

The Impact of the Russian Log Export Tariff on the Global Market for Logs and Lumber

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Russia contains the largest area of natural forests in the world, exceeding the combined forest area found in both Brazil and Canada. The forest area in Russia, estimated at 808,790,000 hectares, represents 20.5% of total global forest area and almost half of the country is covered with forest. However, much of the forest resources in Russia are not economically accessible. In 2005 the Federal Russian Forestry Agency estimated that while the annual

allowable cut in Russia was 564 million cubic meters, the economically available harvest was only about 250 million cubic meters and the actual cut was just 132 million cubic meters.

The disparity between the actual harvest and the economically available harvest varies across regions in Russia and is correlated with the available processing capacity and the existing transportation infrastructure in each region. The actual cut to the economically available cut ranges from a low of 27% (in the Ural Region) to a high of 75.6% (in the Northwest Region), Table 1.

Table 1. Comparison of the actual harvest, available harvest and processing capacity in Russian regions.

	Actual Harvest (million cubic meters)	Economically Available Harvest (million cubic meters)	Ratio of Actual to Available Harvest (%)	Processing Capacity (%)*
Northwest Region	44	59	74.6%	38%
Center Region	10	19	52.6%	13%
South Region	.3	.5	60%	2%
Volga Region	20	36	57.2%	11%
Ural Region	10	37	27%	5%
Siberia Region	32	64	50%	25%
Far East Region	14	33	42.4%	2%
Total	130.3	248.5	52.4%	

*Percentage of regional harvest that can be processed within the regional wood processing sector.
Source: (CIBC 2007)

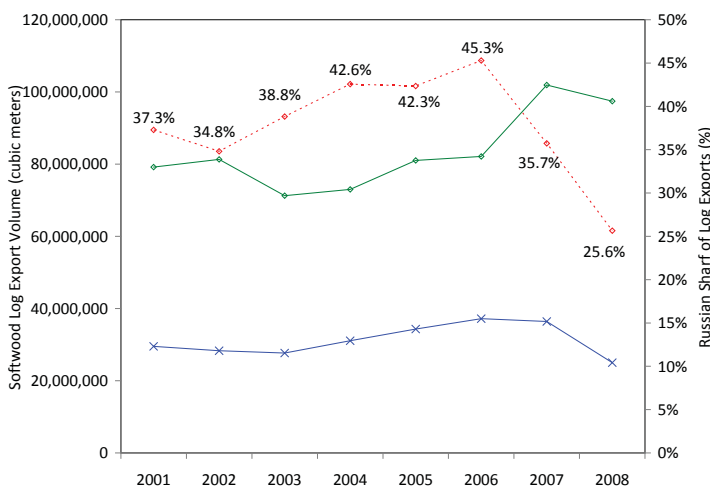


Figure 1. Russian softwood log exports represent over a quarter of total global log exports.

Source: (Food and Agriculture Organization 2008; Global Trade Atlas 2008)

Clearly the wood processing capacity in Russia lags far behind the available resource and in only two regions, the Northwest and Siberia, does the processing capacity exceed 25%. In the remaining five regions, which possess about half of the country's available harvest, the processing capacity averages just 6.6% of the actual harvest (and just over 3% of the economically available timber harvest).

Heavily endowed with an abundance of natural resources, but limited processing capacity, Russia recently moved to restrict the export of unprocessed logs. On February 5th, 2007, the Russian government announced its plan to implement a series of log export tariffs designed to reduce the export of raw logs from Russia and

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The Center for International Trade in Forest Products addresses opportunities and problems related to the international trade of wood and fiber products. Emphasizing forest economics and policy impacts, international marketing, technology developments, and value-added forest products, CINTRAFOR's work results in a variety of publications, professional gatherings, and consultations with public policy makers, industry representatives, and community members.

Located in the Pacific Northwest, CINTRAFOR is administered through the College of Forest Resources at the University of Washington under the guidance of an Executive Board representing both large and small companies, agencies, and academics. It is supported by state, federal, and private grants. The Center's interdisciplinary research is carried out by university faculty and graduate students, internal staff, and through cooperative arrangements with professional groups and individuals.

The bill establishing the Center for International Trade in Forest Products was passed during the 1984 Regular Session of the Washington State Legislature and signed into law on March 7th by Governor John Spellman. Over the past 25 years, CINTRAFOR has played a key role in improving the international competitiveness of the forest products industry by conducting international marketing and economic research in support of forest products companies and state and federal agencies. CINTRAFOR's research and education programs represent a strategic long-term investment in international marketing and economic research aimed at identifying potential challenges to the international trade of US forest products and increasing the international competitiveness of the US forest products industry.

The scope of CINTRAFOR's research includes improving the international competitiveness of the US forest products industry, identifying new and emerging markets for US forest products, assessing the impacts of forest sector and environmental policies on forest products trade flows and performing socioeconomic impact and stability analysis of forest sector policies on rural timber dependent communities within Washington State.

The Washington state legislature mandated that CINTRAFOR specifically focus its research effort on assisting small and medium-sized value-added forest products manufacturers in Washington State identify and access international markets. To achieve this goal, CINTRAFOR works closely with industry associations such as the Evergreen Building Products Association (EBPA), the Softwood Export Council and federal and state agencies to promote the international competitiveness of US wood products. In collaboration with EBPA, CINTRAFOR manages the highly successful US-China Build (USCB) program. To date, 435 US companies have participated in USCB programs in China, resulting in over \$25.4 million in new export sales and creating over 300 new jobs. The USCB program has been critical in helping small and medium sized firms in the US and Washington State identify and access new market opportunities in China.

Over the past 25 years, CINTRAFOR has conducted research designed to assist small and medium-sized firms expand their exports of value-added wood products. When designing these research projects, CINTRAFOR consults with manufacturers, exporters and public agencies to develop projects that provide relevant information and help managers develop effective export strategies that increase their international competitiveness. An indirect measure of the success of CINTRAFOR's programs is reflected in the increasing ratio of value-added wood product exports from Washington. Between 1989 and 2008, the ratio of value-added wood products exports to total wood exports from Washington increased from less than 5% to almost 35%. In 2008, exports of value-added wood products from Washington totaled \$496 million, representing more than 5,100 manufacturing and export related jobs.

As specified within our legislative mandate, CINTRAFOR has aggressively pursued outside funding to supplement our state funding. In 2008, CINTRAFOR was extremely effective in leveraging its state support, generating \$7.78 in non-state funding for every \$1 in state funding.

The current economic downturn in the US economy and the sharp decline in housing starts has devastated the forest products industry and good news is hard to find. Yet even as lumber production declined by 18% both nationally and in Washington State, forest products exports from the US increased by 3% but they increased by almost 9% for Washington State. While export markets represent a growth opportunity, most forest products companies (particularly value-added manufacturers) are small and medium-sized firms that typically lack the financial and managerial resources to research international markets on their own. This is where CINTRAFOR's trade missions and market research provides critical support for these companies by increasing their understanding of international markets and by providing introductions to foreign customers. CINTRAFOR's programs are highly valued and enjoy widespread support within the forest products industry in Washington State — a strong testament to the effectiveness of this public-private partnership that not only benefits the forest products industry but generates export revenue and jobs in Washington.

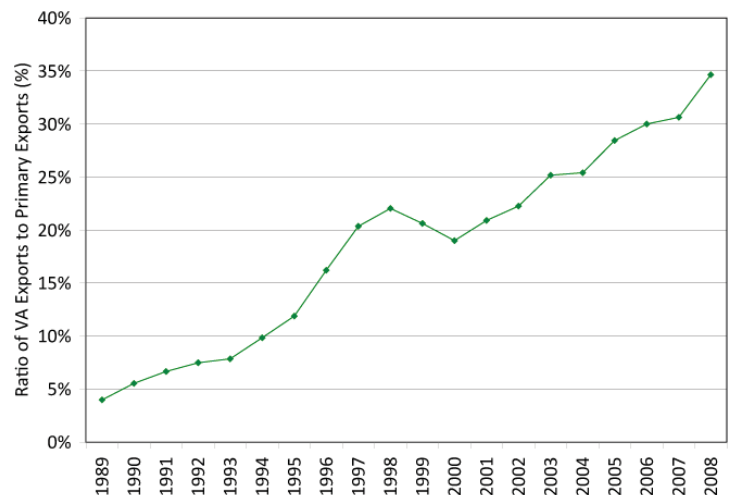


Figure 1. The ratio of value-added wood products exports from Washington State have increased rapidly.

encourage investment within the domestic wood processing industry, Table 2. However, in early November, 2008, the Russian authorities, citing the rapidly deteriorating global financial crisis as well as pressure from Scandinavian countries heavily dependent on Russian logs, announced that they would delay the implementation of the 80% log export tax for 9-12 months.

Russian Exports of Wood Products
Log Exports

Russia has been a dominant player in the export market for softwood logs, attaining a market share of over 45% in 2006 before the implementation of the log export tax, Figure 1. By 2008, Russia's market share declined precipitously from 45.3% to 25.6%. The largest importer of Russian logs

Table 2. Russia's Log Export Tariff

	Softwood Logs		Hardwood Logs	
	Tax Rate %	Minimum Tax €m ³	Tax Rate %	Minimum Tax €m ³
May 2006	6.5%	4	6.5%	4
July 1, 2007	20%	10	20%	24
April 1, 2008	25%	15	25%	24
January 1, 2009	80%	50	40%	50

Source: Bob Flynn, RISI 2007; CIBC World Markets Inc. 2007

Russian exports of both lumber and wood based panels have grown in recent years, although the rate of growth for exports of both product categories was actually lower in 2006-2008 (following the implementation of the log export tax), than in the period 2004-2005, Figure 2. During the period 2004-2005, the growth rate for lumber and wood-based panels was 17.7% and 8.3%, respectively, whereas during the period 2006-2008 the export growth rate for these products dropped to 8.7% and 5.7%, respectively.

Table 3. Major destinations for Russian hardwood and softwood log exports (cubic meters).

Russian softwood log exports							
	2002	2003	2004	2005	2006	2007	2008
Total	28,309,665	27,667,734	31,078,046	34,309,665	37,195,326	36,415,182	24,993,053
China	12,860,826	12,285,199	13,245,657	16,298,962	19,051,215	23,049,945	17,965,943
Finland	5,458,677	5,284,514	5,514,956	6,907,796	5,811,051	3,733,609	3,030,848
Japan	4,533,564	4,701,822	5,637,715	4,553,876	5,094,752	4,376,285	1,933,269
S. Korea	1,572,728	1,509,187	1,593,686	1,733,416	1,974,156	1,224,245	714,229
Sweden	1,449,060	1,386,941	1,456,914	899,346	584,843	369,940	172,928
Russian hardwood log exports							
Total	8,338,735	9,246,876	10,304,106	13,617,052	13,869,365	12,861,417	11,765,671
Finland	5,974,232	6,072,376	6,170,988	7,503,176	7,494,419	6,306,537	6,866,706
China	952,668	1,774,471	2,228,964	2,862,470	3,901,986	4,559,995	3,337,506
Sweden	872,513	781,934	1,078,379	1,949,062	1,357,540	1,265,915	1,055,886

Source: (Food and Agriculture Organization 2008; Global Trade Atlas 2008)

is China and Chinese imports of logs had grown steadily since 2001, Table 3. Between 2001 and 2008, Chinese imports of Russian softwood logs increased from 9.6 to 18.1 million cubic meters. In 2008, imports of Russian softwood logs represented 84.8% of Chinese softwood log imports, 33.3% of Japanese softwood log imports, 12.3% of S. Korean softwood log imports and 47.6% of Finnish softwood log imports.

Russian hardwood logs exports make up over a quarter of global hardwood log exports, although this ratio dropped slightly in 2007 as a result of the log export tax, Table 3. The vast majority of Russian hardwood log exports go to Finland and China, with market shares of 49% and 35.4% respectively. However, between 2001 and 2007, the Finnish share of Russian hardwood log exports dropped from 71% to 49% whereas the Chinese share jumped from 11.4% to 35.4%.

Russian Production of Wood Products

Russian production of industrial logs increased by 12% in 2007, exceeding 160 million cubic meters. Just over half of the industrial log production was sawlogs (51%), while an additional 37.4% was pulpwood. Production of hardwood sawlogs have increased by 79% since 1998, while softwood sawlog and pulpwood production doubled.

Russian total lumber production increased between 1999-2007 and showed a strong upsurge in 2007, driven by increased domestic demand. Total lumber production increased by 21.5% over the past decade, with softwood lumber production growing by 22.7% and hardwood lumber production increasing more slowly at 13%.

Russian production of wood-based panels also increased rapidly over the past decade as a result

of increased investment in this sector, although the particleboard industry appears to have benefited more than plywood and, more recently, the MDF sector has begun to expand, Figure 3. Since 1999, the production of wood-based panels has almost tripled, with the production of plywood increasing by 151%, the production of particleboard increasing by 238% and the production of fiberboard increasing by 720%. Over the past year, production for the entire industry increased by 9.5% whereas within the different sectors production increased by 5.7% (plywood), 12.5% (particleboard) and 15.7% (fiberboard).

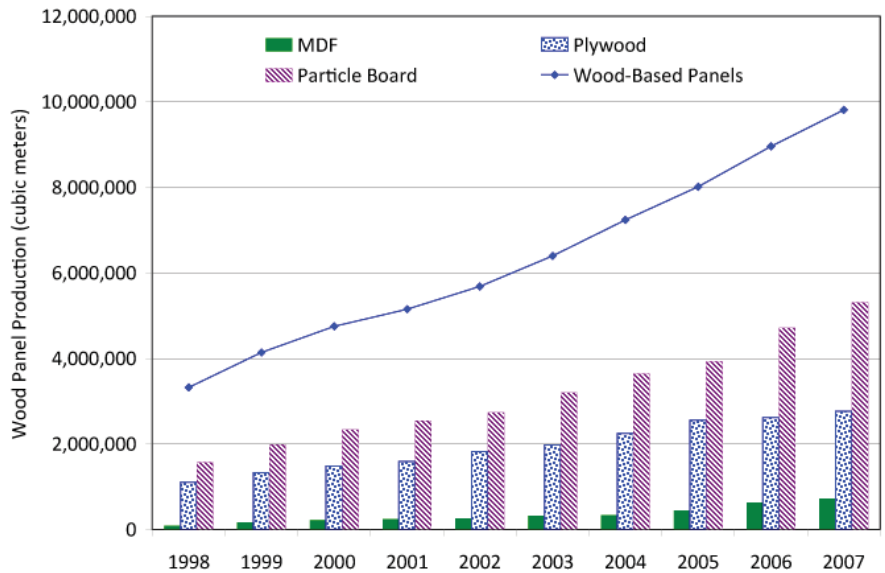


Figure 2. Russian solid wood products exports, 1998-2007.
 Source: (Food and Agriculture Organization 2008; Global Trade Atlas 2008)

Expected Impact of the Russian Log Export Tax (80% Tax Rate)

The following discussion considers the likely medium-term impacts of the implementation of the Russian 80% tax on log exports and is based on an analysis of the Russian log export tax performed using the Global Forest Products

Model conducted by Turner et al. (2008), although CINTRAFOR is responsible for the interpretation of the results in the following paragraphs.

The trade model results suggest that global trade in logs, lumber and plywood would decline by 18%, 1.8% and 0.4%, respectively, by 2020. The trade analysis predicts that Russian log exports

to Finland would drop 72%, to Japan by 77%, to China by 20%, to South Korea by 76% and to Sweden by 72%. However, total log imports by these countries would not decline that much since each country would respond to reduced Russian imports by increasing their imports from other countries. For example, the Russian log export tax is predicted to result in a 1.4% increase in log production in the US and a corresponding increase of 10.6% in log exports from the US.

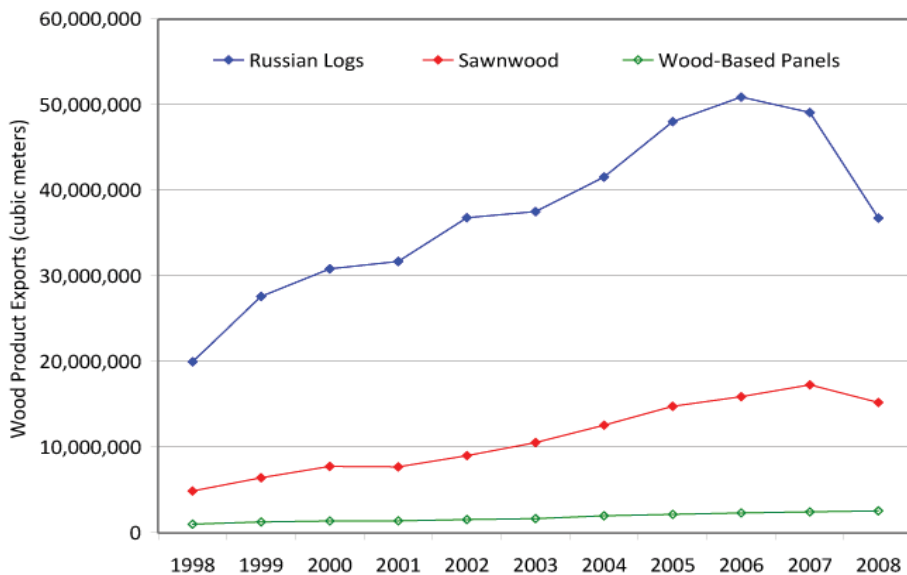


Figure 3. Russian production of wood-based panels.
 Source: (Food and Agriculture Organization 2008)

Footnote

¹ At the time that Turner et al. (2008) carried out their analysis the export tax was announced to be applied to softwood logs only. Since their analysis the tax has been applied to both softwood and hardwood log exports.

The results of the trade model suggest that in 2020 the fallout of the log export tax would cause the domestic prices of wood products in Russia to be substantially lower across the board. The largest price drop, for logs, would be 15.5%, while the price drops for other wood products would include 10.7% for lumber, 10% for particleboard, 5.5% for fiberboard and 4.8% for plywood.



The combination of an underdeveloped wood processing sector, lower log prices and the high tax on logs for export means that log production in Russia would be about 48 million cubic meters (-18.6%) lower in 2020. Interestingly, this analysis suggests that while log production and export volumes would both decline substantially as a result of the log export tax, domestic consumption of logs in Russia would remain relatively unaffected. Both the CIBC and the Turner analyses suggest that the decline in log prices and harvest volumes in Russia would have a devastating impact on the logging sector and they estimated that this sector could lose up to 20% of its work force.

Lower log prices should encourage an increase in domestic production of secondary wood products while reduced log exports and lower prices should translate into an increased demand for Russian secondary wood products in international markets. The modeling by Turner et al. (2008) suggests that production and export of all secondary wood products would increase modestly (compared to the anticipated declines in log production and exports) by 2020. For example, lumber production would increase by 611,000 cubic meters (+1.7%) while lumber exports would increase by 237,000 cubic meters (1.1%). Given the small increases in the production and exports of processed wood products, it is estimated that the revenues from all forest products exports would decline by approximately \$3.4 billion. In addition, the forest products exports sector would likely lose somewhere between 2,500 and 4,000 jobs.

The loss of Russian logs from the export market would provide new opportunities for those countries able to increase log production and fill the void caused by the loss of Russian logs. While some of these gains could be attributed to increased log exports, countries could also expect to increase their exports of value-added wood products as well. The results of the trade analyses show that the US could expect to see its timber harvest increase by 7.3 million cubic meters and its exports of logs increase by approximately 2.8 million cubic meters. In addition, the US forest products industry could increase its exports of lumber by almost 150,000 cubic meters while US exports of secondary manufactured wood products could increase by up to 50%. These increased exports could result in increased export revenues on the order of approximately \$1.3 billion from logs and \$142 million from secondary wood products.

Issues affecting the development of an internationally competitive wood processing sector in Russia

In 2006, then-President Putin suggested that one factor influencing the decision to restrict log exports in favor of developing Russia's domestic wood processing capacity were non-tariff barriers to Russian wood products in foreign markets and subsidies for wood processing facilities in foreign markets. Both of these criticisms of international trade were most likely indirectly referring to China, where Russian forest products face a number of tariff and non-tariff barriers and Chinese exporters of manufactured wood products often enjoy subsidies in the form of low cost capital, low cost processing infrastructure and/or low cost manufacturing equipment. However, in deciding to pursue the development of a domestic wood processing industry, Russian policy makers have downplayed whether or not Russia possesses a competitive advantage in the manufacturing of wood products. Past experience suggests that the lack of a durable competitive advantage results in a wood processing sector that is unable to compete internationally without continued subsidies over the long-term. Such appears to be the case in the Russian situation.

In considering whether Russia possesses a competitive advantage in wood processing that would allow it to develop an internationally competitive wood processing sector, there are several factors that need to be considered including the cost, quality and availability of labor, cost of capital, hosting conditions, presence of supporting industries and exchange rates.

Russia is expected to experience a decline in the availability of working age labor in the future and this is particularly true in timber regions such as the Urals, Siberia and the Russian Far East where the decline in workers is higher than the national average. These three regions contain 54% of the economically available timber harvest but they also have an extremely under-developed wood manufacturing industry which can process only about 10% of the current harvest and less than 5% of the economically available harvest. While attracting and retaining qualified workers in these regions will pose a challenge for the Russian government, perhaps a more important consideration will be attracting and retaining qualified managers (both in sales and marketing as well as technical managers).

Related to the labor issue and the current lack of a wood processing industry, is the lack of related

and supporting industries. Operating a sawmill requires more than simply building and staffing the sawmill. It also requires the presence of related industries to purchase the sawdust and shavings generated by the sawmill, such as a pulp mill or a bio-energy facility (facilities that require a substantially larger capital investment than would a simple sawmill). Similarly, having a large, competitive logging industry and adequate transportation infrastructure are also important to ensure an adequate supply of competitively priced logs.

A transparent and fair investment climate in Russia is necessary in order to attract the foreign capital investment required to establish a wood processing sector (including related and supporting industries). Similarly, investors require that an adequate transportation infrastructure be in place to allow for the efficient and predictable transportation of materials and products to and from the wood manufacturing complex. This will require a substantial up-front investment on the part of the Russian government before investors are likely to commit to the development of a wood processing complex. Concern about transparency of ownership of forests, risk of expropriation, transparency of governance and corruption are also areas of concern in Russia and issues that will need to be successfully dealt with before significant amounts of investment will flow into Russia.

Finally, currency exchange rates will have a significant influence on the competitiveness of Russian wood products in international markets. Investors will need to feel confident that the Russian ruble will not appreciate significantly in the future relative to the currencies of other major wood products suppliers including the US, Canada, Brazil and the EU. Recent economic projections suggest that the BRIC's (Brazil, Russia, India and China) are expected to experience strengthening currencies relative to the US, EU and Japan, resulting in a decrease of cost competitiveness, although this may be a less significant factor for the forest products industry relative to the other factors discussed previously.

Conclusion

The implementation of the 80% log export tax will to a large extent remove the largest supplier of logs from global markets and provide new export opportunities for US logs and secondary wood products. A trade analysis of the global impacts of the Russian log tax suggests that the log export tax will reduce the global supply of

logs by as much as 38 million cubic meters (about 18%).

The results of the trade analyses performed by Turner et al. (2008) suggest that the US could expect to see its timber harvest increase by 7.3 million cubic meters and its exports of logs increase by approximately 2.8 million cubic meters. In addition, the US forest products industry could increase its exports of lumber by almost 150,000 cubic meters, while US exports of secondary manufactured wood products could increase by up to 50%. These increased exports could result in increased annual export revenues on the order of approximately \$1.3 to \$1.5 billion from logs and \$150 to \$200 million from secondary wood products.

Clearly the Russian log export tax, if implemented at the 80% level, will cause significant wood shortages in major markets such as Finland, Sweden, Japan, South Korea and China. The key for US forest products manufacturers and exporters is to understand how the loss of Russian logs will impact the demand for imported wood products in specific markets. For example, Japan, China and South Korea are expected to see their log imports from Russia drop by 77%, 20% and 76%, respectively. In these markets, it is reasonable to expect that US exports of logs and processed wood products would increase to help fill the void left by reduced Russian log imports. Understanding how Russian logs are used in these markets will help US exporters and manufacturer's best determine what combination of US species and products would be most competitive in meeting the increased demand for wood products in these markets.

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