

IMPLICATIONS FOR FORESTS AND LIVELIHOODS

中国与亚太地区国家林产品贸易研究

FOREST PRODUCT EXPORTS
FROM THE RUSSIAN FAR
EAST AND EASTERN
SIBERIA TO CHINA:

STATUS AND TRENDS

ALEXEY LANKIN











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FOREST PRODUCT EXPORTS FROM THE RUSSIAN FAR EAST AND EASTERN SIBERIA TO **CHINA: STATUS AND TRENDS**

by Alexey Lankin

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EXECUTIVE SUMMARY

Since 2001, China has been a top destination of Russian forest product exports to the Asia-Pacific region. The foreign economic and trade liberalization that began in Russia in the mid-1990s – combined with the high demand for timber imports into China due to the Chinese domestic logging ban starting in 1998 – has stimulated strong Chinese trade capital in the Russian Far East forested regions, especially in border areas. The value of Russia's log and lumber exports to China grew approximately six times between 1998 and 2002, while paper and paperboard exports increased by 18% from 2000 to 2002. However, the value of Russia's timber exports grew at a much slower pace compared to the rapidly increasing volume. This is due in part to the low volume of processed products exported to China and the large number of relatively inexperienced exporters who are either undercutting each others' prices or knowingly underestimating the value of exported timber. Russia's timber export market reflects many of the current social and economic conditions and institutional changes in Russia during its transition to a market economy, including basic issues of governance, legality and transparency to low economic efficiency and resource exhaustion.

As part of a larger project whose goal is to help ensure that increased demand from China and others improves livelihoods and enhances forest conservation in the East Asian region, this paper analyzes customs statistics and industry data to determine the status, trends and impacts of Russian forest product exports to China, in particular those from the Russian Far East and Eastern Siberia. This can be difficult because there are systematic discrepancies between Russian and Chinese timber trade customs statistics, a situation which could be alleviated if the two countries harmonized their data collection methodologies and customs regulations. The paper then examines the volume and value of forest product exports by product category, trade route, and major gateways in the Russian Far East and Eastern Siberia, through which the bulk of Russia's forest product exports travel (Central Russia & Siberia (Naushkinskaya), Eastern Siberia (Zabaikalskaya), and the Russian Far East (Grodekovskaya).

The paper shows how, by diversifying their forest product exports and shifting their focus towards value-added processing the Russian economy will come to rely less heavily on raw log exports and will be able to break the current trend in which Russian forest product exports grow faster in volume than in total value. Other issues in the cross-border timber trade examined in this paper include the nature of illegal activities in the border trade, the nature of Chinese enterprises operating in Russia, and the inability of Russian enterprises to directly engage in the Northeast China timber market. By bypassing intermediaries in Northeast China – where Russian exporters are required to trade through a Chinese border exportimport trading company – and establishing more direct links with final consumers (e.g. by increasing sea trade routes), Russian timber producers could earn more revenue. Through more coordinated efforts between Russian exporters to avoid selling below market value, more active marketing by Russian exporters to increase competitive ness in the international marketplace, and an improved business climate to make the RFE and Siberia more attractive for investment, the Russia-China timber trade can develop in a more mutually beneficial manner.

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INTRODUCTION

China's rapidly growing demand for timber — and the impact harvesting practices and trade have in sourcing regions and countries — has attracted the attention of many experts. A number of recent studies examine the impacts on forest resources, local economies and livelihoods as a result of illegal logging and associated trade with countries such as China and ultimate consumers. Among these studies, two merit particular notice: the work conducted by WWF to identify China's 'ecological footprint' in forest-producing countries and the BROK-FoE Japan-PERC analysis¹ of illegal logging and timber trade in the border areas of the Russian Far East (RFE).

In 2002, Forest Trends and the Center for International Forestry Research (CIFOR), with support from the United Kingdom's Department for International Development (DFID), launched a collaborative project entitled "Transforming China's Forest Impacts in the East Asian Region: Strategic Market Intelligence for Sustainable Forests and Livelihoods." The overall goal of the project is help ensure that the increased demand from China and others actually helps to improve livelihoods and enhance forest conservation in the East Asian Region. As a part of the larger project, this study focuses on the status and trends of Russian forest product exports to China, in particular those from the Russian Far East and Eastern Siberia. It includes a description of and, where relevant, summary statistics on volumes and values of forest product exports to China and Hong Kong. These are organized by product category (e.g. hard wood and softwood logs, panels, other products) and by major gateway in the Russian Far East and Eastern Siberia. The study covers:

- Multi-year trends, where possible, for the variables listed above;
- Names, locations and characteristics of major exporting companies and major intermediaries;
- Names and locations of major end-purchasers in China and major destinations in China;
- Description of the export process: steps, chains of custody, types and numbers of intermediaries
 and brokers involved in shipments to China and Hong Kong; explanation of variations in chains
 of custody and identification of actors involved in each type of chain;
- Key areas of non-compliance (e.g. which rules, fees, taxes most commonly avoided) and other problems associated with the export trade;
- Assessment of government options to improve administration of the export trade and compliance with export rules.

The report is supplemented by an appendix containing detailed Russian custom statistics mentioned in the text.

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¹ Lebedev A. et al. 1999.

VOLUMES AND VALUES OF FOREST PRODUCT EXPORTS TO CHINA AND HONG KONG, BY PRODUCT CATEGORY AND BY MAJOR GATEWAY IN THE RUSSIAN FAR EAST AND EASTERN SIBERIA

Since 2001, China has been a top destination of Russian forest product exports to the Asia-Pacific region In 2002, China imported over half of the total value of Russian forest product exports to Northeast Asia. In 2003, China imported 63 percent of Russian round wood exported to the Northeast Asian countries, as compared with 29 percent imported by Japan and 8 percent imported by the Republic of Korea.

FOREST PRODUCT EXPORTS TO CHINA BY PRODUCT SEGMENT

As shown in Table 1, the main Russian forest products exported to China in 2002 included raw logs, lumber, pulp, paper and paperboard. The export of other timber products, such as fuel wood, wood chips, veneer, particle board, plywood and other secondary wood products was negligible.

Table 1: Forest Product Exports to China in 2002²

	Volume/	Declared Contracted Export	% of Value of Forest Product
Item (tariff code)	Net Weight	Value (USD)	Exports to China
Fuel wood, chips (4401), tons	2,157	43,869	0.004
Logs (4403), m ³	14,294,068*	761,051,646*	65.37
Railway sleepers (4406), m ³	1,115	83,257	0.007
Lumber (4407), m ³	567,719*	47,641,640*	4.09
Veneer (4408), kg	599,089	98,964	0.001
Flakeboard (4410), m ³	246	10,853	0.001
Fiberboard (4411), tons	31,223	5,929,581	0.51
Plywood (4412), m ³	1,534	294,299	0.03
Pulp (4702-4704), tons	877,398	274,019,231	23.54
Other (4409, 4413-4421)		1,675,577	0.14
Paper and paperboard (48), tons	289,714	73,354,878	6.30
Total		1,320,134,523	100.00

Notes: Declared value of exporting commodity is here recalculated for FOB-Russian seaport (i.e. price up to and including loading) or DAF-Russian boundary passage point (i.e. price as delivered at frontier), which is column #46 in Russian cargo customs declarations. * The given data do not include so-called temporary and periodic customs cargo declarations, so the actual volumes may be up to 5 per cent larger.

Figure 1 shows the breakdown in round wood equivalent volume (RWE m³) of the main Russian forest product exports to China by product segment in 2002. Rough estimates of RWE volume were achieved by applying common conversion factors to masses and volumes given in Table 1 for raw logs, lumber,

3

² Source: Russian Federation (RF) customs electronic database of customs declarations in 1998-2002.

pulp, veneer, fiberboard and other forest products. As indicated in the figure, raw logs made up 65.2 percent in total volume of Russian timber exports to China in 2002, while lumber made up only 3.27 percent.

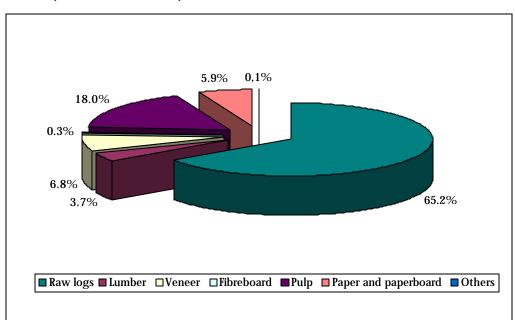


Figure 1: Russian Forest Product Exports to China: Proportion of Main Product Segments by Volume (converted into RWE)

Aside from timber products, Russian forest product exports to China in 2002 included significant amounts of pulp, paper, and paperboard (Table 1 and Figure 1). Exported pulp products are produced from coniferous wood and deciduous wood, both bleached and unbleached. Pulp exported to China comes mainly from large Russian pulp and paper enterprises located in Eastern Siberia and Northwest Russia, transported mainly by rail to customs in Zabaikalskaya and Naushki. Only about six percent of pulp exported to China is delivered out of seaports in Northeast Russia.

Russian exports of paper and paperboard to China in 2002 amounted to 289,714 tons in volume and US\$73.355 million in declared value. Main commodities included newsprint – 31,304 tons (net weight) or US\$8.991 million; offset printing and office paper – 8,553 tons or US\$3.837 million; kraft-liner paperboard – 248,933 tons or US\$60.406 million; and "other" (recycled paperboard, etc.) – 923 tons or US\$108,000. The sources of these paper exports are similar to those for pulp exports, as described above.

ORIGINS AND PATHWAYS OF FOREST PRODUCT EXPORTS TO CHINA

According to the Russian Federation (RF) customs statistics, Russia exported timber products to China from 27 different provinces in 2003. However, the main provinces exporting to China are situated in the nation's main natural forest regions – the southern parts of the Russian Far East and Siberia (Table 2 and Map in Annex III).

Table 2: Russian Timber Exports (Logs & Lumber) to China by Main Exporting Provinces 2003³

#	Regional	Timber Exp (Value)		Raw lo	og (m³)	Sawn v	vood (m³)
	Provinces	Thousand USD	%	Softwood	Hardwood	Softwood	Hardwood
1	Irkutskaya	242,859	31.1	4,173,263	15,111	219,036	4,814
2	Khabarovskii	222,835	28.6	3,522,833	758,499	6,915	19,179
3	Primorskii	73,965	9.5	635,931	522,272	6,254	79,143
4	Krasnoyarskii	70,676	9.1	1,135,253	141,949	49,933	5,029
5	Chitinskaya	63,551	8.1	1,302,299	27,561	127,949	8,567
6	Buryatia Rep.	42,248	5.4	722,660	1,074	38,417	0
7	Amurskaya	32,304	4.1	611,407	49,901	2,447	2,658
8	Evreiskaya	5,912	0.8	58,899	71,070	6,305	5,856
9	Tomskaya	6,493	0.8	77,169	45,923	2,261	789
10	Khakassia Rep.	4,985	0.6	61,614	3,963	6,571	157
11	Kemerovskaya	3,591	0.5	38,486	33,600	3,642	3,317
12	Altaiskii	2,800	0.4	47,411	14,105	6,305	1,251
13	Kirovskaya	2,654	0.3	0	43,240	3,568	0
14	Novosibirskaya	2,443	0.3	35,952	14,524	494	198
15	Sakhaliskaya	677	0.1	8,874	0	4,054	0
	Other provinces	1,960	0.3	27,950	6,879	3,557	342
Tota	1	779,953	100	12,460,001	1,747,671	487,708	131,300

Source: RF austoms electronic data base of customs declarations for 2003.

Some of the main exporting provinces, including Chitinskaya, Amurskaya, Evreiskaya, Khabarovskii and Primorskii, share a border with Northeast China. Others, namely Krasnoyarskii, Irkutskaya, Buryatia, and Khakassia Republic, are relatively far from China. The fact that distance is not a barrier to trade is due to the proximity of the Trans-Siberian railway main line to the Chinese border. Among these two groups of provinces, the traditional forest products-exporting regions of Khabarovskii, Irkutskaya, Primorskii, Amurskaya, Krasnoyarskii, and Chitinskaya Provinces and Burytia Republic are the main contributors to Russian timber exports to China. The main routes of Russian timber exports to China can be traced using available data declared by exporters in customs declarations. The customs data used includes:

- registered address (principal office address) of the Russian exporter,
- registered address of the trader or the forwarder on the border,

³ Notes on Table 2: Logs custom code 4403;, lumber – 4407. Export value - declared contracted amount. Shares of each province calculated using export volumes declared by ex porters located (or with branch offices) in that province. The "other provinces" category includes provinces with relatively low timber exports to China: Vologodskaya, Kamchatskaya, Kostromskaya, Krasnodarskii, Kurganskaya, Nizhegorodskaya, Omskaya, Permskaya, Sverdlovskaya, Tyumenskaya provinces, Moscow, and St. Peterburg.

- customs clearance location,
- border-crossing location (if different from the customs clearance location), and
- combination of transportation facilities used during and after the border crossing (e.g. railway -> ocean ship, or truck -> river ferry, etc.).

In most cases, the registered address, or location of the main (or branch) office, clearly indicates the sourcing area of timber to be exported, although sometimes traders, especially those located in Central Russia, may purchase timber from outside regions and provinces. In rare cases, exporters or forwarders on the border may export timber that obviously come from an entirely different part of Russia than that in which the exporter or forwarder is located, e.g. an RFE company exporting beech, although beech is not grown in the RFE.

It should also be noted that according to RF customs rules, forest product export-clearing documents may be drawn up not only at border customs gateways, but also in hinterland regions. This often occurs in Central Russia and Siberia. Finally, commodities are sometimes not exported through the closest gateway, but one relatively far from the sourcing area. Examples include forest products from Siberia being exported through Zabaikalsk or RFE gateways, especially seaports, instead of closer Naushki. Reasons cited include the destination designated in the export contract, limited capacities of cross-border passages or the desire on the part of businesses to avoid difficulties with customs clearing at some gateways.

Despite such anomalies, the data generally indicates three principal routes along which Russian forest products are exported to China:

- Siberian route which encompasses timber from Central Russia and Western Siberia, including
 Krasnoyarskii Province and part of the China-bound forest products from Irkutskaya Provinces
 and Buryatia Republic. Forest products following this Siberian route exit Russia through Naushki
 in Buryatia Republic, then cross the country of Mongolia, and end up in China's Inner Mongolia
 or travel further to central Chinese provinces.
- Zabaikalian route, where forest products come from regions north and east of Baikal Lake and
 from parts of Irkutskaya, Buryatia and Chitinskaya provinces. Products moving along this route
 cross the border at Zabaikalsk, directly enter China's Inner Mongolia, and then either remain in
 Heilongjiang Province or continue southward.
- Russian Far East route, which encompasses timber sources from the vast region of Eastern Siberia, Zabaikalye, and Southern RFE. Timber moving along this route reaches China mainly through the Grodekovo railway station in Primorskii Province and more recently through the seaports on Russia's Pacific coast. The pathway also branches off to small customs gateways along the Russian-Chinese bounder and then over the border rivers, the Amur and the Ussuri. The main destinations of timber following this third route are China's northeastern provinces and southern seaports.

As shown in Figure 1.2, the bulk of Russian timber bound for China in 2002 was exported through the land customs gateways of Grodekovskaya, Zabaikalskaya, and Nauhkinskaya (mainly by rail) and through two seaport customs gateways – Nakhodkinskaya and Vaninskaya.

■ Softwood log ■ Hardwood log **□** Softwood lubmer ■ Hardwood lumber Thousand m³ 0 1000 2000 3000 4000 5000 Vladivostokskaya Khabarovskaya Blagoveschenskaya Petrapavlovsk-Sakhalinskaya Birobizhanskaya Vaninskaya Grodekovskaya Amurskaya Nakhodkinskaya Ussuriiskaya Khasanskaya Zabaikalskaya Naushkinskaya Other inland

Figure 2: Russian Timber Export Volumes to China through Main Customs Gateways, 2002

The customs gateways for Russian forest products entering China can be divided into three groups. These groups correspond to the three main China-bound routes – the Siberian, Zabaikalian and RFE routes respectively – which were described on the previous page. The gateways groups, listed geographically from west to east, are:

- (1) customs points in Central Russia and Siberia (including 'Bratskaya and others" and Naushkinskaya, as listed in Figure 1.2);
- (2) East Siberian customs to the east of Lake Baikal (referred to as Zabaikalskaya in Figure 1.2); and
- (3) RFE customs (including Khasanskaya, Ussuriiskaya, Nakhodkinskaya, Amurskaya, Grodekovskaya, Vaninskaya, Birobizhanskaya, Sakhalinskaya, Blaogoveschenskaya, Khabarovskaya and Vladivostokskaya customs in Figure 2).

Some customs gateways have several cross-border passages. For example, Zabaikalskaya includes both railway and road passages, and Khasanskaya includes railway, road and seaport passage options. The full list of principal customs and cross-border check-points, with the corresponding Chinese customs gateways, is given in Annex I.

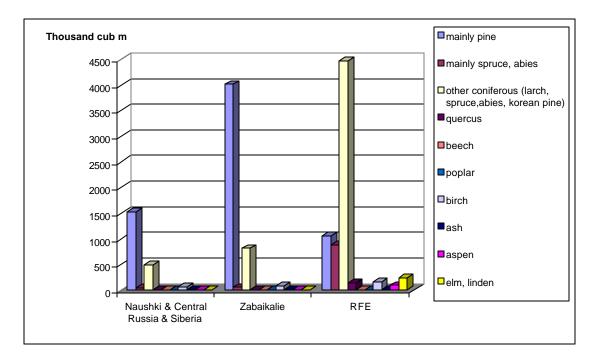
SPECIES COMPOSITION OF TIMBER PRODUCT EXPORTS TO CHINA

Species composition of timber exports to China generally reflects the patterns found in commercially harvested forest stands in the exporting regions. For example, the dominant softwood exports originate from the boreal taiga areas prevalent across Siberia and the RFE where spruce, fir, pine, larch and other softwood species are found. Hardwood logs and lumber – including oak, ash, birch, aspen, poplar, elm and beech – mainly come from southern RFE's Khabarovskii and Primorskii Provinces, where most of Russia's temperate forests grow.

Figures 3 and 4 illustrate the export of raw logs and lumber to China by main species, as indicated in customs declarations. The species are grouped together as they are in the relevant tariff codes, with

prevailing species represented by separate categories. The category of "other mixed conifers" in both figures includes other and unnamed coniferous species, mostly larch, spruce, fir and Korean pine.

Figure 3: Raw Logs Exported to China by Main Species, Grouped by Main Customs Regions, 2002



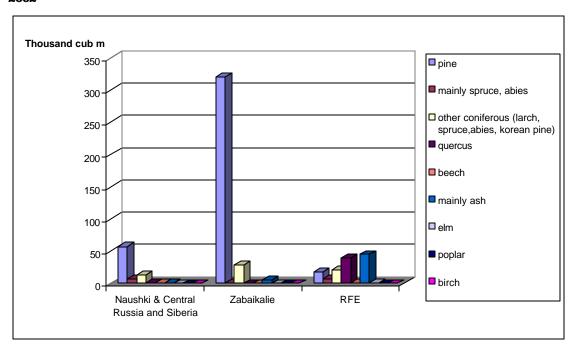


Figure 4: Lumber Exported to China by Main Species, Grouped by Main Customs Regions, 2002

TRANSPORT OF FOREST PRODUCTS TO CHINA

Siberian forest products are delivered mainly by railway directly to China and occasionally through RFE seaports. Eastern Siberian and Southern RFE wood (bordering Northeast China) are carried by rail and motor trucks via the Argun River bridge (in the Upper Amur), across the ice in winter at cross-border points on the Argun River, by river ships and ferries in the summer all along the Amur River; and also by ocean shipping from seaports on the Russian Pacific coast.

Table 3 shows the transportation mode used to carry Russian forest product exports over the Chinese border in 2002. Railway is predominant, accounting for 81 percent of logs and lumber exported to China, 94 percent of pulp and 97 percent of paper. Truck and river shipping play a rather small role, and are used only locally for near-border timber trade. Ocean shipping of forest products exported to China is also very low, except in the case of logs (about 14 percent).

Table 3: Mode of Transport for Russian Forest Product Exports to China, 2002*

Export goods	Railway	Road	Ocean ship	River ship/ferry
Fuel wood, wood chips (4401), tons	0	2,157	0	0
Logs (4403), m ³	11,573,667	283,237	1,946,023	491,094
Railway sleepers (4406), m ³	978	137	0	0
Lumber (4407), m ³	462,059	91,573	3,208	10,879
Veneer (4408), m ³	726	11	0.5	89
Particleboard (4410), m ³	246	0	0	0
Fiberboard (4411), m ²	14,605,629	103,411	39,043	4,448
Plywood (4412), m ²	133	1,355	36	9
Pulp (4702-4704), tons	825,776	0	51,622	0
Paper (48), tons	282,107	6,038	2,538	0

^{*} The given data do not include so called temporary and periodic customs cargo declarations, so that actual volumes may be up to 10 per cent larger.

EXPORTS TO HONG KONG AND TAIWAN

In comparison with forest product exports to mainland China, Russian direct export to Hong Kong and Taiwan is relatively small in both volume and value. In 2002, Russia exported 14,628 tons of paper to Hong Kong 11,914 tons of newsprint (US\$3.667 million value) and 2,661 tons of office paper (US\$1.476 million). Log exports to Hong Kong totaled only 3,795 m³ in volume in 2002, or US\$147,000 USD in value. During the Soviet period and *Perestroika*, export flows to Hong Kong were channeled through intermediates in Japan and offshore companies. Today, it is still difficult to trace forest products flows to Hong Kong by declared destinations.

Russian forest product exports to Taiwan in 2002 included 523 m³ softwood lumber, 151 m³ plywood, 7,707 tons pulp, and 14,587 tons paper and paperboard, altogether valued at US\$201 million.

RUSSIAN FOREST PRODUCT AND LOG EXPORTS TO CHINA: ACTUAL AND PROJECTED TRENDS

TRENDS IN LOG AND LUMBER EXPORTS TO CHINA

Based on available Russian customs statistics for recent years, the following analysis focuses mainly on logs and lumber exports between 1998 and 2002. The export of other Russian timber products, such as wood chips, plywood, veneer etc., was negligible over the five years studied. Russian customs statistics on exports of pulp and paper is available only for the years 2000 to 2002.

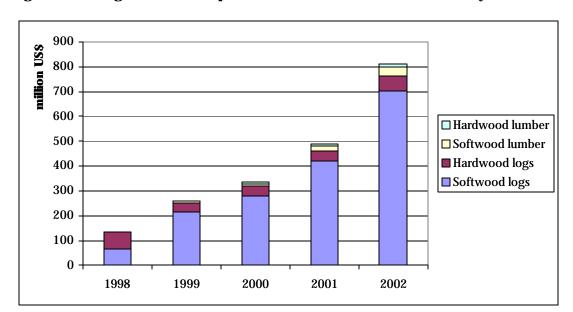
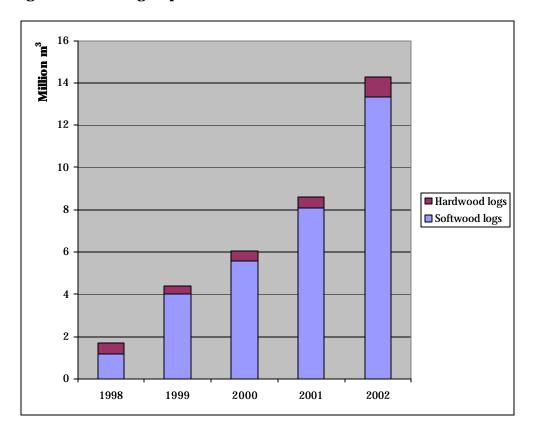


Figure 5 Raw Log and Lumber Exports to China from Russia in 1998-2002 (by value)

The value of Russia's log and lumber exports to China grew approximately six times between 1998 and 2002, from US\$135 to \$809 million (Figure 5). The total volume log and lumber exports for the same period increased from 1,712,105 cubic meters to 14,861,740 cubic meters. While lumber exports have remained small in comparison with logs over the period, lumber exports still jumped over 30 times – from 18,176 cubic meters in 1998 up to 567,719 cubic meters in 2002. The largest annual increase in total log and lumber exports occurred in 1999, when export volumes rose 262 percent in one year. This coincided with foreign trade liberalization in China and the relative strengthening of the export sector within the Russian business world. On December 1, 1998, China's Ministry of Foreign Trade and Economic Cooperation (MOFTEC) abolished restrictions on the import of forest products. Russia was climbing out of a period of financial default, during which the ruble had fallen by three to four times but which increased the competitive advantage of Russian exports. The relatively large increase in log and lumber exports to China three years later in 2002 can be explained partly by the re-orientation of some large Russian exporters from the Japanese to Chinese market, mostly due to the more competitive prices offered and less stringent grading requirements required by the latter.





Softwood log exports to China have increased significantly faster than that of hardwood logs (Figure 6). The relative share of hardwood log exports declined from 30.5% to 6.6% between 1998 and 2002. During that period, hardwood log exports increased 1.8 times while softwood logs exports grew 11.3 times. At least three factors have contributed to this lower share of hardwood logs in log exports to China: (1) nearly all temperate mixed broadleaved forest stands in the southern regions of RFE — the main sourcing base for hardwood — have already been harvested and new harvesting areas are limited; (2) opportunities for hardwood exports from other regions of Russia are insignificant (see Table 2); and (3) marketable hardwood species, such as oak, ash, beech and linden are considered both commercially and environmentally valuable. Harvesting and exporting these species are therefore strictly regulated by the state. Hardwood log exports to China increased in 2002, however, due to growing exports of birch and aspen.

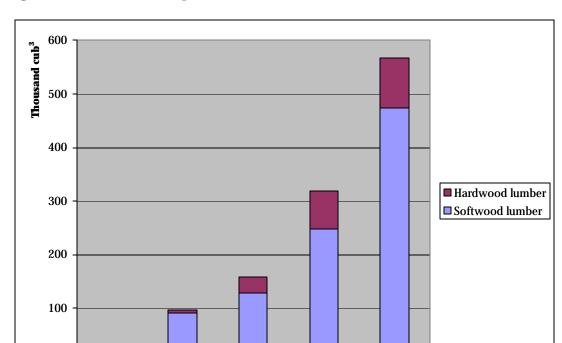


Figure 7: Russia's Lumber Exports to China (1998-2002)

The increase in softwood lumber exports to China generally followed the trend of softwood log exports (Figure 7). Exports of hardwood lumber, however, grew at a faster rate than hardwood logs, especially in 2000, when hardwood lumber exports to China were 5.3 times those of the previous year. Despite decreased hardwood lumber prices in the Chinese market since 2000, hardwood lumber exports have retained their attractiveness due to their relatively large added -value potential and strong market demand. Exports of hardwood lumber also do not require documentary evidence of legal sourcing, unlike hardwood log exports.

GATEWAYS FOR RUSSIA'S LOG AND LUMBER EXPORTS TO CHINA, 1998-2002

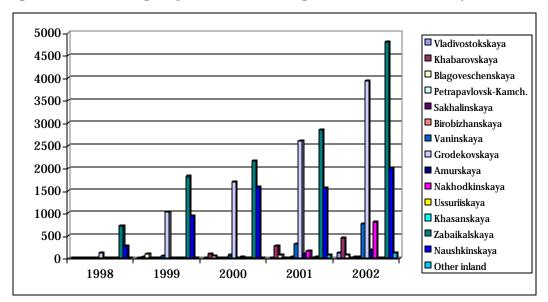


Figure & Softwood Logs Exports to China through Main Customs Gateways (1,000 m³)

As shown in Figure 8, Russia exported softwood logs to China through only three customs gateways in 1998, namely Grodekovskaya, Zabaikalskaya and Naushkinskaya. With the surge in exports to China, other gateways have emerged, but these original three major customs gateways continue to dominate trade flows. With the active development of RFE-Northeast China near-border timber trade beginning in 1999, customs gateways situated in provinces along the Russian-Chinese boundary are playing an increasing role: Blagoveschenskaya (Heihe on the Chinese side), Khabarovskaya (Fuyuan), Birobizhanskaya (Luobei and Fujin) and Ussuriiskaya (Suifenhe-Dongning). Vaninskaya and Nakhodkinskaya, seaport sites, began to play a role in log exports in 2001.

Over the five years studied, the Grodekovskaya was the most important customs gateway for Russia's hardwood log exports to China (Figure 9), likely due to the fact that the majority of exported Russian hardwoods originate from temperate forests in Southern RFE, close to the Grodekovskaya customs gateway, which is considered the RFE's main railway passage to China. In 2001 and 2002, hardwood log exports to China via ocean ports and by near-border timber trade began to increase; these ports now trail Grodekovskaya distantly as points of entry for Russian hardwood logs into China.

Figure 9 Exports of Hardwood Logs to China through Main Customs Gateways (1,000 m³)

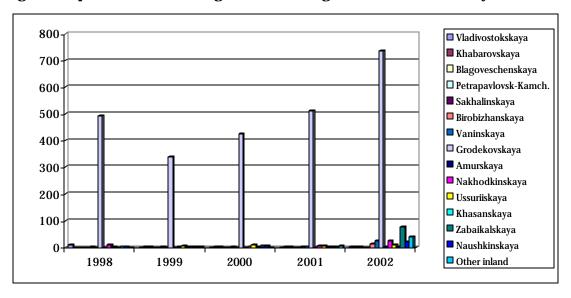
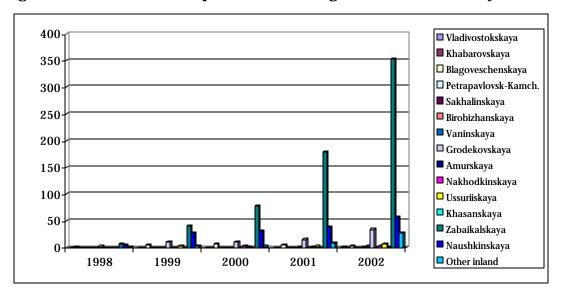


Figure 10: Softwood Lumber Exports to China through Main Customs Gateways (1,000 m³)



In contrast to Russia's softwood log exports to China, softwood lumber was exported mainly through Zabaikalskaya and, to a lesser extent, through Naushkinskaya in Eastern Siberia (Figure 10). The role of Grodekovskaya and other RFE customs gateways was rather small. Siberia has a stronger saw mill industry, with large sawmills in the region remaining active after the privatization and reform initiatives. In contrast, the RFE has always had a less developed timber-processing industry; many existing sawmills became dilapidated during the privatization and reform period.

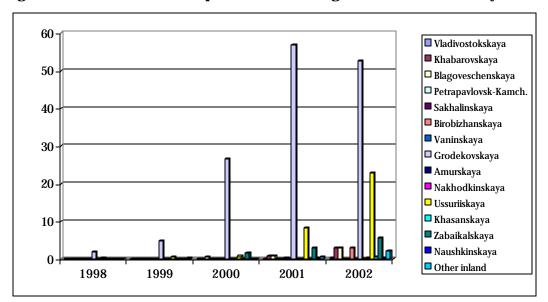


Figure 11: Hardwood Lumber Exports to China through Main Customs Gateways (1,000 m³)

The main customs gateways for hardwood lumber exports to China (Figure 11) parallels Russia's hardwood log exports to China (Figure 9) – with Grodekovskaya playing the dominant role in both cases. The increase of hardwood lumber exports to China through other RFE customs gateways over the last few years is largely due to increased harvesting of less valuable hardwood species such as birch and aspen.

TRANSPORT OF LOG AND LUMBER EXPORTS TO CHINA

Figure 12 shows which modes of transportation were used to carry Russian log exports over the Chinese border between 1998 and 2002.

Railways dominate log export transportation. In 2001, however, transportation diversified with the development of ocean and river shipping operations. Most of this shipping in northern parts of Khabarovskii Province used to go to Japan. The rise in truck deliveries since 2002 is a result of a motor bridge that began operating in November 2001 between Olochi Shiwei over the Argun River in Chitinskaya Province. At present, it is the only year-round bridge over the Amur and its tributaries between Russia and China. It was built by Chinese companies specifically for the purpose of timber transport. In the absence of bridges, winter transport over rivers is achieved by driving over the ice, while in the summer ferries or barges cross the Amur River. Finally, there are also several motor vehicle roads through cross-border passages in southwestern Primorskii Province, linking it with Heilongjiang and Jilin provinces. These roads are usually used to transport hardwoods.

Figure 12: Modes of Transport of Russia's Log Exports to China at the Time of Border Crossing (1998-2002)

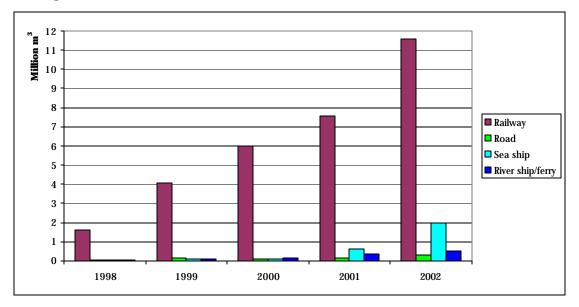
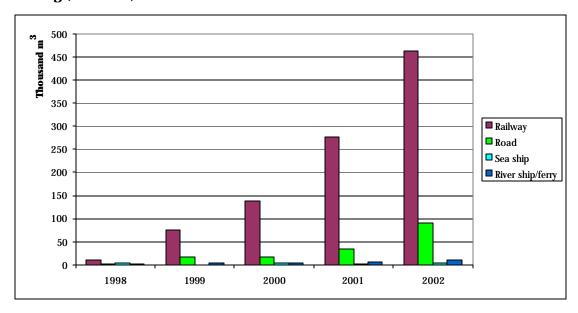


Figure 13: Modes of Transport of Russia's Lumber Exports to China at the Time of Border Crossing (1998-2002)



Road transport plays a strong role in the transport of lumber exports to China. While proportionally small overall, trucking plays a significant role in border trade transactions in the provinces directly bordering China.

TRENDS IN EXPORT OF OTHER FOREST PRODUCTS TO CHINA

According to available data, Russia's export of paper and paperboard to China grew steadily from 2000 to 2002, rising from 246,610 to 290,684 metric tons between 2000 and 2002, an increase of about 18 percent. In 2000, the transport of paper and paperboard products to China was mainly by rail (72 percent) through the Zabaikalskaya customs gateway and by sea (28 percent); in 2002, rail transport of paper exports to China jumped to 97 percent.

Russia's pulp exports to China grew from 784,360 metric tons to 877,398 metric tons between 2001 and 2002. In 2001, 95 percent of pulp exports to China were transported by rail, with the other 5% being transported by sea. In 2002, these proportions were 94 percent (rail) and six percent (sea).

Russia's fiberboard exports to China, which grew rapidly in 2001 and 2002, are of particular note. Fiberboard exports to China jumped 47 times between 2000 and 2002, to 14,752,530 square meters in 2002. In 2000 and 2001, transport of fiberboard exports to C hina was only by rail, but in 2002 small amounts (less than one per cent total) were transported by road, river and sea.

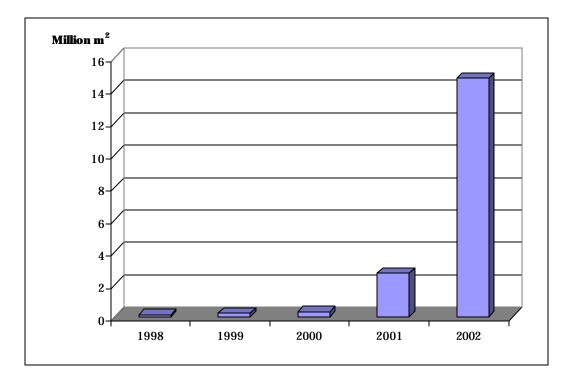


Figure 14: Russia's Fiberboard Exports to China

FOREST PRODUCT EXPORTS TO HONG KONG AND TAIWAN

Russia's forest product exports to Hong Kong and Taiwan remained small in value over the five years studied (1998-2002) (Figure 15). In 2002, however, Russia's pulp exports to Taiwan jumped, exemplified by the increase between 2001 and 2002: from 2,349 to 7,707 tons.

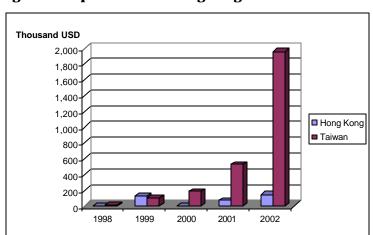


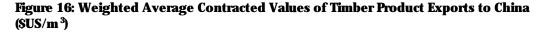
Figure 15: Exports Value to Hong Kong and Taiwan

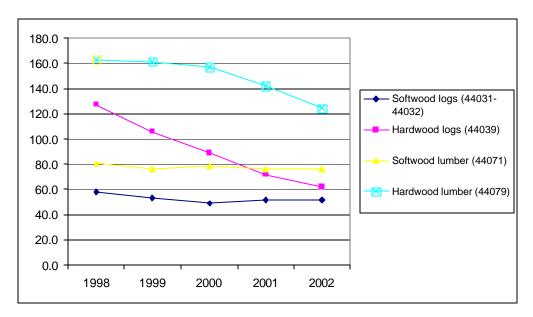
CONTRACTED PRICES OF RUSSIA'S TIMBER PRODUCT EXPORTS TO CHINA

Total declared contract value of Russia's timber exports to China grew at a slower pace compared to the rapidly increasing volumes of these exports. Weighted average contracted price per declared volume was calculated in units of USD per cubic meter.⁴ The reduction in contracted prices was most drastic in the cases of hardwood log and lumber (Figure 16) with the average contracted price of hardwood logs dropping 50% from 1998 to 2002 (US\$ $128/m^3$ to US\$ $62/m^3$) while the price of hardwood lumber dropped from \$ $163/m^3$ to \$ $124/m^3$. In contrast, the contracted prices of softwood logs and lumber remained relatively steady from 1998 to 2002, with softwood logs stable at between \$ $48-58/m^3$ and softwood lumber \$ $76-81/m^3$ during that time.

⁴Based on customs declaration data

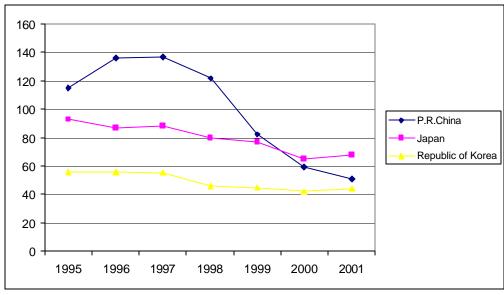
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Reduction in the weighted-average contract values of timber product exports to China clearly correlates with drops in the prices of Russian timber in Northeast Asian markets more generally (Figure 17). Prices in the Chinese market fell most dramatically after 1997 during the Asian economic crisis. At around the same time, however, in 1998-2000, high levels of timber stocks were recorded on the Chinese side of the border – possibly reflecting that Chinese businesses were not themselves suffering from the economic crises as much as their colleagues in neighboring countries and were taking advantage of the lower prices and stockpiling

Figure 17: Price Trends in Russian Timber Export to China, Japan and South Korea (1995-2001)



Note: Weighted average contract values in units of \$USD/m³.

DISCREPANCIES BETWEEN CHINESE AND RUSSIAN CUSTOMS DATA

For the period studied, some systematic discrepancies exist between the forest product customs statistics of Russia and China. The greatest discrepancies between the Russian export data and Chinese import data occur in the volumes of logs and lumber (Figure 18).

While the Russian customs data given does not include end-of-year shipments that were not entered into the customs database by year-end, the data still provides insight on the nature of the discrepancies in the records of the two countries. For example, for each year, the author included customs declarations that had been closed by year-end and disregarded temporal and periodic declarations to avoid double counting. Thus, actual volumes for each year may be somewhat higher (up to 5 percent) due to declarations that were "closed" (entered into the statistics database) the following year.

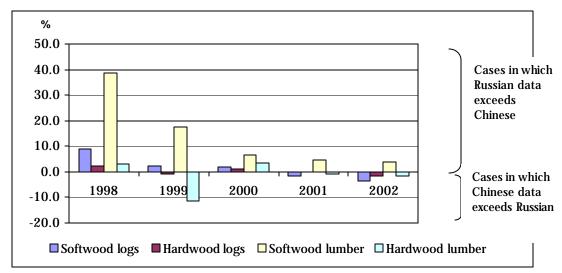


Figure 18: Discrepancies between Russian and Chinese Customs Statistics

Note: Chinese data from Xiufang Sun et al. 2004.5

Explaining these systematic differences in data for Russian softwood sawn wood exported to China is difficult. The gap hovers between 10,000 to 15,000 m 3 each year, although the percentage gap decreases as the volume of Russia's softwood sawn wood export to China gows. In the case of hardwood species, the 1999 Chinese figures exceeded the Russian by over 10 percent for sawn wood and less for hardwood raw logs. This timing coincides with a new Russian requirement to license hardwood exports and may have contributed to increased misclassifications.

In general, discrepancies in bilateral trade statistics can be explained by numerous factors, including differences in methodologies for measuring roundwood and grading, time lags in shipping, and illegal trade practices. The incentives are set such that it is more likely that volumes would be understated rather than overstated in the Russian statistics. For example, Russian exporters are more likely to understate exports in order to evade export duties or approved quotas in exports of commercially valuable species controlled by the state. Russian customs have also consistently found evidence of understating export

⁵ Sun, X. et al 2004.

volumes, particularly of logs, during the period studied (see below). In addition, according to international practice and current Russian standards for measuring round wood, at least five to seven percent of the discrepancies in log volumes could be attributed to measurement error. Smaller discrepancies are admissible in measuring lumber.

The Russian-Chinese border should be regarded as the final step in a potentially long chain of producing and "legalizing" illegal timber within Russia. There are various assessments of the extent of logging and volumes of timber produced in Russia (e.g. by the Ministry of Natural Resources and its provincial subdivisions, the State Statistics Committee, regional and local governments, business associations etc.). All differ substantially from one another. Due to strict border control on the Russian side, relatively small volumes of round wood timber cross the border without customs clearance and border guard checking. However, customs officers vary considerably in their estimations of contracted value and grading or classification of species.

The fact that in the most recent 2-3 years, Chinese customs figures exceeded Russian figures is likely due to newly implemented and stricter Chinese customs controls, and tightening of import formalities on the Chinese side. Examples of problems included blank contracts signed by Russian exporters could be acquired in the Suifenhe railway station (Lebedev 1999). Other gaps in controls included the lack of recording of timber imports with improper documentation or when imports entered through small customs points without the authority to handle imports of timber from Russia. In spite of zero import tariffs on logs on the Chinese side, Chinese importers must pay a value-added tax (VAT) of 13 percent for logs and 17 percent for sawn wood. Thus, gaps in control of timber imports incentives for Chinese importers to evade VAT could be factors promoting the understating of sawn wood import volumes at least during the first years studied.

PROJECTED TRENDS FOR RUSSIAN TIMBER EXPORTS TO CHINA

Future trends in Russian timber exports to China will be determined by macroeconomic and social, institutional and political factors in Russia. The macroeconomic and social situation in Russia, in turn, will depend primarily on world oil and gas prices and on the ruble inflation. Two general macroeconomic scenarios and their corresponding impact on development of the Russian forest sector and timber exports are most likely.

Scenario 1 assumes a stable or stronger ruble, resulting in increased harvesting and production costs, and decreasing the attractiveness of exports of unprocessed wood. This would encourage the development of processing industries to feed domestic demand for lumber and other half-finished products. The lack of external demand for Russian lumber, plus higher export duties, would not be a factor in the development of timber processing in southern RFE.

Scenario 2 assumes an inflation of the ruble as it falls in comparison to freely converted currencies. Russia's comparative costs for producing timber for export would be low and aspirations for hard currency gains would favor the export of raw wood, resulting in further pressures on the last remaining natural forest areas. State, regional and local populations would likely try to mitigate worsening economic and social conditions by accessing new forest and other

natural resources. Increases in illegal logging, related criminal activities and corruption might also occur.

At the moment, key institutional and political factors affecting harvesting and timber export trends in Russia may be divided into those at the federal level and those at the local level:

- Current federal-level trends would promote the continued over-harvesting of Russian forests and
 increased exports abroad without significant value-added processes or revenue returns to local or
 regional stakeholders nor adequate safeguard policies in place or being implemented.
 - Currently, exploitation of natural resources and log export is encouraged at the federal level in order to increase hard currency revenues. Presently, export duties on logs range from zero to ten percent, while duties on lumber exports are 20 percent.
 - Current federal level policy encourages foreign investors in the sector, but they do not bring significant economic development to the region.
- Recent regional level trends, however, offer some hope that the situation may improve:
 - Regional level actions to solve social and economic problems through timber-processing
 industry development. In the recent years, some RFE regional administrations trying to
 attract foreign investment (including Chinese financiers) have required lease agreements that
 include complementary value-added processing operations and the hiring of Russian local
 employees.
 - Regional level actions are trying to discourage rampant export of raw logs and commercially valuable species at low prices.

Other assumptions concerning future trends in the Russian-Chinese forest products trade can be made:

- Chinese demand for timber will increase steadily.
- Economically accessible and allowable cutting areas in Siberia and RFE will remain the same.
 The worsening quality of economically accessible forest stands, however, will decrease the supply of commercially valuable softwood species from Eastern Siberia and the RFE, and high-graded hardwood logs from southern RFE.
- New harvesting areas in the RFE and Siberia will result in higher costs (building new roads, carrying out resource inventories etc.).
- Growing demand and tighter supplies will cause Russian timber market prices to rise, a factor to
 which the Chinese timber market can be rather sensitive.
- Russian timber producers, including provincial administrations, especially in RFE do not have
 adequate free capital to invest in intensive timber processing domestically. Foreign direct
 investment in intensive processing industry -- particularly from Chinese investors -in the next 23 years is not guaranteed, but will inevitably occur in the long-term.
- President Putin's second term in office will promote political stability and stability in current state
 policies in nature management and foreign trade.

Based on these factors and assumptions, we can project the following future trends in Russia's timber export to China for both macro-economic and social scenarios:

- Under current contracted prices, the development of new remote harvesting areas requiring substantial road construction will not be economically justified. Russian timber exports to China will therefore remain at present levels (14-15 million m³ raw logs per year) for the next two to three years. Subsequent trends depend on Russia's macroeconomic situation and contracted prices of Russian wood in Asia. In addition, specifically regarding the export of RFE hardwood logs, low value birch and poplar will increase in trade, while high-value oak and ash will retain or decrease their share in hardwood log exports (under both scenarios).
- Lumber's share in timber exports will gradually increase in both scenarios, with lumber contract
 prices fluctuating Prices for softwood lumber will remain the same in the first scenario and drop
 even lower in the second one. Prices of hardwood lumber will increase slightly in both cases.
- Chinese investments in harvesting and processing operations in Russia will increase.
- The total number of Russian timber exporters will stabilize in both cases. In the first scenario, this stabilization will be coupled with an increasing share of total exports for large operations. In the second scenario, it will be coupled with an increasing share of total exports for medium-sized exporters.
- Transportation by sea and river will grow under both scenarios as these modes of transport become cheaper and offer Russian exporters better opportunities to approach large timber markets in Central and South China.

NAMES, LOCATIONS AND CHARACTERISTICS OF MAIN EXPORTERS AND INTERMEDIARIES INVOLVED IN THE FOREST PRODUCTS TRADE WITH CHINA

LOCATION OF TOP EXPORTERS

The main Russian regions exporting timber to China are located in Eastern Siberia and the Russian Far East (Table 2). Among the top 20 Russian exporters of timber to China, 12 companies are in the Russian Far East, and 8 companies in Eastern Siberia (Figure 19).

The main exporters of pulp are situated mainly in Eastern Siberia and Northeast Russia, including Baikalskii Pulp and Paper Complex (Irkutskaya Province), Solombalskii Pulp and Paper Complex (Arkhangelskaya Province), and, with smaller volumes, Pitkyaranta Pulp Mill (Karelia), Ust-Ilimskii Pulp and Paperboard Complex (Irkutskaya Province), Sukhonskii Pulp and Paper Factory (Vologodskaya Province), Vyborgskaya Pulp and Syaskii Pulp and Paper Complex (Leningradskaya Province) and Tseprus (Kaliningradskaya Province).

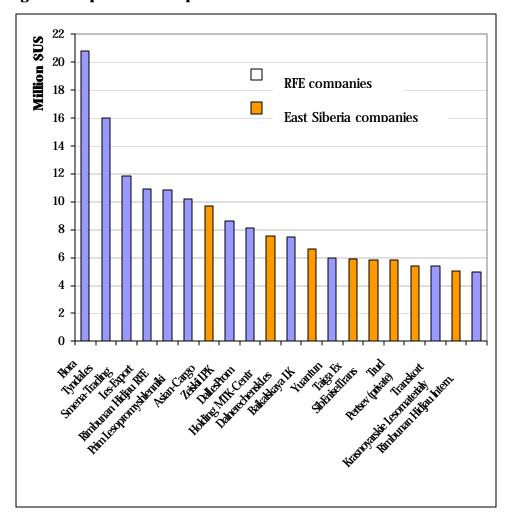


Figure 19: Top 20 Russian Exporters of Timber to China in 2003

CHARACTERISTICS OF TOP TIMBER EXPORTERS⁶

Major timber exporters tend to be either large former state harvesting companies that survived the reforms and privatization, or companies with considerable foreign investment. Most of these companies are also former top timber exporters to Japan that have recently changed their orientation to the Chinese market and due to more competitive prices and less strict quality requirements for exported timber. Except for pure traders, these major exporters are typically involved in both harvesting and processing operations, but with the processing operations oriented towards the domestic market. These companies have experienced staff, established relations with customs authorities and other government agencies, their own sorting floors and storage sites, and railway or port terminals. Thus, they are also able to offer agency services or play an intermediary role for other harvesters or small traders.

⁶ Table I of Annex II gives the names of the top ten exporters in each of the major regions exporting to China. The table also lists the location, total timber exports to China and the main Chinese importers declared by these companies. Finally, the table also includes the primary business of these exporters, namely harvesting, trading or processing.

The lack of processed products being exported to China and the large number of exporters compounds the Russian industry's low efficiency. Foreign trade liberalization and the repeal of requirements that exporters be authorized by the state (eight years ago during the Russian market reforms) promoted the increase in exporters as well as influx of entrepreneurs with little to no experience in the timber business and international trade.

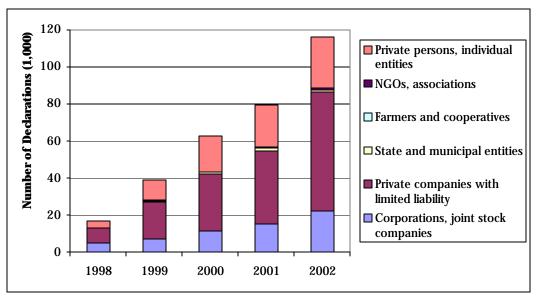
Russian timber exporters can generally be divided into six categories by origin and legal status (Figure 20). Individual entrepreneurs and private businesses with limited liability were the two categories of exporters which grew most rapidly in terms of numbers – bolstered by few business requirements (e.g., one need only submit a standard passport and register with the tax agency to export timber). Private companies with limited liability are flexible and respond quickly to the market, while requiring little in terms of resources and investment.

2500 ■ Private persons, individual 2000 entities ■ NGOs, associations 1500 ☐ Farmers and cooperatives ☐ State and municipal entities 1000 ■ Private companies with limited liability 500 ■ Corporations, joint stock companies 1998 1999 2000 2001 2002

Figure 20: Number of Russian Timber (Logs and Lumber) Exporters to China by Type of Company

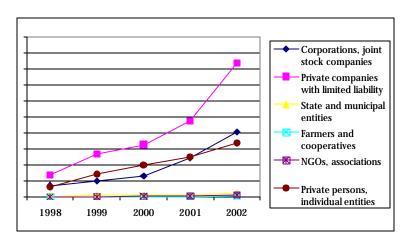
The number of customs declarations and more significantly the total value of exported timber (as declared by different categories of export companies) shows that organized businesses (private limited liability companies) are growing faster than are private persons/ individual entities (Figures 21 and 22). In addition, since 2000, the value of timber products exported by large corporations which are considered to be more professional than small companies and private entrepreneurs, has increased greatly. Export value declared by private persons was also considerable and grew steadily over the period studied.





Less strict accounting requirements and greater opportunities for tax avoidance for private individuals vis a vis companies may account for the large volume of timber (mainly raw logs) exported by private persons. Sometimes, however, trading companies or large Chinese importers try to use the alias of private persons to take advantage of the se looser requirements. The exports of the remaining three categories of companies – state and municipal entities, farmers and cooperatives, and NGOs and associations – are marginal. As a rule, these organizations engage in timber exports to supplement income. the trends for the exporting company categories are likely to continue. It is hope that corporate businesses, which are perceived to be more responsible, will play a more important role and that this will result in a reduced role for disorganized individuals.

Figure 22: Declared Value of Timber Product Exports to China by Different Categories of Russian Exporters



Lately, exporting companies with Chinese financing are playing an increasing role. With the majority of these companies registered as private companies with limited liability in Russian forest regions, only some can be monitored through their Chinese names on customs declarations α by other direct proof that they are backed by 100 percent Chinese capital. Chinese citizens have created numerous small Chinese trading companies in nodal stations and cities along the Russian-Chinese border. They often invite Russian entrepreneurs or hire Russian staff in order to help avoid difficulties – mainly bureaucratic – in doing business on Russian territory. As a result, a large proportion of the private persons registered as exporters in the Russian-Chinese timber trade do not participate in trading operations with any other country other than China.

MAJOR END PURCHASERS AND MAJOR DESTINATIONS IN CHINA

MAJOR CHINESE IMPORTERS

The top 20 Chinese importers of Russian logs (Table 4), based on Russian customs declarations by exporters in 2002, are all registered and situated in border cities on the Chinese side of the Russian-Chinese border -- the main gateways of Russian forest products into China. Judging by names, it appears they all are intermediates or traders. Of the more than five hundred Chinese importers listed in 2002, no more than twenty can be identified by their names as industrial consumers. The other importers are export-import trading companies ranging from state-owned (mainly provincial and, to a lesser extent, prefectural) trading corporations (SOTC) with hundreds of employees of collective or individually privately owned companies registered in border cities. Approximately 60 such trading companies in Northeast China control over 80 percent of the Russian-Chinese timber trade.

According to Chinese customs statistics on timber imports, the top 20 Chinese importers of raw logs from Russia are slightly different from those above (Feng Guoqiang et al. 2002).⁷

The difference in the rankings can be partially explained by the same likely causes of customs data discrepancies discussed in previous chapters, but also by the incomprehensible translations of names from Russian, Chinese, English or all three. Names of a Chinese company can be so abbreviated that it can no longer be identified. Such unclear cases make up in about five percent of custom declarations. Apparently, however, this lack of clarity does not make a difference in identifying top five to ten importers.

⁷ Feng Guoqiang et al. 2002. Analysis on the Legitimacy of Timber Imported from Russia to China. WWF-SFA.

Table 4 Major Importers of Russian Timber as Declared by Russian Exporters in Customs Declarations in 2003

Name of Chinese Importer	Location	Raw logs (m³)	Share in total import (%)	Sawn wood (m³)	Share in total import (%)
Huaqiang Foreign Trade Ltd. Company	Manchouli	794,693	5.59	22,643	3.66
Yunchou Industry Trade Ltd. Company	Erlianghote	585,130	4.12	2,440	0.39
Longjiang United Import Export Ltd. Company	Suifenhe	479,524	3.38	22,257	3.60
Futong Trade Ltd. Company	Suifenhe	447,954	3.15	632	0.10
Jintai Trade Ltd. Company	Erlianghote	414,236	2.92	19,029	3.07
Tiansheng Trade Ltd. Company	Manchouli	312,271	2.20	2,790	0.45
Huayong Trade Ltd. Company	Manchouli/Erlian	278,512	1.96	5,742	0.93
Qihong Trade Ltd. Company	Dongning	268,038	1.89	24,634	3.98
Xiaolong Economic Trade Ltd. Company	Tongjiang/Manchouli	256,503	1.81	24,524	3.96
Tianyang Trade Ltd. Company	Manchouli/Suifenhe	255,737	1.80	19,202	3.10
Xiangda Trade Ltd. Company	Suifenhe	248,880	1.75	2,222	0.36
Guicheng Trade Ltd. Company	Suifenhe	241,286	1.70	0	0
Beifang International Trade Ltd. Company	Erlianghote	215,159	1.51	2,667	0.43
Humeng International Trade Ltd. Company	Manchouli	212,114	1.49	18,695	3.02
Hengchang Trade Ltd. Company	Manchouli	197,485	1.39	1,328	0.21
Fangzheng Trade Ltd. Company	Manchouli	196,693	1.38	4,430	0.72
International Economic & Technological Coop. Company	Erlianghote	195,688	1.38	453	0.07
Zhongyun Trade Ltd. Company	Suifenhe	190,721	1.34	614	0.10
Rongtong Trade Ltd. Company	Suifenhe	189,086	1.33	0	0.00
Yipu Trade Ltd. Company	Erlianghote	177,626	1.25	4,318	0.70
Total Chinese imports from Russia		14,207,672	100%	619,008	100%

Notes: (1) Names of Chinese companies declared in Russian customs declarations may be misspelled because of translation. (2) Share in total log export volume is based on Russian customs statistics. (3) The given data do not include so-called temporary and periodic customs cargo declarations, so the actual volumes may be up to 10 percent larger than indicated.

Attempts have been made to identify these un-readable names of Chinese companies on declarations, by using the declared addresses of main offices as written in export contracts, but were discouraged by the fact that many Chinese importers, especially large ones, have up to a dozen different declared official addresses; and many importers, which have different declared names, often have the same official addresses. It is likely that large Chinese importers are large holding companies consolidating many small entities and have hundreds of procurement managers on staff. The latter have full freedom in seeking and signing contracts on wood supply with Russian partners. These individuals often understate volumes of imported timber in Chinese customs declarations to sell unaccounted wood on the side as an extra source of personal income.

According to Russian exporters' customs declarations, both Russian exporters and Chinese importers on the Chinese side increased considerably from 1998-2002, especially the Chinese government abolished import licensing in 1999. The total number of importers of Russia's forest products in China, however, is at most one-fifth the number of Russian exporters (Figure 23). The steady and more measured pace of their growth indicates closer management and control by Chinese authorities responsible for regulating foreign economic activities.

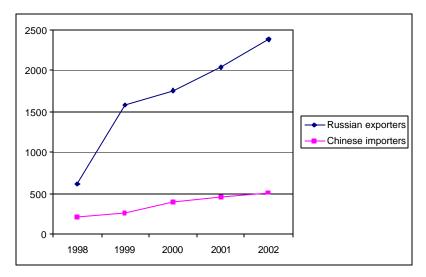


Figure 23: Growth of Chinese Importers⁸ in Comparison with Russian Exporters

Source: Russian Custom Statistics.

The swiftly growing gap between the number of Russian exporters and Chinese importers (Figure 23) reflects the influx of mainly inexperienced exporters on the Russian side, while on the Chinese side the pool of importers has remained relatively stable. This situation can to some degree explain the falling prices of Russian timber after 1999: spontaneous mass offers of timber into the market by Russian exporters met with coordinated trade behavior of the Chinese importers.

On the Chinese side, most trading companies in Northeast China have close relationships with state forestry bureaus because they use the available developed transportation infrastructure and the distribution system from the days of intensive loggings. They also have close relationships with former state timber industrial bureaus – now converted to joint-stock and collective companies – which manage

most parts of timber processing, wood working and furniture enterprises. Local and provincial Chinese governments actively support local traders which bring in additional budgetary income and jobs in a region struggling with high unemployment, but appear to try to hinder Chinese companies from other provinces. Local traders' cargos are given special treatment and protection, while the cargos of Chinese companies from other provinces trading with Russian exporters are hampered by unconcealed obstruction or even sabotage by provincial authorities and border trading businesses. For example, unescorted timber cargos of the inland companies are subject to delays, damage and unscrupulous competition during transportation over Northeast Chinese territory. Central government authorities in recent years have officially expressed dissatisfaction with this situation.

MAJOR DESTINATIONS

Specific and reliable information on the distribution of Russian wood products in China is not available. At least 60 percent of the total volume of Russian bgs imported by China is distributed and processed in three provinces of Northern and Northeastern China, namely, Inner Mongolia (5 percent), Heilongjiang (40 percent) and Jilin Provinces (15 percent). The remaining 40 percent of Russian log imports (as well as most sawn wood and most pulp and paper) is distributed to other regions in China, mainly in North and Central China. The overwhelming proportion of Russian softwood imported to China is consumed by industrial consumers (mainly in construction) and paper mills. About 80 percent of imported hardwood is consumed by producers of furniture and decorative construction materials or retailers.

Inner Mongolia, Heilongjiang, and Jilin Provinces are among the most forested regions in China. In spite of an abrupt decrease in harvesting after adoption of China's Natural Forest Protection Program (NFPP) in 1998, intensive logging continued in the northern areas of Heilongjiang and Inner Mongolia. Heilongjiang and Jilin Provinces are also known as regions of developed timber processing, board production, and the pulp and paper industry. In comparison with these two provinces, Inner Mongolia has only a handful of timber processing factories and pulp mills. Thus, Inner Mongolia plays mainly a transit role in the distribution of Russian forest products in China. Recently, the Chinese Government adopted a new state program for the modernization of existing large pulp and paper factories in Northern and Northeastern China. Small pulp mills with a capacity less than 17,000 tons per year will be closed.

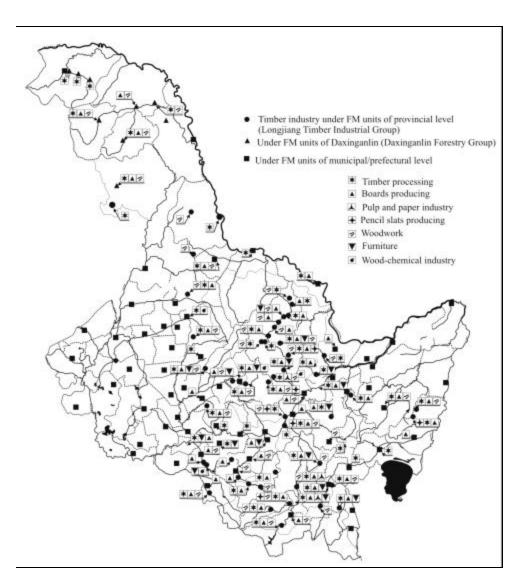
Heilongjiang Province processes over 80 percent of the raw logs imported from Russia that are consumed by these three provinces. Jilin Province and Inner Mongolia process about 15 percent and less than five percent, respectively.

Heilongiang built several hundred sawmills and processing workshops in previous years of intensive harvesting. These are under the jurisdiction of state forest management units and timber industrial bureaus at the provincial and municipal levels (Figure 24). In addition, nearly a hundred new timber processing mills have been set up in the province along the Russian-Chinese border over the last ten years, including the large-scale modern processing factories, such as Nacha Wood, Lanxiang Wood, Mudanjiang Forest Wood, San Gan Ling, and Xin Yang Wood. In the period from 1999 to 2002, harvesting volume in Heilongjiang decreased by 60 percent and the timber-processing industry originally oriented to domestic sources of logs has had to be re-oriented to Russian log imports.

⁸ As reported in customs declarations.

Due to the dismantling of China's planned system economy, most of the old and new enterprises have been converted from state-owned enterprises into joint-stock companies, with the state holding controlling shares. Vertically integrated firms which provided full processing from log to final product have been replaced by separate enterprises. Harbin Wood Processing Complex, for example, has been divided into more than ten private enterprises producing diversified products (furniture, glue board, flooring, woodwork, etc.). These old and new enterprises are served by numerous saw mills producing lumber and semi-finished products for specific enterprises. Due to on-going under-utilization of processing capacities, one-fifth of them are unprofitable.





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⁹ Agricultural Atlas of Heilongjiang Province, Harbin. 1999.

According to official Chinese statistics, in 2001 Heilongjiang Province imported 4,466,847 m³ of logs, 70,735 m³ of lumber, and 617,664 tons of pulp from Russia. These figures include Russian border trade imports: 4,127,315 m³ of logs (92 percent of total Russian log imports to Heilongjiang) and 66,295 m³ of lumber (94 percent of the total). Heilongjiang's own domestic production of logs in 2001 was 4.246 million cubic meters. ¹⁰

After local distribution and direct supplies to processing factories in Northeast China, Northeast Chinese traders sell the other half of the imported Russian timber at their own log storage site or to domestic wood wholesalers from other regions of China at collectively owned large timber exchanges (situated in main railway junctions) to domestic wood wholesalers from other regions of China. After this, the timber may be resold an additional two or three times in some of China's one thousand various-sized wholesale and retail timber markets in provincial and county cities across the country. In other cases, the wood may be shipped directly from border regions to manufacturers or to the wood market by importers. In areas with little history of large-scale harvesting and therefore no existing system of distribution, localized wood markets are situated near large wood-processing enterprises or transport terminals. Procurement managers of domestic wood wholesalers or processing factories usually travel to Manzhouli, Suifenhe, and Erlianhe to close supply contracts. Supply contracts for large lots of Russian wood may be quoted in well-known Chinese timber exchanges in Shanghai, Fuzhou, and Guangzhou. Often, however, Russian wood is mixed with domestic or other wood from the very beginning of its shipment across Northeast China.

It is difficult to trace Russian wood after these multiple and distant re-sales. Too few direct links between Russian producers and final Chinese industrial consumers are documented in customs statistics. Large wood processors and furniture producers in China may establish separate trading firms with different names for the purchase raw wood, making their identification difficult. At present, no official statistics on wood flows have yet been collected in China's emerging free market economy.

ANALYSIS: IMPLICATIONS OF THE NATURE OF CHINESE IMPORTERS

Russian exporters that deliver timber through continental border gateways are concerned with the monopolistic tendencies of trade intermediaries in Northeast China and the Northeast Chinese provincial authorities impeding companies from other parts of China. There are little to no possibilities for Russian exporters to directly engage in the Northeast China timber market. Russian exporters are not allowed to supply timber to China without the involvement of a Chinese border export-import trading company. Such Chinese border trade intermediaries often work on commission and by order of specific Chinese processors or former state-owned harvesting companies located in certain cities or counties. In other words, these principal traders are organized by the geographic area they serve and, as a rule, have no extensive links outside their represented companies or places. Moreover, they are exclusively supported by local and provincial authorities. Newcomers, either Russian or non-local Chinese, encounter difficulties to enter the market in Northeast China. The difference between average import contract prices and wholesales prices of Russian wood on the Northeast Chinese market indicates that these intermediaries are earning a 20 to 30 percent margin on the price at which they sell timber.

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¹⁰ Heilongjiang Province Yearbook. 2002

In contrast, intermediaries located in seaports in southern China do not play the same monopolistic role. Shipping by sea, however, does not enjoy preferential import duties such as the 50 percent reduction in VAT applied on the Chinese side to inland border trade. Thus, while sea shipping enjoys more favorable conditions and higher prices for Russian exporters, it is less attractive to Chinese importers. Shipping by sea requires larger aggregated shipping lots than required for in-land railway or trucking deliveries -- thus either excluding small Russian exporters or compelling them to pool their goods with larger exporters. Shipping by sea also offers Russian exporters higher contract prices due to deliveries directly to Chinese consuming enterprises and direct delivery to the cities of the major timber exchanges, which are known to determine the indicative timber prices for all of China. These major exchanges are situated in Shanghai, Fuzhou and Guangzhou – all leading Chinese seaports.

Given the situation in Northeast China, Russia's goal to expand exports of lumber and other products of primary processing and to reduce raw log exports may be heavily constrained in Northeast China. Russian exporters, as a rule, do not have a good understanding of the potential consumer market in Northeast China and lack of Russian networks for distribution of lumber and other half-finished products in the region. China officially encourages the import of raw logs by enacting full import duty and VAT on lumber – as compared to zero import duty and 50 VAT reduction on round wood imported under near-border trade. 11

Russian sawn wood production costs are at least twice as high as in China due to higher labor costs. In general, the Chinese are interested in developing their own vertical chains of cheap raw wood processing that employs a large population, creates higher added value, and generates final products for re-export. Chinese intermediates themselves are not ready yet to import lumber, half-finished, or final products from Russia on a large scale as they do not have adequate experience in handling a wide assortment of primary processed products and establishing the necessary links with China domestic consumers (e.g. furniture producers, wood works, final product producers and so on). Also, trade in processed products would offers less flexibility and fewer opportunities for price manipulation than the trade in raw logs.

Russian entrepreneurs will face a steep learning curve in selling lumber and other processed wood to Chinese parties. Successful sales of these commodities will require a greater understanding of market demand, standardizing semi-finished products, understanding the diversity of products demanded in China, preparing Russian products to meet Chinese market requirements, and establishing direct links with industrial consumers and cooperative links with Chinese secondary timber product producers (manufacturers) and final buyers. This requires the immediate attention and presence of Russian exporters in China, with official representative offices in China, training and aggressive marketing. Creating an appropriate commercial infrastructure will require considerable financial expenditures by Russian exporters.

China's entry into the WTO should create a better business environment for Russian companies in China. With its WTO entry, China would be required to create equal conditions for non-resident businesses, allowing Russian exporters to play more active and direct roles in the Chinese timber market, including

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¹¹ Commonly "near border trade" is defined as trade flows between two adjacent bordering regions only (like Primorskii Province and Heilongjiang Province, but not Primorskii Province and Liaoning Province or Krasnoyarskii Province and Inner Mongolia). Although this notion is widely used both in Russia and China, only in China do separate statistics exist that calculate flows and incomes within the bordering province and flows going out through the province. In Russia there are no separate statistics concerning border trade and no separate accounts for

serving as first-hand suppliers for Chinese primary and secondary processing industrial consumers or retailers, or signing contracts directly with the Chinese final buyer at an agreed price. In cases where the Chinese buyer has no foreign trade license, trade intermediaries could perform export-import transactions and other logistics. In this scenario, the intermediary would play less of a role and take a much lower margin than at present, where they are able to dictate prices to Russian exporters and Chinese consumers. This new scenario, however, will require significant expenditure and efforts from Russian exporters to secure approval and will require the necessary Chinese partners to establish a permanent presence in China. Today, many of the large Russian producers understand the vital necessity of establishing a presence in China for day-to-day work. In April 2004, one of the leading Russian producers, Liam-Pulp Corporation, opened a representative office in Beijing. In addition, some of the regional associations of timber producers and exporters already have their own representatives on the ground in China.

The successful production activity of IKEA in China is an enlightening example of direct supply to Chinese end users by Russian parties. IKEA has opened two representative offices in China in Harbin (Heilongjiang) and Qingdao, and several furniture stores in large cities. IKEA has contracted over 20 Chinese wood-processing and furniture enterprises in Northeast China to produce furniture. According to various estimates, about 20 to 30 percent of the wood consumed by these contracted enterprises is Russian in origin. Other wood is purchased at forestry bureaus in Heilongjiang and Inner Mongolia. With its IKEA world-renown environmental and social corporate responsibility standards, the company is anxious to ensure transparent supply chains and legality of its wood purchases. Given the difficulty of tracing wood through the long chain of intermediates, IKEA has begun looking for direct suppliers of Russian wood from the RFE and Siberia.

THE EXPORT PROCESS AND COMMODITY CHAIN ON THE RUSSIAN SIDE OF THE BORDER

Most commercial¹² harvesting and non-commercial¹³ logging operations in Eastern Siberia and especially in the RFE are export-oriented. The process from harvesting site to the cross-border point consists of three main phases: 1) harvesting (logging); 2) processing or preparing timber for export (sorting, piling); and 3) customs clearance and transport abroad. The customs clearance can be made by hinterland customs or at the Russian-Chinese border. Specifically authorized transport companies transport of export commodities which have been cleared by customs.

Corresponding to these three phases, all the actors involved in Russian forest products export can be categorized:

First Phase: commercial harvesters (long-term lease holders), non-commercial loggers (short-term or onetime lease holders) and illegal loggers (no lease at all);

domestic and non-domestic transit flows . In some cases, we can determine the consumption/production by location of the certain importer/exporter for Russia.

¹² Industrial forest concessions.

¹³ So-called interim loggings, including thinning, sanitation, salvage, fire prevention, maintenance etc. to improve the quality of growing stands or prepare them for commercial harvesting

Export Phase: export agents and authorized export carriers.

Due to varied professional skills or historical position in the market, some of these different roles can be played by a single company and some of functions can also be fulfilled by different actors (Figure 25).

Commercial Long -term Piling/sorting/processing harvesting harvesting facilities and export sites of sites companies large harvesting companies Exporter (often tied with Non-Short-term carrier) commercial (one-time) logging lease holders Trader with own terminal or not Illegal cuttings Illegal and practices loggers (no lease) Sawmills and other primary processing Harvesting/Logging Phase Sorting/Piling/Processing **Exporting**

Figure 25: Main Chains of Custody from Harvesting Site to Cross-Border Checking Points

Arrows in Figure 25 show the principal timber flows from forest to cross-border check-point. Thin arrows show links at which it is hard to control volumes or money flows due to certain opacities in the current Russian business environment. Dotted arrows depict flows of illegally harvested timber. Thick arrows, crossing the state border, imply timber flows by authorized carriers cleared by customs. Customs clearance of timber usually takes place at appropriate export sites or terminals, which are connected with railways or highways, or are situated in sea or river ports. Such export sites can be located in deep hinterland regions far from the borders. In these cases, the exported timber is transported through Russian territory to the border or sea port gateway in sealed containers by customs. The authorized transport companies (railway, sea and river shipping companies, and trucking companies) play auxiliary roles, but since they usually have a monopoly for crossing the state border, they can have a serious impact

in terms of transportation and handling costs. Sometimes, the transport companies act as registered export agents for other exporters that do not have an export license or the necessary experience and market links abroad.

Large harvesting companies – which were generally formed from former state harvesting enterprises and holdings after privatization – are usually registered exporters and have their own developed infrastructure, including sorting grounds, sawing facilities and export sites. Small harvesting companies and holders of short-term leases¹⁴ without relevant export infrastructure sell to or ask other large harvesting companies or large traders to handle export transactions and formalities on their behalf.

Large traders have emerged from the former state foreign trade associations, with or without the original infrastructure. The large traders are registered as exporters and often act as export agents as well. Small traders, usually private persons, may ask other larger traders or export agents to export on their behalf. Often several harvesting companies or traders will pool export lots and financial resources, designating a specific company among them to handle transport and export operations. Export agents, usually located at the border, can act similar to traders, but they are specialized in export operations only, handling export formalities on lots ready to export at the request of hinterland producers and traders. These export agents are generally independent firms or private persons, involved mainly in the handling of documents, or are border subsidiaries of large harvesters, processors or traders.

Primary processing is represented by a wide range of actors -- from the remaining Soviet and now privatized huge wood-processing factories and pulp mills (as in Siberia), to the subsidiary saw mills of large commercial timber-producing companies or their associates, to primitive sawmills at the RFE border areas that have avoided registration with state engineering supervision, taxation and/ α r labor agencies and are therefore able to minimize production costs and avoid taxation.

"Shadow" wood (harvested without any license, exceeding the permitted quota, or consisting of forbidden species etc.) mainly originates at short-term lease areas and from illegal cuttings, commonly in developed harvesting areas near roads and especially along the Chinese border. As shown in Figure 25, the dotted arrow from "illegal cuttings" to commercial harvester ("long-term harvesting companies") means the timber was harvested in violation of adopted harvesting rules or instructions in the harvesting license, or that the timber was not officially registered (usually to avoid taxation). "Shadow" timber becomes "legalized" during sorting, piling and processing, usually under the guise of available commercial harvesting licenses or logging tickets for sanitary cuttings. If no harvesting license or ticket is available, the "shadow" timber will be lumbered or smuggled using false documents or by bribing customs officers. Lumber export does not require the submission of initial harvesting tickets, and the ratio of raw wood input and lumber output can vary considerably. Thus, "shadow" timber can be easily legalized, sometimes through several resells, documentation or a time lag.

The numerous variations of existing chains of custody for Russian timber exports to China can be grouped into two major types of timber chains: direct (without intermediaries) and indirect (with intermediaries). The characteristics of each of these two types of chains are described below:

I. Direct chain: Commercial Harvester® Carrier® Importer

¹⁴ Short-term leases include salvage leases, sanitary logging leases etc., and formalities include transportation, sorting and storing, linking with the market abroad, export licensing, customs clearance etc.

The direct chain is the simplest scheme – it's rather transparent and offers easier control of production and other costs, export volumes and revenues. The direct chain applies mainly to exports from large commercial harvesting, timber processing, and pulp and paper producing companies with long-term harvesting leases (of no less than three, and usually more than five, years), mostly for softwood in Eastern Siberia and northern areas of the RFE (i.e. Khabarovskii and Amurskaya Provinces). Except for companies in distant hinterland areas, large commercial harvesters or producers with relevant infrastructure are registered as exporters and have relevant licenses issued by the Russian Federation's Ministry of Economic Development and Trade. These large commercial enterprises usually control large forest areas, are dominant local forces, and offer significant economic and social support to the local populations. Distribution of livelihood benefits to local people is rather clear and can be calculated nominally. The federal and especially regional authorities favor this direct chain and are now insisting on the development of processing for new commercial harvesting contracts. The large commercial companies involved in the direct chain may buy illegally harvested timber from outside, but do not allow illegal cuttings in their own harvesting areas or in other areas under their control. Their own-perpetrated legal infringements include understating real volumes of harvesting and processing in order to have discretion in production costs and to minimize taxation. Such "shadow" flows are estimated to make up 10 to 30 percent of these companies' export revenues. Transportation to export sites or to other transport carriers is generally handled by the company itself.

The authorized transport carrier (hauling, railway or sea/river shipping company) on commission provides border-crossing and delivery to the destination abroad, commonly to timber storage sites in large border railway stations or seaports. The importer either keeps the incoming timber at the storage sites or re-loads it directly from the carrier's vehicle for further transport. In some cases, depending on contract terms and conditions, the importer can buy timber on the Russian side and then ask for the Russian transport carrier to convey it across the border.

II. Chain with intermediaries: Harvester ® Intermediary ® Carrier ® Importer

Numerous intermediaries play a large role in the Russian-Chinese timber trade, especially in border areas. The bulk is exported by large harvesting and processing companies, but most export transactions are handled by intermediaries including numerous small firms or private individuals. Professional intermediaries can play positive market roles by aggregating lots and assortments, and linking to buyers that export lumber. In the current situation in Russia, however, most intermediaries focus on short-term monetary gain, and less on reputational development or increasing market share. Their income depends on the extent of their own infrastructure (sorting, storing or transport) and often on illicit practices. Intermediaries with infrastructure can control the commodity chain from log depot to export site. Those without such facilities contract to intermediary harvesters and carriers. Intermediaries play almost an exclusive role in laundering illegally harvested timber, and can retain from one-third to two-thirds of the final revenues from exports – which in many cases are impossible to trace. Some specific chains with intermediaries are explained below:

1) Short-term Lease Logger ® Commercial Harvester as Exporter ® Carrier ® Importer

This chain is common when a short-term or one-time lease logger (generally a small company or private person) has no relevant export infrastructure (e.g., to sort, store, transport, develop links with foreign importers, handle export formalities, or handle banking). As a result, the short-term lease logger turns to

a near-by known company (usually larger and more experienced), either selling the timber or asking it to act as an export agent.

2) Short-term Lease Logger or Commercial Harvester ® Trader ® Carrier ® Importer

This is the most common log export chain involving an intermediary. While similar to the first chain, its motivating force is not a lack of infrastructure but a traditional scheme left-over from the Soviet period in remote areas. During that time, the chain ran from harvester to foreign trade association, with the harvester focusing on cutting but not on export formalities, studying the market, and seeking reliable foreign partners. In today's world, the experienced trader can provides quick decisions to the harvester, secure export sales and the necessary material / logistic support. Large traders often conclude long-term supply contracts with commercial harvesters and may use their infrastructure. To work with short-term lease loggers, however, the trader must have its own minimum infrastructure such as sorting and storage sites to which loggers can deliver timber, or even an export site if the trader is export-registered.

3) Short-term Lease Logger or Commercial Harvester ® Processor ® Exporter ® Carrier ® Importer

This chain of custody is most developed in Siberia, where large wood-processing companies and pulp mills are located. It is less developed in the RFE. Large wood-processing companies and pulp mills commonly have their own harvesting areas, but also draw raw wood from other sources Since large processors usually have their own export sales departments, only the smaller processors ask outside exporters for marketing assistance abroad. This assistance becomes more essential for the export of lumber and other semi-finished products than logs.

4) Short-term Lease Logger ® Trader ® Processor ® Exporter ® Carrier ® Importer

Nearly the same as the preceding chain, but the link with trader's occurs before processing. This situation occurs throughout Russia and has recently become rather common in RFE in-land border areas, especially in the export of commercially valuable species subject to export licensing. Rudimentary processing meets the requirements of regional governments to develop wood processing and/or is used to legalize illegally harvested timber.

5) Illegal Loggers ${\mathbb R}$ (Commercial Harvester or Trader or Processor) ${\mathbb R}$ Exporter ${\mathbb R}$ Carrier ${\mathbb R}$ Importer

Loggers can sell illegally harvested timber only to commercial harvesters, traders or processors which can launder or legalize the timber through available logging tickets or primary processing. Illegally harvested timber can also be exported by misclassification or understating of volumes, or by other illicit practices, such as bribing and smuggling (by the carrier).

THE CHINESE ROLE IN THE COMMODITY CHAIN ON THE RUSSIAN SIDE OF THE BORDER

The foreign economic and trade liberalization that began in Russia in the mid-1990s combined with the high demand for timber imports in China (due to reduction of Chinese domestic logging since 1998) has stimulated strong Chinese trade capital in RFE forested regions and border areas. These Chinese

investments can be legal (registered companies) or quasi or illegal (without registration or through dummy companies or private persons) investments.

In recent years, China, wishing to secure timber supply and sources, has initiated a number of intergovernmental and inter-provincial negotiations concerning timber supply. The inter-governmental Russian-Chinese Agreement on Joint Development of Forest Resources was signed on November 3, 2000. Under this agreement, the Chinese would invest US\$400 million in the development of distant forested regions in Siberia (new forest roads, harvesting and primary processing facilities) and US\$500 million in pulp production on the Russian side of the border. Investment projects in harvesting and processing include the announcement by Fujian Province to build a 100,000 metric ton/year pulp mill and by Great Xinggang Timber Industrial Group to harvest 500,000 cubic meters annually in Siberia.

To date, the Chinese investments have not reached the distant regions in Siberia. Instead, they have focused on harvesting in border areas and raw log exports through nearest cross-border passages, minimizing production and purchasing costs on the Russian side. Chinese investments constructed the Argun River bridge linking border settlements Olochi in Chitinskaya Province and Shiwei in Inner Mongolia, with the purpose of facilitating timber hauling from adjacent forest areas. In sum, most if not all Chinese investment have focused on easily accessible harvesting areas, not on new harvesting territories or significant processing facilities which require considerable financing. Primary processing of the same quality product remains more efficient and cheaper in China, and there is little incentive to invest in these other projects. Chinese requests to secure leases to large harvesting areas in Russia prior to investments in the processing facilities have been met with distrust by Russian authorities.

Nevertheless, bilateral negotiations on joint exploitation of forest resources in Russia have recently continued at the inter-provincial level. As a result, three Chinese enterprises, namely Star Paper Co. Ltd., Zhuhai Zhenrong Company and Huacheng International Economic and Technological Cooperation Co. Ltd from Heilongjiang, have announced that they will jointly invest 2.3 billion yuan (US\$278 million) in a lumber and wood processing project in Chitinskaya Province during 2003-2008. An expected 1.5 million cubic meters of logs will be processed locally each year to produce 300,000 cubic meters of quality timber products and 400,000 tons of quality pulp. Among other investment proposals, the Chinese company "Xinjiang Hualin" has announced that it will invest up to US\$10 million in a wood-processing mill and furniture factory in Barnaul, Altaiskii Province.

Currently, Chinese capital is active in the entire timber export process, from harvesting site to cross-border point in all border provinces of Southern RFE. Senhe-Lesprom Company Ltd. (100 percent Chinese investments) in Evreiskaya Autonomous Province is a typical legal Chinese project involved in harvesting, processing and exporting on the Russian side. Typically, Russian-Chinese joint ventures or companies with 100 percent Chinese investment register as traders and exporters rent or own sorting yards, storage sites or export terminals and purchase and export wood themselves.

Some Chinese merchants in Russia are known to buy legal or illegally harvested timber for cash without any documentation and carry out the phase of sorting, processing and exporting under the guise of fake private companies or individuals.

Lately, some Chinese merchants have used processing to launder illegally harvested and purchased timber, because lumber exports do not require proof of harvesting licenses. An inflow of "suspicious" investments emanating in China into sawmills in the border areas of Southern RFE has managed to

circumvent stricter controls of timber transport, customs, complicated export procedures as well as the need to get special permission to export raw logs (especially of commercially valuable hardwood species). Timber merchants realize they can buy wood for cash in the forest villages and conduct minimal processing into rough square beams or boards that can then be exported without special procedures. They use primitive sawing facilities in the open air or under a simple canopy. This occurs on rented sites, in former state enterprises, in the homes of private individuals in forest villages, etc., which by-passes tax registration or engineering supervision. These facilities can be quickly dismantled and moved at any time. In many cases, these Chinese merchants bring in obsolete sawing equipment – often usually second hand, homemade, or produced by local factories like Mudanjiang Engineering Factory, that range from US\$5,000 – 10,000 in value. To evade taxes, these sawmills can be registered as "non-operating facilities" often under a certain Russian-Chinese joint venture or are wholly owned by a Chinese company. But in reality, these sawmills are in full operation, but show no profits and thus do not generate revenues for the budgets of local villages. They usually employ only Chinese workers.

Compared with Russian traders, Chinese timber merchants are more competitive because they usually buy timber at FOB (including costs through loading at the border) at Grodekovo or Zabaikalsk, simplifying sorting and grading requirements on the Russian side. They declare mixed lots of Grade 1-3 wood as Grade 3 wood or pulpwood at a lower price. For small Russian suppliers, the Chinese merchants pay transport expenses through Russian territory, make advance payments and offer other advantageous forms of accounting. Many Russian private persons registered as exporters have actually been registered for and act on behalf of Chinese traders to provide customs declarations, banking, and rail and delivery services to the latter.

The majority of Chinese timber merchants on the Russian side of the border are representatives and purchasing managers of Chinese border export-import trading companies. They operate individually in Russia or create trading companies with limited liability. They are usually more coordinated in their activities than the Russian timber producers and traders. Mainly because of their activities close to harvesting areas with "always-ready" offers to buy timber, these Chinese merchants played a considerable role in the re-orientation of Russian harvesters and exporters away from the Japanese market, which is now seen as distant and loaded with complex trading requirements.

Russians are inclined to exaggerate Chinese expansion into the RFE, but there is still no recent reliable and adequate data on the clearly growing Chinese investments, legal or shady, in logging, processing, transportation and export. Some agencies collect information separately, like the RF Statistical Committee within the Ministry of Economic Development and Trade. Due to a lack of inter-agency coordination, however, there is no well-organized effort to collect and process appropriate statistics at the regional level.

KEY AREAS OF NON-COMPLIANCE AND OTHER PROBLEMS ASSOCIATED WITH THE EXPORT TRADE

The annual analysis of export transactions and customs infringements of the RFE Regional Customs House shows that the increasing export volumes of raw logs and lumber to China have been accompanied by growth in the number of customs violations revealed. ¹⁵ By December 1, 2002, 10.560 million cubic meters raw log were exported through customs gateways of the RFE Regional Customs House for the year to date and 399,000 cubic meters of lumber were exported. In 2001, for the corresponding period, 9.341 million cubic meters of raw logs and 332,000 cubic meters of lumber were exported. RFE customs officers revealed 471 violations of customs rules in 2002, while they only identified 394 violations in 2001. Of these violations, twenty went to court as criminal cases in 2002. The overall value of confiscated illegal timber that had crossed the Russian-Chinese border in 2002 was over 143 million rubles.

The main infringements of customs rules from forest product exporters to China in 2002 were:

- Non-observance of customs export requirements to remit currency revenues to accounts in authorized banks
- Breaking terms of repatriation of currency revenues
- Submitting false documents or documents obtained illegally (e.g. licenses of RF Ministry of Economic Development and Trade and so on)
- Non-declaration or invalid declaration (understating, under-grading or misclassification of species)
- Not securing the entry of goods of equivalent value (breaking terms of barter contracts).

One would expect that, with steady prices for Russian timber in China in 2001-2002, the growth in exported timber should be relatively paralleled by a similar growth in total value. However, an analysis of 2002 export transactions does not show this. Instead, it shows that it is likely that exporters knowingly underestimate the value of exported timber. During internal investigations in 2001, the RF State Customs Committee ascertained that determining round wood export volumes according to non-standardized technical specifications differing from GOST (the state standards) had allowed exporters to understate exported volumes by up to 20 percent. This understatement amounts to about 1.8 million cubic meters of unaccounted round wood valued at US\$36 million and represents US\$1.8 million of uncollected export duties. ¹⁶

During the same period 1,672 administrative and criminal cases on customs rules offences were initiated by customs officers. The bulk of these cases concerned the non-repatriation of currency revenues, with the total amount under question estimated at US\$20.5 million. Among the regions investigated, the largest sums of non-repatriated currency were revealed in Primorskii Province (US\$6.7 million), Irkutskaya Province (US\$1 million) and Khabarovskii Province (US\$0.7 million).

A case-by-case analysis of customs infringements in Russian timber export through RFE customs gateways, as identified by the RFE Customs House in 2002, shows that there were 333 cases in which Article 273 of the RF Customs Code and Article 16.17 part 1,2 of the RF Administrative Code were violated; 88 cases in which Article 279 part 1 and Article 282 of RF Customs Code and 16.2 part 1,2 of

¹⁶ Analytical note on maintenance of RF state interests in round wood exports. In *Bulletin of RF Auditing Chamber* # 5(41) 2001.

¹⁵ Press-conference on Joint Session of RFE and Siberian Customs Houses about the organization of effective customs control for timber products export. Vladivostok, 05/15/2003.

RF Administrative Code were violated; 29 cases in which Articles 276-278 of the RF Customs Code and Article 6.1 of RF Administrative Code were violated; and 21 cases in which other articles were violated. Among the revealed infringements, 86 percent took place on the Russian-Chinese border (see Table 5).

Table 5: Main Violations of Custom Rules and Currency Control in Timber Trade with China through RFE Gateways (2002)

Revealed infringements			
The real of the re	cases		
Non-repatriation of export contract revenues (# 16.17 part 1,2 RF Adm. Code) or breaking terms of repatriation (# 16.17 part 2 RF Adm. Code)	287		
Submitting false export documents (#16.1 RF Adm. Code)	18		
Understating, misclassification of species, under-grading (#16.2 RF Adm. Code)	40		
Breaking terms of barter contracts (#16.17 RF Adm. Code)	19		
Other	6		

In 2002, 115 of the RFE administrative cases on violations of customs and currency control regulations were initiated in Ussuriiskaya Customs, 108 in Khabarovskaya, 52 in Vladivostokskaya, 56 in Blagoveschenskaya, 46 in Grodekovskaya, five in Khasanaksya, six in Birobizhanskaya, one in Nakhodkinskaya, and four in Amurskaya. Three cases were initiated by RFE Operative Customs. Non-repatriation of currency revenues or breaking the terms of such repatriation (i.e. repatriation required within 90 days) made up 70 percent of these RFE-China trade infringements. Non-declaration or inadequate declaration of timber exports made up 19 percent. In general, inadequate declaration involves understating volumes or under-grading exported wood to avoid export duties. Misclassification of species is unusual, perhaps only done for species for which cutting is forbidden and which cannot be easily identified by customs officers (e.g. velvet tree and dimorfant).

An analysis of non-repatriation cases shows that this infringement is made primarily by so-called "one-day" firms (firms registered with the specific purpose of exporting timber without paying export duties, or through use of fake documents etc.), including the firms established by foreign citizens or with foreign investments. For instance, in 2002, Ussuriiskaya Customs initiated 28 administrative cases on violations of customs regulations related to requirements to remit currency revenues to the authorized banks or the breaking of terms of such remittances against "Ussuri" and "Phoenix," two companies with 100 percent Chinese investment.

At the same time, criminal prosecutions against companies which violate currency repatriation requirements (according to Article 193 of the RF Criminal Code) on a large scale have been rarely initiated in the RFE. Ten such cases were brought to court in 2002 and only one criminal prosecution was finalized. Concord-Mix Company was the company that was prosecuted. It was accused of repatriation violations of 26,914,763 rubles (about US\$900,000) in revenues from Xinghang Economic and Trade Company, based in Suifenhe.

Criminal cases are rare because criminal liability, according to the Article 193 of the RF Customs Code, is triggered when non-repatriated currency revenues exceed 10,000 times the minimal labor payment (currently 100 rubles which calculates a threshold of US\$35,000). For smuggling, criminal liability kicks in

when the value of smuggled commodities exceeds 500 times of minimal labor payment. In 2002, only five criminal cases of wood smuggling according to the Article 188 of RF Criminal Code were initiated in the RFE.

In obvious cases of non-declaration or inadequate declaration of timber exports, RFE customs can confiscate the exported timber. In 2002, RFE customs confiscated 42 m³ of spruce, 42 m³ of fir, 17 m³ of larch, 59 m³ of pine, 201 m³ of oak, 11 m³ of ash and 463 m³ of other wood species. Nearly all the confiscated timber was on the Russian-Chinese border.

The total volume of exported timber with violations of customs rules and currency control regulations, passing through RFE customs on its way to China, was 1,459,810 m³ by December 1, 2002 for that year and 1,158,979 m³ in 2001 for the same period.

It should be noted that with the adoption of the new RF Administrative Code, the penalties for non-observance of export requirements for remittance of currency revenues to authorized banks or for breaking the terms of such remittance will increase because the minimal size of the penalty will be no less than 50 percent of the exported commodities value. In contrast, before July 1, 2002, according to the RF Customs Code, the penalties for these infringements were very low, only up to 0.01 percent of the exported commodity's value.

RUSSIAN GOVERNMENT OPTIONS TO IMPROVE COMPLIANCE WITH EXPORT RULES AND RETURNS OF EXPORT TRADE TO CHINA

Problems with Russia's timber exports, ranging from issues of legality and transparency to low economic efficiency, reflect the current social and economic conditions and institutional changes in Russia during its transition to a market economy. Spontaneous development of the market and the emergence of large numbers of uncontrolled exporters that are in the initial phase of private capital accumulation is part of the problem. The federal government has for the most part not involved itself in the regulation of the timber trade – leaving some measures, mainly administrative, on enforcing control for timber turnover and export and raising the efficiency of the industry to provincial administrations. Indeed, sound market relations and civilized business practices are only beginning to take shape in Russia.

ADMINISTRATIVE MEASURES

Bilateral Options

Russian and Chinese customs need to compare and harmonize national customs statistics and on establishing coordination on species that are not permitted for export. Some other options concerning bilateral timber trade are still under discussion at the federal and provincial levels, namely:

licensing or professional certification of timber exporters;

- establishment of indicative prices for timber with the banning of export contracts at prices lower than these;
- compulsory registration of export contracts; implementation of international standards in measuring round wood;
- a bar-code tracking wood system currently under development by RF the Ministry of Natural Resources, etc.

Provincial Governments: Some provincial governments in the RFE and Siberia have begun to address their concerns about the current low returns from the timber trade, fewer economically accessible harvesting areas, sky-rocketing raw log exports and scanty collection of taxes from harvesting and timber trade enterprises. In order to stimulate the export of higher added value products from their regions, they have engaged in legality verification systems and stricter controls. Many such systems, however, are not yet under effective implementation, and have perhaps resulted in seaports with less stringent export requirements becoming more popular.

In Primorskii Province starting in 2002, a system of inter-agency coordination between the militia, tax agency, territorial committee of RF Natural Resources, and provincial administration was established to control the entire chain of custody from harvesting to storing and transporting wood for export, to tracing exporters and their contracts. Every timber exporter has been required to submit to customs the forms issued by the militia confirming legality of harvesting and transportation of wood. Licenses for harvesting are issued only to RF citizens with compulsory notification of the militia. For hardwood species like oak, beech and ash, an exporter needs an exporting license from the RF Ministry of Economic Development and Trade. To obtain such a license, an exporter submits all harvesting licenses (logging tickets) or original purchase contracts on all export timber to the Inter-Agency Commission on Controlling the Export of Valuable Timber Species under the Primorskii administration.

Amurskaya Province has developed a similar system, in which an exporter must get a temporary one-time export permit issued by a special department of the provincial administration. The main task of this department is to check the legality of wood, the validity of the export contract price, the terms of revenue repatriation, or the fulfilling of barter obligations.

These complex systems of legality confirmation are still not effective in implementation, due to a lack of permanently updated databases on harvesting licenses and logging tickets and imperfect inter-agency cross-checking mechanisms. This is particularly marked in the case of timber logging and the trade of commercially valuable hardwood tree species in southern parts of RFE. Widespread corruption in checking agencies is another crucial barrier to effective implementation of these systems.

Control of export sites and decreasing their number has turned out to be a more effective approach Enforcing pre-customs control for timber export in Northwest Russia raised average contracted prices on raw logs by 25 percent. The number of export sites has been reduced. In Primorskii Province, the number of export sites has been reduced from 200 to 28. Only five timber export sites remain in Evreiskaya Province. In Amurskaya Province, timber cannot be exported without checking in specifically designated sites. Since February 1, 2003 only 18 railway terminals intended specifically to reload timber for export to China have been set up by the provincial administration in Primorskii Province. Loading of timber is permitted only on open railway bays to facilitate checking by customs officers. Export of round

wood by truck from Primorskii Province to China has ceased. Railway traffic in hinterland regions has also become more controlled than before. Thus, in Irkutskaya Province, customs created 40 specific timber export customs zones to check transportation of round wood for export and created a special timber export transport company supervised by customs.

It is now easier to export timber through seaports on the northeastern coast of the RFE than through Russian-Chinese in-land borders or through southern seaports because of these stricter requirements on legality verification.

Several cases of timber being harvested in one province and then exported through the gateways of another to avoid legality checking have resulted in the development of a mandatory unified form system for the export from all RFE timber-exporting provinces. Recently, governors of the southern RFE provinces have preliminarily agreed that only the harvester or party officially holding a harvesting lease could export raw logs.

Provincial Administrations have made considerable efforts to promote wood-processing in their regions, including the log export bans in provinces such as. Amurskaya and Khabarovskii Nearly everywhere, provincial administrations are demanding compulsory processing of a certain percentage of harvested wood in all new long-term harvesting leases. In Evreiskaya and Khabarovskii Provinces, stumpage fees are larger for harvesting companies without processing. Khabarovskii's provincial administration has set a target that 14.5 percent of harvested wood will be sawn in the province. In 2003, Khabarovskii's provincial production of sawn wood increased by 21 percent as compared with 2002.

At the federal level, raising customs duties on the export of raw logs is still under discussion. As in the case of non-repatriation of export revenues, there is a fear that such a measure would lead to further under-declaration of real export volumes at customs and would increase corruption among involved agencies.

MARKET MEASURES

At the moment, Russian timber exporters have no incentive to coordinate efforts to raise export timber prices to world levels. Incentives of the Russian timber producers to undercut each other to attract Chinese buyers are too strong Russian timber exporters in general lack a strategic vision for developing their business. They are relatively isolated compared to Chinese importers, which tend to be large trading companies coordinated by China-wide trade policy interests, and, even more so, by provincial level interests. In addition, Chinese merchants from Northeast China are more active on the Russian side of the border in carrying out aggressive marketing than are Russian merchants on the Chinese side.

Russian timber producers could get more revenues by establishing direct links with final consumers in China or entering the Chinese dominated timber exchanges in Fuzhou and other large Southern China cities where the main consumers of raw logs are situated and final prices for wood products are formulated. Thus, there are avenues for RFE timber producers to get around the regional obstacles of the Northeast Chinese provinces near the Russian border. Regular international timber auctions would show indicative prices for other participants in the market and is one market measure that could improve the nature of bilateral timber trade with China. In Primorskii Province several auctions have been organized for Chinese buyers in the last two years. These have not, however, been successful because of sluggish interest of Chinese intermediates from Northeast China, who naturally are not interested in raising the prices at which they purchase Russian timber. Already, however, the All-Russia Timber Exchange

accredited by the RF Government established its first branch in Irkutskaya Province in October 2003. The exchange plans to create other branches in all forested regions of Russia.

Russian timber exporters could also band into professional associations, like the Primorskii Association of Timber Exporters (PALEX), to defend the interests of exporters, to be responsible for the collection, analysis and dissemination of full information about timber markets in neighboring countries, and to represent the interests of the whole forest sector.

The RFE forest sector is still the least attractive economic segment for domestic and foreign investments. There is still a great need to create favorable conditions for investors in timber processing. Tax and duty privileges should be offered to those who expand their business from logs export to final processing. In this way, a larger taxation base and growth of value added production can be ensured.

CONCLUSIONS

- Russia's timber exports to China are poorly diversified, with raw log exports dominating over sawn wood and other semi-finished products. The projected trends of Russia's timber exports to China indicate that these negative patterns will remain for the short and medium term.
- Russia's timber exports to China are growing faster in volume than in total value. The
 underdeveloped status of the timber market in Russia at present generates uncoordinated,
 spontaneous offers by exporters, which results in reduced prices for Russian timber.
- The low efficiency of Russia's timber exports to China is aggravated by the great number of
 exporters, many of which are small and unprofessional businesses. Most of these small exporters
 are still in the initial phases of capital accumulation, have no relevant production and export
 infrastructure, act as simple intermediaries and depend on large Chinese trading companies.
- There are some systematic discrepancies between the customs statistics of Russia and China for their bilateral timber trade.
- The lack of active marketing by Russian exporters in China decreases the competitiveness of Russia's forest products in the international marketplace.
- The Chinese timber market is less exacting in comparison with other countries that import
 Russian wood. The Chinese market can consume a wider range of forest products, grades, and
 species. This greater assortment of Chinese demand implies good prospects for future
 cooperation between Russian wood producers and Chinese entities. However, this must be done
 under conditions of mutual benefit and environmental and social responsibility.

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ANNEX I: FULL LIST OF CROSS BORDER CHECKPOINTS WITH CORRESPONDING CHINES E GATEWAYS (2002)

Custom point code	Custom point name	Customs location or main type	Chinese/Mongolia opposite customs	# on the Map (Annex III)
10102000	BRYANSKAYA 17	hinterland/railway		
10102120	Suzemskii	hinterland/railway		
10205070	Kaliningrad	hinterland/seaport		
10219000	KOSTOMUKSHKSKAYA	seaport/railway		
10216040	Turukhtanny	hinterland/railway		
10220050	Krasnoznamyonny	hinterland/railway		
10317000	Novorossiiskaya	seaport/railway		
10317001	Novorossiiskii Seaport	hinterland/seaport		
10413040	Ozinki (Saratovskaya)	hinterland/railway		
10501070	?	hinterland/railway		
10503030	Tobolskii (Tymenskaya)	hinterland/railway		
10510000	MAGNITOGORSKAYA	hinterland/railway		
10510020	Kartaly	hinterland/railway		
10602000	BURYATSKAYA	hinterland/railway		
10602010	Gusinoozerskii	hinterland/railway		
10604000	KHAKASSKAYA	hinterland/railway		
10605000	ALTAISKAYA	hinterland/railway		
10605010	Barnaul Airport	hinterland/airport		
10605060	Kulundinskii	hinterland/railway		
10605070	Malinovoozerskii	hinterland/railway		
10605080	Rubtsovskii	hinterland/railway		
10606020	Achinskii	hinterland/railway		
10606050	Kanskii	hinterland/railway		
10606060	Krasnoyarskii	hinterland/railway		
10606070	Lesosibirskii	hinterland/railway		
10606080	Taezhny	hinterland/railway		
10607020	Angarskii	hinterland/railway		
10607030	Baikalskii	hinterland/railway		

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 $^{^{\}rm 17}$ In capital letters are names of regional customs houses

10607040	Irkutskii	hinterland/railway		
10607050	Nizhne-Udinskii	hinterland/railway		
10607060	Sayanskii	hinterland/railway		
10607070	Ussolie-Sibirskii	hinterland/railway		
10608070	Kuzbasskii	hinterland/railway		
10610060	Poltavskii	hinterland/railway		
10611040	Tomskaya	hinterland/railway		
10612000	CHITINSKAYA	near RF-China border/railway		1
10612010	Aginskii	near RF-China border/railway		
10612040	Petrovsk-Zabaikalsk	near RF-China border/railway		
10616000	BRATSKAYA	hinterland/railway		2
10616040	Ust-Ilimskii	hinterland/railway		
10616050	Ust-Kutskii	hinterland/railway		
10617000	ZABAIKALSKAYA	RF-China border	Manzhouli	3
10617020	MAPP Zabaikalsk	RF-China border/motor	Shiwei	
10617030	RW Zabaikalsk	RF-China border/railway	Manzhouli	
10617050	Olochi	RF-China border/motor	Shiwei	
10617060	Solovievskii	RF-Mongolian border/motor	Chulunhuorot	
10617070	Staro-tsurukhaituskii	RF-China border/motor	Heishantou	
10618000	NAUSHKINSKAYA	RF-Mongolian border/railway	Erlian Huote	4
10618010	Kyakhtinskii	RF-Mongolian border/railway	Erlian Huote	
10702000	VLADIVOSTOKSKAYA	seaport/railway		5
10702020	Churkinskii	seaport/railway		
10702030	Churkinskii TK1	seaport/railway		
10703000	KHABAROVSKAYA	RF-China border/river port	Fuyuan	6
10703010	Khabarovsk Airport	RF-China border/airport	Harbin	
10703020	Bikinskii	near RF-China border/railway		7

10703040	Chegdomynskaya	near RF-China border/railway		7
10703050	Bikinskii	RF-China border/motor	Raohe	9
10704000	BLAGOVESCHENSKAYA	RF-China border/river		
10704020	Zhalinda	RF-China border/river	Lianyin	11
10704030	Poyarkovo	RF-China border/river	Xunke	12
10704050	Blagoveschenskii	RF-China border/river	Heihe	
10705000	PETROPAVLOVSK-K.	seaport		13
10707020	Alexandrovsk -Sakhalinskii	seaport		14
10707030	Korsakovskii	seaport		
10707070	Kholmskaya	seaport		
10708000	BIROBIZHANSKAYA	railway/motor/river	Fujin, Tongjiang	15
10708010	Amurzet	RF-China border/river	II noboi	
10711000	VANINSKAYA	seaport		
10711010	SovetskayaGavan	seapor t		18
10712000	GRODEKOVSKAYA	RF-China border/railway	Suifenhe	19
10712010	Sosnavaya Pad	RF-China border/motor	Suifenhe	
10713000	AMURSKAYA	railway/river/sea		20
10713010	Nikolaevsk -Na-Amure	river/sea port		
10713020	De-Kastri	seaport		21
10714000	NAKHODKINSKAYA	seaport		22
10714010	Bolshekamenskii	seaport/railway		23
10714020	Olginskii	seaport		24
10714030	Plastun	seaport		25
10714040	Vostochny	seaport		26
10716000	USSURIISKAYA	near RF-China border/motor	Suifenhe	27
10716020	Markovo	RF-China border/motor	Hulin	28
10716030	Poltavskii	RF-China border/motor	Dongning	29

10716040	Turii Rog	RF-China border/motor	Mishan	30
10716060		near RF-China border/railway/moto r		31
10717000	KHASANSKAYA	near RF-China border/railway/moto r/sea	Hunchun	32
10717010	Dalzavodskoi	seaport		33
10717030	Posietskii	seaport		34
10717040	Slavyanskii	seaport		35
10717060	INJaknalino	RF-China border/railway	Changlingzi	36

ANNEX II: TOP 10 RUS SIAN EXPORTERS IN MAJOR REGIONS EXPORTING TIMBER TO CHINA IN 2003

Top 10	Name	Location (office)	Main activity	Export Value (1,000 US\$)	% of regional export timber to China	Main Chinese importer			
Khab	Khabarovskii Province								
1	Flora	Komsomolsk-Na- Amure	Trader	20834	9.35	Longjiang United , Rongtong, Zhongyun, Zhengda, Chengye, Hongfeng Dacheng, Xiangda			
2	Smena-Trading	Sosnovka v.	Trader	11818	5.30	Yongnan, Itochu Corp., Jingyin, Suifenhe Development Zone, Xiangtang, Tenda Chaoyue, Fuyuan Tengfei			
3	Rimbunan Hizhau RFE (Malasian)18	Khabarovsk	Harvester	10818	4.85	Suifenhe Shenzhan,, Suifenhe Tianfu, Suifeng Trade			
4	DalLesProm	Khabarovsk	Harvester/Trader	8131	3.65	Suifenhe Jinhai, Suifenhe Jinying, Sinotrans, Dalian Golden Sun Import, Deluda, Rongtong, Huafeng			
5	Yuantong (Chinese)	Khabarovsk	Trader	5939	2.67	Suifenhe Haiyun			
6	Transk ort			5366	2.41	Maosheng			
7	Rimbunan Hizhau International (Malasian)	Khabarovsk	Harvester	4970	2.23	Suifenhe Shenzhan,, Suifenhe Tianfu, Suifeng Trade			
8	Damila	Khabarovsk	Trader	4505	2.02	Suifenhe Linyuan, Suifenhe Beilida			
9	Asia-Export			4095	1.84	Yili			
10	Krona			3753	1.68	Blue Sky			

¹⁸ -in parenthesis are known or presumed foreign capital backed companies

Irku	tskaya Province					
1	Asian Cargo Company	Irkutsk	Trader	9681	3.99	Manzhouli Liaoshen, Xiaolong, Yunchou, Taifeng, Tiansheng
2	Trud	Shelekhovo, Taishetskii D.	Harvester	5846	2.41	Tongjiang Xiaolong, Erguna Dalin, Fangzheng, Huayong, Tianyan
3	Pertsev S.K. (private person)	Irkutsk	Trader	5424	2.23	Yunchou (E,M), Jintai
4	Baikalskie Vorota			4591	1.89	Jintai, Beifang, Humeng International Trade, Tiansheng
5	YantalLes	Yantal	Harvester	4449	1.83	Jinying, Xiangda, Qihong, Futong
6	JV Igirma-Tairiku (Russian-Japanese)	Novaya Igirma, Nizhne-Ilimskii D.	Harvester/ Processor	4083	1.68	Suifenhe Longgang, Manzhouli Tiansheng Longgang, Futong, Qihong Xiangda
7	VostSibExportles			3926	1.62	Jintai, Jinying, Futong, Xiangda
8	PIK-89			3627	1.49	Xiangda
9	KirenskLes			3417	1.41	Tiansheng, Xiangda, Qihong, Longgang, Yuanheng
10	Druzhba			3238	1.33	Xiaolong, Huaqiang, Zhongcheng, Langxin
Prim	orskii Province			1		
1	Les-Export	Vladivostok		10880	14.71	Longjiang United, Tongyuan, Jiahong
2	Primorskie Lesopromyshlenniki	Vladivostok	Harvester	10196	13.79	Peifeng, Baofa, Yuanheng, Xingjia, Futong, Xiangdali, Zhongyun
3	DalnerechenskLes	Zimniki, Dalnerechenskii D.	Harvester/Trader	7459	10.08	Xingjia, Suifenhe Hongya, Suifenhe Zhongyun, Sanxia
4	Dalintorg	Nakhodka	Trader	2681	3.62	Guicheng, Guangyu, Baoye, Suifenhe Border Cooperation Zone

5	Forest-Star			2550	3.45	Longjiang United, "Friendship", Suifenhe Border Cooperation Zone
6	Iskra	Dalnerechensk		2086	2.82	Baofa, Shanxia
7	TerneyLes	Plastun	Harvester/ Processor	1875	2.53	Sumitomo Corporation (branches or contracts in China)
8	KirovskLes	Kirovskii T.	Harvester	1841	2.49	Suifenhe Xinjia, Suifenhe Deluda, Suifenhe Peifeng
9	Service-DV			1643	2.22	Longjiang United, Rongtong, Bingda, Xintai, Deluda, Hongfeng
10	LuchegorskLes	v. Verkhnii Pereval	Harvester	1570	2.12	Huafeng, Xingjia,
Amu	rskaya Province	1	1	•		
1	TyndaLes LPK	Tynda	Harvester	16033		Shunshi, Guicheng, Hunchun Shanmu, Deluda, Bingda, Shenghua, Baifeng
2	Zeiskii LPK	Zeya	Harvester	8633		S. Border Cooperation Zone, Longjiang United, Guicheng, Xiangda, Jifeng, Daiye, Yunchou
3	AmurLesProm	Blagoveschensk	Harvester/Trader	2273		Yili, Guicheng, Chengye, Daiye, Suifenhe Border Development Zone, Suifenhe Jifeng, Hongfeng, Jitai
4	Bureiskaya Lesoexportnaya Company	Bureiskii D.	Trader	1308		Jitai, Longjiang United, Sinotrans
5	Chirkov A.A. (private person)	v. Solnechnoye, Ivanovskii D.	Trader	849		Yuxing, Longfei,
6	Burkov S.K. (private person)	Blagoveschensk	Trader	839		Fengjia (D), Jitai (S), Baofa (D)
7	Shum A. (private person)			830		Fengxiang, Heihe Foreign Trade
8	Liashenko L. (private person)			744		Longjiang United, Hongfeng, Deluda

9	SibLessProm			677		Suifenhe Tianfu, Longfei, Longgang
10	Valov A. (private person			623		Zhongshi
Krası	noyarskii Province		1	l	1	
1	MTK-Center Holding Company	Zheleznogorsk	Harvester	7519	10.64	Yunlong, Hengtong, Tiansheng, Fangzheng, Xiaolong, Caihong, Dongfang
2	Taiga-Ex	Krasnoyarsk	Trader	5934	8.40	Yongxing, Huaqiang, Zhongmao, Beifang, Xiangfa, Zhengzheng, Dalin
3	SibEniseiTrans	Krasnoyarsk	Trader	5852	8.28	Xiaolong, Humeng, Jinxiang, Huaqiang, Xiandao, Yongxing, Longgang, Fangzheng, Caihong, Zhenbai
4	Krasnoyarskie Lesomaterialy	v. Peschanka, Emelyanovskii D.	Harvester/Proces sor	5055	7.15	Zet Trading, Yunlong, Tuoda, Yaseng, Huaqiang, Beifang, Erlian International Trade, Xiangfa
5	Maltat	Krasnoyarsk	Harvester/Trader	4889	6.92	Huaqiang, Longjiang United
6	LesSnabSbyt	Krasnoyarsk	Trader	2711	3.84	Zhengbei, Tiansheng, Xiangfa, Hengchang, Futong, Yipu, Yiyuan, Jintai
7	TransCenter			2708	3.83	Guoyun, Huaqiang, Yunlong, Xiandao, Humeng, Futong
8	Huanghe-Group (Chinese)	Lesosibirsk	Trader/Processor	2368	3.35	Yanxin Euro-Asian Society on timber processing, Huaqiang, Jiaxin
9	Enisei Commercial Center	Krasnoyarsk	Trader	2335	3.30	Huaqiang, Zhunsen, Xiaolong, Humeng
10	Yang Jiabing (private person)			1418	2.01	Fukai, Yipu, Humeng,

Chiti	nskaya Province					
1	Suturina G.V. (private person)	Chita	Trader	3009	4.73	Manzhouli Xinwei, Huangqiu,
2	MK Rassvet	Novopavlovka, P Zavodskii D.	Harvester	2443	3.84	Huaqiang, Tianyan, Huayong, Huayong, Dalian Donggang Industries
3	Chitinskaya Company of Foreign Trade	Chita	Trader	2159	3.40	Humeng, Manzhouli Jinjuyuan
4	Bykovskii I.M. (private person)		Trader	1737	2.73	Huayong, Xiaolong,
5	Zagotovitel Consumers Society	Ingoda, Chitinskii D.	Harvester	1730	2.72	Dalin Erguna Border Co, Yongxin, Huaqiang
6	Zabaikalskaya Lesnaya Korporatsiya	Chita	Trader	1332	2.10	Yongxin, Xiaolong, Huaqiang, Lanxin
7	Sosna	Mogocha	Harvester/Trader	1282	2.02	Huaqiang
8	Fyodorov O.A. (private person)		Trader	1226	1.93	Jiaxin, Jinjuyuan, Jianghe, Jinxiang
9	Baranchugov A.V. (private person)		Trader	1166	1.84	Taifeng, Huaqiang, Zhiwei
10	Yakushevskii A.K. (private person)	Balyaga T. P Zavodskii D	Trader	1166	1.83	Tianyang, Manzhouli Wangcheng
Bury	atia Republic	1				
1	Baikalskaya Lesnaya Company	Iliinka, Pribaikalskii D.	Harvester	6605	15.63	Yunchou, Huaqiang, DDalian Donggang
2	Tsybenov Yu.V. (private person)			4001	9.47	Jintai, Yipu, Fengrun,
3	Trans Iron	Turuntaevo, Pribaikalskii D.	Harvester/Trader	1818	4.30	Beifang, Dalu
4	MetalOptTorg	Ulan-Ude	Trader	1736	4.11	Jintai, Huaqiang, Liaoshen
5	AgroPromKomplekt	Ulan-Ude	Trader	1612	3.82	Jili, Anli, Beifang
6	SMP-834			1532	3.63	Jintai
7	Fomitskii M.V. (private person)			1466	3.47	Beifang

8	Mega-Trans	Ulan-Ude	Trader	1247	2.95	Jintai, Beifang, Hengtong
9	TransTEK	Ulan-Ude	Trader	1179	2.79	Beifang, Jintai, Zhengbei, Jili
10	Almaz-2000			1065	2.52	Fangzheng
Evre	skaya Autonomous Province		1	l	1	
1	Senhe-Lesprom (Chinese 100%)	Amurzet		2197	37.17	Luobei Border Trade Ltd. Co
2	Luch			404	6.83	Tongyuan, Tongchuang
3	Green Diamond (Chinese)	Birakan	Trader	379	6.41	Shunsheng, Xingjia, Tongchuang
4	Vinogradov M.Z. (private person)			303	5.12	ShunshengNongchuang, Jiangrun
5	Popov G.M. (private person)	Teploozersk	Trader	281	4.76	Wanlong (D), Tongchuang
6	Katen	Birobizhan		240	4.07	Xinjia (S), Heilongjiang Foreign Trade Co
7	Kotryaga N.A. (private person)			231	3.90	Xingjia, Xinlong, Shunsheng, Longjiang United
8	Master-Tour			169	2.85	Jiayin Timber Trade
9	Puzankov V.O. (private person)	Birobizhan	Trader	159	2.69	Suifenhe Yunin, Shanxia, Futong
10	Niyar			137	2.32	Nabaichuan, Guicheng