus side, Kaliningrad may become an important oblast for companies based in Belarus according to the Ministry of Industry, but little has happened with the projects agreed on. Other large non-fertiliser producers from Belarus that are exporting through the Kaliningrad Oblast are, e.g., the Minsk Automobile Works – MAZ and Belarus Machine Works - BMZ. In order to develop

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166 In 1999, 22,500 TEU was transported by the Trans-Siberian Railway in the East > West direction. In 2000, this amount had risen to about 38,000 TEU and during 2002 48,000 (SeaNews 2003-01-22 www). By 2010 the volume of transit transportation is hoped to have reached 250 – 300,000 TEU "West - East" and 80 – 100,000 TEU "North - South" (Mintrans 2001:2 www).

167 As an example it could be mentioned that the general cost of transporting one ton of aluminium by train from the Sayany plant in Krasnoyarsk Kray to Tallinn amounted to USD 80.3, and to Kaliningrad USD 74.7 (this was before the Lithuanian transit tariffs decrease in November 2001). The cost of handling in the port of Tallinn is USD 8 per ton, while in Kaliningrad, handling costs were USD 5.5. (Nezavisimaya gazeta. 2001-10-04).

168 JSC Gazoil is a subsidiary of the Russian state gas producer JSC Gazprom.

the existing potential, an effective use of the port is of course necessary. The construction of new warehouses and the deepening of the port for large ships would be needed, but most important of all, a reduction in rail transit tariffs for cargoes destined for Kaliningrad.

The most impressive and far-sighted, and by far the most expensive, initiative taken in recent years, concerning the future development of the ports in Kaliningrad has been financed by the EU. Through its Tacis facility, a project called "Kaliningrad Port Development", under the leadership of Universal Transport Consulting GmbH Hamburg, has received financing. The kick-off for this EUR 1,6 million project was celebrated in Kaliningrad 2001-03-18, and the result of this 18 month project, was a new port plan and development plans that were presented by the end of October 2002, but not made public. When the results of this project are made public, a lot more can probably be said about the future possibilities for the development in the port sector of the Kaliningrad Oblast. It is futile though for any kind of project to foresee changes of the kind that the Kaliningrad port sector has seen during the last year, like the sudden changes in railway tariffs and the outcome of the transit agreement with the EU [169].

Much of the development in the oblast, probably including the future of many of the different port development projects, depends on the general development of the economic situation and the legal status of the oblast. The operation of the special economic zone during Gorbenko's time as Governor until November 2000, has been widely criticised, but even the new federal program, that is hoped to include large investments from private investors, has been met by sceptical comments from potential investors – and not investments. What for long has been the most urgent problem for the oblast is the possible exemption from the Schengen rules when Russian citizens transit to and from Kaliningrad Oblast when both Poland and Lithuania become members of the EU. On November 11 2002, an agreement was conclude with the EU that a "facilitated rail transit document - FRTD" will be issued to Russians transiting between mainland Russia and Kaliningrad, something the train passengers will receive when they buy a train ticket – the whole agreement is only applicable to trains, because trains carry over 75% of the transit passengers. Transit passengers by car or bus must apply for a conventional visa or a "facilitated transit document - FTD" that will be issued less stringently than the conventional visa. The agreement was seen as a success for both sides, despite the fact that it is very difficult to see these two documents as anything but a visa. A visa regime was something the Russian side, from the beginning, stated very clearly it would not tolerate. The agreement will required Russian passengers on the route to have foreign, not internal civil, passports from the end of 2004 in order to obtain a FRTD or FTD (Europa.eu 2002-11-11 www; St. Petersburg Times 2002-11-15 www).

[169] When the results from this project will be available has not been made public at the time of writing, but the project was presented by mid September 2002, but depending on content, parts could be kept confidential for a long time.

3.10. Outbound cargo transit through the Kaliningrad Oblast[170]

The important question concerning the oblast origin in Russia and other countries as regards export cargoes transiting through Kaliningrad Oblast has remained unclear. What will be presented here is an attempt to obtain information about the oblast origins for transit trade. The emphasis will be based upon export transit through the ports, although the volumes that transit through land borders will also be mentioned.

3.10.1. Introduction

In order to conduct the geographical survey intended here, the necessary empirical information had to be first obtained. The aim, when it came to statistics, was to use existing information from documentation of export transactions and from this try to extract the oblast origin of cargoes that pass through the oblast during a certain period of time. Initially, this information did not exist at all, but the introduction of a new computer system at the Customs Office in January 2001 made it possible to sort out origins. The reason way the necessary data was not available in the Kaliningrad Oblast was quite simply that trade had previously not been recorded this way, much due to the previous very low level of computerisation. In addition, the departments concerned did not have to include the results of this kind of analysis in the reporting and therefore such information was not being specifically recorded. This means that the information needed for this kind of analysis existed over the years, but has never been used in analyses of the transit flows from a geographical point of departure. The initial time set was the month of March 2001, as in the previously presented example from the Russian North West region (see 3.8). To cover just one month of transit would have been possible, but soon proved less reliable. The problem with just one month was that the transit cargo volumes in Kaliningrad for just one month became so small that reliability would have been doubtful, and a single trainload too influential. Instead, data from the full first half of the year has been used as the background data in the calculations.

What is included in the following is an attempt to do a breakdown of transit cargo flows through the Kaliningrad Oblast putting together all different consignments that transit the oblast into the same six categories used in 3.8, but also in Brodin (2002) where the full survey and an additional collection of maps for transit trade in Kaliningrad are presented. The basic empirical data that has been used here has been generously made available by the Department of Transport Development of the Kaliningrad Oblast Administration. This basic data is based on the data collected by the Customs Authority and presented as customs statistics.

[170] "Outbound" – from a Russian and CIS perspective, i.e. cargoes transiting east -> west.

3.10.2. The empirical results

According to the customs statistics for the first six months of 2001, the ports of Kaliningrad handled nearly 1.5 mt of outbound transit cargoes, which corresponds to about 67 % of total cargo exports in the port. The share should probably be higher, as special custom treatment of cargoes from Belarus could make some cargoes arrive from Belarus for export, without this volume having been recorded as transit. Total turnover in the port of Kaliningrad for the first six months of 2001 was 2.3 mt. This figure includes 1.5 mt of transit cargo and the shares for the different cargo categories are shown in Table 3.20.

Some figures in Table 3.20 can look quite surprising and, of course, require comments. For example, the excess of coal and metal in transit in relation to the volumes that were exported during the same period of time. This could probably be explained by the fact that the part of this cargo that was registered at the border as transit when entering the oblast only came to be registered, but was never really exported. This problem would have been much aggravated if the study period here had been made shorter. In both these cases, the cargo type is such that there is always a fair bit of stockpiling before shipping, so that the lot size when loading can be maximised. The maximum carrying capacity of a train is in the range of 3,000 – 3,500 tons, while shipping lots are at least three times as large. In other Baltic ports, it could well be 10 – 15 times the capacity of one train. In 2001, Kaliningrad Oblast exported more than 225,000 tons of chemical fertilisers, without the existence of any local Kaliningrad Oblast production (registered not as transit, but as export). The reason for this is that a part of the Belarus fertiliser export, which is packed in bags at a special facility in Gvardeysk and then exported through Kaliningrad, is registered as export. Thus, all export of fertilisers is actually transit. In view of this fact, export transit through ports in the Kaliningrad Oblast for the first half of 2001 could be set about 1.8 million tons instead, which would lift the transit share to about 79% of total export handling.

Table 3.20. Outbound transit in Kaliningrad Oblast (H1 2001; 1000 tons)

Type of cargo	Total	Of which transit	
		1000 tons	% of exports
Chemical fertilisers	638	364	57.1
Oil and oil products	547	300	54.8
Coal, coke	410	414	101.0
Metal	289	310	107.3
Wood	39	29	74.4
Pulp, paper	34	17	50.0
Others	294	64	21.8
Exports	2 251	1 498	66,5%

Source: Department of Transport Development; Kaliningrad Oblast Administration.

Land export transit through the Kaliningrad Oblast for the first half of 2001 was just over 310,000 tons. Of this volume, some 228,000 tons originated from other Russian oblasts and 82,000 tons from other states and during the first half of 2001 almost everything from "other states" came from Lithuania (see also 3.10.3).

Thus, for first half of 2001, the total volume of export transit through Kaliningrad Oblast through ports and over land was about 1.8 million tons, and when taking into account the full Belarus volume of chemical fertilisers, it should probably amount to about 2.1 million tons. Of this, about 1 mt of cargoes come from other Russian oblasts and about 500,000 tons come from other FSU countries to transit through the ports of the Kaliningrad Oblast[171].

According to the statistical calculations for the first six months of 2001, the transit cargoes that departed from Kaliningrad ports arrived from 32 of the 89 oblasts of Russia and from four other countries (see Table 3.21).

Table 3.21. Major origins of outbound transit in the Kaliningrad Oblast

(1000 tons)

No.	Oblast/Country origin	Total	% of tot.	To ports	Over land	% to ports
1	Chelyabinsk Oblast	308,7	17,3	282,2	26,5	91,4
2	Kazakhstan	216,3	12,1	215,8	0,5	99,8
3	Lithuania	189,4	10,6	142,3	47,1	75,1
4	Kemerovo Oblast	182,7	10,2	26,9	155,8	14,7
5	Altay Kray	174,0	9,8	174,0	0,0	100,0
6	Perm Oblast	170,3	9,5	170,3	0,0	100,0
7	Smolensk Oblast	98,6	5,5	98,6	0,0	100,0
8	Belarus	98,2	5,5	63,3	34,9	64,5
9	Ukraine	63,3	3,5	63,3	0,0	100,0
10	Astrakhan Oblast	63,0	3,5	63,0	0,0	100,0
11	Belgorod Oblast	34,2	1,9	34,2	0,0	100,0
12	Novgorod Oblast	30,8	1,7	0,0	30,8	0,0
13	Kirov Oblast	29,6	1,7	29,6	0,0	100,0
14	Irkutsk Oblast	26,3	1,5	24,5	1,8	93,3
	Others (22 oblasts)	98,0	5,5	82,7	15,3	84,4
	Share: 5 big. Russian	934,3	52,4	752,0	182,3	80,5
	Share: 10 big. Russian	1118,2	62,7	903,3	214,9	80,8
	Share all Russia	1216,2	68,2	986,0	230,2	81,1
	Total	1783,4	100,0	1388,0	297,4	77,8

Source: Department of Transport Development; Kaliningrad Oblast Administration.

[171] The volumes described in the following do not include these "probable" volumes from Belarus, as described in 2.3, but only volumes that have been declared as transit.

However, over 50% of total transit goods arrive from just five Russian oblasts; Chelyabinsk Oblast, Perm Oblast, Smolensk Oblast, Astrakhan Oblast and Altay Kray. That 80% of the volumes of transit cargoes to the ports from Russian oblasts originate in just these five oblasts goes to show how important these oblasts are, but also the spread over the Russian territory of the use of ports in the Kaliningrad Oblast (see table 3.21). The most distant of all Russian oblasts using Kaliningrad for transit is the Irkutsk Oblast. No specific difference can be seen between the share directed towards the ports for non-Russian origins compared to that of Russian oblast origin. The over-land transit will not be dealt with specifically here, as it will be described in more detail in section 3.4.10.

The division of cargo according to oblasts makes it possible to divide the flow of cargoes according to Russian economic regions**.** This division shows that 77 % of all transit cargoes that use ports in Kaliningrad Oblast arrive from the regions of European Russia, including the Ural (see Table 3.22). The remaining 23% however, arrive from the two Siberian regions of Western and Eastern Siberia. The only Russian economic region that does not use Kaliningrad for transit is the Far East region.

Table 3.22. Russian Economic Regions as origins of outbound port transit[172]
(H1 2001: 1000 tons)

Economic Region of origin	1000 tons	Share in %
Ural	446,9	45,3
West-Siberian	195,7	19,8
Central	118,6	12,0
Volga	95,5	9,7
Central-Chernozem	38,3	3,9
Volgo-Vyatskyy	28,3	2,9
East-Siberian	27,0	2,7
Northern	22,4	2,3
North-Caucasian	11,6	1,2
North-Western	1,7	0,2
Far-Eastern	0,0	0,0
Total	986,0	100,0

Source: Department of Transport Development; Kaliningrad Oblast Administration.

[172] In Russian economic and social geography, Russia is traditionally divided into 11 economic regions. For the composition of oblasts inside the economic regions, see Appendix. ER's are not to be confused with the 7 federal districts introduced by President Putin in May 2000.

The cargo categories that are included in the Russian transit through ports of Kaliningrad Oblast are above all general cargo, metals, bulk, coal and oil[173]. Together, the categories that are raw materials make up 76% of all transit cargoes in volume. Thus, it can be understood that Russian oblasts export mainly raw material and semi-finished goods through Kaliningrad. This is a structure of exports that corresponds well with the structure of Russian export as a whole. One of the differences from total trade, however, is that during the period examined no non-ferrous metals were exported through Kaliningrad.

Coal is the single most important of the categories, comprising 35% of the total volume of Russian transit for the period. 86% of coal in transit through Kaliningrad originates from just two oblasts, Altay Kray and Chelyabinsk Oblast. This is mainly coke breeze from the Zarinsk coke plant in Altay Kray and blast furnace coke from the Magnitogorsk metallurgical complex in the Chelyabinsk Oblast (see Table 3.23).

Table 3.23. Oblast origins of outbound Coal transit (1000 tons)

Oblast of origin	1000 tons	Share in %
Altay Kray	179,5	49,8
Chelyabinsk Oblast	131,9	36,6
Kemerovo Oblast	26,8	7,4
Tula Oblast	9,3	2,6
Perm Oblast	5,3	1,5
Lipetsk Oblast	4,5	1,2
Others (3 obl.)	3,5	1,0
Total	360,8	100,0

Source: Department of Transport Development; Kaliningrad Oblast Administration.

Bulk cargoes, which in this case are almost exclusively chemical fertilisers, amounted to 30% of the total volume of transit through Kaliningrad ports for the first six months of 2001. The greater part of Russian fertilisers are exported from just three different oblasts; Perm Oblast, Smolensk Oblast and Kirov Oblast (see Table 3.24) [174].

[173] "oil" here includes also oil products and gas condensate.

[174] From Perm: nitrogen and potash fertilisers; from Smolensk (Dorogobuz) nitrogen and complex fertilisers (including nitrogen, phosphorus and potassium); from Kirov (Kirovo-Chepetsk) nitrogen fertilisers.

Table 3.24. Oblast origins of outbound Bulk transit (1000 tons)

Oblast of origin	1000 tons	Share in %
Perm Oblast	162,9	52,0
Smolensk Oblast	99,7	31,8
Kirov Oblast	30,1	9,6
Vologda Oblast	12,3	3,9
Samara Oblast	4,9	1,6
Tula Oblast	2,5	0,8
Others (1 obl.)	0,8	0,3
Total	313,2	100,0

Source: Department of Transport Development; Kaliningrad Oblast Administration.

Metals compose another 20% of the Russian transit volume in Kaliningrad and are mostly ferrous metals. The main sources are few, and even more dominant; the by far most important being Chelyabinsk Oblast, the origin of nearly 80% of metals (steel, rolled metal, ferroalloys - mainly from Chelyabinsk and Magnitogorsk), while 17% of metals come from Belgorod Oblast (steel and rolled metal from Staryy Oskol electro metallurgical works - see Table 3.26). Together, the above three categories, coal 35%, bulk 30% and metals 20% make up more than 85% of total transit in the Kaliningrad Oblast.

Table 3.25. Oblast origins for outbound Metals transit (1000 tons)

Oblast of origin	1000 tons	Share in %
Chelyabinsk Oblast	155,0	76,7
Belgorod Oblast	35,1	17,4
Orenburg Oblast	5,1	2,5
Sverdlovsk Oblast	2,0	1,0
Volgograd Oblast	2,0	1,0
Udmurtia Rep. of	1,2	0,6
Others (3 obl.)	1,6	0,8
Total	202,0	100,0

Source: Department of Transport Development; Kaliningrad Oblast Administration.

Oil and oil-products volumes transiting the Kaliningrad Oblast were relatively small during the period under study, constituting only around 6% of total transit volume. As regards oil of Russian origin, almost all oil transit is gas condensate from the Astrakhan gas-processing plant (see Table 3.26).

Table 3.26. Oblast origins of outbound Oil and oil products transit (1000 tons)

Oblast of origin	1000 tons	Share in %
Astrakhan Oblast	64,8	99,6
Orenburg Oblast	0,1	0,2
Moscow Oblast	0,1	0,2
Others (2 obl.)	0,0	0,0
Total	65,0	100,0

Source: Department of Transport Development; Kaliningrad Oblast Administration.

Wood and timber volumes, as was the case with oil, were relatively small and amount to only some 3% of the Russian transit through the ports of the Kaliningrad Oblast. Surprisingly, more than half of these cargoes passing through Kaliningrad come from Irkutsk Oblast which is to be found at a distance of more than 5,000 kilometres. The second most important Russian oblast, the Republic of Komi, is also rather distant from Kaliningrad (see Table 3.27).

Table 3.27. Oblast origin of outbound Wood transit (1000 tons)

Oblast of origin	1000 tons	Share in %
Irkutsk Oblast	14,5	52,0
Komi Rep. of	4,8	17,2
Krasnoyarsk Kray	3,3	11,8
Perm Oblast	2,5	8,9
Vologda Oblast	1,6	5,7
Others (2 obl.)	1,5	4,4
Total	28,2	100,0

Source: Department of Transport Development; Kaliningrad Oblast Administration.

General Cargo is the last of the categories retrieved from the statistics, which in fact is entirely pulp and paper being exported through Kaliningrad ports from Irkutsk Oblast, Perm Oblasts, Leningrad Oblast and make up 2% of the total transit volume (see Table 3.28).

Table 3.28. Oblast origins of outbound General Cargo transit (1000 tons)

Oblast of origin	1000 tons	Share in %
Irkutsk Oblast	10,0	59,5
Perm Oblast	5,1	30,4
Leningrad Oblast	1,7	10,1
Others (4 obl.)	0,0	0,0
Total	16,8	100,0

Source: Department of Transport Development; Kaliningrad Oblast Administration.

3.10.3. Composition of transit from other countries

As was briefly mentioned in relation to Table 3.21, during the first half of 2001 the ports in Kaliningrad Oblast were also used to transit cargoes for export by four other countries than Russia; Kazakhstan, Lithuania, Belarus and the Ukraine. In all, this volume from non-Russian origins came to a total of 480,000 tons during the period under study (see Table 3.29).

The most important country of origin of transit cargoes through the ports is Kazakhstan. The two most important categories of cargo from Kazakstan are ferrous metals, mostly ferroalloys from Ermak, and oil and petroleum products. The use of Kaliningrad as the transit port is probably stimulated by a special tariff for the transport of exactly these two products that was established in 2000 by the Russian Ministry of Railways (RZD-Partner 2000:2 www). The second most important country of origin when it comes to transit through Kaliningrad is Lithuania. The most important product is crude oil, which seems rather surprising. This is because the oil production in Lithuania is rather insignificant, amounting to about 315,000 tons in 2000. The domestic production is mostly sent for processing to the Mazeikiai refinery, but also, exactly as these figures show, to Poland (Ekspert 2001-06-11).

Table 3.29. Countries' transit volumes through Kaliningrad Oblast
(H1 2001, 1000 tons)

Country of origin	1000 tons	Main type of cargoes
Russia	1216,2	Coal, fertilisers
Kazakhstan	216,3	Metals, Oil and oil products
Lithuania	189,4	Oil and oil products
Belarus	98,2	Fertilisers
Ukraine	63,3	Coal and coke
Total	1 783,4	

Source: Department of Transport Development; Kaliningrad Oblast Administration.

As can be expected, the Kaliningrad Oblast's eastern neighbour, land-locked Belarus, is among the more important users of the possibility of transiting cargoes for export. In the case of Belarus, it is mainly nitrogen and potash fertilisers that transit Kaliningrad. However, special control documents of delivery are not made out for the Belarus transit cargoes (only commodity-transport waybills) and therefore customs bodies and statistics departments do not have full data on the transit of Belarus cargo volumes through the Kaliningrad Oblast[175].

In the case of the Ukraine, the export through the ports in Kaliningrad Oblast is coal. Ukrainian exporters are stimulated to use Kaliningrad by additional discounts set by the Ministry of Railway Transport of the Russian Federation in 1999 for transit freight flows from Ukraine.

3.10.4. Non-port outbound transit through Kaliningrad Oblast

It is not only in the ports that cargoes, transiting the Kaliningrad Oblast on their way to a foreign destination, are handled, far from it. Of the total transit volume for the first half of 2001, which was 1.8 mt, 310,000 tons, or 17%, was land transit. These 310,000 tons are cargoes that enter and leave Kaliningrad over a land border. The destination of this transit during the period under study was to 95% Poland, i.e. 16% of the total transit volume in Kaliningrad (see Table 3.30).

Table 3.30. Outbound land transit in Kaliningrad Oblast (H1, 2001)

Loading country / oblast	Destination	1000 tons	Type of cargoes
Kemerovo Oblast	Poland	155.8	Coal
Belarus	Poland	34.9	Chemical fertilisers
Novgorod Oblast	Poland	30.8	Chemical fertilisers
Lithuania	Poland	30.4	Crude oil and liquefied gas
Chelyabinsk Oblast	Poland	26.5	Coal
Lithuania	Czech Republic	16.7	Crude oil
Kazakhstan	Poland	0.5	Liquefied gas
Other Russian (9 obl.)	Poland	15.3	Different types of cargoes
Total		310.4	

Source: Department of Transport Development; Kaliningrad Oblast Administration.

[175] Before June 2001, two documents for Russian cargoes had to be filled in. The first: from the customs house of registration up to the Western border of Russia; the second: from one border of the Kaliningrad Oblast (KO) up to the next border passage (or before export by the sea through ports of the KO). Consequently, the second document reflected the transit of the territory of the KO.

It is not the aim here to check on the destination of the volumes that transit to Poland, or any other countries in Europe, as there is no indication that what is stated as the final destination on the Russian documents will really be the final destination. However, the volume of coal that is exported along this route, all the way from its origin in Kemerovo Oblast, is surprisingly big; 156,000 tons, with another 27,000 tons from Chelyabinsk Oblast having its destination is Poland, a country with a very big and dramatically loss-making coal sector of its own. To give some perspective on the volumes involved it could be mentioned that a standard Russian train of approximately 55 – 60 rail cars each carrying 50 – 60 tons, carries around 3,000 tons. For the above mentioned coal volume, this means that such 60 about full trainloads are needed to transport this volume. The other two major categories involved in the land transit are fertilisers and oil. The fertiliser volume of over 65,000 tons is shared equally between producers in Belarus (potash) and in Novgorod Oblast (nitrogen fertilisers). Of the oil volume, totalling just over 45,000 tons, the full volume had its origin in Lithuania with 2/3 of it destined for Poland and 1/3 for the Czech Republic. The only other country appearing as a destination for land transit through Kaliningrad is Germany, with about two rail car loads of wood from the distant Sverdlovsk Oblast. All export railway cargoes to Poland pass through a customs post in Mamonovo and a checkpoint in Zheleznodorozhnyy, i.e. on one of three railway lines in Kaliningrad with European standard 1435 mm tracks[176].

3.10.5. The influence of Lithuanian railway tariffs on transit to Kaliningrad

Due to its exclave position, Kaliningrad Oblast finds itself on unequal terms with other oblasts of the Russian Federation. After the disintegration of the USSR, the tariff distance of transportation of the Russian cargoes to Kaliningrad (in both directions) was divided into three railways, i.e. Russian, Belarus and Lithuanian Railways. Thus, the distance to Kaliningrad for cargo shipments from other Russian oblasts consists of three separately paid parts (one Russian, one Belarus and one Lithuanian). If freight did not have to cross the neighbouring countries, the transportation costs would be less, i.e. the longer the haul distance is, the cheaper the transportation per ton kilometre would be for the cargo (if it were to be transported within the same country).

Additional to this is the discriminatory tariff policy on railway transport from the Lithuanian side that should also be taken into consideration. Until November 2001, the transportation of goods in the Kaliningrad direction was priced almost twice as much it would have been if it had gone towards Klaipeda (see Table 3.31).

[176] This is a unique feature of the Kaliningrad Oblast in Russia. There are 131 km of railways in Kaliningrad Oblast with standard European gauge (1435 mm), or 21% of the total length of railways, all leading to different destinations in Poland. One track from the city of Kaliningrad through Mamonovo to Braniewo; the second from Chernyakhovsk through Zhelenodorozhnyy to Skandawa; and the third from Bagrationovsk to Bartoszyce

Table 3.31. Transit tariffs of Lithuanian railways for freight transit
(End of December 2000 and end of May 2002 in EUR)

Direction	Cost per ton		Distance in km	Cost/tonkm	
	2000	2002		2000	2002
Border to Kaliningrad*	4.80	5.56	232	0.021	0.023
Border to Klaipeda**	5.09	6.07	419	0.012	0.014
Klaipeda to border**	4.34	5.64	419	0.010	0.013

* = From Kybartai border station, in eastern Kaliningrad, to border station Kena, east of Vilnius, on the Belarus border.

** = From Klaipeda to border station Kena, east of Vilnius, on the Belarus border

Source: 2000 figures - Department of Transport Development; Kaliningrad Oblast Administration; 2002 figures - Lithuanian Railways.

Since November 1 2001, the tariffs to both Kaliningrad and Klaipeda have been identical. It should be noted that the rates given in Table 3.1 are just selected examples, as a more or less flat rate applies in the direction of Kaliningrad while the spread in the Klaipeda direction in 2002 is between 4.34 for dark oil products and 6.07 for lumber and paper. There is also a large spread for one TEU in 2002, with a EUR km cost in the Klaipeda direction of 0.27, and in the direction of Kaliningrad 0.42 (compare also Table 3.32).

The issue of the equalisation of freight tariffs for transit to Klaipeda and transit to Kaliningrad has been discussed at interdepartmental and intergovernmental levels between the Russian and Lithuanian sides since 1993 and, almost annually, a meeting with the heads of the Lithuanian Railways has been held. As a way of solving this long-running tariff problem, a Co-ordination Council especially for this issue was established at the beginning of 1999. Representatives from Lithuania, Belarus and the Kaliningrad Oblast formed the Council. By mid-1999, an agreement between Russia and Lithuania on a long-term co-operation between Kaliningrad Oblast and Lithuania was signed. According to clause 5 of the agreement, the Lithuanian side committed itself to see that the transit cargo passing through its territory would be charged on a non-discriminatory basis towards the other parties involved in the negotiations. The conditions given were not to be less favourable than those given to third parties. Russia insisted in the negotiations with Lithuania that the coefficient of 0.136 for transports to Klaipeda should be applied to transports to Kaliningrad Oblast as well, instead of the coefficient of 0.24 used (RZhD-Partner 2001:1 www).

To encourage Lithuania to reduce transit tariffs, the Russian Ministry of Railways preserved the reduced coefficients of the tariff policy of the Russian Railways for the transportation of 32 of the most important cargoes directed towards Lithuanian and, particularly, towards Klaipeda. At the same time, the same preferential tariffs were cancelled for cargoes going to and from Latvia, Estonia and Finland. Thus, Russia

created favourable conditions for Lithuania, placing it, from the point of rail-tariffs, on the same level as Russian ports, and its charterers on the level of their colleagues from CIS countries. However, in spite of this, the tariff policy of the Lithuanian Railways remained practically the same. Lithuania did not reduce its tariffs towards Kaliningrad Oblast, but instead increased its tariffs in other directions. By mid-2000, the Lithuanian railways had raised its base tariffs by 10 percent for all transit directions, except that of Kaliningrad.

Table 3.32. Freight tariffs through Lithuania in USD/ton (1996 – 2001; EURO /ton)

Type of cargo	1996	1997	1998	1999	2000	2001
Coal	2.6	2,4	3.0	3,2	3.2	4.5
Coke	3,3	3.3	4.1	4.0	4.3	6.2
Chemical fertilizers	3.0	3.7	3.8	4.0	4.3	6.2
Ferrous metals & scrap	4.1	4.1	4.6	4.8	4.8	4.9
Grain and seeds	3.4	4.1	4.2	4.8	4.8	6.9
Lumber	3.2	4.1	4.6	4.8	4.8	6.9
Paper	3.2	4.1	4.6	4.8	4.8	6.9
Light oil	4.1	4.1	4.6	4.8	4.8	6.9
Dark-oil products	3.6	4.1	4.6	4.8	4.8	6.9
One 20 feet container	77	88	101	101	101	131
One 40 feet container	153	173	197	197	197	242

Source: Department of Transport Development; Kaliningrad Oblast Administration.

As the Lithuanian side did not react to the repeated requests of Russia to equalise the tariffs in the direction of Kaliningrad, the Russian side cancelled its reduction for transport of cargoes to Lithuania on October 1, 2000. Furthermore, since August 1 2001, the Russian railway has introduced reduced tariffs for the transportation of export cargoes to Kaliningrad and other Russian ports. As result of this, in September 2001, transport tariffs to Kaliningrad were only 1/3 of the corresponding tariff to Klaipeda[177]. The outcome of this has been that the flow of cargoes to Kaliningrad has increased, and at the same time, the flow to Klaipeda has fallen. Much as a result of this, the export of cargoes through Kaliningrad Oblast for the full year of 2001 increased by 28% (+1.3 mt; see table 1.4) while the turnover in the port of Klaipeda fell by 11% (-2.2 mt) during the same period.

The tug-of-war in transport tariffs seems at least to have promoted renewed Russian - Lithuanian negotiations about equal freight tariffs and the co-ordination of the work of the ports in Klaipeda and Kaliningrad. Without waiting for a new official agreement, the Lithuanian side decided to reduce its tariffs from the beginning of

[177] During 2002, overall freight volumes for the Lithuanian railway increased by 22% to 36 mt, while transit volumes to Kaliningrad increased by near 70% during the same time period.

November 2001 in the direction to and from Kaliningrad to 1.8 US dollars per ton. This means that the coefficient of the basic rates has decreased from 0.24 to 0.15, i.e. it is on a par with other transit directions through Lithuania. It was originally said that the new tariff should be operational until January 1 2002, but the period has since been prolonged.

Following this move, the Lithuania Railways had vainly awaited for adequate measures to be taken by the Russian side, and therefore the Lithuanian side first decided to raise tariffs for transports to Kaliningrad from February 1, 2002. The Lithuanian Minister of Transport, Balchitis, then met in Moscow with the then new Russian Minister of Railways, Fateev. The Russian minister explained that special conditions for Lithuania would not be created as this would not correspond to other neighbour countries conditions. The Russian side promised instead to sharply increase the freight traffic to the port in Klaipeda with 8 - 9 million tons of cargoes from Kazakhstan, and 6 mt coal and 2 - 3 mt of metals and food products per year. After returning to Lithuania, Balchitis recognised that it is time to finish discussions about tariffs as such large freight traffic could solve most problems. (Ekspert 8:2002 www)[178].

3.11. Summary

In this chapter, a number of examples have been given of the changes that have been taking place at different levels of Russian society during the years of transition, but also in the production of some major transport-generating basic products. The situation in the transport and port sectors had possibly looked very different indeed if e.g. the political development had remained stable since the first years of transition, irrespective of political direction. At present, Russia is a society that is severely strained by a number of problems, as exemplified in this chapter, but will hopefully, in the near future, find it easier to co-ordinate actions and carry through fundamental reforms. At the same time, a considerable sensitivity for world raw-material prices remains, but to stay competitive in this line of business it also takes transport infrastructure and organisation. Indirectly many factors are dependent on a stable development in society, and the Russian society has perhaps started to move in a direction that enhances stability and competitiveness. The long-term implications for the port sector are to a large extent dependant upon this, and continued insecurity on all levels and a continued insecurity as to development in Russia in the near future is also negative for this sector.

[178] If seen to the turnover in Klaipeda port for 2002, excluding oil, little has happened as the turnover has increased by only 7% over 2001 (Klaipeda Port 2003 www).

As demonstrated by the different ports described, major changes in the Russian port sector have been carried out during the years of transition. Efficiency and capacity has not improved in line with demand, however. To compensate for this, and to take back cargo "lost" to ports in the Baltic states, a number of new ports have been proposed in the Gulf of Finland and one has also been built, and, by way of railway subsidies, cargoes have been steered back to Russian ports. However, the construction time for new capacity has proved to be long and there are many conflicting interests in the process that must be overcome.

4. THE TRANSIT STATES

4.1. The Baltic states – an introduction

The former Soviet republics, Estonia, Latvia and Lithuania, have gone through different stages in their development since their international recognition as independent states in August 1991. All three have managed to steer their economies away from the former dependence on Russia and have been successful in integrating their trade with their Nordic neighbours and other EU countries (EU Progress Report 2002). Their economic development since the beginning of the transition period has, apart from the setback that followed after the Russian economic crisis in late 1998, been positive. The economic development during recent years can be followed in Table 4.1.

Figure 4.1. Major ports in the Baltic states with rail and road connections

Source: Compiled by the author from various sources

In their first years, the three newly-formed states all started off dramatically by emphasising an independent attitude towards their large eastern neighbour. When it came to transport and port policies, all three countries soon came to realise that they remained dependent upon Russia, not only in the field of foreign trade, but also for transit cargoes to fill their suddenly largely oversized ports. Therefore, it did not take long until relations in the transport sector started to slowly settle down, even if the rhetoric has sounded differently on the political front.

Table 4.1. Economic development in the Baltic states 1994 – 2002

		1994	1995	1996	1997	1998	1999	2000	2001	2002
	GDP	-2.0	4.3	3.9	10.6	4.0	-0.6	7.1	5.0	5.7
	Industrial Prod. %	-3.0	2.0	3.4	13.0	0.5	-3.9	9.0	6.8	4.5
Est.	Unemployment %*	5.1	5.0	5.5	9.8	10.2	12.9	12.9	11.9	9.1
	Exports, EUR bn	1.0	1.2	1.4	2.0	2.4	2.4	3.6	3.7	3.8
	Imports, EUR bn	1.3	1.7	2.2	3.0	3.4	3.1	4.4	4.6	5.2
	GDP	-6.0	-0.8	3.3	8.6	3.8	1.1	6.8	7.7	6.1
	Industrial Prod. %	-9.5	-6.3	1.4	6.1	2.0	-8.8	3.2	8.4	5.8
Lat.	Unemployment %*	6.5	6.6	19.5	14.1	13.7	13.2	13.3	12.9	10.5
	Exports, EUR bn	0.9	1.0	1.2	1.6	1.8	1.8	2.2	2.5	2.8
	Imports, EUR bn	1.1	1.5	1.8	2.4	2.8	2.7	3.4	3.9	4.2
	GDP	-9.8	3.3	4.7	7.3	5.1	-3.9	3.8	5.9	5.9
	Industrial Prod. %	-26.6	5.3	5.0	0.7	7.0	-11.2	5.3	16.9	7.5
Lit.	Unemployment %*	4.5	7.3	6.2	14.1	12.6	15.3	16.1	17.5	14.3
	Exports, EUR bn	1.7	2.1	2.7	3.7	3.5	2.9	4.4	5.4	5.8
	Imports, EUR bn	1.9	2.6	3.4	4.7	4.9	4.3	5.2	6.7	8.2

* = at end of period[179]

Sources: Statistical Office of Estonia 2002 www; Statistics Lithuania 2002 www; Central Statistical Bureau of Latvia 2002 www;

The focus will therefore be put upon different aspects related to transit trade which includes ports, shipping and transit volumes during the month of March 2001 for each of the three Baltic states. The first parts of this chapter will focus on the background to the transit of goods to and from Russia and other CIS states by discussing the Soviet-period influence on these ports.

4.2. Soviet / Russian influence on transport and ports in the Baltic states[180]

4.2.1. The influence on ports of the Soviet heritage

All the port towns of the Baltic states have a long tradition when it comes to the handling of transit trade, but their roles have been changing during different periods of history. The development of the ports and the dependence on trade started to emerge during Hanseatic years in this part of the Baltic Sea (Vareikis 1997). It is not a new phenomenon that Russian inland regions, as during the years of Soviet Union, have been dependent on ports in what today is the Baltic states for

[179] Official statistics are based on registered unemployment and corresponds to the years with 7% or lower figures, while labour force surveys that have been used for the years after 1996-1997 indicate an unemployment more than twice the number registered.

[180] A description of other transport infrastructure than ports in the Baltic states can be found in Buchhofer (1995), for roads in Cullinane and Toy (1998) and an extensive general description in Böhme et.al.(1998), while statistical information can be found on the hompages of Statistical Bureaus

their exports. Some of the ports, like Riga and Liepaja, were important during the latter part of the 19th century when Russia was a large exporter of agricultural products, especially wheat, to Western Europe (Hiden 1987, Goodwin and Grennes 1998). During the inter-war years, that carried the marks of inflation and protectionism together with little Soviet involvement in world trade, these ports were of minor importance. During the years of World War II, all the different towns first fell into Russian hands, then German hands and finally the whole region ended up as being part of Soviet territory. As a result of the war, much of the infrastructure and superstructure in the ports were severely damaged by the end of WW II. After the war, all ports were more or less being rebuilt. Still, it was not until the late 1960´s and early 1970´s that these ports had managed to regain their lost importance.

It was in the late 1980´s that the transit volumes peaked at a time when oil prices had collapsed after 1985. In an attempt to maintain a high level of currency income, the Soviet Union tried instead to compensate for falling prices by increasing the export volumes further. With a constantly increasing Soviet involvement in world trade, the importance of the ports slowly increased, but again based on the handling of cargoes from and to inland areas that transited the ports.

It was from a high turnover level in the last years of the 1980´s, that volumes started to fall, with its lowest level in the period 1990 to 1992. The falling volumes of cargoes in the ports did not depend upon one single factor, but was related to the general economic stagnation during the last Soviet years. Of all the factors that came to hamper trade flows, the most important one was probably the establishment of a supervised national border between Russia and the Baltic states as well as between other FSU states[181]. Weak governments, general currency instability, a contracting Russian industrial production and falling demand in the West were other factors that contributed to the decline in volumes handled in the ports of the Baltic states.

The decline came to be rather short-lived, though, and, as shown in Table 4.2, the years during the middle of the 1990's have meant a strong recovery in export volumes for all the Baltic ports. The drop in handling during the early years of transition had been more or less fully recovered by the different ports by 1995 - 1996 and well surpassed in the years thereafter.

The Soviet transport system, by its nature favoured concentration, even in port handling. The best example of the effects of concentration in the port sector among ports in the Baltic states is Ventspils, that is the largest port of all the FSU ports in the Baltic Sea. The port has the advantage of being connected to the Russian oil grid

[181] All kinds of border crossing problems have been mentioned in a number of interviews and conversations with employees at all levels, from truck drivers to management. In the Baltic states they are mostly related to the early years of transition, but in 2002 procedures are still far from smooth. The early problems have also been documented by others, e.g. Kauhanen (1993).

with a double pipeline laid in the 1960's. At the time of the two oil-price shocks in the mid 1970´s and the early 1980´s, the volumes exported came to grow quickly. Ventspils was to become one of the largest ports in the Soviet Union, second only to Novorossiysk in the Black Sea. The handling of crude oil, chemicals and much of petroleum products in the Baltic Sea came to be concentrated to Ventspils. On the import side, the same pattern of concentration could be observed in the import of cereals. This need arose to compensate for failed domestic harvests, which led to the construction of one of the largest silos in the world in the new Muuga port east of Tallinn[182].

Table 4.2. Turnover in larger FSU Ports in the Baltic Sea (1991 – 2002; mt)[183]

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Primorsk	-	-	-	-	-	-	-	-	-	-	0,1	12,5
St.Petersburg	10,2	12,2	11,1	9,7	15,0	16,4	20,6	21,0	28,1	32,0	36,9	41,3
Tallinn	8,7	8,0	12,4	11,7	13,0	14,1	17,1	21,4	26,4	29,3	32,3	37,9
Riga	5,5	5,2	4,7	5,8	7,4	7,4	11,2	13,3	12,0	13,3	14,9	18,1
Ventspils	24,7	22,1	22,2	27,9	29,6	35,7	36,8	36,4	34,1	34,7	37,9	28,7
Liepaja	-	-	0,4	1,1	1,4	1,6	2,3	2,3	2,3	3,0	3,3	4,3
Butinge	-	-	-	-	-	-	-	-	0,7	3,5	5,1	6,1
Klaipeda	15,7	12,9	15,9	14,5	12,7	14,8	16,1	15,0	14,9	19,4	17,2	19,7
Kaliningrad	2,0	4,0	3,8	2,4	3,5	5,5	6,2	4,5	4,1	4,4	5,8	9,9
Total	66,8	64,4	70,5	73,1	82,6	95,5	110,3	113,9	122,6	139,6	153,5	178,5

Source: Port Administration of each of the listed ports

Other characteristics of transport during the Soviet period that made the reorganisation of the transport pattern and port handling in the Baltic states much more difficult were the large share of non-containerised cargo in foreign trade, and later the slow adaptation to containerisation[184]. With increasing Soviet trade, the need for ports that could handle large volumes of non-unitised cargo increased and this duty, among the ports in the Baltic Sea, was assigned to St. Petersburg, Tallinn and Klaipeda. With the increased use of containers in world trade, new terminals again had to be built. At first, the Soviet container handling was concentrated to St. Petersburg, but was later followed by a bigger terminal in Riga. Both are ports with

[182] The silo in Muuga has a 300,000 tons storage capacity and 5 million ton/year capacity. Grain remains the only major eastbound bulk product, but handling has fallen to just a few mty in the late 1990´s, from a level well above 10 mty five years earlier (Brodin 1999). Two very large Russian harvests in 2001 and 2002 have instead generated a demand for export capacity and Russian export volumes from the latest harvest (of 80 mt) could become 10 mt. (Baltic Times 2002-10-16).

[183] Port Authorities in Tallinn, Kaliningrad and St. Petersburg were established in 1994, and consequently, reliable figures have only been presented since 1995. The Butinge terminal in Lithuania was opened in 1999 and Primorsk in late December 2001.

[184] In Soviet terminology, the English *"general cargo"* corresponds to *"non-unitised cargo"*; i.e. cargo where each piece of cargo must be handled individually as for large machinery parts or other cargoes e.g. on pallets, in rolls or in big-bags.

shallow waters and severe ice problems during winter, factors that today are of much greater importance as feeder traffic with containers are strictly bound to fixed arrival times and departures.

During the Soviet years, all ports were extremely dependent upon the railways. Even the Baltic ports were examples of this imbalance in modal choice. A strong growth in the trucking business during recent years has somewhat lowered this dependence. A general decline in the domestic use of railways has on the other hand made transit traffic increasingly important to the local, still state-owned, railway companies[185]. The share of transit in total handling for the railways is generally going up again, but depending on the type of cargo and destination/ origin the transit share could vary widely.

4.2.2. Baltic ports in Soviet- and transition-times

From a Soviet perspective, coastal towns like Tallinn, Riga, Ventspils, Liepaja and Klaipeda were all relatively small towns at the outskirts of the union. Soviet interest in the coastal Baltic cities often came to focus on military and naval matters at the expense of industrial and cargo port activities. A number of naval bases for the different branches of the Baltic Fleet also came to be established here. These bases were gradually developed, or extended, during the years after World War II, and especially during the Cold War years. The three most important, from north to south, were the submarine base in Paldiski in Estonia, the naval base in Liepaja in Latvia and Baltiysk in Kaliningrad Oblast. Liepaja, served as a normal Soviet commercial port until 1966, but was from then on closed to commercial shipping and fully converted into a naval base[186]. The bases in Paldiski and Liepaja were the points where the Russian troops held out to the longest when the Red Army finally had to retreat from its bases in the Baltic countries.

From a Moscow perspective, the Baltic states were the part of the union that secured Soviet access to ports and naval bases. As each of the three republics had a background as independent states in the inter-war period and all having access to open sea towards the west, they were constantly looked upon with somewhat more suspicion from a Moscow horizon. Few persons that were former citizens of the inter-war states, or with relatives of that origin, were for that reason looked upon as completely loyal to the Soviet Union. Therefore, few were granted permission to work for shipping lines as sailors or for the high-sea fishing fleet which led to the fact that at the break-up of the union in 1991 only some 10% of the employees of the Estonian Shipping Company were native Estonians. It was also a fact that a majority of the employees in the different commercial ports in the region were ethnic Russians.

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185 The national Estonian railway was privatised to 66% in late spring 2001 for USD 60 millions.

186 Since 1993 the port has been re-opened as commercial port(see Table 4.2). Pollution and leftovers from the Soviet-time navy severely restrict the use of parts of the port and the limited funds that have been available for the large scale clean-up operation needed, have made this go slow.

As schematically described in chapter 2, strengthened competition for Russian transit cargoes after the break-up of the FSU also came to involve the governments of the different Baltic states. On the one hand, these governments wanted to take a firm stand against Russia on all levels, they also slowly came to realise the importance of the transit trade to the whole economies of their small countries[187]. One should not forget that all three countries in this respect came to participate in a geopolitical game with Russia as the most important actor. During the transition years, there have been a number of shifts in interest from the Russian side as to whom to favour and who to go against among the Baltic states. Much of this comes from the fact that both Estonia and Latvia hold large Russian minorities. Lithuania, that only holds a small ethnic Russian minority, some 2 – 3%, has never the less had problems to come to term with its eastern neighbour for other reasons. Here, the problem has been the sensitive transit traffic to the still Russian exclave of Kaliningrad. This is a question that, on several occasions over the years, has stirred up a lot of attention. During the latter part of the 1990´s all three Baltic countries have actively been seeking NATO as well as EU membership, processes that took a new turn in the aftermath of the events on September the 11th,. The NATO membership in particular has been strongly opposed, but reluctantly accepted, by Russia and still at the time of writing, not even the borders of the three Baltic states have been confirmed in the form of a border treaty with Russia, despite ten years of negotiations.

During the years of central planning, it was inevitable that certain transport patterns were established. People on different levels in the system established personal relations that, later, during the turbulent years of the early 1990´s would prove to be useful. When the USSR entered its final period of break-up, initiated by the coup in Moscow in August 19 - 21 1991, the transport patterns for export cargoes that included the use of these ports in the Baltic states were long since fixed. Typical for the ports in the Baltic states is that the hinterland of the ports is not just domestic or limited to western Russia. Instead, it reaches all the way to inner Siberia as well as to Ust-Kamenogorsk in eastern Kazakhstan. It is every day business for these ports to handle goods for producers and customers located at a distance of 3,000 km, or more, from the ports. Despite the fact that the ports of the Baltic states were far from free from all kinds of transitory problems, they were mostly able to load and unload the cargoes that came to the ports. Several Baltic ports have also clear advantages over their Russian competitors such as being more or less ice-free during winter and some, especially Tallinn, have a natural depth of several meters more than competing Russian ports. In the wake of the Soviet breakdown, goods transit that before had brought export revenues to the Soviet State coffer suddenly came to function differently. Instead, a large share of these revenues started to end up in the pockets of many fishy and unscrupulous persons, among the i.e. "*bizinezmen*". Men that often took great risks, but also got richly awarded when un-authorised deals could be fulfilled(Own interviews, Pirani 1999).

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[187] Different sources give different values for the share of the Latvian GDP generated by Transports in early transition: *"23%"*(Laving 1996); *"17%"* by President Ulmanis (Business in Russia 11:1998).

It was during years of this kind of ad-hoc style of business behaviour in the port and transport sectors that the independent Baltic states were established. It was also during these years that the first signs of full-fledged competition between these ports emerged. In few other lines of business did competition between former neighbouring union republics in the three different Baltic states emerged so clearly and so quickly. Formerly, the only competition between the ports was for the allocation of investment resources from Moscow ministries, but cargoes used to be assigned to them from levels beyond their own control. But suddenly, in the shrinking market for transit cargoes that came about in the early 1990´s, the competition for the handling of cargoes became even more exposed to market forces than in the capitalist world. Any type of handling could open a chance for certain employees, in medium or higher ranks along the transport chain, to enrich themselves in one way or the other, a fact that further came to sharpen competition[188].

What further came to enhance the importance of the ports was the sudden importance of imports from the West. One such example was facilities for oil imports that were urgently installed by the new governments. These facilities had not existed before, and had never been needed. During the volatile years, around 1990 – 1993, something also happened with the mix of cargoes transhipped. The amount of industrial products and general cargo was reduced and it was different raw materials in bulk that came to lift the volumes instead. At the same time, domestic export from the Baltic countries also shifted and came to concentrate on products like pulp-wood and other goods with a low level of refinement (Brodin 1996). This indicates that the export pattern in the Baltic countries has swung from a relatively high level of average technical content, being east-bound, to product segments with a lower average of technical content, being west-bound, often based on wood working (Shteinbuka and Cirule 1996). With bulky raw materials being the most important items in the national export, few other alternatives than shipping existed for the long-distance transport of such low value cargoes. On the import side, however, much of the high value goods en route to Russia during this period, came instead to be routed over Finnish ports, or trucked directly from western Europe to its destination in the FSU area (Sauna-Aho interview 1998-10-14 and own observations).

4.2.3. Estimations of Russian transit costs

The situation that arose in the port and shipping sector as a result of the collapse of the FSU turned out to be quite unique in modern history. Out of this new geopolitical situation that, from one day to the next, created a huge Russian deficit in both port and shipping capacity, transit trade relations also created a

[188] A wide scale of different methods to achieve this has been identified in many interviews and conversations with employees in leading positions in ports and shipping lines, but who prefer not to be mentioned by name. It was e.g. common that foreign users had to pay each different fee or due for various services, directly to different foreign bank accounts.

considerable mutual dependence. Russia lacked capacity in the port sector, which resulted in a dependence for exporters on the use of port capacity in the Baltic states. At the same time, a political awareness surprisingly slowly emerged in the Baltic states that there was also a huge dependence on Russian cargo for their largely oversized ports in relation to the limited domestic needs.

Parallel to this development, the ports in the Baltic states came to establish a clearer ownership status in the ports, and relatively quickly reorganised their port and transport sectors and came to earn well from transit trade. This came to pave the way for investments in the ports directed towards upgrading existing capacity, making extensions and the building of new terminals. In the Baltic states, financing was not such a pivotal issue as was the case for Russian ports as e.g. existing installations could be used as collateral when financing new port structures. The combined result of these two processes led to the construction of large new terminals for oil, chemicals, ferries, containers a.s.o. that started to come into operation by the mid 1990's in several of the ports of the Baltic states. This development came to further strengthen the position of the ports in the Baltic states in relation to their Russian competitors. It was not until later, in the very late 1990's, that the process of change in Russian ports was to accelerate (see also 3.5.4.).

To be forced to make use of foreign ports for both export and import operations is seen as a major annoyance by Russia, a country marked by a long tradition of autarchic thinking in all aspects (Nove 1986). It is therefore no surprise that Russian calculations have tried to estimate the annual cost to make use of these foreign facilities. At the time when terminals came to be extended and new ports built in Russia, and primarily in St. Petersburg when it comes to the Baltic Sea area, the public message had already long been heard about the high price Russia had to pay for the use of foreign ports to handle its exports. The most frequent figure stating the yearly losses incurred by Russia, in recent years, was given to be in the range of USD 1 – 3 bn, with USD 1.5 bn as the most frequently used figure. This figure can be compared to the importance given to the transport sector in the Baltic countries where most of this would be "lost". Estimates often set the importance of the handling of transit trade in the Baltic countries in the range of 7 – 9% of GDP in Estonia, 8 – 10% in Latvia and 4 – 6% in Lithuania. If the average of these percentages for each country is compared to total GDP for 2001, the aggregate GDP value of transit trade would land at approximately USD 1.7 bn for 2001, a value not too distant from the above-mentioned Russian figure[189]. There are strong reasons, however, for discussing whether the whole figure can be seen as "losses" to the Russian economy, as is pretended by both the Russian President, the Prime Minister and other sources.

[189] By using provisional GDP's for 2001 in current prices from the statistical offices in each country, the value of transit transport services in 2001 can roughly be estimated to be EUR 480 million for Estonia (EUR 5.9 bl. x 0.08), EUR 760 million for Latvia (EUR 8.4 bl. x 0.09) and EUR 680 million for Lithuania (EUR 13.7 bl. x 0.05). Calculated with 1 USD = EUR 0.88

If this calculation is instead made from estimated handling costs in the ports, it could be assumed that the handling and transport costs of a ton of cargo from border to port is in the range of USD 3 – 5 / ton, while handling in the port could be estimated at USD 2 – 7/ton[190]. This would give an average not above USD 10 for both the transport and handling of cargo that transit the Baltic states. If the Russian transit volume were set as high as 100 mt per year, this would give a total for Russian transit costs of roughly USD 1 bn per year. An amount that should correspond to what, in the previous GDP based calculation, came to 1.7 bn.

An alternative calculation from the Russian Road Communication Ministry indicates more or less the same as the above, stating that:

> *"oil product transfer in Finland costs USD 8 more than expensive (sic) than in Russia" ... ..."Transit cargo flows re-orientation back to Russian ports appears to be the problem of state importance. USD 1.5 – 2 mlrd - these are annual losses from transit flow absence (sic)". About 60% of all oil products coming for export go through Baltic ports"*
> *(Transport @Business Russia 2002-04-11 www)*

It is not really clear whether the Russian ”losses” mentioned in the calculations above relate only to transit in the Baltic states or also include costs that come from transit through other outlets, such as Finland and the Ukraine. That there must be a lot of money to compete for, alternatively save, is clearly demonstrated by the fact that e.g. both the Port of Tallinn as well as the biggest handling companies working in Tallinn have, over the last few years, showed a profit level that has corresponded to roughly half the turnover. Port of Tallinn had in 2001 a turnover in the range of USD 40 million with roughly half being profit while for the biggest of all the handling companies in the Baltic states, Ventspils Nafta in the Latvian port of Ventspils, the profit was USD 40 millions from a turnover of USD 75 millions.

The above discussions are of interest when formulating alternative scenarios for future trade routes. There are a number of different levels with sometimes contradicting interests in such a process, whether it be commercial, local, regional, oblast, federal and with some perhaps reaching as far as to some kind of continental level. Each of these levels, with the federal one being the most influential, has ways of steering processes to favour their own objectives. No matter what the initiatives and intentions, the often nearly incomprehensibly long transport distances, as shown in Figure 3.6, remain an influential and irrevocable factor on the Russian transport scene. It should be remembered that Moscow is located as far from the port in St. Petersburg as Munich is from Rotterdam and that Yekaterinburg, located just east of the Ural mountains, is as far away from the port in St. Petersburg as the tip of Italy is from the port of Rotterdam. For nearly all non-oil cargoes and a considerable share of the oil transport, it is the state owned “natural” railway-

[190] These estimations of the transit transport costs and handling costs have been made by people active in the port business in the Baltic states.

monopoly that supplies the transport service. In the case of such large transport volumes and distances, pricing in the railway sector is a question that engages many, making exports possible when kept very low, and prices have remained low, at the same time as pricing decisions have remained inside the state sphere. It is natural that calculations intended to be transport economic optimisations look very different from the point of view of a state railway company in the Baltic states, an exporting company, a Baltic or Russian port or the Russian state level.

It is the incomprehensibly large Russian railway monopoly that often comes in focus when the stability of the transit trade flows are discussed. It is probably not only from a geopolitical point of view that there is a Russian interest in maintaining a good, or at least reasonable, rail service level all the way to its Far East regions, as the line also makes it possible to earn foreign currency from an existing railway service. Since its construction in the late 19th century, the Trans Siberian line has served as the main artery, keeping the vast Russian/Soviet/Russian landmass together within one country. At the same time, it also gives other CIS countries in Central Asia an alternative outlet eastward. If the interest in the Trans Siberian railway can be seen as an example of the mentioned continental level, then the struggle between Pskov Oblast and Leningrad Oblast for involvement in transit trade can be an example of the other extreme – the local level. For already economically struggling Pskov, a sharply reduced Russian transit trade in the direction of the Baltic states would diminish what today is one of the oblast's few strong sides; it's geographical location (as the oblast borders Belarus, Estonia and Latvia), placing it in an artificial vacuum where it can profit only from the transit of conventional trade[191]. This development can be contrasted to that in Leningrad Oblast where a previously near non-port coastline is instead being slowly turned into the transit trade centre of the country.

What was left of Russian coastline in the Baltic Sea after the falling apart of the FSU was limited to the Gulf of Finland, an area that had only three cargo ports with a turnover of more than a million ton, Vyborg, Vysotsk and the Greater Port of St. Petersburg plus the landlocked Kaliningrad Oblast. The organisation in the whole transport sector of the economy was also a negative feature of Russia because, as with all other lines of business at the time, it had not been exposed to competition before. The low capacity in the Russian port sector came to emerge as a major bottleneck. It could probably be said that the continued flow of cargo to ports in the Baltic states was, for a time, more a result of the malfunctioning of this sector in Russia than the result of good work in the ports of the Baltic states.

[191] The struggle between Russian oblasts for influence and economic benefits described in more detail in 3.5.3.

4.3. Sea-borne trade in the Eastern Baltic during the 1990´s

4.3.1. Volumes of transit trade

According to the ports' own calculations for 2002 (1998), it can be assumed that 90% of the cargo turnover in Ventspils and in Tallinn plus 60% of the total volume in the other ports in the Baltic states is transit to or from Russia/CIS. Thus, the Russian/CIS transit volume amounted to approximately 85 mt (56 mt), with the Russian ports excluded.

Additionally 5 mt (4 mt), of Russian cargoes transited in the four Finnish ports of Helsinki, Kotka, Hamina and Kokkola during 2002 (Information from the ports 2003) with another 6 mt (0 mt) of only Russian crude that was loaded at the terminal in Butinge. With both Finnish and Baltic figures added together, the volume of cargoes that have their origin or destination in Russia could be estimated to be around 96 mt. Out of this volume of cargo approximately 85%, or 82 mt, has its origin in a Russia that has for long now been forced to use the Baltic states as entrepôt nations to handle such a large volume of its foreign trade. To better understand how large this transit volume actually is, it could be mentioned that it is nearly 25% above the combined volume of the five Russian ports in the Baltic Sea that, after dramatic increases during the year, handled 68 mt (28 mt) during 2002.

To make it possible to better determine the underlying reasons for the changes that have taken place over the previous decade, it is necessary to compare cargo flows in the different ports in more detail. In Table 4.3, figures are presented covering the years 1997 through 2002, but have been split into two categories. A considerable growth in the handling of oil and oil products has been registered in all seven ports during the period under study. When bearing in mind that, of these countries, only Lithuania and Kaliningrad extract oil, and in very limited quantities, this sharp increase in the volumes of oil and oil products is strongly influenced by Russian transit trade, i.e. Russian exports. Therefore the effects of the entrance into this market segment, that had been more or less stable for several years, of a relatively large new Russian port in Primorsk in the Gulf of Finland has rightly worried many in the Baltic states.

The quantity of non-oil cargoes has remained more or less stable in most of the ports. The two major exceptions are Kaliningrad with a negative tendency until 2001, and St. Petersburg where the growth should probably more be seen as a result of Russian actions to direct domestic cargoes to domestic ports, than as achievements in competitiveness.

The relatively stable volumes of non-oil cargoes in Baltic ports can lead to the conclusion that they serve rather stable volumes and hinterland areas. In theory, the size of the hinterland of a port is limited by the price of transport by rail or road, and quantities of dry cargoes can even decrease, e.g. due to changes in the cargo

structure of the port, from raw materials such as timber, and fertilisers to metals and other more elaborated manufactured products. For example, this tendency becomes more evident in the timber trade. In recent years, producers in the Baltic states have slowly started to move away from the export of pulp wood, as it is understood that the price for sawn timber is much higher, and less volatile, in the export market, while transport expenditures are lower relative to the price of the product.

Table 4.3. Oil and other cargoes in the turnover of major ports (1997-2001; mt)

Port	Category	1997	1998	1999	2000	2001	2002
St.Petersburg	Oil & oil products	5,8	6,0	7,4	7,4	9,0	10,6
	Other cargoes	14,8	15,6	20,8	24,7	27,9	30,7
	Total	20,6	21,6	28,2	32,1	36,9	41,3
Tallinn	Oil & oil products	8,1	11,1	14,5	17,8	21,0	24,3
	Other cargoes	9,0	10,3	12,0	11,5	11,3	13,6
	Total	17,1	21,4	26,5	29,3	32,3	37,9
Riga	Oil & oil products	2,1	2,0	2,2	2,8	3,5	4,9
	Other cargoes	9,1	11,3	9,8	10,5	11,4	13,2
	Total	11,2	13,3	12,0	13,3	14,9	18,1
Ventspils	Oil & oil products	27,1	26,1	24,3	26,4	28,7	20,0
	Other cargoes	9,7	9,9	9,8	8,3	9,2	8,8
	Total	36,8	36,0	34,1	34,7	37,9	28,7
Liepaja	Oil & oil products	0,3	0,1	0,2	0,4	0,5	0,7
	Other cargoes	2,7	2,9	2,1	2,6	2,8	3,6
	Total	3,0	3,0	2,3	3,0	3,3	4,3
Klaipeda	Oil & oil products	3,6	2,2	4,0	5,3	5,1	6,7
	Other cargoes	12,5	12,8	11,0	14,1	12,1	13,0
	Total	16,1	15,0	15,0	19,4	17,2	19,7
Kaliningrad	Oil & oil products	0,9	0,9	0,9	1,0	1,9	4,7
	Other cargoes	5,3	3,6	3,2	3,4	3,9	5,2
	Total	6,2	4,5	4,1	4,4	5,8	9,9

Source: Port Administration of each of the listed ports 2002

Apart from the higher level of political openness after the falling apart of the FSU, an important change is the general process of europeisation and globalisation. This has led to an increase in trade between East and West. Within the framework of this increasing trade, all Baltic ports have a favourable, often midway, location along these trading routes.

In order to make use of their favourable location, different ports have adopted different strategies to radically increase their capacity over the past decade. Most ports have adopted a combination of strategies, but three typical examples should be mentioned:

- the modernising and upgrading of existing terminals; e.g. Ventspils.
- the converting of military and fishing ports into commercial ports; e.g. Liepaja
- the building of a new port; e.g. the oil terminals in Butinge and Primorsk.

At the same time as new handling capacity is being created there is also the risk of creating too much over-capacity. he Klaipeda port is estimated as being able to handle 25 – 30 mty, while the highest turnover reached in the port so far is 19 million tons. It is not the only port in the region that has a considerable over-capacity, a fact that has led to increased competition between ports. As theory would suggest, competition has both reduced handling tariffs and forced ports to increase their quality of operation, changes that have had positive effects for cargo owners and made them continue to make use of ports in the Baltic states during the 1990's.

4.3.2. Shipping in the Baltic Sea region during the 1990´s

It was not only in the port sector that the outcome of the disintegration of the FSU came to have dramatic effects. On the shipping side, the outcome was that all ships registered under the different Soviet shipping companies located to Tallinn, Riga, Ventspils and Klaipeda were kept by, what from then on has been state-owned shipping companies in each of the three Baltic states[192]. Ships, like ports, are expensive long-term investments but have the advantage of being movable objects, which is not at all the case for ports. There is also an active second hand market for ships where objects can be traded at any time, while, in the port business, available capacity is more or less completely fixed in the short run and only marginally flexible within a longer time perspective.

The capacity in both ports and shipping had in the early 1990's been adapted to the transport needs generated by the Soviet system, with large volumes of general cargo shipments. During the transition period there has been a constant drift away from the former importance of LoLo shipping in the Baltic Sea, especially in ports on the eastern Baltic Sea fringe, towards an increase in the importance of RoRo and containers. This shift, which is also seen internationally in short-sea shipping, has not been as clear in the handling of transit trade. The imbalance is huge as regards transit cargoes between the very large outbound (east -> west) flow of cargo

[192] Since then, these companies have been opened up for privatisation. Each country has used its own method to increase private ownership and last, but also least successfully, is the case of the Latvian Shipping Company. By April 2002, the company entered into a process where its shares were sold publicly on the stock exchange and a controlling stock of the shares were acquired by, what was soon to become, a severely troubled Ventspils Nafta.

compared to the inbound (west -> east) flow. This is not the only problem as there is also a strong imbalance in the kind of cargo that transits in the two directions. Outbound cargoes are mostly large volume products, liquid, in the form of crude oil and oil products, or bulk products, in the form of fertilisers and coal. Two another large volume transit cargo products that have increased in handling over the past decade, generating LoLo operations, have been steel and pulp-wood, but products that demand very different types of handling equipment.

Owing to the product mix that is handled as transit trade, it has been more or less been impossible to make this mix fit into the increased use of RoRo and container ships. In the case of domestic trade for the Baltic states, the influence from international trends has been strong and the use of trucks and trailers to be shipped by RoRo vessels has increased constantly and sharply in later years. It is undoubtedly so that the product mix in the foreign trade of the Baltic states has been adapting, surprisingly quickly to a new situation where producers in the region have become increasingly integrated as sub-suppliers of components to EU producers of industrial- and consumer goods. This change is creating a transport system that can provide both regularity and reliability, which on the Baltic Sea has been manifested in a large number of new RoRo lines and container feeder lines that can supply a transport service at the required service level. Here, as elsewhere in the world, the use of containers has increased with a both wider and deeper penetration than before. Wider in the sense that containers are now being handled at devoted terminals in all bigger ports within the region of study, not only in Riga and in St. Petersburg, as was the case a few years ago. Deeper in the sense that a much wider range of products are being shipped in containers today than only some few years back, both in the Baltic Sea region as elsewhere in the world.

The mentioned imbalance in outbound and inbound volumes is also reflected in a similar imbalance in good's values. The westbound cargo volumes generally have a much lower value per weight unit than that of the inbound transit volumes. During 2001, important cargo categories like crude oil have a value per ton around USD 160, simple oil products in the range of USD 200, fertilisers USD 90 while pulpwood values can be as low as USD 40 – 50/ton. For inbound cargoes values vary widely. Some simple and voluminous products like cereals for animal fodder can be in the same price categories as e.g. oil above, while values for inbound electronics and new cars can be in the range of USD 10,000 per ton. An estimated average value, set slightly lower than the Swedish average export value to Russia per ton, would probably be in the range of USD 2,000[193]. These average values could look very different at various entry points however, depending on what kind of cargo categories that are being handled in each country or at each port.

[193] Total Swedish export average to Russia for 2001 was USD 2,000 (at USD 1 = SEK 9.1), but with a third of the volume being low price cereals and granite. With only these two product groups excluded, the average export value per ton was USD 3,100. Import average from Russia for 2001 was USD 1,400 (Statistics Sweden 2002).

4.3.3. Future room for manoeuvre for the Baltic states

The position of the here mentioned port cities in the Baltic states came to be greatly enhanced in the process of forming new independent states in 1991. From having been just cities with a port, they all came to be very important cities in their respective country, and even dominant ones as in the case of Riga, Ventspils and Tallinn[194]. A town like Ventspils, that had been more or less isolated within its region, which had been a restricted area during Soviet years, instead now found itself in a vital position for the national Latvian economy.

After the regained national independence, the Baltic ports have manoeuvred their way through some difficult years. Among the first things that had to be done in the Baltic states was to work out, and adapt, a new Maritime Legislation, that has since its first version seen several amendments (OECD 1997:b) and e.g. a Ship Property Act was not passed in Estonia until 1998. The last few years have been a relatively successful period for the ports and they have managed to win back lost cargo volumes and restore previous Russian transit levels. It should now be time for the ports to prepare for the future. While doing so, a new problem is emerging. All the different ports now try to build up their own expensive capacity to handle all kinds of cargoes; resulting in possible over-capacity. This fear is a result of the fact that the capacities of the proposed new terminals will well exceed local needs. Expectations of a continued, and dramatically expanding, transit trade has become the hope upon which this new capacity is being constructed. Current competition between the ports is for any type of cargo, and especially containers, as all want to enhance their competitive edge. However, none of the Baltic states are satisfied with the fact that volumes have recovered, or surpassed, what was handled during Soviet years. Now the goal is set on expansion.

In what is expected to be the most expanding segment, container handling, three of the bigger ports have now ventured into smaller or larger expansion schemes. All three want to build new terminals, or extend existing ones in order to enhance handling capacity. For the handling of containers, in 1999, it was still only Riga and Klaipeda that could offer a container terminal with what today is standard gantry cranes. The Klaipeda terminal, that was opened in December 1998, has an estimated 150,000 TEU per year capacity and is being served by two such cranes. The largest stevedoring company in the port, Klasco, has borrowed a large share of the capital needed to build the terminal from the IBRD[195]. Just some 150 km to the north, the construction of a new terminal in Ventspils has been completed since 2001, but it is lacking customers to make use of its intended capacity of 100,000 TEU, when fully

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194 Especially so for the port Tallinn that has come to develop into the only large-scale ferry port of all FSU ports. The traffic to Helsinki, and to a minor extent Stockholm, has lifted from some 10,000´s when initiated in 1990, to have reached about 6 million passengers per year around the turn of the millennium (Tallinn Satama 2002 www) – but with the entry into the EU this can be expected to fall.

195 The same amounts, ECU 17.4 million, have been borrowed by the Estonian Railways from the EBRD and by the Latvian Railways, ECU 17.0 million, for rail improvements. Both investments have the purpose to *"improve competitiveness for transit traffic"* (EBRD 1999:a, 1999:b, www).

operational. However, with economic support from the EBRD and being managed, as well as 40% owned, by Noord Natie (Port of Antwerp), sufficient support seems to be in place for the Ventspils terminal. At the same time, the terminal in Tallinn is increasing its handling and has a long-term intended capacity of 250,000 TEU.

The TEU handling in the different Baltic state ports for 2002 (1998) were Tallinn 88,000 (55,000), Riga 127,000 (146,000), Ventspils 1,500 (<1,000), Liepaja 5,000 (<1,000) and Klaipeda 71,000 (32,000). Other ports in the Baltic State handled negligible volumes of containers. The turnover in TEU in these ports could be compared to their Finnish and Russian competitors. In the same year, Helsinki and Kotka/Hamina handled 445,000 (345,000) and 363,000 (275,000) TEU respectively, of which a large percentage contained Russian cargo in transit, while St. Petersburg handled 580,000 (203,000) and Kaliningrad 28,000 (10,000). In 1995, the five major Baltic ports together handled under 50% of what was handled in Helsinki alone, in 1998 the share was near 60% of the Helsinki volume to by 2002 having reached 66% of Helsinki. If compared to St. Petersburg, the increase is much less impressive as the volume of 1995 was 120% of the number of TEU's handled in St. Petersburg, while the 2002 volume was only 50% of the St. Petersburg handling.

The considerable loss in shares that the ports of the Baltic states have seen in relation to St. Petersburg in this segment is not as easy to explain. In this segment, the use of the slogan "all Russian cargoes over Russian ports" does not apply as clearly, because this is not a category like bulk and handled by train to such a large extent. For containers, it is a relatively pure competition between ports. The counting of TEU's though gets a bit deceptive as what often happen is double counting – an incoming container taken by feeder from Helsinki to St. Petersburg becomes three TEU's instead of the one, it would have been when trucked directly to Russia. Another piece of the complex set of reasons behind this could be that it is still only Riga, of the ports in the Baltic states, that by late 2002 can offer a weekly return block-train to Moscow. From all the other ports, further transport in this direction must be arranged on an ad-hoc basis. Still, the competitive position for the Baltic states ports must be seen as strong as the Baltic's have proved to be cheapest to use for a shipper of a 40 feet container from baseports in Europe to Moscow, compared to Finnish ports and the port of St. Petersburg. Estimations have set the costs at USD 1480, 1890 and 1520 respectively, although such cost estimates could change from one week to the next, the big advantage for shippers is probably a quicker custom clearance (International Container... 2001).

The competition for containers in the ports is increasing, but at the same time an expanding net of direct cargo-train connections to distant ports has started to appear during the years of transition. The biggest European ports, such as the ports in Rotterdam and Hamburg, are now connected with especially countries in Central Europe, but also attempting to expand into the former FSU area. These systems are intended primarily to attract containerised and other valuable cargoes directly to the ports in the North Sea range. During 2001, this system attracted no less than

50,000 TEU (27,000 in 1998) from the Warsaw region, to or from the port of Hamburg with a 30 hours transport time, 48 hours to Vilnius and Kiev inside 60 hours (polzug 2002-12-30 www)[196]. Parallel to this development, full customer control by way of internet and satellite positioning for containers en-route by train anywhere between Berlin and Moscow is being introduced from January 2003, lifting this service to the same level as normal sophisticated road transport systems in western Europe (DVZ 2003-01-19). Different logistic solutions, of which these are just examples, are likely to develop into strong competitors to the ports in western FSU, as the reach of these kinds of networks continues to expand.

The oil segment is something that used to be the speciality of Ventspils and, to some extent, Klaipeda. During the 1990's, a number of other terminals have been opened in all the different ports, with the Tallinn one as the most expanding, and both the port in Tallinn – Muuga and the port of Ventspils can already today accommodate as big tankers as can enter the Baltic Sea through the Great Belt. In-between Ventspils and Klaipeda, the Lithuanian Butinge facility went into operation during August 1999 with an estimated yearly capacity of 5 - 10 mt. This oil-loading platform can handle crude tankers up to 120,000 dwt and product tankers up to 35,000 dwt, but only platform loaders[197]. A major change for the Butinge terminal during 2002 has been that the refinery at Mazeikiai, owner of the Butinge terminal, was in June taken over by the second biggest of the Russian oil companies, Yukos. Current plans for further extensions of transit capacity in existing ports are most pronounced in Tallinn and Paldiski. As recently as in November 2002, and after long discussions, the decision was finally taken to double the function of the now 15 year old deepwater pier for cereals in the Muuga port, to be used also for oil loading. The EUR 23 millions invested in this is said to give capacity enough for ships more than twice as big as what can then leave the Baltic Sea with a load; or 300,000 dwt[198]. In addition, Paldiski will have a new terminal, with a capacity of 1 mty of oil products, ready by the end of 2003.

The building of the Russian oil loading terminal in Primorsk was a large setback for transit in the Baltic states in general and structures in the port of Ventspils in particular. Ventspils port had already established a construction company for the lying of an additional pipeline, together with the Latvian operator of the existing pipelines, and had prepared plans for an expansion of capacity. No decisions had been taken, but EBRD had also, already in 1998, invested in a 10% share in this project (Neftegazovaya Vertikal 1:1999)[199]. Transhipments during 2002 in Ventspils

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196 A volume that nearly corresponds to the TEU turnover in nearby Klaipeda in Lithuania.

197 This terminal is fed by pipeline from the refinery at Mazeikiai, and was initially aimed at securing supplies, by way of imports, for the refinery (Neftegazovaya Vertikal 1:1999 p. 72).

198 During the first week of July 2002 the 160,000 dwt "Cap Diamant" loaded 130,000 tons of oil products in Tallinn, which is the biggest load to have been carried on the Baltic Sea. The 129,000 dwt "Anna Knutsen", that loaded 120,000 in Ventspils August 1998, was previously the biggest.

199 Finnish calculations state that transport cost/ton under winter conditions from the Gulf of Finland area for an 80,000 dwt tanker was USD 4.76/ ton, while from Ventspils USD 4.05 / ton (MTC 1998: A1 p.9).

fell dramatically from May, when about half the monthly oil volume disappeared, which for full year volumes has led to a fall by over 25%[200]. This can be seen as a result of the introduction of Primorsk, but probably also as a result of co-ordinated Russian actions to force the Latvian state to sell off shares in the oil-handling company Ventspils-Nafta[201]. During the first quarter of 2003, Transneft is not said to have planned any shipments at all in the direction of Ventspils (Moscow Times 2003-01-10 www).

The Baltic states are forerunners compared to Russia regarding privatisation of infrastructure. The possible privatisation of rail companies and rail operations is one such issue that has long been discussed in the Baltic states. The first major step in this direction was taken in Estonia in February 1999 when the Parliament, despite strong opposition, adopted a law that regulates the issuing of licences for the operation of railways (RFE 1999-02-25 www). When applied, the Estonian rail sector privatisation became the first major privatisation in this field in the FSU area. To maintain its attractiveness for transit cargoes during the years of transition, state-controlled railways have been trying to maintain low prices[202]. At the same time, the three state-owned rail companies in the Baltic states have been restructuring their operations during the 1990´s, much due to falling domestic use especially on the passenger side, and the states have had to bail out the losses incurred.

Privatisation of railways is far from the only issue and all three countries have far reaching plans to completely privatise the operations in their major ports. Allowing Russian capital to participate in this privatisation process of various Baltic ports, e.g. partly the port in Ventspils, could years back have helped to partly erode nationalistic Russian arguments for building new ports in the Gulf of Finland. The privatisation of the biggest handling company in the port of Klaipeda, Klasco, was made public in February 1998, and which could have been used to open up for Russian participation, which it did not[203]. If, e.g, a large Russian bank or oil company would have owner interests in a foreign transit port what can then be considered to be domestic and what is foreign? Even Baltic ports have had problems in finding financing for port projects, but planning continues and the need for new capacity is finding both domestic and international support, despite

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200 A fall that will also have a dramatic effect on the state finances as Ventspils Nafta, the oil handling company, has for long been very important in Latvia. Of a net profit in 1997 of USD 40 millions, from a turnover of USD 120 million, the tax paid, USD 30 million, gave it a position as Latvia's largest taxpayer (Business in Russia, November 1998).

201 As early as in 1999, the Managing Director of the biggest oil company, LUKoil, stated in Ventspils that for decisions about new oil pipelines and large contracts for the transit of oil: "*..serious Russian - Latvian intergovernmental negotiations would be needed*" (RFE 1999-02-12, but these have not taken place since and the result of this neglect has become obvious to everyone from May 2002.

202 At the same time, freight quotations are difficult to compare as prices have varied widely, especially on the Russian side from one month to the next. Ton-kilometre prices generally fall sharply with transport distance, which cannot exceed 500 km in any of the Baltic states (ibid.).

203 After a long process the privatisation agency made public the result of the tender in June 1999 when JSC Viachema, with on of the former directors as one of its largest owners, took over.

possible competition from the Russian port projects in the Gulf of Finland. Traces of something like a "laissez faire" attitude in evaluating the real potential of cargo flows can not seldom be seen.

What can be doubted is whether planners and writers like Korhonen (1996) have taken in the full picture before the positive prognoses are made. It is undoubtedly most probable that Russian foreign trade will continue to increase, but each project seems to more or less take for granted that the whole increase can be steered to their port, without having to share the expected increase with its competitors. It is also so that when competition becomes public as in these oil and container examples, it could also be expected that all likely investors will do their outmost to obtain all forms of supplementary advantages by playing out one port, one town, or country, against the other when negotiating. Exactly as will potential users. In the end, it is probable so that Russia will have gained the most from the competition between this "*could-have-been*" cartel of port cities during the last decade, a reward that has been obtained in the form of lower transit costs. It is still true that by and large the situation is in line with the most important of the factors in the writings of Porter (1998), when maintaining long term competitiveness; *"rivalry"*. A positive sign is that there has long been a number of private operators active in the different ports, and some terminals are partly or fully owned by foreign companies. From the time of the improved (i.e. higher) oil prices in late 1999, the Russian side has seen a take-off in improving domestic capacity further boosted by rail tariffs favouring domestic ports, which can be interpreted as actions taken to meet a too good competitor.

As geography does count, it should not be forgotten that from a Russian perspective, all the ports in the Baltic states are more or less equal competitors as to e.g. transport distance, from nearly anywhere in the Russian interior.

4.4. Estonia as a transit country

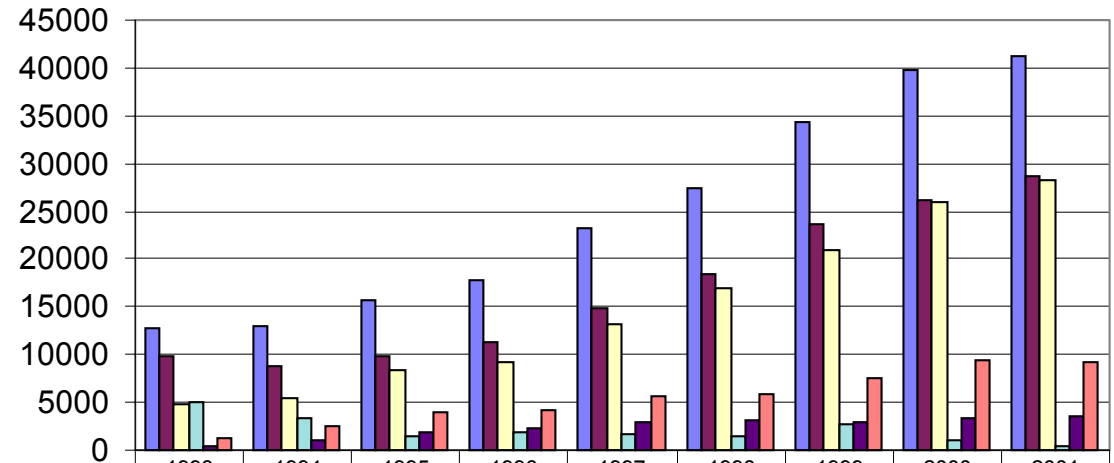
4.4.1. Introduction

During the 100 years prior to the disintegration of the Soviet Union in 1991 and up until the present day in particular, Estonia served as transit country to and from the Euro-Asian land mass. Currently, the most dominant source and destination of such cargoes in transit is Russia and to a lesser extent, several of the other CIS countries.

Estonia has always had a favourable geographic location along the trade routes between West and East. Trade routes passed through Estonia even during Hanseatic times. One of the most important of them was the line Novgorod – Reval (now Tallinn) – Lübeck – Brügge – London. The Estonian towns, of Reval, Dorpat (now Tartu), Pernau (now Pärnu) and Fellin (now Viljandi) belonged to the Hanseatic League. Estonia is still known as an important transit country but in recent years,

Estonia has emerged as one of the fastest adjusting and developing economies in the Baltic Sea region. The necessary transport infrastructure has also been developed very quickly and much as a result of Estonia's coastal location, there are several ports that have both good infra- and supra-structures. The ports are easily accessible due to well-maintained inland connections via railways and roads.

The current political process in Estonia works in favour of Estonia becoming a full EU member by 2004 and the November 2003 national referendum is most likely to approve the membership. From then on, the eastern border of Estonia will become the eastern border of the European Union. To make it possible for transit volumes to continue to rise, a continued high level of investments in infrastructure as well as transport support functions must be maintained. From a transport point of view, it can only be hoped that a positive development in Russia can also help to make the Estonian transit corridor increase its attractive for transit cargoes and to maintain the development demonstrated by Figure 4.2.



	1993	1994	1995	1996	1997	1998	1999	2000	2001
Total	12835	12975	15708	17694	23253	27357	34357	39802	41317
Transit	9846	8788	9900	11275	14757	18364	23723	26116	28632
Transit out	4757	5486	8406	9296	13141	16869	20957	25997	28201
Transit in	5087	3302	1494	1979	1616	1495	2766	1119	431
Import	505	997	1842	2245	2860	3137	3001	3323	3524
Export	1253	2446	3966	4168	5622	5856	7631	9359	9158

Figure 4.2. Handling of cargoes in Estonian ports (1000 tons)

Source: Statistical Office of Estonia

As with any major political change, the final outcome cannot be taken for granted. However, not even both EU and NATO membership has so far influenced come to influence the flow of transit trade. This is especially so as Russia itself has already been included in NATO, although informally, through the NATO – Russian Council that was formed in May 2002.

4.4.2. Estonian ports

The largest and most important ports from the point of view of international traffic are located in Tallinn and its neighbourhood. AS Tallinna Sadam (Port of Tallinn) is the largest Estonian port enterprise consisting of four ports: Muuga, Vanasadam(Old City Harbour), Paljassaare and Paldiski Lõunasadam (Paldiski South Harbour - hereafter Paldiski)[204]. The first three are located within the city of Tallinn while Paldiski is a city about 50 km west of Tallinn. Under the administration of the Port of Tallinn, these ports handle all kinds of cargoes, with the port in Muuga being by far the most important of all Estonian ports.

In the Tallinn region, there are several other ports that also handle different kinds of cargoes such as the Russian-Baltic Oil Port, the Port of Miiduranna and the Port of Bekkeri. In addition, the ports in the cities of Pärnu and Kunda are important from the point of view of domestic export and import. The volume of cargo that is handled in all these ports is shown in Table 4.4.

Table 4.4. Cargo volumes through Estonian ports (1996–2001 mt)[205]

Port	1996	1997	1998	1999	2000	2001
Muuga	7,7	10,6	15,0	20,0	22,0	25,4
Vanasadam	3,4	4,0	3,7	3,8	4,2	3,5
Paljassaare	2,5	1,9	1,9	1,7	1,8	2,0
Paldiski	0,5	0,6	0,8	0,9	1,2	1,5
Total Tallinn	**14,1**	**17,1**	**21,4**	**26,4**	**29,2**	**32,4**
Russian-Baltic	2,0	2,8	2,3	2,7	3,5	2,9
Miiduranna	0,2	0,7	1,0	1,4	2,2	1,7
Pärnu	0,5	1,1	1,6	1,7	2,2	1,9
Kunda	0,6	1,1	1,3	1,5	1,7	1,7
Total others	**3,3**	**5,7**	**6,2**	**7,3**	**9,6**	**8,2**
All Ports	**17,4**	**22,8**	**27,6**	**33,7**	**38,8**	**40,6**

Source: Information from each of the listed ports.

The ports, especially the four ports under the jurisdiction of the Port of Tallinn, are technically well equipped. The Port of Muuga is of such a depth that all vessels that are not too deep to pass into the Baltic Sea can berth at the port. Many of the Estonian ports also have capacity to both store and process goods of many kinds as shown in Table 4.5.

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[204] The local city council in Tallinn has started to object to the extremely profitable port being state property and an attempt could be under way to try to break up the company (SST 2002-04-15).

[205] During the month of May 2002, the Port of Tallinn became the "biggest in the Baltic's" having handled 15.8 mt compared to 14.8 mt in total turnover during the first five months of the year for the previous leader, Ventspils. (LETA 2002-06-20), but for the full year of 2002 it was St. Petersburg that became biggest in the Baltic Sea; 41.3 mt against 37.9 mt.

The Port of Muuga is the largest of the Estonian ports having been opened as recently as in 1986. The port was initially meant to serve mainly cereal imports to the FSU. Today, the port has been turned into a multi-purpose port with a capacity to handle oil products, coal, fertilisers, metals, cars, containers and many other types of RoRo and LoLo cargoes. The number of handling companies working in the Port of Tallinn ports has also increased to a total of 25 by the end of 2002; 13 in Muuga, 1 in the City Harbour, 3 in Paljassaare and 8 in Paldiski. Several of the biggest work with the handling of oil products, that has expanded most rapidly of all cargo categories in the port during the 1990's. Compared to 1993, the volume of oil products handled in Estonian ports has increased from 1.1 mt (or nearly 22 times) to reach 24 mty in 2002, and a substantial part thereof goes through the Port of Muuga. There are six oil terminals in the Port of Muuga alone and it is planned to open yet another by 2003, when the construction of a loading facility for 300,000 dwt tankers, to be combined with the existing grain-jetty, will also be completed. The port has a large freezer facility, while a new RoRo terminal and a container terminal with a 150,000 TEU per year capacity were opened in 2001. A large metal terminal is also under construction in the port and the next project is a coal loading facility for a 5 mty turnover, where the investment is done by the port in co-operation with Russian Kuzbassrazreugol in equal parts, to be operational by 2005. Total investments envisaged by the Port of Tallinn for the time period 2003 – 2007 will come to over EUR 260 millions (Port of Tallinn 2003 www)

Table 4.5. Storage capacity in Estonian ports (2001)

Port	Warehouses		Cold	Container	Cereals	Oil
	open	closed	storage	terminal	silos	tanks
Muuga	368 400	89 500	11 500	150 000	300 000	622 600
Vanasadam	52 000	10 400	1 700	43 000	-	-
Paljassaare	105 000	16 000	15 000	-	-	42 000
Paldiski	119 700	3 900	-	-	-	-
Russian-Baltic	24 000	6 500	-	-	-	116 000
Miiduranna	19 600	-	-	-	-	82 500
Pärnu	73 300	8 500	-	-	-	-
Kunda	12 200	450	-	-	-	-

NB. Space in m^2, containers in TEU, cereal silo capacity in tons, oil tanks in m^3.

Source: Information from each of the listed ports.

In recent years, the Tallinn City Port has been turned into a passenger port that has catered for some 6 million passengers per year during the last three years. The cargo handling in the city port has decreased sharply and is now mostly a mix of clean cargoes such as containers and metal. The Port of Paljassaare has changed from being a fishing port into a multi-purpose port that handles oil products, coal, timber

as well as other types of cargoes. The Port of Paldiski is the former naval and submarine port of the FSU which has been rebuilt and extended into a goods and passenger port. In recent years, this ice-free port with its well-protected location, in a natural bay sheltered by the Pakri Islands just west of the port, has developed quickly. A new extension program has been implemented with new berths being built, new cranes erected and parts of the port being dredged. A problem for Paldiski is the low capacity of the railway, although there are plans to increase capacity via a linked railway construction around Tallinn. As regards other ports, the Russian-Baltic private port is located in Tallinn and handles mainly oil products in transit. The private port, Miiduranna, is located near Tallinn and serves as another important port of transhipments for oil products. To all these ports, the oil handled arrives by rail which is becoming increasingly criticised, especially when passing near, or even in, urban areas. Apart from oil products, pulp wood and sawn timber is also being handled. In contrast to ports in Tallinn, even other ports, like the Port of Pärnu, are important for the export of local goods from West and South Estonia. In this case, primarily timber and timber materials, peat and other export goods are being loaded. The Port of Kunda mainly handles timber, cement, and peat. Kunda Cement Factory not only exports a large part of its production, but also uses the port to import the gypsum and coal needed for its production process. Another large extension project for a port is projected in Sillamä, only 12 km from the Russian border, for oil and chemicals, where capacity inside a few years could reach 10 mty with the Port of Tallinn as one of the most likely investors.

4.4.3. Estonian transport infrastructure

The most important railway line in Estonia connects Estonia with Russia through the border crossing point in Narva, and the second most important connects Estonia with Latvia to the south through Valga. Much of the railway capacity is currently not in use in Estonia. Capacity is affected by border crossing stations, the condition of the railway stock, the condition of the railways themselves and the condition of the stations. The priority construction work on the most important transport connection for transit cargo by rail, between Narva and Tallinn, has been terminated. A doubling of the capacity at the large transit station at Narva was completed in June 2001, at a cost of EUR 18 millions, which was made possible through a credit from EBRD. The border can now service up to sixty trains per day. On the Russian side of the border, there is also an interest in increasing the capacity of the railway and reconstruction works have been started at the neighbouring Ivangorod station. In the future, an upgrading of the line Tapa - Tartu – Koidula that connects the southern part of Estonia with Russia in the direction of Pskov is also being planned (see Figure 4.3).

Estonia has only one line, Petseri - Võru – Valga, in the south-east where railway transit transport could possibly connect two other countries; Russia and Latvia. This approximately 75 km connection is not so important domestically as most transit cargoes are mainly directed to ports to be loaded on to ships. Since the width of the

railways used in Estonia is 1524 mm, the same as in Russia, there are no physical problems for international railway traffic between these two countries. For transit trade, the Estonian Russian border is the Narva – Ivangorod crossing that handles over 90% of the transit traffic.

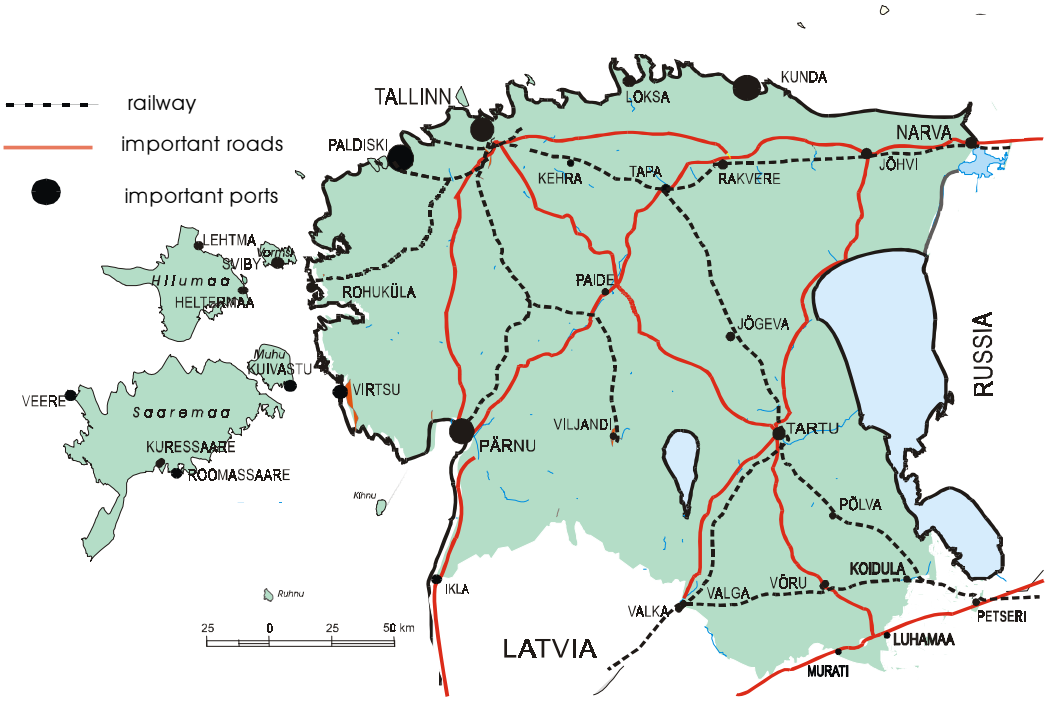

Figure 4.3. Transport infrastructure in Estonia

Source: Compiled by the author

A relatively dense network of roads has been developed in Estonia. The total length of the road network is 49,000 km, including 16,000 km public roads. This gives a density of road network of 1.1 km/km^2, and 0.4 km/km^2 of public roads. The most important roads are the 210 km Tallinn - Narva, the road Tallinn - Pärnu – Ikla, with its 130 km to Pärnu and another 60 to the Latvian border, and finally the Tallinn - Tartu – Koidula road which is about 190 km to Tartu and another 100 on to the Russian border (see figure 4.3). These three directions are also the main roads for international goods transport and are kept in a relatively good all-year-round condition. A considerable part of the Estonian state budget is spent on the construction, reconstruction and maintenance of roads and additional funding for this has provided by the European Union's ISPA support program, loans from the European Investment Bank, World Bank and Nordic Investment Bank.

The share of transit goods that are carried by trucks is still very small, only 1.5% of the total, with a volume of 407,000 tons in 2000 (Estonian Customs Board 2001). The figure for 2000 also indicates a falling share in transit by road and a falling volume compared to the two years before which was of 487,000 tons 496,000 tons respectively (see Table 4.6).

Table 4.6. Road and rail transported transit volumes in Estonia (mt)

	1995	1996	1997	1998	1999	2000	2001
By road	0,6	0,3	0,7	0,5	0,5	0,4	0,4
By rail	9,9	11,3	15,3	18,6	25,2	28,7	31,3

Source: Statistical Office of Estonia 2002 and the Estonian Railways 2002

Most of the transit by truck takes place between different custom border points in Tallinn where, in 2000 and 2001, 67% and 70% of the total trucked transit volume was registered. Longer distance transit carriage through Estonia occurs mainly in the North-South direction, that is from ports in and near Tallinn to and from Latvia, Lithuania and Central-Europe, with 8% of the trucked transit volume going south and 7% going north.

The handling of transit trade is of major importance to the Estonian economy and its transport sector in general and the Estonian railway and its bigger ports in particular. Despite this, there is still relatively little scientific research related to the importance of transit trade in the Estonian economy. Highly credited experts like Bronštein (1997) have argued that its importance to the national economy could have been near 20% of the GDP in the middle of the 1990's, while the share today is often set 7 - 9%[206]. It is against the above background and the relatively large importance of transit trade to the economy that the aims at establishing the points of destination and departure of transit cargoes in Estonia has been conducted.

No trade-related literature has so far attempted to describe Estonian transit trade in more detail, and a very general picture of the origins of transit trade is more or less as geographically detailed as such descriptions have been so far[207]. Here, an attempt is made to advance beyond this point and to try to find a way of establishing an objective geographical origin of the transit trade that passes through Estonia, in the same way as has previously been presented for both the Russian North West region and Kaliningrad. The origins of Russian transit trade will be given on an oblast level for units that conduct foreign trade using Estonia as a transit point.

[206] The share for 2001 was probably much smaller as the total share in GDP of "transport, storage and communication" in the Estonian GDP in 2001 was about 14%, generating a GDP contribution of EEK 14 bd. to a GDP of 97 bd. Then there is always room for discussion about e.g. how large the positive side-effects from transit trade can be said to be and how much of these 14% that relates to purely domestic activities, something that is beyond the scope of this thesis.

[207] Total volumes of transit trade are made public by both the Estonian Customs Committee and by the Port of Tallinn. In both of these sources little or nothing is said about the specific origin, or the destination of the cargoes in transit.

4.4.4. Rail transport of transit cargoes

As was initially mentioned, the transit of foreign cargoes through Estonia has grown quickly in recent years. The free trade policy applied by Estonia since the falling apart of the FSU and the lack of additional fees or taxes on transit cargoes has surely contributed to this. Transit cargoes normally pass through ports and the transiting cargo is mostly "outbound", i.e. coming from the east and leaving through the ports of Estonia. The development of the volume of transit cargoes through Estonian ports was illustrated in Figure 4.2. In 2001 and 2002, the relation between the outbound volumes relative to inbound volumes was in the range of 56:1 and 98:1 in the Port of Tallinn (Port of Tallinn 2002 and 2003 www). In the ports, the dominance of rail as the most important mode of transport for both outbound and inbound cargoes, especially transit cargoes, is very strong. During recent years, both the capacity and the volume of cargoes carried by rail has increased substantially, and 39.5 mt were carried in 2001 and 42 mt in 2002, of which some 28 mt and over 31 mt respectively were transit cargoes (DVZ 2002-12-13).

The official customs statistics in Estonia reflect only transit goods carried by trucks. The Custom Authority is of the opinion that the most important duty for the department is the surveillance of goods under transport and not the collection of statistics. The Statistical Office of Estonia also publishes data for total transit volumes through ports. However, it is possible to receive information concerning the transit by rail directly from the Estonian Railways (AS Eesti Raudtee). The fully computerised information system of the railways makes it possible to retrieve transport data that also gives the railway station of departure and railway station of destination for all cargoes transported[208]. Therefore, it proved possible in this way to find data concerning the departure and destination stations for transit cargoes. The data stored by the railways does not include the final destinations beyond Estonia, i.e. after the cargo in question has been off-loaded at a port. From the moment when the cargoes are loaded on to a ship, the destinations may change several times during the course of the voyage. Information about this foreign trade, although readily available, is seldom very exact and will therefore not be included here.

Since more than 98% of goods in transit through Estonia are transported by the railways, as shown in Table 4.6, the focus here will only be upon these types of transit cargoes. The statistics used here have been taken from the declarations handed in to the Estonian Railways by the consignee. The same form is also used as customs declarations and as a basis for the transport charges levied by the railways. The last factor is not the least important, as this conflict of interest between the cargo owner to (probably) minimise volumes and the railways to (probably) maximise volumes, is likely to considerably enhance the reliability of the statistics.

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[208] "railway station of departure" is where the cargo has first been loaded on to the railway wagon that took it to Estonia; from here on looked upon as the "origin" of the cargo.

Therefore, and with great confidence, the database of the Estonian railways, which is updated daily with all new transactions and processed by the Tabular calculating system, has been used. The database contains data on groups of cargoes, exporting or importing state, railway station of departure and destination, the type of cargo, the volume of cargo, etc. As Estonia has railway connections with both Russia and Latvia, it is possible to identify locations of departure and destination in both these directions, including other countries of the CIS from where cargoes were loaded on to the wagon that enters Estonia.

In the course of the logical review of the data bank, some minor errors were detected which had probably been caused when registering data from transport documents. The influence from all kinds of detected irregularities came to about 1% of the cargo volume examined. The data bank must still be seen as being objective, with a probability of a more than 95% correctness in the data. Because of the large volume of data, only the month of March 2001 was selected to be surveyed in greater detail[209].

The total transit of goods by rail through Estonia in March 2001 amounted to nearly 2,700,000 tons. The average monthly transit volume for 2001 was just over 2,500,000. Thus, the volume of transit in March 2001 is more or less on par with the monthly average for the year. Compared to the same month in 2000, the volume was 1.3% lower. At the same time, the March 2001 volume was 32% above October 2000, which indicates that there can be considerable fluctuations between months, but also that the month of March can be looked upon as being more or less "average". At the same time the variations in volumes in-between months demonstrates the unpredictability of transit trade and the difficulty of planning transit volumes in advance. To a large extent, this depends upon the development of the Russian economy, the administrative process of obtaining export permits, consumption on the internal Russian market, demand on foreign markets for the most voluminous items in transit and sometimes also on political decisions.

The volume of transit cargoes by categories of goods is shown in Tables 4.7 and 4.8. As can be seen, outbound transit (from east –> west) dominates completely, and the outbound volume is dominated by oil products. However, when it comes to inbound transit (west -> east), the volumes are much smaller and the different cargo categories are more diverse, with general cargo being the most important category.

[209] During the month of March 2001, over 4,000 transit trade transactions were registered.

Table 4.7. Outbound transit in Estonia by categories (March 2001)

Category of cargo	Outbound	
	Volume in tons	% of total
Oil and oil products	2 166 962	84,2
Bulk	193 067	7,5
Metals	135 089	5,2
Coal and coke	29 606	1,1
General cargo	29 064	1,1
Pulp wood	23 703	0,9
Other goods	4	0,0
Total	2 577 495	100,0

Source: Calculations by the author, based on data from the Estonian Railways

Table 4.8. Inbound transit in Estonia by categories (March 2001)

Category of cargo	Inbound	
	Volume in tons	% of total
Oil and oil products	4 899	11,8
Bulk	7 610	18,4
Metals	3 605	8,7
Coal and coke	0	0,0
General cargo	25 126	60,7
Pulp wood	6	0,0
Other goods	161	0,4
Total	41 407	100,0

Source: Calculations by the author, based on data from the Estonian Railways

In the following tables, 4.9 and 4.10, the out- and inbound transit cargo volume is divided according to the country of origin and destination. First, for outbound cargoes in Table 4.9 and then for inbound cargoes in Table 4.10. As might be expected, the biggest user of Estonia as a transit country for both inbound and outbound transit is Russia. During the last few years, the Russian economy has developed very positively which has also helped to promote the export of metals and other types of manufactured goods while a high oil prices has resulted in a continued desire to export oil and oil products. Even if the transit of different kinds of goods has increased, it is the transit of raw materials that remains the most important to Estonia. Regarding outbound transit, Belarus should also be mentioned as an important point of origin. All other states have a share below 1% of the total, but it is still remarkable that more than 15,000 tons finds it way to Estonia from distant and war-torn Tajikistan. In the other direction, inbound transit, the

picture is again more diverse, with Ukraine, Latvia and Lithuania all generating noticeable shares, despite the fact that Russia alone is the destination of more than 50% of the volume.

Table 4.9. Outbound transit through Estonia by country (March 2001)

Country of origin	Outbound	
	Volume in tons	% of total
Russia	2 433 928	94,4
Belarus	94 344	3,7
Tajikistan	15 800	0,6
Lithuania	12 656	0,5
Latvia	10 176	0,4
Kazakhstan	8 911	0,3
Ukraine	1 325	0,1
Others	355	0,0
Total	2 577 495	100,0

Source: Calculations by the author, based on data from the Estonian Railways

Table 4.10. Inbound transit through Estonia by country (March 2001)

Country of destination	Inbound	
	Volume in tons	% of total
Russia	21 866	52,8
Ukraine	7 747	18,7
Latvia	6 809	16,4
Lithuania	2 758	6,7
Others	2 227	5,4
Total	41 407	100,0

Source: Calculations by the author, based on data from the Estonian Railways

4.4.5. Estonian transit by oblasts

Taking into consideration the pure size of Russia, having a surface 3.5 times the other 11 FSU states combined and a population exceeding the others by nearly 50%, it is certainly of interest to try to identify the shares of the transit volume from each of the different Russian oblasts passing through Estonia. In the following tables, 4.11 and 4.12, first outbound transit and then inbound transit has been divided according to oblast, as per origin and destination.

The oblasts of Leningrad, Yaroslavl, Ryazan, Perm and Samara are the major Russian oblast sources of outbound transit. In the case of the three most important oblasts, it is mainly liquid products like oil products and fuels that are transported. The share of other oblasts, both inbound and outbound was less than 5% of the total volume.

Table 4.11. Outbound Russian transit by oblast of origin through Estonia
(March 2001)

Category of cargo	Outbound	
	Volume in tons	% of total
Leningrad Oblast	939 607	36,5
Yaroslavl Oblast	371 690	14,4
Ryazan Oblast	251 657	9,8
Perm Oblast	232 971	9,0
Samara Oblast	204 938	8,0
Novgorod Oblast	79 278	3,1
Krasnoyarsk Kray	40 106	1,6
Kemerovo Oblast	51 443	2,0
Vologda Oblast	56 802	2,2
Tambov Oblast	26 199	1,0
Pskov Oblast	10 611	0,4
Other oblasts (36)	168 626	6,5
Other countries	143 567	5,6
Total	2 577 495	100,0

NB. The table includes only oblasts with a volume above 10,000 tons.

Source: Calculations by the author, based on data from the Estonian Railways

It is undoubtedly surprising that the most important of the Russian oblasts for inbound transit proved to be Krasnoyarsk Kray, with its location 5,000 km away, followed by Leningrad Oblast and Moscow Oblast. The share for all other oblasts than these three was below 10%.

Table 4.12. Inbound Russian transit by oblast of destination (March 2001)

Region of destination	Inbound	
	Volume in tons	% of total
Krasnoyarsk Kray	5 147	12,4
Leningrad Oblast	4 877	11,8
Moscow Oblast	4 014	9,7
Pskov Oblast	2 708	6,5
Sverdlovsk Oblast	2 847	6,9
Samara Oblast	1 323	3,2
Other oblasts	950	2,3
To other countries	19 541	47,2
Total	41 407	100,0

NB. The table includes only oblasts with a volume above 1,000 tons.

Source: Calculations by the author, based on data from the Estonian Railways

As can be seen in Tables 4.13, oil and oil products dominate the Russian outbound transit through Estonia. Important oblasts for the origin of these oil product volumes are Leningrad, Yaroslavl and Samara oblasts. Bulk, here nearly only fertilisers, also contributes with a considerable share, 191,000 tons. Most of these volumes of fertilisers are forwarded from the oblasts of Novgorod, Leningrad and Perm in that order. In the category, general cargo, non-ferrous metals with a volume of 60,000 tons and 57,000 tons of ferrous metals together constitute the volume of the category.

Table 4.13. Outbound Russian transit by category (March 2001)

Category of cargo	Outbound	
	Volume in tons	% of total
Oil and oil products	2 053 040	79,7
Bulk	190 992	7,4
Metals	116 892	4,5
General Cargo	28 728	1,1
Pulp wood	23 213	0,9
Coal and Coke	21 063	0,8
From other countries	143 567	5,6
Total	2 577 495	100,0

Source: Calculations by the author, based on data from the Estonian Railways

The non-ferrous metals have their origin in Krasnoyarsk Kray, more specifically the stations Krasnoyarsk-Severniy and Kamyshta, while the ferrous metals mainly come from Vologda Oblast, and most probably from Severstal. The outbound coal comes from the very distant Kemerovo Oblast, but also from Samara Oblast. Pulp wood in transit comes from the nearby areas, Republic of Karelia, Leningrad Oblast and from Pskov Oblast. For other countries, an important share of the outbound transit is non-ferrous metals, with nearly 15,000 tons having its origin in Tajikistan.

A relatively large volume of oil products, over 3,500 tons, that travel in the inbound direction is somewhat surprising (see Table 4.14). As probably can be expected, food products are important, with a volume of 3,000 tons inbound for Russia, but also to other countries, with the same volume for bulk, which here is cereals.

Table 4.14. Inbound Russian transit by category (March 2001)

Category of cargo	Inbound	
	Volume in tons	% of total
Oil and oil products	3 557	8,6
Bulk	3 031	7,3
Metals	440	1,1
General Cargo	14 838	35,8
Pulp wood	0	0,0
Coal and Coke	0	0,0
To other countries	19 541	47,2
Total	41 407	100,0

Source: Calculations by the author, based on data from the Estonian Railways

4.5. Latvia as a transit country

In the same way as is the case for Estonia also Latvia has a long tradition as a transit country going back to the Hanseatic time. However, the main aim of this passage is far from historic and is instead aimed at describing and analyse the foreign trade between the Republic of Latvia and other republics of the former USSR, concentrating on transit trade.

4.5.1. Introduction

In the Long-Term Economic Strategy for Latvia, it is stated that the nation is aiming to become an integrated part of the north eastern flank of the European industrial

cluster. The country has an attractive location in a politically and economically active region, formed by the manufacturing- and trade-centres in Western Europe, with Scandinavia to the north west and the FSU to the east.

From the point of view of transit, Latvia plays an important role on a European scale. Although it is a small country, geographically, it is located between two big markets – the Russian Federation and the European Union. The geographical location of Latvia is even more favourable due to the presence of one very big non-freezing port in Ventspils plus the port in Riga that, on a Baltic scale, is a large nodal point and the expanding port in Liepāja. Latvia's favourable geographical location and the large share of the transit sector in the state economy are usually pointed out by state officials as being two of the positive features of Latvia. A certain ambivalence towards this dependence upon transit trade however is shown now and then. Foreign trade with Russia and other CIS countries is only 9% of the total trade turnover in Latvia while, at the same time, incomes generated from transit trade with the same group of countries correspond to nearly 10% of the Latvian GDP. Latvia's position as the biggest transit nation in north eastern Europe depends on the above-mentioned favourable location, but also on the availability of an efficient infrastructure.

The most essential physical structures of the Latvian transit network are the railway, pipelines and ports. Although many different kinds of products transit Latvia, the most important is the outbound transit of crude oil and oil products, but this is not a purely domestic operation as it also depends on segments of the CIS common carrier system. As early as in the early 1960's, the port in Ventspils gained new opportunities when the biggest terminals in the Baltic Sea Region for oil and oil products were built and later were connected to the Soviet pipeline grid. At the same time, a terminal for liquid chemical cargoes was built to be shortly followed by the second biggest potassium salt terminal in the world. During the last few years, about 20% of the world's total potassium fertiliser trade volume has been handled here, accounting for some 4 – 5 mty of the about 30 - 35 mty that has been handled at the port of Ventspils in later years. However, it should be remembered that the port in Ventspils is not the only Latvian port dealing with oil products. A part of the total volume of oil products is transported by rail to all ports in Latvia, including Ventspils, even though the bulk of the handling is done in Ventspils. Unlike Ventspils, the port in Liepāja has had to come back from a completely different heritage caused by the previous centralised system, when Liepaja served as an isolated and militarised port. The advantages of the port in Riga have been, and still are, its close relations with the shipping industry as well as its container terminal. The port in Riga mainly handled imports during Soviet years, with inbound cargo volumes exceeding outbound volumes by almost 300% during this period, while, for 2002, it is the conventional pattern that prevails even in Riga with outbound cargo volumes exceeding inbound by 400%. During recent years, all the big three ports of Latvia have been able to offer their customers access to either a free-port area or a special economical zone, including tax-reductions for investors.

The railway network is an important component in serving transit trade and, for the moment, over 80% of the total cargo traffic, of around 40 mt in 2002, was generated by transit goods (Lat. Stat. Bur. 2003 www). At the same time, cutbacks in passenger traffic are reducing the competitiveness of the state railway, and indirectly also crippling the internal transport market. Other important components of the Latvian transit system are the natural gas pipelines, the high-voltage electric network that connects Latvia to its eastern neighbours and the highways crossing the territory in East - West and North - South directions.

The transit industry has its place within the Latvian Long-Term Economic Strategy, even though it is no longer considered to be a core industry for Latvia. However, the long-term goal of the transport development policy is to create an effective, safe, competitive, environmentally friendly, balanced and multi-modal transport system. In the long-term strategy, integration into the European transport network is also envisaged, thus creating favourable conditions for cargo transport on both a local and an international scale (Latviyas Vēstnesis 2001–10–10).

To maintain and develop the transport infrastructure, the States' dominant role in transport infrastructure should be maintained, supporting the development of services and industrial production in ports and at other transport nodes. The future transit industry is also expected to play a significant role in the reduction of social economical inequality between Latvian regions. For example, the potential of ports in the Kurzeme region, where Ventspils is located, are hoped to ensure logistics businesses and that transit-related economic activities will be able to develop in the region. At the same time, other large cities, such as Rēzekne and Daugavpils are hoped to be developed into transit nodes and logistics centres in line with what was mentioned above. Both have favourable locations on the main transit directions north – south (Finland/St. Petersburg – Central Europe) and east – west (Russia – Western Europe) through Latvia.

Noticeable improvements in the procedures for transit between the three Baltic states have been achieved in the year since the signing of the Baltic Common Transit Processing Agreement on January 1, 2001. This agreement is also a preparatory step towards joining the common transit convention of the EU and EFTA countries, that was one of the acts covered in accession talks with the EU. The progress in reducing formalities has also been positively greeted by the transport sector, which was clearly indicated in an inquiry conducted during 2001 by the Development Agency of Latvia (2001). The inquiry shows that the most effective border crossing in Latvia is that with Estonia, followed by the border with Lithuania, while the border with Russia is still considered to be the slowest and the least effective.

4.5.2. Current transit trade in Latvia

In discussions about Latvian transit trade, relations with Russia are always focused upon. This is fully understandable as Russia is the major country of origin and destination for the transit flows going through Latvia. Therefore, all changes in relations with Russia and Russian transit policies can strongly affect the whole transit industry in Latvia. As mentioned earlier, transit-related activities account for about 10% of the annual GDP in Latvia and generated an approximated GDP value of EUR 850 millions in 2001[210]. This figure, does not include storage work, forwarding agency services and insurance as such activities are statistically recorded in other sectors of the economy.

During 2001, some 57 mt of cargo were handled in Latvian ports, an increase of 10% compared to 2000, followed by a fall of 8% during 2002 to just over 52 mt, including smaller ports also (see also Table 4.2). The Latvian Railways transported 38 mt of cargo during 2001, which was an increase of 4% compared to the previous year. A stagnation of the handling volumes for 2002 was foreseen but not expected to become as large for oil to Ventspils, coupled with a strong increase for other ports. In its prognoses for 2002, the Transit Department considered it a success if the volumes from the previous year could be maintained (Malpas 2002 www). Latvian officials have stressed that the Russian railway tariff system will be a hindering factor even in the Russian negotiations about a possible future entry into the World Trade Organisation (WTO). The tariffs currently used by the Russian side make the transport, and thereby transit, of fertilisers through Latvia some 300% more expensive than to a comparative destination in Russia, while the transport of metals becomes 200% more expensive. Russian domestic transport tariffs are many times lower than the tariffs for the transit trade through foreign counties. Even the Russian minister accepted that such a discrimination of exporters is incorrect, but the complexity of this issue has not allowed for a re-implementation of the unified transport tariff system that was in use earlier. According to one of the largest Russian producers, Severstal in Cherepovets, the cost of freight from Cherepovets to the port in St. Petersburg is approximately USD 7 per ton[211]. This should be compared to freight moving to the Latvian border that costs USD 34 per ton, even though the difference in distance is only about 400 km (Neatkarīgā Rīta Avīze 2001–12–12)[212]. Such an imbalance in the pricing system is one of the major problems that the Latvian transit industry is facing, since it affects all the components of this chain-type of industry.

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[210] Based on a GDP of Lat 4.759 million in 2001, of which 10% included here and an exchange rate of EUR 0.56 to a LAT (4759 x 0.1 / 0.56) (Centr. Stat. Bur. of Latvia 2002 www).

[211] The distance by rail from Cherepovets (located in Vologda Oblast, north of the Rybinskiy Reservoir) to St. Petersburg is approximately 500 km, and to the Latvian border about 900 km, with an additional 260 km to reach the port of Riga from the border, alternatively 440 border -> Ventspils.

[212] Statistics covering 2002 for railway transhipments indicate that the situation is better than in the ports. During the year, the Latvian Railways carried 40.1 mt of freight, which is 5.9% more than in 2001 with transit freight representing 83.9% of the total volume (Lat. Stat. Bur. 2003 www).

"...such a system hits all the involved parties equally, and if we will all be treated badly, Latvia, Lithuania, Estonia, Finland and Ukraine, then we will die last"
(Lembergs; President of the Latvian Transit Business Association and Head of Ventspils City Council and port; 2001–08–20)

Domestically, it is positive that equal tax regulations have been implemented in all of the biggest Latvian ports which gives rise to hopes that the various logistic services will have better chances to develop. In addition, the regulations of the Customs Office are improving, making things easier for the whole international transport system in Latvia. What will happen with the free-zones that exist in the ports after full EU membership remains to be negotiated.

Traditionally the most important categories in the Latvian transit volumes are crude oil and oil products, which comprise 60% of all the transit shipments through Latvia. About 75% of all the oil transhipments through Latvia come from Russia, which inevitably makes this market and relations with Russia a cornerstone of the Latvian transit industry. The implications for Latvia of the Russian policy of forwarding domestic cargo through domestic ports could be seen in 2002. A clear indication of this is the oil terminal in Primorsk that opened in the last week of 2001, with a capacity in its present layout of 12 mt per year. Altogether during 2001, Russia exported about 70 mt of crude oil through domestic and foreign ports, and of this volume nearly 15 mt, or 21%, passed through the port of Ventspils.

However, there are two main opinions as regards oil transit volumes through Latvia in 2002 and possible developments in the near future. One opinion is that the Latvian oil and oil products transhipment, mainly through Ventspils' terminals, will slightly decrease. This opinion has received strong statistical support during 2002, when the combined effect of the new terminal in Primorsk and the Russian policy concerning its oil exports have been strongly felt. Others, for example the Chairman of the City Council in Ventspils, Lembergs, are of the opinion that:

"no particular problems should arise and there will be work enough for all the ports"
(Lembergs, quoted in Dienas Bizness 2002–01–23).

This statement is based on the fact that the volumes of oil extraction in Russia and the Caspian Sea region are increasing, and will continue to increase, and thus it follows from this that additional capacity in oil terminals will also be needed. The capacity at the Primorsk terminal is just slightly over the increase of extracted oil in Russia during 2001. Latvian proposals to extend pipeline capacity from Belarus to Ventspils in Latvia as an alternative to the Russian Baltic Pipeline System that leads oil shipments to the Gulf of Finland, have not been listened to, despite the fact that it appears to be a much cheaper alternative. Cost estimations for the Latvian alternative have been in the range of 10% of the outlay that must be spent to get the

Baltic Pipeline System in operation; USD 0.3–0.5 bn as compared to USD 3 - 5[213]. It is believed that Russian partners would then be more interested in, and feel safer about, forwarding their oil through terminals of which they themselves are owners. In line with this thinking, in May 2002, Russia's second biggest oil company, Yukos, took over a 25% share of the Lithuanian Mazeikiai refinery, the owner of the Lithuanian oil terminal in Butinge, and in September another 27% to become majority owners of the refinery with the Butinge terminal included[214].

For the time being, Russian investments in Latvian oil transit can only be found in one of the leading Latvian oil transit companies, LatRosTrans, but close business relations have also been established with other companies. Since the middle of 1990's, Ventspils Nafta has been trying to sign agreements with the larger of the Russian oil exporters, but no long-term agreement has been signed so far. Several suggestions have been put forward to Russia's biggest oil company, LUKoil, as to how participation in the Latvian oil transit could be conducted, but as the potential Russian partner would not get a controlling interest no agreement has been signed. Instead, the volumes transhipped during 2002 have fallen by some 30% and the turnover in the port of Ventspils by 25%. To take some kind of initiative in this question must probably come high on the newly elected government in Latvia's agenda during the first quarter of 2003, especially as the state holds a 43% stake in the company that will be free for privatisation by mid 2003 (Baltic Times 2002-10-10).

The Russian state has maintained its control over many regulating functions in the oil business. The Russian Ministry of Energy regulates, for instance, issues related to both total oil extraction quotas and the export permissions for both crude and oil products. The ministry also regulates the export directions, distributes oil export quotas to certain transit corridors and decides the taxes that are applied to the export of oil and oil products (Diena 2002–02–23)[215]. One dramatic decision taken by this ministry, with strong implications for Latvia, is that no export quota has been given for export over Ventspils during the first quarter of 2003 (Moscow Times 2003-01-10 www).

However, when it comes to the Latvian oil transit sector, it does not look as if the Russian side fully adhere to market economy principles thus hindering the development of Latvian transit trade into a more predictable part of its service sector. It is not so that the oil transit is the only problematic field of relations as the demand for licences for the transport of goods to and from Russia by truck has also

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213 Given the difference between the two estimations it is probable that a number of investments included in one of the projects have been excluded in the other, and a lengthy discussion could probably be held about what is right or what is wrong in these calculations. Despite this fact, the basic assumption, that expanding existing terminals would have been a cheaper way to increase capacity than the building of new, is probably correct.

214 A deal that includes the delivery of 4.8 mty of crude during ten years and a USD 75 million loan.

215 A special commission responsible for these kinds of issues has been formed: "The Governmental Commission on antidumping measures in foreign trade and customs and tariff policy".

been much higher than the number issued (Dienas Bizness 2002–01–23 www). This affects mainly container and RoRo freight transportation, which is not a large volume of the Latvian transit trade, but still an important component as the cargoes are of considerably higher unit values.

4.5.3. Future perspectives for Latvian transit

To make prognoses and do forecasting has always been one of the most interesting issues in the preparation of any long-term strategy. However, it can also be the most difficult part if the questions are more numerous than the answers. The above applies especially to the field of transit trade owing to the many unpredictable factors. Seen from a Latvian perspective, Latvia's own transit trade policy cannot alone steer the flow. The Russian export policy, quality of infrastructure as well as the demand and the prices of raw materials on the world market are just a number of other determinants.

The geopolitical location of Latvia between two dynamically developing world economical centres, Europe and Asia, gives it a special role as a part of the communication links between these regions. In an increasingly globalised world, questions concerning transport and financing are of major importance for the integration processes of Latvia. Improvement of the transport system has become one of the basic components of the Latvian economical development, providing even greater transit potential for Eurasian countries.

In Latvia, transit trade has been developing into a major contributor to the Latvian GDP over the last few years. However, this partly conflicts with the long-term economic strategy of Latvia. According to the convergence criteria in relation to the EU, the share of transit trade in the Latvian economy should be reduced, to be partly replaced by e.g. information technological(IT) activities. The latter of these lines of thinking is the most popular and talked about. However, in the present situation one should probably be cautious when evaluating strategies. In the worst scenario, stagnation, the Latvian economy will still include transit trade, a services sector and industries with low value-added, such as light industry, a food industry, a woodworking industry and other industries focusing on other basic products or raw materials. This scenario more or less corresponds to today's situation, despite impressive GDP growth figures during the last three years, +6 - +8% where private consumption has been important in lifting the numbers, this old structure is not a good basis for a long-term positive economic development of the country. In the most optimistic scenario, however, the convergence scenario of the Long-Term Economic Strategy, a dramatic change would take place in the transit industry. In this scenario, an integrated, competitive transport system would effectively integrate international and national freight and passenger logistics and the weight of transit services in the national economy would be better balanced with other industrial and service activities. Transit volumes could be expected to increase in value, but maybe not so in volume. Transit trade will inevitably remain an

important part of the Latvian economy even in the future, but any prognosis is very much dependent on future developments in Russia and other CIS countries. It also depends upon the Latvian political and economic relations with this group of countries, as it should not be forgotten that the competition for transit trade from their closest neighbours, Lithuania and Estonia, is increasing. Therefore, the quality of transit services needs to be constantly improved as the new tendency of generating incomes from transit services while at the same time developing both new and related services, e.g. logistics and distribution services, will probably apply in neighbouring countries as well.

The question of transit trade is one of the most complex questions for Latvia to deal with after entering the EU. Even during the pre-accession process, some problems and changes have occurred in the transit sector. This is because trade, customs and other issues of economic policy are the competence of the European Commission and Latvia is obliged to adapt to the common EU foreign trade policy. It remains hard to judge on what level the European Commission will be able to regulate the economic interests regarding the Russian transit of primarily energy resources because of two reasons, at least. Quite recently, market liberalisation in the energy sector has begun inside the EU, and the Scandinavian states are the first where this sector is slowly being liberalised. How the common EU policy in this sector will steer the liberalisation is not clear, and neither how liberalised energy markets will function in practice inside the EU. On the other hand, Russia has not joined the International Energy Charter, which also determines the transit of energy resources. EU is constantly requesting Russia to join the Charter, but as of yet an entry has not been considered as being in line with the interests of the state.

The European Commission (2000) mentions both the transit and energy sectors as fields of mutual interest in relation to Russia, where Russia should pay more attention to the EU position. At the EU summit of 2001, the strong intention of introducing political co-operation in the energy sector was expressed, paying additional attention to the safety of energy supplies. Despite the optimism and good intentions of this dialogue, the process has not lived up to its full intention, but is instead moving forward rather slowly. The ever-increasing EU energy dependence, that will reach an import dependence of about 70% of natural gas and 90% of oil around the year 2020, is creating a strong long-term demand for energy (LETA 2001–10–23 www). In this case, the role of Latvia should be creative in the field of energy transit, attracting and persuading suppliers to use the Latvian transport infrastructure for further transhipment of these kinds of products. Predictions of future Russian oil production could mean an intensified exploitation of the oil deposits in the Caspian region, which could lead to increased volumes for ports like Novorossiysk and Tuapse. Capacity restraints in the Black Sea region will then result in a redirection of the certain oil flows from Siberia in favour of Western and North Western routes in the nearest future, e.g. in the direction of Latvia. The same intentions as in Latvia, e.g. to attract oil from Kazakhstan and the Caspian Sea region, however, exists in both Lithuania and Estonia

One specific project, that has long been mentioned, for the development of the Latvian transit system has been the construction of a new 18-million-ton per year capacity pipeline from Polock in Belarus to Ventspils in Latvia (Ventspils 2002-10-11 www)[216]. The route of the new pipeline broadly corresponds to the route of the existing pipeline from Polock to Ventspils; but it would bypass the territory of Lithuania. The projected pipeline largely meets the intentions of the EU programs Northern Dimension and INOGATE[217]. The pipeline construction project has been included as a priority project approved by the Latvian government to be suggested to the EU's Northern Dimension program, and, as mentioned in previous chapters the project is also supported by the EBRD which holds a 10% stake in the project. Since this idea was launched, about seven years ago, political risks in Russia have been reduced considerably, oil prices have gone up and, perhaps most important of all, by constructing and operating the terminal in Primorsk, Russia has in deeds showed its ability to both build connecting pipe-line and terminals on time.

The economic and trade relations between Latvia and Russia might have to change as Latvia is now practically situated within the economic space of the EU, with steady economical growth and without any considerable trade links with Russia. The only major economic link with Russia is the transit of raw materials and freight. Meanwhile, the Latvian Government, put its main emphasis on integration and establishing closer ties to Western Europe instead of being just a springboard for Russian businesses towards the West. The relations with Russia have, of course, not been forgotten or put aside, but are not at the top of the list of priorities.

In 1994, a Latvian-Russian inter-governmental commission, a special institution, was created, working on bilateral co-operation issues, but it has never become a successful tool. For example, Latvia is interested in signing a number of different agreements with Russia on air traffic, in the field of customs handling, railway transport and cross-border co-operation. Seven agreements have been prepared for ratification, but none of these agreements had been signed by the end 2002. It must be admitted however that, generally, the relations between Latvia and Russia in the transport sphere, as in most other spheres, are getting better and better. For example, in April 2000, an agreement was signed between the Latvian Railways and the Russian Ministry of Transport regarding the use of ports in Latvia for its freight. However, it should not be forgotten that these agreements have been strongly affected by the internal transit/export policy of the Russian Federation, which remains clearly directed towards a more intensive use of domestic ports and the development of new terminals in the North Western regions of Russia, rather than being faithful to what has been stated in recent bilateral accords.

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[216] The new pipeline would be 528 km, with 415 in Latvia and 113 in Belarus. Including reconstruction of the three existing pumping stations, the building of one new and the expansion of tank parks in both Polock and Ventspils at an estimated USD 260 million. A study of the economic feasibility of the project, support by EU-Phare, has been conducted by the Danish consulting company Ramboll in 2000 (see also www.ramboll.dk/transport/uk/transport/latvia_ew.htm)

[217] A detailed description of the INOGATE and the Northern Dimension initiative can be found at: www.inogate.org and at www.northerndimension.org/index.html.

4.5.4. Russian transit cargo in Latvia – the setting[218]

To do a quantitative analysis of Latvian trade and Latvian transit trade as has been the aim here, to complement the analysis of the Latvian situation and to complement other studies, has proved surprisingly difficult. In Latvia, statistical data are processed in accordance with The State Statistics Law from 1997. According to these regulations, it is the duty of the Main Customs Office at the State Revenue Office (SRO) to supply the Central Statistical Bureau with information about foreign trade transactions (State Customs Office 2002). This extra level in the handling of information handling seems to be one of the main reasons why it is so hard to receive appropriate information on the transit flows through Latvia. Besides the statistical information provided by the Central Statistical Bureau of Latvia, there is some additional statistical information from the Customs Office available directly from SRO[219].

Under certain circumstances it is also possible to get information delivered electronically about separate customs-related parameters, including the transit procedure, based on the following documents "Customs cargo declarations" (for transit cargoes without commodity values) and the part of road transport that has been conducted with the use of TIR – carnets (Transports Internationaux Routiers).

There are regulations that define the official control documents for railway transit, "The Railway Shipping-Note" or invoice, while for transportation through pipelines that is important here, there is an "Acceptance Certificate"[220]. One additional problem is that information from documents for these transport modes is not processed electronically (Main Customs Office 2002). Latvia has accepted, and has changed many of its procedures using EU standards, for border and custom information gathering as well as for analysis. All the collected information currently corresponds to "Intrastat Combined Nomenklature 2000" demands of classification.

4.5.5. Russian transit cargo in Latvia – the statistics

As mentioned in the previous passage it has not been possible at the Latvian Customs Authority or at the CSB to obtain the needed statistics to establish geographical origins to trade. Instead, the same bases for the statistics have been used in Latvia as in Estonia, the State Holding Company Latvian Railway (Latviyas Dzelzceļš). In the same way as in Estonia, the importance of transit cargoes for the Latvian Railways is considerable as 83% of the total volume of 40 mt transported by rail during 2002, is related to transit cargoes. This also indicates that the source of

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218 A more detailed description of Latvian transit trade can be found in Brodin (2002).

219 SRO - State Revenue Office homepage can be visited at: www.vid.gov.lv. The Central Statistical Bureau of Latvia can be visited at: www.csb.lv/

220 The regulations that define this are; Cabinet of Ministers of the Republic of Latvia, No.339, September 8, 1998 - "Order how to execute the customs procedure"

the statistics that will be presented in the tables below all have the Latvian Railways as origin and cover only the share of transit trade transported by rail to and from the port of handling. During the month under study, the total volume of transit cargoes carried came to 2.8 mt, which sets the transit volume for March 2001 to just 8% above the monthly average for the full year, increasing the probability that the results are realistic as regards average annual transit cargo flows.

On the inbound transit side, the most important country was Estonia (see Table 4.15). The most important cargo category of inbound transit for Estonia during the month of March 2001 was Oil and oil products. This category constituted 85% of the volume, while for Russia the dominating cargo category was General cargo, which was almost exclusively food products, making up 63% of the volume (see Table 4.15). The biggest part of this, or 71%, was handled at Ventspils.

Table 4.15. Inbound / outbound transit by country - March 2001 (1000 tons)

Transit destination/origin	Direction		% of total
	Inbound	Outbound	
Russia	117	1 712	56,1
Belarus	18	882	27,6
Estonia	138	49	5,7
Lihuania	50	121	5,2
Ukraine	28	88	3,6
Uzbekistan	2	13	0,5
Others	25	15	1,2
Total	378	2 880	100,0

Source: Latvian Railways 2002

For outbound transit through Latvia during March 2001, the most important was Russia. Some 60% were Russian cargoes while Belarus held a share of 31%. The dominating cargo category from Russia was Oil and oil products, making up 52% of the total, and the main port of destination for the Russian outbound transit was Ventspils. Fertilisers make up 50% of the outbound transit from Belarus, with the port in Ventspils being the most utilised port of transhipment. The second biggest cargo by volume from Belarus was Oil and oil products, making up an additional 45%, with the port of Riga handling 80% of the Belarus oil volume.

When breaking down the statistics further it proved impossible, maintaining an acceptable level of reliability, to establish an Russian/CIS oblast of origin in more than three of the cargo categories used. In addition, it is practically only for

outbound Fertilisers that the coverage has reached a good level[221]. In all categories, the coverage has been more or less affected by the fact that there are considerable volumes being transported in transit in Latvia, but only overland from one country to the next, i.e. not being exported outside the Baltic states from ports in Latvia. The most voluminous example of this is the transit through Latvia of 110,000 tons of oil from Belarus to Estonia and Lithuania. In all, this kind of transit, in all categories, represents a volume of 240,000 tons and affects all categories except coal, where no such over-land transit has been registered. In Table 4.16, the broad picture is presented giving an overview of the most important countries and the volumes in the different categories. Two facts stand out in the table; the domination of Russia as an origin, to 60% of the volume, and the large share of Oil and oil products in the total volume, constituting 51% of total transit during the period under study, also when only rail transport is considered.

Table 4.16. Outbound transit volume per country and category* (March 2001)

No.	State	Oil	Fertilisers	Metals	Other Cat.**	Total
1	Russia	892 000	309 000	224 000	290 000	1 712 000
2	Belarus	399 000	443 000	7 000	32 000	882 000
3	Lithuania	104 000	0	1 000	15 000	121 000
4	Ukraine	70 000	0	11 000	8 000	88 000
5	Estonia	5 000	1 000	4 000	41 000	49 000
6	Central Asia	3 000	0	0	25 000	28 000
	Total	1 473 000	753 000	247 000	411 000	2 880 000

* = Volumes given here include over-land transit through Latvia
** = Categories included are General Cargo and Pulp wood, Bulk, Ore and Coal.

Source: Latvian Railways 2002

The most important category, from a volume perspective, is Oil & oil products, where the total transit volume is 1,473,000 tons, and for which an oblast of origin can be established for 1,046,000 tons, or 71%[222](see Table 4.17). The most important origin is Belarus with 399,000 tons, followed by the Russian Bryansk Oblast 320,000, with Lithuania as the third most important origin with 104,000. All three of these origins are located relatively close to Latvia. The three most important origins make up nearly 60% of the total volume in this, the most important category.

[221] When "oblast" is used in a general sense in the text, it is for practical reasons only and this is meant to include other types of territorial organisations in Russia like Republics, Okrugs, Krays aso.
[222] If the 173,000 tons of Oil and oil products that transit Latvia over-land are deducted from the total, then a origin can be established for 80% of the remaining volume of "pure"-outbound transit.

Table 4.17. Outbound oil transit through Latvia* (March 2001)

Oblasts of origin*	Outbound	
	Volume in tons	% of total
Belarus	399 000	27,1
Bryansk Obl.	320 000	21,7
Lithuania	104 000	7,1
Ukraine	70 000	4,8
Other obl./countries (11)	223 000	15,1
Un-known origin	357 000	24,2
Total	1 473 000	100,0

* = includes known oblasts/countries with > 40,000 tons of outbound oil transit

Source: Latvian Railways 2002

The transit figures in Table 4.17 include only the volumes that transit Latvia by rail while the 500 km long pipeline from Polock in Belarus is a unique feature in the region. Unfortunately commodities that pass through this pipeline are statistically not treated in the same way as cargoes that transit by railway or by truck and therefore these volumes remain a more or less a black hole in the analysis. It is only the total volume of Oil and oil products transported through Latvia in pipelines during the year that is made public and no indication as to geographical origins are given. During 2001, nearly 20 mt of crude and 4 mt of oil products were transiting in the pipeline system, while the fall during 2002 at Ventspils was nearly 40% (Centr. Stat. Bur. 2003 www). For this volume the main exporting companies could be established, but as these companies can only registered in one Russian oblast, which is mostly Moscow, but at the same time have production facilities in many other oblasts. Therefore it would not be meaningful to try to establish an oblast origin for these oil volumes based on the limited information that is officially available[223].

The second most important transit category is Fertilisers where the total transit volume is 753,000 tons and for which an oblast origin can be established for 703,000 tons, or 93%[224]. The most important origin is Belarus with 443,000 tons, which is nearly twice the combined Russian volume. Of the Russian oblasts, Perm Oblast is the origin of 146,000 and Novgorod Oblast that of 62,000 tons. These two oblasts together generate nearly 80% of the Russian volume. Again, most origins are located relatively close to Latvia. Perm Oblast is the exception, being located 2,800 km away from the world's second largest fertiliser ship loading terminal in Ventspils.

[223] The four most important companies for the 15 mt transiting in the pipeline during 2000 were: Title Transfer owning 29% of the total volume, Tatneft 22%, NK LUKoil 15% and LUKoil 11%.

[224] If the 15,000 tons of fertilisers that transit Latvia over-land are deducted from the total, then a correct origin can be established for 95% of the remaining volume of "pure" outbound transit.

Table 4.18. Outbound Fertiliser transit through Latvia* (March 2001)

Oblasts of origin*	Outbound	
	Volume in tons	% of total
Belarus	436 000	57,9
Perm Obl.	146 000	19,4
Novgorod Obl.	62 000	8,2
Samara Obl.	21 000	2,8
Other obl./countries (5)	38 000	5,0
Un-known origin+land.	50 000	6,6
Total	753 000	100,0

* = includes known oblasts/countries with > 15,000 tons of outbound oil transit

Source: Latvian Railways 2002

The third most important category is Metals, but here the level of identified origins becomes doubtful. Out of a total volume of 247,000 tons, exact origins can only be established for 129,000, or 53%[225]. The reason for the problems in this category is that no oblasts of origin have been found for the 111,000 tons that transit the port of Riga from Russia. Countries others than Russia are surprisingly insignificant as origins of Metals, and together generate only 22,000 tons, or 9% of the volume. Slightly less than half of the 45,000 tons originates in the most important of the Russian oblasts, Lipetsk Oblast.

As far as the other categories are concerned, the volumes are below 100,000 tons for all and it has not proved possible to establish origins to any larger extent. Instead, it could be said that the origins have been spread over several countries, meaning that relatively small shares have proved to be of "Russian oblast" origin. Bulk cargoes are a good example of this as an oblast origin could only be determined for 58% of a 95,000 ton total volume which in reality is the full transit volume of ammonia only, while nothing is known about other kinds of products coming from Russia. Adding the ammonia volume to what has a non-Russian origin, the correct origin can be established for 78% of the Bulk volume[226]. The most important non-Russian origin for Bulk products is Estonia, generating 19,000 tons, while 16,000 and 14,000 tons of ammonia originates from Tula Oblast and Perm Oblast respectively. The coal category is also bulk, although it is being separated here, and out of the 166,000 tons of coal handled in Latvia as outbound transit, the full volume has its origin in the Kemerovo Oblast.

[225] If the 4,000 tons that transit Latvia over-land are deducted from the total, then a correct origin can be established for 56% of the remaining volume of "pure"-outbound transit.

[226] If then the volume of over-land transit, 6,000 tons, is deducted from the total, a correct origin can be established for 82% of the "real"-transit volume.

The most diverse of the categories when it comes to origins is General Cargo. Here, the three Central Asian countries Kazakhstan, Uzbekistan and Tajikistan appear as important origins. In all, 78,000 tons of outbound transit cargo was registered in this category, and as in the Bulk category above, no Russian oblasts could be established as origins, although in this case Russia is the origin of only 33% of the total. The Russian volume of 23,000 tons is still the largest, however, larger than the 20,000 from Estonia and the 12,500 from Uzbekistan. Out of the 15,000 tons originating from the three Central Asian states, 97% is cotton. The volume of loaded containers in outbound transit, for which an origin could be established was only 256 TEU, with 40% of the volume destined for Russia, but still a too small volume to draw any conclusions from[227].

The only remaining category of the six used is Pulp wood where the transit volume is the smallest, 60,000 tons, with only 43,000 of this being destined for Latvian ports. Belarus is the origin of 22,000 tons volume reaching Latvian ports, while 14,000 tons originate in Russia and 6,000 in Lithuania respectively. With a Pulp-wood turnover in Latvian ports in the range of 500 – 600,000 tons per month, the inflow of transit Pulp wood proves to be more or less as expected; in the range of 10%[228].

The structure of the total cargo turnover for the month, which was singled out for a deeper analysis, March 2001, corresponds well to the structure of the same month in 2000. The only major difference in transit volumes is that the Ukrainian share was higher in 2001, just slightly less than Russia's. The structure of the dominating products for the month also corresponds well to the annual structure.

4.6. Lithuania as a transit country[229]

As is the case for both Estonia and Latvia, also Lithuania has a historic background as a transit country from the Hanseatic times when the port in Memel, today named Klaipeda, was the centre of activities. However, of the three Baltic states the current transit volumes are the smallest although it is evident that the transport sector plays an important role in the Lithuanian economy.

4.6.1. Introduction

The economic changes in Russia that followed from the break-up of the FSU, including its increased dependence on the economies of western Europe and the

[227] This could be compared to the container throughput at the biggest terminal in Riga that came to 95,000 in 2001, of which approximately 3,500 TEU was outbound during March 2001 – figures that also include Latvian foreign trade.

[228] In discussions with people in this line of business, the transit share from Russia/CIS, although difficult to establish, has often been said to be in the range of 10-15% of total Pulp wood exports in the Baltic states.

[229] A more extensive description of Lithuania as a transit country can be found in Brodin (2002)

transformed position of Russia in the international division of labour, gave a new role to the Baltic states on the geopolitical map.

Important factors in favour of an offensive Russian macroeconomic policy for the Baltic Sea are of course concerns about domestic economical and political independence. This has led to a growing involvement by the Russian federal authorities within the development of alternative international transport corridors for Russian cargo owners. The effect of this has been manifested in large-scale investments in transport infrastructure, including new ports in the Gulf of Finland and tariff changes by way of administrative decrees by the State railway company. These changes clearly aim at moderating the "danger" of Russia becoming too dependent upon foreign ports, as well as reducing the "robbery" of Russia by the Baltic states (Jūra 1:2001 www). Although Lithuania is the least important of the transit countries, during recent years about 4 - 6% of the Lithuanian GDP was generated by the transport sector and a significant part of the transport sector is concerned with foreign cargo transit (Statistics Lithuania 2000 - 2003 www). The dependence on transit trade is for natural reasons especially high when it comes to the ports and shipping business. It has been estimated that 20 - 25,000 people in Lithuania are directly dependent on the ports and shipping business for their daily living and 60 - 70% of the value-add in this line of business is related to transit trade (LSD 2000 www).

From a private company's point of view, when comparing alternative transport possibilities, decisions are taken according to more or less strict economic facts. It furthermore follows, from a strict economic point of view, that cargoes should be routed where the cheapest, safest and fastest transport can be found. The importance of each of these components can of course be discussed separately but, basically, it depends on the type of cargo, as was discussed in chapter 2. For example, pulp wood and peat are sensitive to transport tariff changes, safety is priority number one for alcohol items and containers, while speed, including handling time, is of major importance for items like foodstuffs and spare parts. On the other hand, from a government's point of view and especially that of the Russian government, a higher rating will probably be given to something like geopolitical strategies. This way of thinking has very little in common with a private port users way of thinking, no matter if it is a cargo- or ship-owner.

4.6.2. Transit ports in Lithuania

The outstanding transport hub in Lithuania is the Klaipeda Seaport. Cargo turnover in the port since mid 1990's has been in the range of 16 – 20 million tons annually. This turnover is well below the estimated capacity of this multipurpose port that has an estimated capacity of 25 million tons per year (Klaipeda Port Authority 2001). In all, there were eight stevedoring companies working with cargo handling in the port area in 2002. These companies operate specialised terminals for the

handling of practically all types of cargo. Besides these, there are also three ship repair yards and one shipbuilding yard that all have become involved in the handling of cargoes.

There are three important Lithuanian peculiarities in this field that must be mentioned before going into a detailed description of Lithuania as a transit country:

- Firstly, there are three main transit corridors in Lithuania:
  The East-West corridor from the eastern border of Lithuania to Lithuanian ports. This is the most important transit cargo flow, to and from Russia, and is the flow that will be concentrated upon here. There is also a flow of Russian transit cargoes from the eastern border of Lithuania to the exclave of Kaliningrad Oblast and its ports. As this flow is not aimed at Lithuanian ports, it will not be covered in detail here[230]. The third of the possible corridors is north-south by the Via Baltica motorway that crosses Estonia, Latvia, Lithuania and on to Poland. However this route is not very well suited for Russian transit cargoes and will not be included in the continued analysis here.
- Secondly, there are no direct borders between Lithuania and Russia, apart from Kaliningrad, and therefore Russian cargoes must transit a third country, i.e. Belarus or Latvia, en route to Lithuania.
- Thirdly, the share of Russian cargoes in Lithuanian ports has decreased considerably, during the years of transition, and especially since 1997. Instead, locally generated volumes and the flow of cargoes from Belarus have risen in both volume and importance.

In 1999, a second Lithuanian "port" was opened when the Butinge oil-loading platform terminal came into operation. In this way, a second commercial seaport facility for the handling of transit cargoes in Lithuania was created. The Butinge terminal is connected by a 93-km purpose-built 55 cm diameter pipeline from the Mazeikiai refinery, which in turn is connected to the Russian pipeline grid in the direction of Polock in Belarus (see Figure 3.3). The annual capacity of the terminal is 8 million tons of oil, which can be both export and import. Currently, the terminal is used mainly to export Russian crude oil, having loaded 120,000 tons to one ship at the most (Klaipeda State Seaport Authority 2002 www)[231].

It is the flow of transit cargo over these two port facilities, the Klaipeda Seaport and the Butinge Terminal, that will be considered here. The analysis can be limited to these two, as they handle the whole cargo flow that crosses the western sea border of Lithuania, i.e. all sea-borne trade.

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230 This flow is instead covered in great detail in the Kaliningrad sections: 3.9 and 3.10.

231 After an accident in late November 2001 that caused a 60 ton oil spill, the terminal was taken out of operation for nearly four months while under repair, but was back in operation in March 2002.

4.6.3. Lithuanian statistical problems

There is a problem in Lithuania concerning the reporting of statistics that could have been used to fulfil the purpose of establishing the geographical origins of transit trade. There are various state institutions involved at different stages in the collection of statistics with the Lithuanian customs having the function of collecting first-hand statistics, which are then transferred to Statistics Lithuania and the Immigration Department. Similar kinds of statistics are also being collected by the Klaipeda State Seaport Authority, the main statistic point here, but using a different method of collection than other state organs. Unfortunately, these state departments present slightly different results. In 2002, it was still rather difficult to obtain information that could be used here from these institutions. Therefore, it is probable that, currently, only studies with unconventional approaches, like the one that will be used here, can give an as good a picture of the geographical origin of Russian transit volumes in Lithuania as is possible at the moment.

As it is basically, and primarily, the geographical origin of Russian transit cargoes that is focused upon here, a methodology that made it possible to establish this had to be developed. This is simply because there are no official statistical data concerning regions of origin and destination related to transiting cargoes. The forms used by Statistics Lithuania show that only overseas counties are specified and no more details are given. Inland countries (i.e. countries/oblasts of origin) are divided into only two categories, locally-generated cargoes and transit cargoes. As mentioned above, the most detailed information about both foreign trade and transit trade is registered at the customs office. Unfortunately, the possibilities of obtaining such data are limited by the regulations of the customs authorities, which restrict the use by individuals of their database. On the other hand, the data that is stored by the customs authority is not systemised in a way that would have been useful here. A theoretical possibility would have been to try to systemise and order a computer run of data from the customs authority, but this idea proved prohibitively expensive at a very early stage.

The use of only the database of the custom authority, with information drawn from customs declarations, concentrates on the seller and buyer of goods. In reality, cargo en route could be sold several times. For example, if a Lithuanian company buys crude oil from Russia and then exports it, perhaps not fully according to existing regulations, then as a consequence of these transactions, official statistics will include this quantity as Lithuanian exports. This is a scenario that is constantly indicated by conversation partners as a possibility that often occurs and, as a result of this, that official statistical data should also be treated very carefully. Instead, it became evident, when looking for alternative sources, that the forwarding companies could possess precise transit trade information. However, to use these is also a complicated method, due to the large number of such companies and the fact that cargo origins are information of a kind looked upon as commercial secrets. Nevertheless, as the supply of information was almost unavailable, restricted by

this inability to obtain the material needed, an alternative approach in several steps was developed instead. The period surveyed was purposely set as short as only the month of March of 2001 because the survey is exploratory in nature and because of the large amount of manual work that came to be involved.

To be able to continue this research approach, the starting point had to be the Klaipeda State Seaport Authority reports instead. These reports are consolidated from cargo accounts of the different stevedoring companies. Each company dealing with cargo handling must present a cargo account report to both the Port Authority and to Statistics Lithuania. A report that must list all cargo handled and the volumes handled.

There are three types of such cargo account reports. There is one monthly statistical report that contains data about the total cargo volume of each stevedoring company. In the quarterly account, there is data not only about volumes, but also about the cargo structure of each stevedoring company. The third of the account reports, the half-yearly one, contains the same items as the previous two, but also contains data about the transit cargo share of each stevedoring company. In addition to this, there is a dispatcher's report of the largest stevedoring company working in the port, Klasco, which can be seen as an additional source. Through the dispatcher's reports, it was possible to precisely evaluate the cargo structure and quantities of Klasco for the month under study, March 2001. Complementary to these statistical sources, a number of interviews with forwarders were also conducted to deepen the understanding before making the calculations, but also to evaluate the facts obtained. As a result of this work process, it proved possible to indicatively establish both the oblast of origin and destination of transit cargoes from Russia and other CIS countries.

4.6.4. Calculations of cargo volumes

When the work process had been elaborated, it came to consist of a number of steps with collecting and analysing the available data from possible sources as described in chapter 4.6.3.

The first step was to do a re-calculation of the total cargo flows through the western Lithuanian border distributed by cargo types and stevedoring companies in the first quarter of year 2001 (see appendix). This step was based on data from the Klaipeda State Seaport Authority. Then came the evaluation of cargo flows in Lithuanian ports in March 2001. As there are just quarterly, reports specifying dry cargo types, the estimated shares of dry cargo handled in March of 2001 had to be calculated as shown in Table 4.19. Parallel to this, it was possible to also calculate the cargo flow for the largest stevedoring company in the port for March 2001. This stevedoring company alone handles approximately 40% of total turnover in the port and through its daily dispatcher's reports, the total for the month could be calculated.

Table 4.19. Cargo Turnover for January – March 2001 (1000 tons)

	January 2001	% share of Jan.- Mar.	February 2001	% share of Jan.- Mar.	March 2001	% share of Jan.- Mar.	Jan.- Mar. 2001
- oil products	355	27.5	541	41.9	395	30.6	1 291
- dry cargo	975	34.3	907	31.9	961	33.8	2 843
Klaipeda total	1 329	32.2	1 448	35.0	1 356	32.8	4 133
Butinge - crude oil	401	28.1	500	35.0	527	36.9	1 428
Total Lithuania	1 731	31.1	1 948	35.0	1 883	33.9	5 561

Source: Klaipeda Seaport Authority 2002

This was then followed by a recalculation of cargo flows in each stevedoring company for the month of March 2001, based on each company's report to the port authority. Based on this, a more or less "exact estimation" could finally be made of the cargo flows in Lithuanian ports for the month of March 2001 by summarising the results of each stevedoring company (see appendix). Then followed the step to estimate the share of transit cargo flow, from total cargo flow, and to establish the oblasts of origin and destination for the transit cargo. Principally, it was at this stage that the interviews with the different forwarding companies came to be important. The starting point for this step was official statistical information from the Port Authority. The available statistics give quantities of different types of cargo, but also make it possible to separate purely local cargoes, for example peat, from what are transit cargoes.

Certain groups of cargoes, for example oil products, metals and fertilisers are all being supplied from what is often less than half a dozen of well-known producers. Oblasts of origin for these cargoes were specified by the stevedoring companies. What proved most difficult was to deal with the large number of smaller consignments of cargo that are often shipped in containers and other RoRo cargoes. The distribution of those consignments is extremely widespread. As the time of study was just one month, it was possible to collect a more or less complete set of data from the forwarding companies even for smaller consignments, but for a longer period of time this would probably have proved impossible – as well as entailing prohibitively much work.

The main question regarding methodology is the reliability and exactness of the results. As explained above, precise data for cargoes like oil and oil products, fertilisers, metals, scrap metal were collected with relative ease, while there was no handling taking place during the first quarter of 2001 for either ore or coal. Together the cargo categories outside General cargo made up some 90% of the total cargo volume. Bearing in mind that when cargoes that are of purely local origin, like peat, cement, minerals and timber are deducted from the total, the exactness of the method used here is probably well above 90%. Through a lot of manual work, a fair

exactness could also be established for containerised and RoRo cargoes. It proved possible in the end to state an approximate, i.e. "most probable", oblast of origin for transit cargoes and this picture was supported by the interviews made.

4.6.5. Categorisation of cargo volumes[232]

In this passage, there will be a description of the process of establishing the volumes of cargo that can be included under the definition, transit cargo. Only the cargo groups that had a turnover exceeding 20,000 tons during the month under study will be presented, while the same descriptions for a number of smaller cargo categories can be found in the appendix. However, there are 13 cargo groups that have a turnovers that exceed this limit during the month, while another 17 showed turnovers under 20,000 tons. Both, below, and in the appendix, the categories are presented in order of volume, with the exception of the first one, "containers, trucks and trailers", as this is the most important of all categories in terms of value, but not of volume.

Cargo in containers, rail wagons and via road transport totalled 311,000 tons including Tara. The major part of these kinds of cargoes, nearly 74 %, was handled by the Klasco Eurogate terminal, which mainly handles containerised cargo. The International Ferry Port Company, which specialises in trucks and trailers, unloaded 23%, while the quantity handled by other operators is insignificant.

Through the mentioned calculations, it could be established that more than 50% of all containerised cargo that departed from the port was of local origin and about 60 - 70% of imported containers were also for the local market. For trucks and trailers the picture can vary, but is most often in the range of 45% and 60 - 65% respectively. If the volumes mentioned above are taken together, there could be a 40 - 60 relation between the share of cargo aimed at the local market and the share of cargo aimed at the Russian and other markets.

To establish the oblasts of origin, i.e. the producers and exporters of this transit lot is not very easy. When transport companies supply a "door to door" service, it can be assumed that there would be a large number of destination points. For these kinds of cargoes the destination probably indicates the stuffing or stripping place for containers /trucks /trailers. The most important areas for this are around Moscow, St. Petersburg and Minsk.

The turnover of crude oil totalled 527,000 tons which makes it the largest category. Crude oil is transported via the Butinge terminal and all is of Russian origin. There is no specific oblast of origin, but rather a large number of Russian regions that are

[232] The combined results of this step are presented in appendix. Please also note that there is a 1.7% difference between real cargo turnover and the result shown in appendix. This is due to the use of a slightly different calculation method.

origins of the exported oil. The main oil suppliers to Butinge can be found in Western Siberia, such as the Tyumen Oblast, and in the Volga Region, such as the Republic of Tatarstan and the Republic of Bashkortostan.

The turnover of oil products totalled 397,000 tons and, as in the case of the crude oil that transits from Russia, the oil products are refined at various places. Of the oil products loaded in Klaipeda, 39% are received from Russia and the Moscow Oblast, 30% from Belarus and 31% from Lithuania's Mazeikiai refinery.

The turnover of fertilisers in bulk totalled 120,000 tons. The Bega terminal handled the main part of the turnover during March. This export is mainly from Belaruskaliy in Belarus. The turnover of gas-liquid fertilisers totalled 70,000 tons. The local Lithuanian company, Achema, was the producer of this[233].

The turnover of raw sugar totalled 61,000 tons. The full volume of this cargo was dispatched to four Belarus sugar refineries.

The turnover of steel coils and steel plates totalled 60,000 tons. Almost the full volume was exported from Russia and the Novolipetsk Steel Factory, and only about 6 % was for local use at the shipyards.

The turnover of ferroalloys totalled 53,000 tons, all of which was exported from smelters in Kazakhstan[234].

The turnover of Pulp wood totalled 52,000 tons. This category could be divided into about 65% that originate from Russia and Belarus, while some 35% is domestic Pulp wood[235].

The turnover of steel bars and other steel products totalled 40,000 tons. About 75% were exported from Belarus and the Belarus Steel Works, while the remaining 25% came from Russian suppliers.

The turnover of pig iron in ingots totalled 41,000 tons. The full quantity was handled by Klasco and came from the Russian, Tula Oblast.

The turnover of metal scrap totalled 40,000 tons. This mainly has its origin in Lithuania and only some 5 - 10% are transhipped from Russia and Belarus.

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233 The full volume was for export to UK, France, Germany, Belgium and Sweden

234 This cargo replaced steel coils and plates that came from Russian steel producers, but met export restrictions on its main US market. Handling of ferroalloys is not as attractive as the previous Russian cargo, as it often requires several handling operations in the port.

235 About 90% of the pulp wood was destined for Swedish pulp mills.

The turnover of foodstuffs and animal food in bulk totalled 33,000 tons. The Bega terminal, in its fully-equipped new warehouse for exports, handled most of this. The products exported were mainly agricultural products like soya-meal, sunflower seeds, most of which had their origin in the Ukraine.

The turnover of frozen fish totalled 23,000 tons. This group of cargo was imported and handled mainly by the three stevedoring companies, with Smelte handling 45%, Klasco 43%, and Laivite 12%. The most common destinations are regions in the northern Ukraine and in central Russia, with the main distribution centres being in Moscow and with about 10 - 15% being for consumption in the local Lithuanian market.

4.7. Finland as a transit country

4.7.1. Transit trade through Finland

After WW II, bilateral trade agreements led to Finland being given a special status in its trade with Russia. At its peak in 1982, Russia took 27% of Finnish exports, but trade came to fall sharply during the years of transition to a low of 4% in 1992 (Komulainen and Taru 1999). Trade between the two countries has been extremely volatile with Finnish imports exceeding exports by EUR 450 million in 1994, having been reversed to a Finnish trade surplus of EUR 500 million by 1997 to again fall back to a deficit of EUR 1.3 bn by the year 2000. This volatility can in part be traced to energy prices as Russian export to well over 80% consists of energy while Finnish exports a wide range of high-grade products. In 2001, Finland imported Russian goods for EUR 3.4 bn while exports stood at 2.8 bn, constituting a share of 9.6% of total imports and 5.9% of exports respectively (Tulli 2002)[236].

During the years before the 1990's, the Finnish – Russian border had symbolised the confrontation between two political systems, with all the negative implications that this could have on e.g. handling times at border stations. Despite this barrier, Russian transit trade, in larger quantities, started to pass through Finland as early as the 1970's, but has over the years showed sharp variations in volume from one year to the next. The total volume of transit trade passed 1 mt for the first time in 1979, 2 mt in 1980 and 5 mt during a year for the first time in 1990. Transit trade has surpassed 5 mt during three of the last 25 years, 1990, 1994 and 2001 (FMA 2002 www). From 1993, with the introduction of the European Economic Space treaty (EES treaty), a new set of external regulations was superimposed on the national Finnish regulations. With the Finnish membership of the EU, from 1995, the Finnish - Russian border became the only EU border that, so far, is shared with the countries of the FSU. However, it is the border and the custom handling on the

[236] Crude oil, oil products, gas and wood make up 70% of imports in value and >95% in volume.

Russian side there that the members of the Finnish Russian Chamber of Commerce see as the biggest barriers to business between the two countries - despite the fact that the custom handling is nowadays being done in new facilities that have been largely EU funded (finruscc 2002-11-20 www)

From its geographical position and trade pattern it is natural that Finnish ports handle large volumes of cargo, and the total turnover in Finnish port in 2001 (1998) came to 79 mt (77 mt). In the same year, the volume of transit cargoes was 5.7 mt (4.1 mt), or 7% (5%) of total port turnover. With one exception, Kokkola, the bulk of this volume was handled in the ports that are geographically best suited to handle Russian transit cargoes, i.e. on the south-eastern coast (For 2001 figures: FPA 2002 www; 1998 figures: Kajander 1999).

As can be seen in Table 4.20, it is the two ports located closest to the Russian border, Kotka and Hamina, that handled large volumes in 2001, but also Helsinki with 1.4 and Kokkola with 0.5 mt saw a lot of Russian cargo during the year. Together, these four handled over 95% (95%) of the total transit volume, with a share of 92% (92%) for eastbound transit and 97% (97%) for westbound transit through Finland. Changes in volumes between 2001 and 1998 in Table 4.20, despite being volatile in some cases, cannot fully illustrate the sharp variations from one year to the next that have been so frequent for Russian transit volumes during the transition years. As an example of this, it can be mentioned that, in 2000, the total transit volume was just below 3.6 mt and then saw an overall increase of 65% to reach the 2001 figure, much due to increased fertilisers exports, that became profitable again when fairway dues were reduced.

Table 4.20. Russian transit trade in larger Finnish ports 1998 and 2001

(1000 tons)

	2001			1998			Change % 2001/1998		
Port	Import	Export	Total	Import	Export	Total	Import	Export	Total
Hamina	227	719	946	273	591	864	-17	22	9
Kotka	535	2 112	2 647	597	1 708	2 305	-10	24	15
Helsinki	823	591	1 414	407	25	432	102	2 264	227
Kokkola	24	489	513	116	206	323	-79	137	59
Others	138	130	268	130	74	204	6	76	31
Total	1 747	4 041	5 788	1 523	2 604	4 128	15	55	40

Source: Ports listed in the table; "*Others and total*" (FPA 2002 www).

Although no crude oil transited Finland during either 2001 or 1998, 200,000 tons (400,000 tons) of oil products did. However, it is the exports of chemicals, fertilisers and ores, all in bulk, that constitute the largest volumes of west-bound transit cargoes (see Table 4.21). The eastbound volume consists mainly of general cargo, most often high-value cargoes in containers that are often trucked to Russia. This

volume is to a high degree a one-way traffic where containers are emptied in Russia and where the containers, that have never been lifted off the truck, are taken back empty to the port area on the same truck. This procedure gives rise to a large number of empty outbound containers from Russia in the Finnish ports. In Finland, contrary to the ports of the Baltic states, this flow has come to fit in nicely with a demand for empty containers for the Finnish export of paper and pulp (Arminen interview 1998-10-27). Russian sources have set the share of the Russia-bound container handling in the ports of Helsinki, Kotka and Hamina to 8%, 80% and 90% respectively – which in the first case seems too low and in the two latter too high (International Container... 2001). The biggest Finnish expansion in the container segment was for some years in Kotka and Hamina, but the initiative has been somewhat regained by Helsinki owing to the opening of a new feeder service with transhipments to St. Petersburg. During 1999, 480,000 tons were handled in this service, increasing to 1.1 mt for 2001 and further to an estimated 1.3 mt for 2002. This handling has much been based on the better net of feeder and linear services that Helsinki can offer, than can its domestic competitors (Port of Helsinki 2003)[237].

Table 4.21. Russian transit in Finnish ports by commodity 1998 and 2001

(1000 tons)

	2001			1998			Change% 2001/1998		
Port	Import	Export	Total	Import	Export	Total	Import	Export	Total
General cargo	1 470	657	2 127	1 225	49	1 274	20	1241	67
Ores	5	637	642	0	340	340	*	87	89
Metal	140	90	230	102	35	137	37	157	68
Oil products	0	202	202	35	388	423	-100	-48	-52
Fertilisers	0	1139	1139	0	696	696	*	64	64
Chemicals	10	1 340	1350	52	1 009	1 061	-81	33	27
Minerals	0	0	0	99	4	103	-100	-100	-100
Other	61	1	62	10	83	94	510	-99	-34
Total	1 686	4 066	5 752	1 523	2 604	4 128	11	56	39

*= cannot be calculated

Source: Finnish Board of Customs 2002 and 1999

As shown by Table 4.20, the handling of transit cargoes in Finnish ports showed a strong concentration to just four ports. Despite this fact, a number of other Finnish ports are optimistic about a positive future when it comes to the possibilities of increased Russian transit volumes[238]. Something of a prerequisite for the northern

[237] On October 9 2002, it was finally decided to build a new unified Helsinki port, called Vuosaari. Located east of the city, it should be ready by 2008, at a cost of EUR 470 million (DVZ 2002–11-23).

[238] The northernmost Finnish ports already present themselves in detail on the net in relation to possible transit handling, even in Russian (e.g. Port of Oulu and Port of Kokkola 2002 www).

of the about 10 ports that would like to be considered as serious competitors, possibly including the ports in Luleå in Sweden and Narvik in Norway, is the opening of the ready but not yet used railway line Ledmozero – Kochkoma (Peterson interviews 1999 - 2002, Himanen interview 2002-12-16)[239].

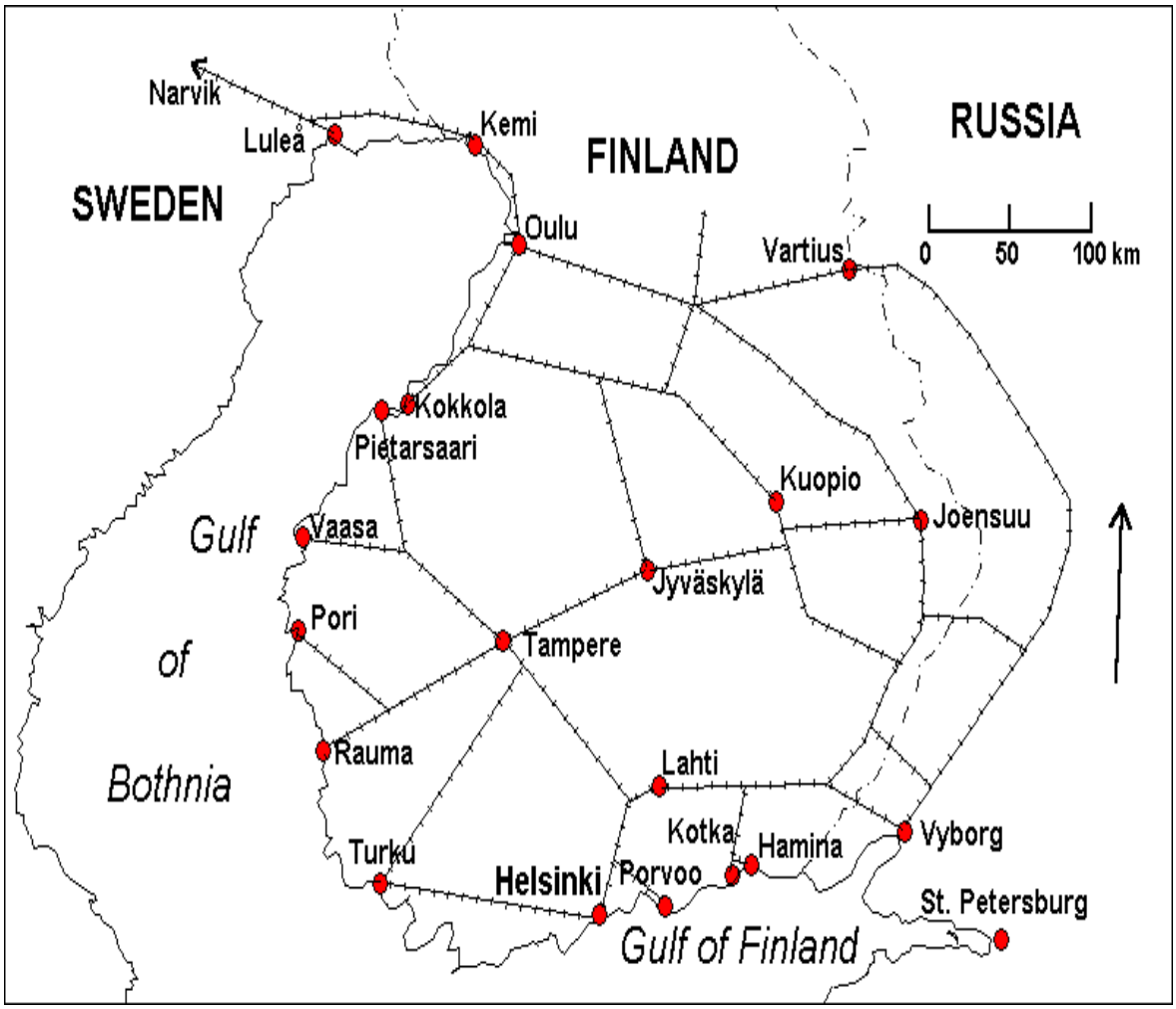

Figure 4.4. Major Finnish ports and railway connections to Russia

Source: Author, based on Ratahallintokeskus (1999)

The opening of this railway line would give a direct connection eastwards from the Vartius border crossing to the Murmansk line, without a 400 km detour south for transport in the Barents direction (see also Figure 4.4 and 3.6)[240]. One advantage of several of these competing ports is their large and established capacity in handling bulk materials, especially ores, but there is a need for a better coverage of Karelia and access to the Barents transport network that such a railway would give. When

[239] For the passage into Sweden, the strengthening of the railway between Kalix and Haparanda (near the border) is necessary (Peterson interviews 1999 - 2002).

[240] The Ledmozero - Kochkoma track was originally designed for a capacity of 5 Mty (MTC 1995) and loaded trains have used the line with, as far as known, positive results (interviews 2002).

finally put into use; as it has already been scheduled for opening in 1994 *(MTC 1993:a, p. 56)*, in 1996 (Nowerail 1998:a www) and in 2000 (Bärlund interview 1999-07-02). When this will happen it is likely that several more ports will compete for the handling of e.g. ores, pulp wood and wood-products from Karelian, Murmansk, Arkhangelsk and Komi. Depending on the point of view, the development of such an international transport network can be seen as a both positive and negative, giving better connections for both Russian raw material and industrial producers to ports, outside of Russia. Such connections are most likely to be positive for the regions concerned, but would again contribute to the erosion of the position of Russian domestic ports. In the long run, it could also erode the potential for new Russian capacity, if logical arguments are not offset by a continuation of central directives steering goods flows by way of Russian rail tariffs.

4.7.2. Other transit trade actors

The port sector is not the only Finnish actor that strives to increase transit volumes as the Finnish State Railways (VR) is one of the largest operators in the Finnish transit business. VR is in the happy position that Finland uses the same track gauge on its railways as Russia. Transport of Russian cargoes by the Finnish railways has grown continuously in importance since the break-up of the FSU. During the years of transition, VR has seen an ever-larger share of the tonne-kilometres transported being generated by the domestic consumption of Russian goods and Russian transit traffic. Little has changed in this respect as, in all, 13 mt crossed the Russian / Finnish border by train during 2001, out of a total freight volume of 40 mt (VR-Cargo 2002 www)[241]. As a consequence of a similar rail gauge, Finnish ports do not have to give any advantage to the ports in the Baltic states from this aspect, but the VR tariffs are considerably higher than rail tariffs in the Baltic states (Knopf interview 1999-06-11 and 2002-12-09). As a result of this, it is more expensive for shippers to use Finland as a transit country where the cost for a 40 feet container from the major ports in Europe to Moscow comes to USD 1890 using Finnish ports and 1520 through St. Petersburg (International Container...2001 p12). On the other hand, the Finnish railways offer block-trains to both St. Petersburg and Moscow, twice per week with a 100 TEU capacity, including Trans-Siberian scheduled container trains to China and to ports in the Russian Far East with a transport time of 14 days, even from Sweden and Germany (DVZ 2002-09-10).

European railway companies also want to compete for transit volumes and since 1997, at the Swedish – Finnish border at Haparanda – Torneå, have had two different EU sponsored axle-exchange systems between 1435 and 1524 mm railways in operation. Both systems have sustained sever winter as well as general operational testing, and from the end of 2003, there will be a full trail-train in

[241] The same figures for 1998 was 13mt crossing the border and 41 mt carried during the year (VR-Cargo 1999:a, VR-Cargo 1999:c www).

operation, and not only one wagon as up until now. This project can be seen as a full-scale test of the future viability of this kind of automatic exchange systems. Wagons used have axles with wheels that, when pulled through the exchange at a low speed, automatically change the width from Finnish/Russian wide tracks to Swedish/European, or reverse. If operational in the climate of Haparanda, where the German system so far has worked to perfection in thick snow and –35 degrees, then in a few years time this is intended to be introduced elsewhere in Europe along the FSU border (Johansson interview 2002-12-13).

Previous Finnish attempts to somewhat offset the whole discussions about Russian ports in the Gulf of Finland by trying to make the pipeline from the Timan - Pechora fields bypass Russian ports altogether and instead terminate in Sköldvik/ Poorvo could be seen as dead owing to the opening of the terminal in Primorsk. From this main line only a sideline would then, later, have connected the port in Primorsk to the pipeline grid. The advantage here would have been that practically all the necessary port facilities needed already exist at the port of Sköldvik, that houses the biggest port in Finland with a turnover of 16 mt, 9 mt unloaded and 7 loaded, in 2001 and the biggest refinery in Finland (owned by Fortum - renamed from Neste) (FPA 2002 www). These plans have been known to exist for several years, but were re-vitalised after the 1998 Russian economic crises. That the Finnish side had build strong support even in Russia is clearly reflected in the statement by President Putin (also quoted in 3.4.3) about "heated discussion in the government" at the time when he was Prime Minister and the BPS-pipeline project was discussed:

"I can recall such harsh words in the government when I had to say openly:
"This project is sabotaged and saboteurs are in this hall." "
(Kremlin 2001 www)

It should be noted, however, that the port in Sköldvik handled no Russian crude oil in transit at all during 2001, neither during 1998.

4.8. Summary

As has been demonstrated in this chapter, Baltic ports are in a relatively favourable position in relation to their Russian competitors. Soviet era patterns left these ports in a difficult starting position, which forced them to restructure administrative routines, cargo handling systems as well as physical port structures and equipment. The quick comeback to positive growth figures in the national economies, along with support from administrative circles on the national level, helped the port sector in the Baltic states to re-vitalise their way of working. A comparatively smooth operation in the sector soon re-attracted Russian transit volumes which has made the comeback in the port sector possible. Both the dependence and vulnerability of the sector to the development in Russia remains strong and is

clearly demonstrated by the large share of Russian transit cargoes in the total turnover of the Baltic ports, 71% in 2002 (about 63% in 1998). Despite the opening of the new oil terminal in Primorsk and the continued expansion of the port in St. Petersburg, the Russian dependence has continued to increase, but the future has entered into a higher degree of insecurity. Finnish ports are here in a somewhat different position with a dependence on transit cargoes of just 7% in 2001, making Russian transit cargoes just complementary to a large domestic cargo base.

5. SWEDISH TRADE WITH THE FSU 1993 – 2001

5.1. Introduction

This chapter will focus on the other end of the trade flows that make up the commodities and goods that transit through the western parts of the FSU. It is backward looking, dealing with cargoes that arrive in Sweden after having, largely, transited through other countries from its origin to the port of arrival. Trade between Sweden and the countries of the FSU will be used to illustrate this angle. The changes that will be illustrated are for the years 1993 - 2001, has been multi-dimensional during the transition years. Not only have volumes changed, but also the content as well as origin and destination of cargoes on both sides of the Baltic Sea. Between 1992 and until 1997 these changes have been documented through a survey within all Swedish ports, and the results have been used to map cargo type, volume, origin and destination of all seaborne trade with the FSU area. It is primarily the results from a port survey (PS) conducted by the author between the years 1993 – 1998 that will be presented, in combination with a survey covering the years 1998 – 2001 where the empirical material has been obtained through the Shipping Goods Survey (SGS) collected by Statistics Sweden (SS). These results not only indicate foreign trade routes and trade patterns, but also shifts in competitiveness in the port sector among the FSU states.

5.1.1. Background

During the first turbulent years of the break-up of the FSU, there were hopes that one of the outcomes would be a quickly expanding trade. This was especially the case among the neighbouring countries, in the Baltic Sea rim.

Most such hopes have so far been proved to be too optimistic. One reason was the dramatic decline in economic activity and industrial production in the FSU. The downturn was also fuelled by political unrest, the breakdown of the CMEA and the internal trade within the Central and East European group of countries. The formerly centrally planned, and well-protected, system had for the first time to face a more or less open competition from the West. In most East European countries, economic crises, related to transitory problems, developed alongside a parallel downturn in economic activity that affected many West European economies during the first years of the 1990´s.

The falling apart of the FSU was also followed by the disintegration of the administrative routines and responsibilities, e.g. the collection of foreign trade statistics. From having been an operation run at the central level of the USSR, new national statistical offices had to be established in each of the new republics.

It was during these turbulent years that the collection of material for the Port Survey started. In a normal bilateral trade relation it would have been possible to compare trade statistics from the countries involved, but for reasons mentioned, this was not meaningful for the first years of transition. It took time until fairly reliable statistics, in any form, existed and another few years before it could be called acceptable. Since the second half of the 1990's, however, these new organisations work, more or less, properly and since the turn of the millennium probably as good as in any other country. Nevertheless, it was not only in the FSU that the new situation led to data problems[242]. In Sweden there were early misunderstandings about how the countries should be separated statistically, and this can have affected the collection of data.

5.1.2. The cargo studies

As regards the Port Survey years, 1992 - 1997, a number of reports have been written taking into account, first of all, the changes that have occurred during each year in relation to the previous year (Brodin 1993, 1994:a, 1995, 1996, 1998, 1999)[243]. What will be presented here, however is not so much the yearly changes as the trends and volumes of the trade for the different categories of cargoes. From what is known no comparable empirical data have been collected elsewhere. The results have also made it possible to show both the country of origin and area of destination of the different commodities included, which has made it possible to establish the actual routing of the goods on the Baltic Sea.

The SGS survey, however, is not collected the same way as the official trade statistics that are based on the declarations that the customs authorities will get from importers and exporters. The SGS is based on a special form filled out by the ports, that includes 30 different cargo groups within which all arriving and departing cargo are classified. The collection of this material was introduced in 1997, but did not reach the desired level of reliability until 1998 (Söderberg interview 2002-10-10).

A number of new and sometimes contradictory facts have been encountered when studying Swedish trade statistics with the FSU group of countries in greater detail. This made it inevitable to include a discussion about the reliability and presentation of official trade statistics as a second field of study. The statistical problems related to Russian transit through the ports of the Baltic states have proved to be a largely unknown field of research in the West, but similar relations, e.g. Hong-Kong in relation to China, have been studied elsewhere (see Feenstra et. al. 1999).

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242 From 1991-08-27 the Baltic countries were treated as separate countries in Swedish trade statistics; from 1991-12-19 Russia, Ukraine and Belarus were separated. The remaining group of nine countries was called *"Soviet Union"* until the end of 1992.

243 The 1992 evaluation covered only Russia and material from this survey has therefore not been used here, but is included in the general trend and as basic facts.

5.1.3. Method

The Port Survey was conducted by way of a written request that was sent annually to the 55 - 65 different ports and private port-terminals in Sweden in order to obtain the information needed[244]. Together, the included ports and terminals handle over 99% of the Swedish seaborne trade with the countries of the FSU. The ports were asked to fill in a form about their turnover of goods to and from ports in Russia and the Baltic states[245]. The first year the reply ratio was approximately 85% and has increased every year, to reach nearly 100% for the last three of the conducted surveys, divided into the same six cargo categories as was used in both chapter 3 and 4. For the whole FSU area, the origins and destinations have come to include a total of nearly 50 different ports and loading terminals along the Russian coastline of the Baltic Sea and in the Russian canal system, ports in the Baltic states, but also, on rare occasions, ports along the Russian Arctic coastline, such as Murmansk and Arkhangelsk. Russian ports of origin in the Black Sea have never been mentioned by the Swedish ports during the years of survey. The information about the port of loading or unloading of a ship departing from or arriving to Swedish ports is as a rule given by the documents presented by the captain of the ships to the ports involved. With the introduction of the compulsory SGS by Statistics Sweden in 1997, disappeared much of the willingness in the ports to fill in the voluntary Port Survey.

For the years 1998 – 2001 the statistical material used here is purely of Statistics Sweden (SS) origin, has caused the statistical base to change somewhat. The 30 groups reported have in turn been grouped together according to the same principles as the port survey – into eight geographical areas of ports and into the same six cargo categories as have been used in previous chapters[246]. The two years of overlapping Port Survey and SGS material for 1997 and 1998 have proved very useful when comparing the figures between the two surveys. A material that fully confirms the statements by Söderberg above, as the data for 1998 correspond much better between the two sources.

The most noticeable difference between the two sources is that the SS material does not include a separation for the different ports in the FSU countries in the same way as was given in the statistical material of the PS. The SS material uses only countries, not individual ports, as origins and destinations, which is a drawback. As a result of this, e.g. Kaliningrad cannot be separated from other parts of Russia and the amount of the oil from Latvia that has its origin in Ventspils cannot be

244 One or two more for each year as the coverage has increased, but also as imports have widened.
245 A copy of both the letter and the *"fill-in form"* can be found in appendix.
246 As the supplier of detailed information, collected by a public entity may not be revealed, made only the aggregates based on transport regions available. Therefore it was not until late 2002 that a permission for a devoted computer run of the SGS material was finally given.

distinguished either[247]. As for the connections to Finland, where cargo is trucked on the regular ferries to continue to Russia, a factor of 8% of total transported volume on these eastward and 3% westward have been added during the Port Survey years as an estimation of these volumes.

The statistical material used in Figures 5.2 and 5.3 has been extracted through the conventional foreign trade statistics of Statistics Sweden and the Port survey. The secondary data from Statistics Sweden have not been refined in any other way than normal statistical material. This base material has been split into eight different Swedish transport areas (sometimes-called "*customs regions*"; see Figure 5.18), made to include all separate items, according to the SITC system of classification on a 3-digit level[248]. These listings include the reported volume of all types of cargoes that have been imported to and exported from each transport area. The information supplied was then manually divided into the six different cargo categories used in this thesis.

The data used has its origin in manual work by the entering figures in forms or by computer. Statistics that then have to be summed-up by someone else, transferred by e-mail or in written form to its final destination, and then to be analysed. In the initial years of the PS, a number of cases were registered when e.g. Latvian ports were assumed to be Estonian or similar mistakes based on misunderstandings. In later years, these kinds of mistakes have probably been eliminated. Still, it is always possible that there can be errors and omissions that affect what is being presented, but that fall outside what has been possible to control.

5.1.4. Comparing the Port Survey and official statistics

To be able to get a complete picture of international economic integration, it is important that the statistics presented also reflect the real trade patterns, but a problem is that statistics do not indicate the actual routing used by bilateral trade, and that it takes special knowledge to reveal this. One major problem in this respect is due to the re-routing of cargoes during transport, which can make it difficult to establish the correct origin of products when they reach their country of destination. What happens is that nations holding an entrepôt position, like Estonia, Latvia and Lithuania, increase their own volumes of trade on behalf of others when handling transiting trade cargoes. It is also a fact that the re-routing of Russian trade is much larger than what could have been expected. When measured in tons, the observed increase in this example in the late 1990's was in the range of 30% (Brodin 1999). With this in mind, it was attempted to use a "*port survey method*", with information directly from the ports, as a way of establishing the actual flow of

[247] Continued international integration, together with the introduction of established EU procedures in the Baltic states will probably initiate considerable improvements in the field of trade statistics for several of the FSU countries in the years to come.

[248] SITC: Standard International Trade Classification, issued by the UN

goods and commodities. This is by no means the ultimate way to establish volumes that are not fully covered by general trade statistics, and both the two current systems used by Statistics Sweden, as well as the Port Survey method, have advantages and disadvantages.

The Port survey - collected voluntarily
The ports are very cautious when measuring the volumes of cargoes they handle. Normally, weight is what ports base a large share of their handling fees on. At the same time, there is no guarantee that the correct volume is stated in the documents that importers present to the customs authorities. This should be the case, but as long as no import tax is applicable on the commodity in question, the stated volume and its origin will very rarely be questioned by the authorities. It is thus more likely that the volume calculated by the port is closer to the truth than the volume that is presented to the custom authorities by the importer. With a quickly increasing use of electronic data interchange, EDI, by the Swedish Customs Authorities, cargo information is normally sent well in advance of when the unloading / loading is due to start. The Port Survey also gives a clear regional dimension, as the individual port of loading / destination in the different countries covered is given. This makes it possible to make deeper analyses with a regional dimension.

Official trade statistics from Statistics Sweden
The greatest advantage of the present form of trade statistics is that it is an internationally accepted system. Conventional statistics have a strong focus on goods values, and records of the country of consignment / origin for imports and the country of destination for exports. The way this system works is well-known to all actors involved, including private importers and exporters. Official trade statistics distinguish between all the different items that together make up the foreign trade, e.g. all the different types of manufactures, which a port survey can hardly be expected to cover.

Another factor that has complicated the collection of conventional trade statistics in relation to the countries studied here has firstly been the introduction of temporary currencies, later followed by new currencies, during the years of the 1990's. Currency fluctuations and the instability of exchange rates between the different currencies, often under pressure from high rates of inflation, was a stage in the economic development that the Baltic countries later came to terms with, but, for a period, this made trade operations difficult[249]. Currency instability is a factor that can partly explain the high volatility of imports, when measured in value from the countries of the FSU, during the first years covered here. These initial problems have now been overcome, especially in relation to the Baltic states, by way of Euro currency pegs in preparation for EU memberships. It is unavoidable that problems

[249] Conversions and comparisons of values to other currencies during the period studied becomes even more difficult as also the value of the USD, in SEK, has been fluctuating, from a low of 6.6, on 1995-12-20, to a high of 10.9, on 2001-09-24 (Hagman interview 2002-12-13).

related to exchange rate volatility have affected the accuracy of the collection of conventional trade statistics based on goods values[250].

Official SGS from Statistics Sweden
SGS as collected by Statistics Sweden could be seen as a hybrid of the two previously mentioned ways of collecting statistics. One advantage is that it is compulsory and therefore comes to cover 100% of the intended sources. As the SGS is based on volumes handled in the ports and it therefore avoids the currency problems mentioned above. On its weak side the same arguments can be made as against the Port Survey, it is much better at separating different kinds of bulky cargoes than cargoes that are more important from the point of view of value. The group ”general cargo”, being one of the 30 used, can probably be expected to contain a very large share of the value handled.

To avoid misunderstandings in relation to statistics in Swedish ports, one more statistical source must be mentioned as there is also a form of semi-official port statistics that measures turnover in ports for different kinds of cargoes presented by the ports themselves though their own organisation – Ports of Sweden (Sveriges Hamnförbund). This distinguishes between foreign and domestic (cabotage) cargoes and types of cargoes, but it is an elaboration of the SGS statistics by SS for Ports of Sweden. This form of statistics is also focuses on volume and quantity (Ports of Sweden 2003 www).

5.2. The reliability of international trade statistics

There are considerable biases in the present form of trade statistics, when used to describe the geographical pattern of international trade. The figures reported by Russia are generally much higher than those in any of the receiving countries.

In some relations, like Russia -> Sweden and Russia -> Latvia, the differences are very far from what is acceptable. When the transit trade studies presented in previous chapters were conducted, the surprisingly large volumes of transit trade that are moving between and across the countries involved also came up as a problem. If fully established as to origin and destination, these volumes could probably help to explain this general problem, to a certain degree.

[250] See appendix for statistics covering total Swedish imports and exports measured in value for all FSU countries during the years 1993 – 2001.

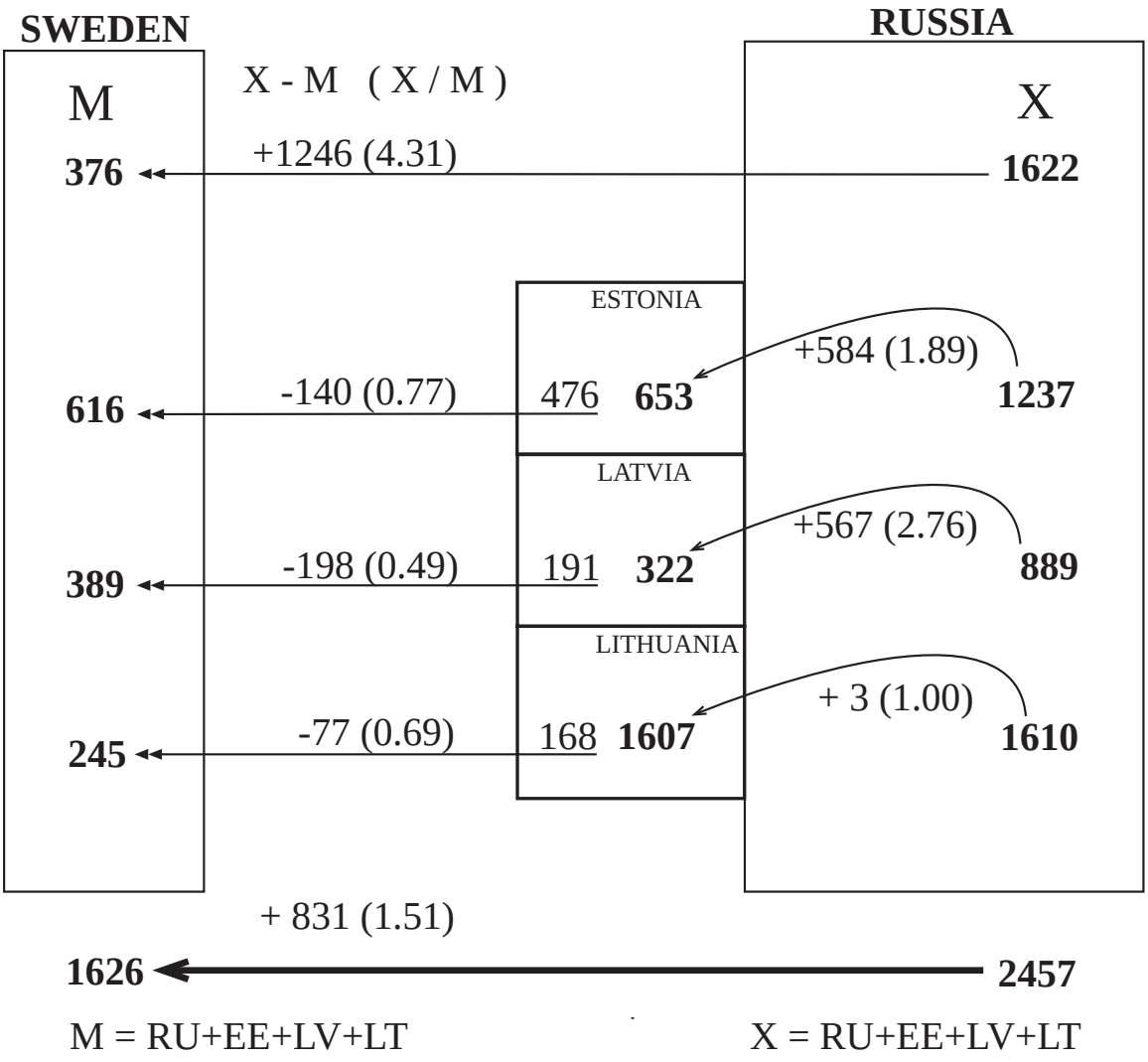

Figure 5.1. Incongruities in official export / import reporting for 2001[251]
(mUSD; X = exports, M = imports)

Source: Data from IMF, Direction of Trade Statistics, Quarterly, December 2002.

The figures reported as Russian exports have their two largest deviations in the examples for exports to Sweden and Latvia, while Lithuania is the trade relation where the data matches nearly exactly. The underreporting in value by the Baltic states when exporting to Sweden follows a similar pattern for all three with the declared value in the range of 50 – 75% of the recorded import value in Sweden. The total trade value between Sweden and all four countries is not as different from each other as between the individual countries because in the total, the two above mentioned effects somewhat offset each other – with the Russian export figure being far too large and the Baltic states figures all being too small.

[251] A corresponding figure for 1997 can be found in appendix.

The statistical material presented concerning trade flows has obviously yet to become more stable to its nature, as well as wider in its coverage. Several reports from central Russian authorities have also repeatedly reported that, for different reasons, the under-reporting of values and volumes can be in the range of 20 - 40% for some product groups.

In Figure 5.1, the Baltic Sea region was used as an illustrative example of the problems involved, with trade statistics put into a proper time perspective during one single year. When the picture is prolonged into a minor time series it is clearly demonstrated how Russian foreign trade statistics constantly overvalue its export to Sweden in relation to the value set in Sweden to imports from Russia (see Table 5.1). In the case of Swedish foreign trade with the Baltic states, the situation is reverse, i.e., it is the Swedish side that sets a higher value to the goods imported than what was assigned to the goods when exported from the Baltic states.

Table 5.1. Swedish foreign trade with selected FSU countries 1992 - 2001
(values, mUSD and X/M-quotas)

	1992	1994	1996	1997	1998	1999	2000	2001
Russia TO Sweden	654	811	995	985	843	798	1729	1622
Sweden FROM Russia	457	721	446	414	411	829	547	376
Rus export minus Swe import	197	90	549	571	432	-31	1182	1246
Russian exp / Swedish imp	1,43	1,12	2,23	2,38	2,05	0,96	3,16	4,31
Estonia TO Sweden	87	142	240	395	542	561	663	476
Sweden FROM Estonia	70	166	396	491	541	566	886	616
Est export minus Swe import	17	-24	-156	-96	1	-5	-223	-140
Estonian exp / Swedish imp	1,24	0,86	0,61	0,80	1,00	0,99	0,75	0,77
Latvia TO Sweden	59	68	94	139	187	184	202	191
Sweden FROM Latvia	79	229	386	414	345	243	383	389
Lat export minus Swe import	-20	-161	-292	-275	-158	-59	-181	-198
Latvian exp / Swedish imp	0,75	0,30	0,24	0,34	0,54	0,76	0,53	0,49
Russia TO Latvia	0	627	1039	1223	673	955	1626	889
Latvia FROM Russia	205	292	426	386	342	281	336	293
Rus export minus Lat import	n.a.	335	613	837	331	674	1290	596
Russian exp / Latvian imp	n.a.	2,15	2,44	3,17	1,97	3,40	4,84	3,03
Lithuania TO Sweden	59	63	138	188	213	165	186	168
Sweden FROM Lithuania	65	82	93	93	102	151	222	245
Lit export minus Swe import	-6	-19	45	95	111	14	-36	-77
Lithuanian exp / Swedish imp	0,91	0,77	1,48	2,02	2,09	1,09	0,84	0,69
Above FSU TO Sweden	859	1084	1467	1707	1785	1708	2780	2457
Sweden FROM above FSU	671	1198	1321	1412	1399	1789	2038	1626
Tot FSU export - Swe import	188	-114	146	295	386	-81	742	831
Tot FSU exp / Swedish imp	1,28	0,90	1,11	1,21	1,28	0,95	1,36	1,51

Source: Extracted from IMF, DOTS (1999 – 2002)

5.3. Results

What is immediately observed when studying the Swedish FSU trade relation is the large unbalance in volume that is generated by a high share of one-way bulk traffic. To make better use of the available capacity in a transport system it is desirable to have balanced volumes of returnloads, but, due to the type of cargo handled this has mostly proved to be difficult. For bulk products, special terminals are most often used and since land transport is more expensive, this restricts possible competition between ports.

5.3.1. Historical perspective

During the 1970's and 80's the USSR mainly exchanged raw materials for manufactured goods. Since the exchange of goods had been centrally negotiated, it was often more or less balanced over a ten-year period, if measured in value (Alekseev 1985). The USSR was never a major actor in international trade however; in 1985 it produced 15% of world GDP but only contributed with a very modest 3% of world trade (Bradshaw 1994). A general outline of Swedish trade with the FSU, which has for a long time showed a slight Swedish deficit, is presented in Table 5.2.

Table 5.2. Swedish trade with the FSU - selected years 1960 - 2001[252]
(Volume 1000 tons; Value in MSEK)

	EXPORT		IMPORT		TOTAL		CHANGE % total	
Year	Value	Volume	Value	Volume	Value	Volume	Value	Volume
1965	260	99	374	3 852	634	3 951	n.a.	n.a.
1970	679	266	804	6 409	1 483	6 675	134	69
1975	1 213	272	2 205	6 254	3 418	6 526	130	-2
1980	1 781	742	3 176	3 468	4 957	4 210	45	-35
1985	2 664	909	5 606	4 017	8 270	4 926	67	17
1990	2 500	470	4 465	5 403	6 965	5 873	-16	19
*1993	4 628	250	5 467	5 488	10 095	5 738	45	-2
*1995	9 184	710	9 904	7 226	19 088	7 936	89	38
*1997	14 721	1 263	12 151	10 498	26 872	11 761	41	48
*1998	15 077	1 058	12 039	11 655	27 116	12 713	1	8
*1999	12 083	857	15 068	13 620	27 151	14 477	0	14
*2000	14 620	1 076	20 112	13 730	34 732	14 806	28	2
*2001	19 692	1 622	17 901	11 822	37 593	13 444	8	-9

*= The 1993 - 2001 figures represent the summed up figures for all the 15 FSU states

Source: Statistics Sweden; Foreign Trade Statistics, 1966 - 2002

[252] The most important items in volume in Swedish exports have been: 1960-75 newsprints; 1980-90 cereals; 1995 – 1998 refined oil products and 1999 – 2001 stone and gravel. On the import side oil & oil products dominated 1960-90 and from 1995 pulp wood.

Every ton exported from Sweden in 2001 (1997) to the FSU was, on average, valued at nearly SEK 12,000 (12,000) while one ton imported was valued at around SEK 1,500 (1,100). At the same time as the Swedish average export ton to Russia in 2001 was valued at SEK 19,000 (27,000) while the average export ton to Latvia was only valued at SEK 10,700 (5,100). The same phenomenon can also be observed on the import side, but the differences in average values are less significant and the average price per ton of Swedish import from Russia was SEK 1,500 per ton (1,400), a value 13 (19) times lover than the export ton. The average import ton from Estonia was valued at nearly SEK 2,500 (1,500) while from Latvia at just over SEK 650 (500).

5.3.2. Total absolute volumes[253]

In figures, 5.2 and 5.3, the foreign trade statistics from SS for each of the four FSU countries with which Sweden share a sea border, and through which, or from which, all seaborne FSU trade originates, have been compared with the Port Survey. The pattern demonstrated in the figures indicates that the conventional statistics overstates the import volumes originating in each of the countries apart from Russia.

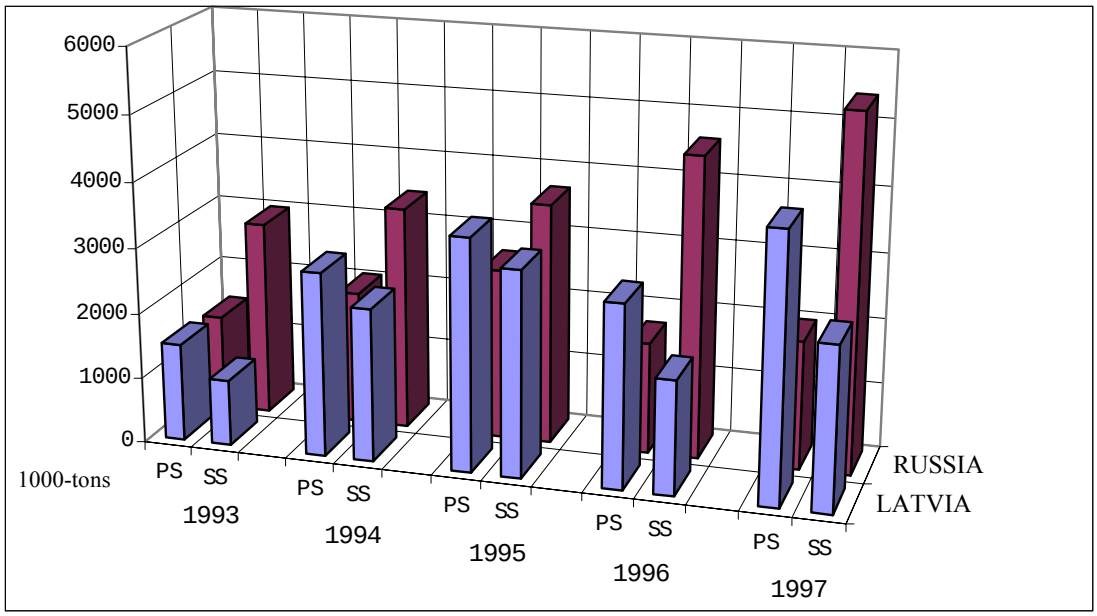

Figure 5.2. Swedish imports in volume: Russia and Latvia 1993 – 1997

Source: Port Survey and Statistics Sweden; 1993 – 1997

[253] Exact figures can be found in the appendix. Figures and diagrams in the text are only included to visualise relations and not to show exact figures.

The reason is of course the transit trade, and what can be observed is that when using ports in the Baltic countries, as previously mentioned and perhaps expected, transiting volumes from Russia is given a new origin. This form of transfer of origin occurs in favour of Estonia on the export side and in favour of both Latvia and Estonia on the import side. Latvia stands out as the country where the underreporting in the SS data is the largest. The other two transit countries Estonia and Lithuania are much smaller in volume, with Lithuania as the country where the difference is the smallest. At the same time, Latvia and Estonia are the most important countries of origins of the growth in total Swedish trade with the FSU.

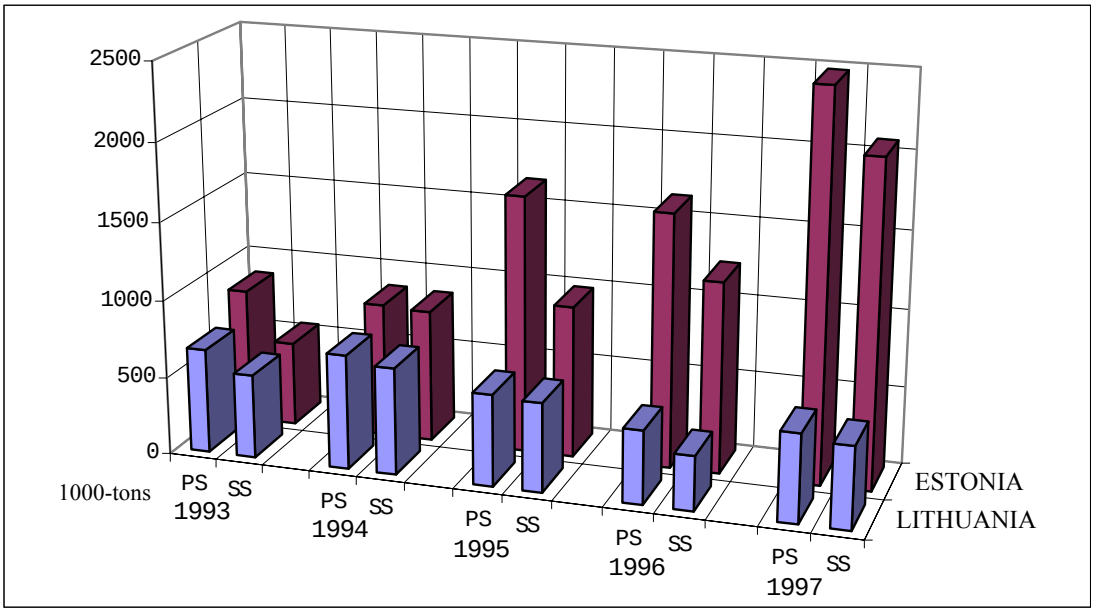

Figure 5.3. Swedish imports in volume: Estonia and Lithuania 1993 – 1997

Source: Port Survey and Statistics Sweden; 1993 – 1997

Total trade between Sweden and the FSU has expanded rapidly in volume over the six years from 1993 through 2001. Only during this short period of time, exports have increased nearly eight times, from around 150,000 tonnes to 1.3 mt. At the same time, imports have nearly tripled from 4.4 mt to 12.4 mt in 2000, but fell back to 11.6 mt in 2001.

As visualised clearly in Figure 5.4, import volumes are many times bigger than exports, which in itself creates a number of particularities for transport that will be taken up in later parts. It is also shown that the values reported by the PS and by the SGS are constantly slightly smaller than what is reported by the Trade Statistics, and especially so for 1999.

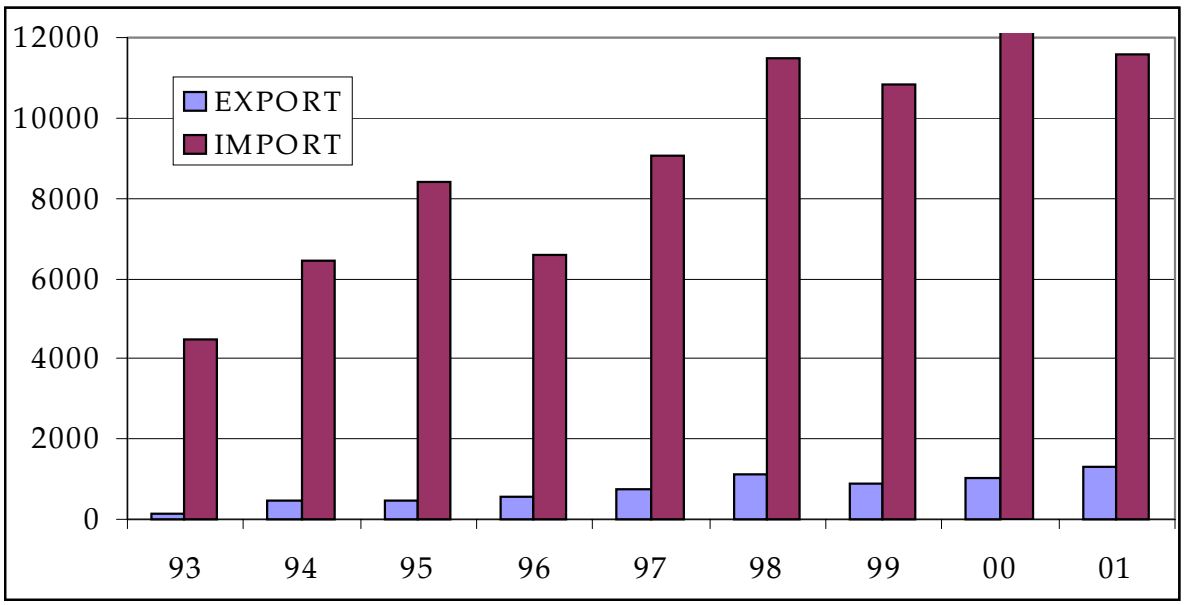

Figure 5.4. Total Swedish FSU exports / imports in volume 1993 – 2001 (1000 tons)

Source: Calculated from PS material 1993 – 1997 and SGS 1998 - 2001

5.3.3 Total relative volumes

After having been at its lowest during the 1960´s and 1970´s the relative share of exports in the total Swedish trade volume with the countries of the FSU came to a new low of 4% in 1993, having been at its highest in 1980-1985 period when 18% of the trade volume was exports. A probable average could be expected to be in the range of 10% for a longer time period.

When total Swedish foreign trade with this group of countries during the years 1993 - 2001 is split into percentage shares for the four FSU countries considered the development displays a pattern as in Figure 5.5. The figure gives a general overview of the total Swedish seaborne trade with the FSU, import and export, which is dominated by the 40 - 45% share held by Latvia since 1994. The Estonian and Lithuanian share expands slowly, while the Russian share slowly contracts over the studied period.

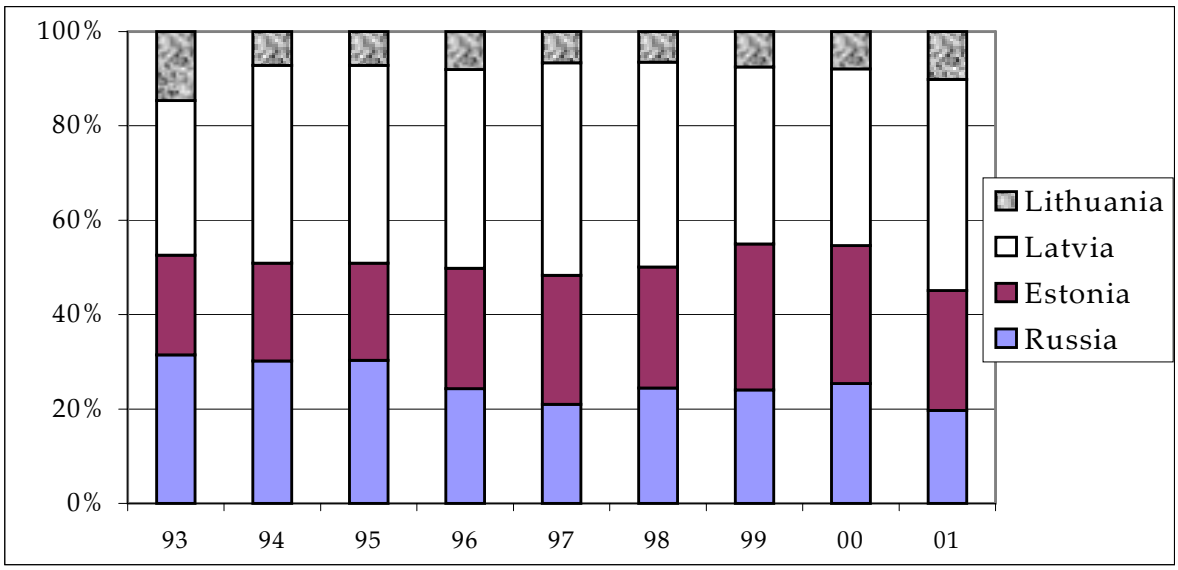

Figure 5.5. Shares of total Swedish foreign trade with the FSU 1993 - 2001

Source: Calculated from PS material 1993 – 1997 and SGS 1998 - 2001

When total trade is divided into imports and exports, as in Figure 5.6 and Figure 5.7, some new patterns emerge. The much smaller volume in exports contributes to enhance the volatility from one year to the next. The Russian volume is much smaller and well below 20% for most years, and even smaller than the Lithuanian certain years, at the same time as it is Estonia that now dominates, being the most important destination. The strong expansion for Lithuania during the last two years is a pure "stone and gravel" effect.

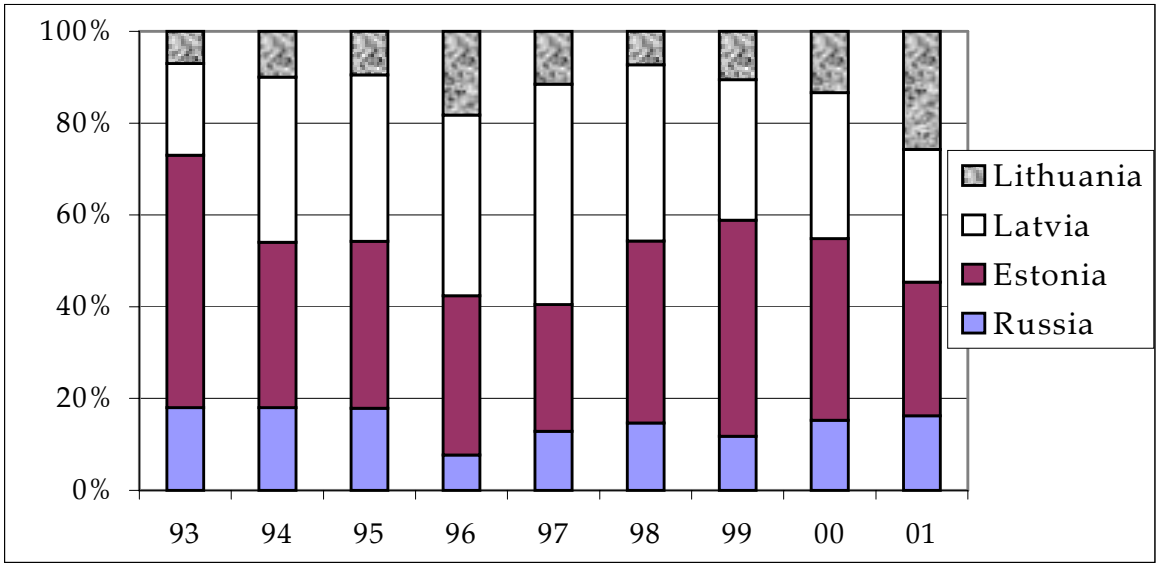

Figure 5.6. Shares of total Swedish exports to the FSU 1993 – 2001

Source: Calculated from PS material 1993 – 1997 and SGS 1998 - 2001

On the import side the similarities between imports and total trade are striking, but expected, as imports constitute such a large share of total trade. The four countries in the figure can be placed into two very distinct patterns, either expansion or contraction, with two countries in each group. Again, it is the large share held by Latvia and its continuous expansion from 34% to 45%, that stands out. The other country to increase its share is Estonia that displays an uninterrupted expansion from 19% to 27% during the first five years and that have been practically maintained at that level since. The opposite can be said for both Russia and Lithuania. Both have seen their shares of Swedish imports contract for each year. Both have lost in the range of 10% of their market shares during the period, from 30 to 20 for Russia and 15 to 5 for Lithuania.

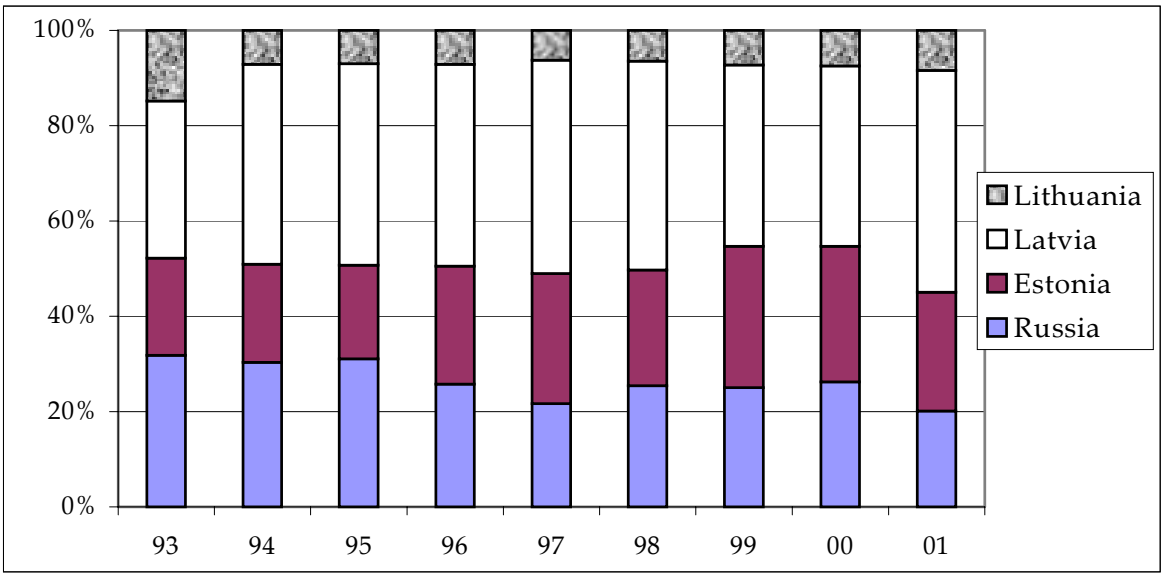

Figure 5.7. Shares of total Swedish imports from the FSU 1993 – 2001

Source: Calculated from PS material 1993 – 1997 and SGS 1998 – 2001

During the 1960's and 1970's, the volume of Swedish exports was very small and a large import volume of oil resulted in a considerable unbalance that lasted until the late 1970's. At about the same time as Swedish imports of Soviet Union oil, after the two oil crises, started to decrease the export of cereals increased. The combined effect of a decreasing Swedish oil import and an increasing volume of cereals exported resulted in the very low figures for the Import/Export ratio in the 1980 – 1985 period. When the exports of cereals started to decrease, in the late 1980's, the unbalance increased again, but now less from oil and minerals imports than from an expanding import of pulpwood.

Table 5.3. Swedish volume import / export ratio with FSU 1965 – 2001

Year	1965	1970	1975	1980	1985	1990	1993	1994	1995	1996	1997	1998	1999	2000	2001
Imp/Exp.	38,9	24,1	23,0	4,7	4,4	11,5	21,9	16,3	10,1	11,5	8,3	11,0	15,9	12,7	7,2

Source: Statistics Sweden; Trade Statistics, different years 1965 – 2002

During the years around the turn of the millennium, the exports of cereals has been at it highest in 2000 with 85,000 tons (8.5% of the export volume) and at its lowest in 1999 with 25,000 (2.5% of the export volume). Swedish imports of cereals have during the years of the 1990´s stood at its highest in 1998 and 1999 with 29,000 tons. It could be seen more as a curiosity that 4,000 tons more cereals were imported in 1999 than exported, but the contribution of the two in export and import volumes was very different indeed, 3% and 0.002% respectively. As the export volumes during the period covered by Table 5.3, have been small in relation to imports, changes in primarily the export of cereals have been of major importance for fluctuations in the Import/Export ratio. From 1999 a new "heavy" export product has emerged, in SITC group 273, "stone, sand and gravel", that in 2001 had an export volume of over 490,000 tones, but only SEK 64 millions (0.003%) in value.

5.3.4. Non coastal, FSU countries

About Swedish trade related to the remaining group of 11 FSU countries that have not been treated separately above, not much can be said and that only by way of SS figures. This is a group of countries that, during the first years of survey constituted around 4% of total Swedish trade with the FSU area. During 1998, their importance among the FSU countries has increased to above 7% of total trade, but with over 11% of exports and just 2% of imports in 1998. During 2001 the share of total trade came to 8%, with imports from this group of countries generating 4.3% (first time over 3%) while exports remained at 11%. It is still very likely that the Swedish trade with these countries, both exports and imports, is larger than what is shown, by official statistics. This because goods bound for, or coming from, these countries can well lose their original origin while in transit and in the next stage, be re-exported/imported from e.g. Russia and the Baltic states. In this way, these volumes statistically become Baltic or Russian in origin when they enter, or leave, Sweden. This is probably as true on the export side as on the import side, with the difference that with a large share of exports being expensive products their destination is made likely to be better known by the sellers than it is for the bulk products that dominate imports. Sweden probably imports some oil from producers like Turkmenistan and Kazakhstan, but these volumes can neither be distinguished in the port survey nor by SS. Especially during the early years of transition, such transformation of origins probably contributed to the quick expansion of Swedish trade with the Baltic states. A deeper explanation to this problem can also be found in passage 2.4, where the basic understanding of transit trade in the FSU region was outlined in relation to Figure 2.8.

5.3.5. Trade by category

To simplify the handling of the statistics involved in the Port Survey and the SGS, it was previously mentioned that the cargo traded has, for analytical reasons, been grouped into six different categories of cargoes that corresponds to how cargoes are handled in a port: General Cargo, Pulp wood, Bulk, Ore, Coal and Oil. The content of each of these groups is as follows[254]:

- General Cargo- normal General Cargo including trucks, trailers and containers
- Pulp wood- all types of wood in the form of logs and chips
- Bulk- all forms of bulk cargoes not included in other categories
- Ore- all types of mineral ores including metal scrap
- Coal - all types of coal and coke
- Oil- all types of crude oils and oil products

When limiting the discussion to only the volume of exports during these years, as outlined in Figure 5.8, it indicates that the expansion of Swedish exports has practically been limited to just three categories.

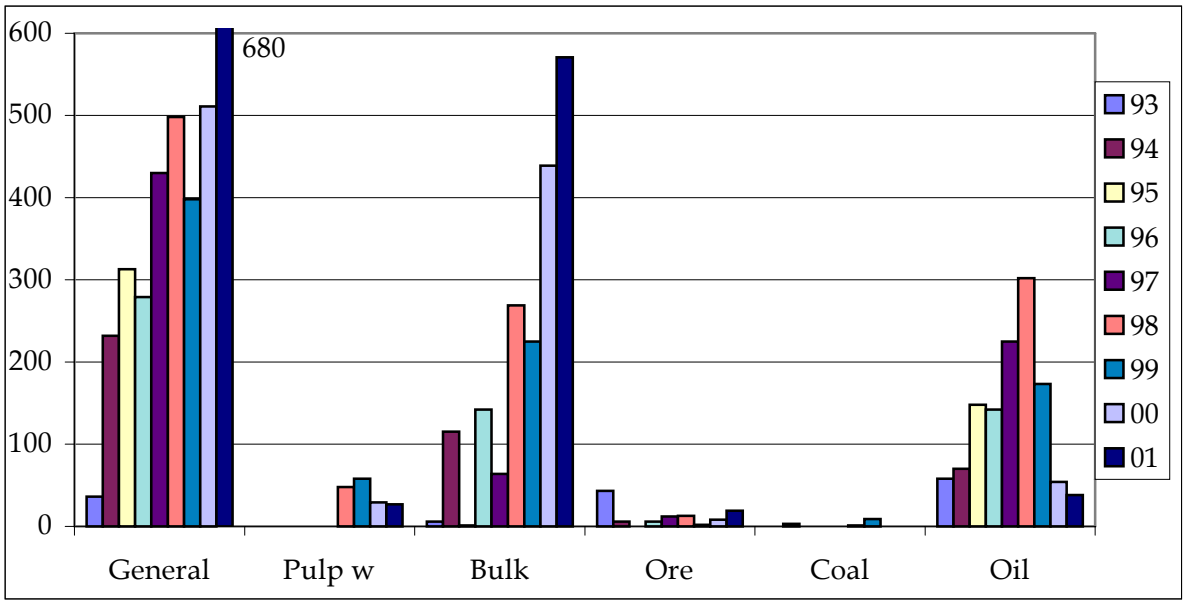

Figure 5.8. Total Swedish exports / category to the FSU 1993 – 2001 (1000 tons)

Source: Calculated from PS material 1993 – 1997 and SGS 1998 - 2001

A considerable, and more or less steady, increase in the category general cargo can be observed, along with an initial steady increase in the export of oil, which subsequently decreased to below its initial volume. The general cargo volume is

254 An even more detailed description can be found in Brodin (2000) and Brodin (2002).

twice as large as the oil volume and both categories show a pattern of a continued increase, apart from in 1996. It is also in the category, general cargo, with its often highly refined products, that the majority of the value is concentrated. Despite the fact that the difference between the average value per ton of export in relation to the average ton imported remains considerable in the Swedish - FSU trade relation, the difference still shows a tendency to have been stabilised (see 5.3.1). Of the other three categories, two, ore and pulpwood, show practically no handling, and a very small and diminishing volume of ore. The category, bulk, however, displays a very irregular pattern and, in 2001, reached its height during the years studied with 570,000 tons. The increased export of stone and gravel in this the category is clearly demonstrated by the dramatic increase during the last two years. Earlier it was only changes in the cereals export that caused the fluctuations; no cereals export, as in 1995, resulted in a very limited Swedish export of bulk products.

On the import side, illustrated by Figure 5.9, all six categories are represented, but pulpwood and oil are the two that dominate. The Pulp wood category has been expanding rapidly, while the oil import has continued its slow, but constant rise. Of the other categories, bulk is the most important, but shows a slow decline, as does coal during the initial years although then turned upwards again. In the following, the larger volume of Swedish imports from the FSU will be analysed from the point of view of each country involved.

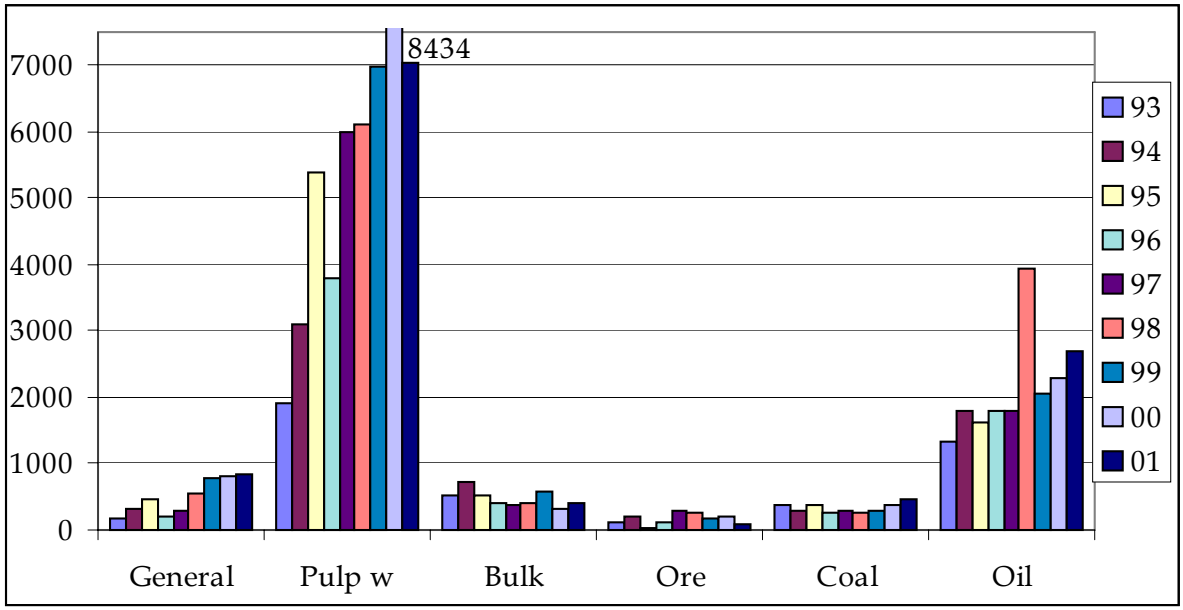

Figure 5.9. Total Swedish imports / category from the FSU 1993 – 2001 (1000 tons)

Source: Calculated from PS material 1993 – 1997 and SGS 1998 - 2001

5.4. Category and country disaggregation[255]

By splitting total trade with the FSU according to the different countries and categories, changes in transport geography and routes becomes much more visible which also, to a certain extent, corresponds to the development of the ports involved.

5.4.1. Volume of trade with Russia

The two categories that dominate Swedish export to Russia during the period shown by Figure 5.10 are general cargo and bulk. For the other four categories the volumes are small, or represent just one or a few spot loads. Again, the export in the bulk category is strongly connected to Swedish exports of agri-bulk and stone that makes the pattern show a striking resemblance to total FSU exports in the same category. As for general cargo, the bars show a typical, strong growth pattern interrupted during 1996, and then a strong comeback in 1997, and to have disappeared again in 1999.

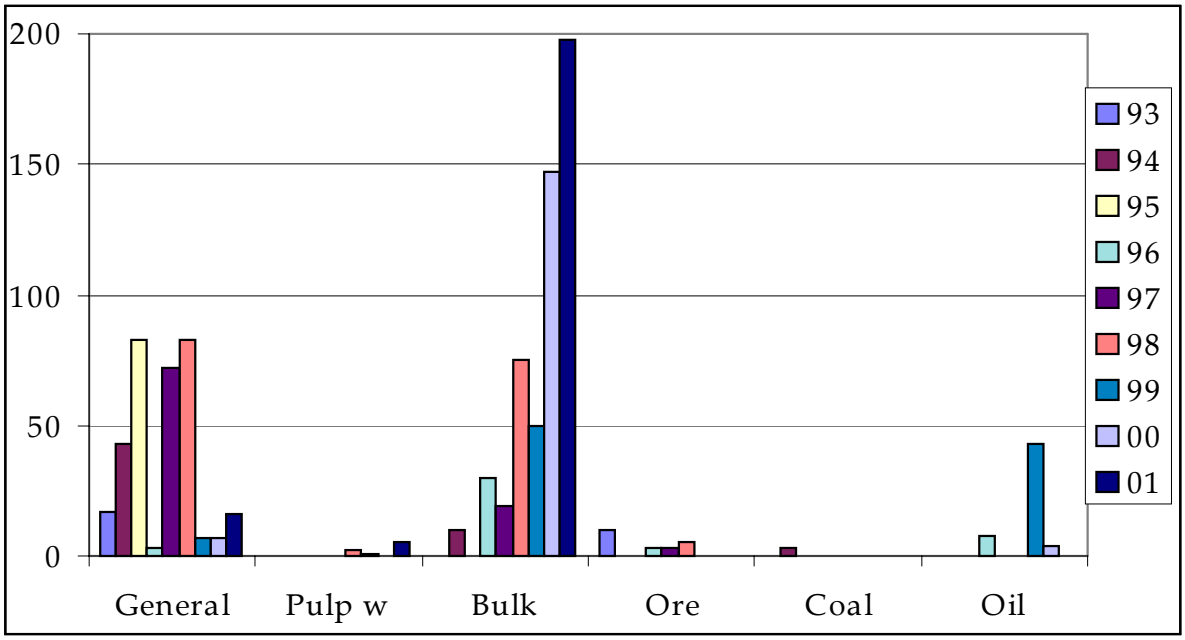

Figure 5.10. Swedish exports / category to Russia 1993 – 2001 (1000 tons)

Source: Calculated from PS material 1993 – 1997 and SGS 1998 - 2001

[255] It must be stressed that for some categories, especially on the export side, the volumes can be small when divided into each of the four countries. As a result of this, just one large consignment or shipload can be enough to leave an impression in the following figures.

Here, the importance of just one ferry connection is clearly demonstrated, as after the ferry link was stopped the first time in 1995, no direct ferry connection from Sweden to Russia has managed to re-establish a service that has received any confidence from transporters[256].

As in the case of total trade, even within imports from Russia is the dominating category, pulpwood, that over the years studied has constituted 60 - 95% of the total volume imported. Despite its large and increasing volume, the Russian share in the Swedish import of pulpwood has still not managed to grow as fast as total import from the FSU area. Oil is the most rapidly expanding category on the import side from the Baltic states and it is undoubtedly so that Russia has a lot of transhipments to recover from their Baltic competitors of what has been lost as late as during the second part of the 1990´s. Imports of oil from Russia have been irregular over the years, but with improved facilities to handle oil in both St. Petersburg and elsewhere in the Gulf of Finland, along with the Russian tendency to focus on domestic ports, these volumes will probably increase. The import volume of general cargo, that initially was larger than the export volume in the category, has been affected by the changes in the ferry traffic, as imports mainly involve a considerable number of spot shipments of e.g. metals. As for ore, coal, oil and e.g. fertilisers in bulk these are the categories where nearly 100% of the volume is Russian transit cargo.

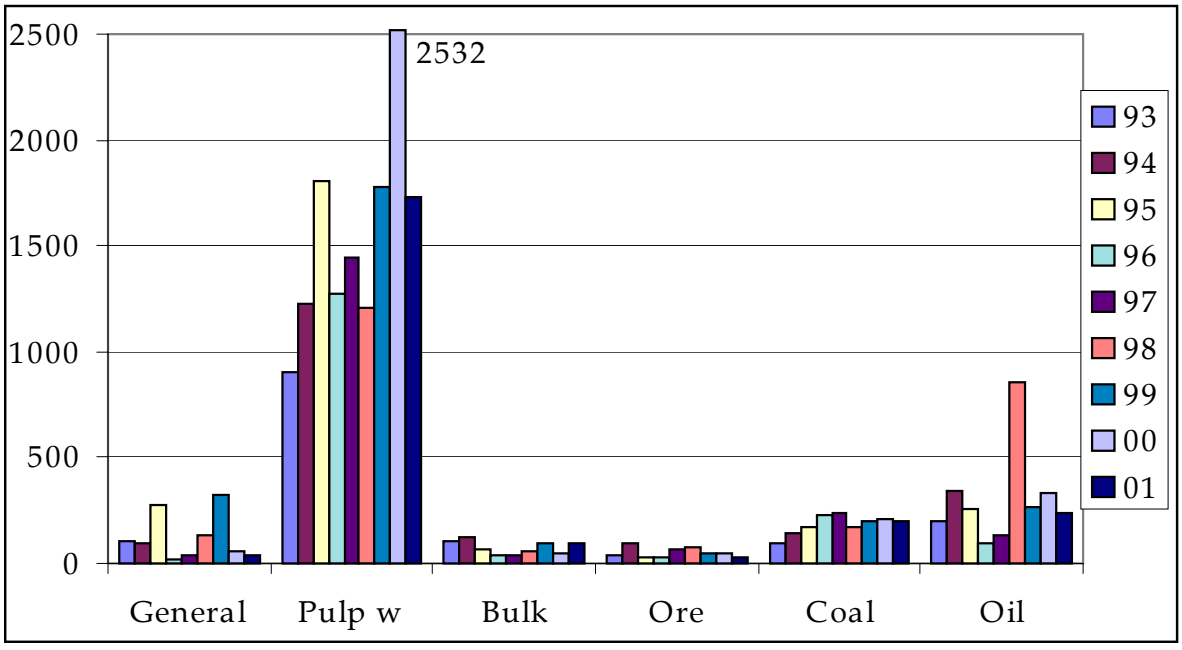

Figure 5.11. Swedish imports / category from Russia 1993 – 2001 (1000 tons)

Source: Calculated from PS material 1993 – 1997 and SGS 1998 - 2001

[256] A connection that was re-established during 1997 and that by the end of 1998 went into bankruptcy. A new service started in late 1999, but was again short-lived.

The only category for which Russia has increased its share in the FSU imports is coal where most of the slow but constant increase in Swedish imports has come directly from Russian ports.

5.4.2. Volume of trade with Estonia

The importance of a stable ferry connection for the handling of general cargo was mentioned above in relation to Swedish export to Russia, and is again demonstrated by the Swedish export volume to Estonia. The dominance of general cargo in relation to Estonia confirms this statement. Of Swedish exports to Estonia, 85-90% has been classified in the category general cargo over the period[257]. A single bar for ore in 1993 indicates Swedish ore sent for refinement in Russia, but this trade has practically ceased since then (see Figure 5.8). Sweden had started to export oil products to Estonia in irregular volumes during the 1990`s, a trade that Finnish suppliers dominate, these days. Out of the bulk volume, it is the agri-bulk export that makes up most of the export, but more than the full difference recorded between 1999 and 2000 was stone, and an above 50% for stone in the category has been maintained during 2001.

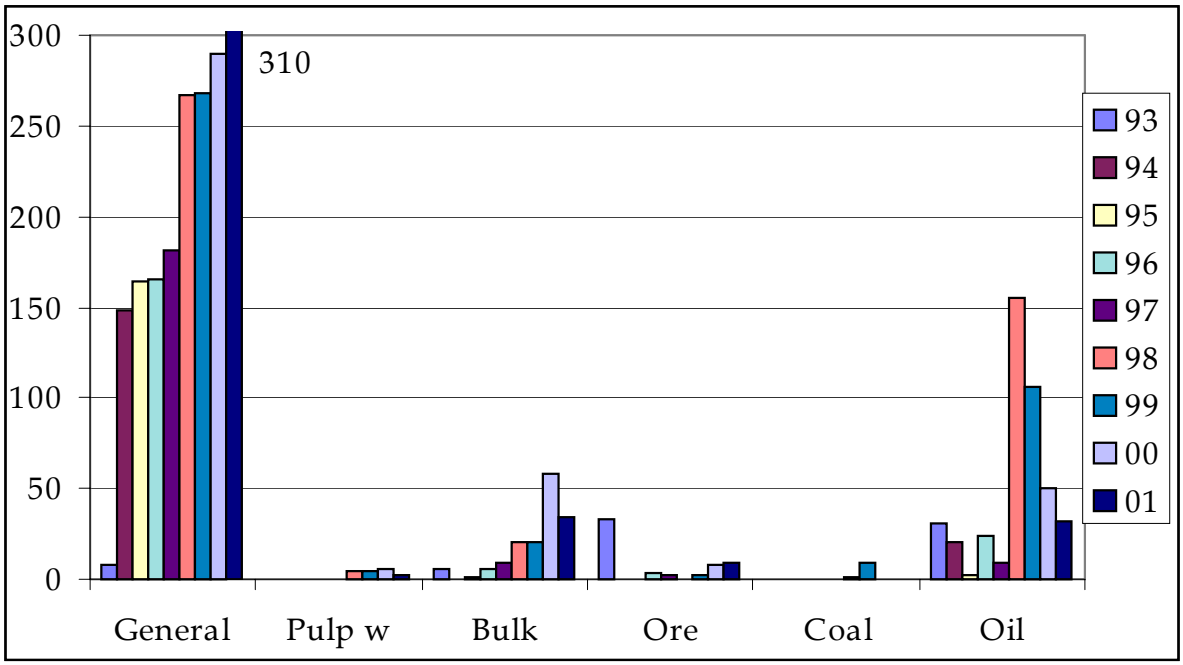

Figure 5.12. Swedish exports / category to Estonia 1993 – 2001 (1000 tons)

Source: Calculated from PS material 1993 – 1997 and SGS 1998 – 2001

[257] This was probably the case during 1993 too, but non-reporting in one case is likely to have left out general cargo in the range of 60,000 tonnes for that year.

As regards imports from Estonia the general cargo category shows a nearly identical pattern of increase as on the export side, but with the volumes being in the range of 60 – 70% of the export volume. This pattern indicates that these two are fairly well balanced which means that this relation is probably developing into an exchange of goods, resembling the trade pattern between most industrial countries, and is to a lesser extent the result of transit trade. The import of pulpwood however, has been growing vigorously in volume over the period, from 377,000 tonnes in 1993 to having passed 2 mt during 2000, a large but insatiable volume that can be exemplified by the fact that at the same time as the pulp wood volume shot up by 78% in 1997 alone, it fell by 32% during 2001. The quick expansion of oil handling in the port of Muuga has so far proved very successful and Sweden has also come to import considerable volumes via Estonia. After having been just 124,000 tonnes in 1993, the volume has increased to 844,000 tonnes in 1998, or by exactly 580%. This rate of increase even exceeds the growth of 420% between 1993 to 2000 that has been showed by the pulp wood category. The ore category shows a typical pattern of substitution with a falling volume compensated for by a rising share of scrap in later years. Coal handling has been constantly falling over the years, with a slight recovery during the last two. Transit volumes in Estonia of dirty bulk, like coal, ore and fertilisers, have probably been reduced also by local initiatives to move handling out of the City Harbour in Tallinn to the Muuga Port, to clear areas for the expanding ferry traffic. In later years new areas in the Muuga port has been set aside for this kind of handling and large investments have been decided, so handling can come to increase.

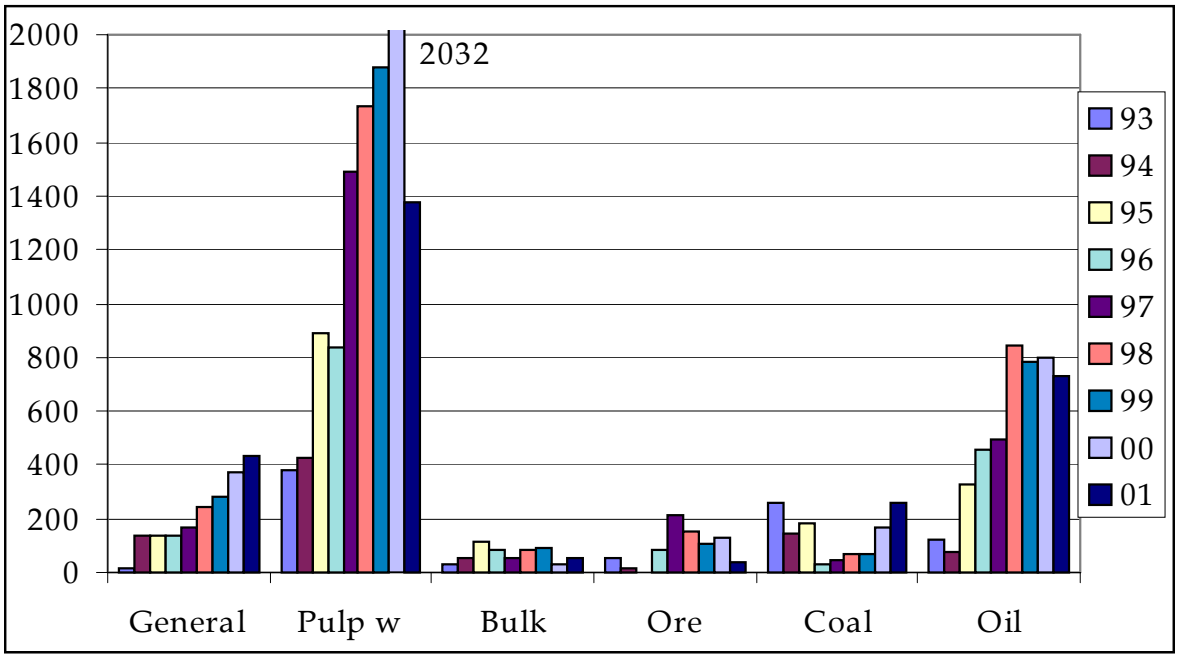

Figure 5.13. Swedish imports / category from Estonia 1993 – 2001 (1000 tons)

Source: Calculated from PS material 1993 – 1997 and SGS 1998 - 2001

5.4.3. Volume of trade with Latvia

Swedish exports to Latvia have seen a very quick expansion of oil products, but also a steady expansion in the general cargo category. Here, like in Estonia, the increased export in the oil category is the combined result of increased domestic car ownership and the non-existence of Latvian oil refining capacity. For general cargo, the base flow has been counteracted by the same stop-and-go problem with the ferry connection servicing the Stockholm – Riga connection, while the Liepaja – Karlshamn ferry has been in operation since late 1995 and the connection to Ventspils from Västervik/Nynäshamn since 2000. The relatively large volumes in the bulk category for certain years are the combined result of Swedish exports of cereals and granite, for construction purposes, to Latvia.

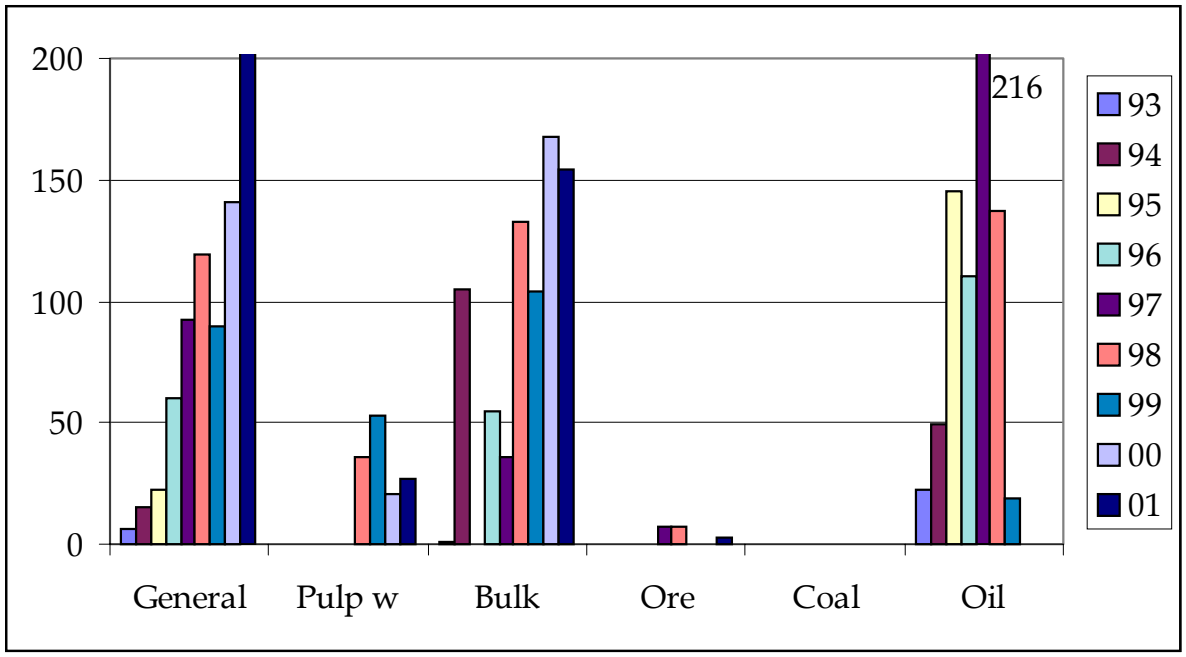

Figure 5.14. Swedish exports / category to Latvia 1993 – 2001 (1000 tons)

Source: Calculated from PS material 1993 – 1997 and SGS 1998 - 2001

The volumes imported from Latvia are the by far largest from the countries included here, with the pulpwood volume in 1997 in itself being nearly 50% bigger than the combined import from Russia the same year. As can be seen in Figure 5.15, it is pulpwood that in later years has come to clearly dominate Swedish imports, taking over that role from crude oil imports in 1995. Shifts in demand between different years have been considerable however, with an increase by over 1 mt between 1996 and 1997, just to fall back by nearly 0.7 mt next year, and than to increase by over 1 mt again the following year. Over the last five years, however, the volumes have remained both large and stable. Swedish import in the oil category has been above 850,000 tons for the last eight years, with an upshot in 1998

and again in 2001. General cargo turnover has been increasing over the last five years and has, by a strong increase, reached a level of 70% of the Estonian volume in 2001. The only other category with any sizeable turnover, although with a negative tendency, has been bulk products, which in this case constitutes of a number of different chemical products like acids and fertilisers.

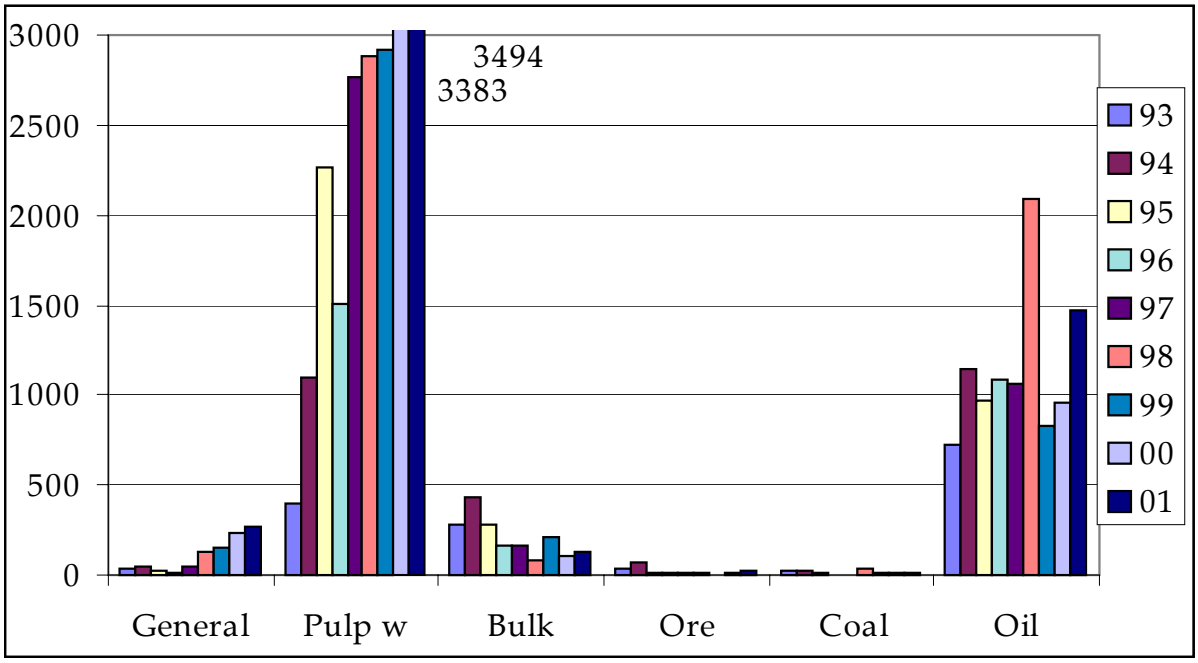

Figure 5.15. Swedish imports / category from Latvia 1993 – 2001 (1000 tons)

Source: Calculated from PS material 1993 – 1997 and SGS 1998 - 2001

5.4.4. Volume of trade with Lithuania

Of the four countries presented, Swedish exports are the most concentrated to the general cargo category in the case of Lithuania. The explanation for this, as for the other two Baltic states, is primarily stable and expanding ferry connections. In this case initially between Åhus and Klaipeda and later also Karlshamn - Klaipeda. The large bulk volume exported, during 1996 and then from 1998 and onwards is, as in the case of Latvia, the result of Swedish exports of cereals during the first of the years and then nearly exclusively stone/granite. Swedish exports of oil products to Lithuania are nearly non-existent after 1993, which can probably be explained by the fact that the capacity at the previously state owned Lithuanian refinery in Mazeikiai has been enough to satisfy domestic demand.

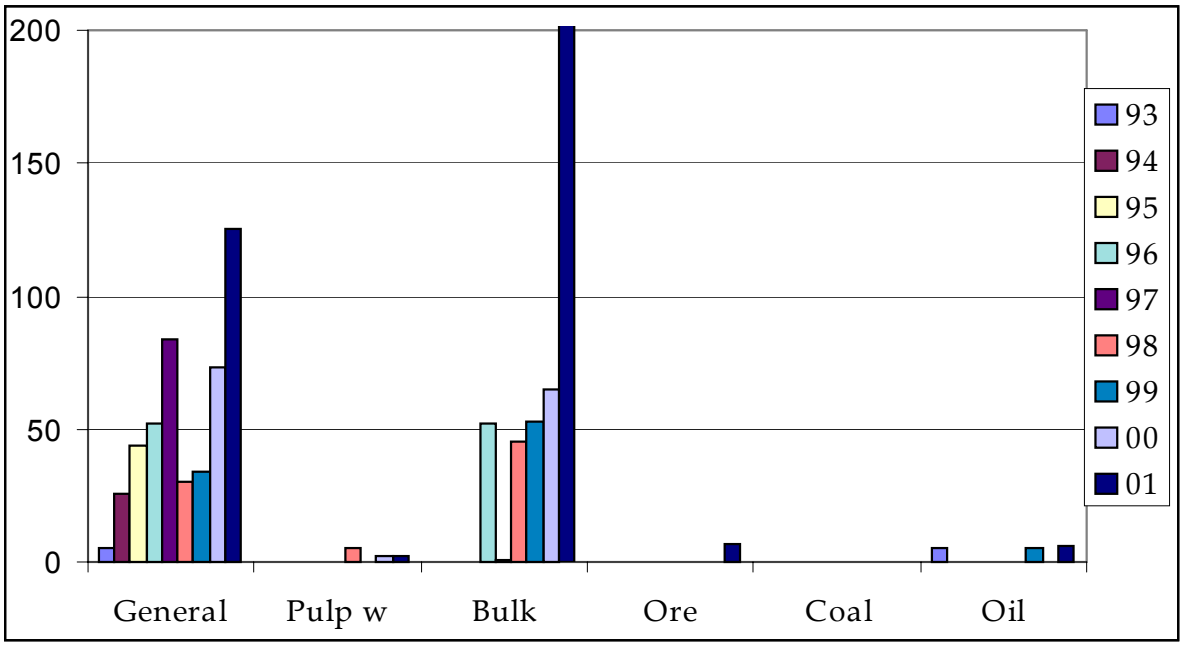

Figure 5.16. Swedish exports / category to Lithuania 1993 – 2001 (1000 tons)

Source: Calculated from PS material 1993 – 1997 and SGS 1998 - 2001

Swedish imports from Lithuania are, as for the other countries, dominated by pulpwood, but to a much lesser extent, apart from during 1994, a year when pulpwood imports expanded from all countries in the group and continued to do so in 1995 except in the case of Lithuania, where imports instead fell by 60% (compare Figure 5.9). This constitutes a good example of how delicate the dependence on unrefined products can be. When the prerequisites for a strong expansion had materialised in nearby Latvia, it took over the lost Lithuanian volume and instead doubles its own volume during 1995. In contrast to Estonia the import volumes of the trucked general cargo from Lithuania are much smaller than the Swedish export volumes, resembling the pattern in Latvia. This unbalance indicates a large dependence on transit trade for both Latvia and Lithuania in this category. To a large extent, the incoming Swedish cargo transit eastward, at the same time as much less westbound return cargoes can be found for the trucks and trailers that are used to carry this transit flow. The large difference between the years is related to the volumes carried on the ferry routes, where the volumes fell back sharply in 1998 and 1999, to recover and double the volume in just two years. Bulk volumes from Lithuania are often fertilisers, but in this case, there is a domestic production. Oil imports in the first years, 1993 – 1994, were much larger, before the much-delayed reconstruction works started at the Klaipeda oil terminal. Still, the pattern points towards increased volumes being loaded, especially so as all available facilities have been upgraded in later years which will give room for this.

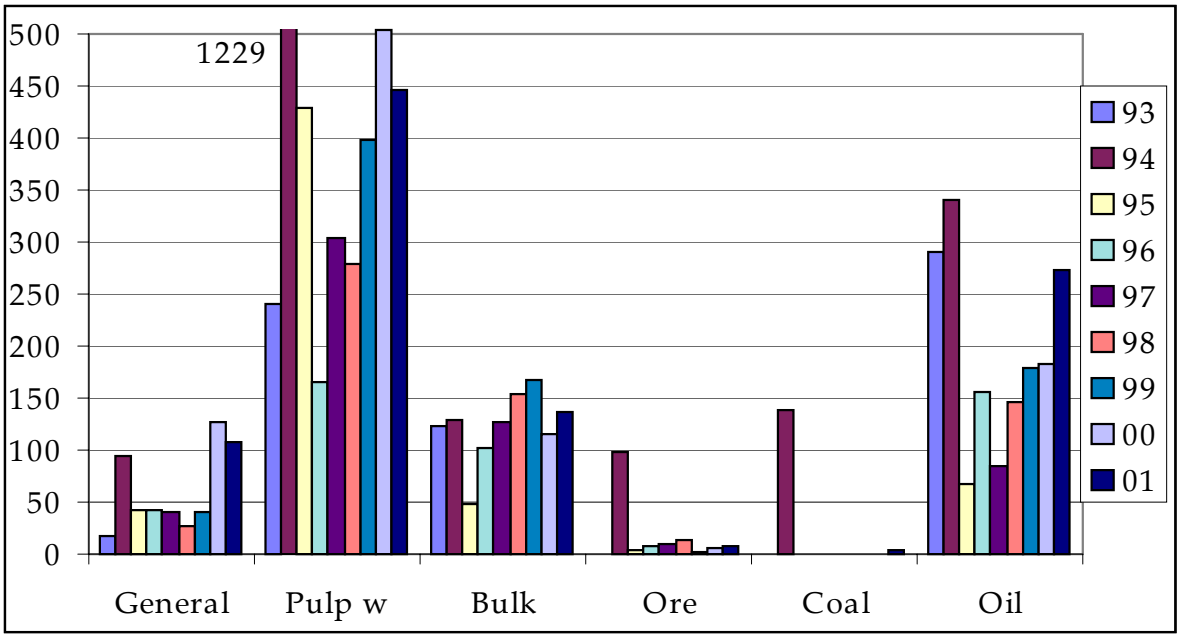

Figure 5.17. Swedish imports / category from Lithuania 1993 – 2001 (1000 tons)

Source: Calculated from PS material 1993 – 1997 and SGS 1998 - 2001

To conclude this part about Swedish foreign trade in different categories, it can be said that some of these could be distinguished as categories with a good potential for the future while for others, the future looks bleak. General cargo will probably continue upwards in volume at a steady pace, especially where the stable ferry connections can be found. This flow of general cargo is an example of the changing transport geography, but in this case, more a result of increasing industrial production in the Baltic states than increasing transit trade. Oil, especially from Lithuania, has increased during the last few years although the domination in volume by Latvia has been challenged by Estonia during the last three years. Swedish exports of oil increased sharply during the mid 1990´s but have since fallen back to the same low level as at the beginning. At the same time, this relatively newly established, and nearly disappeared, cargo flow constitutes a good example of the changing transport geography in the area. Swedish import of Pulp wood has come to established itself as the outstandingly most important category in volume, although still volatile. The import flow remains strongly dependent on demand among Swedish pulp wood importers, whose demand is a derived from their customers. The conversion in the Swedish paper and pulp industry to sourcing on the other side of the Baltic Sea is increasingly being followed by the sawmills, something that will help to maintain the import level in the foreseeable future. The potential for different bulk products can be positive in the cases where a large importer can be found and if prices can be kept competitive, which looks to be the case for the increasing import of e.g. fertilisers. For the remaining two categories, coal and ore, the future look both insecure and bleak. For ore, the future import depends on the future of the few remaining Swedish steel smelters, and especially

for the ones using scrap. Both for the running of scrap smelters, as for heating plant using coal, Swedish environmental awareness makes future imports uncertain and dependant on outside regulations, taxes and alternative energy sources. In the FSU countries trade relations with countries other than Sweden, the future for the last three categories could look very different indeed.

5.5. Regional Swedish unbalances

5.5.1. Regional unbalances for total trade

The flow of goods across the Baltic Sea shows considerable regional unbalances as much larger volumes are imported than exported in some Swedish transport areas. As the content on both the export and the import side is so distinct, these regional differences can largely be explained. Apart from exports and imports in the category general cargo, the other five categories have one characteristic in common: all have more or less some few large-scale producers as the origin and/or a limited number of large-scale consumers as their destination.

Typical examples are coal used for heating, ores for steel-mills and products like basic chemicals in bulk for the chemical industry. In the case of the dominating Swedish import of pulpwood to the paper and pulp industry, the consumer is typically large scale, while felling is often conducted on many smaller sites over large areas. One factor that all these products have in common, however, is that the consumer is also a buyer on the world market. As a result of this, the FSU import to one Swedish consumer, but sometimes several, could change dramatically from one year to the next, or even one month to the next, although a considerable share of the deliveries are made on long term contracts. The fluctuation becomes extra large because many of the important commodities compete against a surplus supply in the world market resulting in a buyers market for products like, acids, heating-coal and basic steel products.

A more general trend during the years studied is that both the origin of, and the destination for, the trade on the Swedish side changes only slowly (see e.g. Figure 5.20). What has been subject to major variations has been the volumes traded which has principally two explanations. First of all the fact mentioned above, that large importers have altered their sourcing due to, e.g., fluctuations in the price on the world market, temporarily or structurally, for the commodity in question. Secondly, that imports being reduced as demand for end-products, like e.g. paper and pulp, has been weak, which immediately hits back in the form of reduced demand for raw materials[258].

[258] The importance of these two factors has been confirmed several times in conversations with people in the different lines of business concerned.

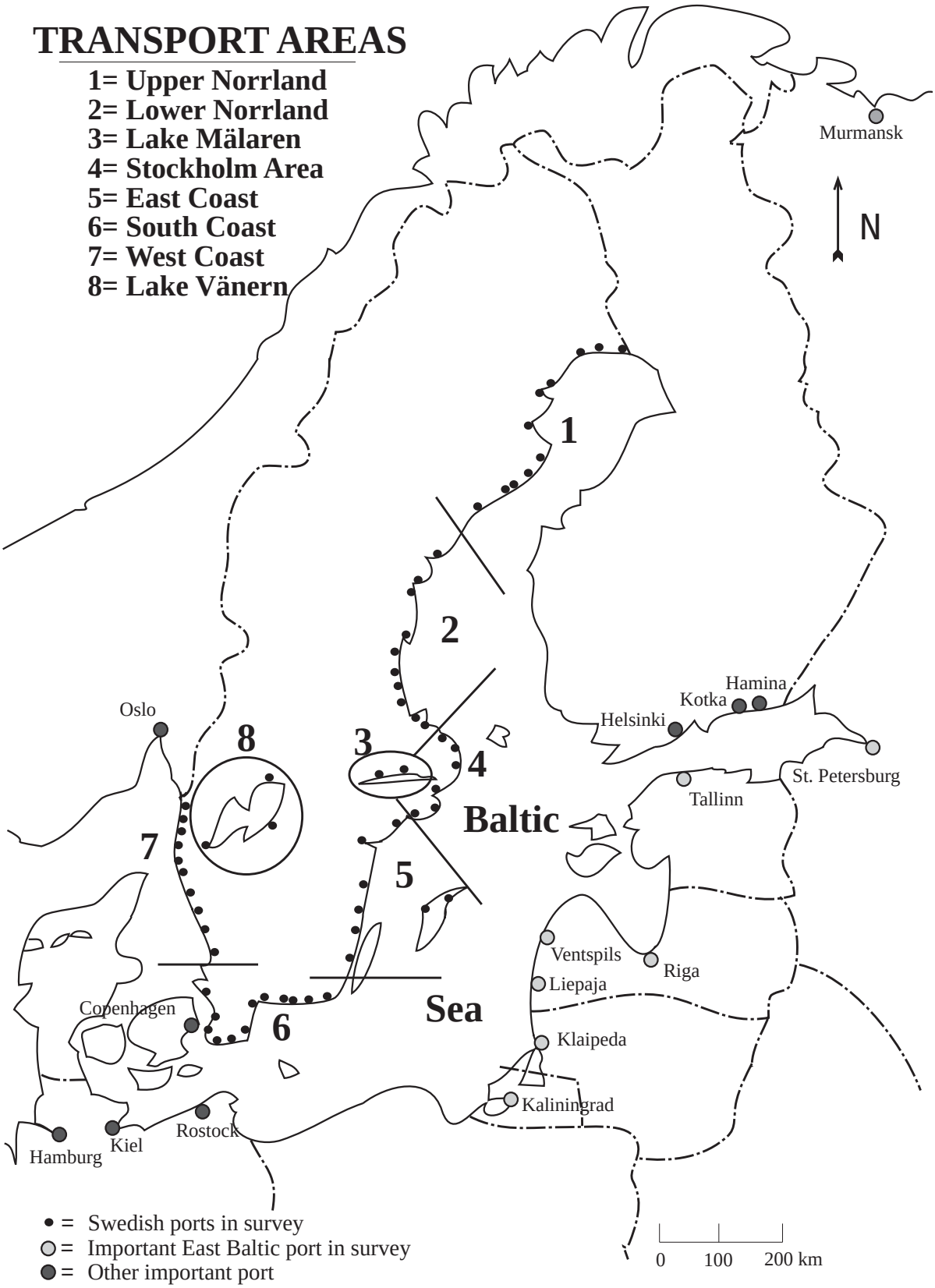

Figure 5.18. Baltic Sea with ports in survey and Swedish transport areas

Source: Author

Exports

As can be seen in Figure 5.19, it is the Stockholm area that initially held the largest, and what appears to be, a somewhat contracting share of Swedish exports to the FSU over the period[259]. The other two areas of importance in Sweden are the West Coast area and the South Coast area. Together these three areas have, most years, been the origin of near 90% of Swedish exports during 1993 - 1998. From then on, the falling oil export has reduced the volumes from the area West and at the same time the increased handling of general cargo in the areas that have ferry connections has instead become relatively more important. It is also from the South and the Stockholm areas that the "new" export product, stone, is being quarried.

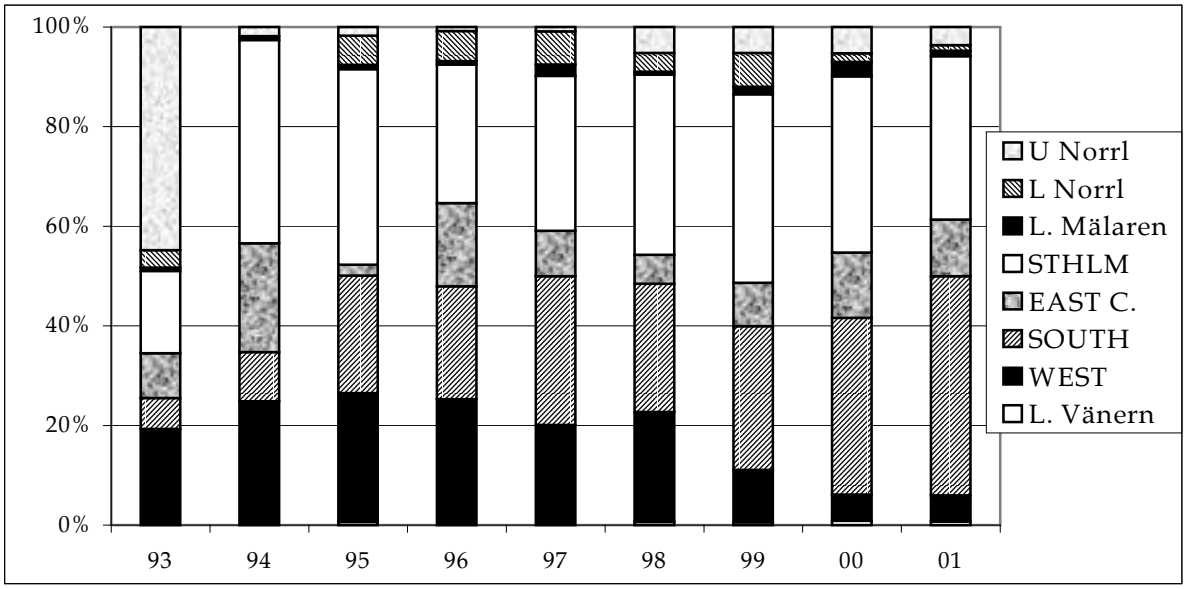

Figure 5.19. Shares of Swedish exports to the FSU/transport area 1993 –2001[260]

Source: Calculated from PS material 1993 – 1997 and from SGS 1998 - 2001

Imports

When imports are split according to the transport areas as in Figure 5.20, four areas stand out as the largest import destinations, Upper and Lower Norrland, the East Coast and the West Coast. Although some areas are large importers, the imports are not concentrated to just a few areas as in the case of the exports. The import of pulpwood has constantly increased over the period covered and this is how three of the biggest four import areas have become so important. Apart from the 1998 setback, the shares have been kept relatively stable. The decreasing import of oil

[259] A dramatic change has been the disappearance of the large export from the area Upper Norrland that existed in 1993. The products involved in the Upper Norrland export were various ores, sent for refinement in the FSU, a trade that has practically ceased since 1993.

[260] The Lower Norrland area is invisible for year 1994, Lake Mälaren is invisible for 1996 and 1998 while the Lake Vänern area appears at the bottom of the 1995 and 1998 - 2000 columns.

and oil products affects the previous large share held by the West Coast area, which is the only area where the import of oil is dominant. Two other areas, the South and Lake Mälaren, have both seen their shares go in different directions despite hiccoughs during certain years. The Lake Mälaren share has been slowly decreasing over the period while the share for the area, South, shows a slow but steady increase. Only Lake Vänern, along with its neighbour area, West, have witnessed a near continuous fall in shares until the transport of Pulp wood upstream the River Göta again proved profitable, compared to rail transport across Sweden from ports in the area East and Lake Mälaren, from 2000.

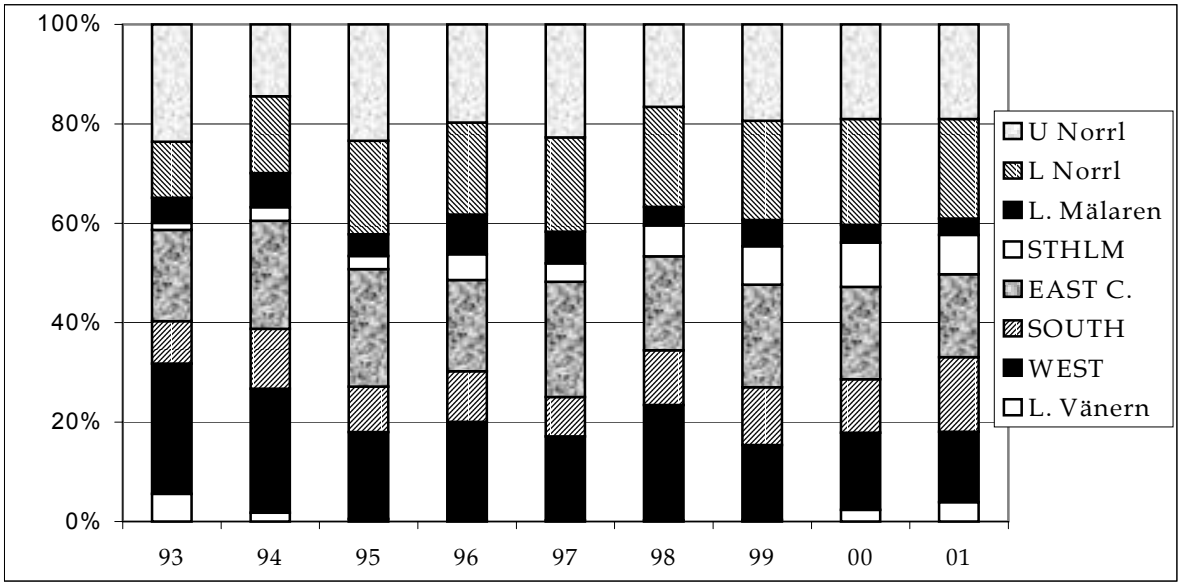

Figure 5.20. Shares of Swedish imports from the FSU/transport area 1993–2001

Source: Calculated from PS material 1993 – 1997 and from SGS 1998 - 2001

5.5.2. Swedish export

General Cargo

General Cargo has been the most important category in Swedish exports during the years of study. The ferry connections have been of great importance for this category. So far, these have mostly originated from Stockholm (see Figure 5.21). In what may seem to be a market with bright growth potential, several shipping lines have been established outside Stockholm for shorter or longer periods, but with Åhus and Karlshamn as the most long running and Kapellskär, Nynäshamn and Västervik as relative new-comers in the market. It is understandable that Stockholm has been successful in this respect. Historically, Stockholm has had extensive ferry connections to the islands of Åland, Turku and Helsinki in Finland and for a number of years with both St. Petersburg and Riga, although both the latter have now been closed down. Stockholm is not only the capital of Sweden but has, in relation to the FSU, a very suitable geographical position. It can be added that the

area around the Lake of Mälaren is in itself an important industrial area, and a huge market, with nearly two million people living within 150 km of the port of Stockholm, which is over 500,000 more than in Estonia, making the dominating position of the Stockholm area understandable[261].

1998	2002
More than 4 times / week	More than 4 times / week
Stockholm - Tallinn	Stockholm - Tallinn
Kapellskär - Paldiski	Kapellskär - Paldiski
Åhus - Klaipeda	Åhus - Klaipeda
Karlshamn - Liepaja	Karlshamn - Liepaja
	Karlshamn - Klaipeda
	Nynäshamn - Ventspils
Less than 4 times / week	Less than 4 times / week
Stockholm - St. Petersburg	Nynäshamn - Riga
Stockholm - Klaipeda	Västervik - Paldiski*
Stockholm - Riga	Stockholm - Riga*

*= The Riga connection commenced traffic as late as 2002-12-20 and the Västervik – Paldiski connection took a "time-out" in December 2002, due to high fees in Paldiski.

Figure 5.21. Regular ferry connections Sweden – FSU 1998 and 2002

Source: Compiled by the author from List of Sailings, in SSG, 11:1998 and 18:2002

Since the cancellation of the ferries to St. Petersburg and Riga, run by the Baltic Shipping Company, the connection to Tallinn had a near monopoly out of Stockholm to the countries of the FSU. With the opening of the Öresund bridge, the competitive position of the ports in southeast Sweden, in the eastward direction such as e.g. Åhus and Karlshamn, has been enhanced, especially in relation to the Danish market.

For the area South General Cargo makes up the shares in Figure 5.19 and 5.20, which are largely due to the fact that the only direct, non-Stockholm area, connections to the FSU are based here. Three RoRo and trailer ferries operate in the South Coast area from Åhus to Klaipeda in Lithuania and one from Karlshamn to Liepaja in Latvia[262]. The content of the export in this category is very varied indeed

[261] For environmental reasons and due to the long and narrow approach through the archipelago, ferry connections have started to move out to the smaller ports in Kapellskär and Nynäshamn, some 90 km to the north and 50 km to the south of Stockholm. Both these ports are administrated by the port of Stockholm.

[262] Beginning from the statistics covering 1995, SS no longer records whether cargoes are trucked or carried by ship. This is because of SS's adaptation to what is EU standard.

and could be anything from cars and trucks to any kind of machine tools as well as textiles that are intended for confection in the Baltic states. It must also be remembered that for what is trucked exports, a part of this is also transiting Finland, by ferry from the Stockholm area to Helsinki/Åbo or in mid Sweden from Härnösand/Umeå to Vasa in Finland, and from there onward to Russia.

Apart from the above mentioned regular ferry services, there were another 18 connections in 2002, 12 in 1998, from Swedish ports to the FSU. These connections are serviced by RoRo and smaller container / feeder lines. The frequency here is once-weekly, or more irregular, connecting larger Swedish ports with the ports of the FSU studied here (List of Sailings, in SSG, 11:1998 and 18:2002)[263].

Oil

In recent years, over 75% of Swedish exports of oil-products have come from the area West and of the exports from this area over 90% are oil-products. The oil-products originate from the large refineries located on the West Coast where three refineries are located, in Göteborg, and the biggest in Sweden at Brofjorden, approximately 150 km north of Göteborg. The market for refined oil-products in the FSU is relatively new for Swedish suppliers and during the initial years studied, it was difficult to find terminals that could receive oil. Over the past year, this exports has mostly been bound for Riga and later Tallinn.

Bulk - Cereals/Stone

On the export side, a large share of the volume in the late 1980's was cereal, but the export volume of cereals was considerable in both 1992 and in 1994. Cereals of different kinds have since these years been fluctuating, but has never been above the 86,000 tons exported in 2000. It still requires special terminals and storage silos to handle large volumes of cereals efficiently, and the export has therefore showed a concentration to Djurön / Norrköping in the East Coast area where the largest facility of this kind in Sweden is located.

The Swedish export of stone (primarily granite) is a relative newcomer as an export product, and it represents a product of very low value; under SEK 75/ton. It has been used for both construction purposes and for the building of e.g. breakwaters in ports. The latter kind of project in particular, makes demand shift rapidly from one year to the next, and the six-fold increase of the export to Lithuania between 2000 and 2001, can be seen in the light of this.

[263] The figures 12 and 18 could well be questioned as several of the lines call at several Swedish ports before crossing the Baltic Sea, while others feeders operate with a reloading in Hamburg. The sailing frequency could be weekly while some have a two-week frequency.

5.5.3. Imports

Oil and oil products
Prior to 1995, oil constituted the largest of Swedish import categories. The volumes have fluctuated sharply. The port of loading has, nearly exclusively been Ventspils in today's Latvia. The only alternative to Ventspils as a port of loading in the Baltic Sea used to be Klaipeda. During the early years of transition, frequently tankers loaded in the Russian river-system, e.g. Yaroslavl and took smaller loads of oil to Sweden, but these days that has become more of an exception. Instead, several ports in the Baltic states, as well as in Russia, have been, and are, expanding their oil-handling capacity, e.g. St. Petersburg, Tallinn, Riga, Klaipeda and Kaliningrad. A newcomer is the new buoy-loading terminal at Butinge that came into operation as late as in July 1999. The terminal has a pipeline connection to the Russian grid via the refinery in Mazeikiai, an advantage that Butinge has over all other ports other than Ventspils and nowadays Primorsk. The problem is that there are capacity problems to be dealt with in the pipeline system long before reaching the terminal. Still, Ventspils remains the only port with a well-established pipeline connection and remains, by far, the dominating origin of Swedish oil imports. Of the different ports in particular Tallinn has displayed a nearly explosive growth in the export of oil and oil products; from symbolic volumes at the start of the first oil handling in 1993 to 22 mt in 2001, of which nearly 0.5 mt was imported to Sweden. It is probably so that the lack of suitable facilities has severely limited Russian exports of oil and oil products in the years of the late 1990´s, as the Russian demand for export capacity well exceeded the capacity in the two pipelines to Ventspils. This has opened the way for alternative ports, despite the fact that the export terminals on offer at alternative locations, like in Tallinn, are only rail-supplied.

Other categories:
For the four following categories, Bulk, Ores and Coal, as in the case with Pulp wood, there are individual explanation to shifts in demand. All categories however, consist of bulk cargoes where demand from Swedish industry could easily be shifted to cheaper non-FSU suppliers, as the products are traded on the world market, and are being supplied under international competition.

-Bulk:
Among the bulk cargoes, two cargo types are clearly more important than others; basic chemicals and fertilisers. Although all ports along the Baltic coast now compete for the handling of these loads, it is Ventspils in Latvia that has the largest terminal devoted to these kinds of products. Even St. Petersburg, Klaipeda and Riga handle fertilisers at smaller terminals and while the Ventspils terminal, with a 40,000 ton automated and weather-protected storage capacity, is rated as the second biggest in the world, it is not the most suitable for the smaller shipments that take

place to Sweden (Ventspils Annual Report 2001)[264]. The terminal for liquid basic chemicals in Ventspils, with an extensive tank storage park and pipeline facilities to enable the efficient handling and storage of e.g. different acids, is located adjacent to the oil terminal with access to the deep outer port basin. Therefore it is understandable that it is in Ventspils that larger consignments of bulk cargoes for Sweden have been loaded. In the first years of the 1990's, the import of bulk rose dramatically, but has since shown a declining tendency. On the Swedish side, this import of basic chemicals is mainly destined for ports like Landskrona while the import of other agri-bulk products are more evenly spread out. A number of ports, especially in the South and East areas, receive 2 – 3,000 tons shipments of these types of consignments.

-Ores:
The import of ores has nearly ceased as the number of smelters in Sweden has declined to just a few and because FSU suppliers, and the qualities offered, have not proved reliable enough. The import of scrap on the other hand, which is in good supply in the FSU, has varied in importance over the years. The volumes of imported scrap dipped around the middle of the 1990's, but volumes have recovered somewhat during the last years studied. This means that there has been less and less ores, but increasingly more scrap being handled in the category ores. This leads to the fact that only some few Swedish ports are involved in this handling. Those closest to a smelter are the ones that handle the largest volumes.

-Coal:
The import of coal is on a slow but steady increase from some of its customers. Swedish demand could be expected to rise further as Swedish nuclear power plants are due for closing within a not too distant future. Imports from the FSU have so far been directed to heating stations and cement making. The import of coal is extremely connected to some few consumers leading to the fact that there are only three ports that handle 90% of the volume imported.

5.5.4. Imported Pulp wood volumes and the regional dimension

The Swedish large-scale pulp wood imports from the FSU is a relatively new phenomenon and, since 1995 the largest Swedish import product. The reasons behind the increasing import are two-fold. Production in the Swedish, and Nordic, mills have, for a long time, been increasing and concentration in this line of business has meant that there are fewer but larger mills in operation. As a result, the remaining mills are now located further away from the available supply of the

[264] Most of what is handled at all three terminals is potash fertiliser, produced by Belaruskaliy in the region of Minsk, while the Klaipeda terminal also handles fertilisers of mostly Lithuanian origin.

cheap, domestic birch and aspen wood often needed in the manufacturing process, for which competition is increasing as it is often also in demand locally, e.g. for use in heating (Brodin, 1995, 1996, 1999)[265]. A large share, if not all, of future increases in demand will probably be covered by FSU suppliers, where a now long-discussed localisation of a pulp plant to Latvia, if based on deciduous wood, could possibly lead to supply problems in Sweden.

What is unique for Sweden is that nearly all larger paper and pulp mills have a coastal or riverside location. This is a heritage from the era when timber and pulpwood were rafted on the rivers from inland logging areas to the sawmills. This historical inheritance has facilitated a shift to new, foreign, and cheaper suppliers of pulp wood. Consequently, larger Swedish mills have now often invested in quayage at their own terminals that are well-equipped for the handling of in-bound ship-borne three meter logs. The appearance of a quickly expanding network of suppliers in the east also came to coincide with some years of recession in this line of business, in the late 1980's, forcing not only Swedish but also other Nordic mills to become strict cost-savers.

As shown in Table 5.4, increasing pulp wood imports from the USSR coincided with the expansion of Swedish import volumes from FSU in the early 1990's (compare Table 5.2). Volumes had started to expand before the break-up of the union, but came to expand vigorously when demand for paper products started to increase in the early 1990's. Russia was initially the dominating source, but after the break-up of the FSU, and in just five years, the volume imported from Latvia increased from 450,000 tons in 1993 to nearly 2.8 mt in 1997, topping nearly 3.5 mt in 2001. Latvia surpassed Russia in 1995 as the most important supplier of Pulp wood, which even Estonia has done since, although the position was lost during 2000, but for one year only.

Table 5.4. Volume of Swedish FSU import of pulp wood 1965 – 2001 (1000 $m^{3)}$

Year	1965	1970	1975	1980	1985	1990	1993	1994	1995	1996	1997	1998	1999	2000	2001
Import	13	67	276	179	1964	1913	2089	4007	5301	3814	6176	7340	8781	9994	6755

Source: Statistics Sweden, different years 1966 – 2002

On the Swedish side, the import in the pulp wood category is the most spread out of all imports with the handling in different ports ranging from less than 1000 tons to close to 1 million for the very biggest[266]. This is a result of locational factors where the low turnover is found in ports used as second or third best alternatives while the high turnovers are found at the devoted terminals of large pulp- paper- and/or sawmills.

[265] Average import price per tonne from Russia in 1995 was around SEK 450, in 1998 SEK 400 and in 2001 SEK 510, but in 2001 with a larger share of more expensive saw wood included.

[266] The 1 mt mark will be passed at more than one plant during 2003 according to the supply plans.

When Swedish imports are split-up according to the different transport areas, the dominance of the two Norrland areas and the East Coast area during the nine years included in Table 5.5 is very clear[267]. Despite an increase in the volume imported, the share for the three most important has been maintained around 80 – 85% over the period. One of the major changes among these three areas is that Lower Norrland has, from an import volume of about half its northern neighbour, surpassed it and has during the last four years been a bigger importer. The reappearance of Lake Vänern with direct shipments by way of the Göta River has instead reduced the volumes in the ports of Lake Mälaren and in the East Coast area, that formerly were used for the reloading to railway in the direction of paper mills in the Lake Vänern area.

Table 5.5. Swedish import of pulp wood 1993 – 2001 / area (1000 tons)

	1993	1994	1995	1996	1997	1998	1999	2000	2001
Upper N.	845	1150	1875	1175	1949	1622	1932	2148	1998
Lower N.	436	881	1502	1205	1623	2078	2003	2544	2092
L. Mälaren	47	150	205	273	333	252	298	115	153
Sthlm Area	0	6	1	0	0	71	151	521	322
East Coast	355	1029	1522	815	1652	1522	1849	1825	1375
South Coast	99	202	172	301	316	421	555	560	470
West Coast	52	85	67	15	128	117	163	349	193
L. Vänern	83	2	11	0	2	9	10	267	438
Total	1917	3505	5355	3784	6003	6092	6961	8329	7041

Source: 1993 – 1997 Port Survey, 1998 – 2001 SGS

The concentration in import is not only regional, it is local inside the regions. The number of locations where over 100,000 tons of imported Pulp wood were handled in 1994 were four, and had increased to eleven by 1998, with only four (two in 1994) of these being located outside the two Norrland areas. As the SGS does not give the exact port of destination for imports, the exact number of +100,000 tons ports/terminals for 2001 can not be given, but can be assumed to have been ten.

In one respect, the import of shipborne pulp wood is distinct from the other categories as it originates from all kinds of ports, even minuscule ones. That is ports located all along the Baltic coast and far into the Russian river-system. However, Riga and St. Petersburg are by far the two leading FSU ports as import origins in this category and the handling of pulp wood is important to both ports, with over 4 mt in St. Petersburg and over 5 mt in Riga during 2002 [268].

[267] With the empirical material, similar tables could have been done for each of the six cargo categories, both export and imports.

[268] Figures include related products like e.g. wood chips

5.5.5. Scandinavian dependence on FSU pulp wood

In the medium-term perspective, the forest industry in both Sweden and Finland is likely to show a slow but gradual increase in production which will probably allow for the same kind of slow but gradual increase in imports. Presently, the local Scandinavian raw material base for the industry cannot compete with FSU prices, especially in the case of deciduous wood. The Scandinavian problem is partly the supply of deciduous wood, but also that the low price makes felling and transport in Sweden and Finland unprofitable.

Another fact that should not be forgotten is that much of this import is used to even-out conjunctural differences in demand for paper and pulp. Therefore, it is often so that changes in the consumption of raw material from the FSU are large and occur at rather short notice. Based on this, it could be foreseen that the changes in pulpwood demand would continue to be volatile, a pattern that was clearly shown in 1996 when pulpwood imports were considerably lower than in 1995, only to fully recover and well surpass the 1995 level in 1997.

During the period studied, Swedish pulp wood sourcing in the FSU area has increased dramatically, but seen in the light of total consumption of wood raw material in this line of business, the dependence on the FSU area has, relative total consumption, not increased as much. In 1995, consumption of wood raw material in the total forest industry stood at 57 mt and had, by 2000, increased to 62 mt, which sets the share of imports during these two years from the FSU area at 11% and 15% respectively [269]. The share of total Swedish wood import, held by the FSU area, however, has increased remarkably during transition years. In 1998, the FSU share of total Swedish imports of pulpwood reached 83%, but increased further to 85% in 2000. Still, it was not until mid December 2002 that the first serious international critique against this kind of sourcing emerged (WWF 2002 www). These concerns have been caused by the extensive fellings in Latvia and that the large Swedish paper companies, that have been given the Pan-European Forest Certificate (PFC) for their domestic handling, take so little precaution about the origin, legal or illegally felled, of the pulp wood imported from the FSU, and, in this case especially, in Latvia.

To northern and central regions in Finland, import from Russia is in the range of 10 mt which constitutes 17% (13% in 1998) of a rising total wood consumption in Finland during 2001 (2001 figure calculated from Tulli 2002 and FAO 2002 www, 1999 figure from Komulainen and Taro 1999)[270]. In Sweden, most of this volume is

[269] Consumption in mt in Swedish forest industry was: 1975 - 47; 1980 - 46; 1985 - 48; 1990 - 49; 1995 - 57 and 2000 - 62 (0.91 tons = one cubic meter when recalculated)(SVO 2002 www). When producing e.g. pulp, the consumption of raw material is in the range of 4.5 times the production volume, making import needs much more volatile than production (Englund interview 2003-01-08)

[270] Domestic roundwood production in Finland has increased uninterrupted, with 1996 as the exception, from 34 mt in 1992 to 40 mt in 2001 (FAO 2002 www)

presently being imported from Russian ports in the Gulf of Finland or from the Baltic countries. To Finnish plants, the import arrives mostly by rail or truck directly from Russia. With a rail gauge of 1524 mm, as in Russia, the Finnish railways are very competitive for this type of transport. Another factor that makes rail a more natural choice in Finland than in Sweden is the fact that many of the bigger paper and pulp plants in Finland have inland locations, not coastal ones as in Sweden. Location factors and the different rail gauge, therefore, give shipping a large competitive edge over rail for the transport of pulpwood to Sweden. Even the Norwegian paper and pulp industry has discovered the cheap raw material in the FSU and has, where location has made it possible, shifted a considerable percentage of its raw material sourcing to the FSU area.

5.6. Changes in the tonnage used

The transition period has opened up for local private entrepreneurs in most lines of business, including the shipping sector. One result of this has been that a considerable number of FSU river-sea ships have come to concentrate their activity to the open sea, sailing to as distant locations as Portugal. The existence of low standard, cheap and small ships was probably very positive for the development of trade between the FSU and the West. The use of river-sea ships has also made it possible to make use of a large number of smaller ports with limited draught, which has led to the spreading out of handling to many more FSU ports, further enhancing competition among ports.

As shown on previous pages, the products and commodities that are being exported are often completely different to these imported in the Swedish trade relation with the FSU. In most of the important Swedish trade relations with industrial countries, trade is an exchange of more or less similar kinds of products, something that also much facilitates transport. Under such circumstances, there is always a fair chance of finding return loads which is less likely in the case of Swedish trade with the FSU countries. This trade relation, with a large share of basic bulk-typ goods, resembles instead, the trade pattern that industrialised countries often have with many less developed countries. To begin with the export side, the two dominating categories, oil and general cargo, cannot use the same kind of ship. Swedish general cargo is mostly exported by ferry across the Baltic Sea. As regards the oil volume, only refined products are exported, and these types of products are carried by product-tankers of a high standard, a type of tanker that will rarely be used for return loads of cargoes other than refined products and possibly liquid chemicals[271].

[271] There are normally no technical problems related to the use of a product tanker as carrier of crude oil. Tanks can be cleaned, but as cleaning carries a certain price tag, it all comes down to a question of freight rates and what ships to charter. For transports of refined products, and especially chemicals, even technical aspects such as the resistance of coatings in the tanks of a vessel to e.g. corrosive substances, must be considered.

On the import side, the volume is not only five times larger than exports during an average year, but also contains a more diversified mix of products, with an emphasis on bulk products. It is here, as carriers of this large volume of bulk products, that a large stock of FSU river and river-sea ships has found their niche. Formerly, larger conventional ships, so called "*timber carriers*" of 4,000 to 8,000 dwt, were often used to transport timber. Today, there is only some few ships registered in the West that managed to compete successfully for these freights with FSU river-sea ships. The majority of the FSU ships used today are designed with two or three open holds with straight sides, making them suitable for most kinds of solid bulk products. A very large share of the pulpwood is shipped in these kinds of smaller vessels of river-sea vessel size. From a very large sample, the average size of a shipload of pulpwood was calculated to 2,150 tons in 1998, which had increased only slightly by the end of 2001. Such a low average means that nearly 3000 voyages were needed to carry the Swedish pulpwood import in 1997 and more than that in 2001. In this traffic, there are also some larger tugged barges being used, with a capacity of about 4,000 tons each. Several of these barges have been active in this trade since the Soviet period.

The transport of coal is an example of a category where the alternative to ship by towed barge is doing well in some connections, while FSU river-sea ships have nearly taken over the market for the transports of scrap. In addition, the shipments of other bulk products in smaller consignments, like fertilisers, have come to be included in the river-sea segment that has out-priced most competition.

The transport of crude oil and oil products also changed in favour of river-sea vessels during the initial years of transition. A change that did not come about without a lot of protesting from the Nordic countries, as the extremely low quality of some of these ships has been proved when they have undergone ship-state control inspections, not seldom after having been accused of causing oil spills[272]. Especially during the years of the early 1990's, arrested ships were often forced to undergo considerable repairs before being allowed to leave their port of call, while some have been arrested due to non-payments of fees and dues, and most spectacular have been some cases of non-payment of wages to the sailors onboard. Probably as a result of this intensive follow up, the number of such cases has been reduced considerably during the last three years. Another factor working in the same direction is that many of the lowest standard ships have had to be taken out of use, due to age and bad maintenance, which has made them either impossible or uneconomical to use, despite extremely low labour costs. Today, these oil loaded river-sea vessels have practically disappeared from the Baltic Sea, apart from canal and coastal shipments inside Russian territorial waters (Pålsson interview 2003-01-

[272] It has been debated whether the increasing number of detected oil-spills is a result of increased oil traffic with smaller ships or just a result of the improved methods of surveillance. It has, no doubt, coincided with the intensified use of smaller FSU vessels for overseas transport in the Baltic Sea. Free discharge of oil wastes in ports around the Baltic Sea area was to be introduced in 2000, but has been postponed as reception facilities were not ready in all ports.

30). The tendency of rapidly increasing shipments on the Baltic Sea of Russian oil during the last few years, both as to the total volume and shipment sizes up to 130,000 tons, has also caused concern about the environment. This time it is because of the many more large ships are used in the region. These ships could for example, not be controlled in case of an emergency and the uncontrollable oil spills that they could cause[273]. An understanding that new rescue and oil-skimming vessels are badly needed in both Sweden and elsewhere around the Baltic Sea has slowly started to emerge (Sveriges Riksdag 2002-11-25 www).

During the years of this study, general cargo has been a rapidly growing category (see Figure 5.8) and that this positive trend will probably remain unbroken in coming years was stated by several influential experts during the years of the mid 1990´s (Konjunkturrådet 1995, Exportrådet 1997, 1998). These predictions have proved more or less right, albeit the fact that none had foreseen that trade would be as disturbed by a number of political crises as it has been. For the import of general cargo, the change in transport patterns and the tonnage used have also been most dramatic. During the first years of transition, the handling of relatively large volumes of metal ingots, that could be transported by the above mentioned kind of river-sea vessels, was not uncommon, but has largely disappeared. Now it is the truck that has taken over instead. There are several factors behind this shift. As mentioned earlier, the number of actors in the market has increased dramatically, both of goods- and transport-sellers as well as goods- and transport-buyers. With more actors active in an insecure, and sometimes juridically unreliable market, it is understandable that the average size of lots was reduced. More buyers and sellers of smaller consignment resulted in a larger market for smaller consignment sizes, like for the river-sea ships and trucks. At the same time, any future growth will result in the continued increase of the number of trucks needed to carry this trade, transporting the general cargo, and privatisations have made trucking a highly competitive business. This is especially so on the export side where the higher value to weight ratio makes the higher cost of trucking more acceptable.

A special problem used to be a high degree of damage to goods during the handling and storage of containers and trailers, and previously also a higher than normal rate of thefts. As long as these factors can not be kept at a satisfactory low level, which it was not during the early years of transition in FSU ports, many cargo owners were given an extra incentive to pay the higher cost of a truck with driver. Early in the period studied, the largest of the Swedish trucking companies in this business, e.g. Danzas, Svex and Schenker established themselves in the Baltic countries and the use of only trailers instead of trucks with drivers has come to dominate[274].

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[273] Practically no strong enough tugboats are available to control such a ship when in trouble.

[274] Danzas – formerly ASG. Schenker - formerly Bilspedition. Svex, now a part of DFDS Transport, is included here because it is one on the major hauliers to the Baltic countries, despite being relatively small on the domestic Swedish market compared to Danzas and Schenker.

With an ever-increasing number of trucks and trailers involved in carrying the trade, there will also be a continuing need for more and more space onboard ferries to cope with this increased demand to cross the Baltic Sea (see Figure 5.21 for complete listing of 2002 and 1998 ferry connections).

5.7. Summary

After the initial descriptive chapters focusing on transit trade, the purpose of the empirical analysis given in this chapter has been an attempt to show the actual flow of cargoes from the receivers' side (see Figure 1.2). For practical reasons, Sweden has been used as example, but Sweden is probably a country that can serve well as a model for how trade between the FSU area and countries in the West has developed during the years of transition.

Initially, the contradictory information that is given when conventional international trade data for the goods exchange in the Baltic Sea region is compared. This has led to the fact that volumes handled in ports have been used, instead of the conventional denominator, value, to measure the trade. Through this, it has also been made possible to follow the flow of cargo through entrepôt countries; here the Baltic states. By way of the Port Survey and the Shipping Goods Survey, it can be shown that the Baltic states increase their share of FSU trade with Sweden on Russia's behalf, especially in the case of Latvia.

By way of these analyses, the rapid changes in handled volumes for different categories of cargo, and for cargo categories in the different countries, have been shown.

For the Pulp wood category, an example of a possible deeper description to the regional changes in import is also given. The large Swedish import of pulp wood could probably be replaced by some other quickly expanding cargo category if a country other than Sweden had been studied.

6. PROSPECTS FOR THE NEAR FUTURE

6.1. General situation

The aim of this thesis is focused on describing the influence that changes in external factors like the geopolitical environment, transport geography and port competition have had on seaborne trade and transport development on the eastern Baltic Sea fringe during the years of transition. Being the single most influential country in the region, Russia has been focused upon.

General developments in Russian society have been marked by considerable uncertainty since the beginning of the perestroika period in the late 1980's but have reached a state of stability during the Putin era. Political stability is often argued as being one of the most important foundations upon which to build future economic prosperity for a country. Financial markets' behaviour has, parallel to this tendency, started to emerge as a first-hand indicator of the local level of not only economic, but also of political stability. In this respect, the Russian financial market from 1999 onwards seems to have accepted the present political situation as dramatically improving. In the aftermath of the 1998 crisis, the Federal Government as well as individual oblasts and companies, defaulted on interest payments on international loans that had been taken during previous years. In this respect much has changed for the better, and on more than one occasion, Russia has since paid in advance of the date when interest payments on international loans have been due. The upgrading by several steps on the risk-scale by all of the international rating institutes has made it possible for Russia, as well as many its oblasts, to be realistically planning for new international loans during 2003. The rating has not become so positive however that Russia and its oblasts are considered without risk, far from it; risks remain significant. The near future economic development for Russia, however, looks stable measured in GDP terms, as has been indicated by a number of domestic as well as foreign institutes.

What has remained a domestic problem during the last few years has been inflation that has remained too high, although it seems stable around the 15% per year level. Several of the big state monopolies, like electricity and gas, as well as property-owning city administrations must soon be allowed to raise prices, well above inflation, to be able to maintain and upgrade infrastructure, at the same time as a way must be found to make the large numbers of non-paying customers pay. The low Russian attractiveness for FDI's, in relation to the size of the country, the size of the population and in relation to other transition countries, can be seen as a confirmation of the judgements by e.g. World Economic Forum, that, for FDIs, there are many other countries that are more attractive (World Economic Forum 2002 www). The high degree of concentration of FDI's to Moscow and St. Petersburg within Russia is possibly an additional negative trend.

One of few positive signs is the growth of foreign trade that, over the last five years, has shown large surpluses and good growth. Exports in 2002 (2000) were valued at USD 106 bn (103) while total imports came to USD 59 bn (53), resulting in a surpluse of USD 43 bn (50) (see also Table 3.1). Most important for the Russian economy since the spring of 1999, has been the fact that the world price of oil has more than doubled and during the latter part of 2002 has increased to about three times that level. This price increase gave some room of manoeuvre for, and took pressure off, the Putin government as early as his inauguration as Prime Minister in August 1999 and has especially helped during his early time as President from March 2000. The renewed economic stability as well as the much improved foreign credit ratings are also a result of the fact that the new Putin administration has not squandered the incomes that the sudden turn-around in the oil-price have led to and have adopted a more consolidated economic policy. The rising world prices of raw materials have also been feeding a continued exodus of capital from Russia, which has been estimated to be many times bigger than the FDI, and evidently, to make it possible for a country as small as Cyprus to become the number three Russian FDI origins (PrimeTass 2002-11-19 www).

In early 2003, most indicators point towards continued economic growth, but much of the optimism is based on continued high energy prices. A fall in the price of crude oil by 25%, from USD 30/bbl to 21.50 would still be within the range planned for in the 2003 Russian state budget, but it would still create a dramatic slowdown of the economic activity. What can be best hoped for, if such a fall in oil prices would occur, is that an as slow a reduction as possible would be desirable giving all sectors of the economy some lead time to react in a sensible way and to adjust to new levels of earning.

On the other hand, for several years now, Russia has been a country defended by a cash-strapped army, troubled by a seemingly never ending ethnic conflict in Chechnya, burdened by apparently usolvable wage arrears and witnessing a rapid social disarmament in society for many. In the socio-economic sphere, large stratas of the population witnessed their money incomes shrink dramatically as a result of the August 1998 crisis that caused a 75% decline in purchasing power for the Rouble relative to other currencies. This took average wages to a level below USD 100/month in 1999, to again have risen to a level of USD 150 /month by late 2002. However, around a third of the population still live on wages around or below an already very meagre subsistence level witnessing a rapid social disarmament in society while fewer, but still many, have seen rising incomes lift them into an emerging and fairly well-off middle class, a process that is rapidly increasing inequalities among population stratas.

6.2. The transport sector

Responsiveness to customer demands is something that is continuously increasing and will also force the Russian transport sector to adapt accordingly. In the West, the adaptability of manufacturers to changing demand and quicker model changes by producers, preferably adapting product specifications to individual customers demands, have both shortened and complicated production runs considerably. Because of this, consignment sizes in non-bulk transport have gone down, resulting in an increased market for truck transport, an increasing value being set to the time factor and as a consequence of this, a decline in demand for rail transport. These changes will mean more RoRo and more container handling for ports, a development that has only just been initiated in the non-Baltic FSU area. An adaptation to new transport modes will, although slowly, be forced upon the transport sector and in the process generate further strain even upon other sectors.

6.2.1. Effects on transport of the economic development

It is still very probable that important parts of the Russian economy will continue to develop positively in the near future. Volumes transported have again started to increase during the last few years, but are still far from the volumes handled during Soviet times, much because the tendency of continuous increasing volumes of bulk goods being transported has been broken since many years back. A major reason for the previous decrease in transport work was a sharply falling transport volume between the countries of the CIS and CMEA countries, such as e.g. between Kazakhstan and Russia and between Poland and Russia. A continued positive economic development in the region will, under normal circumstances, lead to increased trade, resulting in an increasing trend in volumes of exports and imports. This expected increase will take place with a not as strong emphasis on bulk cargoes and with a slightly different mix of countries than before the break-up of the FSU, but Russian industry still needs some lead-time for this adaptation. There are plans to build a large trunk pipeline to Murmansk for oil from the Timan-Pechora fields and the intended market for the oil is said to be the US, which would fit in very nicely as an example of a new market, but not of a new product. Russia, having the size of a continent rather than just a country and with its own set of domestic raw material resources, many sought after on the world market, cannot have its development compared to the development of any European country or group of countries in these respects.

One of the factors that even today distinguishes the Russian transport sector from most other countries is the heavy dependence on the railways. The slow change in modal distribution, from rail to road, is not surprising as long as a state monopoly in the railway sector is maintained. Established transport patterns are slow to change and Russia is no exception in this respect. The fact that container transport by rail is unable to compete with road even over the 680 km separating St.

Petersburg and Moscow is a good example of the fact that it also takes organisational changes and competence, and not only a 15% price advantage, to attract customers (Kopytov 2002 www).

The share of road transport in Russia measured in tons was, in 2001, around 50% of the rail volumes, while the same figure for the Nordic countries indicates a share of road transport between 2 - 3 times larger than the rail volume (Mintrans 2002 www, SIKA 2003). If instead transport work (tonkm) is compared, the Russian road volume is less than 2% of rail volume, while during the same year in Sweden road transport was 153% of the rail volume (ibid.). One way to explain this huge difference is that the Russian transport sector still has a long way to go to come to terms with e.g. a much needed upgrading of its road system at the same time as bulk cargoes transported over long distances weigh in heavily in a tonkm figure. However, transport has so far remained a largely domestic line of business that has attracted a relatively limited share of FDI's, and a stronger foreign influence would probably have accelerated a transformation. Therefore, now and in the foreseeable future, the major tonkm generator of the Russian transport sector will continue to be long-distance haulage of raw materials in block-trains and crude oil in pipelines, i.e. the same procedure as 10 and 20 years ago. At the same time, it can be hoped that the importance of distance will continue to increase, where much depends on the development of the much spoken about railway reform, however difficult to implement, that among other changes will break up the monopoly into a number of different companies for different operations like e.g. freight and passengers[275]. Reforms of the dominating means of transport are probably a must in order to increase competition in the Russian transport sector, not only by low tonkm quotations, but also by providing different kinds of logistic services beyond just pure transport services. Factors like reliability, predictability and speed, are today already important in the transport sector, but few reliable and competing alternatives are active in the market. Deregulation and privatisations are often said to be the best way of attending to such problems, but what is argued for by policy makers and planners has not always been an easy-to-swallow medicine for politicians, and few argue that fair competition between different modes of transport exists within e.g. the EU, and this will take a long time in Russia, too. Rising domestic energy prices, e.g. as a consequence of a near future WTO membership, could be a factor that forces into place the beginning of decreased state subsidies, something that would raise transport prices making future prices somewhat better reflect the true costs of inputs and distance. It is noteworthy that still today cheap bulk products from far away oblasts such as Kemerovo and Altay are transported to ports in the Baltic Sea for shipment. Perhaps the only other transport venture that this can be compared to in both volumes and the distances involved is that of the transport of grain in the US from the Great Plains to ports, where shipments from Sioux Falls in Nebraska are as distant from the ports in the Gulf of Mexico as Chelyabinsk is from St. Petersburg. Due to the size of the country,

[275] The drafted law from the Ministry of Railways received 1655 suggestions for changes at its first reading in the Duma in June, but it still passed the second in late December 2002 (DVZ 2003-01-04).

long transport distance will continue to burden the economy, and as already indicated by Holt (1993), Russia will remain a special case from a transport point of view where:

> *"...Russia's size, scale and poor access to sea transport makes it unlikely that the relationship of transport demand to GDP will decline enough to match that of other large countries such as Canada and the United States "*
> *(Holt 1993, p. 29)*

Russia will also in the future have to bear the cost of a large transport sector with a high capacity. It is still striking that when discussing the future of the transport sector with Russian counterparts, today as well as five years ago, how strong the urge is for Soviet-type solutions, arguing for large new-investments in infrastructure. However, with the present state of infrastructure, the available financial resources should instead be put to work at some pressing cases of restructuring, maintenance and the training/education of staff rather than spending money on some few, new, large-scale investments.

6.2.2. Russian ports in the Baltic Sea

Much of the focus in this thesis has been upon Russian ports in the Baltic Sea, but ports that fulfil just this criterion are few. In reality, only the ports in the Gulf of Finland and Kaliningrad are ports on Russian territory, and ports over which the Russian state still exerts control, directly or indirectly. This is the group of ports, still by the end of 2002 limited to some 6 – 7, where a combination of domestic economic development, geographic position and historic legacy has long hampered their capacity to adapt to changes as quickly as the changing environment in which they work has demanded.

The formation of independent companies operating in the ports has often been characterised by irregular changes in ownership and direction of operation, resulting in an irregular and unpredictable development, complicated further by the fact that local regulations in the different oblasts have not given a levelled playing field. The local administrator of the transition process for the ports has often been the port authority together with state/oblast/city privatisation agencies. Due to the fact that larger ports have been considered to be of national strategic interest, where normally only the cargo handling in the port can be privatised, the process of port privatisations has been even more complicated than an already complicated privatisation process. This is well exemplified by the still ongoing struggle, within the Sea Port of St. Petersburg company, between the local State Property Committee and other owners of the company that, as in many other companies, have profited handsomely from the privatisation strategy adopted.

Despite this administrative legacy, ports remain just one link in a transport chain and in later years, much the same factors as in the West have influenced Russian cargo owners when they choose between the logistic alternatives offered:

- cost of transportation
- duration of transportation
- quality of transport and distribution service
- security and reliability of the whole transport chain involved

To adapt the old style organisations of the ports to this kind of thinking, from the handling of the previously state-directed cargo flows, has taken longer than was previously believed. Competition from foreign ports has been strong, and has constantly been on the rise, the speed of reorganisation and adaptation will continue to be important, but the sector has again been given more time to reconsolidate during recent years by preferable state rail tariffs.

Transformation and adaptation are often painful processes and to find a new line of business that could fill the gap when something is trailing is often necessary to come over such problems. It is worrisome that no major new Russian export commodities have appeared during the last 5 – 10 years, which can be seen as a failure of restructuring in a sense. Instead, commodities in the export sector are much the same as before, with a small number of resource-based products generating a large share of the export volume and a limited number of workplaces, relative to their importance, for export incomes. Companies that produce these raw material-based export products are not seldom dominant in their oblasts, often controlled by the small group of so-called oligarchs, which make these companies more or less immune to influence from the oblast, and often also from the central, authorities.

With export development in different raw materials having shifted in later years, the hope among ports is often directed towards the handling of oil, fertilisers and containers. In this process the importance of the ports, as an interface between land and sea, is further enhanced and it must be fortunate enough to seize the right opportunities when funding for large investments are needed. The slow speed of adaptation demonstrated in the port sector during many years of the 1990's has slowly changed for the better and an adaptation to a new trade pattern for the society has been seen, but not necessarily only positive, as the dependence on energy has remained high.

A grey cloud that rests over the Russian port sector is the distortion, i.e. subsidised pricing on the railways, of transport towards Russian ports in operation since late 2001. The hitherto increased competition from foreign as well as among domestic ports has thereby come to be offset. The lack of co-ordination between state structures has instead made the Customs Authority, that is slow in clearing cargoes in domestic ports and refunding VAT, into one of the best advocates for using a

foreign port for Russian cargo owners. The EU, in particular, has much supported improvements of infrastructure around, and the facilitation of formalities at, border stations, and the easier this passage becomes, the more the sometimes marginal advantage of using Russian instead of foreign ports will erode. The result will be increased competition for Russian domestic ports in the Baltic Sea region.

The Leningrad Oblast, the City of St. Petersburg and Kaliningrad Oblast are the three geographical venues where the changes in the Russian port sector in the Baltic Sea will take place. Leningrad is an oblast that lacks most forms of infrastructure needed in relation to ports, but has access to seashores, which is what the City of St. Petersburg lacks. This has been enough of an advantage for the new port in Primorsk to be selected as the best location. Here, one single commodity is loaded into few and large ships which reduces both the number of employees needed and the need of a supportive shipping/port cluster as a more complicated structure in handling would demand. St. Petersburg possesses, however, the infrastructure to administrate and run a port with diversified handling. The port is located in the middle of the city, restricting expansion and access by road and rail, with dredging as a constant problem. The Kaliningrad alternative can pretend to be the best compered to the other two competing oblasts, with access to both coastline and infrastructure. Instead, Kaliningrad features its own set of problematic border crossings, restricting and complicating access. Military interests in the most favourable port location in the Oblast, the Baltiysk naval base, has, with the exemption of the St. Petersburg ferry that came into operation during the first week of 2003, forced the port sector to use only second best alternatives. Under the existing geopolitical, political and transport geographical situation, the future of the port sector in the Oblast has long looked disheartening, but that was before large reductions in rail tariffs came to change the situation fundamentally.

It has been argued that Russia needs new port infrastructure because this would incur large savings. This is the official version and it could be argued, as by Hayter, that much port capacity is, and especially has not been, used as efficiently as it could have been (see 3.6.1). Had it not been so, then the present transit pattern would probably have looked very differently indeed. It could also be argued that the persisting transit trade pattern is the result of logical decision making on more or less market economic grounds by cargo owners, i.e. under prevailing conditions. The success of all existing, as well as future, port structures discussed here depends, in the end, on how large a share of the incurred costs must be pushed on to the end users, and how quickly. It is not until a more or less equal playing field has been created that the genuine competitive advantages of the different port will have a fair chance to pay off. The existence of alternative (transit-) ports has given openings for a cost awareness among Russian companies that could not be explored previously and the oil company Barneft General Director, Ampir Syrtylanov, sums this up well:

"I don't care whose terminal it is, just how much it costs"
(Business in Russia, September 1997 p.102)

That unexpectedly much has happened in just a few years when it comes to the extension of Russian port capacity in the Gulf of Finland is shown by the statement of the Sea Port in St. Petersburg's former director, Bilichenko:

"It is simply not realistic to think of anyone competing with us in the next 15 years"
(Business in Russia, Sept. 1996 p.102)

Since this was uttered, first of all the plans in Primorsk have matured and it has already handled 12 mt in its first year, and inside St. Petersburg total handling has increased from 16 mt in 1996 to over 41 mt in 2002, with a number of operators in the port, outside of his company, having increased their handling dramatically over these six years.

6.2.3. Other Russian port alternatives

What is often argued for in the Russian North is that a positive economic development will result in increased trade and that a continued high oil price will lead to both further and future development of oil and gas resources. From a port perspective, the offshore extraction of oil and gas would generate more activity than would onshore exploration. Apart from irregular consignments of cargo to on-shore fields, the positive effects from offshore explorations would be felt by the ports near the exploration areas. In this respect, the future for possible competing ports in the north is bleak and the best option is probably to, one way or the other, become involved in the shipping of oil from fields in the Russian north.

Murmansk
The port in Murmansk will continue to be competitive for some categories of cargoes, such as for bulk cargoes produced on the Kola Peninsula aimed for export in a more or less unrefined form. As for other long-distance cargoes, the port has remained competitive for coal exports and alumina imports. However, the future of handling depends more on the future development of the Russian aluminium and coal sectors, and railway pricing, than on how well the port performs. The port will also maintain a competitive position for spot loads of different kinds of goods in bulk, export as well as import, especially during winter months. There are two foreseeable scenarios that could secure a prosperous future for the port. One is an expansion of the mineral extraction on the Kola Peninsula. The other possibility is the transit of oil or gas to the Murmansk region for export shipments where the deep waters, allowing for the use of large tankers, is the factor that attracts investors. Presented plans for a trunk line from the Timan-Pechora fields to Murmansk would be a dream-come-true for the port and the oblast, but again it is a continued high oil price that will decide the future of the project, much more so than any incentives that the port and the economically strained oblast can offer.

New port capacity in the Gulf of Finland has not changed the position of Murmansk as the first choice Russian reserve alternative. Murmansk will continue to operate under ice-free conditions, all the year round, which will not be the case for any other of its domestic competitors outside Kaliningrad.

Arkhangelsk
With a constantly decreasing population in the Russian Far North follows a slowly decreasing demand for transhipments of goods and supplies, a kind of handling that has been important for the turnover of the port in Arkhangelsk. Another important type of cargo has been the export of wood, primarily sawn wood, but also other forms of processed wood. The whole woodworking sector has been marked by contraction since the beginning of the transition period and exports over the port has decreased. Much delayed dredging in the port section of the Severnaya Dvina river during 2002 has opened new hopes for the port, and, during 2002, turnover jumped 100%, due to a comeback of oil handling. Sedimentation in the river hampers the delivery of wood by river ships and the rafting of wood from up-river areas. As the port can still only accept relatively shallow draft ships, there could well be a niche for the minor import or export of shipments of bulk cargoes, alternatively shipments to/from minor foreign ports. Having the longest history of all Russian ports and being one of few ports, it will maintain its strategic interest from federal circles. Despite this, any major improvements of infrastructure and turnover looks less probable.

Black Sea
The 400 km of Russian coastline along the Black Sea includes the biggest of all the mentioned ports, Novorossiysk, together with Tuapse and some smaller ports in the Sea of Azov. The focus here is also on oil and 80% of the turnover during 2002 was in this category, and suggested projects indicate a continued increase. Problems in the Bosphorus with Turkey complicate shipments and the large, non-Russian, findings in the Caspian region will, in a few years time, find outlet by pipe-line to Ceyhan in Turkey and relieve some of the pressure. Transit flows to ports in the Ukraine have constantly been on the increase and will, as long as Russian supply and market prices remains high, continue to be used.

6.3. Non Russian alternatives

6.3.1. Baltic Sea region

With the Baltic states having been in a somewhat isolated position during Soviet times, the transit trade dependant sectors in these countries have managed surprisingly well to adapt to the changes incurred during transition years. Russia has not been favouring the use of these states for transit purposes, although Russian capacity restraints have not given room for any other outlets. Despite a

long discussion about excessive costs that have had to be carried by Russian exporters, the volumes of cargo transiting the Baltic states has been expanding during the whole period under study. It is primarily an increased flow of oil that is the reason behind this expansion, and, at the moment it is the future of the container handling in the ports that is being battled out. This sector has for a number of years showed a strong growth, but has by a large margin been outgrown by capacity extensions in the Baltic ports.

Currently the most active battle between Russian and Baltic states' interest in the port sector is not only over the handling of containers, but also over the handling capacity of oil. The Russian Ministry of Energy, with Transneft as its agent and against the will of Russian oil companies. seems to have initiated the process of forcing a hostile take-over of the "jewel in the Baltic port crown", Ventspils Nafta. For years, the Russian side has been trying to close some kind of deal that would have secured oil-transit volumes in return for some level of ownership, and it now looks likely that they will get a bargain price compared to what could have been requested in 2000, using low shipment volumes as their weapon to first bankrupt their opponent's game (Moscow Times 2003-01-10 www).

The struggle to remain competitive by the different ports in the Baltic states that has been ongoing during the years of transition, could well have been the factor that has saved them from surrendering. In a long term perspective it is perhaps this *"free competition"* among the ports in the Baltic states that will also keep them alert and cost-efficient enough for cargo owners to make use of them. Therefore, there will also be a cargo flow using these ports to keep-up turnover volumes. Despite the fact that there are a number of factors that complicate the situation, this environment could still be looked upon as ideal for rapid development. Combined with the domestic environment they work in, the port sector in the Baltic states is ahead of its Russian competitors in efficiency and although slightly more expensive to use, they largely have a good likelihood of continued operation at their present level. The harsh ice winter of 2002 - 2003 has also helped to indirectly improve the situation for the ports in the Baltic states. Russian difficulties in organising icebreaking has made shippers remember the advantage of ice-free conditions, especially as an ever larger share of the calls are made by feeder vessels that have practically no margin for extra sailing time caused by ice in the inner parts of the Gulf of Finland.

6.3.2. Influence upon the position of the Nordic countries

In many respects, Finland holds an important position in the transit trade as a long established trade partner to Russia, member of the EU since 1995 and until 2004, the only EU country bordering Russia. The term of Finnish presidency of the European Union, during the second half of 1999, was therefore expected to achieve large advances in east-ward connections, but came to generate less in these respects. Larger and more efficient border crossings have been constructed from Lutta and

Vartius in the north to Vaalimaa – Torfjanovka in the south[276]. To improve rail and road connections at borders has proved much less difficult than to open new transit corridors, where the Ledmozero and Kochkoma connection could serve as an example of the difficulty (see 4.7.1). The measures taken at border posts are, of course, vital in facilitating trade in general, but for Russian ports, this coin has two sides. Especially if located in what is the periphery, such as ports in Murmansk or Arkhangelsk, improved transit corridors can more or less be taken for granted to be negative for the development of future goods turnover; but positive for Finnish ports.

For Sweden, the situation with the prevailing unbalance in the volumes of import and exports with Russia is the most striking phenomenon. This is likely to remain, but the unbalance will shrink in years of low demand for pulpwood, as was the case last time during 1996. Already today, several of the larger Swedish paper and pulp producers have established their own affiliates in both Russia and the Baltic countries which are likely to lead to this form of raw material sourcing becoming even more established. Although investments in high capacity production facilities in paper and pulp are very large indeed, it remains striking that none of the big Nordic producers have established any production facility in any Baltic country.

There are a limited number of possibilities to find a return load for a vessel, or a truck, that carries products in the Swedish - FSU trade relation. Much of the cargo volume arriving in Sweden does so in smaller river-sea vessels, which are more complicated and expensive to handle than a modern vessel of a more optimal size, while the general cargo that constitutes most of the export is typically truck cargoes. These general cargo volumes will continue to expand on both the Swedish export and import side, as will the number of ferry services, their capacity, frequency and the quality of their services. This expansion will come as a result of the continued restructuring of Russian business life, and especially so in the Baltic states, that in perspective will reshape trade flows to better integrate with the international system of division of labour. The decisive difference now, compared to ten years ago, is that the development will be steered by market economic thinking and continued initiatives from e.g. the Port of Göteborg has shown that Sweden remains a transit alternative on solid economic grounds (Larsson and Wickström 2001, Kristenson and Erlandsson 2001).

It is for oil shipments that major changes could be expected in relation to volumes and types of vessels used, and less so for pulpwood and general cargo. Major oil disasters, and long term problems with frequent, but small, oil spills in the Baltic Sea, have finally awakened governments. Recently, Sweden has initiated a process, and looks likely to find support in Finland, Estonia and Lithuania, to get the Baltic Sea classified as a Particularly Sensitive Sea Area (PSSA) under the regulations of

[276] At e.g. www.tieh.fi/kamerat/vaalimaa.htm. it is possible to have an on-line view of all Finnish / Russian border stations, -to be able to avoid the one with queues (Finnish Road Adm 2002 www).

the International Maritime Organisation - IMO[277]. Expansion of oil-export terminals, e.g. in Primorsk, Vysotsk, Tallinn, Ventspils and Klaipeda to handle larger ships has probably partly offset much of the river-sea vessel problem through an increased use of larger and more economical ships, but also increased the risk of a very large disaster the day all negative factors happens to coincide.

6.3.3. The delicate balance

In a decision-making process that involves transport economic factors as well as geopolitical factors, it is probably not possible for an outsider to establish the importance given to different arguments as was already discussed in relation to Figure 2.10. Instead it can be assumed that when a decision is made, an imaginary fulcrum could be used to explain how the balance will swing on different occasions and what will make this or that consideration weigh the heaviest. For most of the smaller actors in the system, the possibility of asserting influence is minimal, but where a decision by a forwarder to use a Russian port instead of a Baltic state competitor will still be supportive, even though the decision in the individual case has been based on more or less pure economic factors. Still, most kinds of decision-making will leave a freedom of manoeuvre for the other type of argument, as e.g. the decision to build the port in Primorsk can be seen as purely geopolitical, the detailed planning that followed when the decision was taken still involved a lot of transport economic considerations to make the best of the situation inside the framework given by the principal decision. In Figure 6.1 below, a number of principal actors, that have been mentioned in previous chapters, have been placed in a diagram that at its extremes has geopolitics and transport economy.

The position in the system given to the different actors is also related to when in time the analysis sketched out is being made. As mentioned in the background part of the thesis, the time frame elaborated here is more than ten years and during this time a lot of important events have happened to the actors used as examples. The position given in the figure here would have looked very different indeed if it had related to the situation ten years ago. At that stage, the large industrial conglomerates were still to be created, the privatised oil companies had not been created or were practically without influence and the volumes of cargo in the system were much smaller. The figure as outlined here could be said to represent the situation during the last year only. It must also be noted that for an actor to become influential in this system, a considerable size is needed, making it difficult for those other than states, and their subordinate organisations and other large actors, to affect the working of the system.

[277] The Swedish exclusive economic zone in the Baltic Sea covers about 40% of the sea, and could, if found necessary, take steps to make such a protection unilateral (Ringborg interview 2002-12-20)

1. Transneft: The Russian Federal Administration, which is represented in this case by the state monopoly pipeline operator Transneft. It is highly unlikely that Transneft would act freely in its attempt to steer the flow of oil in different directions as well as in its decisions about where to build new terminals for export. The direction has become increasingly geopolitical since the rise of oilprices in 1999, or rather, the possibility to move in this direction was opened up by the freedom of manoeuvre given by higher oil prices.

2. Raw material producers: The largest of the raw material exporters in the form of oil companies, fertiliser and coal producers. A group of very big companies, or companies being a part of oligarch groups of companies, that are very influential in central circles as a result of being large tax contributors and often locally dominant, but also by way of being able to afford excellent connections in inner decision-making circles. This group of actors must accept to act geoplitically, from time to time, while being allowed a larger freedom of manoeuvre on other occasions where profit seeking will steer the decision making process instead.

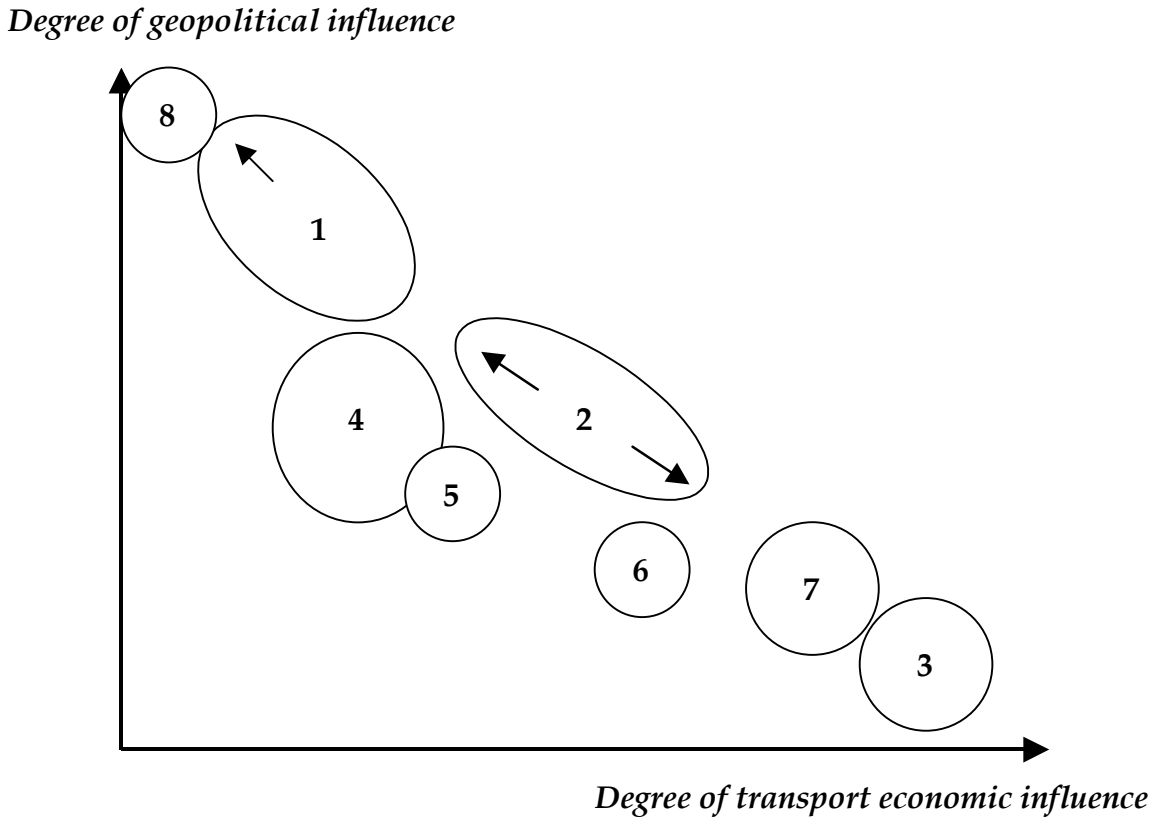

Figure 6.1. Arbitrage between geopolitics and transport economy (March 2001)

Source: Author

3. Profit-seeking company: The profit-seeking company that acts purely according to market economic principles and where only competition among possible suppliers to deliver the kind of service requested is what is being evaluated. Well exemplified by the quotation from the CEO of the Slavneft company in 6.2.2.

4. The oblasts: The different oblasts that are looking for investments and money transfers from the central government to strengthen the local position and economic situation. Oblasts that, in their political bidding, can be expected to play the kind of cards that fit-in, depending on their discussion partner. No doubt the two oblasts around the Gulf of Finland have used the geopolitical argument much more frequently than oblasts in other geographical regions, that do not stand to gain as much from the current development. Over the last few years, development has shown that the most rewarding direction of action for oblasts has been the geopolitical one.

5. Ports in Kaliningrad: A not very influential actor but an actor that finds it convenient to strongly stress the importance of the geographical unity with Russia for the region and that has been given its reward by extreme railway pricing during 2002.

6. Ports in general: A larger number of actors that are mostly profit-seeking companies but that are still to some extent steered by the local port authority and possibly, although seldom, the controlling state ownership share.

7. Money exodus: A flow of cargo that is based on one or many individuals' desire to land personal profits from export trade transactions involving any kind of cargo. An operation that is not seldom based in the vicinity of number 2 above, but where the transaction is run outside the regular and controlled pattern. Here, the possibility to control the transaction, low cost, and profits that can be secured abroad, are the factors steering the operation.

8. The Baltiysk navy base in Kaliningrad: The geopolitical extreme, and the single actor that possesses the best location for commercial port operations in the Kaliningrad Oblast. An actor that has been under pressure to open up for the handling of conventional cargoes during the whole transition period, but has stubbornly resisted until very recently when central decisions have forced in place a change in attitude.

7. CONCLUSIONS

7.1. Introduction

In previous parts, a number of factors related to the development of the Russian transport sector, with an emphasis on the area around the Baltic Sea and ports, have been presented. The aim has been to describe how the changing geopolitical environment in the FSU has created a new transport geography, and thereby resulted in new patterns of foreign trade routes and port competition on the Baltic Sea fringe.

In order to fulfil the given aims, the analysis has been carried out in three steps:

The first step was to describe and set into perspective the geopolitical situation that reigned before the initiation of the transition process. This process made possible the geopolitical and transport-geographical changes in the Baltic Sea area, focused upon in the following parts.

The second step gave the empirical background to the current development, including a description of the Russian port sector, but also related sectors and regions in the FSU. For the three Baltic states and two Russian regions, the North West and Kaliningrad, devoted studies of the geographical origin of Russian transit trade has been presented.

The third step included an in-depth analysis of the development and changes in Swedish seaborne trade with the countries of the FSU from a geographical perspective.

7.2. Effects of the geopolitical situation

One of the reasons behind Russian discomfort over *"lost"* infrastructure and land that has been put in focus here, is the emotionally motivated feeling that countries apprehend a need, or a historically motivated desire, to exert control over territories that are considered to be of great importance. This desire to execute control certainly includes some of the most important transport arteries leading to and from a country as big and historically influential as Russia. The old tsarist Russian ambition of having direct access to the Baltic Sea came true through Peter the Great in the first years of the 18th century and the desire to maintain this contact has remained strong. During many years of transition the country's leadership has often given the impression of working more to reinforce personal positions than for the best of the country, making an impression that *"anything can soon happen* " ever present. During the turbulent years under President Yeltsin, frequent and unexpected dismissals of Prime Ministers, other political turmoil, coupled with deteriorating living standards for large stratas of the population, was in itself proof enough of inherited instability. A number of strong arguments could, of course, be

found that indicated a number of alternative developments. However, all theories could be seen as just alternative forms of speculations, but the ideas of the famous geopolitical writer Peter Taylor (1993), also support unconventional thoughts by stating:

" ...that, of course, is the nature of any geopolitical transition
- the absurd becomes the obvious"
(Taylor 1993, p. 80)

The appearance of President Putin, who soon gained a strong support base, the stabilisation of the Russian economy that has been no less than remarkable over just three years, the invitation of the Baltic states as members of NATO and the EU have all much changed the setting in the region. Not least important is the fact that the Baltic states membership in EU and NATO has been approved, though perhaps not very enthusiastically, by Russia. From a theoretical point of view, it is probably true that the existence of the Baltic states has come to re-create for the countries in Western Europe, a new form of "*cordon sanitaíre"* that presumably the West, after all, see good reasons to keep in place. The strongest argument for an independent and secure future for the Baltic states is perhaps to be found in their present position as *"buffer-nations"*. A fact that was argued for in the early writings of Kjellén more than 80 years ago when he stated:

"...buffer-politics contain a life insurance for small states
in an era of large powers"
(Kjellén, 1917, s. 72; author's translation)[278]

The problematic question of Russian control over transport arteries can still be attended to by the Baltic states themselves. Seen from the same geopolitical perspective there is still a backdoor, forced in place by the adaptation of market liberalisation, in the form of infrastructure privatisation that could help the Baltic states out of this awkward situation where it could still be necessary and even advisable, to offer Russia directly, or indirectly through Russian companies, fair stakes in railway- pipeline- as well as port companies. This strategy would secure future Russian influence and serve two purposes. First of all, to give the big neighbour a certain degree of control over its transport arteries, but also to help to secure future flows of cargoes to ports. Transit trade will continue to be very important for the economic well-being of the Baltic states. To see such an approach as a worthwhile investment in both national security and the economic well-being of the countries has practically not been done by any of the Baltic states until the take-over by Russian Yukos in September 2002 of the Mazeikiai refinery in Lithuania, where the deal included the off-shore oil-loading platform in Butinge. More agreements of this kind could have served as an acceptable excuse for Russian politicians to understand the economics of the large-scale use of foreign ports. If such a policy had been enhanced, not only would this have created

[278] In Swedish *".. att buffertpolitiken innehåller en lifförsäking för småstater i stormakternas tidehvarf".*

friendlier relations to Russia, but also supported the long-term well-being of the Baltic states at a relatively low price. The price tag on the loss of national pride that the seller could feel is hard to set, though. Instead, Russia has developed large new infrastructure, at what is probably much greater cost than necessary.

Russia, in its present geographical shape, has a very limited number of possibilities as to where it could steer its seaborne foreign trade (see Figure 2.5). Despite the fact that Russia ought to have had great difficulties in extending capacity, a new port in Primorsk has been inaugurated, and in the first year has already proved exactly as productive as was intended. With this in mind, it becomes much more probable that capacity at other locations and in other directions could also be expanded. Parallel to this are ongoing expansion projects among ports in the Baltic states that will result in a situation that looks destined to aggravate competition among foreign ports.

7.3. The geographical setting

During the transition period, the positive development effects have had problems spreading outside the large city regions, especially Moscow and St. Petersburg. Nearby oblasts absorb most of what is left of investment resources, and little will be left for the transport and port sector in peripheral oblasts. Just a few years back the empty money coffer of the Russian state could not give any direct state support to the building of new port structures, apart from a strong verbal support. During the last few years, however, much has changed in line with oil incomes, and state controlled Transneft was the initiator of the project in Primorsk. At the same time, neighbouring ports, especially in St. Petersburg, have expanded rapidly and more than doubled handling inside the last five years. This expansion on the supply side has been even quicker than was expected only a few years back, and then including the materialisation of other port projects. The demand for port capacity has expanded during this time, but has been outgrown by the increase in capacity resulting in a possibility to shift cargoes from ports in the Baltic states to ports in Russia.

This Russian expansion of port capacity in the Gulf of Finland has been much based on the argument that a lot of money is *"lost"* to foreign countries, because Russian export cargoes has been transiting in foreign ports. The continuous expansion of the port in St. Petersburg, complemented by the new port in Primorsk, has dramatically increased efficiency in existing domestic ports. This solution, i.e. to venture into building new and expensive infrastructure of national importance, is a Soviet period solution, that has become fully utilised due to the steering of goods to domestic ports. A result of the dramatically increased incomes, that have come from export earnings on energy, has made the financing of the extended capacity come from domestic sources – something that, during the years before 1999, looked impossible. The original reason behind all these projects was, after all, to break

away from foreign dependence, a process which has now commenced exactly as originally planned. Now the turnover in Russian ports is increasing dramatically, but without reverting to Soviet time practices when it comes to rail tariffs it can be doubted if the cargo flow in these ports would be as large as it was during 2002.

Ports in the Baltic countries are also expanding, but are operating existing facilities and have had time and possibility to adjust to, and practise, market behaviour longer and better than their Russian counterparts. All ports have lately found it increasingly difficult to find enough cargoes to make their expansion plans viable. To run a port in any location will probably prove increasingly difficult, due to increased competition giving lower margins, but not necessarily reduced cargo volumes. For oil handling companies, e.g. in Tallinn, that for several years have demonstrated profit levels in the range of 50% of turnover, a margin for the reduction of handling fees seems to exist. For ports off the main flow of cargoes, as in Murmansk and Arkhangelsk, the competitive position will be further depleted for cargoes that can not be generated in the Russian north. Russian ports in the Black Sea will probably continue to expand, with more oil being handled at both Tuapse and Novorossiysk, as will smaller ports in e.g. the Sea of Azov. Here, changes will be seen in neighbouring countries like Georgia, due to the large Caspian Sea oil findings, although these findings should, via pipeline, find their largest outlet at Ceyhan, in the easternmost corner of the Turkish Mediterranean coastline.

In recent years, Finland has made a strong comeback as a transit destination. However, the situation remains insecure with the latest increase based on reduced fairway dues and long ongoing arguments over trucking permits. As mutually acceptable agreements have been be reached, and if the long discussed and already existing, Ledmozero - Kochkoma railway could finally be opened, the position of Finland would improve further. There are forces in Russia that would not be happy to see a further enhancement of the competitive position for Finnish ports in relation to both Russian and Baltic ports, and that will try to obstruct this.

7.4. A new setting for Russian foreign trade

As was briefly mentioned in the introduction, the point of departure for a part of this thesis were the indications, given by officials during visits to ports in the Baltic states, that statistics related to the oblast origin and destination of transit trade to and from the Russian Federation, as have been presented here, were not available and most often unknown to the ports.

The aim of the studies included has not only been to try to establish such origins, but also to support and to contribute to the development of a methodology to establish the origins of cargoes involved in Russian transit trade. This kind of information is needed and asked for by many actors, but has so far been impossible to come by. The studies have shown that the oblast origins of Russian exports can be

established through the extraction of information from statistics already available, although the methodology must be adapted to fit to local conditions. These kinds of compound studies, conducted in different geographical areas, are also hoped to contribute to the process of establishing a "best practice" for statistical routines in this field.

A tendency that complicates the access to both the primary and secondary data, even in Western Europe and not only in this region, is the increasing commercialism of statistical departments in all the countries involved. It has become increasingly frequent that access to basic data has been given a price, making it unavailable to researchers without considerable funding. In a way, this could be looked upon as understandable in times of restructuring, but it is a tendency that will have dramatic effects as it will probably be more and more difficult to do surveys of this kind without solid financial backing.

Is it then possible to establish the correct origins of the cargo flows that can be identified? The answer would undoubtedly be affirmative. The patterns that the flows of transit cargoes follow, and that emerge in the different areas surveyed, look a bit like what someone with a good insight into the economic geography of the FSU could have expected. In a study that focuses on the volumes of goods transported, it is unavoidable that the focus will be upon heavy and large volume basic materials as these are still both frequent in exports and important. Meanwhile, for general cargo types of products, it has been shown in four of the different studies that the origins, i.e. the hinterland, are located much closer to the transit region in question than for other cargo categories. The exception to the rule is Kaliningrad where all cargo types originate in far distant regions.

The enormous distances over which much of the transit trade are transported are impressive and the dominance of cheap bulk products from far away oblasts such as Kemerovo, Altay and Perm is noteworthy. In each of the studies, this pattern of long distance transport is repeated and for these distant exporters, the relatively small difference in distance between e.g. Klaipeda and St. Petersburg, when the starting point is e.g. Chelyabinsk, must be of a marginal importance. That is if ton/km pricing for rail transport is kept more or less similar in different directions. In this case, there could be a real chance for ports in all directions, not only in the Baltic Sea basin, to compete for the handling of these products. What is questionable is whether a shipment carried by rail from east of the Ural mountains should be reloaded onto ships in a Baltic port rather than just continuing by rail to its final destination in, e.g., Germany. Is it really the differences in rail gauge when entering Poland and the subsequent reloading that makes such a method of transport prohibitively expensive or could it be that this method of transport will become the major competitor to Baltic ports for all categories in the future, as it once was during Soviet times? If ongoing experiments with railway wagons built for automatic axle-adjustment will continue to be successful, the railways could become an important competitor for certain cargoes, like containers, as early as in five years time.

In the above mentioned discussions in ports over the last 10 years, officials have constantly been pessimistic as regards to future volumes of transit trade from Russia through the Baltic states. Now, ten years later, the flow of cargoes has seen several sudden changes due to interventions of different kinds at the state level and also changes in administrative procedures at borders. However, the cargo flow is at its largest ever in the ports of the Baltic states. It is undoubtedly true that the volumes of locally-generated cargo has increased and that the dependence upon Russia and other FSU states as origins has in certain segments diminished, despite continued large transit volumes. During the last few years, Russian shipments to domestic ports have increased, especially since the railway tariffs have changed in favour of domestic ports. If the Russian process towards membership of the WTO continues, this can come to force Russia to apply railway rates that better correspond to fair and free competition in this field, particularly since all the Baltic states may be found on the other side of the negotiation table when it comes to the EU in the near future. Thus, they will be involved in setting the agenda for an EU - Russian free-trade agreement and a Russian WTO membership. Especially in the case of the negotiations with the EU, the access for Russia to regional and structural funds will be of major interest, but a number of questions can be made into political issues related to (transit-) trade. Negotiations between Russia and the EU about the future of transit visas to the Russian exclave of Kaliningrad, which was finally solved in late 2002, have influenced the atmosphere of the relations positively. Russia, that accepted what in reality is a visa regime, will probably have to be compensated for this in some future agreement.

These factors can probably also be seen as the visible traces of the on-going struggles for influence at both the local, regional, national and the continental levels and where, on the two last levels, the involvement of geopolitical considerations will often be strong. On the latter of these levels, the means used and actions taken are entirely different from the ones that are used between two oblasts arguing in Moscow over favours as regards investments or e.g. between the ports in Riga and Ventspils for state support for something else. Russian attempts to re-route cargo flows towards their own ports are decided upon at the national level, but have been lobbied for from both the regional and local levels. At the same time, there are a number of actors in the transport sector that work according to their company strategies and take decisions based on normal transport economic factors like availability of capacity, prices, transport times, attempts at optimising shipments sizes and so on. It is against this background that the different ports and their related interest groups must be seen, with the common goal of attracting as large and profitable flows of cargo to the port as possible, and that they will co-operate in this matter. This goal can sometimes be best achieved in co-operation with influential circles at the regional or even the national level, as administrative decisions taken outside the port sector can sometimes become the best generator of cargo for the port in question. That Russian rail tariffs are lower for shipments to domestic ports than foreign ones can serve as an illustrative example of how fruitful it can be for the ports to put efforts into fields outside of cargo handling.

The current Russian tendency of re-routing cargo to domestic ports, due to favourable railway pricing for such destinations, becomes a problem for shippers when there is insufficient capacity to handle what is being directed to these ports. The long-term effect upon non-Russian ports, as a result of this behaviour, is difficult to predict. The optimist could stick to what was stated by the Mayor of Ventspils, Mr Lembergs in early 2002, that there will be enough cargo for everybody while the pessimist could be foreseeing problems even in a short-term perspective. Dramatic changes have already occurred due to the taking into operation of port capacity at the new Russian oil terminal in Primorsk in the Gulf of Finland, capacity that theoretically should lead to increased competition and a possible scarcity of cargoes. From May 2002, the dramatic fall in volumes in the port of Ventspils is the only sign that supports this concern, since all other ports continue to increase, or at least maintain, their turnover compared to 2001. It is understandable to get dazzled by volume in this business and forget that to work with a much smaller volume of something else could be much more profitable for a handling company in a port.

The price for the autarchy, as regards to port capacity, that Russian is aiming for is probably high, especially as expansion costs at existing, but foreign, terminals would have been much lower than the costs for building new capacity that state structures now have been, and still are, financing. The arguments that probably override other solid economic arguments in this field relate to geopolitics and therefore a discussion about costs here become less important and more theoretical in nature.

7.5. The methodological lesson from studies of transit trade

Even in well-established trade relations, all kinds of official trade statistics need to be looked upon with a certain degree of scepticism, but in this case, when studying transit trade, the margin of error is difficult to assess with accuracy. When describing the way the statistical base material has been put together in the different surveys presented, an attempt has been made to maintain an open attitude when describing the problems encountered during the collection of the data. Despite this, it is inevitable that the reader should be reminded of the fact that although data given as transit trade is as good as can be and presented with full openness, it is not perfect.

A factor that complicates studies of transit trade is in this case that of the large volumes of goods that only pass the different Baltic countries on the way to or from ports in neighbouring countries and that are not directed to a port in the country where the data has been collected. As shown in the studies from the Baltic states and Kaliningrad concerning over-land transit, this type of trade involves considerable volumes and ought to be worth a survey of its own to find out what kind of mirror data are available and to possibly make a better assessment of these flows. Furthermore, there are other loopholes, such as the case of the registration of

goods for export at other points than the original point of extraction/production. This deficiency is perhaps best exemplified by the large oil and pulp wood export recorded from the City of St. Petersburg area. This is a major problem for the correct establishment of an origin, but with unrestricted access to the statistical material, these problems could perhaps have been overcome.

The measurement period of one month being used in the different studies is not the standard calendar year most often used, but its representability is nevertheless comparable to conventional full-year studies. The reliability of the adopted methodology is probably sufficient, apart from the fact that during such a short period as one month, shipment volumes in a category such as metals and coal, can be affected by a build-up in the port of a commodity for a single, but large, shipment. Sometimes it can take weeks to transport a large enough volume by railway to the port, and if unlucky, a one-month survey traces this inflow and will give the impression that this is a regular pattern, despite the fact that this happens only once or a few times during the year. These kinds of methodological problems will not cease to exist just because the time period under study is prolonged, it is also so that other kinds of problems, that have been avoided in the present case, will emerge instead.

7.6. "Westernisation" of Russian foreign trade

The continued restructuring of the contents of trade must also be taken into consideration. This is due to an ongoing global, as well as regional, transformation and upgrading process from the current Russian and FSU dependence on goods with a low level of elaboration in its exports towards a larger share of higher value goods. It has been beyond the aim of this thesis to establish to what extent such a process is already under way in the FSU area and whether transit trade shipments already are a part of an integrated manufacturing chain. However, if this is true, then the oblasts of origin appearing frequently here could be increasingly involved as conventional international subsuppliers being connected already to different manufacturing and service networks.

It could well be discussed at what point a transit trade situation like the one under study, or in fact any trade situation, could be said to have become normalised after a major change has occurred. When can it be said that trade, that to its nature is such a dynamic process, has reached a state that could be seen as "normal" and to have found a lasting pattern; or will it ever? A normalisation of trade between countries and the adaptation of Russian foreign trade to the patterns that reign between countries in the west is probably what can be predicted in the long run. Between the countries of the EU, large scale exports of bulky materials with a low level of elaboration is a thing of the past and the same process will probably repeat itself in this case. It is more a question of the timeframe and the direction of the trade flows during that period of time that is difficult to predict. Although Russia possesses

what can be looked upon as nearly unlimited raw-material resources, the most lasting and rewarding future for Russia itself when making use of these resources cannot be found in exporting these as crude products, but rather to use and elaborate them as much as possible in the domestic industry sector.

The understanding of this process can be illustrated by a statement made by President Putin when visiting an industry that is a part of the national military complex, assembling winged missiles:

"Russia is a very rich country, first of all in mineral resources,
natural resources - so far...
...Russia's future is undoubtedly in the sphere of high technology"
(quoted by ItarTass 2002-11-21 www)

A statement well in line with the words of Porter, and deep-rooted market economic thinking:

"Productivity, not the export of natural resources,
determines the prosperity of any state or nation"
(Porter 1998 p.13)

7.7. Russian (transit-) trade related to other countries

The historic legacy makes the problems faced by the Baltic states very different to the problems of long-established states in Western Europe that hold a similar position. Despite this, the similarities with e.g. Belgium and the Netherlands are not only one of size in relation to its large neighbours, but also that of small countries handling large volumes of transit trade by means of a port sector with a capacity substantially exceeding domestic needs. Another similarity is also the big importance to a very large hinterland. This position has been achieved through local actions to organise cargo-handling so efficiently that it has not proved viable for the big neighbouring countries to hold back, or make any serious attempts to redirect, the flow of cargo. This same level of efficiency is something to aim at even for the Baltic states. If the different Baltic ports, preferably in co-operation with their domestic railway companies, could reach a level of productivity similar to standard European ports, it would, in itself, keep up the flow of transit cargoes. It would also erode the whole basis of the Russian ambitions to further increase domestic port capacity. In this way, pure efficiency, as a result of the present fierce competition between the ports could well become the factor that will help secure a prosperous future for these coastal Baltic port cities and the countries they work in.

The flow of foreign trade cargoes over the borders in the FSU area, as well as ports, is at the same time a valuable measure of economic integration between countries, but to serve as such the data presented needs to be creditable. For the cargo

turnover in all the different ports being studied here, cabotage handling is small business. What is important is transit- and foreign trade that constitutes the by far largest share. Current ways of recording this trade show a number of drawbacks as has been shown in various parts of this thesis. In this respect, irregularities are plain to see when both using the primary sources like the port survey and when based on official secondary statistical sources like IMF. The port survey, covering the handling in Swedish ports of cargo to and from the FSU as an empirical example, shows the kind of irregularities that can occur when entrepôt nations increase their volumes of trade on behalf of their neighbours. These insecurities severely limit the possibilities to correctly establish the demand and volume of Russian foreign trade with not only Sweden, but most probably with countries of the West in general. What it shows for this trade relation is again that the present form of trade statistics does not tell the complete story. It takes special knowledge to reveal what exactly is the problem and just the existence of entrepôt nations is likely to further complicate an already multi-dimensional and insecure picture. The different empirical studies presented here, on Swedish – FSU trade as well as of west-bound Russian transit trade, yet again emphasise this. The results presented should be looked upon as a contribution to the continuous work to develop a better methodology to study foreign trade in general, but for transit trade in particular.

7.8. Sum-up of geopolitical trade and transport geography

By using a relatively small number of ports in the Baltic Sea, invaluable nodes in the Russian transport geography and for foreign trade routes, it is hoped that the unavoidable interrelationship between geopolitics and transport geography in the region has been made fully understandable. The fact that the two fields of study have become interrelated, enhances the difficulty of carrying out analysis of questions within this field of research. The relatively quick adaptation by the ports in the Baltic states to more efficient ways of operation has made the two questions clash. Seen from a Russian geopolitical position, and especially a Soviet nostalgic one, these ports should quickly have been stripped of most of their turnover, but due to the new influences from the market, this change did not happen. At the same time, the building of new port capacity, that from a Russian transport geographical point of view would have been a logical development, took a number of years before it was initiated, and most of it has still to happen. The complexity of the present Russian transport geographical situation has been extensively demonstrated and years of economic recession made it impossible for all the grand plans that did exist to materialise. As a result, Russia has just initiated a process of breaking loose from its new transport containment. As clearly shown by the large Russian transit volumes that continue to be handled in foreign countries, this link between geopolitics and transport geography remains as strong as ever.

7.9. Future research

If the prediction that the Russian foreign trade is in a state of restructuring is correct, how should such an on-going process, i.e. in relations to e.g. Germany and other countries of the EU, best be studied? The individual studies presented in this thesis have demonstrated both weak and strong sides in the methodology used when conducting these studies. It could well be that another approach built upon studies of product flows from a selected number of producers, in both the EU and in Russia, could be a way to form a basis for a more general picture of both the advantages as well as the problems with different transport corridors and means of transport on offer. This is especially so if the focus of future studies will be shifted in the direction of studies of the flows of general cargo.

An alternative way of deepening the research approach presented here, without adapting a more or less new methodology as suggested above, could be to study the distribution of imports, or what here has been called "inbound" transit, and how imports move from the ports of arrival to the oblasts of consumption. Such an approach would automatically focus upon general cargo as being the category where most of the valuable cargoes are being handled and because general cargo is the dominant category among inbound transit. Such a study could with ease be designed to include a study of related service sectors in the field of transport and different transport corridors used. Little is known in this field and as general cargo is a category of nearly unlimited diversity as regards the different types of goods included, this would make it a very interesting field for future studies.

Many of the fields mentioned have been covered in other geographical areas of the world, but very little has so far been done in this region. Deeper studies along these lines could therefore become especially rewarding, and could also make way for meaningful comparative studies in a number of directions and geographical areas.

ABBREVIATIONS

bn	Billion (1000 millions = 1,000,000,000)
Bofit	Bank of Finland Institute for Countries in Transition
CBSS	Council of Baltic Sea States
CEEC	Central and East European Countries
CIS	Commonwealth of Independent States (FSU, excl. the three Baltic states)
CMEA	Council for Mutual Economic Assistance (also called COMECON)
DKK	Danish Crowns
EES/EEA	European Economic Space / European Economic Area
EDI	Electronic Data Interchange
EBRD	European Bank for Reconstruction and Development
EC	European Commission
ECMT	European Conference of Ministers of Transport
EES	European Economic Space
EU	European Union
EUR	Euro (EU – currency since 2002-01-01)
FDI	Foreign Direct Investments
Feport	Federation of European Private Port Operators
FSU	Former Soviet Union
FTA	Free Trade Agreement (EU – Russia agreement, in operation since 1994)
GATT	General Agreement on Tariffs and Trade (see also WTO)
GC	General Cargo
IBRD	International Bank for Reconstruction and Development
ILO	International Labour Organisation
IMO	International Maritime Organisation
INSROP	International Northern Sea Route Program
ISO	International Standardisation Organisation
JSC	Joint Stock Companies
LNG	Liquefied Natural Gas
LoLo	Lift-on Lift-off; way of handling cargo to/from a ship
LPG	Liquefied Petroleum Gas
mbd	Million barrels per day (= 143,000 tons)
mt	Million tonnes
MTC	Ministry of Transport and Communications of Finland
MTI	Ministry of Trade and Industry of Finland
mty	Million tons per year
NATO	North Atlantic Treaty Organisation

nm	Nautical Miles (1852 m)
OECD	Organisation of Economic Co-operation and Development
NSR	Northern Sea Route (in some works also called "*North-East Passage*")
NUPI	Norwegian Institute of International Affairs
NUTEK	Närings- och teknikutvecklingsverket (Swedish National Board for Industrial and Technical Development)
OBIP	Russian acronym for: Consortium of Banks Investing in Ports
OECD	Organisation of Economic Co-operation and Development
PCA	Partnership and Cooperation Agreement (Russia – EU effective from 1997)
PHARE	EU support program for Baltic states + former Eastern Europe countries
PIANC	Permanent International Association of Navigation Congresses
PS	Port Survey (-s): conducted by the author during 1991 - 1998
PW	Pulp wood
P&O	Peninsular and Oriental Shipping Company
RF	Russian Federation
RFE/RL	Radio Free Europe / Radio Liberty (based in Prague)
Riisnp	Russian International Institute of Social and Nationalities Problems
RoRo	Roll-on Roll-off; way of loading cargo onto a ship/ferry
RUR	New Russian Rouble (SIS abbreviation from 1998-01-01)
SCB	Statisktiska Centralbyrån - See SS
SEK	Swedish Crowns
SITC	Standard of International Trade Classification
SNS	Studieförbundet Näringsliv och Samhälle
SS	Statistics Sweden (in Swedish = Statistiska Centralbyrån - SCB)
SSAG	Svenska Sällskapet för Antropologi och Geografi
SVEX	Since 1972 the name of the logistics company (former Svenssons Express)
TACIS	Since 1996 adopted as name. Formerly acronym for the EU program administrating support program for the CIS (i.e. ex. the Baltic states)
TEU	Twenty Foot Equivalent Unit (international accounting unit for containers)
USD	United States Dollars
VER	Voluntary Export Restraint
VR	Valtion Rautatiet (Finnish State Railways)
WTO	World Trade Organisation (continuation of GATT from 1995-01-01)
VLCC	Very Large Crude Carriers, i.e. > 200,000 dwt
WWW	World Wide Web (i.e. the Internet)

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Johansson, G.	Head of development, Banverket (Swedish rail track administration) Interview Luleå, telephone 2002-12-13
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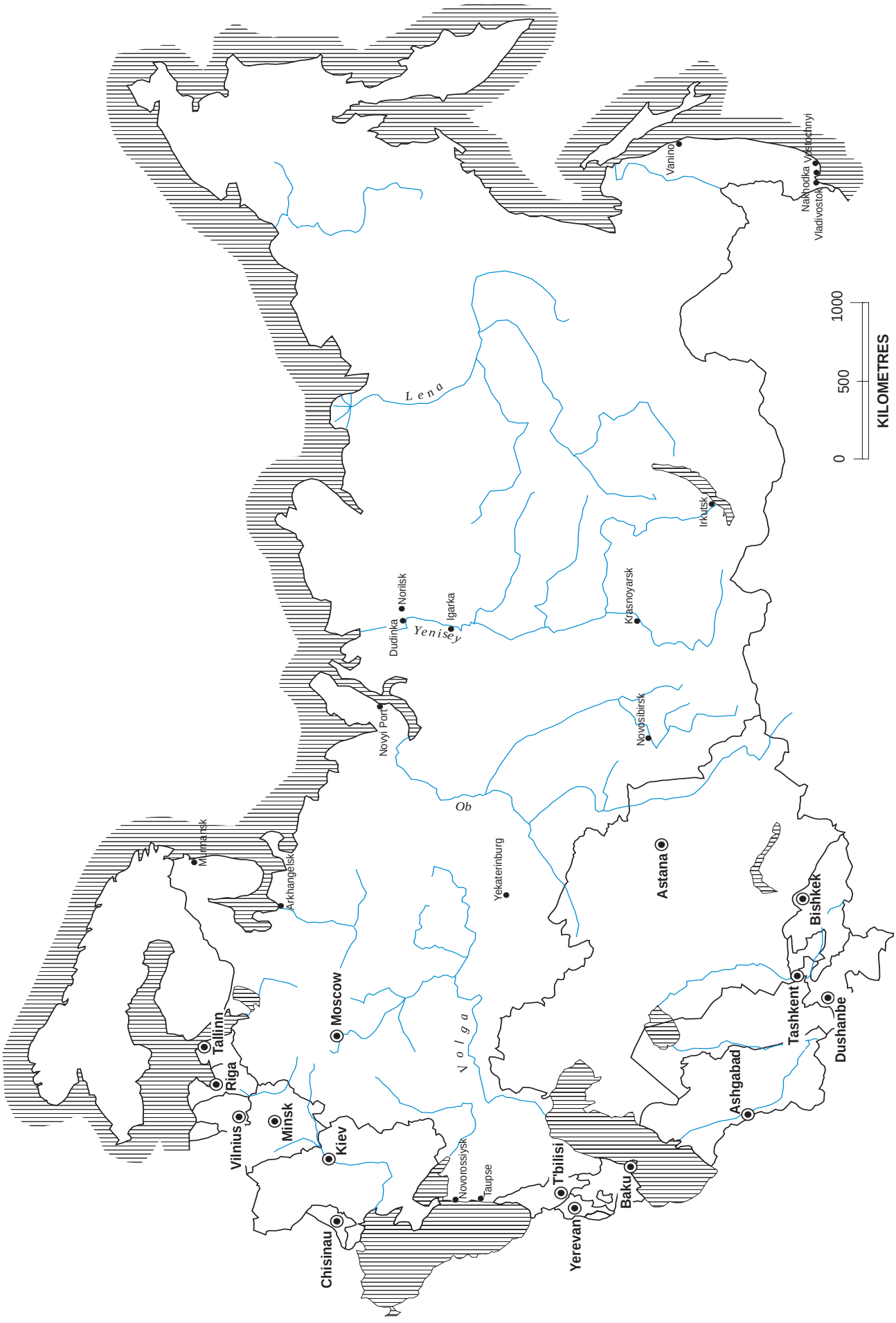
LIST OF APPENDICES:

Appendix 1

Basic map of the FSU area



Appendix 2

Conversion factors for oil and gas volumes:

FROM		TO	Multiply by
Crude oil:			
Barrels	->	metric tonnes	= 0.137
Metric Tonnes	->	Barrels	= 7.33
Barrels / day	->	metric tonnes / year	= 49.8
Natural gas:			
Billion cubic feet	->	Billion cubic meter	= Divide by 0.028
Billion cubic meter	->	Billion cubic feet	= Multiply by 35.3

Source: BP Amoco Statistical Review of World Energy 1999 - 2002

Appendix 3

Turnover in Larger Russian Ports 1996 (1000-ton)

	HANDLING		TRADE			
	Dry cargo	Liquid***	Export**	Import**	Cabotage*	Total
(Baltic Sea)						
Vyborg	1 138	-	1 031	63	44	1 138
Vysotsk	907	-	907	-	-	907
St. Petersburg	8 322	1366	6 106	2 216	-	9 689
Kaliningrad	2 660	60	2 287	433	-	2 720
(North West)						
Murmansk	5 764	-	3 891	1 050	822	5 764
Arkhangelsk	647	-	252	89	305	647
(Black Sea)						
Tuapse	2 997	10 556	13 434	116	3	13 553
Novorossiysk	8 705	43 789	49 931	2 443	120	52 494
(Far East)						
Vostochnyj	9 549	-	8 443	368	738	9 549
Nahodka	5 976	-	5 500	78	398	5 976
Vladivostok	4 195	-	3 385	421	389	4 195
Vanino	4 531	-	2 236	377	1 918	4 531
Total 12 above	55 391	55 771	97 403	7 654	4 737	111 163
Total all ports	76 900	65 600	120 900	10 800	10 800	142 500

*** = Nearly exclusively export
** = Excluding liquid bulk
* = Cabotage handling is recorded both as goods loaded and unloaded

Source: Morskie Porti 1:1997 p.131

Turnover in Larger Russian Ports 1998 (1000-tonnes)

	HANDLING		TRADE			
	Dry cargo	Liquid***	Export**	Import**	Cabotage*	Total
(Baltic Sea)						
Vyborg	661	0	637	6	18	661
Vysotsk	1 838	0	1 824	1	13	1 838
St. Petersburg	15 576	5 982	17 802	3 756	0	21 558
Kaliningrad	3 315	1 142	3 831	626	0	4 457
(North West)						
Murmansk	7 322	797	6 002	1 286	831	8 119
Arkhangelsk	983	96	813	72	194	1 079
(Black Sea)						
Tuapse	3 220	10 580	13 190	610	0	13 800
Novorossiysk	12 571	38 057	47 736	2 823	69	50 628
(Far East)						
Vostochnyj	7 161	0	6 328	330	503	7 161
Nahodka	3 945	1 392	5 259	76	2	5 337
Vladivostok	5 022	681	4 583	627	493	5 703
Vanino	4 562	1 851	4 411	394	1 608	6 413
Total 12 above	66 176	60 578	112 416	10 607	3 731	126 756
Total all ports	73 500	62 100	116 700	11 100	7 800	135 600

*** = Nearly exclusively export
** = Excluding liquid bulk
* = Cabotage handling is recorded both as goods loaded and unloaded

Source: Morskie Porti, 1:1999 p. 63

Appendix 4

Border Points in the Russian North West region:

(Listed in order of importance for export March 2001)

Russian North West here includes the following oblasts:
Kaliningrad Oblast, Pskov Oblast, Novgorod Oblast, Leningrad Oblast, City of St. Petersburg, Republic of Karelia, Vologda Oblast, Murmansk Oblast, Arkhangelsk Oblast, Nenents Autonomous Okrug and Republic of Komi.

1. **Baltijskaya** - in the port of St. Petersburg
2. **Kingisepp** - in Leningrad Oblast, east Ivangorod, on the border with Estonia
3. **Vyborg** – in the city of Vyborg on the border with Finland
4. **Pskov** - in the city of Pskov
5. **Murmansk** - in the city of Murmansk
6. **Sebezkaya** – in western Pskov Oblast, on the border with Latvia
7. **Viartsilskaya** – west of Sortavala in Karelia, on the border with Finland
8. **Kaliningrad** - in the city of Kaliningrad
9. **Kostomuksha** - in the city of Kostomuksha in north western Karelia.
10. **Syktyvkar** - in the capital of the Republic of Komi
11. **Arkhangelsk** - in the city of Arkhangelsk (only station in the oblast)
12. **Bagratinovskaya** – on the border with Poland in southern Kaliningrad
13. **St. Petersburg** - in the city of St. Petersburg
14. **Velikie Luki** – in south-eastern Pskov Oblast, on the border with Belarus
15. **Nemanskaya** – on the border with Lithuania in northern Kaliningrad

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16. **Petrozavodskaya** – in the capital of the Republic of Karelia
17. **Pulkovskaya** - airport of Pulkovo in St. Petersburg
18. **Kandalaksha** - in the city of Kandalaksha on the western White Sea
19. **Petchory** – western Pskov Oblast, on the border with Estonia
20. **Novgorod** - in the capital of Novgorod Oblast
21. **Vologda** - in the capital of Vologda Oblast

NB.
The last six on the list all recorded a volume of less than 1 000 tons of total foreign trade, including both export and import, during the month of March 2001.

Appendix 5:

Kaliningrad Oblast port; active companies by end of 2001

Terminal	Specialisation	Capacity mt
Closed Company "Sea Commercial Port of Kaliningrad" (*Morskoy torgovy port Kaliningrad)*	Coal, fertilizers, metal, scrap, bulk, containers, timber, paper, cellulose, general cargoes, cargoes, passengers	8.0
Closed Compay "Terminal GMB"	Fertilisers	0.8
Public Company "Port Elevator" *(Portovy elevator*)	Grain	0.4
National Enterprise "Kaliningrad Sea Fishery Port" *(Kaliningradsky morskoi ribny port)*	Fertilisers (liquid and bulk), fish products, scrap, refrigerated cargoes, passengers	2.0
National Unitary Enterprise "Port's petroleum storage depot" *(Portovaya neftebasa)*	Crude oil and oil products	0.6
Closed Company "Kaliningrad river port" *(Kaliningradsky rechnoy port)*	Coal, coke, passengers	2.0
Limited Company "Baltic grain transport company"*(Baltiskaya transportno-zernovaya kompaniya)*	Grain	0.1
Closed Company "Svetport" (Svetlyy)	70% of construction completed	0.3
Limited Company "Svetly Industrial company" (Svetlyy) *(Svetlovskaya proizvodstvennaya kompaniya)*	Fish products, metals, peat	0.2
Public Company "LUKoil-Kaliningradmorneft" (Izhevskoye)	Crude oil and oil-products	1.5
Limited Company "Baltic Oil Handling company" (Baltijsk, Eastern point) *(Baltiiskaya nefteperevalochnaya kompaniya)*	Crude oil and oil-products	1.5
Closed Company "Pionersk base port of the ocean fishery fleet" *(Port Pionerskoi basi okeanicheskogo ribnogo flota)*	Fish products, general cargo, timber, sawn timber, oil products	0.6

Source: Port Authority of Kaliningrad

Appendix 6:

Proposed development projects for the port sector

Closed company "Sea Commercial Port of Kaliningrad":
To complete the construction of the container terminal project that at completion will occupy 120,000 m^2, or some 30% of ports area;
To complete the technical preparation of the territory for the accumulation of roll-trailers and tracks with an object of maximum time restriction on ferries' cargo handling;
To use the rear area of the port, which has railway entrance, roads and all engineering infrastructure, for the handling of cargo.
National Enterprise "Kaliningrad Sea Fishery port":
To increase the refrigerated storage capacity through the reconstruction of existing refrigerators; and add new refrigerator storage with 10,000 ton capacity.

Public company "LUKoil-Kaliningradmorneft" (Izhevskoe settlement).
The company is considering the construction of the third terminal that would allow the cargo turnover to increase to 9 million tons oil and oil products annually.

The construction of new container terminals and RO-RO terminals which would provide quick cargo handling and further shipment to/from the East by train. Providing the area with an adequate development of the capacity and technological equipment for storing, sorting and transship cargo.

The construction of a new deep-water port near Baltijsk.
The project to construct a port in the Gulf of Primorsk, east of Baltijsk, was launched in the beginning of the 1990's. The latest project here suggests a port construction with a cargo turnover of up to 7 million tons per year. One of the new terminals is to be used for a rail-ferry, but also for containers, metal cargoes and oil. The projected berth depths are from 9 to 15 m.

The opening of a new ferry-line between Leningrad Oblast, Kaliningrad Oblast and Germany and in the future also the Scandinavian countries.
2002-07-09 the Russian government decided to transfer basin number 3 of the Baltijsk Naval Base to the management of the Ministry of Transport for 15 years, to establish a new ferry line between Ust Luga in Leningrad Oblast, Baltijsk and ports in Germany(Port Authority of Kaliningrad 2002).

Working out of favourable legislation, tariffs and custom conditions for the transit of cargo through Kaliningrad Oblast ports.

Source: Department of Transport Development; Kaliningrad Oblast Administration.

Appendix 7

CARGO TURNOVER AND STRUCTURE IN LITHUANIAN PORT COMPANIES JAN-MAR, 2001 (TONS)

			JAN-MAR KLASCO			JAN-MAR SMELTE			JAN-MAR BEGA			JAN-MAR KT			JAN-MAR SEVEN AS BELOW*			JAN-MAR KLAIPEDOS NA. + BUTINGE			JAN-MAR ALL PORTS
			LOADED	UNLOADED	TOTAL	LOADED	UNLOAD	TOTAL	LOADED	UNLOAD	TOTAL	LOADED	UNLOAD	TOTAL	LOADED	UNLOAD	TOTAL	LOADED	UNLOAD	TOTAL	TOTAL
GENERAL	CARGO IN CONTAIN. /BRUTTO	CONTAIN., TRUCKS, TRAILERS	21 450	43 360	64 810			0				23 000	197 600	220 600	1 190	1 670	2 860				576 540
CARGO	CARGO IN RAILWAG. /BRUTTO		66 360	61 770	128 130			0													256 260
	CARGO IN ROAD TRP. /BRUTTO		173 362	196 799	370 161							36 970	34 480	71 450							883 222
	FROZEN FISH	FROZEN FISH		21 640	21 640		30 130	30 130					870	870		8 110	8 110				121 500
	FROZEN MEAT		1 800	7 250	9 050																18 100
		CLQ IN BOXES																			0
	FRUIT AND VEGETABLES			1 120	1 120		27 390	27 390													57 020
	ANIMAL FOOD /PACKES	FISH MEAL /SLINGES, BAGGED		4 740	4 740		1 700	1 700					2 230	2 230							17 340
	SAWN TIMBER	SAWN TIMBER				11 090		11 090	5 520		5 520	3 320		3 320							39 860
	PEAT /PACKED														11 170		11 170				22 340
	MACHINERY, TRP. EQUIPMENT	EIQUIPMENT	30	350	380		200	200				720	2 720	3 440		770	770				9 580
		CARS																			0
	FINISHED METAL STRUCTURES												68 200	68 200	9 470	290	9 760				155 920
	STEEL, PIG IRON, FERRO-ALLOYS	STEEL COILS	538 110		538 110										1 480	6 350	7 830				1 091 880
		STEEL PLATES																			0
		STEEL BARS																			0
		OTHER STEEL																			0
		PIG IRON																			0
*ORE**		FEROALLOYS																			0
	MINERALS PACKED			3 890	3 890								1 000	1 000							9 780
	FERTILIZERS PACKED	AMMNITRATE IN B/B	10		10				940		940		2 330	2 330							6 560
	CHEMICALS								940		940		2 330	2 330							6 540
	PAPER			2 510	2 510	2 240		2 240				300	1 620	1 920							13 340
	PAPER PULP, WASTE PULP			970	970							9 610		9 610							21 160
	GLASS, GLASSWARE																				0
	OTHER GENERAL CARGO																				0
																					0
ULPWOOD	PULPWOOD		3 510		3 510	28 060		28 060	22 210		22 210				103 570		103 570				314 700
BULK	RAW SUGAR	RAW SUGAR		119 330	119 330																238 660
	MOLASSES					2 530		2 530							3 630		3 630				12 320
	FOODSTUFFS BULK /MALT, HOPS	MALT		9 980	9 980		1 040	1 040													22 040
	GRAIN						1 420	1 420	1 080	500	1 580										6 000
	ANIMAL FOOD /IN BULK	SBM		31 310	31 310	1 140		1 140	67 120	2 200	69 320				2 270		2 270				208 080
	OILS SEEDS, FATS /LIQUID						4 830	4 830	13 830	6 280	20 110										49 880
	OILS SEEDS, FATS /BULK																				0
	PEAT														21 740		21 740				43 480
	BRICKS												1 250	1 250							2 500
	CEMENT								20 390		20 390										40 780
	MINERALS						6 770	6 770		12 720	12 720					5 750	5 750				50 480
	FERTILIZERS LIQUID	KAS-LIQUID FERTILIZERS	179 140		179 140				91 600		91 600										541 480
	FERTILIZERS BULK	UREA / OTH. FERTS IN CONTS	79 850		79 850	112 620		112 620	184 160		184 160										753 260
		UREA IN WAG.																			0
		AMMNITRATE/OTH. IN WAG.																			0
ORE*	SCRAP METAL					72 650		72 650				15 330		15 330	31 500		31 500				238 960
COAL																					0
OIL	OIL, OIL PRODUCTS	OIL PRODUCTS													5 100		5 100	1 295 800		1 295 800	2 601 800
		OIL																1 427 700		1 427 700	2 855 400
			1 063 622	505 019		230 330	73 480		407 790	21 700		89 250	314 630		191 120	22 940		2 723 500			5 643 381
		TOTAL:			1 568 641			303 810			429 490			403 880			214 060			2 723 500	5 643 381

N.B. = Company column five is the summed up figure for the seven companies; LDK, WSY, KSY,LAIVIT, BALTIJA HIDROTECHNIKA and TRANSFOSA

Appendix 8

CARGO TURNOVER AND STRUCTURE FOR KLASCO DURING MARCH 2001

	DATE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	TOTAL
GENERAL	CONTAINERS, TRUCKS, TRAILERS	2031	4783	2346	11005	9858	5645	2861	10258	5740	4057	12154	7592	7696	2419	9657	5491	2951	12554	9348	7657	4081	11129	5510	4126	13582	9921	7036	2404	9580	5642	2510	**211624**
CARGO	FROZEN FISH	866	170	449	727		130	1399	420	1124	486		346				283	79	1548			307	162					763	20		300		**9579**
	CLQ IN BOXES																		580											545	20		**1145**
	STEEL COILS		2038						7059	2464	477	1024			2203	874	254	2028	2667				2978	245			3077		287	3804	2036	4001	**37516**
	STEEL PLATES							2226	353	2605	404			2523			809	1745						518	3530	803		485	1228		2496		**19725**
	STEEL BARS				949			247	2653	105	1350				1462		3558	1574	194	2364		2426		1406				794	8544	7078	2209	996	**37909**
	OTHER STEEL												2469																				**2469**
	EQUIPMENT						300	109											28														**437**
	PIG IRON				3661	11676	10492	9171		1231	1611												2767	447									**41056**
	AMMNITRATE IN B/B						600	2063				598									2044					3006				2718		**11029**
	FISH MEAL													871	145	533	971							1000									**3520**
	CARS																													30			**30**
	SAWN TIMBER										478									129								347	409				**1363**
PULPWOOD																																	
BULK	RAW SUGAR	1365	3965	2785	3977	5700	4027	4931	4615	565								504	4810	6017	1632	3615	3445	1284	1946				963			5202	**61348**
	UREA / OTHER FERTS IN CONTS		2835	80							3013				2045			824		1580						1554							**11931**
	UREA IN WAG.														860	768	609	80															**2317**
	KAS-LIQUID FERTILIZERS	7462	2810									4856										8883	13346				664			650			**38671**
	AMMNITRATE/OTHER FERTS IN WAG.									1437	1049						1114															2150	**5750**
	MALT		1000				2000																										**3000**
	SBM			832	843						1265	985	1600																				**5525**
																																	0
																																	0
ORE	FERROALLOYS	557	86		1400		1984	2559		2301					4686	7077	8278	5826						2286	9631	3236				1469	1388		**52764**
COAL																																	**0**
OIL																																	**0**
																																	0
																																	0
	TOTAL:	12281	17687	6492	22562	27234	25178	25566	25358	17572	14190	19617	12007	11090	13820	18909	21367	15611	22381	19438	11333	19312	33827	12696	19233	19175	16668	9425	13855	23126	16839	14859	**558708**

Appendix 9

Origin and destination oblasts	Tons	%	RUSSIA & CIS	RUSSIA & CIS %	IMPORT %	REGIONS	EXPORT %	REGIONS
Cargo in containers								
Cargo by rail	311 334	16,2	**155 667**	**8,1**	55	European Russia (focus around Moscow and St.Petersburg), Belarus, North-Ukraine	45	European Russia (focus around Moscow and St.Petersburg), Belarus, North-Ukraine
Cargo by road transport								
Frozen fish	22 802	1,2	**19 952**	**1,0**	100	North-Ukraine (70%), Central-Russia/ Moscow (30%).	0	
Chicken leg quarters	1 145	0,1	**1 145**	**0,1**	100	Moscow & St.Petersburg (90%), Kalningrad (10%).	0	
fruit and vegetables	9 621	0,5	**7 216**	**0,4**	100	Moscow region (65%), Belarus (25%), Latvia-Riga (10%).	0	
Fish meal	4 849	0,3	**4 025**	**0,2**	100	Russain users (85%), Belarus users (15%).	0	
Sawn timber	8 101	0,4	**2 835**	**0,1**	0		100	Krasnodar (40%), Belarus (60%).
Peat - packed	3 776	0,2	**-**	**0,0**	0		0	
Machinery, transport equipment, cars	1 958	0,1	**21**	**0,0**	100	Kaliningrad (20%), Saratov, Voronezh, other Central-Russia (50%), Belarus (20%), Ukraine (10%).	0	
Finished metal structures	5 606	0,3	**-**	**0,0**	0		0	
Steel coils and steel plates	59 888	3,1	**56 295**	**2,9**	0		100	Novolipetsk, Russia (100%).
Steel bars and other steel	40 378	2,1	**40 378**	**2,1**	0		100	Belarus (Zhlobin) (75%), Central Russia (25%).
Pig iron (in ingots)	41 056	2,1	**41 056**	**2,1**	0		100	Tula (Tulchemet) (100%).
Ferroalloys	52 764	2,8	**52 764**	**2,8**	0		100	Kazakhstan factories (100%).
Minerals, fertilizers, amminitrate, chemicals (packed)	13 579	0,7	**-**	**0,0**	0		0	
Paper (gafrotara)	1 406	0,1	**647**	**0,0**	0		0	
Paper pulp and waste pulp	3 249	0,2	**3 249**	**0,2**	0		100	Kaliningrad (CBK) (100%).
Pulpwood	51 861	2,7	**33 710**	**1,8**	0		100	Belarus (100%).
Raw sugar	61 348	3,2	**61 348**	**3,2**	100	Belarus Sugar Refining Factories.	0	
Mollases	2 082	0,1	**-**	**0,0**	0		0	
Grain in bulk	1 014	0,1	**1 014**	**0,1**	100	North Ukrainian Breweries (100%).	0	
Foodstuffs and animal food in bulk	33 466	1,7	**10 040**	**0,5**	40	Russian users (80%), Belarus users (20%).	60	Ukraine (100%).
Oils seeds and fats in bulk	8 432	0,4	**1 265**	**0,1**	0		100	Ukraine (100%).
Peat in bulk	7 350	0,4	**-**	**0,0**	0		0	
Bricks and refractory materials	423	0,0	**423**	**0,0**	100	Cherepovets (Staryi Oskol) Russia (100%).	0	
Cement in bulk	6 894	0,4	**-**	**0,0**	0		0	
Minerals in bulk	8 534	0,4	**-**	**0,0**	0		0	
Kas-liquid fertilisers	69 638	3,6	**-**	**0,0**	0		0	
Fertilisers in bulk	120 339	6,3	**120 339**	**6,3**	0		100	Belarus (Belorusskaliy) (96%), Russia (4%).
Scrap	40 396	2,1	**3 030**	**0,2**	0		100	Russia (40%), Belarus (60%).
Oil and oil products	923 124	48,2	**923 124**	**48,2**	100	Moscow region (100%).	0	
TOTAL:	**1 916 413**	**100,0**	**1 539 541**	**80,3**				

* User indicates that goods are distributed inside region.

Appendix 10

Minor cargo groups - with a cargo turnover of < 20.000 tons in March 2001

(in decending importance)

Minerals, fertilisers (bags), **amminitrate** (in bb.). Total: 13 579 tons.
During March 1914 tons of minerals and packed fertilisers were imported to the Lithuanian market. The remaining volume was produced by the local company ACHEMA – amminitrate in big bags –for export only.

Fruit and vegetables. Total: 9 621 tons.
100% handled by SMELTE. About 15% distributed to local market, about 10% to Latvia, about 20% to Belarus. The remaing 55% was dispatched to Moscow.

Minerals in bulk. Total: 8 534.
This group of cargo was imported apatites for the local Kedainiai Chemical Plant LIFOSA.

Oils seeds and fats in bulk. Total: 8 432 tons.
Seeds for oil production. Mainly a Lithuanian export product with about 15% coming from Russia and the Ukrainia. Most important destinations are Denmark, Sweden and Germany.

Sawn timber. Total: 8 101 tons.
About 50% was exported from Russia with another 25% from local exporters for UK and Sweden.

Peat in bulk. Total: 7 350 tons.
100% of Lithuanian origin. Destinations in Denmark, Germany and Sweden.

Cement in bulk. Total: 6 894 tons.
Exported from Lithuania by Akmenes Cementas.

Finished metal structures. TOTAL: 5 606 tons.
Mainly for local use. These lots were imported from Denmark and Belgium.

Fish meal (slinged, bagged). Total: 4 849 tons.
75% dispatched to Russia, 10% to Belarus and the remaining was for the local marked.

Peat (packed). Total: 3 776 tons.
All exported from Lithuania with destinations in Denmark (70%) and Sweden (30%).

Machinery, transport equipment, cars. Total: 1 958 tons.
Cars – arrive from Germany and the UK. About 65% to be re-exported to Russia.

Paper pulp. Total: 3 249 tons.
The full volume was exported from Kaliningrad and dispatched to Italy (Livorno). There was no waste paper being loaded during the months.

Mollases. Total: 2 082 tons.
The full volume was exported from Lithuanian sugar factories to Denmark.

Paper (gafrotara, paper). Total: 1 406 tons.
757 tons were produced locally and exported.
649 tons arrived from Sweden to be dispatched to Kazakhstan for newsprint.

Chicken leg Quarters Total: 1 145 tons.
This product is distributed directly from Klaipeda Cold-Storage to the Russian market. 90% of all import is sent to the Moscow region and St.Petersburg, the other 10% to Kaliningrad.

Grain. Total 1 014 tons.
This cargo group covers import of malt in bulk. This was loaded in Belgium (Antwerp) and dispatched to Ukrainian brewers.

Bricks. Total: 423 tons.
Imports from Antwerp to various Russian metallurgical plants (mainly Cherepovets, Staryj Oskol). Real name is refractory material.

Note.
There is a 1.7% difference between real cargo turnover and summed up volumes presented in Appendix 4 and in the paper. This originates from imperfections in the statistics delivered by the smaller handling companies.

Appendix 11.

Value of Total Swedish Trade with the FSU Countries 1993 - 2001

(SEK Millions)

	1993		1994		1995		1996		1997		1998		1999		2000		2001	
Country	Import	Export	Import	Export	Import*	Export	Import*	Export	Import*	Export	Import*	Export	Import*	Export	Import*	Export	Import*	Export
Russia	3 392	2 588	5 562	3 439	5 294	4 746	5 937	4 855	6 939	6 968	5 255	6 050	6 873	4 118	8 077	5 076	7 146	8 581
Estonia	746	815	1 280	1 520	1 663	1 687	1 967	1 762	3 060	3 108	3 765	3 535	4 686	3 213	7 229	4 303	5 259	4 594
Latvia	809	565	1 767	869	2 138	1 304	1 188	1 391	1 315	1 893	1 926	1 992	2 011	1 722	2 385	1 916	2 588	2 340
Lithuania	410	283	623	552	594	842	480	974	677	1 346	796	1 819	1 249	1 408	1 820	1 353	2 133	1 919
Sub. tot.	5 357	4 251	9 232	6 380	9689	8579	9572	8982	11991	13315	11742	13396	14 819	10 461	19 511	12 648	17 126	17 434
SUM		9 608		15 612		18268		18554		25306		25138		25280		32159		34560
Ukraine	13,6	152,5	44,0	258,0	27,0	282,6	55,3	441,0	61,0	877,7	111,0	1069,5	74,5	803,0	63,6	1093,0	191,0	1330,0
Belorussia	20,7	46,5	37,0	80,0	39,9	123,8	85,0	117,1	47,1	142,2	74,0	204,4	93,1	102,0	115,0	139,3	160,0	238,0
Armenia	0,0	36,1	0,2	14,0	0,0	0,1	0,0	5,0	0,0	3,6	0,0	1,8	0,1	7,8	1,1	48,6	0,3	101,6
Azerbaijan	0,5	7,1	1,0	12,0	0,2	4,5	0,0	52,6	0,0	31,8	0,0	73,0	0,4	138,7	1,0	184,3	0,4	97,0
Georgia	2,6	3,9	0,6	7,0	0,1	7,5	0,0	2,8	0,0	13,5	0,2	29,7	0,1	76,7	1,6	131,6	3,2	11,6
Moldavia	0,5	2,0	0,5	6,0	1,1	25,7	2,5	27,6	0,2	10,1	1,3	34,9	1,1	16,8	75,8	10,3	8,4	10,2
Kazakhstan	63,7	114,4	56,0	114,0	36,4	133,9	17,3	81,3	48,0	107,1	50,1	147,7	69,2	227,2	335,5	259,5	381,3	359,6
Kyrgyzstan	6,5	0,9	2,0	25,0	0,0	4,7	0,0	32,8	0,0	103,2	1,4	37,5	0,5	42,9	1,4	10,2	21,9	5,6
Tajikistan	0,4	6,9	0,8	13,0	0,4	0,1	1,8	8,9	0,3	0,8	0,0	0,8	0,1	0,3	1,2	0,3	2,6	2,5
Turkmenistan	0,0	0,0	47,0	7,0	107,8	0,8	2,4	28,1	0,1	2,7	22,5	18,4	3,8	2,3	0,0	8,7	0,1	10,8
Uzbekistan	2,0	7,0	2,0	13,0	1,8	21,8	1,5	101,1	3,5	113,1	36,2	63,3	5,7	204,0	4,7	86,3	3,3	89,9
Sub. tot.	110,5	377,3	191,1	549,1	214,7	605,5	165,8	898,3	160,2	1405,8	296,7	1681,0	248,6	1621,7	600,9	1972,1	772,5	2256,8
SUM		488		740		820		1064		1566		1978		1870		2573		3029
TOTAL	5468	4628	9423	6929	9903,7	9184,5	9737,8	9880,3	12151	14720,8	12039	15077	15068	12083	20112	14620	17899	19691
SUM		**10 096**		**16352**		**19088**		**19618**		**26872**		**27116**		**27150**		**34732**		**37589**

Source: Statistics Sweden; Foreign Trade Statistics 1993 - 2002

Appendix 12

FROM: Alf Brodin Department of Human and Economic Geography
School of Economics and Commercial Law
Göteborg University, Sweden

Cargo to and from the Eastern Baltic in Swedish Ports

My name is Alf Brodin and I am doing research for a doctor's degree in Economic Geography at the School of Economics and Commercial Law in Gothenburg, Sweden. As a part of a larger project about Russian shipping and Swedish - Russian seaborne trade, I am trying at this stage to obtain information about freight to and from the area of the former Soviet Union on the Baltic Sea for 1998, e.i. as in previous years, from you.

For the seventh year running I am conducting a survey in Swedish ports to obtain information about their handling of cargoes destined to and from the former Soviet Union. This is then compared to the official trade statistics and the two figures have each year showed great divergences. I also ask for the same type of information in some selected Baltic Sea ports, among them your port. Therefore I am writing to you in X-port as one of these ports. Hopefully the conclusions drawn, based on the whole material from all ports, will be available in the form of a report in the autumn of 1999.

What I would like you to inform me about is the volume of cargo that you handled in your port during 1998 in relation to Sweden. If you can do, or have, a split on types of cargo like, general-cargo, bulk and so on, or in a classification that you yourself use, this would be much appreciated. It would also be of great interest to me if you would include figures about your total cargo turnover for 1998, split on import/export and transit. Have there been any major changes compared to 1997 in your handling, in the total turnover and/or for any special type of cargoes ? Especially in relation to Russia.

To make my survey as complete as possible I am dependent on the information that you can send me and would therefore like to thank you in advance for your co-operation. If you have any further questions feel free to contact me by E-mail, phone, Fax or letter.

Alf Brodin

Appendix 13 (similar import + export forms were used for the years 1992-1998)

IMPORT		Cargoes to and from the Eastern Baltics in Swedish Ports During 1998								(1000 ton)	
State number of metric tons IMPORTED from each port											
			Russia			RUS TOT					
	St. Petersb.	Vyborg	Kalining.	White Sea	Other/					**IMPORT**	
Group					unknown						
General											
Paper Wood							("Paper Wood" - avser massaved och träflis)				
Bulk											
Ore											
Coal											
Oil											
Total											
	Estonia		EST TOT		**Latvia**			LET TOT	**Lithuania**		LIT TOT
	Tallinn	Other/		Riga	Ventspils	Liepaja	Other/		Klaipeda	Other/	
Group		unknown					unknown			unknown	
General											
Paper Wood											
Bulk											
Ore											
Coal											
Oil											
Total											

Appendix 14

Larger Swedish Ports with Border Codes

Upper Norrland (Övre Norrland)	
Haparanda	10
Karlsborg	102
Luleå	11
Piteå	12
Skellefteå	13
Umeå	14
Domsjö	151
Husum	152
Köpmansholmen	153
Örnsköldsvik	154
Härnösand	16
Utansjö	167
Väja	168
Sundsvall	18-19

Stockholm Area (Stockholmsområdet)	
Hargshamn	262
Stockholm	27-28
Kapellskär	282
Nynäshamn	29
Södertälje	35

East Coast (Östkusten)	
Oxelösund	36
Norrköping	37
Västervik	38
Oskarshamn	39
Mönsterås	391
Kalmar	40
Visby/Gotland	42-43
Slite	246

Lake Vänern (Vänern)	
Vänersborg/Trollhättan	68
Lidköping	69
Karlstad	70
Kristinehamn	73

Lower Norrland (Nedre Norrland)	
Hudiksvall	20
Skärsnäs	202
Söderhamn	21
Vallvik	213
Gävle	22-23
Norrsundet	231
Skutskär	232
Norrtälje	26

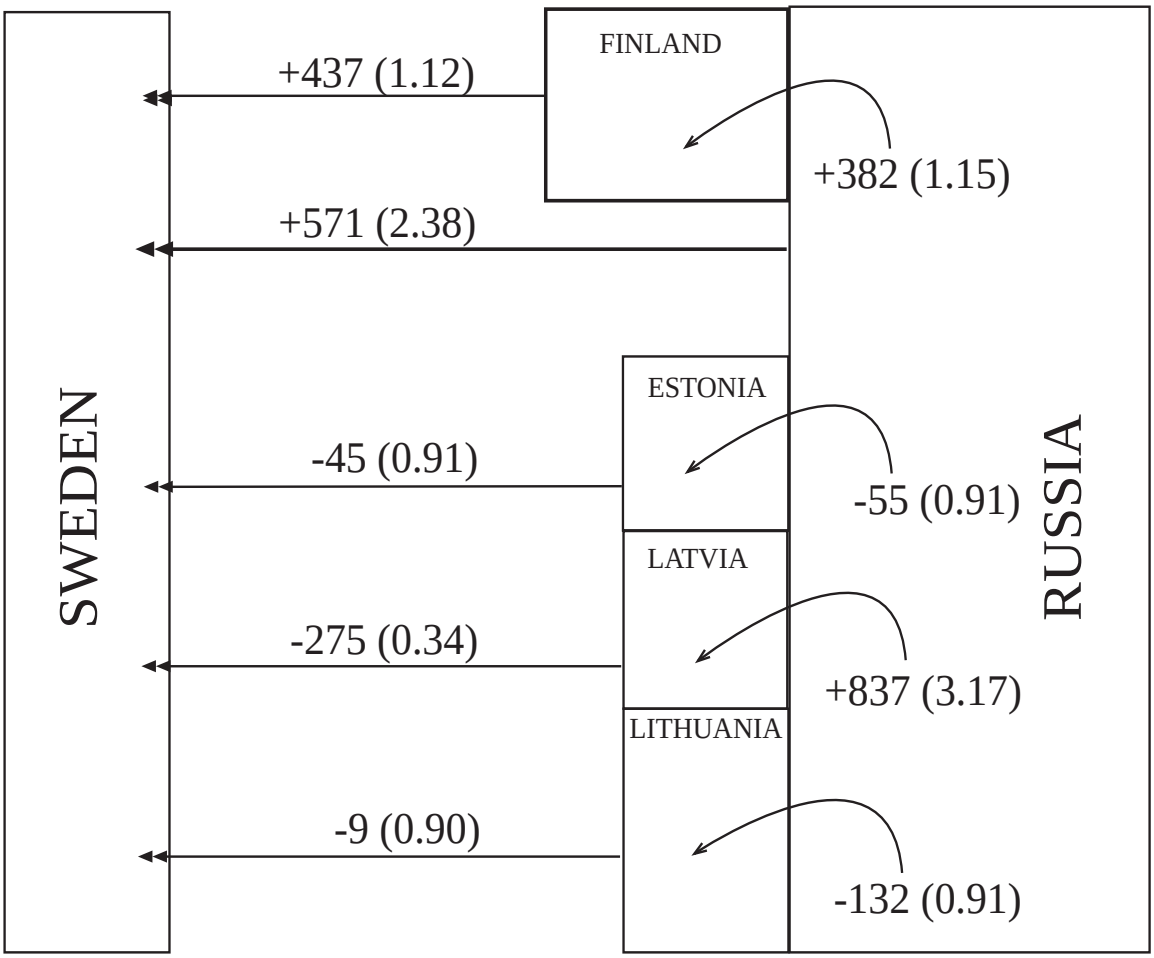
Lake Mälaren (Mälardalen)	
Västerås	31
Köping	32

South Sweden (Sydsverige)	
Karlskrona	47
Karlshamn	48
Åhus	49
Sölvesborg	50
Ystad	52
Trelleborg	53
Malmö	54-55
Landskrona	56
Helsingborg	57-58

West Coast (Västkusten)	
Göteborg	59-60
Wallhamn	611
Halmstad	62
Falkenberg	63
Varberg	64
Uddevalla	65
Lysekil	66
Brofjorden	663
Strömstad	67

Appendix 15

Difference in import and export values (mUSD) and quotients (Xi/Mi) for selected countries in 1997



Source: Extracted from IMF, DOTS (1999)

Appendix 16

Total Swedish export / import in ports of FSU cargoes per country, 1998 - 2001

IMPORTS	2001	2000	1999	1998
Russia	2327	3257	2716	2499
Estonia	2891	3536	3218	3118
Latvia	5383	4708	4127	5231
Lithuania	972	932	787	618
	11573	12433	10848	11466
EXPORTS	2001	2000	1999	1998
Russia	216	159	102	166
Estonia	387	412	408	450
Latvia	385	331	266	436
Lithuania	342	139	91	83
	1330	1041	867	1135
Total	12903	13474	11715	12601

Source: Shipping Goods Survey, Statistics Sweden 2002

Appendix 17

Total Swedish export / import in ports of FSU cargoes per category, 1998 - 2001

Import	2001	2000	1999	1998
General Cargo	849	799	793	544
Pulp wood	7042	8438	6972	6122
Cereals	14	8	30	32
Bulk	208	193	457	323
Fertilisers	192	129	81	50
Ore	96	200	160	273
Coal	476	388	291	274
Oil & oil prod.	2702	2277	2049	3939
	11579	12432	10833	11557

Export	2001	2000	1999	1998
General Cargo	680	511	398	498
Pulp wood	27	29	58	48
Cereals*	32	83	25	31
Bulk	532	347	191	225
Fertilisers*	7	9	9	13
Ore	19	8	2	13
Coal	0	0	9	1
Óil & oil prod.	38	54	173	302
	1335	1041	865	1131
Total	12914	13473	11698	12688

*= Cereals and Fertilisers have been added to the Bulk category everywhere where only six categories have been discussed or presented.

Source: Shipping Goods Survey, Statistics Sweden 2002

NB. Differencies between the totals for country, trp-area and category figures are due to minor volumes of non-classified cargoes in the three categories.

Appendix 18

Total Swedish export / import in ports of FSU cargoes per transport area, 1998 - 2001

Import	2001	2000	1999	1998
Upper Norrland	2201	2363	2101	1899
Lower Norrland	2317	2649	2163	2308
Lake Mälaren	382	445	579	429
Stockholm area	914	1109	834	712
East Coast	1933	2310	2236	2167
South Coast	1738	1337	1264	1259
West Coast	1636	1927	1633	2663
Lake Vänern	452	294	37	29
	11573	12434	10847	11466
Export	2001	2000	1999	1998
Upper Norrland	48	55	45	59
Lower Norrland	15	18	59	42
Lake Mälaren	14	30	13	7
Stockholm area	433	368	328	407
East Coast	150	136	75	65
South Coast	580	369	250	290
West Coast	70	55	91	249
Lake Vänern	26	9	5	7
	1336	1040	866	1126
Total	12909	13474	11713	12592

Source: Shipping Goods Survey, Statistics Sweden 2002

NB. Differencies between the totals for country, trp-area and category figures are due to minor volumes of non-classified cargoes in the three categories.

Appendix 19

Total Swedish export / import from Russia and Estonia per cargo category, 1998 - 2001

RUSSIA

Imports	2001	2000	1999	1998
General Cargo	40	59	320	132
Pulp wood	1728	2521	1780	1207
Cereals*	3	1	2	0
Bulk	12	5	61	52
Fertilisers*	84	70	35	7
Ore	29	51	46	80
Coal	196	213	204	171
Oil & oil prod.	235	337	263	859
	2327	3257	2711	2508

Export	2001	2000	1999	1998
General Cargo	16	7	7	83
Pulp wood	5	0	1	2
Cereals*	10	25	11	5
Bulk	188	120	38	66
Fertilisers*	0	2	1	4
Ore	0	0	0	5
Coal	0	0	0	0
Oil & oil prod.	0	4	43	0
	219	158	101	165
Total	**2546**	**3415**	**2812**	**2673**

ESTONIA

Import	2001	2000	1999	1998
General Cargo	435	374	279	241
Pulp wood	1375	2032	1881	1732
Cereals*	0	3	0	26
Bulk	48	27	85	44
Fertilisers*	5	4	9	10
Ore	38	130	106	154
Coal	262	164	66	66
Oil & oil prod.	728	802	785	844
	2891	3536	3211	3117

Export	2001	2000	1999	1998
General Cargo	310	290	268	267
Pulp wood	2	6	4	5
Cereals*	9	25	5	15
Bulk	21	32	13	6
Fertilisers*	4	1	2	0
Ore	9	8	2	0
Coal	0	0	9	1
Oil & oil prod.	32	50	106	155
	387	412	409	449
Total	**3278**	**3948**	**3620**	**3566**

*= Cereals and Fertilisers have been added to the Bulk category everywhere where only six categories have been discussed or presented.

Source: Shipping Goods Survey, Statistics Sweden 2002

NB. Differencies between the totals for country, trp-area and category figures are due to minor volumes of non-classified cargoes in the three categories.

Appendix 20

Total Swedish export / import from Latvia and Lithuania per cargo category, 1998 - 2001

LATVIA

Import	2001	2000	1999	1998
General Cargo	267	238	154	128
Pulp wood	3494	3383	2913	2886
Cereals*	4	3	26	1
Bulk	117	96	179	86
Fertilisers*	6	5	1	0
Ore	21	15	5	13
Coal	6	12	16	32
Oil & oil prod.	1467	956	823	2085
	5382	4708	4117	5231

Import	2001	2000	1999	1998
General Cargo	204	141	90	119
Pulp wood	27	21	53	36
Cereals*	17	14	5	6
Bulk	135	152	95	121
Fertilisers*	2	2	4	7
Ore	3	0	0	7
Coal	0	0	0	0
Óil & oil prod.	0	0	19	137
	388	330	266	433
Total	**5770**	**5038**	**4383**	**5664**

LITHUANIA

Import	2001	2000	1999	1998
General Cargo	107	127	40	26
Pulp wood	446	503	398	278
Cereals*	8	0	1	2
Bulk	31	65	132	127
Fertilisers*	97	50	35	25
Ore	7	5	2	14
Coal	3	0	0	0
Oil & oil prod.	274	182	178	146
	973	932	786	618

Import	2001	2000	1999	1998
General Cargo	125	73	34	30
Pulp wood	2	2	0	5
Cereals*	6	21	4	5
Bulk	194	42	46	32
Fertilisers*	2	3	3	2
Ore	7	0	0	0
Coal	0	0	0	0
Oil & oil prod.	6	0	5	9
	342	141	92	83
Total	**1315**	**1073**	**878**	**701**

*= Cereals and Fertilisers have been added to the Bulk category everywhere where only six categories have been discussed or presented.

Source: Shipping Goods Survey, Statistics Sweden 2002

NB. Differencies between the totals for country, trp-area and category figures are due to minor volumes of non-classified cargoes in the three categories.

Appendix 21

EXPORT						TOTAL - all transport areas - 1997												
	Russia						Estonia			Latvia					Lithuania			
UN	St.P.	Vybor	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Other	Total	Total
G C						0			0		2			2			0	
PW						0			0					0			0	
Bulk						0			0	4,1				4,1			0	
Ore						0			0					0			0	
Coal						0			0					0			0	
Oil						0			0					0			0	
						0			0					6,1			0	6,1
LN	St.P.	Vybor	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Other	Total	
G C						0	3		3					0			0	
PW						0			0					0			0	
Bulk			7,1			7,1			0	9,2			8,1	17,3			0	
Ore	2,9					2,9	2,1		2,1					0			0	
Coal						0			0					0			0	
Oil						0			0	11,4				11,4			0	
						10			5,1					28,7			0	43,8
MAL	St.P.	Vybor	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Other	Total	
G C						0			0	1,7		2,9		4,6			0	
PW						0			0					0			0	
Bulk						0			0					0			0	
Ore						0			0					0			0	
Coal						0			0					0			0	
Oil						0			0					0			0	
						0			0					4,6			0	4,6
STH	St.P.	Vybor	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Other	Total	
G C					3,5	3,5	170		170	16,6				16,6	6,8		6,8	
PW						0			0					0			0	
Bulk						0			0					0			0	
Ore						0			0	6,6				6,6			0	
Coal						0			0					0			0	
Oil						0			0					0			0	
						3,5			170					23,2			6,8	204
EAST	St.P.	Vybor	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Other	Total	
G C	67					67	8,2		8,2	0,2	0,4	0,1		0,7	5,4		5,4	
PW						0			0		0,1			0,1			0	
Bulk	2,5					2,5	3,3	1,2	4,5	4,2				4,2	0,5		0,5	
Ore						0			0					0			0	
Coal						0			0					0			0	
Oil						0			0	28,8				28,8			0	
						69,5			12,7					33,8			5,9	122
SOUT	St.P.	Vybor	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Other	Total	
G C	1,7					1,7			0			68		68	72		72	
PW						0			0					0			0	
Bulk	7				2,5	9,5	4,1		4,1			10,2		10,2			0	
Ore						0			0					0			0	
Coal						0			0					0			0	
Oil						0			0					0			0	
						11,2			4,1					78,2			72	166
WEST	St.P.	Vybor	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Other	Total	
G C					0,2	0,2		0,1	0,1					0			0	
PW						0			0					0			0	
Bulk						0			0					0			0	
Ore						0			0					0			0	
Coal						0			0					0			0	
Oil						0	9		9	173		2,7		176			0	
						0,2			9,1					176			0	185
VAN	St.P.	Vybor	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Other	Total	
G C						0			0					0			0	
PW						0			0					0			0	
Bulk						0			0					0			0	
Ore						0			0					0			0	
Coal						0			0					0			0	
Oil						0			0					0			0	
						0			0					0			0	0
Area	St.P.	Vybor	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Other	Total	
G C	68,7	0	0	0	3,7	72,4	181	0,1	181	18,5	2,4	71	0	91,9	84,2	0	84,2	430
PW	0	0	0	0	0	0	0	0	0	0	0,1	0	0	0,1	0	0	0	0,1
Bulk	9,5	0	7,1	0	2,5	19,1	7,4	1,2	8,6	17,5	0	10,2	8,1	35,8	0,5	0	0,5	64
Ore	2,9	0	0	0	0	2,9	2,1	0	2,1	6,6	0	0	0	6,6	0	0	0	11,6
Coal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oil	0	0	0	0	0	0	9	0	9	213	0	2,7	0	216	0	0	0	225
					Tot:	94,4		Tot:	201				Tot:	350		Tot:	84,7	730

Appendix 22

IMPORT						TOTAL - all transport areas - 1997												
	Russia						Estonia			Latvia					Lithuania			
UN	St.P.	Vybor	Kalin	Whit	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Othe	Total	Total
G C						0,0			0,0					0,0			0,0	
PW	405,0	6,8	62,1		37,7	511,6	50,2	245,0	295,2	742,0	158,0	22,2	135,0	1057,2	85,2		85,2	
Bulk						0,0	0,5	2,3	2,8		3,9			3,9			0,0	
Ore	4,7	2,9	26,0			33,6		58,4	58,4	5,5				5,5	0,5		0,5	
Coal						0,0			0,0					0,0			0,0	
Oil						0,0	3,5		3,5					0,0			0,0	
						545,2			359,9					1067			85,7	2057
LN	St.P.	Vybor	Kalin	Whit	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Othe	Total	
G C						0,0	2,7		2,7				6,0	6,0			0,0	
PW	309,0	2,6			102,0	413,6	105,0	346,0	451,0	104,0			567,0	671,0	77,0	11,4	88,4	
Bulk						0,0			0,0					0,0			0,0	
Ore	4,9					4,9	52,0		52,0	5,0				5,0	4,2		4,2	
Coal						0,0			0,0					0,0			0,0	
Oil						0,0	17,8		17,8					0,0			0,0	
						418,5			523,5					682			92,6	1717
MAL	St.P.	Vybor	Kalin	Whit	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Othe	Total	
G C	2,2		3,2			5,4	9,0		9,0					0,0	1,6		1,6	
PW	61,4				15,6	77,0	8,4	161,0	169,4	27,2	8,0	17,0		52,2	34,4		34,4	
Bulk			3,7			3,7	1,0		1,0		80,0			80,0	15,8		15,8	
Ore	1,2	5,1				6,3	2,6	80,5	83,1	2,7	1,6			4,3	5,0		5,0	
Coal	3,0	19,4			7,9	30,3			0,0					0,0			0,0	
Oil						0,0			0,0					0,0			0,0	
						122,7			262,5					136,5			56,8	579
STH	St.P.	Vybor	Kalin	Whit	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Othe	Total	
G C					3,4	3,4	125,7	0,5	126,2	7,7				7,7	1,8		1,8	
PW						0,0			0,0					0,0			0,0	
Bulk						0,0	1,5	41,0	42,5		2,0		1,8	3,8	1,8		1,8	
Ore						0,0			0,0					0,0			0,0	
Coal						0,0			0,0					0,0			0,0	
Oil						0,0	149,4		149,4					0,0			0,0	
						3,4			318,1					11,5			3,6	337
EAST	St.P.	Vybor	Kalin	Whit	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Othe	Total	
G C	25,0	2,1	1,4			28,5	1,5		1,5		1,9			1,9	5,9		5,9	
PW	114,0	55,7	45,9		160,0	375,6	74,8	331,0	405,8	392,0	95,0	225,0	75,9	787,9	84,0		84,0	
Bulk	13,3		2,6			15,9	2,9		2,9					0,0	9,5		9,5	
Ore						0,0			0,0					0,0			0,0	
Coal	74,7	119,0	13,8			207,5	48,7		48,7					0,0			0,0	
Oil						0,0	83,0	15,5	98,5	16,7				16,7	7,4		7,4	
						627,5			557,4					806,5			107	2098
SOUT	St.P.	Vybor	Kalin	Whit	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Othe	Total	
G C	0,1					0,1	5,3	26,1	31,4			26,4		26,4	30,5		30,5	
PW	4,9	16,4			19,8	41,1	69,1	7,7	76,8	43,9	9,3	85,4	50,3	188,9	10,5		10,5	
Bulk			8,4		9,0	17,4		4,6	4,6		73,2		3,0	76,2	42,8		42,8	
Ore						0,0	2,8		2,8					0,0			0,0	
Coal						0,0			0,0					0,0			0,0	
Oil	22,6					22,6	51,1		51,1	44,3	0,1			44,4	49,6		49,6	
						81,2			166,7					335,9			133	717
WEST	St.P.	Vybor	Kalin	Whit	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Othe	Total	
G C			1,5			1,5			0,0					0,0			0,0	
PW	17,5	1,1			4,6	23,2	7,6	82,6	90,2	9,7	2,5	2,0		14,2			0,0	
Bulk						0,0		2,3	2,3					0,0	39,4		39,4	
Ore	20,0					20,0	16,9		16,9					0,0			0,0	
Coal						0,0			0,0					0,0			0,0	
Oil			54,3	53,7	4,6	112,6	176,0		176,0	24,6	981,0			1005,6	28,4		28,4	
						157,3			285,4					1020			67,8	1530
VAN	St.P.	Vybor	Kalin	Whit	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Othe	Total	
G C						0,0			0,0					0,0			0,0	
PW	2,1					2,1			0,0					0,0			0,0	
Bulk			3,0			3,0			0,0					0,0	17,5		17,5	
Ore						0,0			0,0					0,0			0,0	
Coal						0,0			0,0					0,0			0,0	
Oil						0,0			0,0					0,0			0,0	
						5,1			0					0			17,5	22,6
Area	St.P.	Vybor	Kalin	Whit	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Othe	Total	
G C	27	2	6	0	3	39	144	27	171	8	2	26	6	42	40	0	40	292
PW	914	83	108	0	340	1444	315	1173	1488	1319	273	352	828	2771	291	11	303	6007
Bulk	13	0	18	0	9	40	6	50	56	0	159	0	5	164	127	0	127	387
Ore	31	8	26	0	0	65	74	139	213	13	2	0	0	15	10	0	10	303
Coal	78	138	14	0	8	238	49	0	49	0	0	0	0	0	0	0	0	287
Oil	23	0	54	54	5	135	481	16	496	86	981	0	0	1067	85	0	85	1784
Tot:	1086	231	226	54	365	1961	1069	1405	2474	1425	1417	378	839	4059	553	11	564	9057

Appendix 23

EXPORT						TOTAL - all transport areas - 1996												
	Russia						Estonia			Latvia					Lithuania			
UN	St.P.	Vybor	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Other	Total	Total
G C						0			0					0			0	
PW						0			0					0			0	
Bulk						0	0,9		0,9	0,9				0,9	0,3		0,3	
Ore						0	2,5		2,5					0			0	
Coal						0			0					0			0	
Oil						0			0					0			0	
						0			3,4					0,9			0,3	4,6
LN	St.P.	Vybor	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Other	Total	
G C						0			0					0			0	
PW						0			0					0			0	
Bulk						0			0	18,5				18,5	3		3	
Ore	3					3			0					0			0	
Coal						0			0					0			0	
Oil						0			0	12,8				12,8			0	
						3			0					31,3			3	37,3
MAL	St.P.	Vybor	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Other	Total	
G C						0			0	2,7		1,7		4,4			0	
PW						0			0					0			0	
Bulk						0			0					0			0	
Ore						0			0					0			0	
Coal						0			0					0			0	
Oil	8,3					8,3			0					0			0	
						8,3			0					4,4			0	12,7
STH	St.P.	Vybor	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Other	Total	
G C						0	154		154	0,4				0,4			0	
PW						0			0	0,4				0,4			0	
Bulk						0		1	1					0	22		22	
Ore						0			0					0			0	
Coal						0			0					0			0	
Oil						0			0					0			0	
						0			155					0,8			22	178
EAST	St.P.	Vybor	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Other	Total	
G C	2,6					2,6	9,1	2,2	11,3	1,6			0,1	1,7	3,5		3,5	
PW						0			0					0			0	
Bulk	24,8					24,8	4,1		4,1	1				1			0	
Ore						0			0					0			0	
Coal						0			0					0			0	
Oil						0			0	2,7				2,7			0	
						27,4			15,4					5,4			3,5	51,7
SOUT	St.P.	Vybor	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Other	Total	
G C						0			0			52,9		52,9	48,3		48,3	
PW						0			0					0			0	
Bulk						0			0	25		4,1	3	32,1	26,6		26,6	
Ore						0			0					0			0	
Coal						0			0					0			0	
Oil						0	6		6		4,6			4,6			0	
						0			6					89,6			74,9	171
WEST	St.P.	Vybor	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Other	Total	
G C						0			0					0			0	
PW						0			0					0			0	
Bulk	5					5			0	2				2			0	
Ore						0			0					0			0	
Coal						0			0					0			0	
Oil						0	14,9	3	17,9	90,1				90,1			0	
						5			17,9					92,1			0	115
VAN	St.P.	Vybor	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Other	Total	
G C						0			0					0			0	
PW						0			0					0			0	
Bulk						0			0					0			0	
Ore						0			0					0			0	
Coal						0			0					0			0	
Oil						0			0					0			0	
						0			0					0			0	0
Area	St.P.	Vybor	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Other	Total	
G C	2,6	0	0	0	0	2,6	163	2,2	165	4,7	0	54,6	0,1	59,4	51,8	0	51,8	279
PW	0	0	0	0	0	0	0	0	0	0,4	0	0	0	0,4	0	0	0	0,4
Bulk	29,8	0	0	0	0	29,8	5	1	6	47,4	0	4,1	3	54,5	51,9	0	51,9	142
Ore	3	0	0	0	0	3	2,5	0	2,5	0	0	0	0	0	0	0	0	5,5
Coal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oil	8,3	0	0	0	0	8,3	20,9	3	23,9	106	4,6	0	0	110	0	0	0	142
					Tot:	43,7		Tot:	198				Tot:	225		Tot:	104	570

Appendix 24

IMPORT						TOTAL - all transport areas - 1996												
	Russia						Estonia			Latvia					Lithuania			
UN	St.P.	Vybor	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Other	Total	Total
G C						0		0,9	0,9					0	3,2		3,2	
PW	223		33,2		287	543	85,6	81,2	167	262	32,1	29,9	104	428	36,7		36,7	
Bulk						0	0,2		0,2	1,5				1,5			0	
Ore	1,9		14,7			16,6		32,1	32,1	4,4				4,4			0	
Coal						0			0					0			0	
Oil	13,4					13,4	45,8		45,8		5,4			5,4			0	
						573			246					439			39,9	1298
LN	St.P.	Vybor	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Other	Total	
G C						0			0					0			0	
PW	345	3,1	12,8		19	380	183	88,2	271	340	56,5	73,9	3	473	81,1		81,1	
Bulk			6			6			0		2,1			2,1			0	
Ore						0			0					0			0	
Coal		3,2				3,2			0					0			0	
Oil						0			0					0			0	
						389			271					476			81,1	1217
MAL	St.P.	Vybor	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Other	Total	
G C	3,2		3,8			7	3,1		3,1					0			0	
PW	69				15,5	84,5	29,4	80,3	110	40	1,4	15		56,4	23,3		23,3	
Bulk		2,8	5,1			7,9	1		1		107			107	9,8		9,8	
Ore						0	5,3	40	45,3					0	7,3		7,3	
Coal	10,6	21				31,6			0					0			0	
Oil						0	17,7		17,7		15,2			15,2			0	
						131			177					179			40,4	527
STH	St.P.	Vybor	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Other	Total	
G C						0	124		124	0,2				0,2			0	
PW						0			0					0			0	
Bulk						0	9	45	54		2			2			0	
Ore						0			0					0			0	
Coal						0			0					0			0	
Oil						0	123		123		37,6			37,6			0	
						0			301					39,8			0	341
EAST	St.P.	Vybor	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Other	Total	
G C	1,1		5,3			6,4	1,1	2,6	3,7		0,2	0,3		0,5	3,6		3,6	
PW	126	5,7	14,2		53,2	199	43,9	154	198	128	63,9	191	19,6	403	15,4		15,4	
Bulk	3,3	5,4	4,6		4,7	18	14,3	8,3	22,6					0	10,9		10,9	
Ore	8,6		4,2			12,8			0		2,5			2,5			0	
Coal	105	62,3	21,3		8,6	197	32,3		32,3					0			0	
Oil	8,2					8,2	71,8		71,8					0			0	
						442			328					406			29,9	1205
SOUT	St.P.	Vybor	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Other	Total	
G C	0,3	1,1				1,4	0,3	1,1	1,4	1		13		14	23,5		23,5	
PW	45,3	10,3	10,2			65,8	55,6	28,4	84	52,3	9,7	80	2,4	144	7		7	
Bulk			6,4			6,4	5	3	8		53,5		1	54,5	43		43	
Ore						0	4,7		4,7					0			0	
Coal						0			0					0			0	
Oil	55,4					55,4	53,7		53,7		29,6			29,6	72,8		72,8	
						129			152					243			146	670
WEST	St.P.	Vybor	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Other	Total	
G C			2,6			2,6	1,7	0,7	2,4					0	7,5		7,5	
PW	2	2,6				4,6	2,5	2,2	4,7	2,5	2,6			5,1	1,1		1,1	
Bulk						0			0					0	37,1		37,1	
Ore						0			0					0			0	
Coal						0			0					0			0	
Oil	19,7					19,7	144		144	15	985			1000	80,6		80,6	
						26,9			151					1005			126	1309
VAN	St.P.	Vybor	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Other	Total	
G C			2,8			2,8			0					0	5,5		5,5	
PW						0			0					0			0	
Bulk		2				2			0					0			0	
Ore						0			0					0			0	
Coal						0			0					0			0	
Oil						0			0					0	1,2		1,2	
						4,8			0					0			6,7	11,5
Area	St.P.	Vybor	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventsp	Liepaj	Other	Total	Klaipe	Other	Total	
G C	4,6	1,1	14,5	0	0	20,2	130	5,3	135	1,2	0,2	13,3	0	14,7	43,3	0	43,3	214
PW	810	21,7	70,4	0	375	1277	400	434	834	825	166	390	129	1510	165	0	165	3786
Bulk	3,3	10,2	22,1	0	4,7	40,3	29,5	56,3	85,8	1,5	165	0	1	167	101	0	101	394
Ore	10,5	0	18,9	0	0	29,4	10	72,1	82,1	4,4	2,5	0	0	6,9	7,3	0	7,3	126
Coal	116	86,5	21,3	0	8,6	232	32,3	0	32,3	0	0	0	0	0	0	0	0	264
Oil	96,7	0	0	0	0	96,7	456	0	456	15	1073	0	0	1088	155	0	155	1795
					Tot:	1696		Tot:	1626				Tot:	2786		Tot:	471	6579

Appendix 25

EXPORT						TOTAL - all transport areas - 1995												
	Russia						Estonia			Latvia					Lithuania			
UN	St.P.	Vybo	Kalinin	White	Other	Total	Tallin	Other	Total	Riga	Ventspil	Liepaja	Other	Total	Klaipeda	Other	Total	Total
G C						0			0					0			0	
PW						0			0					0			0	
Bulk						0		1,2	1,2					0			0	
Ore						0			0					0			0	
Coal						0			0					0			0	
Oil						0	1,7		1,7	5,3				5,3			0	
						0			2,9					5,3			0	8,2
LN	St.P.	Vybo	Kalinin	White	Other	Total	Tallin	Other	Total	Riga	Ventspil	Liepaja	Other	Total	Klaipeda	Other	Total	
G C	7					7			0					0			0	
PW						0			0					0			0	
Bulk						0			0					0			0	
Ore						0			0					0			0	
Coal						0			0					0			0	
Oil						0			0	19,8				19,8			0	
						7			0					19,8			0	26,8
MAL	St.P.	Vybo	Kalinin	White	Other	Total	Tallin	Other	Total	Riga	Ventspil	Liepaja	Other	Total	Klaipeda	Other	Total	
G C						0			0	4				4			0	
PW						0			0					0			0	
Bulk						0			0					0			0	
Ore						0			0					0			0	
Coal						0			0					0			0	
Oil						0			0					0			0	
						0			0					4			0	4
STHLM	St.P.	Vybo	Kalinin	White	Other	Total	Tallin	Other	Total	Riga	Ventspil	Liepaja	Other	Total	Klaipeda	Other	Total	
G C	13,9					13,9	153,2		153,2	14,4				14,4			0	
PW						0			0					0			0	
Bulk						0			0					0			0	
Ore						0			0					0			0	
Coal						0			0					0			0	
Oil						0			0					0			0	
						13,9			153,2					14,4			0	181,5
EAST	St.P.	Vybo	Kalinin	White	Other	Total	Tallin	Other	Total	Riga	Ventspil	Liepaja	Other	Total	Klaipeda	Other	Total	
G C	6					6	1,1		1,1	0,2	0,1			0,3	3		3	
PW						0			0					0			0	
Bulk						0			0					0			0	
Ore						0			0					0			0	
Coal						0			0					0			0	
Oil						0			0					0			0	
						6			1,1					0,3			3	10,4
SOUTH	St.P.	Vybo	Kalinin	White	Other	Total	Tallin	Other	Total	Riga	Ventspil	Liepaja	Other	Total	Klaipeda	Other	Total	
G C	54					54			0	3				3	35		35	
PW						0			0					0			0	
Bulk						0			0					0			0	
Ore						0			0					0			0	
Coal						0			0					0			0	
Oil						0			0	17				17			0	
						54			0					20			35	109
WEST	St.P.	Vybo	Kalinin	White	Other	Total	Tallin	Other	Total	Riga	Ventspil	Liepaja	Other	Total	Klaipeda	Other	Total	
G C	2					2	10		10	0,3				0,3	3,3		3,3	
PW						0			0					0			0	
Bulk						0			0					0			0	
Ore						0			0					0			0	
Coal						0			0					0			0	
Oil						0			0	103,4				103,4			0	
						2			10					103,7			3,3	119
VANE	St.P.	Vybo	Kalinin	White	Other	Total	Tallin	Other	Total	Riga	Ventspil	Liepaja	Other	Total	Klaipeda	Other	Total	
G C						0			0					0	3		3	
PW						0			0					0			0	
Bulk						0			0					0			0	
Ore						0			0					0			0	
Coal						0			0					0			0	
Oil						0			0					0			0	
						0			0					0			3	3
Area	St.P.	Vybo	Kalinin	White	Other	Total	Tallin	Other	Total	Riga	Ventspil	Liepaja	Other	Total	Klaipeda	Other	Total	
G C	82,9	0	0	0	0	82,9	164,3	0	164,3	21,9	0,1	0	0	22	44,3	0	44,3	313,5
PW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulk	0	0	0	0	0	0	0	1,2	1,2	0	0	0	0	0	0	0	0	1,2
Ore	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oil	0	0	0	0	0	0	1,7	0	1,7	145,5	0	0	0	145,5	0	0	0	147,2
					Tot:	82,9		Tot:	167,2				Tot:	167,5		Tot:	44,3	461,9

Appendix 26

IMPORT						TOTAL - all transport areas - 1995												
	Russia						Estonia			Latvia					Lithuania			
UN	St.P.	Vyb	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventspi	Liepaja	Other	Total	Klaipeda	Othe	Total	Total
G C						0,0	1,1	8,7	9,8					0	1,7		1,7	
PW	604,5	2,0	78,2	10,9	228,0	924	37,3	83,4	120,7	551,6	63,9	57,6	91,5	764,6	84,7	3	87,7	
Bulk						0,0		3,6	3,6					0			0	
Ore						0,0			0					0			0	
Coal						0,0			0					0			0	
Oil				2,3		2,3	48,4		48,4					0			0	
						926			182,5					764,6			89,4	1962,4
LN	St.P.	Vyb	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventspi	Liepaja	Other	Total	Klaipeda	Othe	Total	
G C	2					2			0					0			0	
PW	406,4		44,6			451	106,8	398	504,8	237,5	93,5	36,8	2	369,8	177		177	
Bulk	3,3	2	5,9			11,2	18,6		18,6	9	5,1	0,9		15			0	
Ore						0			0					0			0	
Coal	6,1		3			9,1	3		3					0			0	
Oil						0	12,4		12,4					0			0	
						473,3			538,8					384,8			177	1573,9
MAL	St.P.	Vyb	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventspi	Liepaja	Other	Total	Klaipeda	Othe	Total	
G C	4,5	1,5	3,8			9,8	2		2		2			2	3		3	
PW	76		6		3	85	11	9	20	53	6		15	74	27		27	
Bulk			3			3	4		4	3	79			82	27		27	
Ore						0			0					0	4		4	
Coal	6					6	12		12				3	3			0	
Oil						0	5		5					0			0	
						103,8			43					161			61	368,8
STHLM	St.P.	Vyb	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventspi	Liepaja	Other	Total	Klaipeda	Othe	Total	
G C	5,4		0,7			6,1	123,4		123,4	9,3				9,3			0	
PW	0,3					0,3			0	0,8				0,8			0	
Bulk		4				4		65	65		1			1			0	
Ore						0			0					0			0	
Coal						0			0					0			0	
Oil						0	7		7		1			1			0	
						10,4			195,4					12,1			0	217,9
EAST	St.P.	Vyb	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventspi	Liepaja	Other	Total	Klaipeda	Othe	Total	
G C	5	0,8				5,8			0		3,8	0,6		4,4			0	
PW	151,8		50,9		51,2	253,9	89,1	106	194,8	420,9	68	272,9	188,7	950,5	124,7		124,7	
Bulk	2,4	1,3	18,4			22,1	5,6	13,9	19,5					0	8		8	
Ore			8,7			8,7		2,8	2,8					0			0	
Coal	108,9	19	8,7		3	139,4	152,6	2,9	155,5	3				3			0	
Oil	20,6		2,6			23,2	46		46		20,6			20,6			0	
						453,1			418,6					978,5			132,7	1982,9
SOUTH	St.P.	Vyb	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventspi	Liepaja	Other	Total	Klaipeda	Othe	Total	
G C	200		40,1			240,1			0		0,6		0,8	1,4	30,8		30,8	
PW	36,6		3,3		5,7	45,6	20,6	14,2	34,8	17		52,2	11,1	80,3	11,1		11,1	
Bulk	7,7		9,8			17,5	3		3		157,3	0,5	7,2	165	4,9		4,9	
Ore						0			0					0			0	
Coal		8,4				8,4	6		6					0			0	
Oil	59,3		5,3			64,6	21		21	1	25,7	8,1		34,8			0	
						376,2			64,8					281,5			46,8	769,3
WEST	St.P.	Vyb	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventspi	Liepaja	Other	Total	Klaipeda	Othe	Total	
G C	2,3		1,6	0,4	8	12,3	2,4		2,4	2,6				2,6	3		3	
PW	22,2		2,6		12,4	37,2	8,4	2,4	10,8	21				21			0	
Bulk						0			0			0,8	17	17,8	3		3	
Ore		6			6,8	12,8			0					0			0	
Coal			11,4			11,4			0					0			0	
Oil	117,2		28,8	17,8		163,8	189,6		189,6		911,7			911,7	67,2		67,2	
						237,5			202,8					953,1			73,2	1466,6
VAN	St.P.	Vyb	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventspi	Liepaja	Other	Total	Klaipeda	Othe	Total	
G C						0			0					0	3,2		3,2	
PW	3,3		1		6,8	11,1			0					0			0	
Bulk	2,6		4,8			7,4			0					0	5,5		5,5	
Ore		3,7				3,7			0	5,7				5,7			0	
Coal						0	4,8		4,8					0			0	
Oil						0			0					0			0	
						22,2			4,8					5,7			8,7	41,4
Area	St.P.	Vyb	Kalini	White	Other	Total	Tallin	Other	Total	Riga	Ventspi	Liepaja	Other	Total	Klaipeda	Othe	Total	
G C	219,2	2,3	46,2	0,4	8,0	276,1	128,9	8,7	137,6	11,9	6,4	0,6	0,8	19,7	41,7	0	41,7	475,1
PW	1301	2	187	10,9	307,1	1808	273,2	613	885,8	1302	231,4	419,5	308,3	2261,0	424,5	3	427,5	5382
Bulk	16	7,3	41,9	0	0	65,2	31,2	82,5	113,7	12,0	242,4	2,2	24,2	280,8	48,4	0	48,4	508,1
Ore	0	9,7	8,7	0	6,8	25,2	0	2,8	2,8	5,7	0	0	0	5,7	4,0	0	4,0	37,7
Coal	121	27	23,1	0	3,0	174	178,4	2,9	181,3	3,0	0	0	3,0	6,0	0	0	0,0	361,6
Oil	197,1	0	36,7	20,1	0	254	329,4	0	329,4	1,0	959,0	8,1	0	968,1	67,2	0	67,2	1618,6
					Tot:	**2602**		Tot:	**1651**				Tot:	**3541**		Tot:	**588,8**	**8383**

Appendix 27

					Total Export and Import / Port and Category 1994													
EXPO	Russia						Estonia			Latvia					Lithuania			
	St.P.	Vyborg	Kalinin	White S	Other	Total	Tallin	Other	Total	Riga	Ventspils	Liepaja	Other	Total	Klaipeda	Other	Total	Total
General	82,9	0	0	0	0	82,9	164,3	0	164,3	21,9	0,1	0	0	22	44,3	0	44,3	313,5
Pulpw	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulk	0	0	0	0	0	0	0	1,2	1,2	0	0	0	0	0	0	0	0	1,2
Ore	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oil	0	0	0	0	0	0	1,7	0	1,7	145,5	0	0	0	145,5	0	0	0	147,2
	82,9					82,9	166	1,2	167,2	167,4	0,1			167,5	44,3		44,3	461,9
Share %	17,9					17,9	35,9		36,2	36,2				36,3	9,6		9,6	
IMPO																		
	St.P.	Vyborg	Kalinin	White S	Other	Total	Tallin	Other	Total	Riga	Ventspils	Liepaja	Other	Total	Klaipeda	Other	Total	
General	219,2	2,3	46,2	0,4	8	276,1	128,9	8,7	137,6	11,9	6,4	0,6	0,8	19,7	41,7	0	41,7	475,1
Pulpw	1301,1	2	186,6	10,9	307,1	1807,7	273,2	613,6	886,8	1301,8	231,4	419,5	308,3	2261,0	424,5	3	427,5	5383,0
Bulk	16	7,3	41,9	0	0	65,2	31,2	82,5	113,7	12	242,4	2,2	24,2	280,8	48,4	0	48,4	508,1
Ore	0	9,7	8,7	0	6,8	25,2	0	2,8	2,8	5,7	0	0	0	5,7	4	0	4,0	37,7
Coal	121	27,2	23,1	0	3	174,3	178,4	2,9	181,3	3	0	0	3	6,0	0	0	0,0	361,6
Oil	197,1	0	36,7	20,1	0	253,9	329,4	0	329,4	36,6	923,3	8,1	0	968,0	67,2	0	67,2	1618,5
	1854,4	48,5	343,2	31,4	324,9	2602,4	941,1	710,5	1651,6	1371	1403,5	430,4	336,3	3541,2	585,8	3	588,8	8384,0
Share %	22,1	0,6	4,1	0,4	3,9	31,0	11,2	8,5	19,7	16,4	16,7	5,1	4,0	42,2	7,0	0,0	7,0	
imp+exp	1937,3	48,5	343,2	31,4	324,9	2685,3	1107,1	711,7	1818,8	1538,4	1403,6	430,4	336,3	3708,7	630,1	3	633,1	8845,9

Appendix 28

					Total Export and Import / Port and Area 1994													
EXPO	Russia						Estonia			Latvia					Lithuania			
	St.P.	Vyborg	Kalinin	White S	Other	Total	Tallin	Other	Total	Riga	Ventspils	Liepaja	Other	Total	Klaipeda	Other	Total	Total
U N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
L N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mälaren	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
STHLM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	174
East C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	93
South C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42
West C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	106
Vänern	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	27	0	9	0	21	57	175	0	175	142	0	5	23	170	26	0	26	428
Share %	6,3					13,3	40,9		40,9	33,2				39,7	6,1		6,1	
IMPO																		
	St.P.	Vyborg	Kalinin	White S	Other	Total	Tallin	Other	Total	Riga	Ventspils	Liepaja	Other	Total	Klaipeda	Other	Total	
U N	313	24	60	2	30	429	100	46	146	227	55	9	2	293	59	0	59	927
L N	251	15	84	6	56	412	172	105	277	119	38	31	30	218	92	0	92	999
Mälaren	104	4	42	0	0	150	53	6	59	28	138	4	0	170	62	0	62	441
STHLM	23	0	0	0	3	26	126	11	137	9	6	0	0	15	0	0	0	178
East C	222	0	135	0	154	511	97	28	125	207	55	276	64	602	162	0	162	1400
South C	156	5	32	0	24	217	34	43	77	26	266	40	59	391	90	0	90	775
West C	29	0	66	0	124	219	38	0	38	15	1049	7	16	1087	258	0	258	1602
Vänern	7	49	7	0	0	63	6	0	6	25	6	0	0	31	13	0	13	113
	1105	97	426	8	391	2027	626	239	865	656	1613	367	171	2807	736	0	736	6435
Share %	17,2	1,5	6,6	0,1	6,1	31,5	9,7	3,7	13,4	10,2	25,1	5,7	2,7	43,6	11,4	0,0	11,4	
imp+exp	1132	97	435	8	412	2084	801	239	1040	798	1613	372	194	2977	762	0	762	6863

Appendix 29

					Total Export and Import / Port and Category 1993													
EXPO	Russia						Estonia			Latvia					Lithuania			
	St.P.	Vyborg	Kalinin	White S	Other	Total	Tallin	Other	Total	Riga	Ventspils	Liepaja	Other	Total	Klaipeda	Other	Total	Total
General	12	0	0	0	4	16	8	0	8	5	1	0	0	6	5	0	5	35
Pulpw	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulk	0	0	0	0	0	0	6	0	6	1	0	0	0	1	0	0	0	7
Ore	5	0	5	0	0	10	33	0	33	0	0	0	0	0	0	0	0	43
Coal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oil	0	0	0	0	0	0	31	0	31	22	0	0	0	22	5	0	5	58
	17	0	5	0	4	26	78	0	78	28	1	0	0	29	10	0	10	143
Share %	11,9					18,2	54,5		54,5	19,6				20,3	7,0		7,0	
IMPO																		
	St.P.	Vyborg	Kalinin	White S	Other	Total	Tallin	Other	Total	Riga	Ventspils	Liepaja	Other	Total	Klaipeda	Other	Total	
General	55	1	43	0	3	102	8	4	12	20	13	0	1	34	13	4	17	165
Pulpw	727	50	29	3	90	899	219	158	377	233	89	42	36	400	184	57	241	1917
Bulk	59	0	13	3	27	102	19	11	30	56	220	2	1	279	123	0	123	534
Ore	4	32	0	0	0	36	57	0	57	30	4	0	0	34	0	0	0	127
Coal	23	5	63	0	8	99	261	0	261	22	0	0	0	22	0	0	0	382
Oil	107	0	0	0	94	201	124	0	124	2	724	0	0	726	290	0	290	1341
	975	88	148	6	222	1439	688	173	861	363	1050	44	38	1495	610	61	671	4466
Share %	21,8	2,0	3,3	0,1	5,0	32,2	15,4	3,9	19,3	8,1	23,5	1,0	0,9	33,5	13,7	1,4	15,0	
imp+exp	992	88	153	6	226	1465	766	173	939	391	1051	44	38	1524	620	61	681	4609

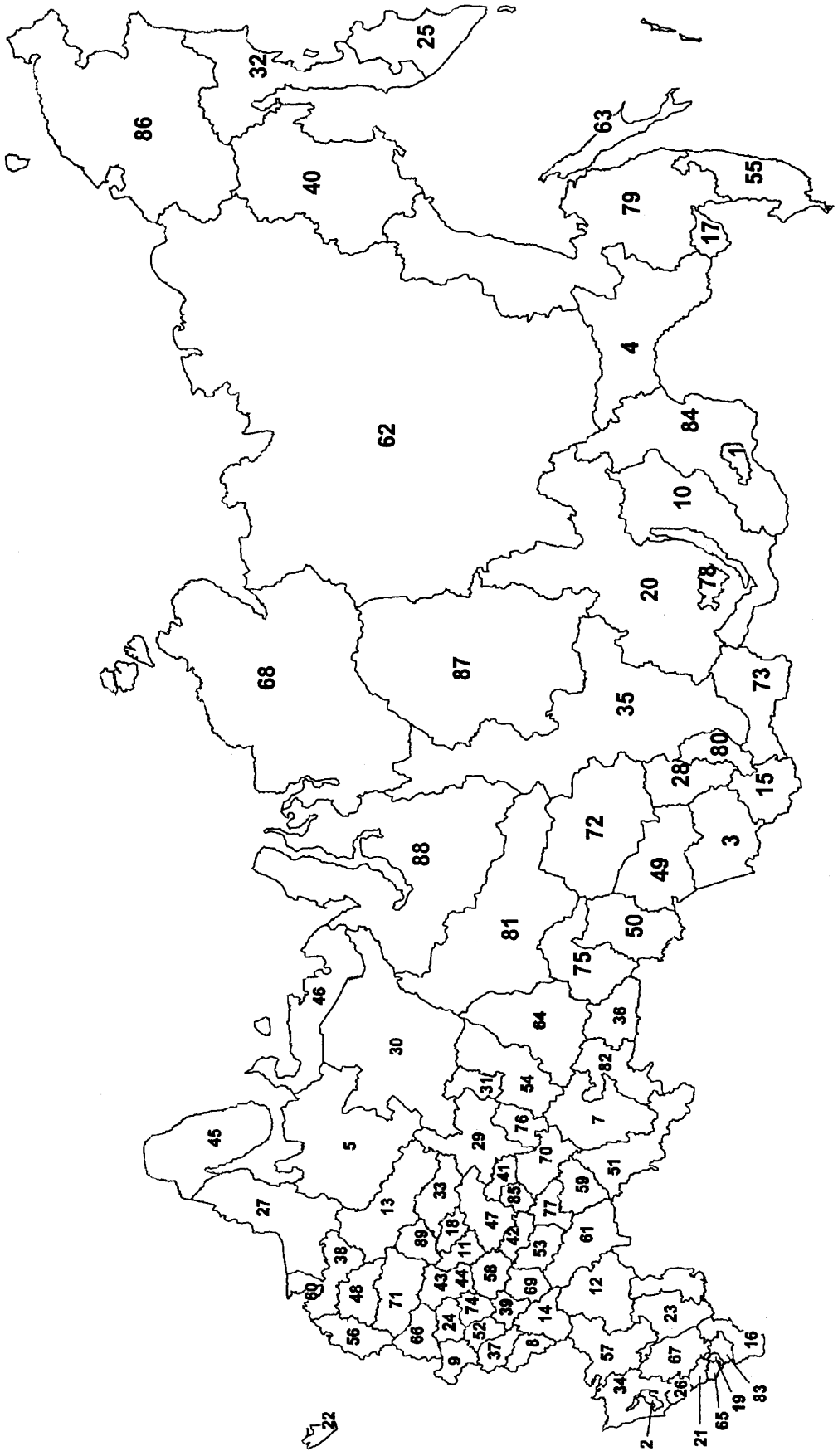
Appendix 30

					Total Export and Import / Port and Area 1993													
EXPO	Russia						Estonia			Latvia					Lithuania			
	St.P.	Vyborg	Kalinin	White S	Other	Total	Tallin	Other	Total	Riga	Ventspils	Liepaja	Other	Total	Klaipeda	Other	Total	Total
U N	5	0	5	0	0	10	38	0	38	13	0	0	0	13	5	0	5	66
L N	0	0	0	0	0	0	5	0	5	0	0	0	0	0	0	0	0	5
Mälaren	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STHLM	8	0	0	0	2	10	12	0	12	2	0	0	0	2	0	0	0	24
East C	5	0	0	0	0	5	1	0	1	3	0	0	0	3	3	0	3	12
South C	0	0	0	0	0	0	6	0	6	0	0	0	0	0	3	0	3	9
West C	0	0	0	0	2	2	16	0	16	10	0	0	0	10	0	0	0	28
Vänern	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	18	0	5	0	4	27	78	0	78	28	0	0	0	28	11	0	11	144
Share %	12,5					18,8	54,2		54,2	19,4				19,4	7,6		7,6	
IMPO																		
	St.P.	Vyborg	Kalinin	White S	Other	Total	Tallin	Other	Total	Riga	Ventspils	Liepaja	Other	Total	Klaipeda	Other	Total	
U N	412	31	0	0	38	481	227	30	257	162	59	3	0	224	91	0	91	1053
L N	154	9	10	3	17	193	83	98	181	35	18	0	27	80	39	7	46	500
Mälaren	23	5	7	0	0	35	38	0	38	11	123	0	1	135	20	0	20	228
STHLM	2	0	0	0	0	2	9	9	18	1	42	0	0	43	0	0	0	63
East C	137	14	52	0	76	279	233	30	263	111	29	31	8	179	48	52	100	821
South C	110	0	55	3	32	200	16	6	22	9	87	9	2	107	51	2	53	382
West C	74	0	6	0	56	136	11	2	13	3	683	0	0	686	333	0	333	1168
Vänern	62	32	17	0	0	111	69	0	69	30	11	2	0	43	28	0	28	251
	974	91	147	6	219	1437	686	175	861	362	1052	45	38	1497	610	61	671	4466
Share %	21,8	2,0	3,3	0,1	4,9	32,2	15,4	3,9	19,3	8,1	23,6	1,0	0,9	33,5	13,7	1,4	15,0	
imp+exp	992	91	152	6	223	1464	764	175	939	390	1052	45	38	1525	621	61	682	4610

Appendix 31 The 89 Russian Oblasts (Numbering refers to map on next page)

1. Aga-Buryat Autonomous Okrug
2. Adygeya Republic
3. Altay Kray
4. Amur Oblast
5. Arkhangel'sk Oblast
6. Astrakhan Oblast
7. Republic of Bashkortostan
8. Belgorod Oblast
9. Bryansk Oblast
10. Republic of Buryatia
11. Vladimir Oblast
12. Volgograd Oblast
13. Vologda Oblast
14. Voronezh Oblast
15. Republic of Gornyy Altay
16. Republic of Dagestan
17. Jewish (Yevreyskiy) Autonomous Oblast
18. Ivanovo Oblast
19. Ingush Republic
20. Irkutsk Oblast
21. Kabardino-Balkar Republic
22. Kaliningrad Oblast
23. Republic of Kalmykia-Khalmg-Tangch
24. Kaluga Oblast
25. Kamchatka Oblast
26. Karachayevo-Cherkess Republic
27. Republic of Karelia
28. Kemerovo Oblast
29. Kirov Oblast
30. Komi Republic
31. Komi-Permyak Autonomous Okrug
32. Koryak Autonomous Okrug
33. Kostroma Oblast
34. Krasnodar Kray
35. Krasnoyarsk Kray
36. Kurgan Oblast
37. Kursk Oblast
38. Leningrad Oblast
39. Lipetsk Oblast
40. Magadan Oblast
41. Republic of Mari-El (Mariyy El)
42. Republic of Mordovia (Mordvinian Republic)
43. Moscow (city)
44. Moscow Oblast
45. Murmansk Oblast
46. Nenets Autonomous Okrug
47. Nizhniy Novgorod (Nizhegorodskiy) Oblast
48. Novgorod Oblast
49. Novosibirsk Oblast
50. Omsk Oblast
51. Orenburg Oblast
52. Orel (Orlovskiy) Oblast
53. Penza Oblast
54. Perm' Oblast
55. Primorskiy Kray
56. Pskov Oblast
57. Rostov Oblast
58. Ryazan Oblast
59. Samara Oblast
60. St Petersburg
61. Saratov Oblast
62. Republic of Sakha (Yakutia)
63. Sakhalin Oblast
64. Sverdlovsk Oblast
65. Republic of Severnaya Osetia (North Osetia)
66. Smolensk Oblast
67. Stavropol' Kray
68. Taymyr (Dolgano-Nenets) Autonomous Okrug
69. Tambov Oblast
70. Republic of Tatarstan
71. Tver' Oblast
72. Tomsk Oblast
73. Republic of Tyva
74. Tula Oblast
75. Tyumen' Oblast
76. Udmurt Republic
77. Ul'yanovsk Oblast
78. Ust'-Orda Buryat Autonomous Okrug
79 Khabarovsk Kray
80. Republic of Khakasia
81. Khanty-Mansi Autonomous Okrug
82. Chelyabinsk Oblast
83. Chechen Republic
84. Chita Oblast
85. Chuvash Republic
86. Chukchi Autonomous Okrug (Chukotka)
87. Evenki Autonomous Okrug
88. Yamalo-Nenets Autonomous Okrug
89. Yaroslavl' Oblast

Appendix 32 The 89 Russian Oblasts (Numbering refers to listing in appendix 31)



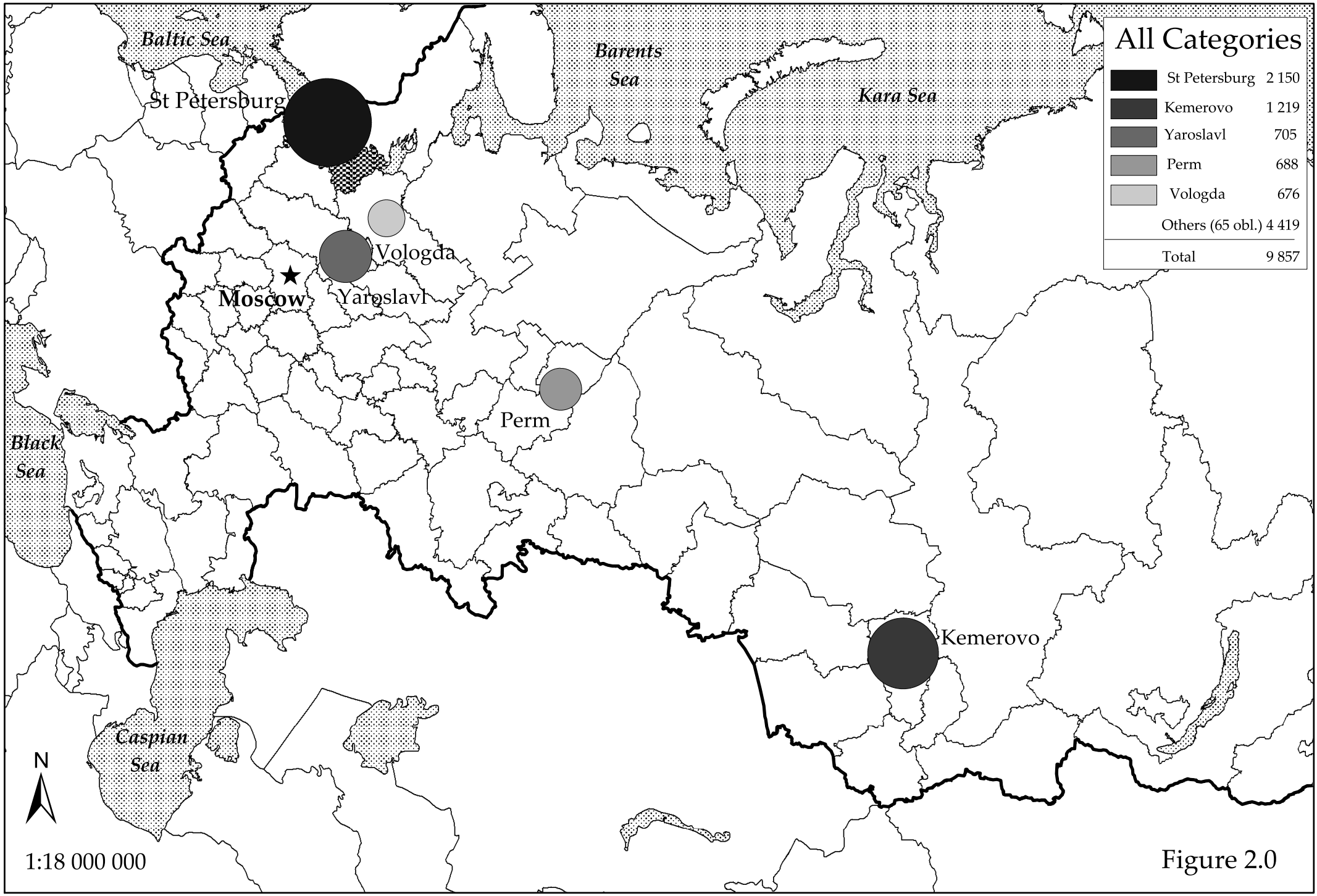

Baltic Sea
Barents Sea
Kara Sea
St Petersburg
Vologda
Moscow
Yaroslavl
Perm
Black Sea
Caspian Sea
Kemerovo
N
1:18 000 000
All Categories
St Petersburg 2 150
Kemerovo 1 219
Yaroslavl 705
Perm 688
Vologda 676
Others (65 obl.) 4 419
Total 9 857

Figure 2.0


Baltic Sea
Kaliningrad
Barents Sea
Kara Sea
St Petersburg
Vologda
Tatarstan
Bashkortostan
Black Sea
Caspian Sea
N
1:18 000 000
General Cargo
St Petersburg 265
Vologda 260
Kaliningrad 121
Bashkortostan 76
Tatarstan 66
Others (60 obl.) 837
Total 1 625

Figure 2.1

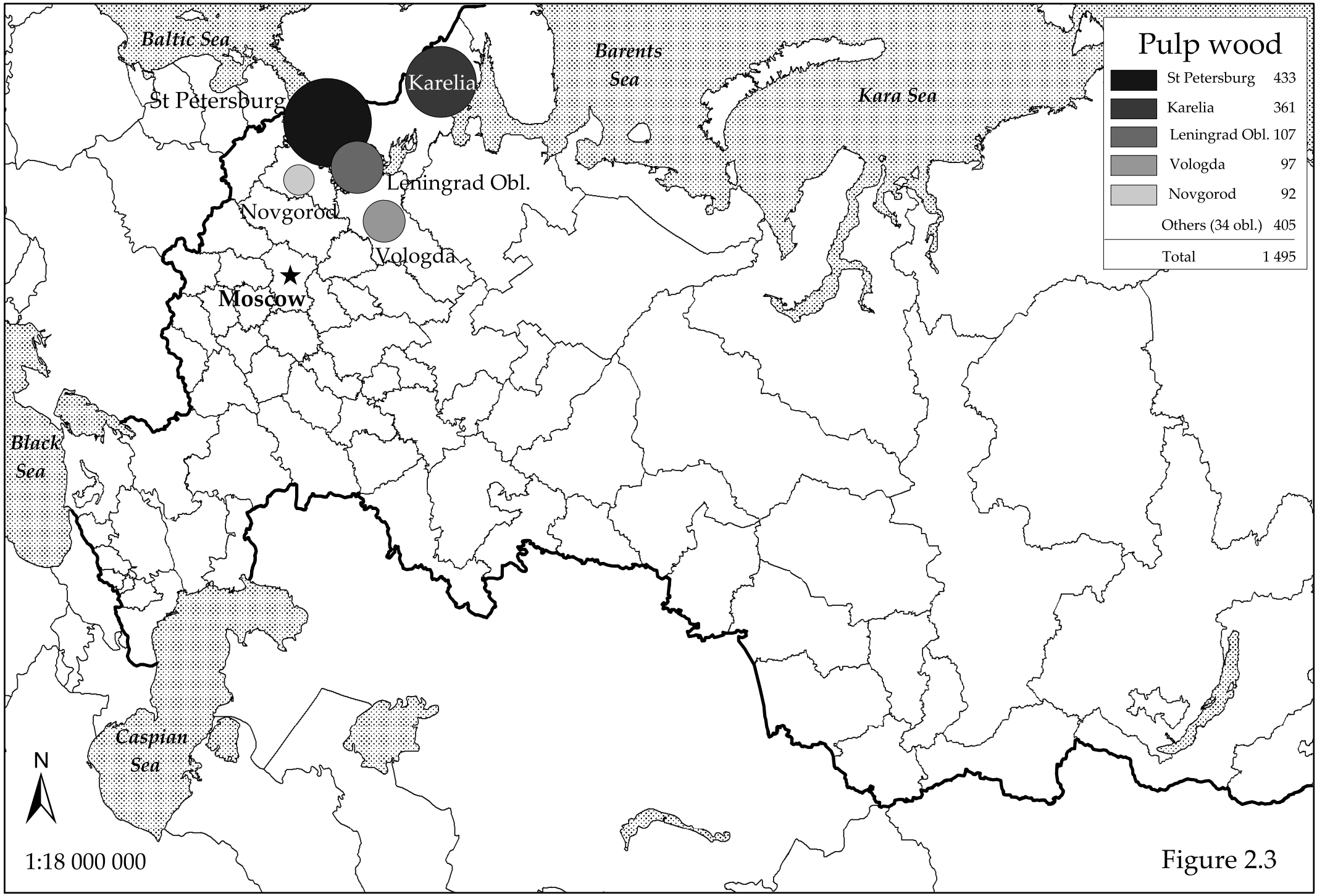

Pulp wood
St Petersburg 433
Karelia 361
Leningrad Obl. 107
Vologda 97
Novgorod 92
Others (34 obl.) 405
Total 1 495
Baltic Sea
Barents Sea
Kara Sea
Karelia
St Petersburg
Leningrad Obl.
Novgorod
Vologda
Moscow
Black Sea
Caspian Sea
N
1:18 000 000

Figure 2.3