



Department of Forest Products

Establishment of pulp and paper production in Russia
– Assessment of obstacles

Etablering av pappers- och massaproduktion i Ryssland
– *bedömning av möjliga hinder*

Hanna Andersson



Department of Forest Products

Establishment of pulp and paper production in Russia – Assessment of obstacles

*Etablering av pappers- och massaproduktion i Ryssland
– bedömning av möjliga hinder*

Hanna Andersson

*Master thesis, 30 ECTS credits, D-level in Business Economics
Hanna Andersson, Economics and Business Administration Programme
with specialisation in Natural Resources, 02/07*

*Supervisor at SLU: Denise McCluskey
Supervisor at McKinsey & Company: Peter Berg*

Acknowledgements

This is a dissertation for the Swedish University of Agricultural Sciences, where the work has been done in co-operation with McKinsey & Company.

There are many people I would like to thank for their support for and contribution to this work, particularly the people who took time to answer my questionnaire, be interviewed, as well as the SLU study visit to Russia. I would like to give special thanks to:

Peter Berg, my supervisor at McKinesy & Company, this assignment possible. Peter has been supportive, always had time to sit down and discuss my progress and obstacles that I have encountered along the way. Peter's great knowledge on this subject has provided new angles of approach for me in my work.

Glen O'Kelly, McKinsey & Company, for his assistance in identifying source material about the Russian pulp and paper industry. Glen, Daniel, Elisabeth and Maria have shown a great deal of patience and friendship, always having time to answer my questions regarding pulp and paper.

Denise McCluskey, my supervisor at SLU, for her guidance and help with problems I encountered on the way.

Great thanks to Harriet Sharp, Brooke Fridfinnson and Erin Kitchen who took the time to help with copy edit the text.

Last, but not least I want to give a special thanks to my parents for providing me with an upbringing close to the lovely forests of Bergslagen in Västmanland, and of course for always supporting me.

Thank you all...

Abstract

This essay is written for the purpose of finding out why so few international pulp and paper companies have established production in Russian. It identifies the main obstacles potential investors perceive. This essay has its theoretical ground originates from the PEST model, the resource based view of strategy, risk management. It also contains general reports of the Russian political and economic situation, as well as new material about the pulp and paper branch in the. Using this as a framework to sort and collect data, the main approach has been empirical

To collect the necessary information for this essay the following three methods have been used:

(1) Field study observation

In March, I participated in a Russian field study. The purpose was to observe the cultural and the political system, experience the infrastructure and the see for myself potential for establishment of forest industries. It was also possible to visit forests and firms that had previously invested in Russia.

(2) Questionnaires

Questionnaires were sent out to 14 international pulp and paper companies. Here 11 detailed questions about Russian pulp and paper industry were posed.

(3) Interviews

Three semi-structured interviews were carried out. One with a company that was currently considering the potential of investing in production capacity in Russia, one company who has successfully established sawmill production in Russia, and one that had initiated some production investments and later withdrew.

A general summary is that there are many obstacles to establishing production in Russia, with the most significant ones being Russia's political climate, legal barriers and the infrastructure.

These obstacles are of great importance and need to be resolved in order for potential investors in pulp and paper to feel safe. While this dissertation does not focus on finding solutions to such obstacles, its intention is nonetheless to provide a thorough overview of the pulp and paper industry in Russia and so develop a foundation for understanding the obstacles.

It has shown that companies are careful in considering the risk in establishing production in Russia, due to threat and odds their company faces within the industry. The general concept that there are first mover advantages when entering a new market are not considered advantages in the current Russian business climate. Companies who are interested in establishing production in the Russian economy need to be thoroughly prepared because the pulp and paper industry is currently is an early development stage and many changes are expected.

Key terms: *Pulp and paper industry, Russia, establishing process, obstacles and opportunities, forests.*

Sammanfattning

Detta är ett examensarbete som syftar till att belysa den ryska papper och massamarknaden. Syftet är att förstå varför så få internationella papper och massaföretag har lyckats etablera sig på den ryska pappers- och massamarknaden samt att försöka förstå vilka hinder de ser. En annan viktig fråga för att lösa föregående fråga är om den ryska marknaden är livskraftig och om det är genomförbart för företag att etablera produktion i Ryssland. Metoden som har användas för arbete består av följande tre delar:

(1) Studieresa

Under mars månad deltog jag på en sex dagars studieresa till Ryssland där målet bland annat var att observerade kulturen, organisation samt skogarna.

(2) Enkätundersökning

14 internationella papper och massaföretag var ombudda att besvara en enkät med 11 frågor som berörde den ryska pappers- och massamarknaden.

(3) Intervjuer

Enbart tre intervjuer har genomförts med internationella företag. Ett företag som misslyckats med sin etablering, ett företag vars moderbolag planerar att kanske etablera sig inom en snar framtid samt ett företag som är etablerat med ett sågverk i Ryssland.

En sammanställning av dessa tre delar finns i kapitel fem, den empiriska studien i detta arbete. De olika teorierna detta arbete har sin grund i är PEST- modellen, det resursbaserade synsättet, riskanalys samt vissa rapporter som berör pappers- och massa industrin i Ryssland. Dessa två delar, teori och empiri, är sedan sammanflätade i analysdelen.

Under tiden som arbetet har vuxit fram har många snarlika problem nämnt av företag som de ser med den ryska industrin, dessa hinder är saker som är mycket viktiga att de löses innan företagen kommer att ta steget in på den okänd ryska marknad. De största och mest återkommande problemen är politisk osäkerhet, legala problem samt problem med infrastrukturen i Ryssland. Några konkreta lösningar på problemen kommer inte arbetet att innehålla men förhoppningen är att arbetet kan hjälpa till att öka kännedomen om marknaden och hindren.

Den ryska marknaden är en marknad som ännu inte är färdigutvecklad, så min åsikt är att det kan finnas stora möjligheter för företagen om de lyckas övervinna de största hindren på vägen. Vissa internationella papper och massaföretag har lyckas med att etablera sig och då även överkommit de nämnda svårigheterna med den ryska industrin. Dessa företag är mer villiga att ta risker men ser större fördelar än problem med detta. För att kunna vara en aktör på den ryska marknaden måste företagen vara mer öppna för förändringar eftersom den ryska industrin just nu är i en utvecklings stadie.

Nyckelord: *Massa och pappers produktion, etablering, hinder och möjligheter, Ryssland, skog*

Symbols and abbreviations used

ha	Hectare
m ³	Cubic meter
mill. ha	Million hectares
GDP	Gross Domestic Product
FAO	Food and Agricultural Organization
IMD	International Institute for Management Development
PEST	Political, Economic, Social, and Technological factors
RBV	Resource based view
SFFA	State Forest Fund Account
SLU	Swedish University of Agricultural Sciences
USSR	Union of Soviet Socialist Republics
WCY	World Competitiveness Yearbook

Table of Contents

1 Introduction and background	7
1.1. Aims and research questions	8
1.2. Delimitation	8
2 Method	9
2.1. Outline of the chapter	9
2.2. Methods used in the collection of data	9
2.3. Field study observation	9
2.4. The questionnaire	10
2.4.1. Selecting the population	10
2.4.2. Weaknesses of the selection procedure	12
2.5. The interviews	12
3 Theoretical framework	13
3.1. Outline of the chapter	13
3.2. The PEST-model	13
3.3. The resource based view model	15
3.4. Risk management	16
4 Background empirical information	19
4.1. Outline of the chapter	19
4.2. The Russian pulp and paper industry from a recent historical perspective	19
4.3. The Russian pulp and paper industry today	20
4.4. Pulp and paper flows	26
4.5. The quality of wood	26
4.5.1. The Forest Code	27
4.6. UN reports on the Russian forest industry	28
4.7. Government and public organizations managing Russian forests	29
5 Empirical observations	31
5.1. Outline of chapter	31
5.2. Summary of field study observations	31
5.3. Results of the questionnaire	32
5.4. Results from interviews	37
5.4.1. Interview with Swedwood	37
5.4.2. Interview with SvirTimber	39
5.4.3. Interview with former AssiDomän	39
6 Analysis	41
6.1. Outline of the chapter	41
6.2. The PEST-model	41

6.3. The resource based view model.....	43
6.4. Risk management	45
7 Discussion and Conclusions	48
7.1. Aims and research questions	48
7.2. The main obstacles on the Russian market	48
7.2.1. Political risks and legal barriers.....	48
7.2.2. Infrastructure	49
7.2.3. Bureaucracy	49
7.2.4. Supply of raw material	50
7.2.5. Lack of skilled labour.....	50
7.3. Final thoughts on the subject	51
<i>Bibliography</i>	52
Literature and publications	52
Articles	52
Interviews	53
Internet and database	53
McKinsey analysis	53
<i>Appendices</i>	54
<i>Appendix 1: Questionnaire</i>	
<i>Appendix 2: Interview questions</i>	

Table of figures

<i>Figure 1, the relationship between resource heterogeneity and immobility, value, rareness, and sustained competitive advantage.</i>	<i>16</i>
<i>Figure 2, Pulp and paperboard production in Russia 1980-1990.</i>	<i>19</i>
<i>Figure 3, Pulp, paper and paperboard production during 1992 – 2005</i>	<i>21</i>
<i>Figure 4, Russian net export of pulp, paper and paperboard during 1992 - 2005</i>	<i>21</i>
<i>Figure 5, Russian forests available for production in the 21st century.</i>	<i>22</i>
<i>Figure 6, The Russian market of pulp, paper and paperboard capacity, international and domestic companies' part on the market.</i>	<i>22</i>
<i>Figure 7, the structure of the players on the Russian market and there production capacity.</i>	<i>23</i>
<i>Figure 8, the ten largest companies on the Russian market and there participation of different products.</i>	<i>24</i>
<i>Figure 9, the pulp and paper industries' share in percent of the Russian economy in 1995 and in 2004.</i>	<i>24</i>
<i>Figure 10, Infrastructure spending projections in Russia 2006-2010.</i>	<i>26</i>
<i>Figure 11, Organisation of the forest administration before 2007 and since 2007</i>	<i>28</i>
<i>Figure 12, Answers to question 1: "-How accessible to international participation (in production) do you perceive the Russian pulp and paper industry to be?"</i>	<i>33</i>
<i>Figure 13, Answers to question 4: "- What do you see as the main obstacles to production participation?"</i>	<i>34</i>
<i>Figure 14, Answers to question 5: "-In what timeframe do you think a sufficient number of obstacles will be removed so that international participation in production may flourish? ...</i>	<i>34</i>
<i>Figure 15 Answers to question 6: "-In what timeframe do you think the domestic Russian Pulp and paper industry will become an important player in the global pulp and paper industry?"</i>	<i>35</i>
<i>Figure 16 Answers to question 8: "-What do you see as the main benefits with production participation in the Russian pulp and paper industry?</i>	<i>36</i>
<i>Figure 17, Answers to question 9: "- If you are considering participating in the Russian pulp and paper production, what timeframe would be relevant for your company?"</i>	<i>36</i>

List of tables

<i>Table 1, Competitiveness ranking of specified countries in basic infrastructure</i>	<i>25</i>
---	-----------

1 Introduction and background

The Russian Federation is the largest country in the world in terms of its land area, which is approximately 17 000 000 square kilometres. The Russian climate ranges extensively: dry, windy steppes in the south; a humid continental climate in large parts of European Russia; a sub-arctic climate in Siberia; and, a harsh tundra climate in the polar north. Russian winters vary from cool along the Black Sea coast to frigid in Siberia. Russian summers vary from warm in the steppes to cool along the long Arctic coast.¹

Not only is Russia the largest country in the world in terms of area, it also contains the largest quantity of forested area. As much as 808 million ha of Russia is covered by forests. This constitutes 20% of the growing forest mass available globally. An overwhelming part of the Russian forests (97.1 million m³sub) are softwood forests i.e. made up of pine trees, spruces and other conifer trees. Thus, Russia has comparatively minimal supplies of hardwood forests (37 million m³sub) i.e. forests consisting of deciduous trees such as birch, aspen, ash, oaks and so on.²

The fall of the Berlin wall in 1989 marks the start of dramatic changes in Eastern Europe and in Russia in particular. Further dramatic changes followed in the wake of the break up of the USSR in 1991. The Russian economy suffered a total collapse in 1991. A collapse that has taken Russia a long time to recover from. Nonetheless in 2007 it is considered by some that in the forestry industry, Russia has met great progression towards building up a stable market economy.³

In the process of rebuilding the Russian economy, the forest industry has played a significant role. During the communist regime, the Russian forest industry had little commercial contact with the world outside. However, today more and more international companies are beginning to view Russia as an emerging market and source of raw material. Russia has huge forest resources and its proximity to both Europe and Asia is a valuable factor key advantageous factor in terms of exports. Some companies have tried to establish production in the Russian market but have failed; others have successfully managed to do so. Many international pulp and paper companies are currently in the process of considering how they participate in Russia⁴

In the following sections of this chapter I will describe the focus of this essay, its research questions and aims and finally, I will present the delimitations of this study.

¹ <https://www.cia.gov/cia/publications/factbook/geos/rs.html>, 2007-03-17

² Filiptchouk, Strakhov, and Borisov, 2001, Forest and forest products country profile, Russian Federation, Geneva, United Nations Publications, ECE/TIM/SP/18, ISSN: 1020-2269.

³ Schmögnerová Birgita, 2003, Russian Federation forest sector outlook study, Geneva Switzerland, United Nations Publications, ECE/TIM/DP/27, ISSN 1020 7228.

⁴ Filiptchouk, Strakhov, and Borisov, 2001, Forest and forest products country profile, Russian Federation, Geneva, United Nations Publications, ECE/TIM/SP/18, ISSN: 1020-2269.

1.1. Aims and research questions

The subject area of this essay is the potential for foreign companies to establish pulp and paper production in Russia, and the identification of issues they face.

The aim of this study is to find out *why* so few international companies have established production in Russian. In addition, this essay will attempt to identify the main *obstacles* preventing companies from establishing production in Russia and whether Russia is a viable country for establishing pulp and paper production according to the sample population of companies.

It is hoped that this essay will provide useful information for international companies interested in establishing production on the Russian market.

1.2. Delimitation

Although the Russian forest sector is very large and encompasses a great range of products, this study focuses solely on Russian pulp and paper production. The study discusses the Russian pulp and paper industry from the perspective of large international European companies that are, or could be, potential participants in this industry. It should be observed that specific domestic Russian companies involved in the pulp and paper industry are not discussed in this essay. Finally it should be noted that although Russia was once one of many states in the Union of Soviet Socialist Republics, this study excludes from discussion all other former member states. The prime focus will be on the pulp and paper industry in the western parts of Russia, the west side of the Ural Mountains.

2 Method

2.1. Outline of the chapter

This chapter focuses on the methods used in this study of the Russian pulp and paper industry. Section 2.2 gives an overview of the three main methods used in this study. Section 2.3 describes methodological aspects of the field study made in Russia this section is then followed by section 2.4 Presents the questionnaire that was carried out and also describes various aspects concerning the selection of the population for this study. Finally section 2.5 which reports on the interviews that were done.

2.2. Methods used in the collection of data

In order to obtain data for this study, three main methods have been used:

- (1) Field study observation
- (2) Questionnaires
- (3) Interviews

Each of the data collection methods above will be described in detail in sections 2.3 to 2.5.

2.3. Field study observation

The third method used in this study is field study observation. This method involved visiting Russia to observe the culture, the political system, and the infrastructure relating to the establishment of potential forest industries, as well as observing company structures and forests.

The observations were carried out in March 2007 in conjunction with a six-day visit to a Swedwood production plant in Tikhvin and a SvirTimber sawmill west of Podporoze, both located outside St Petersburg in western Russia. As an independent researcher, I accompanied a group of third-year students at SLU on a study project to Russia.

During the visits to the above mentioned production plant and sawmill, I introduced myself and described this study to the people later interviewed as part of this study (see 2.4).

According to Emerson (1995:14)⁵ “[f]ield researchers seek to get closer to others in order to understand their way of life. To preserve and convey that closeness, they must describe situations and events of interests in detail.” During the field study, all observations made were documented. On visits short field notes were made concerning what I saw, people I talked to and what we talked about.

⁵Silverman David, 2005, Doing qualitative research, second edition, London, Sage, ISBN: 1412901960, s.174

These short field notes were later developed into more comprehensive summaries. I also kept a journal in which day-to-day experiences were entered, questions and problems that arose during my field study. Detailed records of the field study were kept in order to facilitate later analyses of the data and in order to improve the reliability of the study.

2.4. The questionnaire

The questionnaire used in this study consisted of 11 questions. Four of these were open-ended questions where the respondent could state his/her opinions in more detail. The other seven questions were multiple choice questions where the respondent was asked to put a tick before the alternative(s) that most closely corresponded to his opinions. After each multiple choice question, the respondent was given the opportunity to comment in writing on his answers. The respondents were assured total anonymity, i.e. they were instructed that their names would be removed from the questionnaire form when they returned it to the sender. The questionnaire used in this study can be found in Appendix 1.

A cover letter outlining the study and the purpose of the questionnaire was sent out by post together with the questionnaire form to the 14 companies selected to be part of the present study. Given the sensitive nature of the questionnaire, anonymity was considered vital. Respondents were given the option of inserting their name and were assured that this was not to be disclosed. Unfortunately the promises of anonymity and its benefits had a down side; it was not possible to follow up non-respondents to the questionnaire. It was hoped that the number of people filling out the questionnaire would be greater if the respondents received the questionnaire and the cover letter by regular mail rather than by e-mail. By having the respondents receive a 'physical' paper copy of the questionnaire; it was hypothesised that the respondent rate would increase. In contrast, had the questionnaire and cover letter been sent out by e-mail, there would have been a greater risk that the questionnaire would 'disappear' among all the incoming e-mails and that the respondents would forget to fill them in. The addressees were instructed to forward the questionnaire to another person within the company if they felt that they were not capable of answering the questionnaire themselves. The respondents were given a period of two weeks to fill in the questionnaire and return it. All companies were instructed to post the questionnaire in the addressed envelope which was sent out together with the cover letter and the questionnaire.

2.4.1. Selecting the population

This study is delimited to a total of 17 international companies involved in both sawmill and pulp and paper production form the population for this study. Of these 17 companies, questionnaires were sent out to 14 companies and interviews were conducted with three companies. The reason why sawmill companies are included in the population is because the establishing process is similar to the process pulp and paper companies experience and the obstacles that occurred are almost the same. During the field study to Russia good relationships was formed with sawmill companies and that opened several more opportunities.

The international companies selected represent three stages of establishment:

- (1) companies that have *successfully* established themselves in Russia
- (2) companies that have *withdrawn* themselves from Russia
- (3) companies for whom the Russian industry could be of interest

Information concerning which stage of establishment a particular company has was obtained from Peter Berg, my supervisor at McKinsey & Company.

When selecting companies for whom the Russian industry may be of interest, my supervisor and I used the following selection criteria:

- (3.1) the company's geographical proximity to Russia
The closer to Russia, the better.
- (3.2) whether the company has sufficient capital to establish themselves in Russia. Establishment in Russia requires large investments.

Swedish Forest Industries Federation index^{6,7} of leading pulp and paper producers was also used when selecting the companies for the population. The following 17 international companies constitute the population of this study. The first 8 companies are Swedish and the rest are Norwegian, Finnish, Austrian and American.

Swedish companies

1. Former AssiDomän
2. Billerud
3. Holmen
4. Korsnäs
5. Rottneros
6. SCA
7. Swedwood
8. Södra skogsägarna ekonomisk förening

Norwegian company

9. Norske skog

Finnish companies

10. M-Real
11. Metso paper
12. Metsä-Botnia
13. StoraEnso
14. SvirTimber
15. UPM

⁶ <http://www.skogsindustrierna.se/LitiumInformation/site/page.asp?Page=10&IncPage=626&IncPage2=232&Destination=227&destination2=226&ohKatID=16&ohID=286&lang=sv>, 2007-03-20

⁷ <http://www.skogsindustrierna.se/LitiumInformation/site/page.asp?Page=10&IncPage=626&IncPage2=232&Destination=227&destination2=226&ohKatID=16&ohID=285&lang=sv> , 2007-03-20

Austrian company
16. Mondi packaging

American company
17. International Paper

It should be noted that no Russian company currently active in the pulp and paper industry was selected for the population.

2.4.2. Weaknesses of the selection procedure

It should be noted that the selected companies in the population do not constitute a *representative* selection of international companies in the forest industry. Nor do they represent a *random* sample of companies since the companies were selected according to a list of specified criteria. The selection method utilised in this study is thus *arbitrary*. The selected companies were chosen because they fit the aims of this study. The results obtained from the investigations carried out do thus only pertain to the population in question. The results are not valid in regard to the international forest industry as a whole. However, it is hoped that the results will suggest certain general trends and indications which may also be applicable on a wider scale.

2.5. The interviews

A total of three interviews were carried out. The people interviewed were selected based on the criteria specified in section 2.4.1. The respondents were assured partial anonymity; that is, I was allowed to specify what company they worked for but not their name or rank within the company.

Before the interviews were carried out the respondents received the general topic areas I wanted to ask questions about by e-mail. The reason for sending out the topics before the actual interviews were conducted was to provide the respondents with the opportunity to see what topics the interview would concern. It was hoped that this would make the respondents more willing to participate in the interview.

Four of the interviews were carried out by phone and one interview was conducted face-to-face. The interviews lasted between 20 and 60 minutes. The face-to-face interview was recorded in Sweden using an Mp3 *Iaudio* recording device. The four phone interviews were not recorded. The number of questions asked in the interviews varied based on the reasons for selecting the particular company for the interview (see section 2.4.1). The questions can be found in Appendix 2.

Rather than transcribing each of the interviews, I prepared written summaries of the interviews after they had been completed. It should be noted that a face-to-face interview differs from an interview carried out by phone in a number of respects. In a face-to-face interview, you may observe facial expressions and other aspects which may be missed in a phone interview. On the other hand, in a phone interview the respondents may feel more anonymous and this may encourage them to speak more freely and provide greater depth to the questions asked.

3 Theoretical framework

3.1. Outline of the chapter

Chapter 3 presents the theoretical framework of this study. Section 3.2 focuses on the so-called *PEST-model*. Section 3.3 discusses the *Resource-based View* and section 3.4 brings up the topic of *Risk Management*.

3.2. The PEST-model

PEST is an abbreviation for Political, Economic, Social, and Technological factors. These factors influence the external macro-environment of the company. These factors are commonly not controlled by a company in the process of investigating a potential market. Because these factors are not controlled by the company, they can become threats. However, if the factors are favourable, they can become future opportunities. By using the PEST-analysis method, predictions regarding the future can be made with greater accuracy. The PEST factors differ depending on which country a company is active in and/or located in. The PEST analyses therefore has to be made in each country that is of interest to the company doing the investigation.⁸

According to www.netmba.com, the main PEST factors to be taken into consideration when making predictions for the future are divided into four principal categories of analysis: (1) political analysis, (2) economical analysis, (3) social analysis and (4) technological analysis. These four areas of analyses comprise several factors to be investigated. The areas of analysis as well as the more specific factors in the PEST-model are listed below:

Political Analysis

- Political stability
- Risk of military invasion
- Legal framework for contract enforcement
- Intellectual property protection
- Trade regulations
- Favoured trading partners
- Anti-trust laws
- Pricing regulations
- Taxation - tax rates and incentives
- Wage legislation - minimum wages and overtime
- Work week
- Mandatory employee benefits
- Industrial safety regulations
- Product labelling requirements

⁸ Cornelis A. de Kluyver, 2006, *Strategy, a view from the top*, second edition. Pearson prentice hall, ISBN: 0-13-1861360s 28-42

Economic Analysis

- Type of economic system in countries of operation
- Government intervention in the free market
- Comparative advantages of host country
- Exchange rates
- Efficiency of financial markets
- Infrastructure quality
- Skill level of workforce
- Labour costs
- Business cycle stage (e.g. prosperity, recession, recovery)
- Economic growth rate
- Discretionary income
- Unemployment rate
- Inflation rate
- Interest rates

Social Analysis

- Demographics
- Class structure
- Education
- Culture (gender roles, etc.)
- Entrepreneurial spirit
- Attitudes (health, environmental consciousness, etc.)
- Leisure interests

Technological Analysis

- Recent technological developments
- Technology's impact on product offering
- Impact on cost structure
- Impact on value chain structure
- Rate of technological diffusion⁹

In the last two decades, interdependence has increased between the most important economies in the world and the competition has also increased in many industries due to globalization. According to Cornelis and de Kluyver,¹⁰ as the global competition increases the winners are not likely to be the companies that are in control of the natural resources or the physical capital. It is more likely that those companies profit which have the most ideas and technology, resources that are not bound by ownership, governments or geographic location. It should not be forgotten that a company's environment never ceases to change and in the years to come companies will continue to invest in new markets and expand. As a political, economic, social and technological force globalization is unstoppable. The never ending flow of information has made people around the globe more aware of threats, life styles and preferences of others continents and this has made us all global citizens. We are living in a global economy, whether we like it or not.¹¹

⁹ <http://www.netmba.com/strategy/pest/2007-02-11>

¹⁰ Cornelis A. de Kluyver, 2006, Strategy, a view from the top, second edition. Pearson prentice hall, ISBN: 0-13-1861360s 28-42

¹¹ Cornelis A. de Kluyver, 2006, Strategy, a view from the top, second edition. Pearson prentice hall, ISBN: 0-13-1861360s 28-42

Globalization in the business world has in the last years expanded and more companies are now active on the global market. Many companies are expanding in areas with great potential but a higher level of risk. Participation in international markets often entails contacts with unfamiliar cultures, different regulatory agencies and structures. As a result, the level of exposure to currency fluctuations and political risks increase.¹²

3.3. The resource based view model

The Resource based view model (RBV) focuses on a company's internal resources. Within RBV, the strategic resources of a company are assessed and then evaluated in terms of how to best make use of the strategic resources. RBV is thus an economic tool that helps companies to exploit their competitive advantages.¹³ To maintain a competitive advantage the resources and capabilities the company control have to be rare, valuable, and not substitutable. These resources can both be tangible and intangible assets to a company.¹⁴

There are two ways to help companies find the source of competitive advantage. The first way argues that it does not matter to the companies or groups in an industry whether it is heterogeneous when it comes to the strategic resource they have power over. The second way argues that heterogeneity is not long lasting and the resource cannot be perfectly movable.¹⁵

The companies' resources are often divided into three categories:

(1) Physical capital resources

Physical capital resources are for example the geographic location, the physical technology in the company and the access to raw materials.¹⁶

(2) Human capital resources

Human capital resources are all those personal characteristics that the individuals in a company possess such as judgement, intelligence, expertise, training in their line of work and insights.¹⁷

(3) Organizational capital resources

Organizational capital resources can be anything from the company's relationships with others players on the market to the company's own structure as well as the information networks and the coordination and control systems in the company.¹⁸

¹² Cornelis A. de Kluyver, 2006, Strategy, a view from the top, second edition. Pearson prentice hall, ISBN: 0-13-1861360s 28-42

¹³ http://en.wikipedia.org/wiki/Resource-Based_View, 2007-02-12

¹⁴ Barney, J.B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17, 99–120.

¹⁵ Barney, J.B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17, 99–120.

¹⁶ Barney, J.B. 1986b. Organizational culture: can it be a source of sustained competitive advantage? *Academy of Management Review*, 11:656-665

¹⁷ Barney, J.B. 1986b. Organizational culture: can it be a source of sustained competitive advantage? *Academy of Management Review*, 11:656-665

¹⁸ Barney, J.B. 1986b. Organizational culture: can it be a source of sustained competitive advantage? *Academy of Management Review*, 11:656-665

It should be noted that all of these resources may be strategically relevant to the company at the same time.¹⁹

The list of resources a company has tends to be long. It is therefore important to estimate the competitive advantage of each resource.²⁰ The resources have to fulfil four criteria to have potential to become sustained competitive advantages:

1. They must create a value; the resource should exploit threats and opportunities in the environment.
2. In comparison to the company's competition, the resource must be rare.
3. The resources must be valuable.
4. The resources must be substitutable to the company.²¹

These four characteristics are important indicators to companies when they want to know the full extent of how heterogeneous and immobile the company's resources are. Figure 1 below illustrates the relation between resources and sustained competitive advantage for a company. It suggests which empirical questions need to be answered in order to identify which resources are sources of sustained competitive advantages.²²

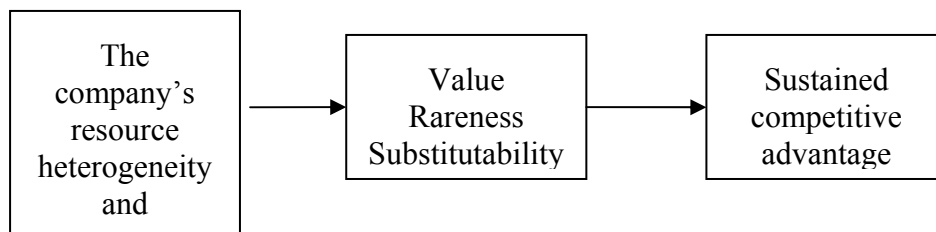


Figure 1. The relationship between resource heterogeneity and immobility, value, rareness, and sustained competitive advantage.²³

3.4. Risk management

According to www.nationalencyklopedin.se risk is the possibility that something unexpected will occur.²⁴ When assessing or measuring risks for a company, risk management is a useful model to use to set up accurate strategies to reduce the negative effect of risk, avoid risk and

¹⁹ Barney, J.B. 1986b. Organizational culture: can it be a source of sustained competitive advantage? *Academy of Management Review*, 11:656-665

²⁰ John Fahy, Strategic marketing and the resource based view of a firm, volume 1999 nr 10

²¹ Barney, J.B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17, 99–120.

²² Barney, J.B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17, 99–120

²³ Barney, J.B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17, 112

²⁴ http://www.ne.se/jsp/search/article.jsp?i_art_id=294214, 2007-03-12

help to accept the consequences risks can bring.²⁵ It is very important to identify the sources of risks and measure the risks. Financial risk management focuses on reducing the exposure to risk by using financial instruments.²⁶

There are special tools to identify risks and to help us understand what the risks involve. These tools focus on the same aspects as instruments used for evaluating finances.

Risk management is further often subdivided into the following three categories:

1. Market risk

Risk in a market is affected by different fluctuations in variables. Market risk can be categorised into *functional business areas*, *cash products* and *structured products* and the *expertise* of each area affected by risk management.²⁷

2. Credit risk

According to Dash (ibid.) credit risk it is divided into *traditional credit risk assessment of corporations*, *credit issuer risk* and *counterparty risk*.²⁸

3. Operational risk

Operational risk is everything that can go wrong and as such it resembles *Murphy's Law*. The worst part of this risk is that it is unexpected and when it occurs it is the first time to occur.²⁹

Measuring risk can be difficult due to the fact that risk often is the opinion of someone who is investigating it. To help understand the measuring of risk it is good to look at four variables. (1) The first variable is to understand the individual interpretation of risk, i.e. the person's own understanding and preferences. (2) The second variable focuses on the uncertainty individuals feel when groups of individuals interact. (3) The third variable is concerned with how risk emerges and in what social context, cultural within the company is a factor that has large influence (4) the fourth variable considers the society one lives in, people feel a risk of losing family members, personal belongings or fear different decisions³⁰

There are people who have a higher willingness to take chances and increase the risk. These people often make decisions faster and these results in quicker responsiveness to fast changing industries, but also increase the exposure to risk. The people who are risk-averse are more cautious and they may therefore miss opportunities when they arise since they are too slow to make decisions. Risk-averse people may therefore be a disadvantage to companies in a rapidly changing market.³¹

²⁵ http://en.wikipedia.org/wiki/Risk_management 2007-02-11

²⁶ http://en.wikipedia.org/wiki/Financial_risk_management 2007-02-11

²⁷ Dash Jan. W, 2004, Quantitative finance and risk management, Singapore, World scientific Publishing co., ISBN: 981-238-712-9 s.9-13

²⁸ Dash Jan. W, 2004, Quantitative finance and risk management, Singapore, World scientific Publishing co., ISBN: 981-238-712-9 s.9-13

²⁹ Dash Jan. W, 2004, Quantitative finance and risk management, Singapore, World scientific Publishing co., ISBN: 981-238-712-9 s.9-13

³⁰ Andersson. J, Carlstedt. F and Rad. A, 2004, Integrated Risk Management, Lunds universitet

³¹ Andersson. J, Carlstedt. F and Rad. A, 2004, Integrated Risk Management, Lunds universitet

The process of decision-making has to be done thoroughly. Two factors must be taken into consideration when assessing alternatives: (1) the probability of success and (2) the degree of risk. When the risk of failure is high, the related cost will increase and alternatives may not be lucrative. Risk can be both personal and economical. Companies can never be certain of a positive outcome because complete information may be lacking.³²

³² Wendy Bloisi, *Management and Organisational behaviour*, 2003, s.156, 487

4 Background empirical information

4.1. Outline of the chapter

Chapter 4 is divided into seven parts. To start with, section 4.2 describes some important events and developments in the Russian pulp and paper industry from a historical perspective. This section is then followed by section 4.3 which discusses the current state of the Russian pulp and paper industry. Rather than giving an in-depth description of the historical and current state of the Russian pulp and paper industry, both sections primary purpose is merely to provide a backdrop for the empirical study presented in chapter 5. The chapter is concluded with an overview of pulp and paper flows in section 4.4. There is a discussion in section 4.5 on the quality of wood, as well as a presentation of miscellaneous reports regarding the Russian forest industry.

4.2. The Russian pulp and paper industry from a recent historical perspective

During the period 1980 to 2000 major changes took place in the Russian forest sector. The changes were economical, social, organizational as well as political changes. The two decades can be divided into two periods: (a) 1980-1990 and (b) 1990-2000. During the first decade Russia had a centrally planned economy. In the second decade leading up to the millennium, dramatic changes had taken place in Russia and Eastern Europe and the economy had evolved into a market economy.³³

Figure 2 illustrates how the Russian production of pulp, paper and paperboard evolved during the period 1980 to 1991.



Figure 1. Pulp and paperboard production in Russia 1980-1990.³⁴

During the period 1980-1989 Russia was the largest republic of the Soviet Union and it was the main supplier of pulp, paper and paperboard to the other states within the union. By 1989 Russia was one of the leading producers of pulp and paperboard worldwide. This was due to

³³ Schmögnerová Birgita, 2003, Russian Federation forest sector outlook study, Geneva Switzerland, United Nations Publications, ECE/TIM/DP/27, ISSN 1020 7228.

³⁴ Schmögnerová Birgita, 2003, Russian Federation forest sector outlook study, Geneva Switzerland, United Nations Publications, ECE/TIM/DP/27, ISSN 1020 7228. S. 15

increasing demands in both the domestic and foreign markets. The state supported new enterprises and modernization of facilities and production flourished.³⁵

Since 1989 there has been a decline in forest industry production and some of its branches have still not managed to turn this decline around. During the last decade of the 20th century, pulp, paper and paperboard production dropped by as much as 38 percent. The main reason for this production decline was the economic difficulties Russia suffered during this period.³⁶

Six significant factors contributed to the decline in production:³⁷

1. The forest management program broke down
2. Increase in energy and fuel costs
3. Cooperation between forest companies broke down
4. The cost of logistics increased
5. The technological level remained at a low level
6. The tax systems took more money and left none for development

When the forest sector was privatized, the production and efficiency decreased for almost all companies in the sector.³⁸

4.3. The Russian pulp and paper industry today

After a dark decade at the end of the 20th century when production of pulp, paper and paperboard dropped steeply, the current trend shows production is slowly but surely increasing again. Figure 3 below illustrates the increase in pulp, paper and paperboard production in the period 1992 to 2005.³⁹ Statistics show that although the Russian production of pulp, paper and paperboard is currently increasing, as illustrated in Figure 4, international companies – paradoxically - show little interest in the Russian market.⁴⁰

³⁵ Schmögnerová Birgita, 2003, Russian Federation forest sector outlook study, Geneva Switzerland, United Nations Publications, ECE/TIM/DP/27, ISSN 1020 7228.

³⁶ Schmögnerová Birgita, 2003, Russian Federation forest sector outlook study, Geneva Switzerland, United Nations Publications, ECE/TIM/DP/27, ISSN 1020 7228.

³⁷ Schmögnerová Birgita, 2003, Russian Federation forest sector outlook study, Geneva Switzerland, United Nations Publications, ECE/TIM/DP/27, ISSN 1020 7228.

³⁸ Schmögnerová Birgita, 2003, Russian Federation forest sector outlook study, Geneva Switzerland, United Nations Publications, ECE/TIM/DP/27, ISSN 1020 7228.

³⁹ FAOSTAT | <http://faostat.fao.org/site/382/default.aspx>, 23 February 2007

⁴⁰ FAOSTAT | <http://faostat.fao.org/site/382/default.aspx>, 23 February 2007

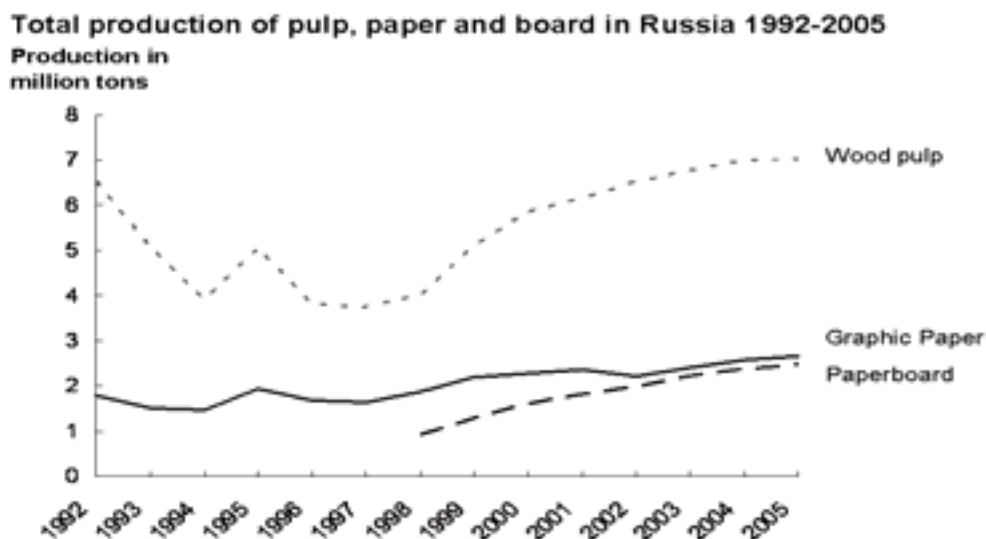


Figure 2. Pulp, paper and paperboard production during 1992 – 2005⁴¹

Although Russia is no longer one of the big players in pulp, paper or paperboard, exports are relatively high at the moment. Figure 4 shows the net export of Russia from 1992 to 2005. The main part of the current Russian export of pulp, paper and paperboard goes to China, Germany, India, the Ukraine, Belarus and the United Kingdom.⁴²

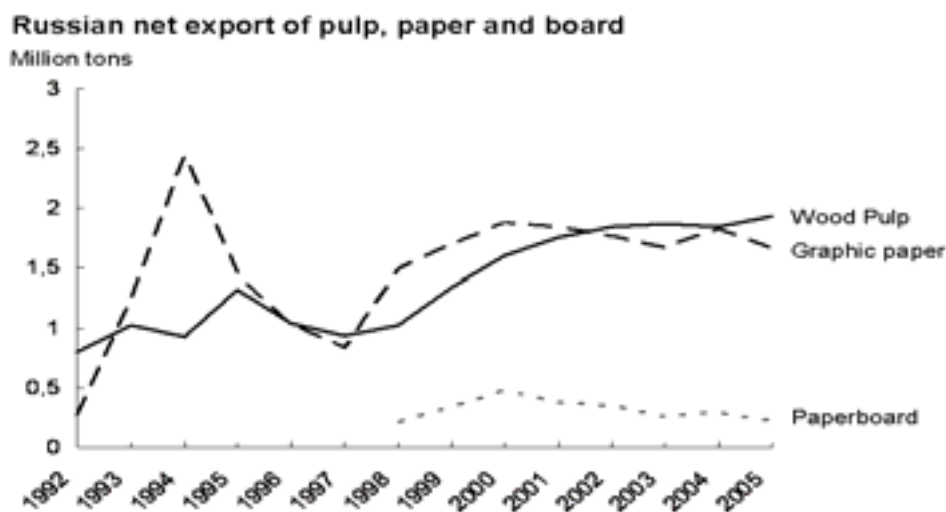


Figure 3. Russian net export of pulp, paper and paperboard during 1992 - 2005⁴³

Russia has the largest amount of forest area in the world, 808 million ha. Of this area 237 million ha is protecting soil and water, conserving biodiversity, social services and multiple purposes leaving 564 million ha of forest area to use for production. See Figure 5.⁴⁴

⁴¹ FAOSTAT | <http://faostat.fao.org/site/382/default.aspx>, 23 February 2007

⁴² FAOSTAT | <http://faostat.fao.org/site/382/default.aspx>, 23 February 2007

⁴³ FAOSTAT | <http://faostat.fao.org/site/382/default.aspx>, 23 February 2007

⁴⁴ Global Forest Resources Assessment 2005, FAO 2006, ISBN: 92—105481-9

Russian forests available for production in the 21st century.
Mill. ha

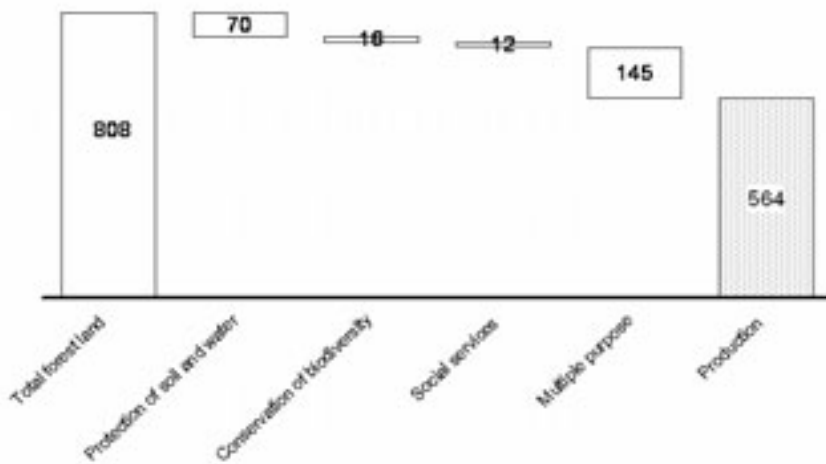


Figure 4. Russian forests available for production in the 21st century.⁴⁵

At the moment, the Russian pulp and paper industry is made up of a combination of domestic and international companies. Figure 6 illustrates the current status of the Russian forest industry and the domestic and international companies competing on the Russian market.⁴⁶

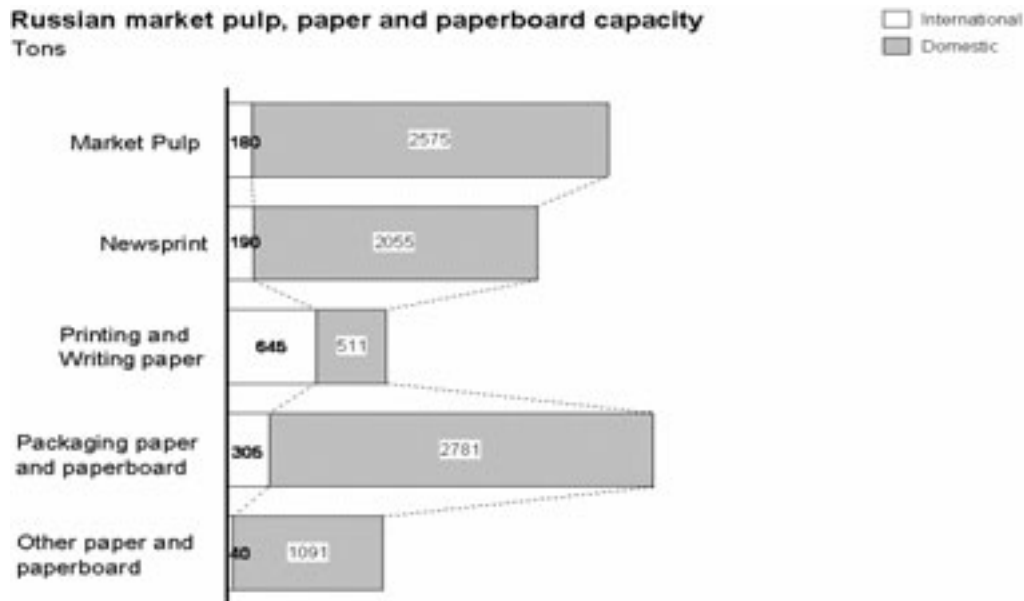


Figure 5. The Russian market of pulp, paper and paperboard capacity, international and domestic companies' part on the market.⁴⁷

⁴⁵ Global Forest Resources Assessment 2005, FAO 2006, ISBN: 92—105481-9

⁴⁶ NLK Associates mill database, 2007-04-03

⁴⁷ NLK Associates mill database, 2007-04-03

In a global perspective, massive changes have taken place in the pulp and paper industry in the new millennium. For example, during 2000 and 2005 more than one hundred mills closed in North America while, in the same period, the production capacity in Eastern Europe and China grew. These swift changes present companies throughout the pulp and paper supply chain with both opportunities as well as considerable risks.⁴⁸

The Russian pulp and paper industry contains ten relatively large players. In addition, there are many small companies on the market. The ten largest pulp and paper companies are, as shown in Figure 7, in control of almost all market shares in the Russian industry. Mondi has the second largest capacity of the companies and they are also one of the two international companies that have managed to establish in this country.⁴⁹

Structure of the ten largest players

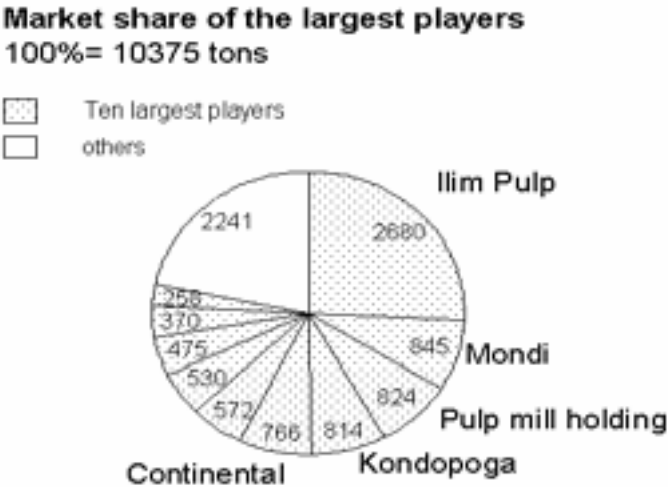


Figure 6. The structure of the players on the Russian market and there production capacity.⁵⁰

Among the top ten producers, there are only two international companies. Figure 8 shows the ten largest participants/players and which segments they are active in and their production capacity in each segment.⁵¹

⁴⁸ <http://www.risiinfo.com/corporate/do/welcome>
⁴⁹ NLK Associates mill database, 2007-04-03
⁵⁰ NLK Associates mill database, 2007-04-03
⁵¹ NLK Associates mill database, 2007-04-03

Ten largest companies and their participation in tons

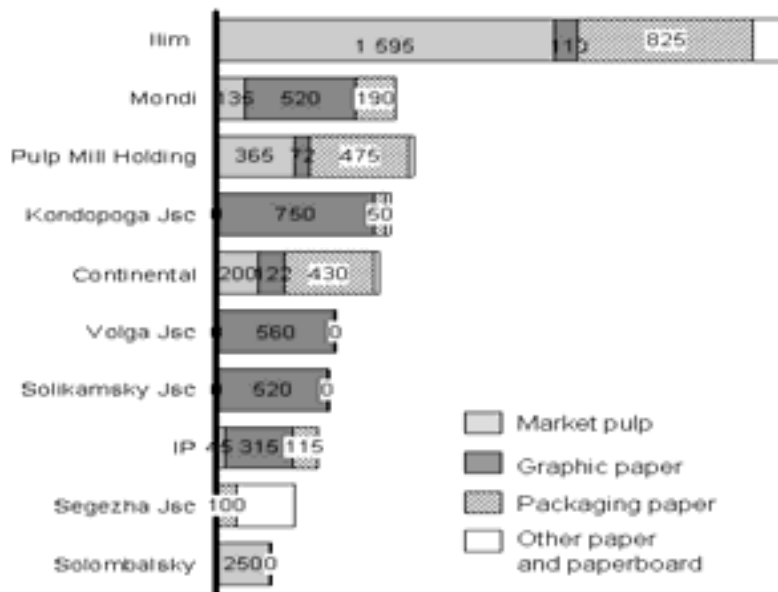


Figure 7. The ten largest companies on the Russian market and their participation of different products.⁵²

The pulp and paper industries' percentage share of the Russian economy in 1995 and in 2004 is shown in Figure 9. The Figure indicates that the pulp and paper industry share of GDP in the Russian economy is no longer at the same level as in 1995. The industry share of export goods and employment has gone down, the investments made in the pulp and paper industry is the only sector which shows an increase between these years.⁵³

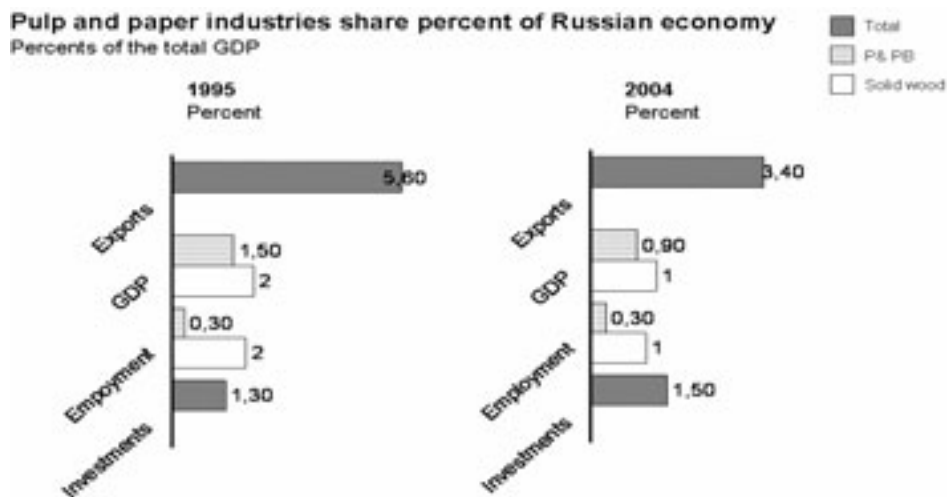


Figure 8. The pulp and paper industries' share in percent of the Russian economy in 1995 and in 2004.⁵⁴

⁵² NLK Associates mill database, 2007-04-03

⁵³ Rosstat and McKinsey analysis

⁵⁴ Rosstat and McKinsey analysis

Russia’s basic infrastructure (roads, railroads, ports, etc), which is so important for industries such as the paper industry, is not well developed. The infrastructures of Russia, China and India can be compared using *The IMD World Competitiveness Yearbook (WCY)* a report on the competitiveness of nation, IMD uses five main factors divided into 20 sub-factors to define and help in the ranking of the countries. The five factors that have been used in defining countries’ development of infrastructure are; basic infrastructure, education, technological infrastructure, scientific infrastructure, health and environment.⁵⁵ In the Table 1 below the ranking between China, India and Russia for 2003-2007 is shown. The countries with the lowest number are more competitive compared to other countries. It is clear that Russia has increased in ranking in the past year, but it is still at the level of India.⁵⁶

Table 1. Competitiveness ranking of specified countries in basic infrastructure⁵⁷

Countries	2003	2004	2005	2006	2007
China Mainland	15	14	22	18	8
India	48	39	35	30	36
Russia	45	47	47	52	33

The Russian government is planning to increase its spending on infrastructure, particularly on roads and railroad systems. However, it remains unclear whether these investment levels will be sufficient to significantly improve the infrastructure in the next few years.⁵⁸ For comparison, the Chinese government plans to spend over 400 billion Euros on transportation infrastructure up to 2010.

⁵⁵ http://www.imd.ch/research/publications/wcy/Factors_and_criteria.cfm 2007-05-18

⁵⁶ International Institute for Management Development ,IMD(WCY)

⁵⁷ International Institute for Management Development, IMD(WCY)

⁵⁸ Ministry of transportation of Russian Federation, EIU, McKinsey analysis

INFRASTRUCTURE SPENDING PROJECTIONS IN RUSSIA 2006-2010
EUR billion

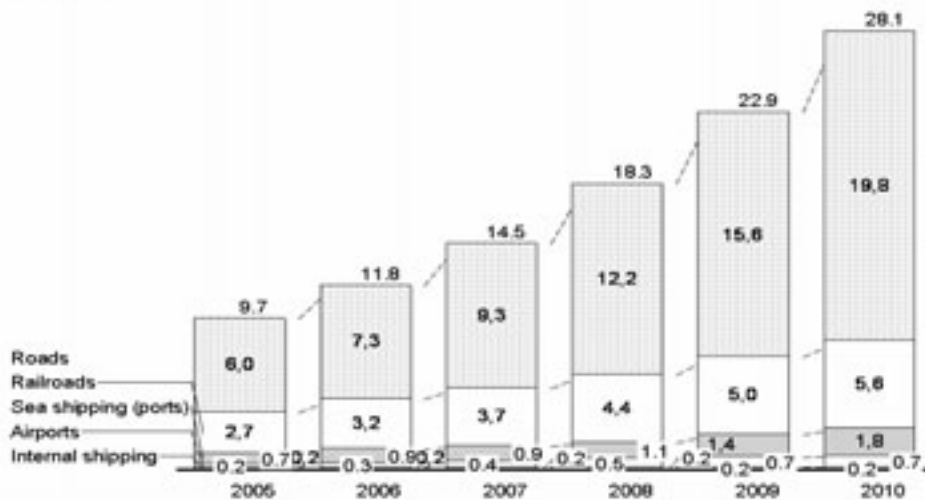


Figure 9. Infrastructure spending projections in Russia 2006-2010. ⁵⁹

At this website it is possible to view the railroad system in Russia. It is clear that the St. Petersburg area and the area close to Moscow are the most detailed ones.

<http://www.parovoz.com/maps/supermap/index-e.html>.

Over the last years there has been an increase in export of timber from Russia to nearby located countries. These transports are done mostly by boat and train. The Russian government is now planning to increase the export tariffs on timber. The tariffs will be raised from four euros/m³ to ten euros/m³ in the next year. In 2009 it is predicted that the tariffs will increase to 50 euros/m³. According to a recent report from Swedish Forest Industries Federation, the increase in tariffs on timber will reduce imports of Russian timber by countries around the Baltic Sea and as a result the Swedish forest industry will suffer. ⁶⁰

4.4. Pulp and paper flows

29 percent of all pulp, paper and paperboard produced in the world are exported globally. The largest part of this export flow takes place within Europe. Ten of the largest importers and six of the largest exporters are actors in the European region. The largest European producers are Finland, Sweden and Germany and they export almost 31 percent of all pulp, paper and paperboard produced in Europe. Canada is the biggest exporter worldwide and they also export to the European markets. Canada and the US are the major suppliers of paper to the Asian market. ⁶¹

4.5. The quality of wood

The quality of wood is based on the type of fibre the wood has. The fibres of conifers and broad leaved trees have different characteristics; fibres of soft wood are longer than hardwood fibres. Paper made out of softwood is stronger than paper made out of hardwood. ⁶²

⁵⁹ Ministry of transportation of Russian Federation, EIU, McKinsey analysis

⁶⁰ http://www.svd.se/dynamiskt/inrikes/did_14639346.asp, Skakad skogsindustri hos regeringen, 2007-03-21

⁶¹ Hansen, E and Juslin Heikki, 2003, Strategic marketing in the global forest industry, Cornwallis, Author Academic Press, ISBN: 0-9703333-7-4 S. 149-150

⁶² Kassberg, Mats, 1998, Massa och Papper -en grundbok, [Markaryd, Skogsindustrins utbildning i Markaryd AB, Markaryds grafiska](#), ISBN: 91-7322-233-X, s. 48-49

The quality of timber is also a criterion for production. Timber needs to enter production at the right moment; if it has to be stored in the forest or at the production site, the quality is reduced, partly due to drying, partly because of the risk of insects such as bark beetles harming the timber. Timber left lying can also be affected by blue stain.⁶³

To be able to ensure a sustainable supply of high-quality raw material it is crucial to have a good combination of planning and efficient forest management. Both short-term planning and long-term planning are of great importance. Long-term planning outlines when the harvesting should take place and which part of the land should be harvested next. The main goal of short-term planning is to determine how the forest is going to be harvested and what actions should be carried out in the forest at a particular time. Examples of actions in the forest include cleaning, thinning and regeneration felling.⁶⁴

80 percent of the total quantity of forest in Russia is on the eastern side of the Ural Mountains. However, only 10 percent of the population lives in this area due to the cold climate and the poor infrastructure. The forest is slow-growing and thus experiences low productivity. Furthermore, it is very difficult to reach these forests due to the poor infrastructure and it is hard to obtain information concerning the quality of wood in this area.⁶⁵

4.5.1. The Forest Code

The purpose of the Russian Forest Code is to give guidelines to different authorities in the Russian government regarding how to manage Russian forests and obtain good quality within the forests. The Forest Code stipulates the rules and regulations concerning short and long term leases of forests. In the Forest Code from 1997, some of the suggested changes to the management of the forests were never implemented. One large aspect is whether the monopoly that the government has over the forest land will continue. The structure of the *leskhoze*, i.e. the authority in charge of forest leasing, changed even though there were no economic incentives for such a change. For these reasons, a new Russian Forest Code was written and approved in 2006 and this Forest Code was implemented in January 2007.⁶⁶ In Figure 11 is showing the Organisation of the administration of forests in Russian now and before.

⁶³ Kassberg, Mats, 1998, Massa och Papper -en grundbok, [Markaryd, Skogsindustrins utbildning i Markaryd AB, Markaryds grafiska](#), ISBN: 91-7322-233-X, s. 52-53

⁶⁴ Edfast Ann-Britt, Skogsbruk, Sveaskog Piteå, Taberg Media Group AB,

⁶⁵ Svenska FAO-Kommiten, 2006, Ökad skogsproduktion i Syd, Jordbruksdepartementet, nr3, ISSN: 1652-9316

⁶⁶ Schmögnerová Birgita, 2003, Russian Federation forest sector outlook study, Geneva Switzerland, United Nations Publications, ECE/TIM/DP/27, ISSN 1020 7228.

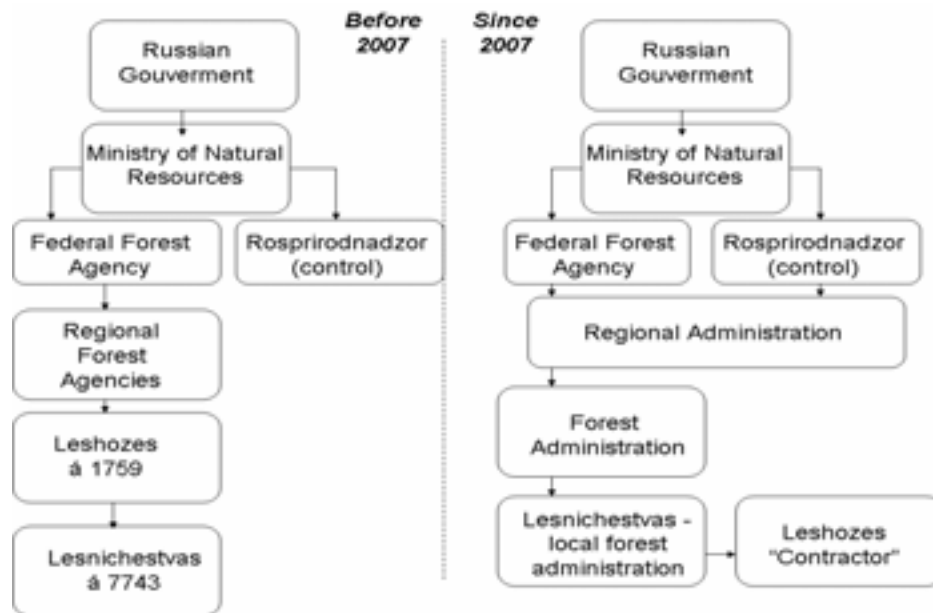


Figure 10. Organisation of the forest administration before 2007 and since 2007⁶⁷

4.6. UN reports on the Russian forest industry

Over a long period of years, the UN has published several reports on the Russian forest industry. The UN reports give a good overview of the Russian resources and raw material and they describe different parts of the forest industry. In this section I will describe and discuss two of these UN reports.⁶⁸

The first UN report is called “*Forest and forest products country profile: Russian Federation*”. This report describes trends and developments in the forest sector during the last decade. The report also discusses the Russian ownership of forest land. In Russia, all forests are owned by the government. A total of 93 Forest Management Boards and 2000 *leskhoz* manage the leases of forest land. The Forest Management Board was originally founded as early as 1798 and the forest management structure has changed very little since then.⁶⁹

Approximately 60 percent of Russian soil is suited for forest growth. In the year 2000 Lesnoy Fond-land (‘Lesnoy Fond’ is forests under the control of the Russian Ministry of Natural Resources)⁷⁰ encompassed as much as 1 113 million ha. In the future it is predicted that there

⁶⁷ Dr. Maria Palenova, 2007, Mobilizing Wood in Russia in the light of the new forest code, MINISTRY OF NATURAL RESOURCES OF THE RUSSIAN FEDERATION, Agency of Forestry

⁶⁸ Schmögnerová Birgita, 2003, Russian Federation forest sector outlook study, Geneva Switzerland, United Nations Publications, ECE/TIM/DP/27, ISSN 1020 7228.

⁶⁹ Filiptchouk, Strakhov, and Borisov, 2001, Forest and forest products country profile, Russian Federation, Geneva, United Nations Publications, ECE/TIM/SP/18, ISSN: 1020-2269.

⁷⁰ Sheingauz Alexander, 2003, Overview of the Forest Sector in the Russian Far East: Production, Industry, and the Problem of Illegal Logging, © 2004 Forest Trends, ISBN 1-932928-03-0

will be changes in the total forest area due to conversion of land into industrial or agricultural land.⁷¹

The second UN report is called “*Russian Federation forest sector outlook study*”. This is a very informative report which provides a comprehensive overview of the Russian forest sector. In contrast to the first UN report described above, this second report gives a more detailed account of special fields within the Russian forest sector.⁷²

The government of the Russian Federation has made long and short term strategic socioeconomic plans for the development of its forests. The aim of this report is to attempt to describe the possible outcomes of the short and long-term development plans. Unlike the UN report described above, this report focuses both on Russia and on the global forest sectors.⁷³

4.7. Government and public organizations managing Russian forests

The *State Environmental Protection Committee* is a department that monitors the condition of the environment, i.e. it is involved in overseeing the use of natural resources, regularly documenting the extent of atmospheric pollution, and it plays an active role in attempting to solve environmental problems. This committee is also responsible for the *Federal Forestry Service*, the *Ministry of Natural Resources*, and the *Federal Hydrometeorology and Cartography Services*.⁷⁴

The forest resource assessment structure includes: forest monitoring, forest management and planning, forest pathology and other inspections, as well as inventories of current changes in the forest fund. Both the *State Forest Fund Account* and the *State Forestry Cadastre* are involved in forest resource assessments.⁷⁵

The primary responsibilities of the *State Forest Fund Account* (SFFA) are to ensure that there is:

- Sustainable forest management
- Forest protection
- Forest reproduction
- Systematic quality and quantity control.

The SFFA is required to provide federal and regional authorities, legal entities, and other concerned parties with data concerning the Russian forest fund. The SFFA takes stock of clearings, felling sites, areas of new forest plantations, areas that have burned down, forest areas affected by pests and diseases, and, in addition, keeps track of changes in forested areas and traces the growing stock. SFFA data is further used by the State Forest Cadastre. The

⁷¹ Filiptchouk, Strakhov, and Borisov, 2001, Forest and forest products country profile, Russian Federation, Geneva, United Nations Publications, ECE/TIM/SP/18, ISSN: 1020-2269.

⁷² Schmögnerová Birgita, 2003, Russian Federation forest sector outlook study, Geneva Switzerland, United Nations Publications, ECE/TIM/DP/27, ISSN 1020 7228.

⁷³ Schmögnerová Birgita, 2003, Russian Federation forest sector outlook study, Geneva Switzerland, United Nations Publications, ECE/TIM/DP/27, ISSN 1020 7228.

⁷⁴ www.fao.org/forestry/site/country/en, 2007-04-02

⁷⁵ www.fao.org/forestry/site/country/en, 2007-04-02

SFFA management also regularly updates the forest inventory and the existing planning data.⁷⁶

Today all scientific support activities in the field of international cooperation are coordinated and implemented by the *International Center on Forests* established in the all-Russian *Research Institute for Silviculture and Mechanization of Forestry*⁷⁷

In 2002 the *Center on Legal Research, Handling and Control of the Forest Practices* was established in order to secure further development and perfection of the normative and legal base of the Russian industry. The primary tasks of the Center include: elaboration of the forest laws and regulations and documentation of concepts, projects, and economic justifications. It is further involved in analyses of the practiced laws and regulations and in submissions of scientifically grounded suggestions concerning how to improve the Russian forest industry.⁷⁸

⁷⁶ www.fao.org/forestry/site/country/en, 2007-04-02

⁷⁷ www.fao.org/forestry/site/country/en, 2007-04-02

⁷⁸ www.fao.org/forestry/site/country/en, 2007-04-02

5 Empirical observations

5.1. Outline of chapter

This chapter contains the empirical part of this study. Section 5.2 describes the findings from the field study observations in Russia. Section 5.3 presents a summary of the results obtained from the questionnaires carried out. Finally, section 5.4 reports the data obtained from the three interviews with three international companies.

5.2. Summary of field study observations

The overall impression I got from the six-day visit to the Swedwood production plant in Tikhvin and SvirTimber sawmill west of Podporozhe was that Russia is a land full of potential opportunities, but before these opportunities are realized, a number of obstacles need to be removed and several improvements must be made.

During my visit, it became abundantly clear that the Russian infrastructure was very poor. The roads are remarkably straight but they are in very bad shape; they are covered with bumps and holes which create big problems and inconveniences when travelling on them. Due to the poor state of roads it takes approximately twice as long to cover a particular distance in Russia than it takes in, for instance, Sweden. Without a well-functioning infrastructure it is impossible to run a smooth operation. The government and regional political authorities appear to have little available capital to invest in the maintenance of the infrastructure.

When companies transport products in Russia, they most commonly use trucks. The reason for this is that trucks are cheaper than transport by trains and that trucks can reach a larger area. In contrast, railroads are constricted to certain routes, but when longer transports are made, companies usually favour transport by rail. However, the rail network has its flaws as well. Russia primarily has single track rails, a fact which increases the time and cost of transportation considerably.

The Russian forests are generally in very bad condition. As described in section 4.7 there are many different authorities involved in the management of Russian forests. Regrettably, the different authorities appear to have little contact with one another and there appears to be little overall co-ordination between the authorities controlling the different parts of the Russian forest management. The general quality of timber appears to be poor. In the forests visited, the trees were growing haphazardly and as a result many of the trees were far from straight. Further, there was a wide range of species of tree in one and the same forest. I saw little evidence of reforestation and thinning attempts. Instead I saw great quantities of damaged and rotten timber stacked in piles. On the whole, there appears to be few efforts directed at enhancing the quality and growth potential of Russian forests.

During my visit to a forest outside St Petersburg, I was told by a forest employee that companies often make special winter roads for their forest machinery. However, when spring comes, these winter roads will melt and this will make it impossible to get the machinery into the forest and the timber out. The reason proper roads (that can be used all year round) are not built is that they are not cost-efficient since the leases are relatively short periods of time (see section 5.4.1.1). In the long run this creates a supply shortage.

A number of people I met in Russia described how difficult it was to find qualified staff to run the plants. The knowledge of English is very poor in Russia compared to the knowledge of English in Western Europe. Regrettably, the running of plants often requires knowledge of English. For instance, machine manuals are often written in English and at the management level international contacts are predominately conducted in English. However, finding qualified staff is not only a question of finding English-speaking employees. In some parts of Russia, it is also difficult to find staff with more than a basic education.

I have also learnt about a problem related to keeping the labour force. Basically, each autumn companies such as Swedwood and SvirTimber experience that large numbers of their employees temporarily disappear without leave. The reason why employees suddenly take off is that they spend weeks collecting berries and mushrooms in the woods in order to help out with the food supply. This story serves as an example of culture differences between East and West. It also illustrates that the general standard of living in many parts of Russia is a lot below that which we are used to in Sweden.

5.3. Results of the questionnaire

As described in section 2.3, a questionnaire was sent out to 14 international pulp and paper companies, essentially all major European players. The questionnaire can be found in appendix 1. These companies represent three stages of establishment:

- (1) companies that have *successfully* established themselves in Russia
- (2) companies that have *withdrawn* their plans for establishing production in Russia
- (3) companies for whom the Russian industry could be of interest

Of the 14 questionnaires sent out, nine companies filled out the questionnaire. This corresponds to an answering rate of approximately 64 percent. The number of non-respondents is hard to control because this is an area which is influenced by factors outside the control of the investigator. For instance, people may not want to participate in the study, or they may not have received the letters sent out to them. According to Jacobsen an answer rate of 50 percent is satisfactory, 60 percent is good and 70 percent is very good. The answer rate in this questionnaire study could thus be considered good. Since only two people chose to give their names in the questionnaire, the issue of anonymity is considered important to ensuring this high response rate. Unfortunately, as discussed in the chapter on methodology, anonymity also meant that it was not possible to distinguish data fall out from data responses. Thus, sensitivity to fall out can not be ascertained.⁷⁹

The results from the questionnaire indicate that international pulp and paper companies feel that it is difficult to get established in Russia. Figure 12 illustrates the answers given to the first question of the questionnaire. In this question I asked how accessible to international participation in production the international companies perceive the Russian pulp and paper market to be.

⁷⁹ Jacobsen Dag Ingvar, 2002, Vad, hur och varför?, Lund, Studentlitteratur, ISBN: 91-44-040962

In the comments made to this question, the respondents write that the prime reason for this is the unstable political climate in Russia and complications brought on by unclear laws and regulations.

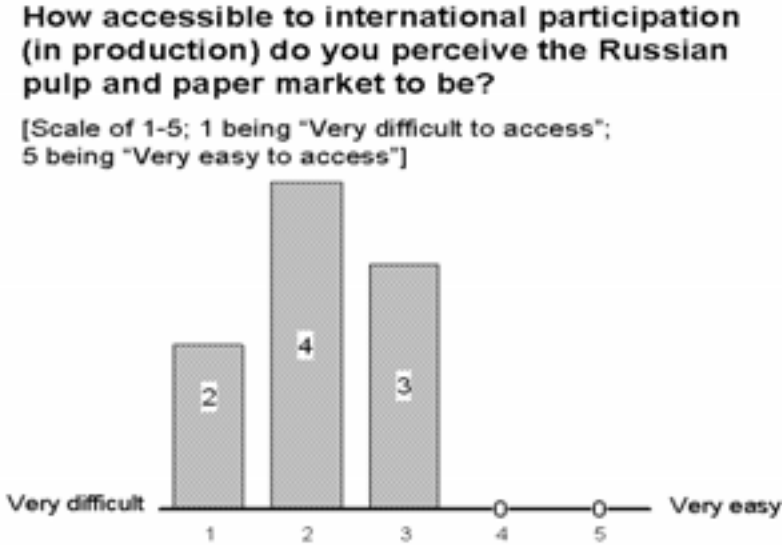


Figure 11. Answers to question 1: “-How accessible to international participation (in production) do you perceive the Russian pulp and paper industry to be?”

The respondents were asked to rank the perceived accessibility on a scale from (1) very hard to access and (5) very easy to access.

In question two, the respondents were asked whether they felt that the production accessibility in Russia had improved or deteriorated in the past five years. The majority of respondents, (6 out of 9), replied that they did not feel that the Russian accessibility had improved.

The third question asked if the respondents thought that the accessibility to the Russian market would improve or deteriorate in the near future. Most respondents (6 out of 9) were pessimistic; they believed that the accessibility to the Russian market would not improve in the near future.

In question four and question 11 (which was a control question to ascertain that the respondents gave consistent answers), the respondents were asked to rank the main obstacles they saw in establishing production in Russia. As shown in Figure 13, they answered that the greatest perceived problem is the political risk involved, as well as the poor infrastructure in Russia and the legal obstacles.

What do you see as the main obstacles to production participation?

Please choose the five most important

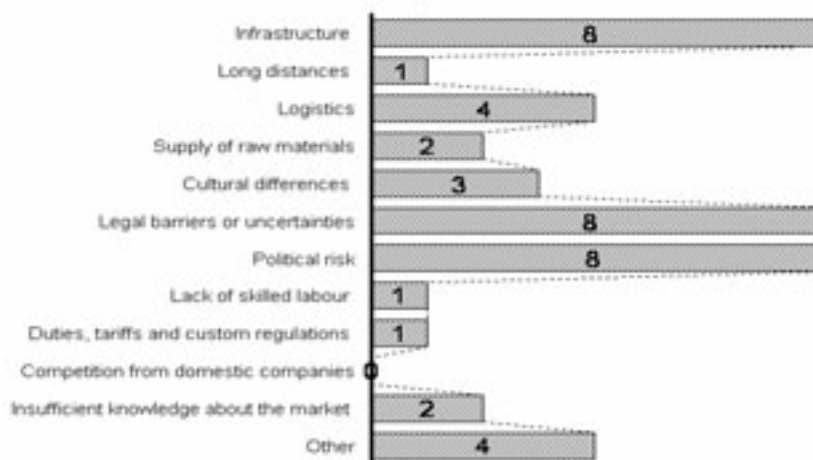


Figure 12. Answers to question 4: “- What do you see as the main obstacles to production participation?”

The fifth question asked the respondents to assess the timeframe in which they thought a sufficient number of obstacles would be removed so that international companies could flourish on the Russian market. The answers to this question varied (see Figure 14). One respondent was very optimistic: he thought that the obstacles would be removed within the next five years. Five respondents were slightly less optimistic and answered that they thought it would take between five to ten years for the obstacles to be removed. Three respondents were sceptical and answered that it would in all likelihood take more than ten years for the obstacles to disappear.

In what timeframe do you think a sufficient number of obstacles will be removed so that international participation in production may flourish?

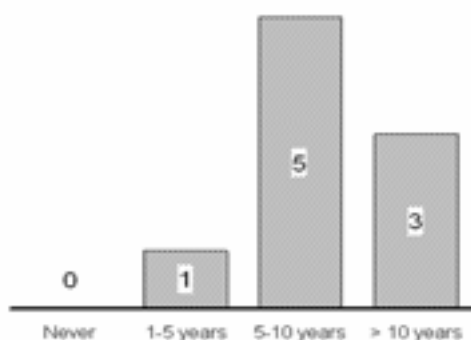


Figure 13. Answers to question 5: “-In what timeframe do you think a sufficient number of obstacles will be removed so that international participation in production may flourish?”

In question six, the respondents were asked to assess how long it would take until the Russian pulp and paper industry would become an important player in the *global* pulp and paper

industry. Figure 15 below illustrates that most of the respondents thought that it would take between five to ten years for the Russian industry to become an important player on the global market.

However, two respondents thought that this would happen in less than five years, while the remaining two respondents were pessimistic and answered that it would probably take more than ten years for the Russian industry to become important worldwide. The respondents commented that for the Russian market to evolve, the domestic demand must first increase. One respondent added that the new Russian tariffs on export timber would in all likelihood encourage the domestic market to evolve.

In what timeframe do you think the *domestic Russian pulp and paper industry* will become an important player in the global pulp and paper industry?

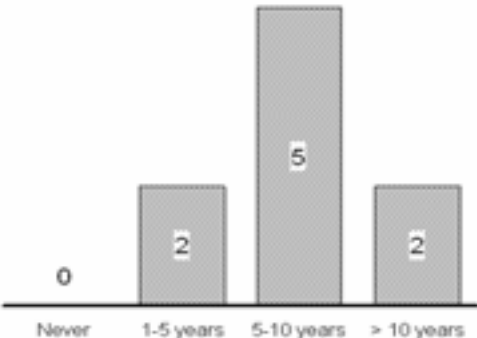


Figure 14. Answers to question 6: “-In what timeframe do you think the domestic Russian Pulp and paper industry will become an important player in the global pulp and paper industry?”

In question seven, the respondents were asked if the company they represented currently had production in Russia or if they had plans to establish themselves in Russia. Three of the nine respondents answered that they were actively participating in the Russian pulp and paper market and five respondents answered that they had no production in Russia. One respondent did not answer this question. As regards their companies’ plans to establish themselves in Russia, half of the respondents answered that they had active plans to do so and half answered that they had no plans to establish themselves in Russia. As with the first part of this question, one respondent gave no answer. The respondents commented that some obstacles must first be removed for them to become interested in investing in the Russian pulp and paper industry. In addition, for these companies to become interested in buying a Russian mill, the capacity of the Russian pulp and paper mills must first increase, i.e. they must become more competitive, and the quality of the pulp and paper products must improve as well otherwise the companies indicate that they will build greenfield plants.

Question eight asked the respondents what they saw as the main benefits with production participation in the Russian pulp and paper industry. The respondents could give more than one answer to this question. As illustrated in Figure 16, as many as eight respondents replied that the low fibre cost was the greatest benefit with the Russian market. Four of the respondents also answered that the proximity of the Asian market was an important benefit. A further four thought that the growing end-user market in Russia was a benefit and the low production cost in Russia was an additional benefit.

What do you see as the main benefits with production participation in the Russian pulp and paper industry?

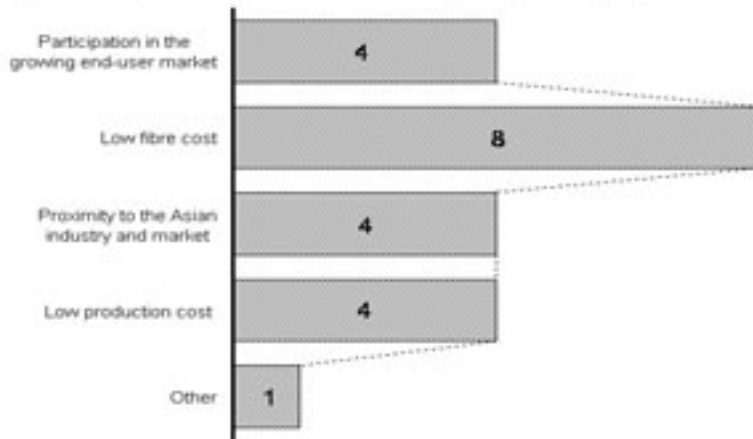


Figure 15. Answers to question 8: “-What do you see as the main benefits with production participation in the Russian pulp and paper industry?”

In question nine, the respondents were asked if they were considering participating in the Russian pulp and paper production, what timeframe would be relevant for their company. Four of the respondents replied that they thought they might be likely to invest in the Russian industry within the one to five years. Four respondents thought that five to ten years would be a more likely timeframe. One respondent did not select a particular period of time. He answered that he was uncertain, but optimistic. These answers are shown in Figure 17 below.

If you are considering participating in the Russian pulp and paper production, what timeframe would be relevant for your company?

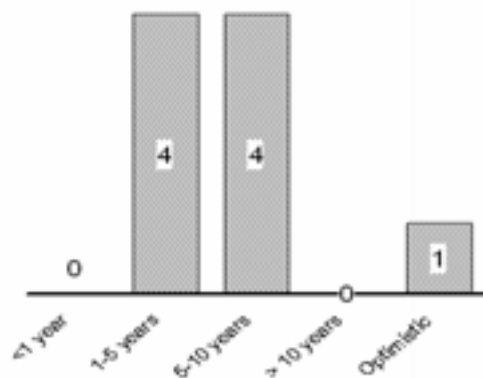


Figure 16. Answers to question 9: “- If you are considering participating in the Russian pulp and paper production, what timeframe would be relevant for your company?”

Question ten, finally, asked the respondents what method of establishment they would use to establish themselves on the Russian market. A clear majority of the respondents replied that they would build brand new production plants in Russia instead of making use of the existing

plants so that there would be no problems with the laws and regulations of the Russian government. Some added that the old plants were too costly and that they probably caused considerable environmental problems and also the capacity and quality of goods were not acceptable.

5.4. Results from interviews

5.4.1. Interview with Swedwood

The main focus during this one-hour interview was on raw material and on the bureaucracy and political climate of Russia, since these were the key issues identified by the questionnaire. The interview was informal; rather than following a strict question and answer format, the respondents spoke freely and at length about the general topics he received. Rather than talking specifically about Swedwood, the respondent talked about the specified topics in general terms.

Harvesting rights and the Russian forests

At the beginning of the interview, the respondent described and gave me his opinions regarding the Russian harvesting rights. He described the process of obtaining harvesting rights and stressed the importance of approaching the right people in the right authorities. Before a company can begin the actual harvesting, they have to obtain several permissions from different authorities involved in the Russian forest industry. The first permission a company has to obtain is a 'frame of agreement' or an 'investment agreement'. Before a company can lease a forest, an authority commissions a tender, i.e. the company must draw up detailed plans for the forest area in question, plans which adhere to special guidelines stipulated by the authorities. Among other things, the tender must specify the particular management goals to be achieved. The authorities may cancel the harvesting rights for a company if the company mismanages the leased area, or if the company does not pay its legal fees. In Russia all the forests are owned by the Russian government and private people and companies can only lease parts of the forests.

There is no guarantee that a company gets harvesting rights for an area just because they have got their tender approved. According to the respondent from Swedwood;

“... if the company has power and is a strong player, it can be easier to get a tender approved if you show your investment plan, how much timber you want to harvest in the near future, details concerning employment of labor and in what you intend to make your large-scale investments. And then of course you have to achieve all of the things you promise and show that your company is good to its word.”⁸⁰

The harvesting rights process can become shorter and easier if you are a large player with a good reputation in the business. Harvesting rights are usually leased for a time period of 10, 25 or 49 years. The length of the lease is not related to the time it takes to obtain harvesting rights. It takes a long time to obtain harvesting rights for all types of leases. Some years ago, you could get five-year leases without having to go through the long process of tender commissions. All that was needed was that a governor approved of the lease. This simple short-term lease has now been taken away.

The areas that companies lease to get harvesting rights have various sizes ranging from 500 ha to 50 000 ha. The cost of the lease is calculated based on a pricing index compiled by the authorities. It is generally the case that the larger the leased area, and the closer it is to

⁸⁰ Interview with Swedwood representative the 3 of April 2007

railways, the higher the cost. According to the interviewee, this principle is the same for all of Russia and it works relatively well.

In the leased area, a company must harvest a special quota of timber per year. During the first year, you must harvest 50 percent, during the second year 75 percent, and 100 percent during the third year. In addition, the company is required to manage the forest, i.e. the forest must be thinned out, and new growth must be ensured and so on. On the topic of forest management, the respondent has very firm opinions:

“...One thing is for sure, and that is that Russian forests were never well-managed or cared for! Never! Basically, Russian forests must look after themselves.”⁸¹

Close to St. Petersburg, there is hardly any forest areas left to lease. All the good leases containing high quality timber located close to roads and railways have already been taken. The respondent estimates that “...almost 90 percent of the forest area has been leased out and the remaining 10 percent is almost not worth the effort”⁸²

As a result of the improved living standards in Russia, the consumption of pulp and paper products has increased steadily. This autumn, however, it is predicted that production will not continue to increase. The reason for this is that last winter in the St Petersburg area was comparatively short and mild which resulted in reduced quantities of timber in stock. In order for the production plants to get the raw material they require, it may be necessary to transport timber from eastern Russia to the St Petersburg area by trucks and trains which is very costly. Furthermore, the Swedwood representative explains, the further east you travel in Russia the worse the infrastructure gets.

The establishment process

It is not easy to establish in the Russian market if you are a company from the West. The Swedwood representative explains:

“The first thing I had to do when I came to Russia was to employ a recruiter so that we could employ all the people needed to run the operation. We then had to start the long process of training our staff. You can't just simply bring over a forwarder team from Sweden, because then you will get problems with the Russian authorities.”⁸³

In the initial phase of the establishment process there are lots of things that need to be taken care of before you can actually establish your company. You need to obtain a great number of permissions. For instance you need to get the blueprints of your planned plant approved, and, to build a plant, you also need to get the land upon which the plant will be built redefined in official documents from ‘agricultural land’ to ‘industrial land’. Obtaining all the required permissions is a very lengthy and hard job. Companies intending to establish themselves in Russia therefore need to set aside considerable time for this initial phase.

According to the Swedwood representative, Swedish companies take many things for granted in Sweden. For instance, we are used to a working infrastructure i.e. we expect good roads, a working power and water supply, draining systems, telephones and so on. However, when

⁸¹ Interview with Swedwood representative the 3 of April 2007

⁸² Interview with Swedwood representative the 3 of April 2007

⁸³ Interview with Swedwood representative the 3 of April 2007

you get to Russia, “there is no infrastructure whatsoever ... there are only bureaucrats!”⁸⁴ The investments that have to be made in the initial phase are therefore considerable.

5.4.2. Interview with SvirTimber

The main focus of the 30 minute phone interview with the SvirTimber’s representative was the possibility that Metsäliitto might establish a pulp production facility close to the company’s Russian sawmill.

In the process to make it possible to establish pulp production in Russia the SvirTimber sawmill is one step in the right direction and will make inquiries concerning the industry easier and help Metsäliitto get correct information regarding the industry. At the moment, a large investigation is being made by the company to ascertain the opportunities and risks of establishing production. The location of a new pulp production plant is important. One question is whether to locate the new plant next to the sawmill or in some other better-suited location.

One large factor to take into account, according to the representative from SvirTimber, is the ability to keep a steady supply of raw material for production. Metsäliitto’s timeframe for establishing is, at the moment, four to five years depending on unforeseen circumstances. SvirTimber encounters obstacles and problems in its everyday work. Although some problems are small and easy to solve, others are not, and it is important that SvirTimber recognizes these uncertainties when planning to establish a new pulp mill.

If or when the establishing takes place in Russia, it is more likely that the company will build a new greenfield plant rather than purchase an old mill, says the respondent. When establishing a sawmill in Russia, SvirTimber encountered many of the same problems and obstacles as Swedwood.⁸⁵

5.4.3. Interview with former AssiDomän

In 1996, AssiDomän took over JSC Segezha Pulp and Paper Mill, only to sell it after many unexpected difficulties. The focus of this interview was to hear the respondents’ opinions and thoughts about the Russian market and to see what the main problems were.

AssiDomän’s main purpose with taking over the ‘Segezha mill’ was to ensure their leading position in manufacturing kraft paper and sack kraft paper in the European market. There had been a meticulous investigation of the ‘Segezha mill’ by a consulting company and the thinking that the Russian industry was on its way up, AssiDomän decided to buy the mill and its potential opposition. AssiDomän was also interested in buying a company in Czechoslovakia and in order to buy this company, they had to buy the mill in Segezha. AssiDomän saw the Russian raw material supply and the relatively inexpensive labour force as advantages in establishing the mill; however the main purpose was to become the dominant player in kraft paper production.

AssiDomän was one of the first international companies to establish in Russia. The respondent commented that in order to successfully establish production in Russia, a company

⁸⁴ Interview with Swedwood representative the 3 of April 2007

⁸⁵ Interview with SvirTimber representative the 16 of April 2007

must be prepared for a cultural and political environment that is different from its home country.

There are two things the respondent from former AssiDomän thinks companies should do when planning to establish production in Russia:

- (1) Understand the political system and the bureaucracy within Russia
- (2) Find a legitimate and trustworthy partner from Russia

The representative believes that this advice can make the process easier for other companies.

In 1996, Russia had suffered a big downfall after the collapse of the Berlin Wall in 1989. Not only was the infrastructure to the 'Segezha mill' in very bad condition, the whole country was devastated. The respondent said that he could not travel alone in Russia; it was hard to feel safe during this period. There was a lot of corruption going on and the legal situation was uncertain. One large problem was the credibility of the Russian people during this time; it was hard to find good people that did not try to cheat you and your company out of money.⁸⁶

⁸⁶ Interview with former AssiDomän representative the 23 of April 2007

Analysis

6.1. Outline of the chapter

This chapter contains an analysis of the theories in chapter 3 and the empirical study in chapter 5. In section 6.2 the empirical data and the PEST-model are viewed, the four different factors in PEST are looked at and discussed. In section 6.3, the resource based view is in focus and the categories of resources are viewed together with information regarding Russia and in section 6.4 risk management is viewed through the three forms of risk analysis.

6.2. The PEST-model

Section 3.2 lists sub factors to the four factors that together form the PEST model. Companies' surrounding macro-environments are often influenced by these factors. Information collected during the empirical study of this essay shows clear connections between almost all of the factors that are mentioned in this theory. The four categories that together form the PEST model are:

- P**olitical analysis
- E**conomical analysis
- S**ocial analysis
- T**echnological analysis

Companies have different macro-environments but some factors are re-appearing for almost all companies and these factors are mentioned in the section below.

Political Analysis

Political factors include government regulations and legal issues and define both formal and informal rules under which companies must operate. In the results from question one in the questionnaire, it clearly shows that the respondents see the political climate in Russia as unstable and they forecast no improvements for the next five years (see Figure 12.) In question four the companies were asked to choose five of the obstacles and eight of the companies chose both political risk and legal barriers, this is shown in Figure 13. Many of the companies believe that there will not be significant changes in the market in the next five years according to the answers to question five (see Figure 14.) The companies suggest that the role of the domestic players can increase in the near future but that this is mostly based on the new tolls for export of timber. This new tolls on export of timber is hoped from the Russian government side to help stimulate the domestic market and to increase the refinement of raw materials within Russia. The respondents in the interviews speak of what they see as bureaucracy and how different things are influenced by this in their every day work. The representative from Swedwood also spoke of how corruption is and has been a large part of Russian politics.

The political uncertainties regarding forest management practices are creating doubts for companies that could potentially invest in Russia. Furthermore, they consider new Forest Code neglects the significant changes in forest management practices.

Economical analysis

Economic factors affect the purchasing power of potential customers and companies' production cost and cost of capital. At least two issues surfaced in this work relate to production cost. First, what struck me when visiting Russia was the conditions of the infrastructure, and the problems that would accrue as a result from these bad conditions. In question four in the questionnaire, eight of the companies chose infrastructure as a significant obstacle in Russia and this obstacle is also mentioned by the respondents in the interviews. Due to the bad infrastructure it is hard for the companies to get the logistics to run smoothly without creating costly problems. Unfortunately, the spending on infrastructure does not seem to be significant enough to remove this obstacle in the near future. In section 4.3 Table 1 shows Russia's rank compared to China and India in a global perspective on infrastructure.

Second, poor management of Russian forests has resulted in poor quality of timber and this in turn can result in a shortage of raw material if the companies do not plan ahead. Still the companies who responded to the questionnaire see no significant problems with finding good quality wood, and see one large advantage with the Russian market is the low fibre costs.

It is important to have a long-term view and consider the future of the market. One thing that was mentioned by the respondents in the interviews was that they saw a growing end-user market in Russia; this was also mentioned as an advantage that the respondents to the questionnaire hoped for.

Social analysis

The *social* factors include demographic and cultural aspects of the external macro-environment. When visiting Russia, one large disadvantage was that we did not speak the language and the most of the Russians we met could not speak any English. This language barrier was mentioned as a minor problem by the interviewed companies but a problem that needed to be solved. The companies also mentioned that the employees had an education level that was lower than what they were used to working with. The companies solved this by starting their own education programmes. The interviewed companies also encountered cultural problems that surfaced during the fall season, when the employees simply left work to pick berries in the forests.

To better grasp how the market in Russia is functioning, Metsäliitto is collecting information with the help of SvirTimber. It is a large investment to establish pulp production and with Russia being a market that companies see many obstacles with. It can be wise to know the market and what obstacles can arise. This is the advice former AssiDomän's representative also wants to give to international companies who are planning to establish soon. 'Understand the political system and the bureaucracy within Russia and find a legitimate and trustworthy partner from Russia.'⁸⁷ This advice regards both the social analysis and the political analysis because it has to do with creating relationships and understanding the political ground in Russia.

Technological analysis

Technological factors can lower barriers to entry, reduce minimum efficiency production levels and influence outsourcing decisions. In the questionnaire it was clear that the companies did not consider the current levels of technology in Russian pulp and paper mills to

⁸⁷ Interview with former AssiDomän the 23 of April 2007

be sufficient. If these companies were to invest in Russia, the majority considered that they would need to build new plants.

All of these categories can and will affect companies and therefore it is crucial to take them into account when looking at the macro-environment for companies. When looking at the four PEST factors *Political analysis* and *Economical analysis* are of the greatest importance to a companies' macro-environment when considering establishing in Russia. The other two are also of importance but not to the same extent as *political- and economical analysis*, which has the largest impact if a change was to occur.

The empirical information that has been collected for this study helps to understand what things are of importance to the companies who are interested in establishing in the Russian pulp and paper industry. It also shows which of the factors have the greatest influences on the company and their surrounding macro-environments. It is important for companies to consider the PEST factors very well and minimizing the risk that establishment introduces.

6.3. The resource based view model

The whole purpose with the RBV is that companies have to be aware that the resources within the company have to be seen as benefits. The resources they have compared to other companies can be used to create a competitive advantage within the industry.

Resources can be divided in to three categories

- (1) *Physical capital resources*
- (2) *Human capital resources*,
- (3) *Organizational capital resources*

All companies in this study have different connections to these three ways of looking at resources.

Swedwood and SvirTimber have both taken careful considerations regarding their *physical capital resources*. When choosing the location to open a plant in Russia they considered proximity to good quality raw materials and a good working infrastructure for example. SvirTimber is located close to a river that can act as a transportation system for some seasons in the year. Both companies have contributed to building roads and railroads to simplify their logistical possibilities. The plants visited during my study observation trip were located in the area close to St. Petersburg. Assidomän bought the leading production plant of kraft paper, a plant that already existed and therefore the location of this mill could not be influenced. The 'Segezha mill' was not top of the line in regards to technology and therefore the mill had almost no *physical capital resources* to offer. Swedwood bought old technology from Sweden and reassembled it in Russia just to reduce the costs and to ensure the quality and efficiency they wanted. Almost all companies that answered the questionnaire said that they would build a new plant if establishing in Russia just to reduce potential costs and problems.

SvirTimber and Swedwood have had some difficulties finding qualified working staff for their plants, finding good labour is a big part of *human capital resources*. To solve this problem they have begun to provide education to their employees. The companies who answered the questionnaire do not feel that there will be obstacles in finding qualified staff. According to SvirTimber and Swedwood the employees are enthusiastic and eager to learn but the education level is low compared to the owner's standards.

AssiDomän had problems regarding this category of resources, when they took over the 'Segezha mill' the employees of the mill was included and the employees visions were not the same as AssiDomäns for the mill.

The focus for all the companies is for the most part on creating relationships, which is one of the factors in *organizational capital resources*. One of SvirTimbers purposes in Russia is to get a feeling of the market and create useful relationships within Russia; this work will then help Metsäliitto in their plans to potentially begin establishing of a pulp mill. Swedwood's opinions regarding creating good relationships in Russia is that the company needs to be in Russia, 'your Russian associates need to see that you are active and honest in your work.' Swedwood also spoke of the differences regarding the structure of organization in Russia, there has to be a strong leader in charge, otherwise it will create obstacles if it is a flat organization as most of Europe has. AssiDomän was not successful in Russia and failed to manage this resource in a good way. The relationships between AssiDomän, their employees and the Russian government were not good from the start. The organization within the company also had flaws that did not help their situation. It created many problems when they tried to reorganize the structure of the 'Segezha mill'.

What has become more significant is that companies see the *human capital resources* as something that is not recognized as a significant obstacle in the Russian industry. This is easily fixed with education and inspiration to the right employees. Factors that can be harder to find in *human capital resources* are the characteristics of the people, some patience is needed but this does not create significant problems for production. The category that seems to be of importance to the company is the *physical capital resources*. Companies spend a lot of time planning their location before actually entering Russia, it is important to find a good location and take all aspects into account. This can create problems because there are a limited number of good locations and it can be very difficult to find them. It can of course also be a problem to the companies if the technologic development has remained stagnant for a long period, in Russia the development has once again started to pick up after a period of stand stills.

In connection to the *human capital resources* is the *organizational capital resource* which focuses on the organization within the company and also on the relationships between different players and authorities. This category of resources has a more significant impact on the companies' competitive advantages and it is therefore important that companies consider this aspect more carefully before coming to Russia. This category of resource can be hard to influence due to the fact that you can have problems finding good and legitimate companies to form friendships with and that can affect your future in Russia. As mentioned earlier in this section, it is also important to have the right organization within the company and it is important to consider all cultural differences. This aspect is not hard to adjust to but plays a significant role in getting the company to work efficiently. The respondent from AssiDomän spoke about the importance of relationships with representatives from Russia.

When looking at resources with the resource based view, one does not only have to look at companies but it's also possible to look at countries. When looking at Russia one clearly can see the large raw material supply resource, Cornelius and de Kluyver say that it is not necessarily the countries with the natural resources that have the upper hand in competition. It is more likely that it is the countries with good technological development.

Although Russia has the most forest resources worldwide, the interviewees from Swedwood and SvirTimber are both disappointed in both the poor quality of the Russian forests and the poor forest management practices. There is hard competition between companies to get leases for harvesting rights. For Russia to have more competitive advantages in the global industry, one step is to take better care of their resources and support more technological development within their country.

6.4. Risk management

The companies that are interested in investing in the Russian industry are international companies and have many competitors on the global market. Companies should of course always take these players into account; the environment surrounding companies that are globally active never stops changing. Companies are always exposed to some extent of risks; therefore, it is of great importance to have the right knowledge about potential risks. The results from question one in the questionnaire indicates that many companies see a large risk with establishing in Russia, but that they also believe that within a few years time, the industry will become a fast growing market. It is important to measure risks. However, to do this it is necessary to try to understand the risks. The most risks that companies encounter in Russia are *market risk*, *counterparty risk* and *operational risk*. These risks all contain different obstacles and problems.

Market risk is fluctuations in different variables that affect the industry. The economic variables are numerous in the pulp and paper industry for example, fluctuations in price on finished products, the cost of building a mill is higher the building a sawmill in Russia, the local currency can tend to fluctuate and that can make the market unstable.

Counterparty risk accure for example if a company fails to act, but their competitors act and the company miss out on the advantage it can give. It suggests that the companies who have a faster responsiveness and are more willing to take risks are more likely to be involved in rapidly changing industries and markets.

Operational risk is a risk that has never accrued before in that industry, and there is no chance to be prepared for it. [Operational risk](#) are including the risk of loss resulting from inadequate or failed internal processes, systems and people, or from external events.

During both the field study and questionnaire, several aspects were mentioned as risks within Russia. The risks can be different things depending on which company or person one asks; it is individual-specific. Companies that are interested in investing in Russia feel that they would have to see improvements made in these areas before they could proceed with plans invest. These things can be seen in Figure 13. When companies are active on the global market, there are all kinds of risks that companies need to take into account involving both micro- and macro environments. The largest risk in Russia at the moment seems to be the political and legal barriers according to the respondents and companies that have answered the questionnaire, and also the infrastructure and bureaucracy.

Another risk that arises according to the respondents in the interviews is risks from labour without education and this is easily overlooked by new established companies in Russia. The respondent from SvirTimber thought this not to be a significant problem or risk to production.

He said that the labour in Russia is willing to learn and they want to be a part of the development in their country. At Swedwood, they've had some trouble with commitment from the workforce, but that it is no longer a problem. In the questionnaire, companies thought there to be no significant problems with finding qualified labour.

A risk mentioned by Swedwood was how the Russian government sometimes promised one thing but could later take it back if they changed their minds. This political uncertainty is what companies fear the most, and what they do not like with Russia. When AssiDomän owned the 'Segezha mill', one of the reasons why it did not go as planned involved political obstacles and bureaucracy on the part of the Russian government.⁸⁸

Raw material was another of the topics discussed with the respondent from Swedwood and SvirTimber. Raw materials and the quality of wood were also frequently discussed during the field study to Russia. The overall impression of the Russian forests was that it is very difficult to get the right amount of quality wood needed in order to ensure production; this can be a risk to the company. An additional obstacle that had a great influence this year, but also is out of the companies' control, is the climate. Good quality timber is necessary to ensure that the companies produce high quality products. The production plants need 'just in time' deliveries, and the timber needs to be just recently harvested so that no defects occur on the timber. During the field study, personal observations regarding the haphazardness within the forests made me aware of the potential for quality risks within the Russian forests.

The respondent from SvirTimber spoke of the difficulties to find the right amount of timber to even begin planning a pulp mill in the area close to St. Petersburg. The forest leases are a commodity in short supply in this area. Swedwood owns leases, but for the most part, they buy timber from suppliers. It can be a large risk to depend in a large scale solely on suppliers due to the risk of corruption.

In January 2007, a new Forest Code was implemented for Russia forests. The impression during the field study was that people did not think that it would create significant change in the forest management, just that the deciding power will be moved around to new departments. The respondent from Swedwood believed that it was in the best interest of the forests for a shift of power to happen.

Another factor that affects the quality of the forests and also is a large risk, is the poor communication between the forest management departments in the Russian government. Section 4.7. and 4.5.1. attempts to explain how the Russian system works and which authority is in charge of each department. (Figure 2)

The general impression from the field study observations is that Russia is rapidly evolving and that there is a large willingness to see international companies establish in Russia. The results from question nine show that four companies see themselves in Russia within one to five years, while the other four believe that it will take them between five to ten years. The results from question seven in the questionnaire clearly show that several of the companies in the population have plans to participate in Russia. The timeframe that the respondents believe to be accurate for participating on the Russian market is shown in Figure 14. The results from question eight (Figure 16) in the questionnaire it shows that companies see many benefits

⁸⁸ Interview with former AssiDomän the 23 of April 2007

with the Russian market, but the respondent from SvirTimber and Swedwood says that there are still large risks and uncertainties in the market.

Answers for question two and three in the questionnaire, reveal that it is clear that the respondents also feel an uncertainty with this industry.

At the moment companies see political and legal barriers as the largest risks, in the 1990s the biggest obstacle was the problems with bureaucracy and corruption in Russia but overtime it has improved according to the companies in this essay. After the brake up of the USSR the whole political and legal system in Russia was a bit unstable and the bureaucracy was apparently unbelievable. It is hard to try to see what risk is growing at the moment but the companies speak about the bad quality of the Russian forests and that there can soon become shortages of leasing rights. This is hard to believe when Russia is the country with the largest supply of wood but due to bad infrastructure and shifts in weather climate it has potential to become a risk.

7 Discussion and Conclusions

This chapter firstly reviews the research questions and aims that stated in chapter 1 to help focus the context of my discussion and conclusions. The main obstacles surrounding the Russian pulp and paper industry are then reviewed and discussed. Finally, my conclusions are presented.

7.1. Aims and research questions

The context of this dissertation is the potential for foreign companies to establish pulp and paper production in Russia, and the issues they potentially face.

The aim of this study is to find out *why* so few international companies have established production in Russian. In addition, this essay attempts to identify the main *obstacles* preventing companies from establishing themselves in Russia and whether Russia is a viable country for establishing pulp and paper production according to the sample population of companies.

7.2. The main obstacles on the Russian market

The empirical findings show that both interview and questionnaire respondents shared a common concern about a number of issues. These are:

- Political risks
- Legal barriers
- Infrastructure
- Bureaucracy
- Supply of raw material
- Lack of skilled labour

In the sections below, I will assess why these variables are considered noteworthy obstacles for companies considering investing in production capacity in Russia.

7.2.1. *Political risks and legal barriers*

Regarding political risk, companies see uncertainties within the country: the government in Russia is not considered to lead a stable political environment. Political risks can also be risks regarding the economy in a country, there are uncertainties with fluctuations in the currency etc. Regarding legal barriers, Russia has recently undertaken initiatives to build a new legal framework with the intent to developing its forestry industries. This is a protracted process, with firms needing to invest significant time and effort in understanding and working within the current legal framework. Nonetheless, companies feel somewhat unsafe in Russia due to the issue of corruption, which is considered a common practice. The empirical data illustrates the uncertainty and unpredictability that companies perceive about these issues in Russia. At present, this uncertainty prevents companies from viewing Russia as a land with a realisable potential.

Questionnaire responses show that firms feel that there will not be any improvement in the near future about the legal barriers in Russia. Interview respondents nonetheless feel that there have been improvements since the USSR era. The former AssiDomän felt they encountered more problems than a company would today. To make the legal barriers smaller, one step can

be to find a partner from Russia who knows how the Russian industry works and how to manage the Russian politics positively.

In the establishment process, there are many steps where communication with the Russian authorities is crucial. There are many authorities that have to approve the companies' plans and it can take several years before companies can begin establishing. It is therefore crucial for a company to understand the whole process.

Many companies feel that the uncertainty with politics and the legal system is too risky and therefore they are careful when taking their plans to the next level. It is not clear if it is a good choice to wait. When a company hesitates too long there can be disadvantages in form of missing out on the first mover advantage. Companies are also familiar with a dynamic business context and in this respect Russia is no exception.

Companies nonetheless need to be thoroughly prepared for making investments in production capacity in Russia. They also need to recognise that Russia will change and problems can arise very unexpectedly. To manage this, knowledge about the industry and market is crucial.

7.2.2. Infrastructure

Figure 10 shows Russia's planned investments in infrastructure in the forthcoming years, whereas Table 1 ranks China's, India's and Russia's infrastructure. When I visited Russia, one thing that shocked me was the condition of the roads. They are in bad shape with bumps and holes and it took forever to travel on them. Due to the poor infrastructure in Russia the possibilities for effective logistics are restricted to the railroad system and the available roads. This lack of infrastructure introduces problems for the companies that have to transport timber and products. In the area close to St Petersburg there is relatively good infrastructure compared to the rest of Russia.

Readers can see for themselves the railroad systems in Russia by viewing the link <http://www.parovoz.com/maps/supermap/index-e.html>. It is clear that there is more rail track in the St. Petersburg area. Leases for forests in the St. Petersburg area are however limited and most of them have already been purchased. This means that companies that are currently looking for new land to lease. The remaining available forest resources are mainly located in the east, where the infrastructure and logistic possibilities are much poorer than the St Petersburg area.

Companies are dependent on well-functioning logistics operations, which are reliable upon infrastructure. Infrastructure plays a large role in firm's hesitation about investing in the Russian industry. Firms that previously invested e.g. SvirTimber and Swedwood, both had to build infrastructure to shape their own logistic operations. This is a costly solution, which may be the only viable way forward in some situations. When planning to build infrastructure, there are of course political obstacles that may delay the work. Therefore, infrastructure issues are compounded by insecurity in the political climate.

7.2.3. Bureaucracy

For international companies, Russia's bureaucracy can be hard to understand. When I visited Russia both SvirTimber and Swedwood had special departments and people employed just to handle all the paperwork that the bureaucracy demanded. The bureaucratic system in Russia is a very complex and appears to further complicate relationships between the Russian government and the companies. The bureaucracy acts slowly and the process are lengthy

since so many people have to approve various process-steps. The interviewed companies spoke a lot about the bureaucracy and all departments that companies had to be in contact with in their daily work. Their impressions were that the bureaucracy was more complicated during the 1990s, with more recent legal reform after the break-up of the USSR apparently reducing the extent of the bureaucracy. Respondents consider there have been some improvements.

7.2.4. Supply of raw material

In sections four, five and six, the quality of the Russian forests and their condition are discussed and compared to the Swedish forests. Companies do not see the bad quality of timber as a large obstacle: the low fibre prices are rather seen as a good characteristic. According to the contacted companies for this study, almost all say that this is a factor that can make them want to establish production in Russia. What I saw when visiting Russia was lack of organization within the forests. It was not a pretty sight and I am sceptical of the possibilities to get the right quantity of timber with the right quality out from the forests if nothing further is done. The close proximity to raw materials is important for them but now there are signs of a lack of forest leasing possibilities in the area close to St. Petersburg. The process for getting leasing rights of forest in Russia can be prolonged, and filled with bureaucracy. As spoken of in section 7.3.2 the infrastructure is best in the area closest to St. Petersburg and the close location to the European market is also alternative.

Russia has tremendous areas of forests and raw materials and perhaps companies should look further to find unexploited areas with great opportunities, good possibilities for logistics and good quality of timber. Although it is understandable why companies with their main market in Europe tend to focus on the west part of Russia, it might also be wise to look southwest and east. Russia has the potential to be also closely connected to the Asian market.

My thoughts on the forests of Russia are that the companies have not seen lack of quality in forests; they have only seen the numbers that there is a large quantity of forest available for production. When I visited a harvesting site in Russia during my field study I got the impression that a large proportion of the timber was rotten and it was not even economical to transport it out of the forest. This is the case with a large part of the forests. I cannot see how companies do not see the quality as a problem for them. The sources to the problem as I understood it was the bad communication between the different authorities, who were in charge of the forest management. None of the authorities wanted to take responsibility for the work at hand and hoped that the other authority would manage it.

It is not certain that companies can lease the same area over the next 49 years. Respondents also voiced uncertainty about this. If companies had more certainty about long-term leasing possibilities, they would have an incentive to own more leasing rights and invest more in the forests. When companies' lease forest land they are responsible for re-plantation and some forest management the first years after plantation. For these measures companies can get some subsidies according to the old Forest Code. However, it is currently unclear how the new Forest Code will address this issue.

7.2.5. Lack of skilled labour

Labour in Russia seems to be very enthusiastic when it comes to getting the chance to work for a company. In the questionnaire, companies responded that they did not see the labour force as a significant problem. However, when interviewing firms, they all indicated that problems had occurred with finding skilled labour that spoke English. They also found there

were issues in giving incentive and motivating output. These issues posed obstacles for firms currently working in Russia.. I believe that the respondents' plans to educate their labour force are a good investment that will make their employees and companies stronger in the long run. The employees feel special and are more engaged in their work and have concern with the productivity of their labour. In Russia it can, according to the interviewed companies, be difficult to find skilled labour and this should in my opinion be an obstacle worth taking into account when planning production there.

One other thing that people talked about when I was in Russia was the organizational differences compared to Scandinavian companies. In Scandinavia, a horizontal organization that is dominant organisation choice. These cultural differences can be a problem but is easily overcome. Employees in Russia prefer to have a clear leader that supervises all decisions. This was an unexpected issue for Swedwood, which they said took a lot of time to adjust to.

7.3. Final thoughts

The overall impression of Russian is that it is challenging, with changes easting the way for the future establishment of pulp and paper to production. Companies are interested and see the opportunities. Russia is a large country and only a small section has been exploited by international companies, so there is still great potential. Some consider there are still some first mover advantages to be gained. Nonetheless, some companies are waiting for someone else to take the first step. First movers such as Mondi and International Paper have established production in the Russia. While they have encountered problems, they have nonetheless managed to overcome them.

Soft wood supplies in Russia are a resource that are waiting to be used, with the resources potential significantly more than any other country. If a company is in pursuit of a new raw material supplier and new production, then the Russian industry may be a viable option for establishing manufacturing. I think Russia is a country that has many advantages when comparing to other markets that are evolving at the moment. Many companies see Africa and China as the next big thing but I believe that Russia should not be neglected from the discussion. It can be easy to say 'why not take a chance' but when looking at Russia. This dissertation reveals that establishing a pulp or paper mill is a costly business, with companies concerned about loosing investments, which accounts for their perceptions of the obstacles.

When analysing the forest use in Russia and the economical relations in-between, it becomes apparent that Russia is not yet a competitive market and that the interaction between owners and users transparent. The political weight from regional authorities is neither in the best of interest for this market.

The discussion whether Russia is a viable country for international companies to establish production in will continue. The industry is showing signs of growth. While the Russia pulp and paper industry has many flaws, there are also many advantages that are hidden behind the shadow of the political climate and the Russian bureaucracy. Companies all have different opinions about what their weighting of risks and obstacles. I believe that the Russian industry has a chance on a global market, especially when two of the ten largest players in the industry at currently present in that region.

Bibliography

Literature and publications

- Andersson. J, Carlstedt. F and Rad. A, 2004, Integrated Risk Management, Lunds universitet
- Barney, J.B. 1986b. Organizational culture: can it be a source of sustained competitive advantage? *Academy of Management Review*, 11:656-665
- Barney, J.B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17, 99–120.
- Cornelis A. de Kluyver, 2006, Strategy, a view from the top, second edition., Pearson prentice hall, ISBN: 0-13-1861360
- Dash Jan.W, 2004, Quantitative finance and risk management, Singapore, World scientific Publishing co., ISBN: 981-238-712-9
- Dr. Maria Palenova, 2007, Mobilizing Wood in Russia in the light of the new forest code, MINISTRY OF NATURAL RESOURCES OF THE RUSSIAN FEDERATION, Agency of Forestry
- Edfast Ann-Britt, Skogsbruk, Sveaskog Piteå, Taberg Media Group AB
- Filiptchouk, Strakhov, and Borisov, 2001, Forest and forest products country profile, Russian Federation, Geneva, United Nations Publications, ECE/TIM/SP/18, ISSN: 1020-2269.
- Global Forest Resources Assessment 2005, FAO, ISBN: 92—105481-9
- Hansen.E and Juslin Heikki, 2003, Strategic marketing in the global forest industry, Cornvallis, Author Academic Rress, ISBN: 0-9703333-7-4
- Jacobsen Dag Ingvar, 2002, Vad, hur och varför?, Lund, Studentlitteratur, ISBN: 91-44-040962
- John Fahy, Strategic marketing and the resource based view of a firm, volume 1999 nr 10
- Kassberg, Mats, 1998, Massa och Papper -en grundbok, [Markaryd, Skogsindustrins utbildning i Markaryd AB, Markaryds grafiska](#), ISBN: 91-7322-233-X
- Schmögnarová Birgita, 2003, Russian Federation forest sector outlook study, Geneva Switzerland, United Nations Publivations, ECE/TIM/DP/27, ISSN 1020 7228.
- Sheingauz Alexander, 2003, Overview of the Forest Sector in the Russian Far East: Production, Industry, and the Problem of Illegal Logging , © 2004 Forest Trends, ISBN 1-932928-03-0
- Silverman David, 2005, Doing qualitative research, second edition, London, Sage, ISBN: 1412901960
- Svenska FAO-Kommiten, 2006, Ökad skogsproduktion i Syd, Jordbruksdepartementet, nr 3, ISSN: 1652-9316
- Swedish Statistical yearbook of forestry 2006 Swedish Statistical yearbook of forestry 2006, redactor Jan Olof Loman, Tryck Elanders Berlings AB, ISBN: 91-88462-68-4
- Wendy Bloisi, 2003, Management and Organisational behaviour, [Maidenhead, McGraw-Hill Education](#), ISBN: 0-07-711107-9

Articles

- http://www.svd.se/dynamiskt/inrikes/did_14639346.asp, Skakad skogsindustri hos regeringen, 2007-03-21

Interviews

- Representative from Swedwood the 3 of April
- Representative from SvirTimber the 16 of April
- Representative from former AssiDomän the 23 of April 2007

Internet and database

CIA homepage

- <https://www.cia.gov/cia/publications/factbook/geos/rs.html>, 2007-03-17

FAO homepage

- © FAO Statistics Division 2007, FAOSTAT, <http://faostat.fao.org/site/382/default.aspx> 07-02-23
- www.fao.org/forestry/site/country/en, 2007-04-02

Nationalencyklopedin

- http://www.ne.se/jsp/search/article.jsp?i_art_id=294214, 2007-03-12
- NLK Associates mill database, 2007-04-03
- www.netmba.com, 2007-02-11

Railroad system in Russia

- <http://www.parovoz.com/maps/supermap/index-e.html>

RISI homepage

- <http://www.risiinfo.com/corporate/do/welcome>

Swedish Forest Industries Federation homepage

- <http://www.skogsindustrierna.se/LitiumInformation/site/page.asp?Page=10&IncPage=626&IncPage2=232&Destination=227&destination2=226&ohKatID=16&ohID=286&lang=sv>, 2007-03-20
- <http://www.skogsindustrierna.se/LitiumInformation/site/page.asp?Page=10&IncPage=626&IncPage2=232&Destination=227&destination2=226&ohKatID=16&ohID=285&lang=sv>, 2007-03-20

Wikipedia homepage

- http://en.wikipedia.org/wiki/Financial_risk_management 2007-02-11
- http://en.wikipedia.org/wiki/Risk_management 2007-02-11
- http://en.wikipedia.org/wiki/Resource-Based_View, 2007-02-12

McKinsey analysis

- Federal State Statistics Service, (**Rosstat**) and McKinsey analysis
- <http://www.globalinsight.com/> 2007-05-11
- International Institute for Management Development, IMD,(WCY), http://www.imd.ch/research/publications/wcy/Factors_and_criteria.cfm 2007-05-18
- Ministry of transportation of Russian Federation, EIU, McKinsey analysis

Appendix 1: Questionnaire

11 questions regarding the Russian pulp and paper industry

1. How accessible to international participation (in production) do you perceive the Russian pulp and paper market to be?
[Scale of 1-5; 1 being “Very difficult to access”; 5 being “Very easy to access”]

Could you give the reasons for the choice you made...

2. In your perspective, has accessibility improved or deteriorated the past 5 years?
Comment: _____

3. In your perspective, do you see accessibility improving or deteriorating in the near term?
Comment: _____

4. What do you see as the main obstacles to production participation?
Please choose the five most important:

- Infrastructure
- Long distances
- Logistics
- Supply of raw materials
- Cultural differences
- Legal barriers or uncertainties
- Political risk
- Lack of skilled labor
- Duties, tariffs, and customs regulation
- Competition from domestic companies
- Insufficient knowledge about the market
- Other: _____

5. In what timeframe do you think a sufficient number of obstacles will be removed so that international participation in production may flourish?

- <1 year
- 1-5 years
- 5-10 years
- >10 years
- Comment: _____

6. In what timeframe do you think the *domestic Russian* pulp and paper industry will become an important player in the global pulp and paper industry?

- <1 year
- 1-5 years
- 5-10 years
- >10 years

What do you think needs to be a place for this to happen?

7. Is your company currently participating in or has plans for production in Russia?

Already participating

Please describe current participation:

- Active plans for production in Russia

Please describe plans (if official):

- Interest in production in Russia but not actively investigating
- No current plans for production

8. What do you see as the main benefits with production participation in the Russian pulp and paper industry?

- Participation in the growing Russian end-user market
- Low fiber cost
- Proximity to the Asian industry and market
- Low production cost in general
- Other: _____

9. If you are considering participating in the Russian pulp and paper production, what timeframe would be relevant for your company?

- <1 year
- 1-5 years
- 5-10 years
- >10 years
- Opportunistic.

10. If establishing production in Russia, what would your likely method for establishment be?

- Greenfield own operations

- Acquiring existing player

Why this choice?

11. What do you see as the most important factors an international company must master to succeed with establishing production in Russia

Thank you very much for your help. If it is ok to contact you with follow-up questions, if they will occur , please tick the box and provide the appropriate contact information below:

Appendix 2 Interview questions

Interview questions for established companies

- Short introduction of your company and your current status in Russia.
- Why was your company interested in establishing?
- What steps and measures did you take in leading up to that decision?
- What was it that made your company decision to establish?
- What steps and measures did you take when your company decided to establish production in Russian?
- What different political authorities' had to be contacted to get clearance for your establishment?
- What is it about Russian that is still of interest to your company today?
- What has been the positive outcome from your establishing- and research process?
- Have you encountered any problems when establishing in Russia?
 - If yes, what were they and how did you solve them?
- Did you establish within your planed timeframe?
 - What was your timeframe?
 - If not, what were the obstacles?
 - How did you solve them?
- When deciding the location for your site/production what factors where taken in to account?
- Why not on the other side of the Ural?
- What products are you producing in Russia?
 - Why the choice of these products?
- How do you ensure that your supply of raw material is constant to production?
- What are your comments on the Russian infrastructure?
 - Roads
 - Rail
 - Have you made your own infrastructure, participated in building and developing?
- Labor for your plant, was it easy to find?
 - What recruiting process did you use?
 - Did you educate the workers?

Interview questions for companies that withdrew from Russia

- Short presentation of your former company.
- Why was your company interested in establishing production in Russia?
- What was your impression of Russia at that time?
 - Has it changed? How?
- What happened in the lead-up to the decision about whether to establish production that made your organization decide NOT to establish production?
- What would you say was the most important obstacles for you in establishing production capabilities?
- What can make the establishing process easier?
- What would you do differently if you where going to establish now in the industry?
- Did you have difficulties with finding the raw material needed?

- Quality
- Supply
- In time
- Was the Russian infrastructure a problem?
 - In what way?
- Where there problems to find competent labor?
- Tips for companies that are planning to participate in the Russian pulp and paper industry

Interview questions for possible participation

- Short presentation of company.
- Why was your company interested in establishing production in Russia?
- What products are likely to be produced? And why? i.e. Why produce just these goods in Russia?
- What issues do you face that you consider to be
 - Obstacles
 - Constrains/Irritations
 - Lack of infrastructure
 - Quality of raw materials
 - Labor
 - Distances
- What have your company done to get the proper background information to be able to participate in Russia
- What products are in your main focus when it comes to production?
 - Why produce just these goods in Russia?
- What steps have been taken to be able to participate and establish?
- Where are you at the moment in your establishing process?
- In what timeframe will you be active and producing?
- Are you going to build a green field plant?
 - Why, why not?
- How will you find the right labor with the right knowledge to run your plant?
- How will you insure your demand of raw materials?
 - Quality
 - Supply
 - Just in time.
- What advantages do you see in an early participation?
- What are the risks of not participating?

Intervjufrågor till Swedwood

- Vad var det med den ryska marknaden som kändes mest intressant för er?
- Vilka instanser i den ryska ”regeringen” måste man få klartäcken från vid köp?
- Leasa eller köpa in råvaran från leverantörer?
 - Fördelar och nackdelar
- Vid köp av leasing avtal är priset fast per ha?
- Vilka är de olika klassificeringarna på skogsmark, vilka faktorer bestämmer pris differensen på skogsmark/”leskhoze”?
- Kan vem som helst få leasa mark?

- Råvaran
 - Logistik
 - Kvalité
 - Tillgången
 - Inköpsprocess
 - Är certifiering viktigt för slutkunden?
 - Ursprung
- Tillvägagångssätt vid inköp av råvaran?
- Restprodukter
 - Säljs till massa bruk eller använda själv?

Publikationer från Institutionen för skogens produkter, Sveriges lantbruksuniversitet (SLU)

Rapporter

1. Ingemarson, F. 2007. De skogliga tjänstemännens syn på arbetet i Gudruns spår. Institutionen för skogens produkter, SLU, Uppsala
2. Lönnstedt, L. 2007. *Financial analysis of the U.S. based forest industry*. Department of Forest Products, SLU, Uppsala

Examensarbeten

1. Stangebye, J. 2007. Inventering och klassificering av kvarlämnad virkesvolym vid slutavverkning. *Inventory and classification of non-cut volumes at final cut operations*. Institutionen för skogens produkter, SLU, Uppsala
2. Rosenquist, B. 2007. Bidragsanalys av dimensioner och postningar – En studie vid Vida Alvesta. *Financial analysis of economic contribution from dimensions and sawing patterns – A study at Vida Alvesta*. Institutionen för skogens produkter, SLU, Uppsala
3. Ericsson, M. 2007. En lyckad affärsrelation? – Två fallstudier. *A successful business relation? – Two case studies*. Institutionen för skogens produkter, SLU, Uppsala
4. Ståhl, G. 2007. Distribution och försäljning av kvalitetsfuru – En fallstudie. *Distribution and sales of high quality pine lumber – A case study*. Institutionen för skogens produkter, SLU, Uppsala
5. Ekholm, A. 2007. Aspekter på flyttkostnader, fastighetsbildning och fastighetstorlekar. *Aspects on fixed harvest costs and the size and dividing up of forest estates*. Institutionen för skogens produkter, SLU, Uppsala
6. Gustafsson, F. 2007. Postningsoptimering vid sönderdelning av fura vid Säters Ångsåg. *Saw pattern optimising for sawing Scots pine at Säters Ångsåg*. Institutionen för skogens produkter, SLU, Uppsala
7. Götherström, M. 2007. Följdeffekter av olika användningssätt för vedråvara – en ekonomisk studie. *Consequences of different ways to utilize raw wood – an economic study*. Institutionen för skogens produkter, SLU, Uppsala
8. Nashr, F. 2007. *Profiling the strategies of Swedish sawmilling firms*. Department of Forest Products, SLU, Uppsala
9. Högsborn, G. 2007. Sveriges producenter och leverantörer av limträ – En studie om deras marknader och kundrelationer. *Swedish producers and suppliers of glulam – A study about their markets and customer relations*. Institutionen för skogens produkter, SLU, Uppsala
10. Andersson, H. 2007. *Establishment of pulp and paper production in Russia – Assessment of obstacles*. Etablering av pappers- och massaproduktion i Ryssland – bedömning av möjliga hinder. Department of Forest Products, SLU, Uppsala