

Factors Affecting Investments in Northwest Russian Forest Sector and Industry

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Abstract <p>While most of the equipments, machinery and capacity investments in Russian forest sector dates back to 1970's, they are mostly out-of-date, wastefully, environmentally damaging and the productivity of them is weak. Domestic possibilities to finance forest investments in Russia are still under developing, and the forest sector is not attractive among Russian investors due to the more profitable sectors such as energy, technology and metal clusters. Therefore, the forest sector calls urgently for forest investments to develop, to create more value added production and to survive in international competition in final product markets. Along with the global profit maximisation many foreign forest enterprises have established especially in Northwest Russia during 1990's and 2000's. However, most of these investments are of small-scale (saw- and veneer mills, packaging plants), and they can be seen as pilot investments to test market environment and, especially, the working of wood procurement.</p> <p>This study shortly considers the factors affecting foreign forest sector investments in Russia, and especially in Northwest Russia. The viewpoint is mostly of Finnish forest enterprises and investors. Forest resources, competitive other factors of production and developing domestic final product markets can be seen as supporting factors for forest investments in Russia. Also, the vertical integration strategies and wood procurement of international forest companies over the national borders are important factors to determine the location of investments. The impeding factors in Russia are incompleteness of Forest Code giving at the moment unclear rules for forest leasing, management and silviculture, unpredictable political system and trade policy, deteriorating external price competitiveness in international markets, business culture and weak infrastructure.</p>			
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Preface

During the last fifteen years, operational and business environment in Russia has been under rapid unexpected changes. The collapse of the Soviet Union and the followed financial crises after the free-market experiments introduced business uncertainty. Changes and aims behind political decisions, depreciation of rouble in 1998 together with rapid economic growth during 2000's have also been partly unpredictable and challenges especially for foreign investors. Even though development towards more transparent business culture is progressing in Russia, operators, both domestic and foreign ones, in many cases have still to make their operational decisions under unpredictable circumstances and high business risks concerning the operational profits.

In spite of the difficulties to operate in Russia, several western firms, including many Finnish ones from different kinds of economic activity, have been attracted by profitable possibilities of Russian markets. Establishment in Russia has been carried on by direct green field investments, purchasing existing capacity and operational chains, or by joint ventures with Russian partners. Among those enterprises are also several foreign forest industry companies, which have been attracted especially by Russian unused allowable cut reserves and forest product markets with low current consumption. Also, Finnish forest industry enterprises have built few saw- and veneer mills and packaging plants in Northwest Russia. Nevertheless, Finnish forest industry enterprises have been claimed for too slow progression to establish in Russian markets. While plans and background information for more extensive investments, such as paper and pulp mills, have been prepared, the investments themselves have been firmed up. Also, small and medium sized enterprises have been quite reluctant to increase their activity in Russia or to joint to co-operation projects.

Legislation reforms, especially Forest Code renewal, are undoubtedly among the most important factors for the development process of Russian forest sector. From foreign investors' point of view, issues such as availability of property rights, leasing contracts, forest management and silviculture, labour legislation, customs policy, taxation system and main features of trade policy are essential criteria while planning investments and establishment to Russian market. Often foreign operators claim that they cannot receive equal position and possibilities to operate in Russia compared to the local operators, though on the basis of the spirit of current legislation, operators should not be discriminated. Russian culture in general and business culture in particular are challenging to western business partners and have clearly impacts on operators' working habits and manners. Therefore, understanding and considering cultural differences could help to solve at least some of the appearing problems during establishment to new market area.

The aim of this survey is to shortly consider the factors behind the slow progression of direct forest investments in Northwest Russia, and evaluate the convenience and rationally behind this policy. Unlike many other foreign forest enterprises, Finnish forest companies have avoided several essential problems and conflicts related to social responsibility of investments, cultural

differences and, especially, to wood procurement with slow progression in Northwest Russia. This does not mean that Finnish forest enterprises would have managed to handle their establishment to Russia totally without difficulties, but slow adjusting process has undoubtedly been beneficial in avoiding biggest mistakes in Russian market. This survey describes those features of economy and societal system, which can be estimated to be the most significant from foreign forest operators' standpoint despite the strategy operator has decided to use while entering to Russian market.

1 Introduction

Russian forest sector has undergone a deep structural change since the collapse of Soviet Union. The forest sector in Russia has adapted to new market and competition based business environment along with the changes in social and political systems, institutional settings and general economic development. Even though the forest sector in Russia has developed during the recent years, there are still many fundamental issues which hinder further development. Some to mention, the inherited machinery, equipments and technology from the Soviet era are mainly out of date or economically inefficient, the business culture are still proceeding towards market orientating thinking, the management of forests and legislation related to forest leases are under construction, and the lack of infrastructure calls for investments to better access to forest resources. The role of Russian forest sector in the global scale has so far been mostly as a raw material producer for export or as a producer of low value added products (Mutanen et al. 2005). Therefore, Russian forest sector urgently calls for maintaining and green field investments, either from domestic or foreign origin, to survive in international competition and to provide higher value added domestic production

The Federal Government of Russia has taken a new initiative to promote the modernisation of Russian forest sector and business related to it. The adoption of the Forestry Development Concept for 2003 – 2010, and Timber Industry Development Guidelines for the period up to 2015 has been presented by the President of Russia to be adopted as agendas towards progressive forest sector in Russia (Putin 2006). The objective is politically one of the main aspects to develop Russian forest sector, and the immediate promotion was an announcement of increase in tariffs for roundwood exports.

Recently, an extensive literature has explored the economic development and success of Russia and other Eastern transitional economies, and it is even not possible to summarise all the recent contributions (among others, see Sutela 1998, 2003, and Alapuro et al. 2004). Also, there are many studies concentrating on the investments, investment behaviour and business activity in Russia (World Bank 2004, Filippov et al. 2005). However, those studies are typically depicting general economic development with multi-sectoral approach, or describing case studies of experiments of foreign firms to establish in Russian markets (Karhapää-Puhakka 2004, Mäkinen 2005). Even though they provide a good understanding of the background of the economic development and give general aspects for investments in Russia, a closer forest sector specific analysis for investment behaviour is needed. This follows from the specific characteristics related to forest sector in general, and the use of forest related resources in particular, such as requirements for logistics, wood procurement and accessibility to forest resources. The existing studies concerning Russian forest sector either do not account investments (World Bank 1997, Unece 2003), their purposes are somewhat different (Ovaskainen et al. 1999, Nilsson and Kleinhof 2001, Piispa et al. 2006), or they need updating (Dudarev et al. 2002, 2004, Makkonen 2003). To our knowledge, however, Nilsson and Söderholm (2002) and Filippov et al. (2005) are only attempts to evaluate the institutional obstacles for direct forest investments in Russia.

Typically, an investment decision in market orientating business strategy is based on the careful planning, where the profitability of investment is assessed from different perspectives. The global forest industry companies do not make any exception from this working. The rate of return and discounted present value of the investment are most commonly used indicators to evaluate the profitability of the investment decision. However, in the background there are many aspects that are affecting on these indicators, such as stability of the economy including legislation and its enforcement, infrastructure, business climate and the availability of the factors of production. In forest sector, perhaps the most important factor is the Forest Code, the content of which is still under reconstruction.

This paper tries to give a short overview of the factors which are likely to impede or support investment behaviour in Russian forest sector. The viewpoint of the study is mainly from Finnish perspective and concentrates only on Northwest Russia. The latter is due to the ongoing forest investments of Finnish enterprises. Most the recent investments of Finnish forest firms to Russia have been implemented in Northwest Russia, while some of the investment possibilities are under evaluation. The main conclusions, however, can be applied with some cautions for other regions of Russia as well as for some other industries.

The paper is organised as follows. Chapter 2 gives a short review of the history of the co-operation and trade between former Soviet Union, Russia and Finland. The Chapter also shortly describes how Northwest Russia has been a competitive source of roundwood for Finnish forest industry complementing partly domestic supply, and how the recent investments in Northwest Russia has been gradually integrated as a part of the global strategy of forest companies. In the light of this overview, it is then easier to understand the current state of the forest sector and industry, and the investment requirements the sector in Northwest Russia needs to be able to develop and survive in international scale. Chapter 3 gives a general description of the development of macroeconomic fundamentals in Russia from the viewpoint of economic interests of forest sector enterprises. A special emphasis is given to the close connection of the foreign trade, which is dominated of oil exports and exchange rate development. The economic policy executed in Russia is highly dependent on the oil sector success and income, which gives challenges as well as opportunities to the current forest sector investment options.

The Russian industrial forest resources are frequently referred to when forest investment options are discussed. However, the commercial use of Russian forest resources is limited by the poor infrastructure what concerns logging, hauling and transportation. The challenges related to the improvements in the commercial use of timber resources, that is, availability and accessibility of wood resources for the new capacity investments, as well as other necessary factors of production are discussed in Chapter 4. The chapter also includes an overview on the forest product markets. In Chapter 5 we characterise the institutional factors which affect investments and establishment of foreign enterprises in Russian markets. In forest sector, among the most important institutional factors are social responsibility of business, which slightly differ from that of the western corporate social responsibility, general legislation and, especially, Forest Code, which defines the rights and responsibilities for operations in forest sector.

Chapter 6 concentrates on analysing business culture in Russia, and how it differs from western business culture. Also, we give a short review on other general Russian-specific characteristics, which are likely to have effects on business and establishment of the enterprises in Russia. Finally, Chapter 7 concludes with some critical remarks. In Appendix we present a profile for investment environment, especially from the standpoint of forest industry, which shortly summarise the main findings and their relative importance for investment decisions.

2 Background of Joint Activity between Finnish and Russian Forest Sectors and Industries

There have been two main reasons why Finnish forest companies have been interested in Russian roundwood resources. The first reason relates to the deficit between domestic supply and (planned) industrial use, and the second one is due to the price competitiveness of imported roundwood with respect to the domestic supply. The roundwood imports during the Soviet period was for the most based on shortages of domestic pulpwood, mainly hardwood. This period is discussed in Section 2.1. During the Russian era, enhanced price competitiveness of logs increased both absolute and relative shares of log dimensions in roundwood import. This period is discussed in Section 2.2. The current import shares of softwood and hardwood are about 16 and 53 percent of the total annual industrial use of roundwood in Finnish forest industry, respectively. The alternative of processing of that amount of roundwood in Russia instead of import it to Finland is discussed in Section 2.3.

2.1 Co-operation in Soviet Period

During the Soviet era the co-operation between Finnish and Russian operators in forest sector was highly controlled and limited. The first increase in volumes of imported roundwood to Finland was from 3 million cubic meters to 6 million cubic meters during 1973 – 1976. This growth was closely connected to the adoption of price contracting system between the major Forest Industry Firms (FIF) as buyers and the organisation representing Non-Industrial Private Forest Owners (NIPFO) as sellers (Kahiluoto 1988, Viitala 2002). Because of the increased import volumes a need of public management of roundwood market became obvious, and a committee was nominated to manage import (Komiteamietintö, Tuontipuutoimikunta 1977:50).

Public management was institutionalised by establishing a permanent advisory group, Tuontipuulautakunta from 1978 to 1987, to control roundwood imports in order to stabilise the domestic market equilibrium. The second type of market contracting to govern all timber species and markets in the whole country was introduced in 1977. At that time, forest industry counted import volumes before making any wood procurement contracts from domestic markets. Average annual import volume grew to 6 million cubic meters, and the peak volume at 1984 was 7.6 million cubic meters (Fig. 1), of which 86 % originated from Soviet Union.

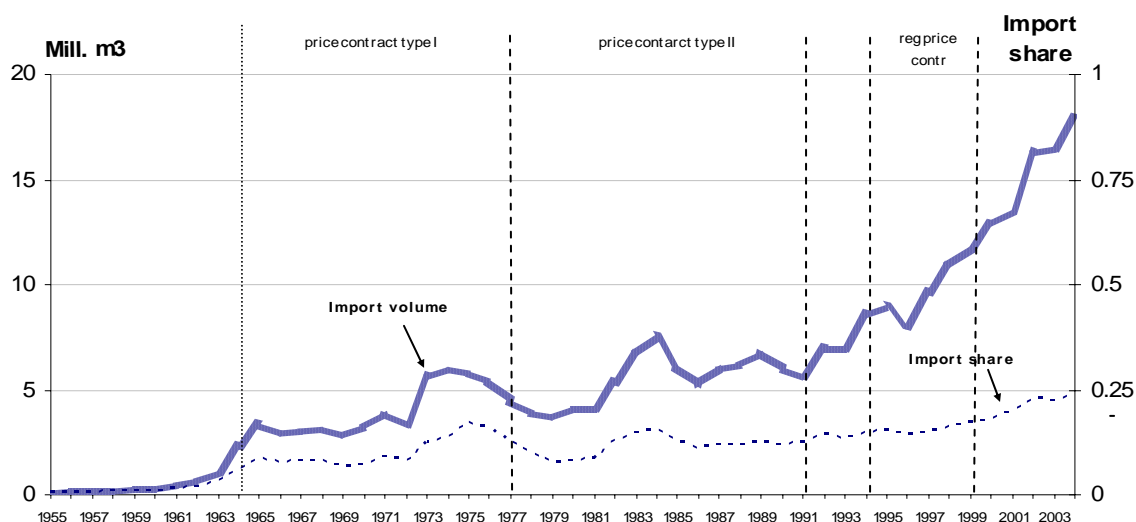


Fig. 1. Industrial use of imported wood material (roundwood and wood residue) to Finland, 1955 – 2004

In general, the growth in roundwood import volumes to Finland until 1991 was rather modest even though some annual deviation existed due to the contract policy and domestic wood supply. The import volumes were involved partly in the five year barter contracts between Finland and Soviet Union, and annual trade volumes were decided beforehand among major Finnish roundwood importers. Thus, the significance of real demand and supply was marginal, and due to the contracts involved in barter trade it would be therefore misleading to discuss about market forces in roundwood trade between Finland and Soviet Union.

2.2 Trade and Business during Russian Era

Under the price contracting regime in Finland, roundwood import comprised almost exclusively pulpwood timber species. Almost parallel with the collapse of Soviet Union, the domestic roundwood price contracting was ceased in 1991. In Finland, public evaluation in 1993 considered that 3.5 million cubic meters annual hardwood pulpwood import is a necessity to complement domestic wood procurement. However, immediately after the structural breaks in price contracting system in Finland and political system in Russia, the volumes of imported roundwood increased rapidly (Fig. 1), and the distribution of timber assortments started to diversify parallel with the increase in total volume (Fig. 2 and 3).

Among other things, the reason for the increased roundwood trade can be understood by the societal changes in Russia in the beginning of 1990s. The change in policy regime in 1991 in Russia was rapid and the adoption of new societal system together with the market-base way of thinking, the challenges to survive in international competition and to ensure price competitiveness of domestic forest sector also challenged the forest industry enterprises. Most

of them were privatised in the beginning of 1990s, and the domestic forest products markets were opened for free competition. While the products of the Russian forest industry were rarely competitive with foreign products mainly due to the inherited lack of incentives to respond to customer-orientated demand, only low value added products, such as roundwood, plywood and sawn timber were relatively high competitive export products (Vinokurova et al. 2005). To be able to maintain the existence of business and to avoid bankrupt, the Russian enterprises were eager to increase co-operation and trade with foreign partners and receive currency income. This, among many other things, explains the vast increase of roundwood trade to Finland and many other countries.¹

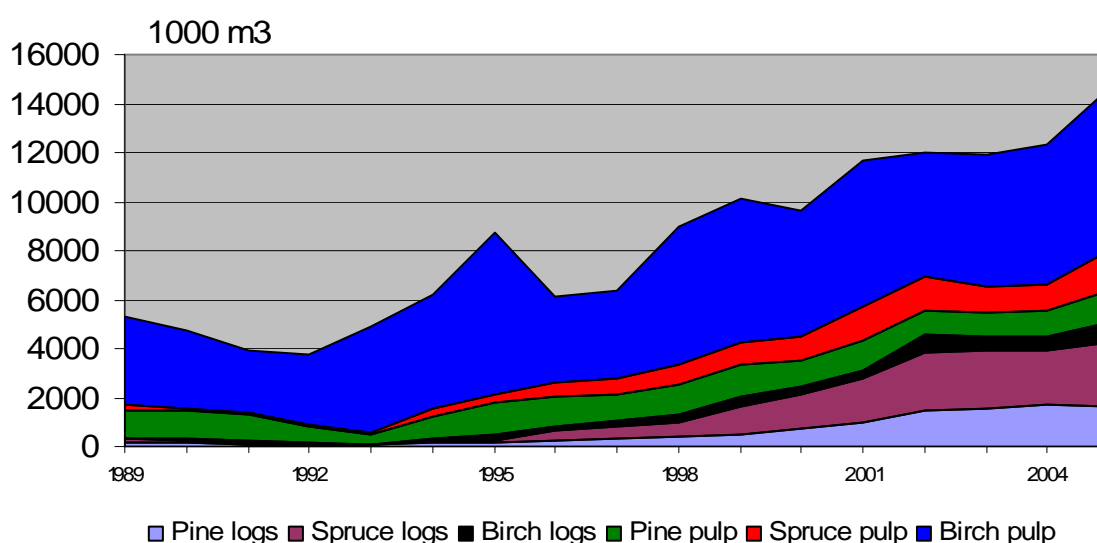


Fig. 2. Distribution of imported roundwood from Russia, 1989 – 2005

As can be seen from Figures 2 and 3, the export volumes from Russia to Finland as well as the distribution of timber assortments has increased after the beginning of 1990s. Even though birch pulpwood is still the most significant article in Finnish-Russian roundwood trade, the coniferous logs have become more important in trade. Especially the share of spruce logs, accounting about 15 percent of the total roundwood trade to Finland in 2004, has increased considerably after the devaluation of rouble in 1998. The large share of birch pulpwood is explained by the fact that in Russia there is not any consequential hardwood utilising forest industry capacity. As discussed in Vinokurova et al. (2005), while the stands in Russia include mixed species and while the legislation obligates to cut all the wood from the stands, logging companies do not hesitate to sell hardwood even for low price to receive at least some income. For Finnish forest enterprises, the roundwood imports from Russia offered a way to achieve cheap raw material. Also, while there were some lacks to acquire deciduous pulpwood in Finland, imported birch pulpwood complemented domestic hardwood procurement. Import growth has been stabilised

¹ Viitanen et al. (2006) describe that the roundwood trade volumes in Northern Europe originates mostly from east (Russia, Baltic States) to west (Finland, Sweden, Norway).

from 2001 on mainly because of the difficulties on the accessibility on the new high quality stands in Northwest Russia, and increased unit prices for the imported assortments. Especially, because of the increased demand and competition of spruce logs and revaluation of rouble, the unit price of them has increased considerably in recent years (Metinfo 2006).

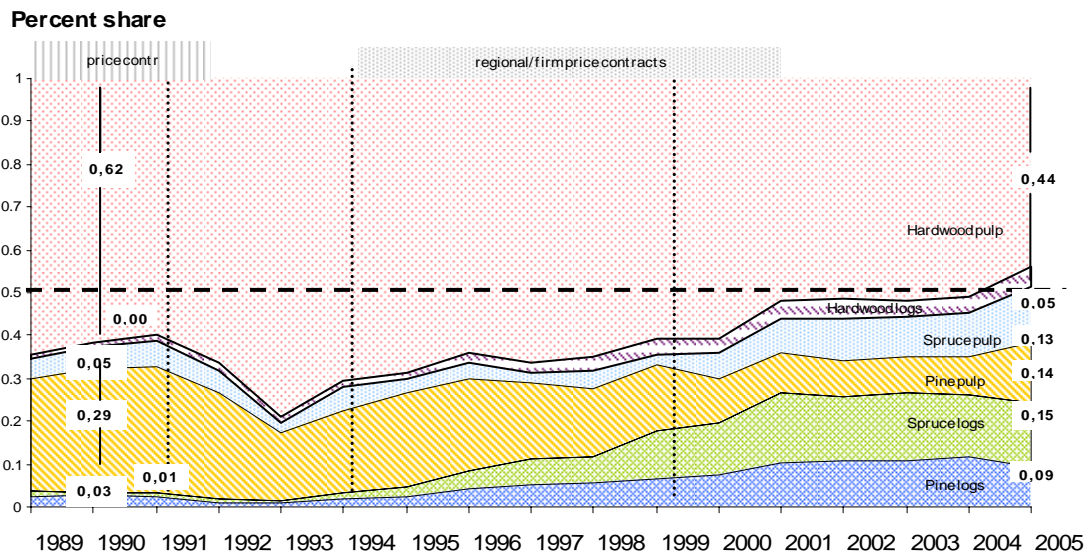


Fig. 3. Percent shares of imported roundwood from Russia, 1989 – 2005

The transition from barter trade to market base competition did not go along without complication. During the period of barter trade between Finland and Russia, only the big Finnish merchant houses had prominent positions in roundwood trade operations. Since the collapse of the Soviet economy, these merchant houses, which were among the major Finnish firms, had adequate experience, knowledge and contacts to directly continue the co-operation and trade from the base of barter trade tradition. Clearly, immediately after the change in policy regime in Russia, this experience from Soviet time generated competitive advantage for Finnish forest companies with respect to other foreign competitors.

From the Russian side, the transition to market orientating trade and business was not that easy. During the Soviet time, only Soviet merchant institute managed all international trade contracts. This institution was divided into major economic sectors and experts there had only limited engineering knowledge of barter trade activities. The firms typically had no direct business contacts to abroad. Also in Soviet Union, the total separation of international trade and domestic forest sector activities in industry and timber management complicated the adoption of comprehensive international co-operation. Thus, only limited number of experts, who had some experience from roundwood trade, was able to attend international trade and acquire competent trade partners from 1992 on. Majority of roundwood suppliers were totally unaccustomed with features of market trade such as pricing, delivery and quality rules. During 1990s, because of

the learning from mistakes and continuous doing on business, the trade infrastructure has however gradually become more stable improving the quality of trade co-operation.

Table 1. Physical forest investments of Finnish origin in Russia

Plant	Capacity, per year	Year	Investor
Sawmills			
Impilahti	100 000 m ³	2003	StoraEnso
Nebloch	100 000 m ³	2004	StoraEnso
Pestovo	300 000 m ³	2004	UPM-Kymmene
Podporozhie	200 000 m ³	2005	Metsäbotnia
Suda	100 000 m ³	2007	Metsäbotnia
Vologda	20 000 m ³	2007	Koskisen
Veneer mills			
Tshudovsky	60 000 m ³	1988	UPM-Kymmene
Tshudovsky	10 000 000 m ³	2003	UPM-Kymmene
Vologda	40 000 m ³	2008 – 2010	Koskisen
Cardboard			
Balabanovo	105 000 000 m ²	2002	Stora Enso
Arzamas	120 000 000 m ²	2004	Stora Enso
Lukhovitsky	150 000 000 m ²	2008	Stora Enso
Board shells			
St. Petersburg	4000 t	2001	Ahlström

Along with the increased roundwood trade to Finland, Finnish forest industry has also focused on the investments of forest industry process capacity in Northwest Russia. Table 1 depicts the recent forest investment projects of Finnish origin.² While these investments, comprising of small-scale saw- and veneer mills and cardboard production, can be seen so far more as pilot projects and tests for the fluent wood procurement, other factors of production and development of forest product markets, the interests of the Finnish firms has also partly been due to the changes in the business infrastructure in Russia. Federal Government of Russia has started to support development towards increased domestic use of roundwood and more value added production in Northwest Russia (Kivelä 2006). In the future, this new political infrastructure may dramatically change the usage and export of roundwood from Northwest Russia, and consequently have economic impacts both on Finland and Northwest Russia because of the relocation of roundwood industry production.

² Finnish origin companies, such as Thomesto, have also bought or they are partners in many wood procurement firms in Russia. The total value of Finnish based forest sector investments in Russia is about 300 million euros. In 26.6.2006 Ruukki Group signed preliminary contract to build sawmill and veneer mill in Kostroma area.

2.3 Alternatives to Process Russian Roundwood

The use of coniferous logs imported from Russia to Finland has gradually increased. As can be seen from Table 2, dependence on imported logs has increased in Finnish wood product industries from an average of 3 percent in 1995 – 1998 to 13 percent in 1999 – 2005. Theoretically, current import volumes of coniferous logs will feed 6 – 8 large industrial sawmills in Finland annually. However, the realised use of imported logs has been distributed to numerous mills implying that there does not actually exist any strict dependence on imported coniferous logs. The dependence on imported deciduous logs (mostly birch) is more drastic. In 2004, 32 percent of total industrial deciduous log use in Finland was based on imported logs. This share is not easily substituted from domestic stands.

In future, multinational Finnish forest companies have different alternatives to ensure wood procurement for sawmills and paper and pulp mills. The first strategy is – *ceteris paribus* – to continue import of logs from Russia. Second, the distribution of sawmill capacity can be reorganised by processing the current import volumes in new invested plants in Russia, and by importing the sawmill residue as a by-product to pulp and paper mills in Finland. The third alternative is to centralise sawmill capacity to Finland, and purchase the needed volumes of logs from domestic market. All of these alternatives include risks and many uncertainties. The first strategy is unlikely to be fulfilled because of many economical and political reasons discussed in more details in the following chapters. The second alternative implies lease contracts that may become more predictable in the future (depending on recent authority decisions and operating in inferior infrastructure with expensive investment requirements together with many societal and political uncertainties discussed also in the following chapters). The third alternative concerns purchasing the required log volumes from diversified NIPFO markets in Finland, where log supply can change over the time, but where the operational environment (infrastructure, TGM applied in harvest and transports) is rather stable.³

The profitability of each of these strategies requires calculations, evaluations of the possible risks and then comparisons of investment alternatives. Majority of annual variable costs of sawnwood production are lower in Russia than in Finland. On the other hand, fixed costs are the most important costs supporting production in Finland. Investments to sawmill capacity in Finland are currently replacement investments in the existing plants diminishing the infrastructure costs of investments. In Russia, majority of investments are green field implying outlays to construct infrastructure (roads, roundwood storages, mill transportation...) in addition to the direct investment costs (see also Piispa et al. 2006 and their Appendix 2). These costs must be compensated by the discounted differential in the annual costs of production between Finnish and Russian mills.

³ See Ollonqvist et al. (2006) for more on the delocalisation strategies of Finnish forest enterprises.

Table 2. Volumes (Mill. m³) and share of imported logs from Russia used by Finnish wood product industries, 1995 – 2004

Softwood				
	Domestic	Import	Total	%-share of imports
1995 – 1998*	25,0	0,8	25,8	3%
1999 – 2004*	27,9	3,2	31,1	10%
Change	2,9	2,4	5,3	
2004	27,7	4,0	31,7	13%
Hardwood				
	Domestic	Import	Total	%-share of imports
1995 – 1998*	1,3	0,2	1,5	14%
1999 – 2004*	1,2	0,5	1,7	30%
Change	-0,1	0,3	0,2	
2004	1,2	0,6	1,8	32%

* Average values

Table 3. Volumes (Mill. m³) and share of imported pulpwood and sawmill residue from Russia used by Finnish pulp and paper industry, 1995 – 2004

Softwood				
	Domestic	Import	Total	%-share of imports
1995 – 1998*	20,8	1,9	22,7	8%
1999 – 2004*	21,4	2,4	23,8	10%
Change	0,6	0,4	1,0	
2004	22,0	2,9	24,7	12%
Hardwood				
	Domestic	Import	Total	%-share of imports
1995 – 1998*	5,2	5,2	10,4	50%
1999 – 2004*	5,9	7,2	13,1	55%
Change	0,7	2,0	2,7	
2004	6,7	7,9	14,5	54%
Wood residue				
	Domestic	Import	Total	%-share of imports
1995 – 1998*	10,1	0,7	10,8	6%
1999 – 2004*	11,2	1,4	12,6	11%
Change	1,1	0,7	1,8	
2004	10,9	2,2	13,1	17%

* Average values

Dependence on imported roundwood in Finnish pulp and paper industries is more complicated, because it is also dependent on the investment strategies and location of wood working industries. Table 3 depicts the domestic use of pulpwood and wood residue, import volumes and their percent shares of total use in Finland. As can be seen from the Tables, the share of imported coniferous pulpwood has slightly increased during the last ten years. In 2005, the use of imported coniferous pulpwood (3,8 mill. m³) still increased and constituted about 20 percent of the total use in Finland. The dependence on imported hardwood is even higher constituting over 50 percent of the total use. In addition, the combined volumes of the imports of wood residue (4,3 mill. m³ in 2005) and residue produced in Finland from imported softwood logs (1,9 mill. m³ in 2005) are higher than the imported coniferous pulpwood from Russia to Finland.

The following chapters concentrate to analyse the factors which are likely to affect forest investments in Northwest Russia. While it is not possible in this survey to go any details behind the investment decision⁴, the accessibility to the aggregate wood resources as well as macroeconomic indicators and other societal specific factors give insight of the profitability and risk of forest investments.

3 Russian Macroeconomics

3.1 General Economic Development

To understand thoroughly the investment behaviour, financial possibilities and other factors supporting and impeding sectoral investments in Russia, it is essential to describe and understand the general economic development, and anticipate the factors which are likely to affect this development in the near future. Macroeconomic indicators give insight on the directions towards the country is proceeding, and about the general circumstances and atmosphere for investments.

The beginning of the Russian Federation was not an economic success. Starting from 1992 the GDP was ever decreasing in Russia, and in 1998 it amounted to only about two third compared to that in 1992.⁵ During the same time period investments collapsed about 60 % (see Fig. 4). The reason for this regressive development was manifold. During the Soviet era, the domestic production was controlled and determined by the central planning authority, which mainly promoted large scale industry complexes. While most of the industrial production was based on the standardised products, there were little incentives for research and development activity or production innovations, the only exception being the military sector. Also, domestic industrial sector was protected from import competition, which reduced further the need for innovations.

⁴ For example, the rate of return calculations is specific for firm, location, production article and final market, among others.

⁵ According to Shleifer and Treisman (2005) Russia's economic performance in the 1990's is underestimated. They argue that the size of unofficial economy, underreported production and other statistics reveal that the actual economic development has been far better than officially reported.

Due to the socialistic system and idea, the unemployment rate in Soviet Union was low. However, the productivity of labour was low as well, and enterprises were committed to maintain and finance many social responses such as schools and public infrastructure. The lack of cash flow and finance possibilities impeded and delayed investments.

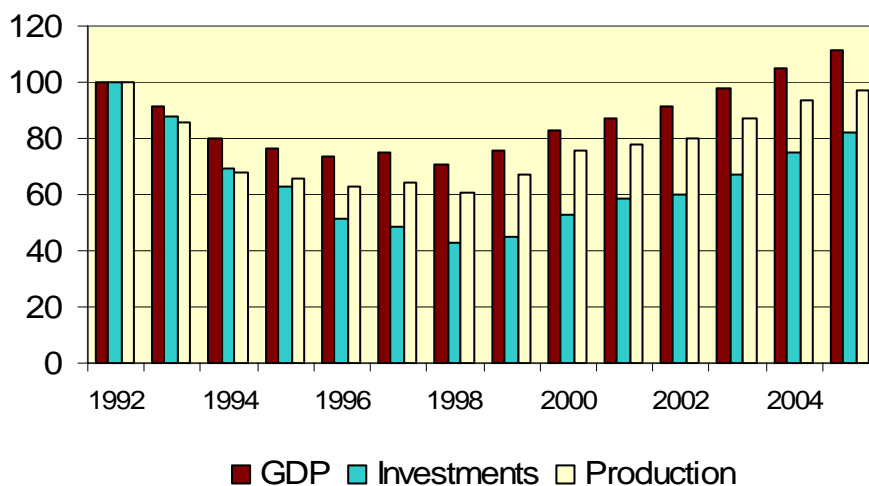


Fig. 4. Annual GDP, investments and industrial production, 1992=100 (Source: BOFIT and Rosstat)

After the fundamental change in policy regime in 1992, enterprises were largely privatised, domestic markets were opened and they were challenged to the international competition. While the Russian standards and most products did not meet the demand in international markets, the domestic enterprises plunged into difficulties together with increasing import volumes, and out-of-date and inefficient production technology. Only raw materials were relatively highly competitive products and their exports, dominating the total exports, increased until the year 1997 (see Fig. 5). The income from export surplus were largely invested abroad to avoid income taxes. In turn, this led to the Federal budget deficit.

In August 1998, a financial and economic crisis broke out in Russia.⁶ As will be discussed in more details in the next section, one consequence of this crisis was a devaluation of Russian rouble. As can be seen from Fig. 4, the immediate impacts of the change in exchange rate regime was that GDP and, especially, investments in Russia started increasing. The monetary external surplus was achieved in spite the modest increase in the total export because the aggregate annual volume of import nearly halved (see Fig. 5). The external surplus materialised in a rapid economic recovery and aggregate domestic GNP recovered rapidly back into the 1997 level in 1999. This was a result from low exchange rate which improved price competitiveness of export business and at the same time provided competitive advantage on domestic industry towards import. The average annual GDP growth has thereafter exceeded 6 percent.

⁶ See Komulainen and Korhonen (2000) for a thorough understanding of the reasons, background and effects of the crisis.

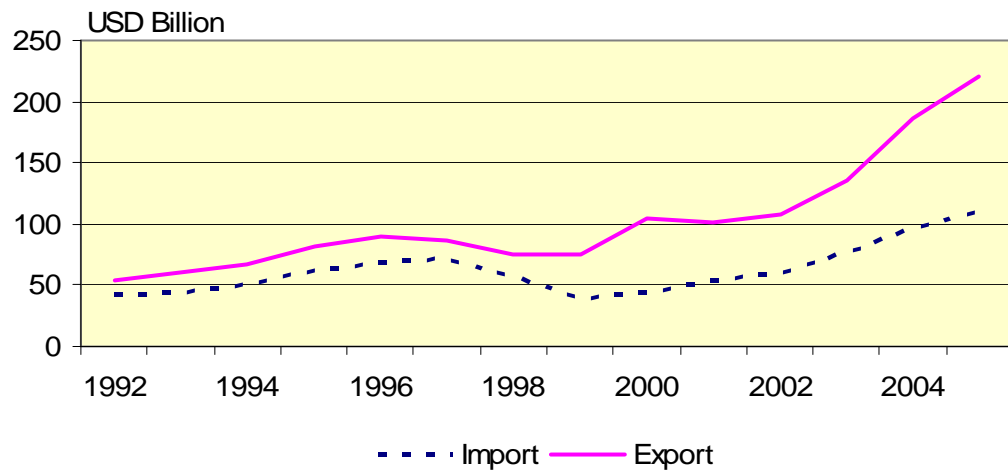


Fig. 5. Russian foreign trade, USD billion (Source: BOFIT, Rosstat)

Since the economic crisis, Russia has rapidly achieved strong positions of trade, current account and federal budget surpluses. The current account surplus, which increased from zero in 1998 to over 60 billion USD in 2004, has been based on the production of raw materials and export incomes from gas, crude oil and other low value added products (Fig. 6). The strong export market competitiveness has increasingly been based on low costs of production supported by the depreciation of rouble. During 2000's, Russia has earned over 40 % of total export incomes from crude oil and gas exports. While the annual growth of crude oil export volumes has been only few percents, the sharp increase in world market prices has accelerated the trade surplus to surge to about USD 100 billion at the end of 2005.

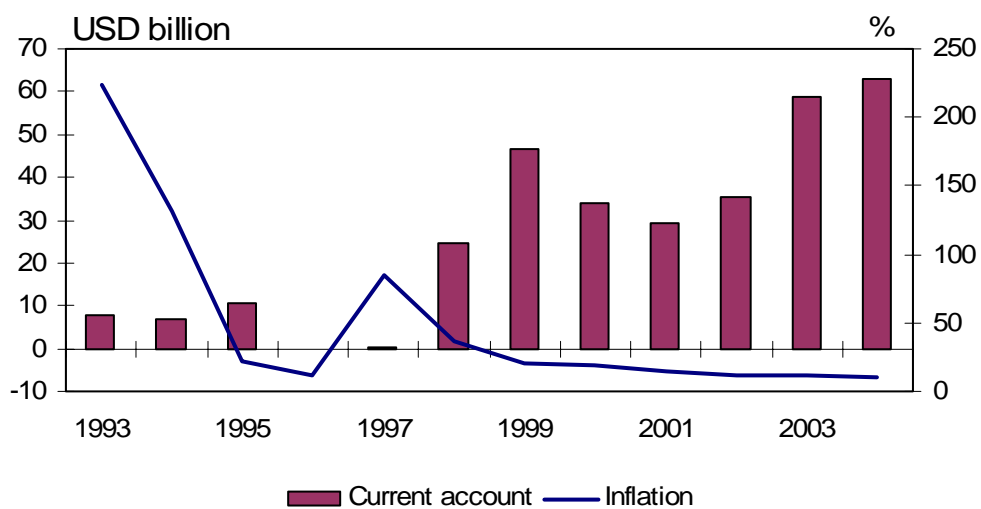


Fig. 6. Current account and inflation in Russia (Source: BOFIT, Rosstat)

The sharp decrease of import after the devaluation of rouble in 1998 has recovered through the increased purchasing power of all social groups in Russia. Part of these earnings has been directed to increased consumption that has also boosted domestic inflation. Even though there are large regional differences between income distributions, the demand for Western goods and services has remained strong. Especially, transport equipments and machinery constituting investment commodities comprise over half of the imports from non-CIS countries and about one fourth from CIS countries in 2004. While the production machinery in forestry sector is largely out-of-date in Russia and the domestic forest sector lacks of finance and technical innovations, it is suspected that most of the forest investment goods are of foreign origin also in near future.

During 2000s, general macroeconomic development has been stabilised in Russia. After the hyperinflation in the beginning of 1990's and the peak due to the economic crisis in 1998, the annual inflation rate has decelerated slightly above 10 percent in 2000's (Fig. 6). Foreign currency debt, that increased throughout the late 1990's and recorded in 1999 (88 % of GNP), has been repaid at good international level (18 % of GDP) in 2004 by the help of positive trade balance. The growing world market demand for oil and gas together with increasing unit prices of oil has accumulated foreign currency surplus in Russia. The real lending interest rate has been zero or negative from 2001 on and made costs in loan financing favourable what concerns debt financing of investments. Also, the term of payment of loans has increased. On the other hand, negative deposit interest rates since 1997 have boosted non-monetary domestic investment financing.

3.2 Exchange Rate Effects

In August 1998, due to the massive capital outflow, sharp decrease of equity prices and increase in interest rates, rouble was allowed to float and it depreciated from 6 to about 20-25 RBL for one USD. An immediate consequence of the crisis and the change of the exchange rate regime was the collapse of the banking system, default of debts, and decrease of asset and saving values.

Because of the devaluation, and especially, increase of the world market prices for raw materials, such as crude oil and gas, Russia's current account has turned to surplus and thereafter there has not been any strong external pressure against the nominal exchange rate. As can be seen from Fig. 7, the exchange rate of rouble against dollar has been rather stable since March 1999. During the same time period, the market development between euro and dollar can be seen as a main reason for rouble's depreciation against euro. Between 2002 and 2005 rouble has depreciated about 28 percent against euro even though during 2005 it appreciated about 10 percent.

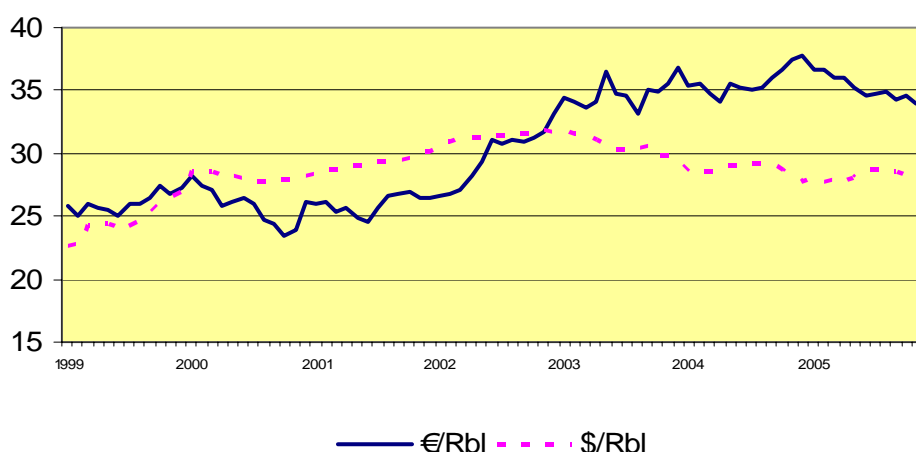


Fig. 7. Nominal exchange rate of rouble versus euro and USD (Source: CBR)

To understand and to evaluate the anticipated changes in exchange rates, it is necessary to understand the relevance of capital in- and outflows. As discussed in previous section, Russia benefits from high world market prices for crude oil, gas and other raw materials.⁷ Theoretically, an extensive energy and mineral exports increase current account of the country together with extensive currency inflow. This leads supply for foreign and demand for domestic currency, respectively, and to the appreciation of domestic currency. Currently and in the near future, Russian export sector is still dominated by oil and gas exports. According to several studies (among others, see Plekhanov 2005, Sutela 2005, Westin 2005 and Korhonen 2006), there seems to be a wide understanding and consensus that rouble is currently either close to its equilibrium level or slightly undervalued, but due to the increasing revenues from oil and gas exports, there is a high pressure for it to appreciate in the near future.

According to the standard macroeconomic definition, real exchange rate or the price competitiveness can be formulated as a ratio

$$(1) \quad R = \frac{eP^f}{P},$$

where e is the nominal exchange rate, and P^f and P are prices of the foreign and domestic commodities, respectively. If the increase in prices is higher in abroad or if the nominal exchange rate becomes higher (that is, the domestic currency devaluates meaning that one should pay more per unit for foreign currency), a country gains price competitiveness and its commodities become cheaper relative to those produced in competitor countries.

⁷ The Russian Stabilisation Fund was established in 2004 to prevent the currency inflow from exports of natural resources to funnel and overheat the Russian economy. Currently, the size of this Fund is about 7 percent of GDP. See Ollus (2005) for more details and success of this Fund.

Using equation (1), Fig. 8. depicts the evolution of real exchange rate of rouble against euro.⁸ After the devaluation of rouble in August 1998, the price competitiveness increased and eased domestic industrial production to recover. However, while the inflation in euro zone has been close to zero and domestic inflation in Russia was running over 10 percent annually, the real price competitiveness was rapidly lost. Between 2001 and 2004 the real exchange rate and price competitiveness was rather stable mainly due to the depreciation of rouble against euro, which cancelled out the inflation effect. During 2005 the appreciation of rouble against euro has weakened the real competitiveness of Russian products.

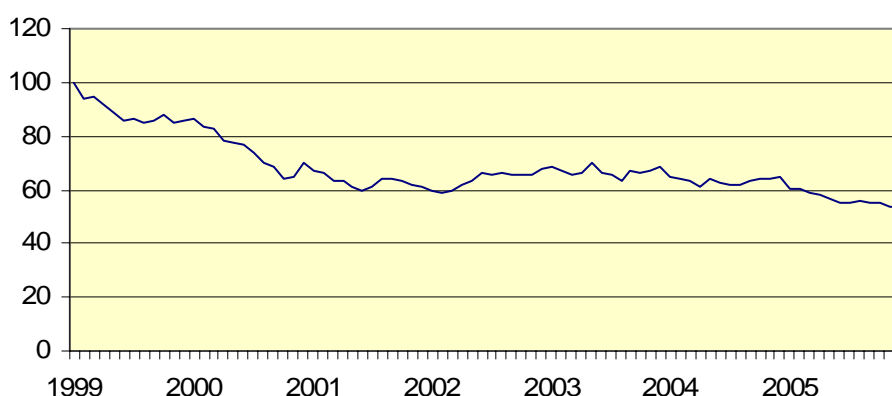


Fig. 8. Rouble real price competitiveness in euro area, 1999M1=100 (Source: Metla)

In the future, the anticipated appreciation of rouble together with increase of domestic purchasing power and consequential inflation, real exchange rate will gradually continue to deteriorate, price competitiveness will weaken and domestic production can be surpassed by increased import growth. This development, on the other hand, may lead Russian Federation to implement some protectionist policies to protect and cover domestic production. Also, changes in exchange rate regime or policy are not impossible in the future.

In general, anticipations of the appreciation of the nominal exchange rate can attract capital inflows, from which some may be allocated to different investment projects. Also, it is noteworthy that while forest investment goods, such as logging harvesters and paper machines, are mainly of foreign origin, the appreciation of exchange rate is rather a supporting than impeding factor for forest sector investments as far as the final goods are primarily allocated to the domestic markets. If the production of the final goods is export orientated, the exchange rate development then weakens their price competitiveness in world market. Especially, the exporters of sawnwood may lose market shares to Finnish, Swedish and German competitors.

⁸ Calculations are based on indexes of consumer prices in Russia and euro zone, and on index of nominal exchange rate between rouble and euro. Thus, this illustrative calculation depicts only real price competitiveness in euro zone, and differs from the standard value weighted foreign trade and currency basket calculations (see e.g. Korhonen 2006).

3.3 Financial Markets

Well working financial sector is typically an essential requirement for sustainable business making and, especially, for investment behaviour. According to Bevan et al. (2004), foreign direct investments in transition economies have been positively related to the development of banking sector along with other institutional reforms such as liberalisation of trade and legal institutions.

Under the socialistic system, the role of banking sector in Soviet Union was fundamentally different from that of the western banking system. As discussed in more detailed in Ollus (2004), primarily the state owned banks were monitoring the internal account money flows between production plants and bureaus, and ensuring that these account flows were in line with the five-years-plans given by Gosplan, a central planning authority. Another task for the banking sector was that they were responsible for monetary transactions with foreign countries, and to ensure that the cash reserves enabled the payment of wages, which were typically given to employees as cash.

After the change of economic system, the banking sector in Russia was wild and without any binding legislation and supervision.⁹ In the mid 1990's, the number of banks in Russia amounted over 2600, and most of them were rather small concentrating only on making short-run business by operating with interest rate marginal. Also, some of the banks were established only to run business activity and cash flow of one single enterprise. Typically, the banking system was suffering from inexperience of free market behaviour and incapability to recognise reliable and solvent customers from those of the adventurers and speculators. Together with general difficulties to anticipate political and economic development in Russia, liquidity problems and lack of deposit guarantees and risk management, it is therefore not surprising that deficiency of confidence against banking sector led to bank runs and was one of the leading factors for the economic crisis in August 1998.

Even though the banking and credit sector in Russia has developed since the end of 1990's, many of those structural and fundamental problems mentioned above still exist. In 2005, the number of banks still amounted over 1000. With respect to the size of Russian economy, banking sector is inadequately small to contribute economic development and, especially, investments. The aggregated assets of Russian banks are only about 40 percent of Russian GDP, while the same ratio in industrialised countries is between 100 and 300 percent (Ollus 2004). The understanding of market behaviour has increased among the finance institutions, but there are still difficulties to analyse solvency, confidence and repayment ability of customers. To compensate this risk, the lending interest rates and marginal between borrowing and lending interest rates has been high, which has sometimes led to additional problems such as adverse selection. Also, the loan periods have been short in maturity terms (about one year or shorter).

⁹ For more thorough understanding of the development of banking system and financial markets see Komulainen and Korhonen (2000), Korhonen and Ollus (2004) or Mahlamäki (2005).

Main problem for the development of Russian banking sector is however the lack of general trust and confidence, which is consequence of several financial crises and bank runs after the change of the economic system. According to some recent inquiries, about 70 percent of the total household savings are not allocated to banks. Rather, they are held either in cash or in other assets.¹⁰ Even though the Central Bank of Russia has tightened the rules for banks (see Mahlamäki 2005 for details) and created a guarantee for deposits, the bank legislation as well as monitoring of the sector and accounting system needs additional reform. The lack of trust to domestic financial institutions has also led to massive net outflow of private sector capital from Russia which, in turn, weakens the possibility for financing domestic investments (see Korhonen and Ollus 2004 for more details).

The scantiness of total funds on deposits, short maturities and high interest rates of loans and general thinness of Russian financial markets have clearly impeded and prevented domestic investment behaviour. For example, only 14 percent of corporate bank loans are currently longer than three years in their maturity (Orlova 2006). Especially, SMEs have suffered from undeveloped financial markets and investments are established mostly by net cash reserves. While international banks have been established in big cities, bigger enterprises and foreign companies, who have also access to the international markets, are able to finance the investments through foreign debt, which, of course, involve another risk, namely, that of change in exchange rates or policy regime.

3.4 Threats for Economic Development in Russia

During 2000s, Russia has benefited high crude oil and gas prices in world market. Along with the continuing economic growth in Asia and emergent growth in Europe, it seems that demand for crude oil, gas and other raw materials will remain high in the near future. Therefore, Russia will strengthen its strong position in current account surplus, and currency inflow as well as the size of the stabilisation fund is likely to increase.

To prevent overall currency inflow and, thereby, increase of domestic inflation and appreciation of rouble, Russia established The Russian Stabilisation Fund in February 2004. This Fund has increased rapidly, and in December 2005 it was already 7 percent of GDP. Even though the neutralising effect of The Stabilisation Fund prevents overheating of the Russian economy, it is evident that part of the oil revenues will channel to economy through the Federal budget. According to the Funds rules, the first 500 billion roubles accumulated in the Fund may only be spent on financing Federal deficits caused by two consecutive years of low oil market price. Above the 500 billion ceiling, the government is free to spend revenues for repayment of foreign debt and spending on certain structural reforms (Ollus 2005). Therefore, it is a great challenge for political decision making to enforce the domestic cost level (especially in main cities) to remain low, and to prevent a dutch disease type of deterioration of international

¹⁰ While the real interest rate has been negative, there is no incentive for bank saving. Therefore, most of the earnings and incomes of households are channelled directly to consumption.

competitiveness.¹¹ In case of currency inflow together with strong current account surplus, Central Bank of Russia can only fight against appreciation of rouble or towards increase of domestic inflation.

Resource based economy or mineral economy is a specific type of structure, where the macroeconomic growth is based on the incomes from the trade of a single natural resource. The potential to alleviate the social costs of structural development of the economy through the rent on deploying the resource stock depends on the timing in the use of these resource potentials. Extraction incomes support balanced economic restructuring when used by increasing the use of underutilised resources. The latter is frequently achieved in infrastructure investments with long payback period. When income from export together with unused domestic factors of production is used, their inflation effects can be minimised. The opposite may happen if the current account surplus boosts demand for private consumption or full use of domestic production inputs.

Value of rouble in Euro area is a challenge to the Russian non-oil export industry's real price competitiveness. While it seems evident that rouble has a tendency to appreciate in the near future, majority of Russian non-oil export of low technology type take price competitiveness of primary concern. At the same time, high rate of currency make foreign goods and services relatively inexpensive and support foreign technology intensive investment solutions.

Other threats, which may slow down the economic development in Russia and imbed investment activity, are deceleration of reforms in legislation concerning finance sector and other institutions, difficulties in operational preconditions for foreign companies in Russia, protectionist trade policy to cover domestic production, and other trade and economic operations for political purposes which are likely to weaken the general trust and confidence on economy. Also, corruption and bureaucracy are factors, which should not be belittled when considering economic and business development in Russia.

4 Forest Sector and Its Development in Northwest Russia

Production of forest sector has increased rapidly in Northwest Russia after 1998, as discussed in Mutanen et al. (2005) in more details. There are numerous supporting factors behind that development. First, the devaluation of rouble in 1998 boosted the utilisation rate of forest industry capacity and increased roundwood exports. It also improved investments in Russia what concerns investment outlays in rouble terms, and increased export incomes of Russian forest industry companies offered the possibilities for financing investments. The modernisation of production capacity in turn increased productivity in forest industry companies and helped them to keep their business profitable irrespective of the high rate of domestic inflation. Second,

¹¹ The concept dutch disease originates in Holland after the discovery of North Sea gas in 1970s. Generally, it means that because of the massive exports of natural resources, the surplus of current account increases and the exchange rate of currency reevaluates making other industries less competitive in international markets, thus increasing imports and decreasing exports.

the smooth depreciation of rouble in Euro area markets from 2001 to 2005 has also supported export competitiveness.

The following chapters discuss briefly on the recent development and problems regarding the forest resources, their economic accessibility, infrastructure and logistics. Also, we discuss on the impact of other factors of production on the willingness to invest in forest sector in Northwest Russia.

4.1 Forest Resources in Northwest Russia – Accessibility and Use

Russia has by far the largest forest resources in the world. According to FAO, approximately 22 percent of the world's forest area and 25 percent of wood resources are under governance of Russian Federation. From the Finnish and other Baltic Sea area investors perspective, forest sector in Northwest Russia is of special interest due to its close location to the European markets and, especially, because of the unused vast forest resources. In addition, huge growth potential of wood based product markets in Russia and geographical nearness have been incentives for Finnish firms to establish in Russia. Smaller enterprises have been more interested in lower costs and sufficient raw material resources than the international enterprises, which were more market oriented. (Nilsson & Söderholm 2002, Laakkonen et al. 2005)

For sawmill or paper and pulp investment decision, it is essential for the investing enterprise to ensure continuous wood flow to the production plant. While a modern sawmill of 100 000 m³ capacity needs over 200 000 m³ of logs, and 400 000 ton pulp mill requires about 2 million cubic meters pulpwood or wood residue, the economic profitability calls for unbroken wood procurement together with other factors of production. In a case of pulp and paper investment, for example, the enterprise should ensure wood procurement process at least for 30 – 40 years. Therefore, the size of the forest resources and their economic accessibility, in addition to the transportation possibilities and other infrastructure, challenge the investment possibilities and determine the location of production plant.

Due to the geographical position, coniferous assortments dominate the Forest Fund in Northwest Russia. The main tree species are pine, spruce and birch.¹² Table 4 depicts the regional forest areas, total growing stock and the percentage share of the coniferous assortments of the total growing stock in 2003. As can be seen from the figures, Republics of Karelia and Komi together with Arkhangelsk and Vologda Regions have the most extensive forest resources in Northwest Russia. To compare and give perspective of these forest resources, total forest area in Finland was 26.3 million ha in 2005, which is only about 29 percent of the total forest area in Northwest Russia. The total growing stock in Finland in 2005 was 2091 million cubic meters accounting only about one fifth of that in Northwest Russia.

¹² The share of coniferous assortments differs between the regions in Northwest Russia. See Dudarev et al. (2002) and Mutanen et al. (2005) for more detailed information on regional forest resources and their economic utilisation in Northwest Russia.

Table 4. Forest Resources in Northwest Russia, 2003

	Forest Area	Total Growing Stock	Coniferous Growing Stock
	1000 ha	Million m³	% share
Republic of Karelia	9737	940	79,3
Republic of Komi	30635	2965	75,3
Arkhangelsk Region	22713	2488	83,4
Vologda Region	10266	1594	53,2
Kaliningrad Region	265	41	32
Leningrad Region	4593	790	51,8
Murmansk Region	5372	229	68,3
Novgorod Region	3574	612	31,5
Pskov Region	2112	334	48,1
TOTAL	89267	9993	

Sources: Karvinen et al. (2005), www.idanmetsatieto.info

Table 5. Annual Average Growth and Fellings in Northwest Russia, 2003

	Annual Average Growth	Total Fellings	Final Fellings	Roundwood Export
	Million m³	Million m³	% share	Million m³
Republic of Karelia	14,14	7,1	85,9	3,56
Republic of Komi	30,94	6,8	92,6	0,03
Arkhangelsk Region	25,05	10,1	89,1	0,04
Vologda Region	17,31	6,6	93,9	2,20
Kaliningrad Region	0,92	0,4	25	na
Leningrad Region	10,04	6,3	63,5	na*
Murmansk Region	2,52	0,1	100	0,06
Novgorod Region	10,71	3,5	82,9	1,18
Pskov Region	3,26	1	70	0,03
TOTAL	114,87	41,9		

The annual average growth is for year 2004. * According to unofficial statistics 6,8 million m³. Sources: Karvinen et al. (2005), www.idanmetsatieto.info, www.roslesinforg.ru

As can be seen from Table 5, total fellings, comprising mostly on final fellings, are less than 40 percent from the annual average growth in Northwest Russia.¹³ Due to the difficulties for accessibility, the stands are somewhat undisturbed, and the age structure of the forests is biased towards mature and overmature forests. Therefore, the annual growth rate of old trees remain

¹³ The terminology and definitions in Russia differ from that of the western countries and the direct comparison of the figures are not justifiable. See Karvinen et al. (2005) for more detailed description of the terminology.

slow and make the comparison between annual growth/allowable cut potential biased and consequently a misleading picture of the efficient sustainable potential usage of the forest resources. Recently, some of the investment projects of forest industry enterprises in Russia have been postponed due to the uncertainty related to continuous availability of suitable raw material. The famine of industrial roundwood in the investors' projection does not mean lack of allowable cut reserves. Technically, adequate resources normally exist, but harvesting, transportation logistics as well as logging leases are problematic. Also, insufficient and weak road network causes difficulties for roundwood procurement. While the forest road network is often poor or it does not even exist in many areas, the economic utilisation of the forest cannot be increased easily. For example, in the Republic of Karelia the annual average growth of forests is twice that of the total fellings, but the economic accessibility to the new stands needs additional investments in infrastructure. According to Pulliainen (2004), especially the scarcity of coniferous logs and birch logs of good quality will lead to higher competition for them in the near future and increase their prices, thereby challenging the investment plans.

In Russia, forest resources are owned by the Federation and permissions for using the resources are available through long and short term agreements, and through direct distribution by state author. Operator can buy short-term (shorter than one year) cutting rights by auctions. Longer permissions (leasing), up to 49 years, are also possible, but normally operator is then also obliged to arrange forest regeneration and other similar duties. Partly because of this, unit prices are remarkably lower in longer term agreements compared to that of permissions sold in auctions, though price level of auctions is still quite marginal when compared with western markets.¹⁴

While the forest road network is poor and, therefore, the accessibility to new stands is difficult, regeneration of forests has raised as a one of the main issues for forest investors to ensure wood procurement also in the future. In short-term leasing contracts, all costs and responsibilities of regeneration after logging activities remain on authorities' responsibility. Forest regeneration duties are frequently undone in practise due to the lack of adequate financing possibilities. Also, the lack of tradition and know-how of regeneration is a problem. Therefore, forest authorities have gradually become aware of the fact that despite of the existing accessible resources of mature and overmature forests, they will be consumed in the near future without sufficient investments on regeneration and forest management. After a couple of decades, structure of age classes of Russian forests would not offer a strong basis for production of forest industry – especially for sawn- and veneer mills – if all accessible forest stands have already been cut and the quality of young stands does not fulfil the need and requirements of forest industry. The Forest Code, which is still under reconstruction, will include a possibility for long-term leasing of forests together with strict rules for the responsibilities on regeneration and silviculture.

Regeneration works after cutting have typically carried out by the leshoses, an authority responsible of forestry administration in local level, which have forest management, protection

¹⁴ Short and long term agreements and direct distribution by state authorities cover 20, 45 and 35 percents of the wood procurement, respectively.

and monitoring as main tasks. Regeneration works are financed by Forest service from the forest lease or auction stumpage incomes. The balance between the sales income and regeneration and forest management costs have increasingly become deficit because of the increased forest management costs. The same challenge is related to the investments into forest roads (construction and repair investments). Thus, there is a pressure and need to increase stumpage prices to cover the increasing costs of forest management.

Question about adequacy of roundwood supply is at least partly governmental and of regional character. In some parts in Northwest Russia, for example in Republic of Karelia, all easily available forest resources are already in efficient use in practise. Lack of sufficient infrastructure causes regionally uneven usage of forest resources supporting the concentration of economic activities to the most developed areas, and keeping majority of distant resources unattainable. Recently, some Russian politicians and high-level authorities have restated willingness to restrict export of Russian roundwood and encourage foreign operators to invest in Russia.¹⁵ At the same time, there has been discussion about threat of foreign owners for Russian society, including forest resources, if proprietary rights will become internationally available. These two lines of political rhetoric are contradictory. If the rules and managerial patterns, applied by Russian government as the owner of raw material resources, are not predictable, there are no incentives among the potential investors to carry out their plans.

Table 6. Production of Forest Products in Northwest Russia, 2003

	Sawnwood		Plywood		Fibreboard	
	1000 m ³	Operating Rate	1000 m ³	Operating Rate	Milj. m ²	Operating Rate
Republic of Karelia	741	36	23	94		
Republic of Komi	638	62	249	100	20	91
Arkhangelsk Region	1979	62	72	100	18,8	83
Vologda Region	919	54	149	98	25,4	57
Kaliningrad Region	16	na				
Leningrad Region	491	65	135	na		
Murmansk Region	19	23				
Novgorod Region	336	82	134	100		
Pskov Region	148	27				
TOTAL	5351	46	763	92	60,6	77

Operating rate is given as a percentage share of the production volumes with respect to the available capacity. Sources: Karvinen et al. (2005), Rosstat, Karelijastat

Table 6 depicts the production volumes and operating rates for different forest products in 2003, respectively. As can be seen from the Table, only about half of the total capacity is in usage in

¹⁵ While writing this paper, Russia has announced an increase of tariffs for coniferous roundwood exports. Since 1.6.2006 the tariff will be 4 euro per cubic meter. At the same time, Russia will abolish the import tariffs for machinery and investment goods for forest industry.

Northwest Russia, even though there are substantial differences between the regions. In plywood, chipboard and cardboard production, the existing capacity is nearly in full usage. Also, a volume of paper production is difficult to increase without any substantial green field investments in capacity. The low operating rates for some products are partly due to the outdated technology, which urgently requires at least repair investments.

Table 6. Continues

	Pulp	Paper		Chipboard		Cardboard	
	1000 t	1000 t	Operating Rate	1000 m³	Operating Rate	1000 t	Operating Rate
Republic of Karelia	430	759	70	106	na	65	13
Republic of Komi	506	526	100	295	100	183	100
Arkhangelsk Region	1895	333	99			705	100
Vologda Region	42	43	34	382	80	26	100
Kaliningrad Region	216	71	89			23	95
Leningrad Region	510	448	97	104	na	379	97
Murmansk Region							
Novgorod Region		13	81			14	59
Pskov Region						4	95
TOTAL	3599	2193	-	887	-	1399	-

4.2 Other Factors of Production

Even though roundwood supply and well working wood procurement are among the most significant and major factors for economically sustainable production in forest industry, other factors of production such as skilled labour and energy are also important. Despite the fact that forest industry is often seen as a capital intensive sector, role of labour is significant at least in mechanical wood working industry. Relative unit costs of labour are among the criteria determining the location of new mills. Competitive price and availability of labour are among the reasons for forest industry enterprises to start co-operation projects with Russian partners, or to invest and participate in modernisation of Russian factories. Especially foreign small and medium sized enterprises, Finnish ones among others, can utilise low cost level of Russia as a reason for beginning of subcontracting. It enhances their competitiveness and gives to them knowledge about operating in different environment. If circumstances allow deeper co-operation later in the future, that knowledge would be a significant benefit for a new investor (Ivanova et al. 2006). On the other hand, assumption about remarkably lower cost level is partly flawed, because lack and competition of skilful employees has become a reality at least in the biggest Russian cities and, therefore, wages, especially those of the managers, will soon overtake the western level (Suomalaisten yrittysten ...2005).

Professional skills can be expected to become crucial factor when investments are planned to expand from, say, basic routines in sawmills to more advanced fields of forest industry. Educational level of available labour has, partly for that reason, been set as a critical point when evaluating possibilities to start production in Russia. On the other hand, significance of labour costs varies remarkably between different parts of production chain, and those most expensive, labour intensive parts can be handled by vocational education.¹⁶ Recently, western enterprises have been especially interested in transferring the most labour intensive parts abroad and entrust, for example, research and development activity to domestic staff. While development of Russian society progress further, supply of highly educated labour will also increase in the future. Younger generations acquire knowledge about western business culture for example by educating themselves abroad, and if difference between labour costs in Russia and western countries remains on same level as it is today, in the long term also R&D activities will undoubtedly be transferred, at least partly, to Russia.

Investment plans should also give preliminary answers to the questions concerning the availability of energy and, especially, that of electricity. The need for energy depends highly on the branch of forest industry. For example, sawmilling industries as well as mechanical pulp industry are energy intensive branches while chemical pulp industry can even be a net producer of energy. In Russia, the State has monopoly of transportation and energy supply. This dependence can turn out to be a risk for the forest industry, as well as for other industries, to operate in Russia, especially if the interests and targets of enterprises are not in line with those of the State's preferences. Otherwise, Russian Federation is net supplier of energy and energy resources are extensive. Even though the domestic consumption of energy will increase along with the general economic development, it is hard to recognise any direct lack of energy availability in the near future. New power plants are under the planning and the use of standard sources of energy will be intensified. Only the price of energy, as a part of administrative economical control tool, may challenge the profitability of the use of different energy sources. In Northwest Russia, the basic infrastructure for transportation system of electricity does exist, but the system calls for repairing investments as well as rationalisation. Due to the underdevelopment of power transmission grids, many large power plants in the region are not operating at their full capacity (Dudarev et al. 2004). Thus, the key issue for the utilisation of electrical power industry is the development of transmission system.¹⁷

Most of the physical capital equipments and machinery are inherited from the Soviet era. Therefore, they are typically out-of-date, wastefully and environmentally damaging, and the sector calls urgently for modern investments. Dudarev et al. (2002) have estimated that even 70 – 80 percent of the equipments and machinery used in forest industries in Northwest Russia are worn down and obsolete. Especially, the modernisation investments in pulp and paper processing are urgent. However, the transition towards more modern technology is also in the

¹⁶ As shown in Anttonen et al. (2005), franchising has been one popular business type for foreign enterprises to penetrate in Russian markets. However, according to our knowledge foreign forest industry companies have not applied this type of business in Russia.

¹⁷ Dudarev et al. (2004) give excellent description of the different clusters in Northwest Russia, including forest and energy sector and their recent development.

process in forest harvesting. The old and work intensive full-length method, inherited from the Soviet period, is giving way to Scandinavian cut-to-length method, which is seen the most profitable technology and basic condition for forest investments by foreign investors (see Karjalainen et al. 2005). As discussed in section 3.3, the Russian financial markets are rather underdeveloped and the possibilities of domestic operators to finance the needed investments are weak. The foreign enterprises have more opportunities to find finance for the investments.

Availability of factors of production can be seen as a kind of critical variable among other facts impacting on investing decision. In the areas, where infrastructure is weaker than on average, demand of roundwood is usually also lower than on average. This means lower raw material costs of wood procurement. On the other hand, constructing of needed road network and other logistical connections, and advantaging a modern technology can turn out to be remarkably expensive. Each investor should evaluate the trade-off between maximising reduction of production costs and minimising of costs caused by creation, or buying of needed factors of production.

4.3 Infrastructure and Logistics

Along with the consideration of availability and accessibility of forest resources, a profitable forest investment decision includes well-designed wood procurement logistics. As well as final product logistics, a well working wood procurement process require viable infrastructure. Compared to other regions in Russia, the transportation infrastructure is relatively well developed in Northwest Russia. Especially, the railroad network provides good base for the wood logistics, even though the density of the railroad network is not that high as in Finland and in the Baltic States and the density also differs highly between the regions. Considering the amount of forest resources the density is highest in the Leningrad Region and in the Republic of Karelia, and lowest in the Arkhangelsk and Vologda Regions and in the Republic of Komi (Table 7., see also Dudarev et al. 2002 for more details). A clear advantage of railroad transportation is the same gauge of railway in Russia, Finland and the Baltic States due to the historical reasons.

To provide continuous wood flow from the stands to the mill, it is essential that the railroad network is working. Recently, in spite of its relatively well functioning, however, the network has been overburdened in some regions and there has been lack of cargo wagons.¹⁸ In the future, along with the general economic development and growth, the overburden is likely to be worsening in the main growing areas and centres without any considerable investments. Especially, the transportations around Leningrad Region, as a major traffic centre in the Northwest Russia, will increase significantly due to the several new seaports and increased cargos.

¹⁸ To avoid problems and to maintain persistent roundwood trade, Stora Enso Ltd, for example, has its own cargo wagons.

Russian railroads are owned by the monopoly JSC Russian Railways, which is under the governance of the Russian Federation. Due to the economic unprofitability and low efficiency, there is a pressure to increase railroad tariffs in the future, even though the government has an ambition to support the competitiveness of the local industrial companies by low tariffs and tariffs discounts. According to Dudarev et al. (2002), the drawbacks for the low efficiency are high deterioration rate of the railroad car fleet, shortage of specialized cars, inefficient logistics and low level of operations transparency. The latter, for example, culminates to the multi tariff pricing – the foreign enterprises who can afford pay more are typically paying higher tariffs than the domestic customers.

Table 7. Information on transportation networks in Northwest Russia

	Public Roads	Forest Roads	Density of Railroads*	Length of Inland Navigable Waterways*
	1000 km	1000 km	km/10000 km²	km
Republic of Karelia	7,9	17,8	122	3645
Republic of Komi	12,1	14,2	41	3962
Arkhangelsk Region	7,5	22,9	30	3221
Vologda Region	8,1	6	53	1581
Kaliningrad Region	2,7	0,6	377	357
Leningrad Region	9,6	3,1	327	1888
Murmansk Region	4,2	2,3	61	0
Novgorod Region	3,6	0,8	208	627
Pskov Region	8,6	0,6	198	503
TOTAL	64,3	68,3		15784

* The figures correspond the year 1998, other figures are for year 2003. Sources: Karvinen et al. (2005), Dudarev et al. (2002)

The water transportation offers relatively cheap solution for big transportations of roundwood. However, the navigable river transportation is available only on few months in summertime, and the tugboats, owned by the local river-shipping companies, are typically worn-out and unreliable to work. Due to the lack of finance, the waterways have also worsened in their conditions, and the maintenance of them requires financing which is difficult to arrange from the regional budgets. Also, the roundwood transportation can be arranged only via certain rivers and canals inside the regions and the best forests nearby them are already partly harvested.

The forest road network inside the regions in Northwest Russia is weak or it does not even exist.¹⁹ The budget financing is hardly sufficient to maintain the conditions of main roads between the regional centres, and the responsibility of investments in forest roads are given to the forest usage operators. Thus, to ensure adequate wood procurement, investments in forest

¹⁹ Karvinen et al. (2005) describe the division between different types of forest roads more thoroughly.

roads are necessary and among the first investment targets. However, depending on the region, the forest road constructing can be difficult, for example, due to the lack of gravel and sand, which perhaps should be imported from long distance away. These investments also require clear legislation and guarantee for the investor to utilise the forest stands around the constructed forest roads, at least for certain time period. The legislation, on the other hand, culminates to the Forest Code and is discussed in more details in the following chapters.

4.4 Forest Product Markets

Wood resources and procurement, other factors of production and general economic climate are important determinants to affect profitability of forest industry and to attract new investments. The other side of the coin is the final products and their markets, which can be crudely divided between domestic and foreign markets. If the final products are allocated to the foreign markets, *ex ante* exchange rate behaviour together with other estimated costs (logistics, custom tariffs) play an important role on profitability. Therefore, it is among the most important strategic decisions of investment planning to forecast the demand for forest products, and to decide whether these products are allocated to the domestic markets or under the international competition abroad.

In Russian domestic markets, the general economic growth is propagating the available income of citizens, even though the growth and welfare are concentrating on big cities and centres. Therefore, it is likely to suspect that part of this purchasing power increase is also allocated to the forest products directly (e.g. construction) or indirectly (e.g. containers and packaging material). Many socio-economic factors, however, have intensive influence on the demand for different forest products. For example, the growth of population and demographic distribution of age structure affect demand for furniture, house building, repairing and country cottage (datsha) construction.²⁰

Table 8 comprises the estimated increases in demand for different forest products. According to these FAOs (UNECE 2003) classified forecasts, Russian domestic demand for different forest products is considerably increasing.²¹ The demand for sawnwood is estimated almost to triple up to 2015 compared to that in 2000. Partly this is due to the increase in new construction, but mainly the increase is in connection to the repairing of existing housing facilities. Because of the economic reasons and lack of repairing investment in recent years, the need for urgent repairing has accumulated.

The demand for plywood and particle board is estimated to increase 110 and 130 percent up to 2015, respectively. Both of these products depend highly on the demand for furniture. At

²⁰ It is also a matter of question, how wood material can replace other materials (brick etc.) in construction. Until now, wood material has been only a secondary and not very popular element in construction in Russia.

²¹ The figures in Figure 5 must be interpreted with caution. It is often argued that the scenario is highly political and forecasts are overestimated.

present, along with the increase in wealth and housing construction, the demand for furniture has remained high. In the 1990's, a large fraction of the furniture was imported, but the development, investments (e.g. IKEA) and increased competitiveness of the domestic furniture industry and, especially, the improvement of quality of furniture, has reduced the share of imports. While the demand for plywood will increase also in construction, the investments to meet the demand for both plywood and particle boards are necessary.

Table 8. Estimates of demand for basic forest products in the domestic markets in Russia

	Sawnwood	Plywood	Particle board	Fibreboard	Paper and paperboard	Market pulp
	Mill. m ³	Mill. m ³	1000 m ³	1000 m ³	1000 t	1000 t
2000	12	548	2430	695	3490	429
2005	18	770	3200	832	4700	540
2010	23	950	4300	1184	6800	600
2015	31	1150	5600	1920	10200	720

Source: UNECE 2003

Domestic consumption of fibreboard and paper and paperboard are estimated to increase slightly less than one hundred percent. Regardless of the magnitude of the estimated volumes, it is evident that along with the general economic growth the demand for both fibre- and paperboard will increase. Even though some new plants have been established to meet the increased demand, new investments are still needed in future.

Since the end of Soviet era, Russian's forest sector export has been dominated by low value-added products such as roundwood and sawnwood. After the devaluation of Rouble in 1998, Russia has increased its exports and market share in German coniferous sawnwood markets while Finland and Sweden, as a traditional exporters, have lost their market shares (Mutanen et al. 2005, Mutanen 2006). However, as discussed in section 3.2, there is a high pressure of appreciation of rouble in near future due to the oil and energy trade, and large surplus of current account. Together with higher domestic inflation rate with respect to that in abroad, the external price competitiveness is likely to weaken in the future. Thus, this development will also affect Russian sawnwood exports, if the exporters are not willing to adjust downward their unit prices and profits.

While the domestic demand for other forest products will increase and there is urgent need for investments to meet this demand, it is unlikely that those products – such as paper or paperboard – are exported in high volumes in the near future. In long run, depending on the

relative price and exchange rate development, it is possible that some forest products are increasingly exported.²²

5 Institutional Factors Affecting Investments

5.1 Legislation Aspects

5.1.1 General Legislation

When Russian legislation is considered and assessed from foreign investors' standpoint, a couple of issues are in special emphasised. Among the most important is the possibility of foreign enterprises to operate in Russia in general. If position of foreign operator is remarkably weaker than that of domestic competitor, motivation and economic attraction for investments will be diminished. Other important legislation questions are related to enterprises, taxation, currency, labour, custom and competition policy (Filippov et al. 2005).

Foreign investors have claimed that in practise their possibility to operate in Russia is not equal compared to those of domestic firms. On the basis of existing legislation, however, both domestic and foreign enterprises should have equal rights and liabilities to operate. Nevertheless, Russian legislation includes several levels, and in some areas existing norms can differ more or less from those of the whole federation, even though regional norms should not contravene federal ones (Ivanova et al. 2006). In forest legislation, regional authorities can for example provide that foreign operator has to be registered as an regional operator before it is allowed to get logging permissions or other similar documents (Nystén-Haarala 2001). Because it is not always clearly clarified which level of legislation is the most significant, there can be real inequality between the areas where foreign enterprises are operating. This leads up to differences between favourabilities of regions from foreign operator's standpoint. Some regions or even cities have decided to attract foreign investments with help of governmental decisions (e.g. Novgorod) and special supporting systems while some others regions have been remarkably more passive or even reluctant for such incentives. (Laakkonen et al. 2005, Ivanova et al. 2006).

As well as general legislation Russian taxation system is often said to be too complex for foreign operators to live with. Federal Tax Code draw basic lines and principles of taxation, but local municipalities are given to interpret and slightly modify federal principles in a way that regional special features will be taken into account. However, principles of taxation system are, at least partly, dependent on a size of the enterprise and a business field in which it operates (see Ivanova et al. 2006 for more details). Anyway, scale of different criteria related to taxation practise is very wide: in some cases taxation principles are undoubted while in other cases

²² For example, China as a growing economy has been mentioned as one export market for Russian forest products (Kivelä 2005a).

enterprise can itself affect taxation base and rates. In Russia, it is a common practise to use accounting system to hide profits and avoid paying taxes.

Even though the needed licences, taxation and all kinds of permissions are in order, competent personnel is still needed for creating successful business. Compared to Soviet era, status of labour unions in Russia has diminished remarkably but, in general, the role of labour unions and their association in Russia is still stronger than it is, for example, in Finland. Employer, especially foreign one, should be prepared to co-operate with labour unions and their local representatives. Unions have to be heard while making significant changes to employees' working environment or core interests of them. In any case, it is easier for employer to hire domestic employees. In case of a foreign worker, employer has to have a permission for hiring and employee has to get a working permission before coming to Russia. Possibilities to fulfill free vacancy by hiring domestic worker have also to be ensured properly (for more details, see Ivanova et al. 2006). Russian labour legislation apply to all labour relations occurring in Russia. Thus, relations between foreign employee and foreign enterprise operating in Russia are also normally under these regulations. In 2005 labour legislation was changed by making hiring of foreign employees more difficult than it was in previous years. At the same time new regulations, like mandatory medical testing and residence registrations, came in force, but impact of those regulations on business in practise can be estimated to be quite moderate (Ivanova et al. 2006).

Questions related to custom legislation become actual if investment materials are imported to Russia or manufactured and final products are exported abroad. Custom legislation is effective tool to apply strategies of trade policy by restricting transition by adapting high custom payments or, in opposite situation, making trade more profitable with low tariffs. Working habits of Russian custom authorities are often criticised by foreign operators. Because legislation controlling custom principles can be understood on different ways, personal opinions and attitudes of authorities are of higher significance than would be preferable, though the recent legislation, fulfilling the requirements of World Trade Organization (WTO) and World Custom Organization (WCO), is estimated to enhance situation (Ivanova et al. 2006). In some particular cases foreign operator is allowed to get permission to operate without paying customs (Suomalaisten yritysten... 2005), but even the recent legislation does not clearly standardise the decision power and bureaucracy. Thus, the border posts and custom terminals may have different requirements for needed documents. Sometimes decision making is even moved forward to higher level authorities, which makes the whole process slow and complicated at least from foreign operator's point of view.

5.1.2 Investment System Guarantee

Finnish and Russian authorities have negotiated several times about a contract that would ensure, or at least enhance, stability of circumstances of investments. Under the Soviet era, this kind of contract was effective, but after the societal and economical changes the contract cannot

be enforced. In general, Russia has been quite reluctant to give foreign investors opportunity to transfer their capital back and forth on the basis of their current needs. Foreign investors have required that changes in legislation or in general policy should not retrospective impact on conditions of contracts. If such possibility cannot guaranteed, investors are not able to know the real character of the environment in which they are operating. If already made contracts are under the possibility of alteration, the gap between the cultures and operational environments might turn out to be too wide to pass.

Thus far all negotiations have been eventually fruitless. During the years main interest has moved from a call for investment guarantee system to demand for equal treatment of foreign and domestic operators. Lack of such contract has been mentioned to be among one of the main reasons for delay or even annulment of some remarkable planned investments (Kivelä 2005b). Investment guarantee system protecting against the fundamental changes in circumstances are quite common practise in international business relationships, and also Finland has consummated such agreement with several countries. Lack of investment guarantee agreement is influencing especially on the large projects, such as building pulp and paper mill, and, on the other hand, it prevents effectively interest of small and medium sized enterprises in co-operation projects with Russian partners. Currently, Russia is negotiating for participation in WTO. Although the time schedule and the possible transition period are under negotiation process, the participation would ensure more harmonised trade legislation, custom duties, investment guarantee and more open competition in the world market. However, according to the most recent information, the negotiation process has been delayed. Russia has clearly announced that it will not accept the rules and proposals which are against the trade policy of Russian interests.

Enterprises who have already invested in Russia have called into question, why Finnish forest operators suspect that investments in Russia are difficult without any guarantees of their safety. Other western operators, including also big forest enterprises, have operated for years in Russia without any special agreements, because in investment projects it is always possible that (expected) incomes turn out to be higher than costs (Mäkinen 2005). It has been also argued, that Russia does not differ remarkably from other countries from investor's point of view. When foreign operator is willing to take into account local culture and habits in its operations, managers of enterprises, which have successfully invested in Russia, do not see any barriers of success compared to operating in other operational environments.

Status of such special agreement in real business is also doubted. If government, for example, decides to prevent selling electricity to a mill owned by foreign firm, an agreement is eventually quite weak tool for defending rights of an investor. However, question about an agreement ensuring certain equality and safety of foreign investments seems to be one of the major issues in developing co-operation and business transactions between Finland and Russia.

5.1.3 Forest Legislation and Its Reform

At the moment, Russian forest legislation is under reconstruction process. This process has been long and complicated, but eventually new version of Forest Code has been presented, and according to latest information (Idänmetsätieto 2006) the ratification of new Forest Code is postponed to autumn of 2006. From investors' point of view major interest is focused on questions related to ownership of forest resources, possibilities to get rights and permissions for logging and what kind of responsibilities will be given to forest users.

In the latest version of Forest Code forest resources are planned to be sustained under the governance of Federal government, though at least partial privatisation might be possible in the future. Privatisation of forest resources is not a prerequisite for successful investments. In Canada, for example, in practise all forests are owned by government. Still, despite of this, industrial enterprises, both domestic and foreign, are allowed to lease forest resources. In Russia, foreign forest investors have required rights either for partial private ownership, or at least for possibility for long-term leasing to ensure continuous wood procurement to the factories. Russian authorities have been unwilling to give private ownerships especially to foreign operators, but in the latest version of the Forest Code long-term leasing of forests, concession, is allowed. However, because there is not experience or exact norms of enforcement of such decisions, possibility for long-term leasing contracts might still be unusable in practise. (Filippov et al. 2005).

On the basis of current research (Lehtinen 2006) and general experience, Russian forest legislation is considered to be confused and open to various interpretations. Especially, uncertain role of agreements of enterprises to lease forest resources is seen to be among the most significant weakness of Russian forest legislation. In fact, those agreements are not fundamentally agreements as such, but promises to give roundwood from certain areas to certain enterprises. The most focal conditions, such as yearly allowable volumes and prices, are only suggestive, and those will be particularised on the basis of valid norms and legislation. The restrictions are also seen to be serious threat to market-based development of Russian forest industry. Because of the openness to various interpretations, government has not a real possibility to control use of forest resources. Also, interpretations of legislation vary, and operators have different conceptions of limit between legality and illegality. As a result, corruption can be seen as a consequence of circumstances, where operators can impact on the way they operate in Russian roundwood market. Also, illegal loggings are estimated to be about 5-15 percent of the timber consumed in or exported from Northwest Russia (Ottitsch et al. 2005).

In general, it is difficult to estimate, how Russian government and authorities have succeeded in renewal of forest legislation from investors point of view. Circumstances, in which investors are operating, consist of many parts of society that even legislation is sometimes too narrow scale to make evaluations. However, compared to Soviet era, positive development has already appeared. During process of Russian forest legislation, quite many of investors' requirements

have been taken into account in some way. In recent classifications made by international credit institutions Russia has been seen as investment-friendly country (Filippov et al 2005). Distance from official classifications to real practise in business is still long. Corruption, discrimination of foreign operators and slow and complicated governance are still seen as major threats for creation of good circumstances for investments in Russia.²³

5.2 Social Responsibility

Corporate social responsibility (CSR) is a concept that provides general guidelines, norms and ethics for enterprise to execute its business activity. While CSR does not have a universal definition and form, it typically contains all interest groups, which are involved and affected by firm's business operations either directly or indirectly. CSR provides information, targets, tools, training corporate sustainability, corporate sustainable development and corporate responsibility together with their economic, social and environmental impacts. For example, in the context of investments foreign operator as an employer undertake to respect common principles of human rights, equity and local legislation. Nowadays in western business activity, at least in the biggest companies and enterprises involved in international business, a clear publicly announced rules and norms of corporate social responsibility are matter of course and give transparency for the firm's business operations.

In Russia, social responsibility should be understood in a wider context.²⁴ Deficiency of infrastructure and other similar parts of society, which are adjusted to be almost obvious in western countries, can be under responsibility of foreign or even domestic investors. In addition to the investment project itself; investors are often responsible for the social welfare of their employees and obligated to develop at least partly the regional investment environment. Historically, this duty originates from the socialistic system and ideology, and from the fact that the enterprise was, as an employer, obligated to arrange basic infrastructure, health service and education. For example, in Kontupohja in Republic of Karelia local forest industry enterprises have, in fact, created majority of societal services, though that has happened after collapse of Soviet Union. According to Solanko (2006), local firms bear still large responsibility of the basic infrastructure investments especially in rural areas in Russia. From foreign investor's point of view, requirements of social responsibility can appear as a need to employ certain amount of local workers or duty to invest on local infrastructure or service system. Typically, western operators are not used to consider these kinds of duties even less taking them into account in their investments plans.²⁵ Especially, while investing to countries like Russia, where a structure of society differs remarkably from western countries, societal responsibility is

²³ See Appendix for more accurate evaluation of the factors which are likely to effect investment behaviour.

²⁴ In a wider context, CSR includes also illegal loggings and wood certification. See Ptichnikov and Park (2005) for more on these issues.

²⁵ In 1996, Swedish company AssiDomän bought a Segezha pulp and paper mill in the Republik of Karelia. While the firm was not aware of all the societal responsibilities and obligations involved in this investment decision, the conflict with local governance set off that AssiDomän withdraw from Segezha in 1998.

obvious part of the wholeness. The requirements for maintaining social welfare, however, differ between regions and communities. Also, the social responsibility and requirements for green field investments differ essentially from those of the alternative to buy old capacity and production plants. The latter typically contains more inherited social responsibilities.

Social responsibility can also turn out to be real prerequisite for getting permission to operate in Russian business. These kinds of requirements can be seen as a way to restrict enterprise's operation plans, but from regional point of view employing local inhabitants funnels proportion of incomes to economy. If investors use only forest resources and transport raw material abroad, their benefit for Russian society remains marginal. Concept of social responsibility is also connected to principles of forest using habits of investors. As was already mentioned in the previous chapter, shortsighted profit seeking has been among the biggest problems in Russian forestry. For example import of forestry products from Russia to Finland has traditionally emphasised on pure roundwood, while share of more value added products has been very marginal. Western operators have been claimed to destroy living environment of local inhabitants and logging activities are said to be made also in old forests and even in conservation areas. In this case it is worth to mention that domestic operators have also utilised forests quite freely, because during Soviet era abundant nature resources was described to common property that everyone could use free of charge and traditions change very slowly. On the basis of this kind of history concept of social responsibility will be a challenged part of business both for foreign and domestic operators.

6 Business Culture

6.1 Decision Making System

Every feature of co-operation between business partners cannot be explained by using only societal facts such as economy or legislation as a reason for possible difficulties. Business relationships also depend highly on cultural issues, namely, economic traditions or ways of thinking and working. In Finnish-Russian co-operation, cultural differences might have even more important role than on average, because background of development of business in these countries differs essentially from each other. While Russia is in transition from socialistic system to more market-based economy, principles of market economy have long traditions in Finland.

Differences between national definitions of power, authority and decision making can have negative impacts on possibilities to co-operate successfully. Specialists in cultural field define different hierarchical structures and decision making in enterprises and organisations with a concept of distance of power, features of which remarkably differ between Finland and Russia. According to Nystén-Haarala (2001), status of manager in Russia is higher compared to Finland. More complicated hierarchical structure is partly a consequence from Soviet history, when welfare and benefits of employee or lower-level manager were depended on political

activity and decisions made by higher-level managers. The inherited history and tradition impact still in practise in Russian business, though step by step progressing economical transition has diminished these effects. It is also worth of considering that operating in private enterprises has rather short tradition in Russia. Previously, enterprises were owned by the government and size of enterprises was bigger than nowadays, which resulted in slow and complicated decision making system. Reconstruction of structures of enterprises is normally faster process than changing working manners. In Russia, significance of informal institutions and relationships are highly important in daily living and business making (Bevan et al. 2004). High-level power distance partly explains some of the main problems in Russian roundwood market and trade. Decision making often strongly depends on personal needs and targets, which means that interests of authorities can even substitute those of real customers. Also, features like low quality on products, instability of forest legislation and undetailed property rights can be seen as consequences of high-level power distance (Vinokurova et al. 2005).

Though traditions of Finnish and Russian trade partners differs remarkably from each other, some signals of more equal practices can be seen. Nowadays, Russian young generations, which are interested in business and market orientated way of thinking, are willing to educate themselves abroad, which means that they become more familiar with principles of market economy than older Russian generations. It is also popular to hire real professionals to managerial posts: being a member of powerful family is not anymore as significant criteria as it was in previous years, even though this phenom as well as power of political system cannot still belittled.

6.2 Time and Quality Management

Another cultural, and perhaps also problematic, fact in Finnish-Russian forest co-operation projects is time management (Vinokurova et al. 2005 discusses this issue with more details). Russian time management is characterised as cyclic one, while western time management is merely linear (Hofstede 1986). In practise, this difference means that in Western countries all kinds of due dates and time schedules are normally considered as highly controlling limits of life and business. The linear time management is also closely related to JOT-management, which means that everything is done just on time, neither too early nor too late. In Russia, where time management is cyclic, it traditionally does not matter, if it turns out to be impossible to follow the planned time schedules. However, according to the principles of cyclic time management, it is still highly significant that the development in general will occur heedless of the time that the development requires.

In forest investment plans, continuous, persistent and unbroken wood flow is among the most important factors which affect the location and profitability of investment. Especially, in wood procurement process different time management practises are likely to generate conflicts and contradictions. In Russia, Finnish partners are often concerned about weak status of contracts which include many issues related to time management. Especially, delivery times included in

contracts have to be quite moderate in a way that possibilities for successful co-operation would exist. Sometimes, however, prevailing circumstances can be seen as a reason for differences in time management. For example, circumstances in roundwood procurement can be so difficult in Russia that breach of contract cannot always be estimated to be intentional. Weak infrastructure, especially forest roads, has probably revised Russian mentality less dependent on timetables compared to Finnish one.

Another important concept is quality management. Especially in roundwood procurement, quality management is of particular interest. If a target of co-operation is to create successful business between partners, there should be similar understanding of quality norms of traded product. In Finnish-Russian roundwood trade, partners' different cultural and historical backgrounds impact still on practices used in cutting process of trunks. While in Finland cutting process can be characterised to be quite custom-oriented (cut-to-length method), in Russia timber assortments and cutting process (full stem or whole tree method) follow similar principles independent of current circumstances or needs of buyer (Vinokurova et al. 2005). Quality management is closely connected to custom payments, which means that these questions are essential part of the practise of roundwood trade.

However, both time and quality management, both in their definitions and features, can turn out to be serious problem in co-operation between Finnish and Russian partners having different cultural backgrounds. Even though the understanding of each others needs has increased in recent years, the total removal of time and quality management problems will take time, because changing operating manners and national traditions are known to be very slow and complicated. Eventually, both-sided adjusting and learning-by-doing are perhaps the most usable ways to deal with the cultural problems in business.

6.3 Attitudes towards Foreign Business Partners

Even though Finland and Russia have long traditions in co-operation and trade, it seems that attitudes are still among the main general reasons for difficulties in business relationships between Finnish and Russian partners. Changing attitude atmosphere has been also mentioned as one of the most important issues in economic strategy of Russia-relationships of Finland (Ollus and Torvalds (eds.) 2005). Usually attitudes are created on the basis of information received from media, and partly as inherited from older generations. Therefore, attitudes typically consist of generalisations, unique opinions and experiences both in Finland and in Russia (see also Haapaniemi et al. 2003 for more discussion).

In Finland, attitudes towards Russia, Russian language and culture have been negative (Vaatelias vaalikansa 2003). It is noteworthy, however, that attitudes towards Russia and Russian citizens are different. Russia as a nation together with its political system is often seen as unpredictable, while Russian citizens are often experienced as amiable and hospitable. The negative attitudes are expressed in particular if foreign employee is willing to work in Finland

or if Finnish enterprise hires foreign workers despite of high unemployment rate in Finland. When Finns are asked to rank foreigners in preference order, position of Russian is rather low. Main reason for these negative attitudes is most likely to originate to the long and bellicose history between Finland and Russia and, especially, to years 1939 – 1944 when Finland and Soviet Union were at war. The consequent war indemnities were experienced unfair in Finland especially among the old generation, who was responsible for reparation. Negative experiences can be traced also to the beginning of 1990's, when the collapse of Soviet Union diminished dramatically possibilities of Finnish enterprises to export their products to the area of former Soviet Union. At the same time, there was deep economical depression in Finland, and especially eastern and northern parts of the country suffered from high unemployment rates and other consequences of depression. In those circumstances many enterprises devoted strongly on the market area of Russia, where demand was expected to increase dramatically. When development turned out to be slower than that of estimated, majority of those enterprises had to give up their plans, or went on bankrupt. On the basis of such history, especially small enterprises can be suspicious on co-operation with Russian partners or investments in Russia.

Attitudes are almost equal in Russia. However, negative attitudes are not directed especially towards Finns or Finnish enterprises. Rather, western operators in general are wished to diminish exporting of raw material and low-refined products by investing on modernisation and increasing of production capacity of Russian forest industry. Raw material resources exploiting operators do not pay for inputs as much as it would be possible to get by refining roundwood resources in Russia, and sell the products then abroad. Occasionally, some interest groups have seen western operators as a threat to the Federation, which is major owner and controller of natural resources. Even though development during last decades has increased openness of the Russian society, patriotism still exists (Mäkinen 2005). One embodiment of this patriotism is the recent attacks against different ethnic groups, such as Africans, Asians and South Americans. However, in spite of the still existing negative attitudes against each other, the suspicion has clearly decreased over time, and, especially, for the younger generations the national borders and language barriers are not that important restrictions as for the older generations.

7 Conclusion

This report has given a short overview of the factors which are likely to affect foreign forest investments in Northwest Russia. Together with the societal break in the beginning of 1990s, the Russian forest sector has undergone a strong structural change towards more business orientated way of thinking. While most of the main investments are dated back to 1970s, the recent forest technology is mainly outdated, and the sector calls for urgent investments to develop, to meet the increased domestic demand and to survive in international competition. While the possibilities for domestic investments are somewhat limited for many reasons, the development of forest sector and industry in Russia depends highly on either direct or indirect foreign investments.

From foreign investors' point of view, Russian forest sector is attractive investment target for many reasons. The domestic demand for forest products is increasing along with the general economic growth and increase of purchasing power of citizens. The vast forest resources and their location near the final product markets give a good base for vertical integration of forest companies across the national borders. Also, other factors of production, such as labour force and energy, are competitive despite that wages and inflation are increasing in Russia.

During 1990s, international forest companies have increased their activity in Russia by investing in primary wood product capacity (sawmills, wood plate mills, pellet units). Secondary wood product industry has also started to develop through international investments (Swedwood, Incap furniture). The international intercourse has also occurred in the opposite direction: Russian companies have established investments abroad (for example, Vuokatti log cottages in Finland and Korsnäs packaging in Sweden) deepening the cooperation and vertical integration over the national borders.

Even though several foreign forest companies have established and increased their investment activity in Northwest Russia, there are still many obstacles and uncertainties which hinder the willingness and establishment of further (and larger scale) forest investments (see Appendix). Many of the recent investments, such as sawmills and veneer mills, can so far be seen as a pilot projects to test general investment environment in Russian forest sector, especially wood procurement. Despite of promoting both domestic and foreign investments and willingness to increase value added production, many institutional settings and recent political actions by Russian Federation have rather been impeding than supporting factors to attract direct foreign investments in Russian forest sector. Especially, the support concerning continuous and predictable wood procurement is still missing, and the future development of the domestic roundwood markets is unclear.

While the general legislation has proceeded to give more strict rights and liabilities to operate in Russia, the enforcement of legislation is still somewhat unpredictable. Forest Code, including more detailed rules, rights and responsibilities for example for forest leasing and regeneration, has been under reconstruction for many years, and it is still uncertain if the latest version will never be ratified in its present form. Without any knowledge of the management and leasing possibilities of the forests in the future and any investment system guarantee it is a big risk to invest in infrastructure, such as forest road network and wood procurement logistics, not to mention any larger investments, such as pulp and paper mills.

The recent increase in custom tariffs and regulations of assorting of species for exported roundwood clearly reveals how unpredictable the trade policy is in Russia. From investors' point of view, the stands in Russia include mixed species, of which primarily coniferous logs can be utilised in the planned sawmill. Other assortments could be exported abroad, but due to the custom tariffs the profitability of the whole planned investment can be questioned. In some recent political rhetoric, there have been attitudes and addresses to ban roundwood exports either totally or partially (concerning logs) which certainly weakens the profitability of

investments. This ban of course contradicts the rules of WTO, but Russia is not forced to obligate them until the membership is coming into force. Even the possibility to ban the exports in future remains uncertainty and is not in favour for planning international vertical integration across the borders. For instance, Finnish pulp and paper industry is highly dependent on Russian deciduous pulpwood, and the reduction of hardwood imports will implicate reorganisation of production lines in Finland. Also, many societal problems starting from corruption and bureaucracy to general political risk, some to mention, are decreasing the willingness for foreign direct investments in Russian forest sector.

Oil exports and the increasing surplus of the current account are likely to appreciate the rouble's nominal exchange rate in the near future. Together with high domestic inflation this will weaken the international price competitiveness of Russian products. Therefore, generally the export of final forest products is probably not as profitable business as the production for domestic markets. In Russia, however, consumers are traditionally not used to utilise wood based products, such as wood based construction materials. Changes in consumers' preferences and increase of income and purchasing power of urban citizens will however gradually increase the demand for wood based products. The general increase of prices and wages, and lack of coniferous logs, on the other hand, challenges the profitability of forest investments. To summarise, evaluation of the findings of this overview to those of the pioneer work by Nilsson and Söderholm (2002) for obstacles for foreign direct investments in Russian forestry reveals that only a slight improvement has been occurred. Many of the uncertainties remain still unsolved.

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Appendix: Key Factors and Their Relative Importance for Forest Investments

	Poor	Satisfactory	Developing	Good	Excellent
ECONOMY					
Macroeconomics					
General economic development				x	
Inflation			x		
Cost level (wages, lots)			x		
Financial sector					
Banking system			x		
Operating capabilities of banking sector			x		
Possibilities to finance investments		x			
Level of interest rates			x		
Exchange rates					
Level of exchange rates			x		
Stability of exchange rates			x		
Real price competitiveness		x			
Political system					
Stability			x		
Predictability		x			
Transparency			x		
Trade policy					
Stability		x			
Predictability		x			
INSTITUTIONAL SETTING					
Infrastructure					
Density and quality of railroad network				x	
Density and quality of general road network			x		
Supply of electricity and energy in general			x		
Legislation					
General legislation			x		
Enforcement			x		
Transparency			x		

General features and clearness of legislation					
Status of legislation			x		
Principles of labour legislation		x			
Features of tax system		x			
Custom policy		x			
FORESTRY					
Forest resources					
Quantity of forest resources					x
Quality of forest resources			x		
Sustainable use of forest resources		x			
Accessibility of forest resources		x			
Clearness of property rights		x			
Pricing			x		
Competition		x			
Factors of production					
Quantity of labour force				x	
Quality of labour force			x		
Availability of lots				x	
Energy			x		
Forest product markets					
Competition				x	
Growing possibilities of domestic markets				x	
Growing possibilities of foreign markets			x		
Safety of investments					
Quarantee		x			
SOCIETY					
Bureaucracy		x			
Corruption	x				
Business culture					
Clearness of the rules in business		x			
Business way of thinking			x		
General mentality			x		
Attitudes towards foreign operators			x		
Social responsibility			x		