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Review on Russian Roundwood Exports into Northern Europe 1993–2008

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Abstract
This study reviews development of the Russian roundwood exports to main importing countries in Northern Europe. In addition to unit prices and traded volumes, this study also shortly describes the significance of imported Russian roundwood with respect to national roundwood markets in importing countries.

According to the trade flows, majority of the roundwood from Russia has been traded to Scandinavia and around the Baltic Sea region. Especially, Finland and Sweden have been the most important roundwood importers from Russia. Although some amounts of roundwood from Russia have also been traded to Central Europe, their role and importance with respect to local forest production and removals have been only marginal.

Due to its geographic location and lower logistic costs, Finland has typically paid lower import prices for Russian roundwood than the other importers. If the customs tariffs programme for Russian roundwood exports is coming into full effect in 2011 or later, it is clear that the effects on the national roundwood markets and the production possibilities for the traditional Nordic exporters of forest products such as Finland and Sweden are large. The Baltic States and their sawnwood industry will face a lack of logs. Also, termination of roundwood exports from Russia is likely to cause crucial rechanges in roundwood flows around the Baltic Sea region.

Keywords
roundwood trade, Russia, Northern Europe

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Preface

While writing this review, we utilised several statistical sources and databases, such as Faostat, Eurostat, Metinfo, Unece timber database, UN Comtrade, Swedish and Finnish Statistical Yearbooks of Forestry, national Customs databases and other institutes, which release official statistical figures and time-series concerning roundwood imports from Russia, national production volumes, removals and roadside prices. However, when comparing the data from different sources, it was surprising how much volumes, value of trade and aggregation of assortments differ from each other. For example, the magnitude of imported volumes to destination countries between Faostat and Eurostat databases in some cases differs by over half a million cubic meters. Evidently, this discrepancy is due to the different sources the data is compiled. To be consistent, the time series and descriptive statistics concerning volumes and prices in this study are tried to be given in a manner that the figures are somewhat comparable. Unfortunately, in some cases the data was available only to 2006.

Contents

1 Introduction

During the last fifteen years, Russia's role in international roundwood markets has been significant. The total export volumes of roundwood have increased from 10 million cubic meters in 1992 to 50 million cubic meters in 2007. Due to the worldwide economic slowdown and sluggish construction activity together with customs tariffs programme for roundwood exports, the export volumes were reduced to about 37 million cubic meters in 2008. Still, Russia is the most remarkable roundwood exporter in the world. Even though the majority of wood is exported to Asia, and especially to China, Russia has been also the most important roundwood exporter to the European Union area.

Inside the European Union, the roundwood trade from Russia has been distributed rather unevenly. Majority of the trade is located in Scandinavia and around the Baltic Sea region, where the Russian roundwood has had a significant importance on the local forest industry, national roundwood markets, consumptions and removals. While some amounts of roundwood from Russia have also been traded to Central Europe, their role and importance with respect to local forest production and removals have been only marginal.

The aim of this study is to review development of the Russian roundwood exports to the main customers in Europe and, especially, to Scandinavia and the Baltic Sea region. In addition to unit prices and traded volumes from Russia, this study also shortly evaluates the significance of imported Russian roundwood with respect to national roundwood markets in destination countries. While writing this study continuation of roundwood export from Russia is highly uncertain. The implementation of customs tariffs programme for roundwood exports announced by the Russian Federation is not coming into full effect until 2011. Whether the roundwood trade will continue thereafter is still uncertain, however. As a consequence of the first raises in the customs tariffs, roundwood exports from Russia decreased 25 percent in 2008. If the customs tariffs programme is coming into effect in 2011 or later, it is clear that the effects on the national roundwood markets and the production possibilities in Northern Europe will be large. Especially, the magnitude of Russian roundwood trade is substantial for the traditional Nordic exporters of forest products, such as Finland and Sweden.

Although the possible termination of roundwood imports from Russia can be expected to have large effects on national markets and cause also crucial changes in roundwood flows in the Baltic Sea region, the subject has not been studied nor reviewed earlier. The recent studies of industrial roundwood trade and exports from Russia to the Baltic Sea countries, Finland and Sweden have mainly concentrated on describing the fluctuations in total exports or the distribution of timber assortments (Tilli and Skutin 2004, Toppinen and Toropainen 2004, Mutanen et al. 2005), or concentrated on the integration of roundwood markets around the Baltic Sea area (Toppinen and Viitanen 2005, Viitanen et al. 2006).

2 Development of Russian Roundwood Exports 1992–2008

2.1 Total Export Volumes

Since the collapse of the Soviet Union, and especially after 1995, the foreign trade in Russia was liberalised and the roundwood traders were allowed to access international markets. As discussed in more details in Mutanen et al. (2005), many Russian forest enterprises found roundwood export as an only solution to survive and to avoid bankrupt. Motivation for the foreign forest companies was undoubtedly cheap price of roundwood and the possibility either to compensate or substitute the domestic roundwood procurement. Another motivation for foreign enterprises to start roundwood trade was establishment into the Russian markets, which were seen as a huge potential for future profitability.

In practise, during these years the roundwood trade was organised either by the Russian roundwood dealers selling the wood directly to the foreign forest firms, or by the companies' own wood procurement organisations established in Russia. In spite of the motivation to receive roundwood from Russia, another reason for this latter strategy was to ensure and test the procurement possibilities and roundwood delivery to the factories in Russia for possible future investments (for more on this issue, see Holopainen et al. 2006, Karjalainen et al. 2007, and Vinokurova et al. 2009).

In the beginning of 1990's, the exported roundwood volumes were rather small compared to the total removals in Russia (Fig. 1). In 1992, the share of exports of the total fellings was only less than 5 percent. In 1996, the corresponding share was increased to slightly over 16 percent. Even though the exported roundwood volumes increased from 10,1 million cubic meters to 16,7 million cubic meters between the years 1991 and 1996, the main reason, however, for the increase of this share was that the annual industrial roundwood removals decreased rather rapidly after the economic reform. According to the database of the Unece Timber Committee the total removals in Russia were 228 million cubic meters in 1992, while in 1996 the annual removals were collapsed to only slightly over 100 million cubic meters.

Even though both the removals and roundwood exports started to slightly increase after 1996, the actual increase did not occur until the financial crisis in Russia ended up to the devaluation of Rouble in 1998 (Fig. 2). Then, the price competitiveness of the Russian roundwood increased essentially and both the total removals in Russia as well as the export volumes started to increase. In 2007, roundwood exports from Russia constituted about 50 million cubic meters which was slightly less than a quarter of the total removals of 207 million cubic meters. The highest exports share of nearly 27 percent was in 2005. In 2008, both the removals and export volumes decreased sharply due to the worldwide economic slowdown and diminishing demand.

During the whole time period after the socialistic era, coniferous assortments have constituted the majority of the exported roundwood volumes. Especially, after the devaluation in 1998, the rapid increase in export volumes is mainly due to the increase in coniferous exports (Mutanen et al. 2005, Vinokurova et al. 2005, 2009). In 1998, the average annual shares of coniferous and non-coniferous assortments of total industrial roundwood exports from Russia were 62 and 38 percents, respectively. In 2008, the corresponding shares were 68 and 32 percents. Thus, even though the volumes of non-coniferous exports have almost tripled in 1992–2008, the corresponding export volumes of coniferous roundwood have more than four-folded.

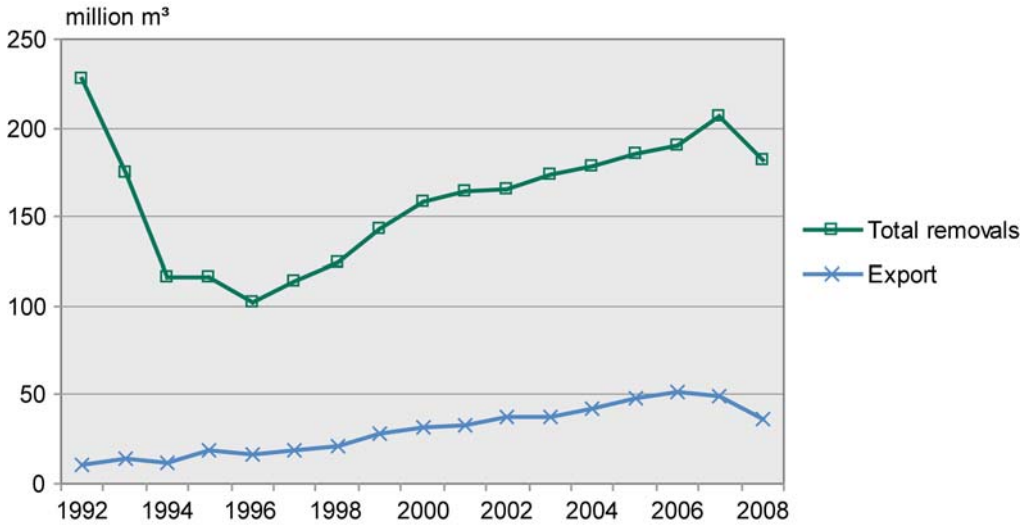

Fig. 1. Total roundwood removals and exports in Russia, 1992–2008 (Faostat, Unece).

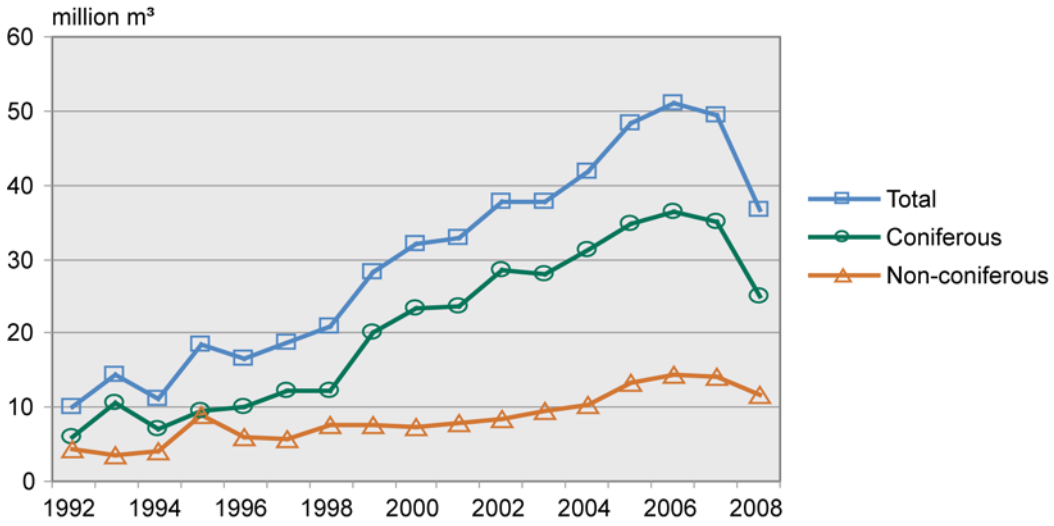

Fig. 2. Roundwood exports from Russia during 1992–2008 (Faostat, Unece).

The distribution of Russian roundwood exports in worldwide is rather unequal. Russian roundwood has been exported to over 50 countries. During the 2000's, the most important trading partner, measured by volumes, has been China (Fig. 3), which has replaced Japan as the most important destination of the Russian coniferous roundwood. In 1997, nearly half of the total exports of coniferous roundwood were directed to Japan which used mostly sawlogs for construction purposes (Mutanen et al. 2005). Since then, Japan's share of coniferous exports has decreased sharply even though the annual trading volumes have remained around 5 million cubic meters. At the same time, however, along with the economic development and growth China's need for raw materials has also been emphasised in global roundwood markets. According to the UN Comtrade database, China imported officially only half a million cubic meters of coniferous roundwood from Russia in 1997, while in 2008 the imported volumes were close to 18 million cubic meters. Totally, China has imported over 130 million cubic meters of coniferous roundwood from Russia during 1997–2008.

In coniferous roundwood trade, along with Japan and China other significant trading partners for Russia have been Finland, South-Korea, Sweden, Turkey and Norway. During 1997–2008 both Finland and Japan imported about 50 million cubic meters of coniferous roundwood from Russia. In 2000, the combined coniferous trade to China, Japan and Finland constituted about two third of the total exported volumes. In 2008, the combined share of these three countries was even higher. The combined share of other countries than those mentioned above is about 10 percent of coniferous industrial roundwood exports from Russia.

For non-coniferous industrial roundwood the most important trading partner has been Finland, as can be seen from Fig. 4. In 2000, over 70 percent of the total volumes of non-coniferous roundwood were traded to Finland. Other significant destination countries have been Sweden, China and Japan. During the 2000's, the export share of Finland has slowly diminished but still in 2008 over half of the total volumes of non-coniferous roundwood was traded to Finland. China has increased its share of trade whereas role of Sweden and Japan has been decreasing. The combined export share of other countries has been less than 5 percent.

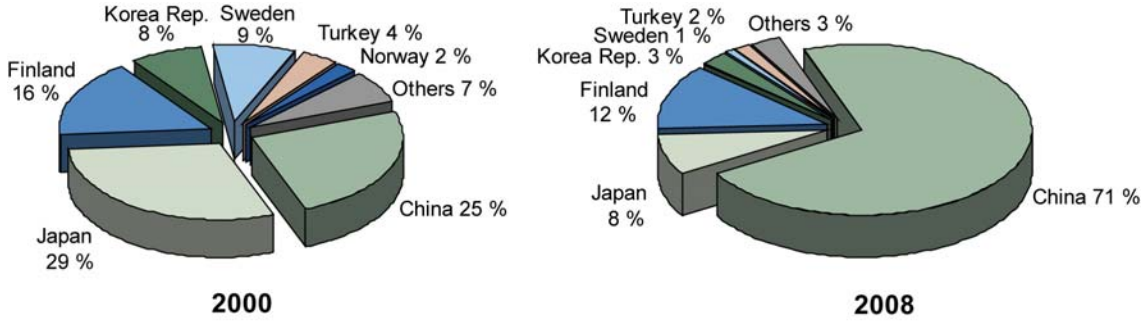

Fig. 3. Coniferous industrial roundwood exports from Russia in 2000 (23.3 milj. m^3) and 2008 (25 milj. m^3) (UN Comtrade).

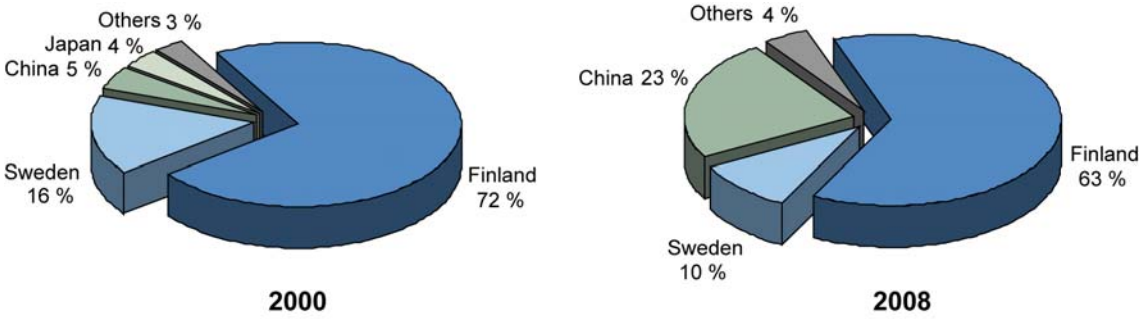

Fig. 4. Non-coniferous industrial roundwood exports from Russia in 2000 (7.4 milj. m^3) and 2008 (11.8 milj. m^3) (UN Comtrade).

2.2 Roundwood Trade to the European Union

It is evident that from the Western part of Russia most of the roundwood exports directs to the European Union area. Inside the EU, the Nordic countries as well as the Baltic States have been the main consumers of the Russian roundwood. As can be seen from Fig. 5, the total exports to the current EU27 area somewhat doubled between 1997 and 2006. The traded volumes of coniferous and non-coniferous roundwood to the EU area increased rather equally to each other, and the volumes were rather similar. Since 2007 the amount of exported roundwood, particularly coniferous, has started to decrease sharply mainly due to the higher customs duties and decreasing demand. It is also noteworthy that the shape of time-series of development of roundwood exports is closely related between EU27 and the euro area (EU15). Thus, only the difference between the levels of time-series reveal that the Eastern European countries with transition economies have imported and consumed only a small amount of Russian roundwood compared to the old EU countries.

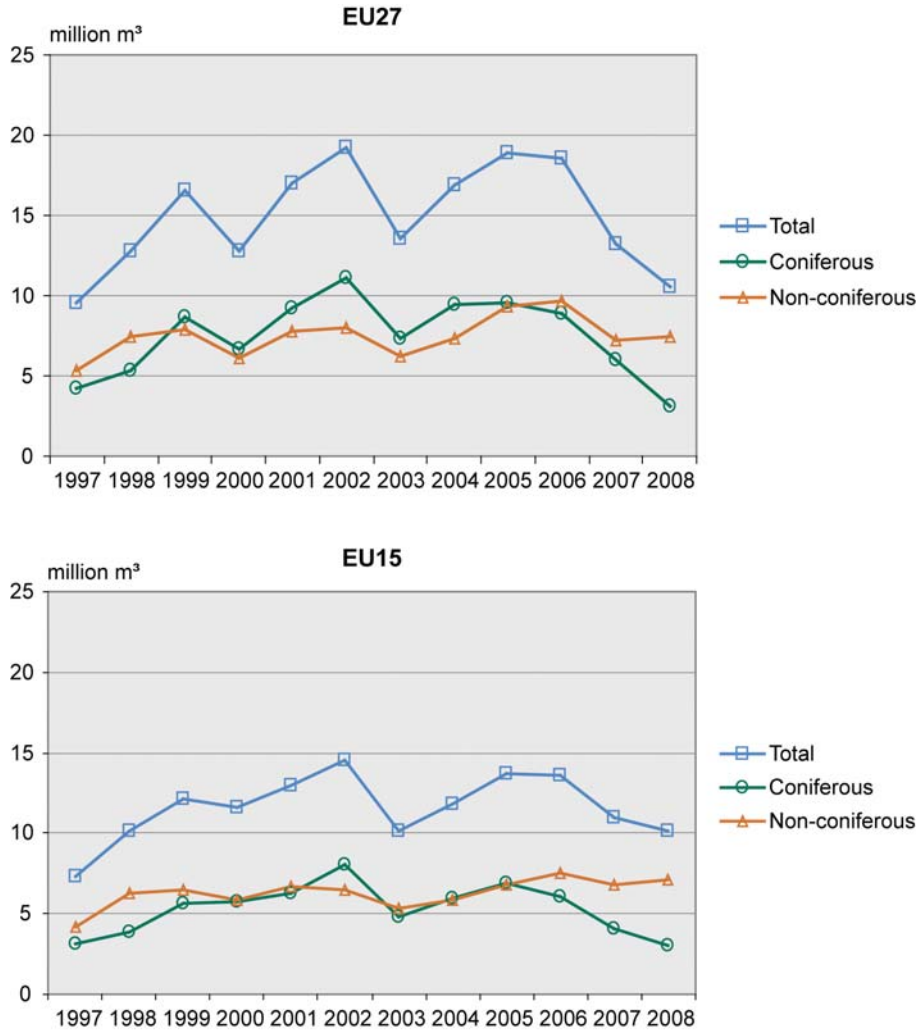

Fig. 5. Russian roundwood exports to EU27 (upper Fig.) and EU15 (lower Fig.) area, 1997–2008 (Faostat, Eurostat [1]).

[1] Years 2007 and 2008 were available only in Eurostat database which data differs from Faostat for earlier years. However, the two datasets were combined to show also the latest tendency.

While a statistics depicting only a single annual roundwood trade flow can give a slightly misleading picture of the long-run development of the roundwood exports from Russia, Table 1 presents the average annual coniferous and non-coniferous roundwood exports to the European Union. Clearly, Finland and Sweden have consumed most of the Russian roundwood.[2] On average, over 60 and 80 percent of the coniferous and non-coniferous volumes have directed to Finland, respectively. Sweden has consumed about 15 percent of both assortments. Also, with respect to their size, Estonia and Latvia have been important Russian coniferous roundwood importers. The shares of other countries are only marginal with some percents. However, these comparatively small shares of the total roundwood export volumes from Russia do not necessarily mean that the effect on national roundwood markets can be ignored or belittled.

Table 1. Annual average roundwood exports from Russia into EU27 during 1997–2006* (Faostat).

	Coniferous		Non-coniferous	
	m^3	share, %	m^3	share, %
Austria	148 731	1.85	11 775	0.16
Belgium	84 284	1.05	1 169	0.02
Bulgaria	1 617	0.02	97	0
Czech Republic	28 643	0.36	2 058	0.03
Cyprus	4 164	0.05	122	0
Denmark	12 069	0.15	111 937	0.16
Estonia	620 515	7.70	116 767	1.55
Finland	4 938 043	61.30	6 089 081	80.98
France	7 611	0.09	5 384	0.07
Germany	386 464	4.80	3 397	0.05
Greece	19 643	0.24	2 942	0.04
Hungary	169 545	2.10	215	0
Ireland	1 072	0.01	18	0
Italy	5 333	0.07	28 538	0.38
Latvia	196 338	2.44	79 867	1.06
Lithuania	29 102	0.36	13 932	0.19
Luxemburg	0	0	579	0.01
Malta	744	0.01	0	0
Netherlands	47 889	0.59	15	0
Poland	15 527	0.19	45 318	0.60
Portugal	458	0.01	1 395	0.02
Romania	16 973	0.21	157	0
Slovakia	9 125	0.11	8 748	0.12
Slovenia	127	0	78	0
Spain	7 405	0.09	1 244	0.02
Sweden	1 274 089	15.82	1 089 957	14.50
United Kingdom	30 622	0.38	4 587	0.06

* Faostat has not released the corresponding data for 2007–2008. While the total export volumes from Russia have sharply decreased after 2006, it is evident that the average roundwood exports to the destination countries are smaller for 1997–2008 compared to figures in the Table. However, it is unlikely that the percent shares have changed considerably.

[2] Roundwood trade inside the European Union is also considerable. See Tilli and Skutin (2004) and Viitanen et al. (2006), among others.

As illustrated in Fig. 6, coniferous roundwood trade from Russia into Europe in 2008 had the same pattern as the average annual long-time trade. Finland, Sweden and to some extent also the Baltic States have been the most important consumers of Russian coniferous roundwood when measured by volumes. It is also noteworthy, that outside the European Union Norway has imported coniferous roundwood annually close to 350 000 cubic meters on average in 1997–2006. However, Norway's annual trade has been rather fluctuating – for example, in 2004 and 2005 the traded volumes were 266 and 80 thousand cubic meters, respectively. After 2006, Norway has not imported any essential volumes from Russia.

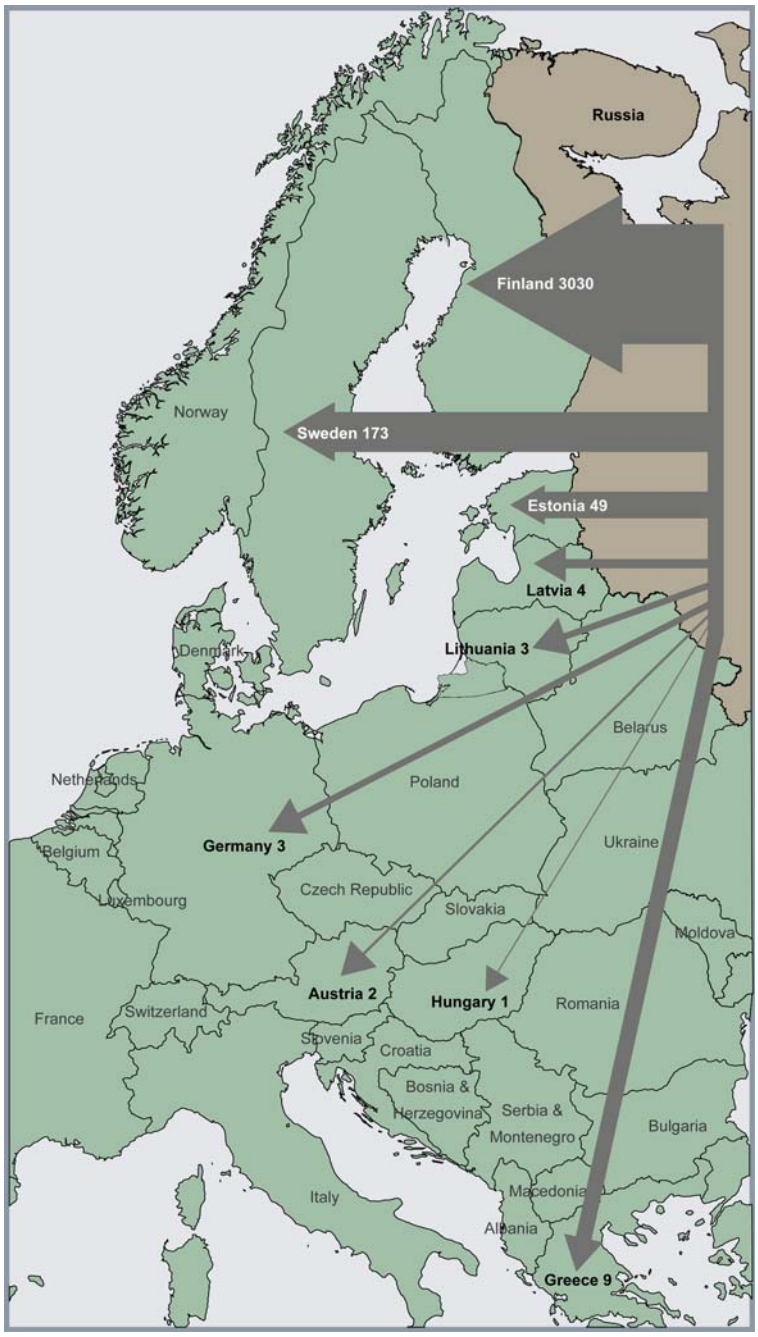

Fig. 6. Coniferous roundwood trade (1 000 m^3) from Russia into the European Union in 2008 (UN Comtrade).

The roundwood trade flows in Fig. 7 confirms the above discussion that Finland and Sweden are the most important destination countries of non-coniferous Russian roundwood. In 2008, majority of the non-coniferous roundwood (mainly birch) was directed to Finland. Sweden has also consumed about one and a half million cubic meters Russian roundwood. The trade volumes to other countries have been minimal with respect to Finland and Sweden till 2008, when export of non-coniferous roundwood to China exceeded two million cubic meters. However, even though the trade flows, for example, to Estonia and Latvia has been only few thousands of cubic meters, the importance and significance to local forest industry has been essential as will be discussed in the following Chapter.

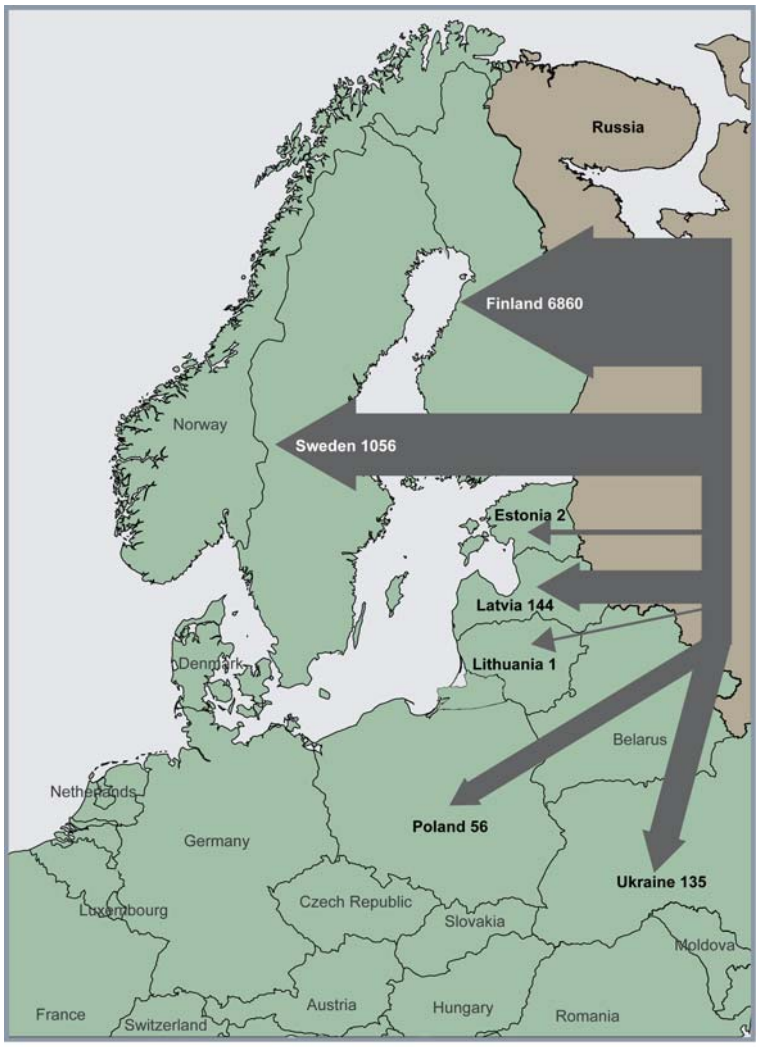

Fig. 7. Non-coniferous roundwood trade (1 000 m^3) from Russia into the European Union in 2008 (UN Comtrade).

3 Effects on Domestic Markets in Northern Europe

3.1 Finland

3.1.1 Roundwood Consumption and Removals

In Finland, the total use of industrial roundwood has increased from slightly less than 50 million cubic meters in 1992 to about 70 million cubic meters in 2008. As depicted in Fig. 8 until 1998 the increase of industrial roundwood use was mainly due to the increase of domestic removals while the total imports (including industrial roundwood, fuelwood, chips and wood residues) increased only modestly[3]. Since then, the increased wood consumption from about 65 to 75 million cubic meters in Finland has been based mainly on the roundwood imports. The record year of total use of roundwood as well as use of imported roundwood was 2006 while the use of domestic roundwood was in its highest in 2007[4]. The slowdown in roundwood consumption in 2005 was due to the labour market dispute in the paper industry. The economic slowdown and closure of capacity of forest industry in 2008 decreased the total use of industrial roundwood in Finland and thus resulted diminishing need for domestic and exported roundwood.

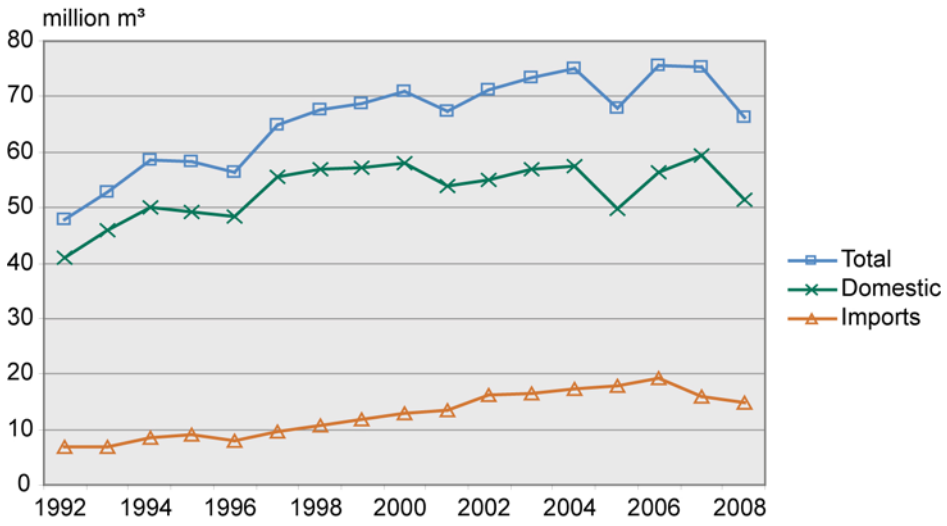

Fig. 8. Roundwood consumption and imports by forest industry in Finland, mill. m^3, 1992–2008 (Metinfo, Finnish Customs).

[3] While the annual domestic use and removals of roundwood in Finland are closely related to each other, the former is typically few million cubic meters more due to storages from previous years.

[4] One should note the distinction between roundwood imports and consumption of imported roundwood. The former was in its highest in 2005 while the all-time record year for the latter was 2006.

Table 2. Industrial roundwood removals by species in Finland 1992–2008, mill. m^3 (Metinfo).

	Sawlogs				Pulpwood				Total
	Pine	Spruce	Non-conif.*	*Total*	Pine	Spruce	Non-conif.*	*Total*	
1992	7.6	9.3	1.1	*18.0*	8.7	8.5	4.8	*22.0*	**40.0**
1993	8.3	10.6	1.0	*19.9*	8.7	8.6	4.5	*21.8*	**41.7**
1994	9.6	14.1	1.2	*24.9*	9.7	9.4	4.7	*23.8*	**48.7**
1995	9.7	13.8	1.2	*24.7*	10.7	9.9	5.4	*26.0*	**50.7**
1996	9.0	12.9	1.0	*22.9*	10.3	9.0	4.6	*23.9*	**46.8**
1997	10.3	15.4	1.3	*27.0*	10.8	10.0	5.1	*25.9*	**52.9**
1998	10.9	15.4	1.5	*27.8*	12.1	9.9	5.3	*27.3*	**55.1**
1999	10.4	15.6	1.3	*27.3*	12.5	10.0	5.5	*28.0*	**55.3**
2000	10.9	16.0	1.3	*28.2*	12.4	9.9	5.3	*27.6*	**55.8**
2001	10.1	14.0	1.3	*25.4*	12.3	9.9	5.6	*28.0*	**53.4**
2002	10.4	14.3	1.2	*25.9*	12.5	9.9	5.8	*28.2*	**54.1**
2003	11.3	14.4	1.1	*26.8*	12.4	9.8	6.0	*28.2*	**55.0**
2004	10.8	14.6	1.0	*26.4*	12.7	9.9	6.0	*28.6*	**55.0**
2005	9.8	13.4	1.1	*24.3*	12.5	9.6	6.1	*28.2*	**52.5**
2006	10.2	12.6	1.0	*23.8*	12.2	8.9	5.9	*27.0*	**50.8**
2007	12.3	14.5	1.2	*28.0*	13.7	9.4	6.6	*29.7*	**57.7**
2008	9.8	10.5	1.1	*21.4*	14.6	8.2	7.3	*30.1*	**51.5**

* The removals of non-coniferous assortments consist mostly of birch.

Distribution of removals between the assortments in Finland has been rather stable during the studied period (Table 2). Annually, coniferous species have accounted for 84–88 percent of total removals in Finland. Conversely, the proportion of non-coniferous species, particularly birch, has been 12–16 percent. Even though in 2008, an exceptional year with respect to whole 2000's, the share between logs and pulpwood accounted for 41 and 59 percent of the total removals, respectively, the share between logs and pulpwood has been rather equal and stable over the years. At the beginning and in the middle of 1990's, spruce has been the most important assortment by volumes with slightly less than half of the total removals. Pine and birch removals were about 40 and 13 percent, respectively. In 2008, the birch removals slightly increased to 16 percent. An interesting observation, however, is that the share between pine and spruce removals have turned as nearly opposite – 47 percent of the total removals consisted of pine while only 36 percent consisted of spruce in 2008. This development is mainly due to the increased amount of harvested pine pulpwood in first thinnings and the changing development of final demand in international sawnwood markets.

3.1.2 Roundwood Imports

The roundwood imports into Finland have three-folded since the beginning of the 1990s. Without the years 1995 and 1996 the annual import growth has been rather smooth until 2005, which was the record year of roundwood imports (Fig. 9). In 2005, the total imports consisting of industrial roundwood, chips, fuelwood and wood residue accounted for almost 21,5 million cubic meters of which the industrial roundwood consisted almost 18 million cubic meters. After the Soviet era, Russia has been the most significant roundwood trade partner for Finland. Consistently, over 80 percent of the total annual roundwood imports have originated from Russia. In 2005, the combined volume of coniferous and non-coniferous roundwood imports from Russia accounted almost 15 million cubic meters. However, during the recent few years

weather conditions have also been difficult in Russia, and all the planned winter fellings were not realized. Together with the increasing lack of economically profitable stands and increasing domestic demand for roundwood in Russia, it has resulted the share of Russian roundwood in imports to Finland slightly to decrease. In 2007, however, the share with respect to total roundwood imports was still 66 percent.[5]

In 2008, the roundwood imports from Russia remained at the previous year's level. The declaration by the Russian Federation, released as last as in November, that the fulfilment of the customs tariffs programme for roundwood exports was postponed by one year to the end of 2009, was not affecting the annual import volumes. In 2008, the total import volumes from Russia were 12 million cubic meters, of which the industrial roundwood was less than 10 million cubic meters. Russian roundwood consisted 59 percent with respect to total imports into Finland.

During the roundwood trade history with Russia, majority of the imports into Finland has consisted of birch, especially birch pulpwood. As can be seen from Fig. 10 and Table 3, the share of birch has varied from 50 to almost 90 percent of the total trade. The trading volumes have been, however, rather volatile over the years. The reason for high proportion of birch is that the Finnish forest industry's consumption of birch has been more than one third higher than maximum sustainable annual removals of birch in Finland. Thus, about half of the needed birch, especially birch pulpwood, has been imported (Finnish Forest Sector…2006, Ollonqvist and Viitanen 2004). As proved by Mutanen (2004), Russian birch pulpwood has complemented rather than substituted the domestic birch procurement and supply.

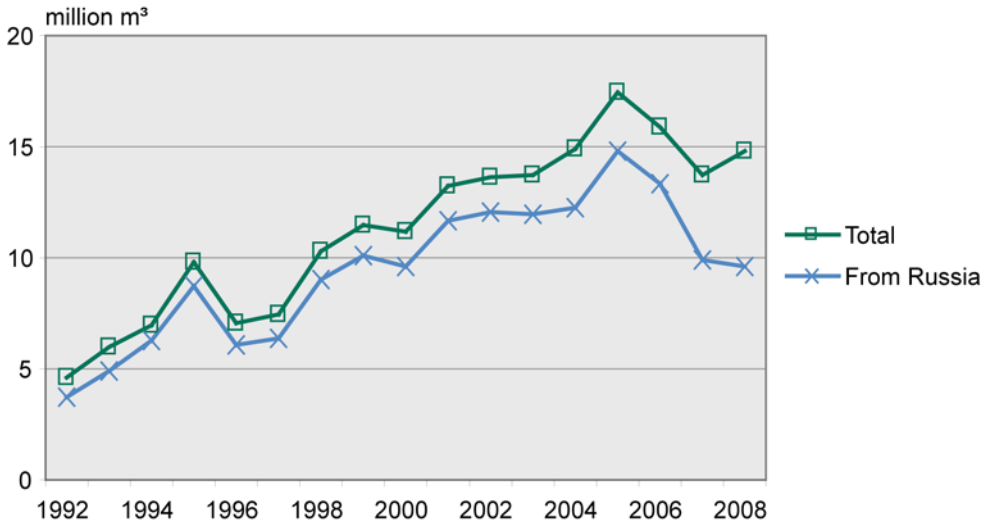

Fig. 9. Industrial roundwood import into Finland, mill. m^3 (Metinfo, Finnish Customs).

[5] The detailed expression of the development of roundwood trade between Finland and Russia can be found in Jutila (2009).

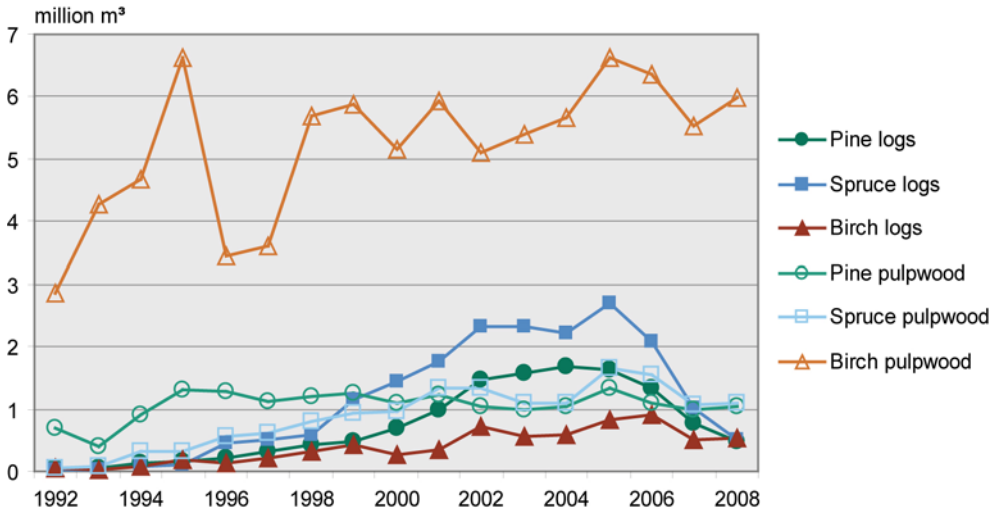

Fig. 10. Roundwood import from Russia into Finland by species, mill. m^3 (Metinfo, Finnish Customs).

In the early 1990's, the imports of pine pulpwood consisted about 15–20 percent of the total trade from Russia. Since then its' relative magnitude has decreased to about 10 percent even though the traded volumes have been rather stable over the years. The traded volumes of spruce, and especially spruce logs, have been increasing since the turn of the century. In 2005, spruce sawlogs were imported into Finland as much as 2.7 million cubic meters which accounted almost one fifth of the total roundwood trade from Russia. Also, the magnitude and proportions of the other assortments have slightly increased since the mid 1990's even though the total volumes have turned down since 2005.

Table 3. Shares of assortments of Russian roundwood imports into Finland during 1992–2008, % (Metinfo, Finnish Customs).

	Sawlogs			Pulpwood		
	Pine	Spruce	Birch	Pine	Spruce	Birch
1992	2	1	1	19	1	76
1993	1	1	1	8	2	87
1994	2	1	1	15	5	75
1995	2	1	2	15	4	76
1996	3	8	2	21	9	57
1997	5	8	3	17	10	57
1998	5	6	4	13	9	63
1999	5	11	4	12	9	59
2000	7	15	3	11	10	54
2001	9	15	3	11	12	50
2002	12	19	6	9	11	43
2003	13	20	5	8	9	45
2004	14	18	5	9	9	45
2005	11	18	6	9	11	45
2006	11	15	7	8	12	45
2007	8	10	5	10	11	56
2008	5	5	6	11	11	62

3.1.3 Import Value and Domestic Roadside Prices

The total value of industrial roundwood imports into Finland has almost tripled since 1996. However, the development has been different between the assortments. Along with the increase in coniferous logs' trade after the turn of decade, also the total value of trade slightly increased. Also, an interesting observation is that, even though the record in trade by volumes was in 2005, the value of trade was in its highest in 2008. In 2008, the total value of roundwood imports into Finland was 1079 million euros of which the value of industrial roundwood was 869 million euros. The value of trade from Russia accounted 65 percent of total industrial roundwood import value, that is, 564 million euros (Fig. 11). The values of Russian coniferous and non-coniferous roundwood imports were 181 and 383 million euros, respectively.

Along with the total roundwood volumes traded into Finland also the unit prices of different species affects the total value of roundwood trade. In Fig. 12 a comparison between the domestic roadside prices by species and Russian roundwood prices at the border is presented. As can be seen from the Figures, the prices have been closely connected with each other over the years. However, there are few observations which should be mentioned. First, the border prices of Russian roundwood have been more volatile than the domestic delivery prices[6]. Second, the domestic delivery prices have in general exceeded those of the border prices when considering pine and spruce logs, while in the case of birch and pine pulpwood the Russian roundwood prices have been higher in general. Third, in 2007 the general increase in prices, due to the increased demand in final markets and corresponding need for roundwood and difficulties

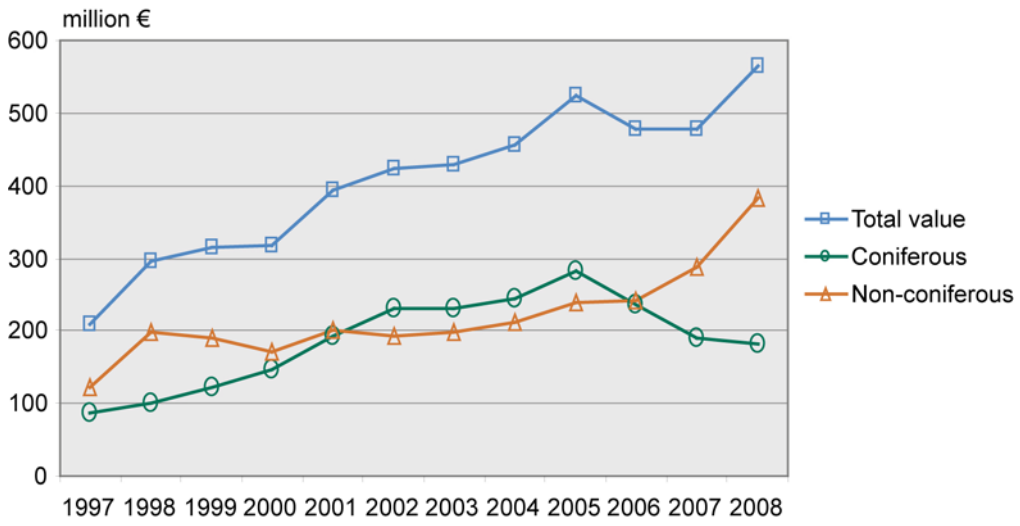

Fig. 11. Value of Russian roundwood import to Finland in 1997–2008, mill. € (Metinfo).

[6] See Mutanen and Toppinen (2007) for a technical analysis of price dynamics between Finnish delivery prices and Russian roundwood prices at the border.

to procure enough roundwood from domestic markets, was considerable higher for imported Russian roundwood (with the exceptions of coniferous logs) than for domestic roundwood. Generally, however, the economic explanation for the higher imported prices is that it is profitable for the industry to pay higher prices for marginal volumes[7].

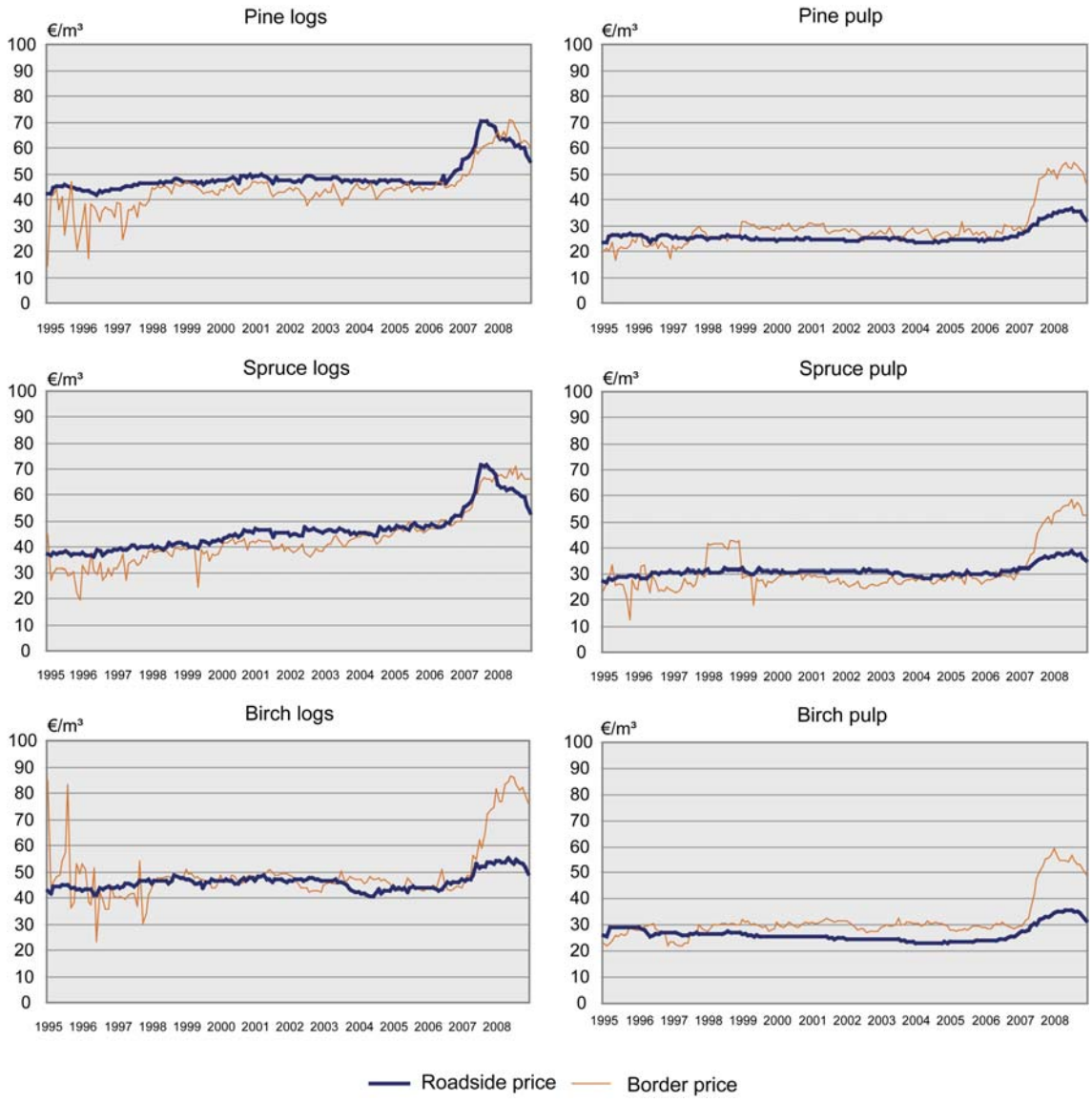

Fig. 12. Domestic roadside prices and border prices of Russian roundwood in 1995–2008, €/m³ (Metinfo, Finnish Customs.

[7] If Finnish forest industry would procure the import corresponding volumes of roundwood from domestic markets, according to the increased demand it should pay higher price not only for these extra amounts, but also for the whole domestic wood procurement.

3.2 Sweden

3.2.1 Roundwood Consumption and Removals

In Nordic countries, Sweden has traditionally played an important role in forestry issues and its relative share and importance on the European forest markets has been essential. During the last 15 years, industrial roundwood consumption by the Swedish forest industry has had a smooth positive trend. While in the middle of 1990's the consumption was close to 60 million cubic meters, in 2007 the corresponding amount was almost 75 million cubic meters (Fig. 13). The development of industrial roundwood removals has closely followed the increase in consumption. During 1993–2004, the annual industrial roundwood removals in Sweden have been in average 57 million cubic meters with slightly positive increasing trend during the period. However, as seen from Fig. 13, in January 2005 the storm 'Gudrun' felled about 75 million cubic meters of forest in Southern Sweden, mostly large sized spruce, and the total annual industrial removals were as high as 91 million cubic meters. Thus, the storm created a sudden increase in the supply in particular of spruce sawlogs and pulpwood (Toppinen & Viitanen 2005), and the followed increase in storages reflected in 2006 volumes of industrial removals, which were clearly less compared to removal volumes in previous years. In 2007, the magnitude of industrial roundwood removals normalised in its long run trend to about 66.5 million cubic meters. The distinction between industrial consumption of roundwood and removals has been compensated by using roundwood storages (especially in 2006) or imported roundwood volumes.

In Scandinavia coniferous species dominate the removals and Sweden is not an exception. Most of the industrial removals accounted for coniferous species, and non-coniferous assortments create only a small fraction of total removals (Table 4.). An interesting note concerning the development of the total removals is, however, that the increase in total removals since the mid 1990's have been based on the increase of coniferous fellings while the removals of non-coniferous species as well as import volumes have been rather stable.

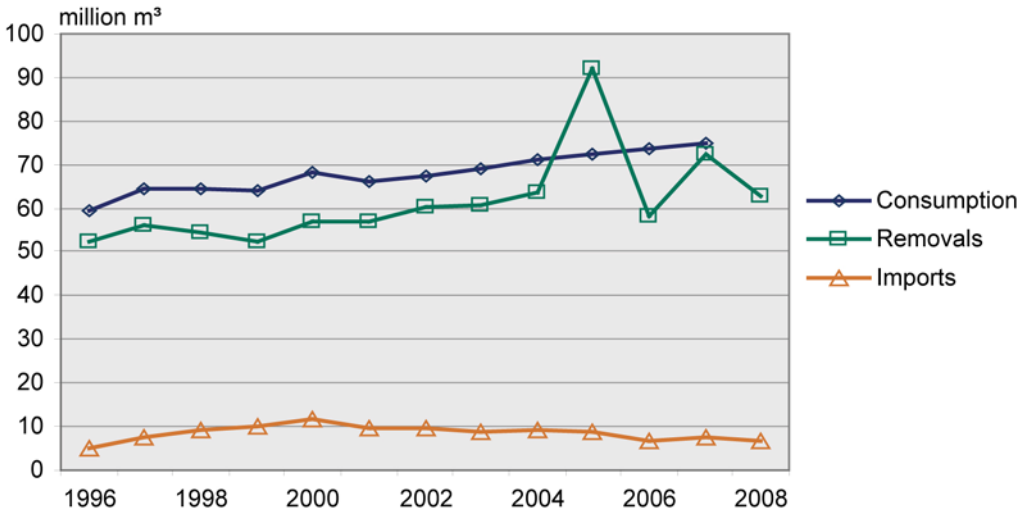

Fig. 13. Industrial roundwood consumption, removals and imports 1996–2008, mill. m^3 (Skogsstyrelsen).

Table 4. Industrial roundwood removals in Sweden by assortments, mill. m^3. 1996–2008 (Skogsstyrelsen).

	Coniferous			Non-coniferous			Total
	Logs	Pulp	Total	Logs	Pulp	Total	
1996	30.2	18.0	48.2	0.4	3.4	3.8	52.0
1997	33.7	18.3	52.0	0.4	3.5	3.9	55.9
1998	31.5	18.8	50.3	0.5	3.1	3.6	53.8
1999	30.3	18.9	49.2	0.5	2.6	3.1	52.3
2000	32.7	22.3	55.0	0.4	3.0	3.4	58.4
2001	32.7	20.8	53.5	0.5	2.8	3.3	56.8
2002	33.5	23.3	56.8	0.3	3.1	3.4	60.2
2003	35.0	22.2	57.2	0.5	3.0	3.5	60.7
2004	34.9	22.5	57.4	0.5	3.0	3.5	60.9
2005	57.7	29.2	86.9	0.5	3.8	4.3	91.2
2006	28.1	24.7	52.8	0.2	2.6	2.8	55.6
2007	39.8	22.6	62.4	0.2	3.9	4.1	66.5
2008	31.8	27.9	59.7	0.2	4.3	4.5	64.1

3.2.2 Roundwood Imports

As depicted in Figures 13 and 14, the total annual volumes of imported roundwood into Sweden have not been as volatile as those to Finland during the last 15 years. Also, the magnitude and relative importance of imports with respect to total domestic industrial roundwood use remains much lower compared to Finland. In 1996, the total industrial roundwood imports accounted for about 5 million cubic meters. With the exception of 2000, which was the record year with over 11 million cubic meters, the annual roundwood imports have been around 9 million cubic meters until 2006 when the traded volumes decreased to about 6.6 million cubic meters due to the increased domestic roundwood storages and supply. In 2007, along with the boom in final products markets and, especially, in sawnwood markets, the demand for roundwood increased in Europe and the imported volumes into Sweden increased. In 2008, the economic slowdown diminished again the need for imported roundwood.

Sweden has imported most of the roundwood from neighbouring countries, the Baltic Sea region and Russia. The share of Russia in the total roundwood imports into Sweden has been about quarter. During the turn of the decade, the share was momentarily almost one third of the total trade, but since then the share has gradually decreased. In 2008, Russian roundwood constituted slightly less than one fifth of the total roundwood imports into Sweden.

Contrary to the Finnish roundwood import history, Sweden has also imported remarkable amounts of coniferous roundwood from Russia in addition to non-coniferous trade. In average, about half of the total industrial roundwood imports from Russia into Sweden have consisted of coniferous roundwood. The share between coniferous and non-coniferous imports from Russia has, however, changed considerably during the last 15 years. Until 1998, before the devaluation of the Russian rouble, non-coniferous wood (mainly birch pulp) was dominating the roundwood imports from Russia to Sweden. Since then, coniferous imports was slightly dominating until 2005, which was the record year of coniferous removals due to the storm damages in Southern Sweden, the import share of coniferous and non-coniferous trade from Russia turned again opposite.

In general, Swedish industrial roundwood imports by assortments have not been significantly dominated by the Russian roundwood. Only about 10 and less than 20 percent of the total imported pine pulpwood and sawlogs originate from Russia, respectively (Table 5). The share of

Russian birch pulpwood has been around one third of the total birch pulpwood imports. Even though the share of Russian spruce sawlogs has been decreasing during the recent years, it still accounts about half of the total spruce sawlogs imports.

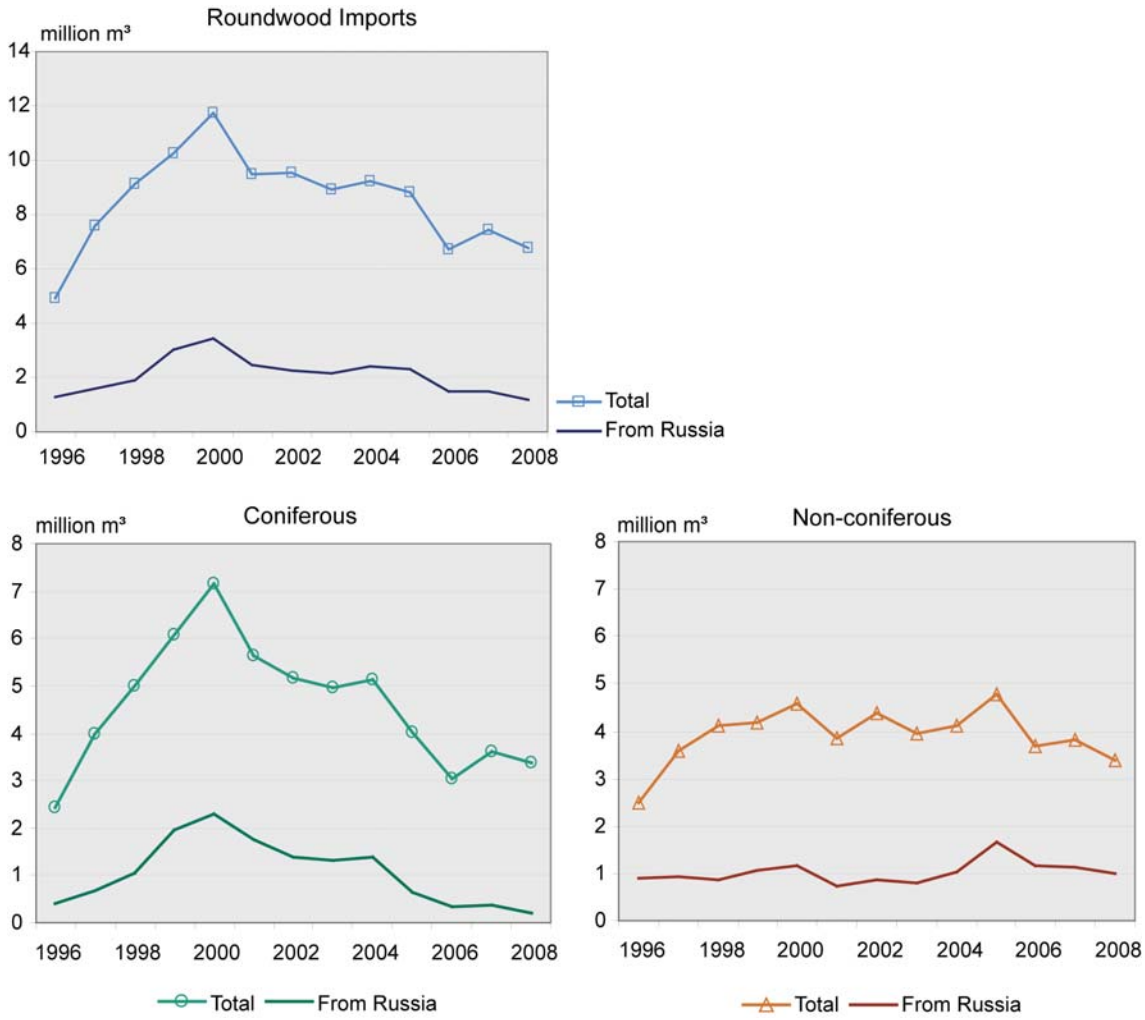

Fig. 14. Total roundwood imports and imports from Russia in 1996–2008, mill. m³ (Skogsstyrelsen).

Table 5. Share of Russian roundwood of the total imports in 2002–2008*, % (Statistics Sweden).

	Sawlogs			Pulpwood			Other
	Pine	Spruce	Other conif.	Pine	Spruce	Birch	
2002	33	64	6	11	14	23	33
2003	25	76	55	9	11	23	25
2004	19	77	0	9	16	28	19
2005	9	69	22	8	5	42	9
2006	12	67	0	1	6	38	12
2007	14	46	33	5	5	34	14
2008	5	20	0	5	3	35	5

* Until 2002 roundwood imports were classified mainly between coniferous and non-coniferous imports, and not any exact assortment specific data exists. Category other includes, for example, imports of poles and tropical timber, beech and oak.

3.2.3 Import Value and Domestic Roadside Prices

Development of the total import value of roundwood typically follows closely to the pattern of total volumes of imported roundwood. As seen from Fig. 15, the total value of imported roundwood into Sweden increased along with the growing volumes up to the 2000, the record year of imports. Since then, the total annual import value stabilised around 400 million euros until 2006 the value collapsed due to the decreasing import volumes. In 2007, the total roundwood trade value again increased not only due to the increased import volumes but also because of increased unit values of imports.

The value of Russian roundwood imports follows closely to development of the total value of wood import. Similar structure can also be observed in coniferous and non-coniferous trade from Russia with respect to the total imports (Fig. 16) even though the value of Russian non-coniferous imports has fluctuated more smoothly with respect to total value of non-coniferous trade, which has increased quite rapidly after 2000. In 2008, the total import value of non-coniferous trade was 242 million euros constituting about 55 percent of total value of industrial roundwood import. There is one interesting observation between the values, however. While the value of non-coniferous trade from Russia has been rather stable around 40 million euros until 2005, the value of coniferous Russian imports has fluctuated more widely.

When comparing import prices of the Russian roundwood with Swedish roadside prices by species, four observations arise. First, the price gap between import prices from Russia and domestic roadside prices have been about 15–20 euros depending on species (Fig. 17). Second, the roadside prices in Sweden have been rather stable since the mid 1990's until the recent years. Third, the excess supply of roundwood due to the storm damages in 2005 in Southern Sweden increased momentarily the price gap against import prices. Finally, in 2007 the increased demand for roundwood due to the high demand in the final markets and poor felling conditions reflected the Russian import prices to increase more sharply than domestic roadside prices.

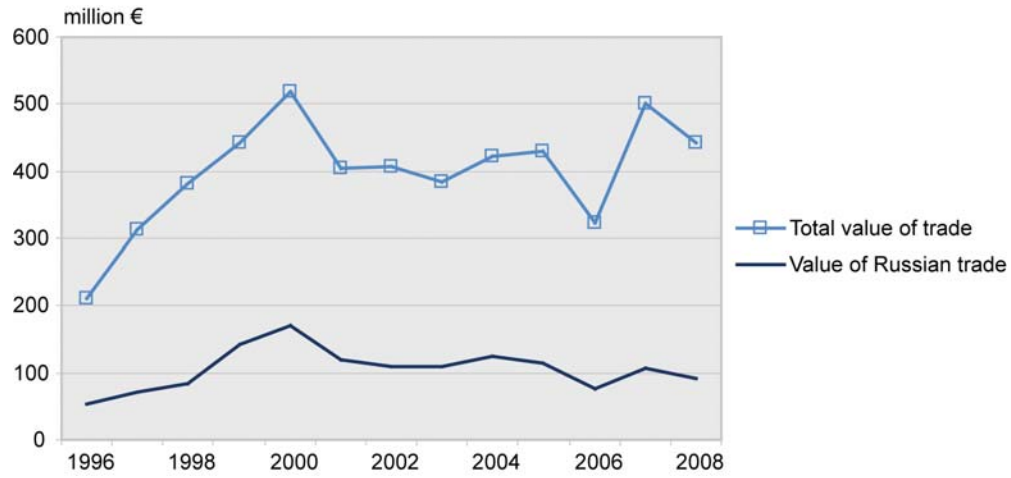

Fig. 15. Value of industrial roundwood trade into Sweden in 1996–2008, mill. € (Skogsstyrelsen).

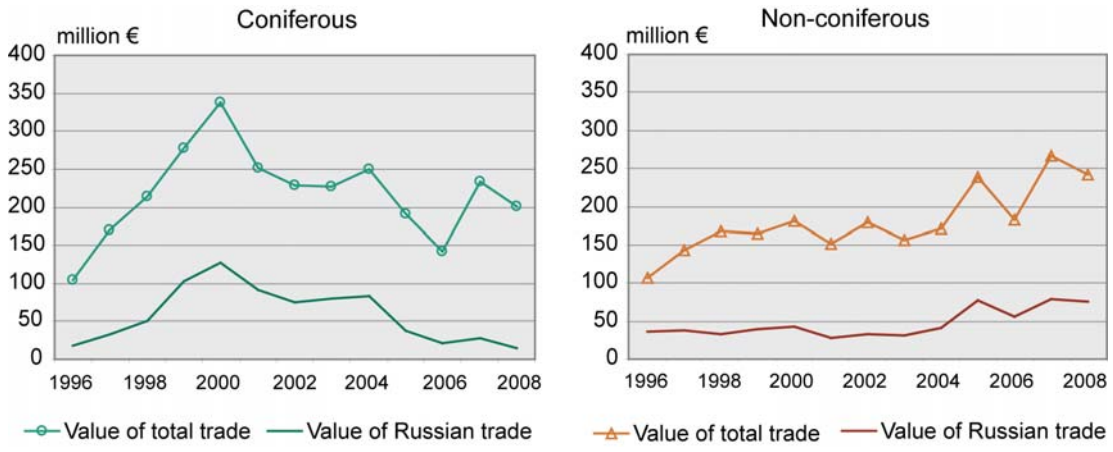

Fig. 16. Value of coniferous and non-coniferous industrial roundwood trade into Sweden, mill. € (Skogsstyrelsen).

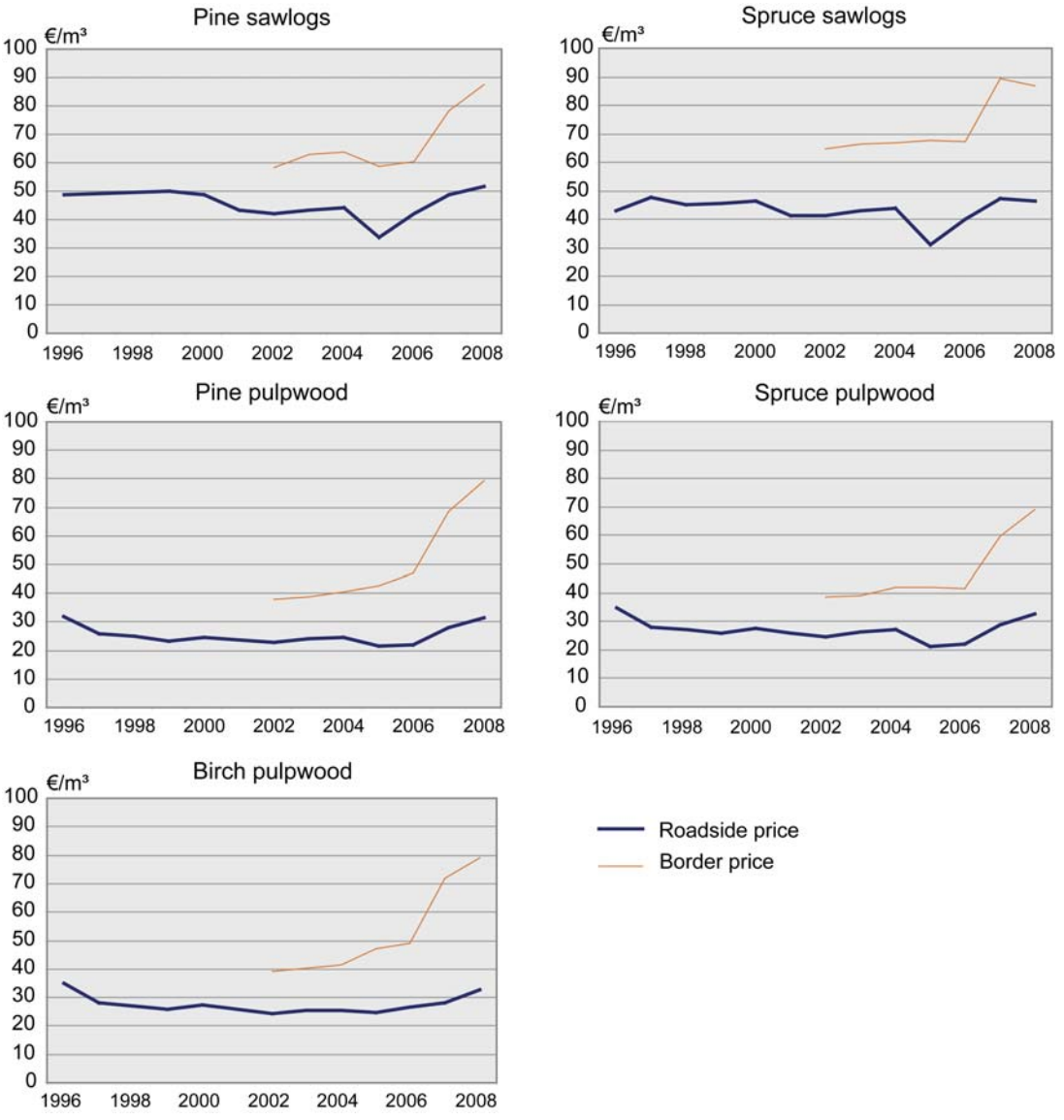

Fig. 17. Roadside prices in Sweden and Russian import prices by species in 1996–2008, €/m^3 (Skogsstyrelsen).

3.3 Norway

With respect to its eastern neighbours Norway's removals have been rather small due to its geographic location and mountainous terrain. Majority of the removals have concentrated in southern Norway. Even though the direct comparison with Sweden and Finland is not justifiable, the annual total removals have still been significant. During the studied period, the annual removals have been around 7–8 million cubic meters (Fig. 18). At the same time, the total import volumes have been around 2–3 million cubic meters constituting about third of the total roundwood use in Norway. This import intensity is somewhat higher compared to Sweden and Finland, and emphasises the significance of imports in roundwood use in Norway. It is also noteworthy, that the coniferous assortments dominate both the industrial removals in Norway and roundwood imports (Table 6). Slightly over half of the removals are coniferous logs, while slightly less than half are consisted of coniferous pulpwood. Non-coniferous fellings have been only marginal.

Even though the roundwood imports into Norway as a whole have been an essential part of industrial roundwood consumption, Russian roundwood has not played as important role. Only about 20 percent of the total imports have originated from Russia. Evidently, this low share is explained by the high trading costs from Russia. An interesting observation is, however, that according to statistics the roundwood trade from Russia into Norway have consisted mostly of coniferous species. On average, about fifth of the coniferous imports have originated from Russia. The corresponding share in non-coniferous trade has been only few percents. After 2006, the trade from Russia has terminated.

Comparison of roundwood import prices and domestic roadside prices in Norway is not straightforward. First, imported roundwood prices are not compiled and separated between the species. Only aggregated data of coniferous and non-coniferous total imports, as well as imports from Russia, and corresponding prices are available. Second, import volumes of non-coniferous roundwood were rather small and cover only the time period of 1999–2006. Therefore, any strict conclusion between the interaction of domestic and import prices cannot be made.

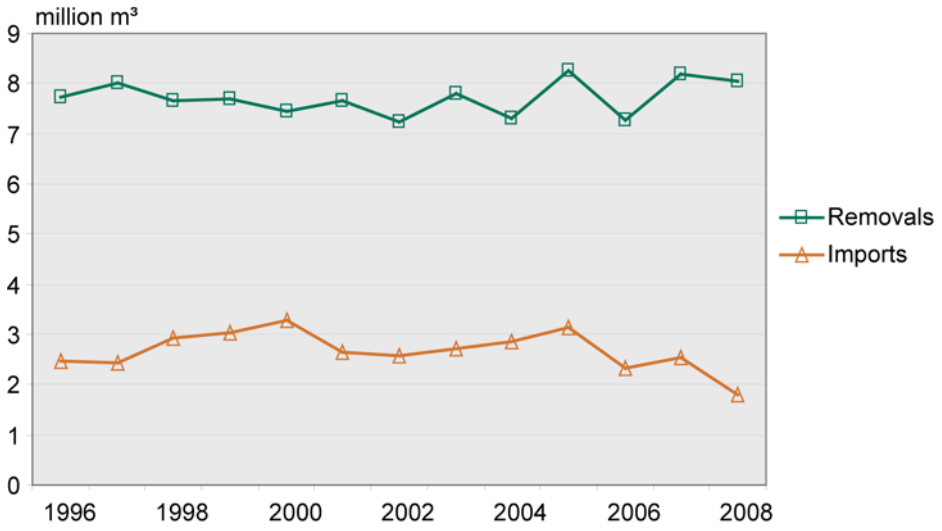

Fig. 18. Industrial roundwood removals and imports into Norway in 1996–2008, mill. m³ (Faostat, Statistics Norway).

Table 6. Shares of assortments in industrial roundwood removals in Norway during 1996–2008, % (Statistics Norway).

	Coniferous		Non-coniferous	
	Logs	Pulpwood	Logs	Pulpwood
1996	50.6	46.6	0.2	2.6
1997	55.2	42.8	0.2	1.9
1998	52.7	45.2	0.2	2.0
1999	53.4	45.3	0.1	1.2
2000	53.7	45.5	0.1	0.7
2001	53.8	45.5	0.1	0.6
2002	53.4	45.8	0.1	0.7
2003	47.0	52.4	0.1	0.5
2004	52.8	46.6	0.1	0.6
2005	50.5	48.7	0.1	0.7
2006	49.3	49.8	0.1	0.9
2007	51.4	47.7	0.0	0.9
2008	47.5	51.4	0.1	1.0

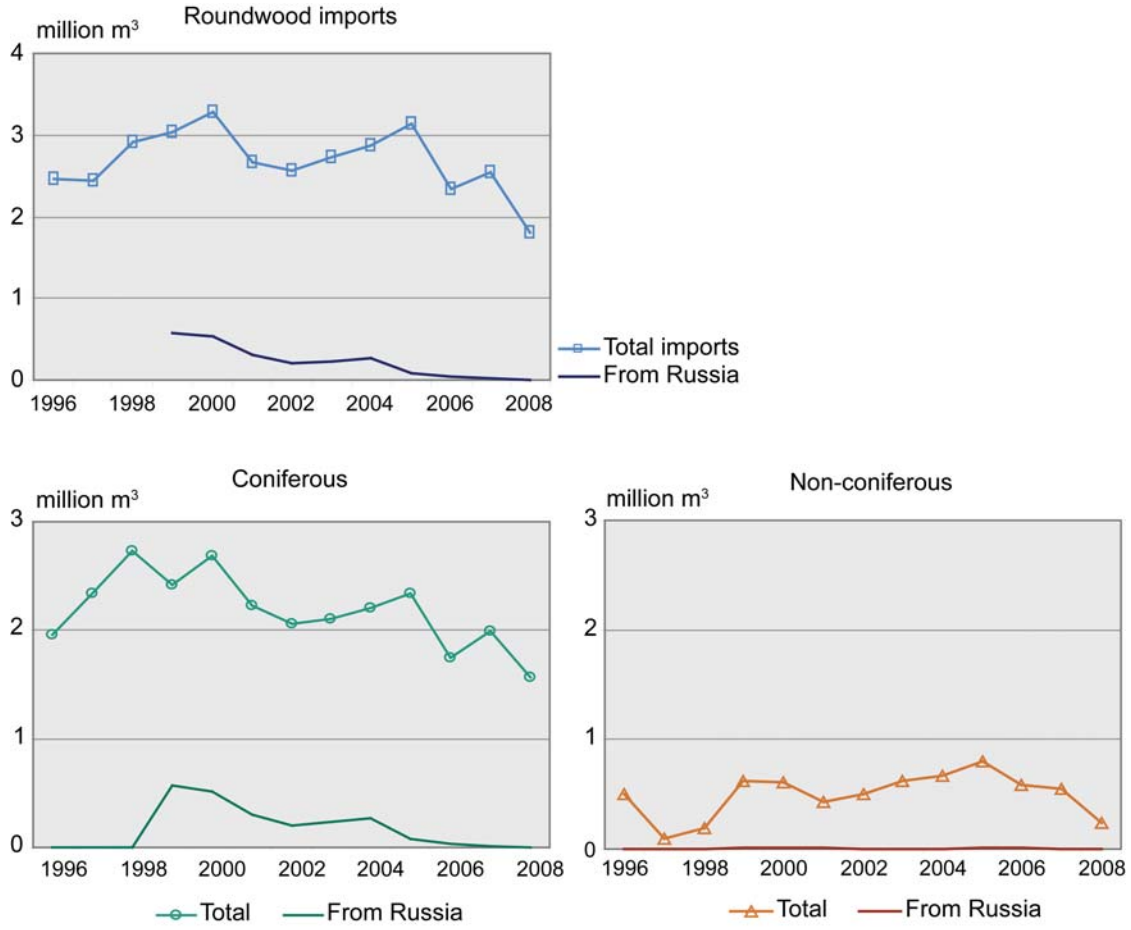

Fig. 19. Roundwood imports into Norway in 1996–2008, mill. m³ (Faostat, Statistics Norway).

According to the time series given in Fig. 20, the unit prices of imported coniferous roundwood from Russia have clearly exceeded those of the domestic coniferous prices. Also, the import unit prices of coniferous roundwood have been significantly more volatile than the domestic prices in Norway. The unit prices of Russian non-coniferous imports have had a downward trend after 2001. Unfortunately, the lack of data prevents any detailed comparison with the domestic prices.

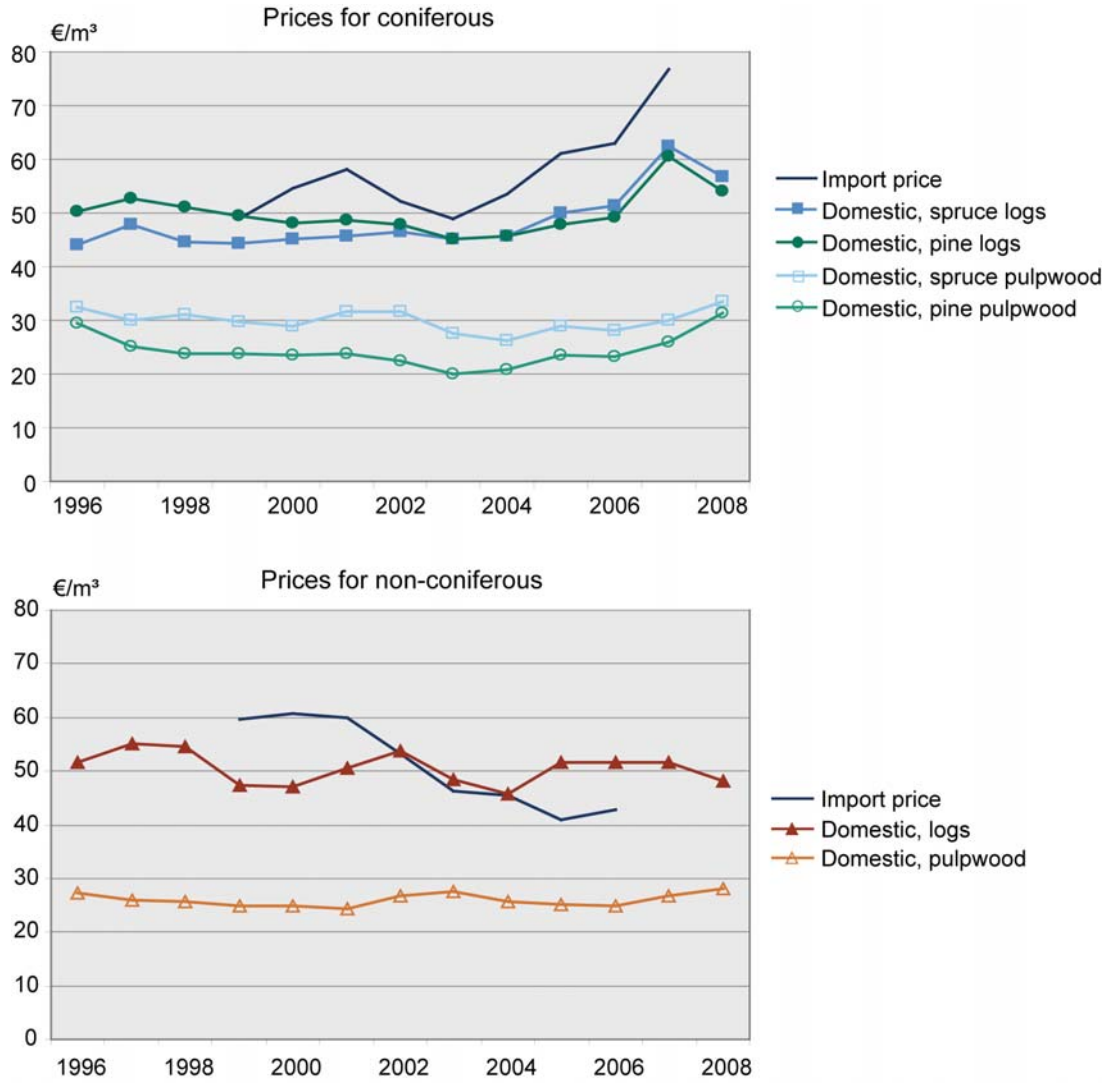

Fig. 20. Domestic average roundwood prices in Norway and import prices from Russia in 1996–2008, €/m^3 (Statistics Norway).

3.4 Baltic States

After the declarations of independence in the beginning of 1990's, major changes have taken place concerning the forest sectors in Estonia, Latvia and Lithuania. The forests, which were under state governance during the Soviet era, have been partly privatised, and fellings, wood use and foreign trade have all increased significantly. Along with the substantial forest investments to the region, the rapid international integration of Estonia, Latvia and Lithuania and the international nature of roundwood procurement by the major forest industry

corporations have been key factors in integration of national roundwood markets throughout the entire Baltic Sea region (Toppinen & Viitanen, 2005, Ollonqvist et al. 2006). An interesting phenomenon in the Baltic States is also that while they have only limited possibilities to utilise pulpwood in domestic plants, most of the harvested pulpwood is exported to abroad, mostly to Sweden and Finland.

The forest sectors in the Baltic States are rather similar in their size. In Estonia, forest land area is about 4,2 million hectares while the corresponding areas in both Lithuania and Latvia are about 6,2 million hectares. Also, the growing stock volumes on the forest land are closely similar in size. In Estonia, the total growing stock volume is about 450 million cubic meters while in Lithuania and Latvia, it is about 400 and 570 million cubic meters, respectively (Finnish Statistical… 2008). However, composition of tree species differs slightly in the Baltic States. In Estonia, perceptually coniferous species dominate while in Lithuania and Latvia, non-coniferous species such as aspen and birch are more common.

3.4.1 Roundwood Removals

The net annual increment in the forests available for wood supply is 5.3, 5.4 and 5.8 million cubic meters in Estonia, Lithuania and Latvia, respectively (Metinfo). In 2007, the total removals (including also fuelwood) in the Baltic States were 24.1 million cubic meters, while in 2008 the total removals were decreased to 19.2 million cubic meters. While similar fraction between the annual removals and increments has occurred during the last 10 years, the forest stock has slightly decreased in all Baltic countries. Especially, in Latvia and Estonia the harvesting volumes have exceeded the net annual increment available for wood supply (see also Tilli and Skutin 2004). During 2000's, Latvia, for example, has harvested almost doubled that of the annual increment (Fig. 21).

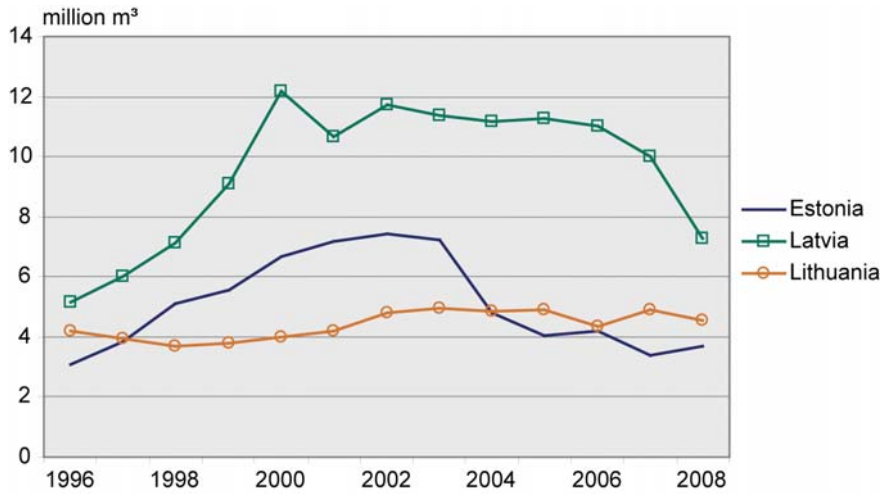

Fig. 21. Industrial roundwood removals in the Baltic States in 1996–2008, mill. m³ (Unece).

Even though the structure and wood resources have been rather similar, the utilisation of forests and development of the industrial removals in the Baltic States have been different. Total industrial roundwood removals have increased quite rapidly in 1990`s but after 2000 the growth rate has stagnated. Also, there have been slight fluctuations in distribution of industrial roundwood removals in the Baltic Sea countries. As can be seen from Fig. 21, the removals in Lithuania have been rather stable and slightly over 4 million cubic meters per year. After the mid 1990's, annual industrial removals in Estonia increased rather steadily until 2002 they decreased sharply to the level of less than 5 million cubic meters. Latvia has exploited its forest resources most intensively. While the total fellings were even less than in Estonia and Lithuania in the mid of 1990's, the industrial removals increased sharply to the level of 11 million cubic meters which is twice higher than the annual increment in Latvia.

The industrial removals by assortments in the Baltic States have mainly followed the same pattern as the total removals. There are, however, some exceptions as can be seen from Fig. 22. The most intensive and fluctuating fellings concerning coniferous pulpwood have occurred in Estonia. After the sharp increase and peak in 2001, the removal volume has decreased to slightly over half a million cubic meters. The annual fellings of non-coniferous logs have been extremely intensive in Latvia in 2003–2004.

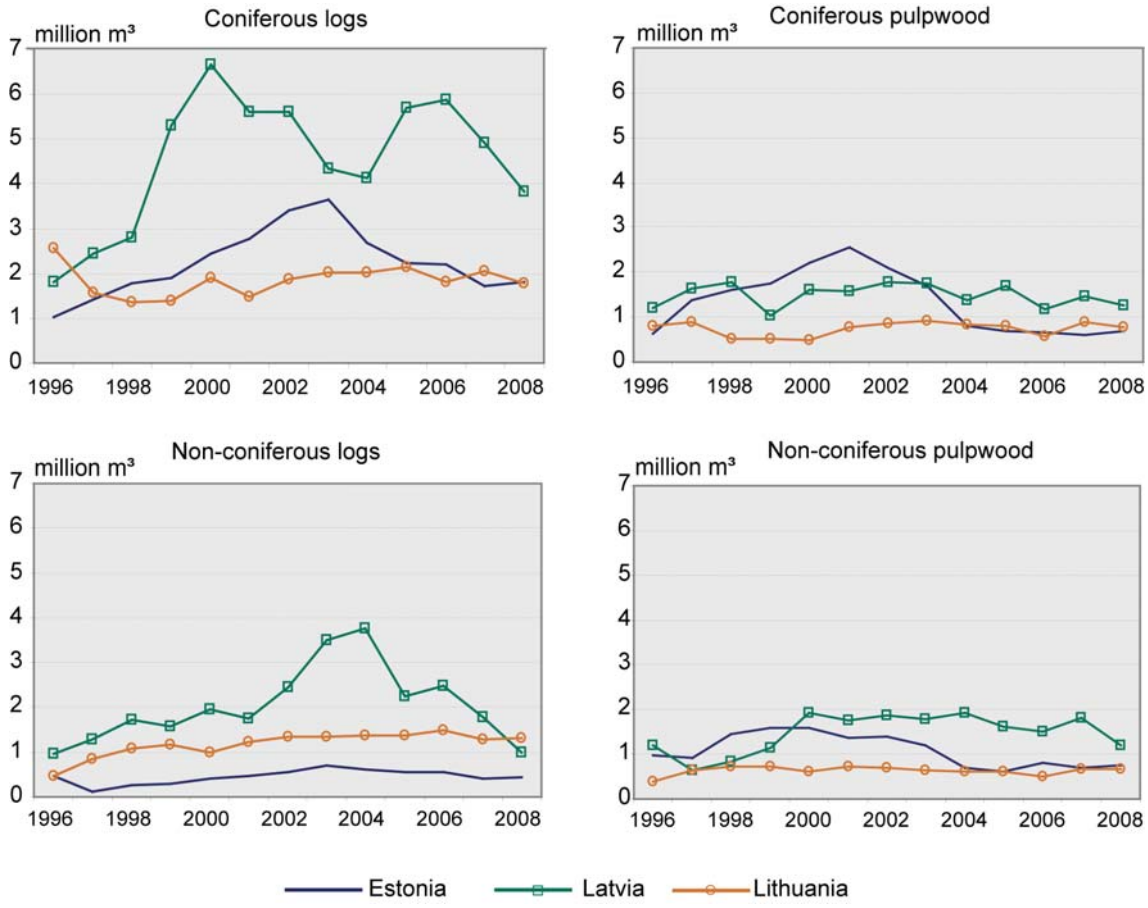

Fig. 22. Industrial roundwood removals in the Baltic States by assortments in 1996–2008, mill. m³ (Unece).

3.4.2 Roundwood Imports

As was illustrated above, two special observations among others raised concerning the forest sectors in the Baltic States. First, the annual industrial removals exceeded the annual increment of the forests. Second, the absence of pulp and paper industry which consumes pulpwood is a special feature for all countries. Thus, both of these facts imply that foreign trade of roundwood is important for all the Baltic States.

After the slow growth years in the mid of 1990's, the total industrial roundwood imports into the Baltic States has increased considerably (Fig. 23). Especially, after 2000 imports have increased rather steeply into Estonia and Latvia while imports into Lithuania have increased only moderately. In 2006, the total industrial roundwood import volume into the Baltic States was 3.2 million cubic meters while the corresponding magnitude in 1996 was only about 0.2 million cubic meters.

Along with the increased roundwood import volumes into the Baltic States, the distribution of imported species between coniferous and non-coniferous assortments as a total has remained rather stable. About one third of the total industrial roundwood import volumes have consisted of non-coniferous species (mainly birch). In 1996 and 2007, the shares of coniferous imports were 67 and 72 percent, respectively. However, the country-specific comparison reveals some differences (Fig. 24). Even though the developments of roundwood imports into Estonia and Latvia have alike patterns, Lithuania has had a slightly different development. Both the coniferous and non-coniferous import volumes into Lithuania have been only a fraction of total imported volumes into Baltic. Also, contrary to Estonia and Latvia the import volumes into Lithuania have not increased remarkable over time. All of these issues are due to the structure of forest sector and industry in Lithuania (Ollonqvist et al. 2006).

As can be observed from Figures 21, 23 and 24, forest industry in Estonia has been most dependent on Russian roundwood. In 2007, coniferous imports constituted about 22 percent of the total industrial roundwood use in Estonia. Russian coniferous roundwood, on the other hand, constituted about 82 percent of the total coniferous imports. The corresponding shares concerning non-coniferous roundwood were 3 and 94 percents, respectively.

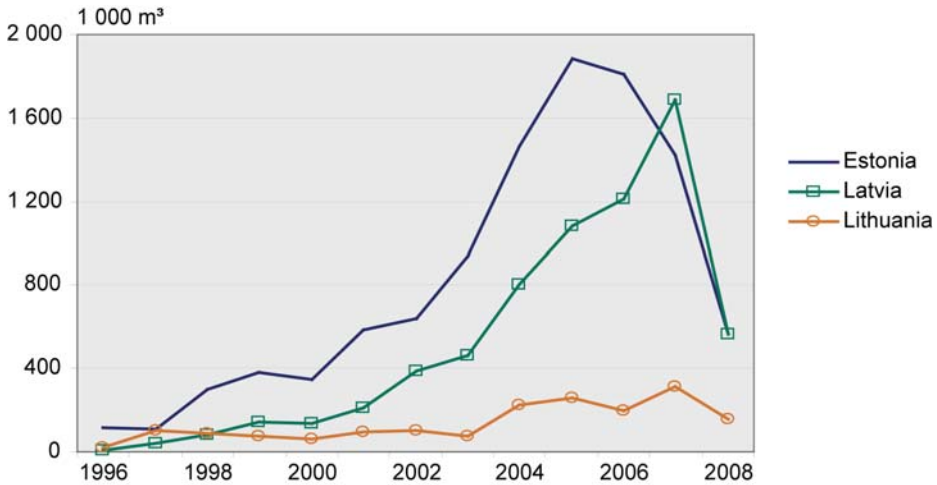

Fig. 23. Industrial roundwood imports into the Baltic States in 1996–2008, 1 000 m³ (Faostat, Unece).

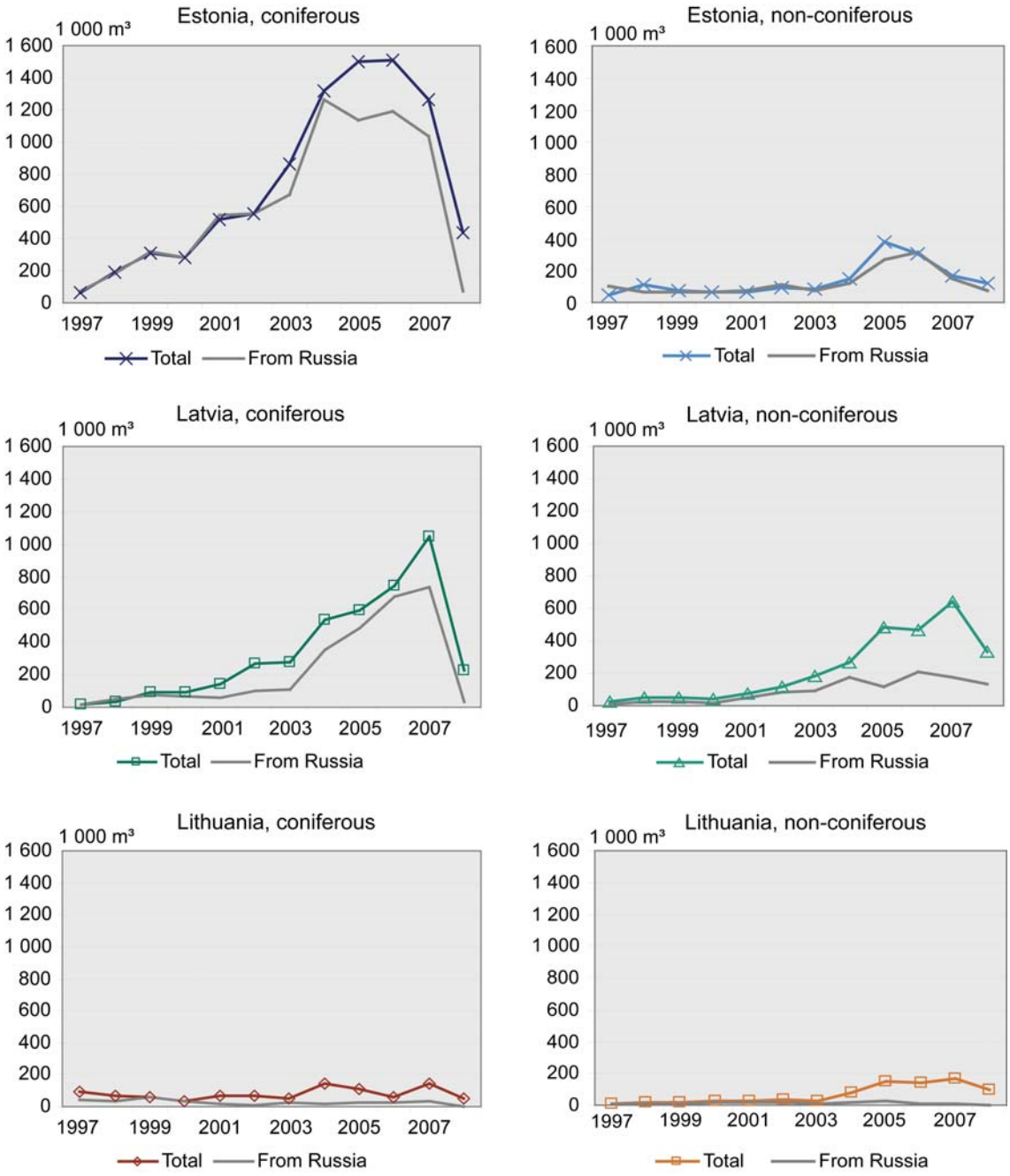

Fig. 24. Total industrial roundwood imports into the Baltic States by assortments in 1997–2008, 1 000 m³ (Faostat, Unece, Eurostat).

3.4.3 Import Prices and Domestic Roadside Prices

Along with the increased import volumes into the Baltic States also the value of the roundwood trade has increased during the studied period. However, as mentioned above, the special feature in the Baltic States is the absence of pulp and paper industry. Therefore, the annual and, especially, monthly volumes of imported pulpwood from Russia have been marginal, and it is not meaningful to compare the imported pulpwood prices with respect to domestic pulpwood prices in the roadside. Although a part of the imported pulpwood into the Baltic States is consumed in construction board industry, most of it is typically resold to Sweden or Finland, or used for other purposes than pulp processing, such as fuel wood.

Fig. 25 depicts the border prices of imported Russian logs with respect to domestic roadside prices in state forests in Estonia. Along with the increasing prices over time, two special features arise between the domestic roadside and border prices. First, according to the figures, it seems that the domestic roadside prices have been higher on average than the import prices. Also, the border prices, especially in the case of pine logs, have followed the domestic prices with some months lags. Second, without any statistical tests, the domestic roadside prices seem to have been slightly more volatile.

Unfortunately, the corresponding comparisons between the import and domestic roadside prices in Lithuania and Latvia are not possible to implement. Even though the domestic roadside prices in state forests in Lithuania are well documented since 2002, the small amounts of imported roundwood do not give any reliable basis to assess development of the prices over time. In many months some assortments such as pine logs are not imported at all. In Latvia, on the other hand, the imported volumes and the corresponding unit prices are well documented, but lack of domestic roadside prices prevents the comparison.

In spite of the lack of data, Fig. 26 presents the development of imported unit prices of coniferous logs into Latvia and domestic roadside prices in Lithuania, respectively. The development of prices seems to follow the same pattern as in Finland and Estonia. Since 2002, the prices have had a slightly increasing trend until the boom in final products markets, and especially in sawn wood markets, which constituted high demand and shortage for logs and the corresponding increase in prices in late 2006 and 2007. In 2008, the prices have had decreasing trend due to the deteriorating circumstances in final markets.

An interesting observation concerning the price development of birch logs between domestic and import prices is that even though the domestic price in Estonia jumped upwards in September 2007, the level hereafter has been rather stable (Fig. 27). The import price of Russian birch logs, on the other hand, has increased sharply until the end of 2008. The imported volumes, however, have been rather small compared to domestic removals. In Latvia, the border prices have developed rather similarly than those in Estonia (Fig. 28). The positive development in final markets and the corresponding increasing demand for birch logs, which started in 2006, caused the border prices to increase until 2008. The market effects also increased the roadside prices in Lithuania.

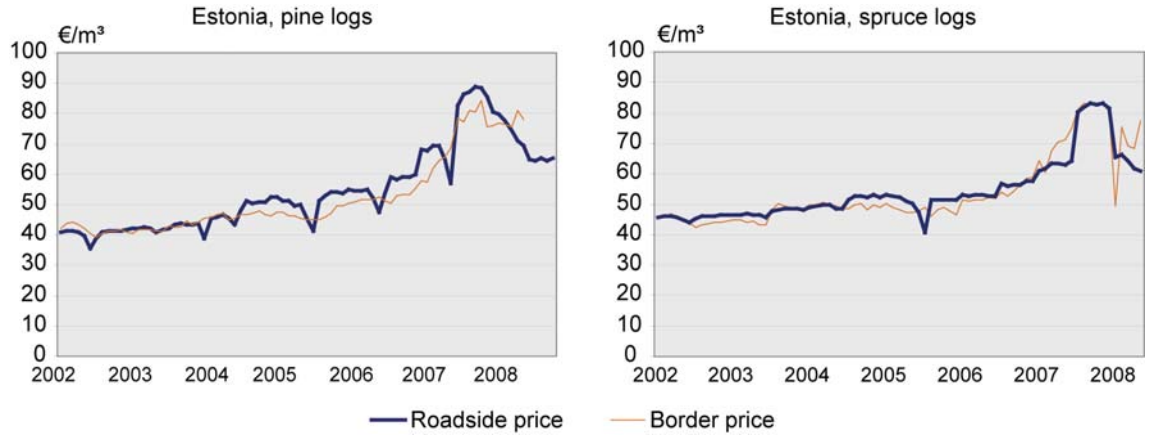

Fig. 25. Border and roadside prices of coniferous industrial logs in Estonia, €/m³ (Eurostat, Faostat).

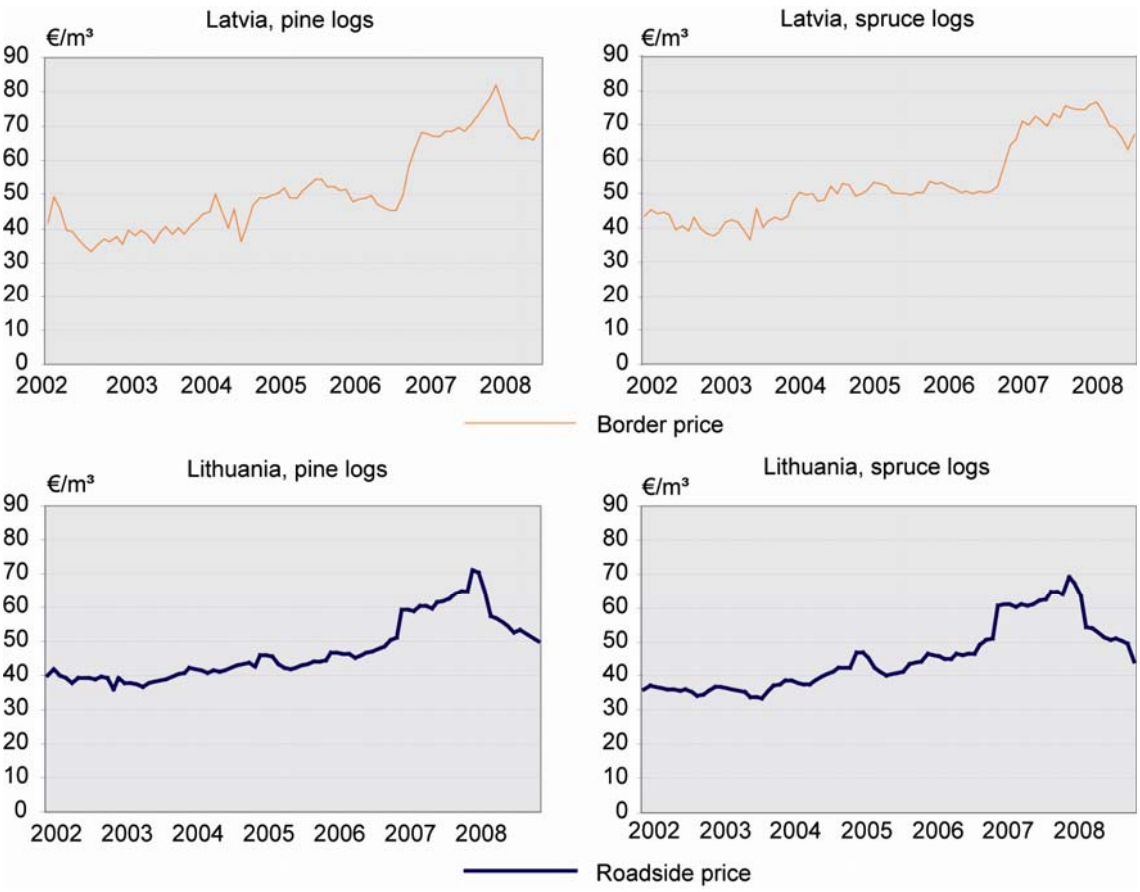

Fig. 26. Border and roadside prices of coniferous industrial logs in Latvia and Lithuania, €/m³ (Eurostat).

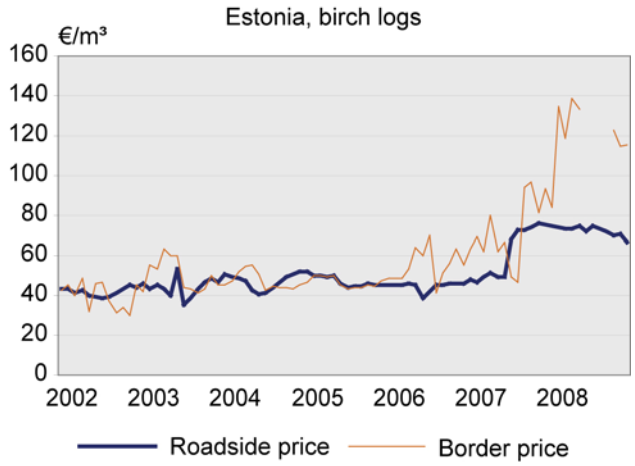

Fig. 27. Border and roadside prices of birch logs in Estonia, €/m³ (Eurostat, Metinfo).

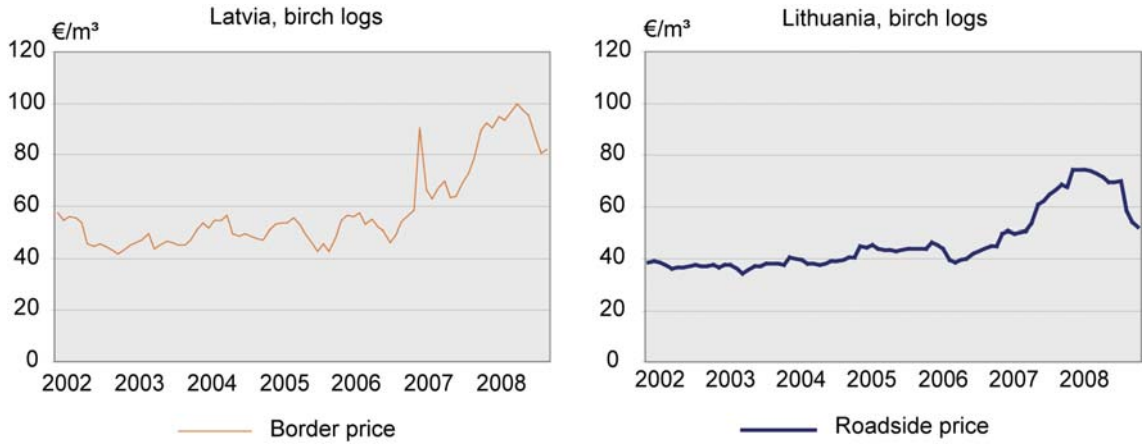

Fig. 28. Border and roadside prices of birch logs in Latvia and Lithuania, €/m³ (Eurostat).

4 Comparison of Border Prices

Along with the comparison of Russian roundwood prices at the border with domestic roadside or delivery prices, it is worthwhile to analyse also development of unit prices of imported Russian roundwood by species between the destination countries. The results may reveal information whether the roundwood seller has been able to utilise price discrimination in its business activities, that is, possibility to sell different units of roundwood at different prices to different customers reflecting imperfect competition in roundwood markets. The results may also reveal information about transaction and logistic costs together with the intrinsic transfer prices[8] inside the firms across the borders.

Fig. 29 presents the development of border prices of Russian roundwood by species among the most important importers in Northern Europe.[9] According to the evolution of time-series, Finland has benefited the cheapest import prices for roundwood. This result, however, is easy to interpret. While most of the roundwood from Russia to Finland originates from the Republic of Karelia and other neighbouring areas, the logistic costs are lower than to other countries. Also, Finland has the advantage of having the same railway gauge with Russia. Majority of the roundwood imports from Russia to Finland is transported by railway.

[8] Vertically integrated forest companies typically contain several departments, some of them producing parts, components and (semi)products which other departments process further to final products. Transfer pricing refers to valuation of internal prices at which these components and (semi)products are sold between the departments.

[9] The development of time-series in Fig. 27 should be interpreted with caution. In some months, the traded volumes are small and the corresponding prices, causing additional up- and downward jumps in time-series, do not give reliable picture of the real trade. The time-series, as given by the Eurostat, may also contain errors. While the inflation rates have differed between the import countries, the prices describe only nominal roundwood prices at border. In time-series, there are some months without any trade, and the missing values are replaced by the mean of surrounding observations. From Norway, there is not any monthly time-series available.

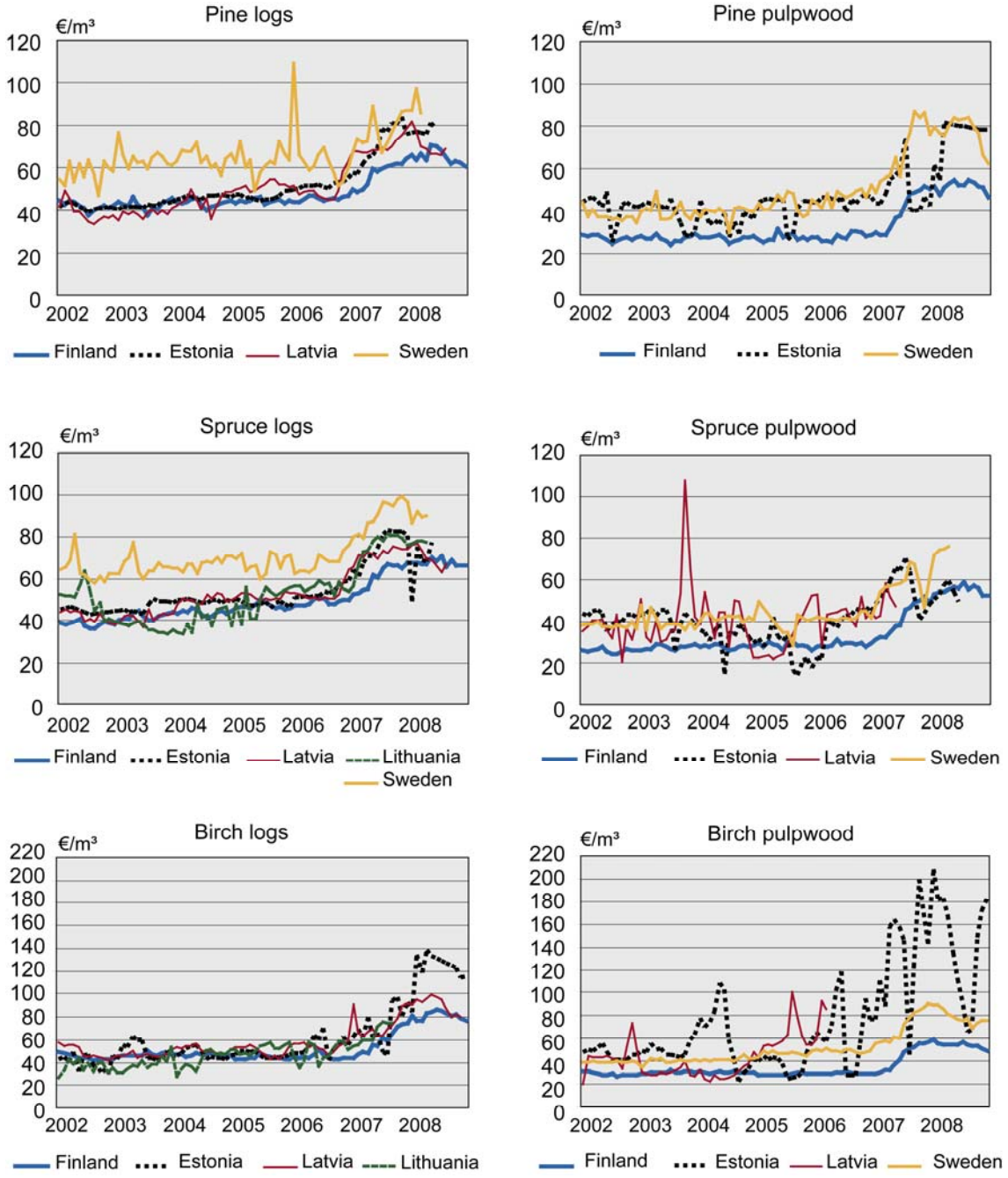

Fig. 29. Comparison of border prices of the Russian roundwood in 2002–2008, €/m³ (Eurostat).

Logistic costs can explain also the gap between the import prices to Sweden and other Baltic Sea countries. Especially, this can be seen in the case of pine and spruce logs, where the import prices have exceeded the corresponding prices to the other countries by 10–20 euros per cubic meters. It is also noteworthy that the pulpwood prices to the Baltic States implicitly contain prices which Swedish forest industry has paid for pulpwood. While there is not any large scale pulpwood processing industry in the Baltic States, the traded pulpwood from Russia has typically traded further to Finland and, especially, to Sweden. This connection can be seen, for example, from the close development of pine pulpwood prices to Sweden and Estonia. Otherwise the long-run trends between the price series seem to have similar development even though the import prices to the Baltic States have been more volatile than those to Finland and

Sweden. This is evidently due to small imported pulpwood volumes. The series can also contain statistical outliers, such as the peaks in pine logs imports to Sweden and spruce pulpwood to Latvia, which are difficult to explain by traded volumes.

The prices and traded volumes also reveal information about the integration of the roundwood markets around the Baltic Sea region – many international forest industry companies use Baltic Sea area as a common roundwood procurement area, and the wood flows are directed to mills where the need for roundwood is urgent or where it is most profitable to process when concerning, for example, the local cost level or development of exchange rate.

5 Concluding Remarks

This study has shortly reviewed the development, magnitude and unit prices of Russian roundwood exports to Europe, especially to Scandinavia and Baltic States. Also, this study has shortly depicted the relative importance of Russian roundwood imports with respect to national roundwood consumption and markets.

Not surprisingly, Finland, Sweden and to some extent also the Baltic States have been the most important importers of Russian roundwood in Northern Europe. Even though some amounts of roundwood from Russia have also been traded to Central Europe and Norway, their role and importance with respect to national removals and consumption have been only marginal. Especially, the forest industry in Finland has been heavily depended on Russian roundwood. Since the beginning of 1990's, the share of Russian roundwood with respect to total industrial roundwood consumption in Finland has varied between 10–25 percent. In 2008, the share was decreased to less than 15 percent.

Especially, non-coniferous roundwood imports from Russia have been large-scaled. Although the annual share has changed over time, on average about two thirds of the total imports from Russia to Finland have consisted of birch. In Sweden, one third of the non-coniferous imports have originated from Russia. The importance of non-coniferous imports is evidently due to the structure of forests in Scandinavia and the corresponding need of pulp and paper industry. Forests in Finland and Sweden are typically dominated by coniferous species, and it is not necessarily cost efficient to procure needed amounts of non-coniferous roundwood from domestic markets. In Baltic States, the local sawmill industry has benefited coniferous logs imports from Russia. While the domestic removals have been higher than the annual increments of forests in the Baltic States, the increasing need for sawlogs has been compensated by Russian imports.

The border prices of Russian roundwood have closely followed the development of national roadside prices in destination countries. The difference of import prices between the importer countries can typically be explained by the different transportation costs. High volatility of prices over time is explained not only by similar supply factors – such as winter felling conditions, competition, Russian customs tariffs programme for roundwood exports – concerning roundwood exports from Russia, but also because of different delivered volumes. Finland has clearly benefited its close geographic location with Russia. To some extent this holds true also for the Baltic States concerning imports of coniferous logs.

The future of roundwood exports from Russia, and the corresponding effects on the national markets in Northern Europe remain somewhat uncertain. Whether the customs tariffs programme for roundwood exports is coming fully effective is still uncertain. Also, the worldwide economic slowdown has reduced the demand of final forest products and the corresponding closure of capacity has decreased the need of roundwood. When the markets will slowly recover and if the roundwood exports from Russia are decreasing, this will mean increasing demand for roundwood in Baltic Sea area and pressure for national roadside prises to increase. Especially, pulp and paper industry in Finland and sawmilling industry in the Baltic States will face challenges to find cost-effective methods for production.

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