

Chapter 8

Pulp and paper markets peaking amid slowing economy, rising input costs, and erosion of profits:

Markets for paper, paperboard and woodpulp, 2007-2008⁴⁷

Highlights

- In mid-2008, pulp and paper prices were at or near historic peak levels, but global demand conditions were weakening.
- Industry profits were eroded in 2007 and 2008 as sharply higher energy costs led to higher prices for fuel, freight, pulpwood, recovered paper, chemicals, and other inputs.
- Expanding pulp and paper capacity in China is having a huge impact on paper and paperboard markets, and on global competition for wood, recovered paper, and pulp.
- United States net exports of paper and board surged, boosted by the weaker US dollar, while with a strong Canadian dollar net exports and output of paper from Canada declined.
- US recovery of paper for recycling and export of recovered paper reached record levels in 2007, and demand continued in 2008, with recovered paper prices reaching near record levels.
- Rising biofuel production and concern about bioenergy produced from food crops have been drawing industry attention to competition for wood-based biofuels, as well as to relationships among forest practices, food production, climate change and land use changes.
- The Russian Federation continued to experience growth in pulp, paper and paperboard output; however exports fell for the second year in 2007 as consumption continued to rise.
- Integrated forest product biorefinery concepts are being explored in Europe and North America as a means of obtaining optimal future recovery of energy and chemicals as well as conventional paper and pulp products from wood resources.
- In the aggregate, the European and North American demand for graphic papers receded, while the demand for packaging paper and paperboard increased.
- Paper demand increased in Europe but production levelled out as imports increased.

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Secretariat introduction

The secretariat greatly appreciates the continued collaboration with the four authors of this chapter on the pulp and paper market. Thanks to these regular contributors, the *Review* has an overview of paper, paperboard and woodpulp market and policy developments across the UNECE region. Dr. Peter Ince,⁴⁸ Research Forester, USDA Forest Service, deserves special thanks for coordinating the input from the co-authors, as well as analysing the North American developments.

In alphabetical order, we extend our gratitude to the other analysts, beginning with Professor Eduard Akim, PhD,⁴⁹ of The St. Petersburg State Technological University of Plant Polymers and The All-Russian Research Institute of Pulp and Paper Industry, who described developments in the Russian pulp and paper sector. Mr. Bernard Lombard,⁵⁰ Trade and Competitiveness Director, Confederation of European Paper Industries (CEPI), is well placed to analyse trends in western Europe. Mr. Tomáš Parik,⁵¹ Director, Wood and Paper, A.S., highlighted developments in central and eastern Europe.

The European analysis was aided by Mr. Eric Kilby, Statistics Manager, and Ms. Ariane Crevecoeur, Statistics Assistant, both from CEPI. Collaboration with trade associations such as CEPI not only helps with the analysis, but it also helps validate the database for pulp and paper markets. Readers should note that CEPI has a different European subregion than the UNECE. Therefore the authors are careful, when discussing Europe, to indicate whether it is CEPI's 20-countries, the EU27 or the UNECE European subregion of 41 countries. Due to some discrepancies between CEPI and UNECE/FAO definitions, the figures may vary slightly, but the trends remain the same.

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8.1 Introduction

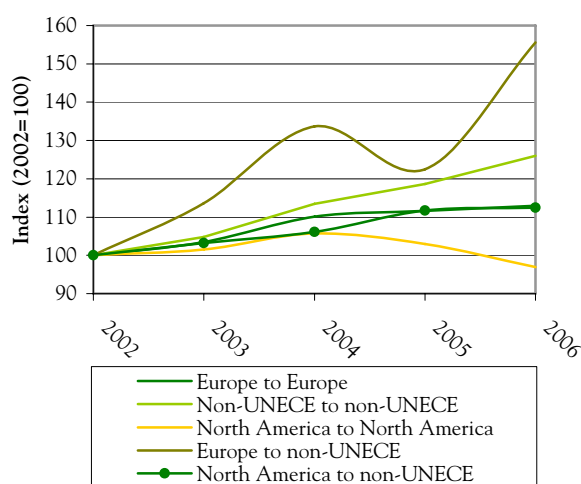
In 2008, the countries of the UNECE region accounted for about 55% of the world's production and consumption of paper and paperboard, and they produce nearly three fourths of the world's woodpulp, used to make paper and paperboard. Europe produces slightly more paper and paperboard than North America but less woodpulp, with European producers relying more on recycled fibre than producers in North America. The United States remains the world's largest producer and consumer of pulp, paper and paperboard. Outside the UNECE region, China is rapidly gaining ground as the second largest producer and consumer of paper and paperboard worldwide. Much of China's rapid growth is based on recycled fibre and imported pulp. Rapid expansion of Chinese pulp and paper production capacity is having a huge impact on paper and paperboard markets, and on global competition for wood, recovered paper, and pulp.

By mid-2008 prices in US dollars had climbed to near historical highs for market pulp and most paper and paperboard commodities, although prices in European and Canadian currencies increased only gradually as those currencies strengthened against the dollar. High prices and strong demands had improved industry profits going into 2007, but higher input costs eroded industry profits by 2008 despite rising product prices. Sharply higher energy prices and higher commodity prices led to higher costs for fuels, chemicals, fibre, and freight. By mid-2008, economic conditions suggested that pulp and paper markets were peaking amid a slowing economy, rising input costs, and erosion of profits.

Paper and paperboard trade flows had expanded in 2006 from Europe and North America to non-UNECE countries, but declined within North America, reflecting disruption of Canadian exports to the US as a result of the stronger Canadian dollar (graph 8.1.1). Meanwhile, trade flows of woodpulp within Europe increased and the trade flow of pulp from North America to Europe declined, reflecting again the negative impact of the stronger Canadian dollar on Canadian pulp exports (graph 8.1.2).

GRAPH 8.1.1

Major paper and paperboard trade flows in the UNECE region,
2002-2006

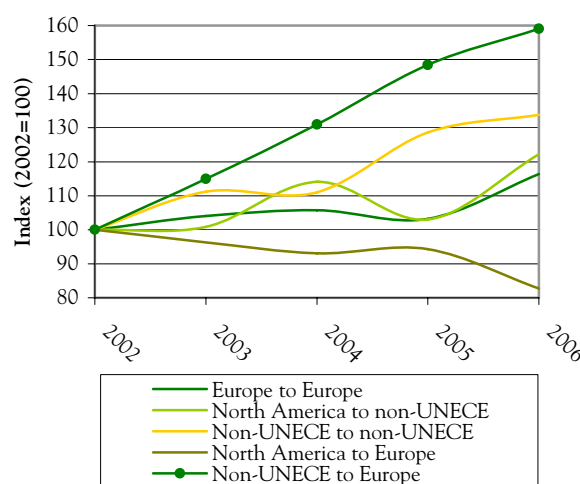


Note: Corresponding trade flow table in electronic annex.

Source: UN Comtrade/EFI, 2008.

GRAPH 8.1.2

Major woodpulp trade flows in the UNECE region,
2002-2006



Note: Corresponding trade flow table in electronic annex.

Source: UN Comtrade/EFI, 2008.

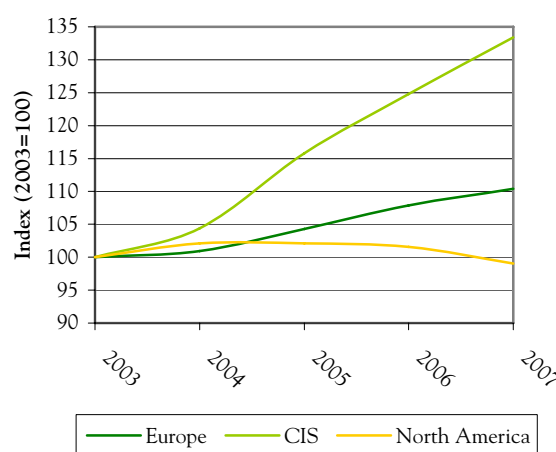
8.1.1 Weaker product demand, tighter fibre supply

Paper and paperboard demand conditions weakened globally in 2008. Global manufacturing conditions became increasingly stressed in 2008 as manufacturers faced record increases in average input prices and a slower growth outlook, according to the JP Morgan Global Report on Manufacturing (JPMorgan Chase, 2008). Fears of a slowing economy deepened in June 2008 as the Organization for Economic Cooperation and Development (OECD) in Paris slashed its forecast for global economic growth, citing sharply higher oil and commodity prices and cooling housing markets, projecting growth in OECD's 30 member countries slowing to 1.8% in 2008 and 1.7% in 2009, down from January forecasts of 2.3% and 2.4%. Growth in the US was projected to be slower (just 1.2% in 2008 and 1.1% in 2009). Demand for paper, paperboard and woodpulp closely follow GDP developments.

Paper and paperboard consumption indices for UNECE regions show higher growth rates over the past five years in the CIS region than in Europe or North America (graph 8.1.3), but the CIS region still consumes far less than Europe or North America. Slower growth in consumption was generally apparent in 2007, and preliminary data in 2008 indicate a slowing global economy and a slowing growth in demand for paper and board.

GRAPH 8.1.3

Consumption of paper and paperboard in the UNECE region,
2003-2007



Source: UNECE/FAO TIMBER database, 2008.

Despite weaker global demand, tighter fibre supply conditions were apparent globally in 2007-2008, with higher prices for market pulp and recovered paper, and also higher pulpwood prices in many regions. Higher fuel prices contributed directly to higher pulpwood harvest and transport costs. Higher ocean freight costs and enormous demands for imported fibre in China contributed to higher prices for woodpulp and recovered paper. Export tariffs on pulpwood from the Russian Federation were scheduled to increase significantly. Expanded wood pellet production resulted in expanded

competition for wood residues, while the decline in housing construction and sawnwood production in North America since 2005 have generally reduced wood residue supply. The apparent connection between biofuel production and food prices (e.g. higher corn ethanol production and higher corn grain prices) and the expansion of biomass energy production drew attention to potential future competition for wood fibre resources in biofuels for transport. Meanwhile, in both Europe and North America, integrated forest product biorefinery concepts are being explored as a future means of obtaining optimal recovery of energy and chemicals, as well as conventional products, from wood resources.

8.2 Europe subregion

8.2.1 European trade impacted by strong euro

Paper and paperboard consumption in the European subregion grew by 2.3% in 2007 to 100.4 million metric tons (m.t.), while a smaller increase in consumption (1.7%) was observed for the EU countries (table 8.2.1), and CEPI member countries⁵² also saw a smaller increase in demand (+1.2%). There was stagnation in European production of paper and board during 2007 compared with 2006 as net trade declined sharply for European producers.

TABLE 8.2.1

Paper and paperboard balance in Europe, 2006-2007
(1,000 m.t.)

	2006	2007	Change %
Production	108 344	108 298	0.0
Imports	60 255	65 629	8.9
Exports	70 502	73 559	4.3
Net trade	10 247	7 930	-22.6
Apparent consumption	98 097	100 368	2.3
of which: EU27			
Production	101 791	101 846	0.1
Imports	55 304	59 897	8.3
Exports	66 958	70 041	4.6
Net trade	11 654	10 144	-13.0
Apparent consumption	90 137	91 702	1.7

Source: UNECE/FAO TIMBER database, 2008.

The strength of the euro versus the US dollar but also versus other currencies during 2007 has heavily impacted trade developments. The strong euro has lowered profit margins on exported volumes and has increased the

pressure from imports to the European markets. The euro has gained 23% over the US dollar during the last two years, as was noted in chapter 3.

8.2.2 Growth in European paper production slows down

Growth in European paper and paperboard production flattened out at 0% growth in 2007 (table 8.2.1 above), and production of paper and paperboard by CEPI countries increased by only 0.4% in 2007. This represented another record level of annual production by CEPI countries, but relatively slower growth. Output of paper and board by CEPI countries has increased on average by 2.8% per annum since 1991 and by 1.6% per annum since 2000. With paper production capacity of CEPI countries at 110 million m.t. (down by 0.6% in 2007), the apparent operating rate for 2007 was 93.2%, 0.9 points higher than in 2006 (CEPI, 2008). This is a relatively high capacity utilization rate and helps explain why prices for paper and paperboard commodities remained relatively high in 2007-2008.

Production decreased in 2007 in the graphics sector but rose in packaging, sanitary and specialty paper grades. Similar trends occurred in North America, where demand has declined sharply for newsprint. The trends reflect shifts in graphic paper demands, such as higher growth in advertising expenditures for electronic media than print media, and changes in paper usage in offices and homes associated with electronic information technology. Overall output of graphic paper grades in CEPI countries fell by 0.6%. Production of newsprint fell by 1.5% to 10.8 million m.t., the lowest output since 2003. For the packaging sector, production increased by 0.4% among CEPI countries. The majority of this increase was in carton boards, where production rose by 1.8 %. Output of case materials fell by 0.3%. Since only tonnage variations are being measured, it should be noted that these volumes are also affected by the continuing trend towards light-weighting (lower standard basis weights of paperboard products).

8.2.3 European paper consumption increases but so do imports

European paper and paperboard consumption increased by 2.3% (table 8.2.1 above) in 2007, while consumption in CEPI countries rose by 1.2%, reaching 90.1 million m.t., a record level. Imports to CEPI countries from non-CEPI countries increased to 5.1 million m.t. (+22.7%). Imports from Asia saw a rapid increase of 95.1% in 2007 and accounted for 13.4% of imports. Despite this increase in imports, CEPI countries maintained an overall positive trade balance in paper, with net exports of 12.4 million m.t. in 2007 (although net trade dropped from 13.5 million m.t. in 2006).

⁵² CEPI countries include: Austria, Belgium, Czech Republic, Finland, France, Germany, Hungary, Italy, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, the Netherlands and the United Kingdom.

In CEPI countries there was an increase in consumption of graphic grades of only 0.2% in 2007 when compared to 2006, and imports of graphic grades from outside CEPI countries rose by 32.0%, whereas exports to countries outside CEPI increased by only 0.1%. Consumption of newsprint by CEPI countries decreased to 10.4 million m.t. in 2007 (-4.6%). Demand for packaging grades increased by 1.8% compared to 2006. Demand for sanitary and household grades grew by 3.6%.

8.2.4 European pulp production decreased by 0.5%

Woodpulp production declined by 1.0% in 2007 for Europe as a whole (table 8.2.2). Among CEPI countries, output of pulp fell by 0.5% in 2007. Total European output of both integrated and market pulp in 2007 was 44.2 m.t. (table 8.2.2), and was 43.5 million m.t. among CEPI countries. Although overall pulp exports and imports increased within Europe (table 8.2.2), the exports of pulp from CEPI countries to countries outside the CEPI region fell to 2.1 million m.t. (-5.2%), with Asia representing the principal destination (59.7%).

TABLE 8.2.2
Woodpulp balance in Europe, 2006-2007
(1,000 m.t.)

	2006	2007	Change %
Production	44 609	44 164	-1.0
Imports	19 735	20 111	1.9
Exports	12 770	13 054	2.2
Net trade	-6 966	-7 057	1.3
Apparent consumption	51 574	51 222	-0.7
of which: EU27			
Production	41 687	41 347	-0.8
Imports	18 471	18 759	1.6
Exports	11 980	12 272	2.4
Net trade	-6 491	-6 488	-0.1
Apparent consumption	48 178	47 834	-0.7

Source: UNECE/FAO TIMBER database, 2008.

Apparent consumption of pulp in Europe declined to 51.2 million m.t. (-0.7%), and among CEPI countries fell slightly, to 49.6 million m.t. (-0.1%). Imports of pulp to CEPI countries fell to 7.8 million m.t. (-1.3%), with primary sources remaining Latin America (50.1%) and North America (38.9%), although imports from Canada became less attractive due to the stronger Canadian dollar.



Source: Finnish Forest Industries Federation, 2008.

Pulpwood supplies in Europe tightened, with increased competition for wood from the energy sector and subsidies for renewable energy production. Meanwhile, the Government of Russia decided that all timber destined for export (except birch of less than 15 cm diameter) would be subject to export duties as of July 2007 (see section 8.3.3). This has resulted in higher wood costs for the European pulp and paper industry – particularly for northern European countries – and decreasing wood trade volumes. It could ultimately have effects similar to an export ban, and is therefore a subject of serious concern for the European industry.

8.2.5 Utilization of recovered paper increased 1.4%

Consumption of recovered paper has continued to increase in Europe. Utilization was up in CEPI countries by 1.4%, reaching 49.6 million m.t. in 2007. Apparent collection of recovered paper increased, by 3.6%, to 58.2 million m.t. Exports of recovered paper to countries outside CEPI reached 9.6 million m.t., with 91.7% of this being sent to Asian markets. Within Asia, China was the principal destination, primarily because of a huge expansion in papermaking capacity in 2007. Woodpulp represents 41.6%, and recovered paper 42.7%, of the fibre used in papermaking in CEPI countries.

8.2.6 Eastern European entrance to European Union presents opportunity and challenge

Almost all of the countries of eastern Europe have entered the EU in recent years, and a number of countries in eastern Europe have been members of CEPI for some time, including the Czech Republic, Hungary, Poland,

and Slovakia. For these countries, EU membership appears to attract capital investment but also threatens overly broad EU policies and regulations.

Countries in eastern Europe have cost advantages in terms of energy, fibre and labour, as well as a growing demand for pulp and paper products. There are, of course, also threats to further development, such as distance to major markets, weak infrastructure, and capital availability. Existing capacities in these countries are still focused on exports. Most countries in eastern Europe are experiencing rapid appreciation of their local currencies. Together with globally increasing energy prices, the currency appreciation puts pressures on costs and significantly decreases export profit margins. This suggests the need to focus more on local markets, not only for economic reasons, but also because of the emerging ecological and social aspects of the industry.

The wood export tariffs from Russia currently have little influence on eastern Europe due to several local windthrow calamities that have boosted local supplies of pulpwood and wood chips. Nevertheless, a “domino effect” can be expected if the Nordic countries shift their demand for roundwood to other nearby countries outside of Russia.

As eastern European countries remain attractive to new businesses, the pulp and paper industry in some locations could begin to experience competition for labour and other pressures on infrastructure. Nonetheless, the pulp and paper sector within the region has clearly not yet reached its maximum potential.

8.2.7 *EU political developments related to pulp and paper*

At the EU level, the year 2007 was dominated by political discussions about climate change and bioenergy. In January 2008, an Energy and Climate Change package was issued by the European Commission. The package seeks to have the EU reduce greenhouse gases by at least 20%, and increase to 20% the renewable share of energy consumption, by 2020, as agreed by EU leaders in March 2007. Discussions have been ongoing since then, particularly on ways to raise the various targets and on the issue of burden sharing.

Implementation of the Emission Trading Scheme (ETS) in the EU has affected and will significantly affect the entire European pulp and paper industry, which will have to reduce emissions to meet the more restrictive emissions cap and support the corresponding costs. Direct and indirect effects of emission trading on the European pulp and paper industry can be expected, including purchase of CO₂ allowances and increased prices of energy and raw materials. Total cost of the ETS Directive for the European pulp and paper industry would be at a

minimum €2 billion per annum according to CEPI. The ambitious targets set by the Council of Ministers in March 2007 regarding the share of renewable energy (20% by 2020) will further increase the demand pressure on wood and woody biomass for biofuels. Recent studies have shown that wood supply will have to be substantially increased to meet the future demand (Steierer, F. and Fisher-Ankern, A., 2007).



Source: Finnish Forest Industries Federation, 2008.

WTO negotiations maintained their focus on trade liberalization. At the global level and in the context of the Doha Round, the Government of Canada tabled (in October 2007) a proposal for a sectoral agreement that would reduce the tariffs on forest products. This proposal can be considered as an attempt to extend the 1994 Uruguay Round agreement to other countries as far as pulp, paper and paper products markets, as well as wood products and furniture markets are concerned. This proposal has been supported by Hong Kong S.A.R., New Zealand, Singapore, Switzerland, Thailand and the US. It could lead to further trade liberalization in the sector following openings since 2004 of the pulp and paper markets of several developed countries, including the EU countries.

The International Council of Forest and Paper Associations (ICFPA) has focused attention on issues related to biofuels, forest practices and land use. At a recent meeting of ICFPA and FAO in South Africa, attention was drawn to the intricate relationships among forest practices, food production pressures, liquid biofuel

production and land-use choices. It is likely that climate change and policies related to its reduction will also impact the availability, accessibility, stability and utilization of food. It has been anticipated that the energy and climate change situation could lead to resource-based conflicts at the national and international levels and to increased pressure on existing forests. The members of ICFPA underlined the critical role of sustainable forest management in addressing these issues.

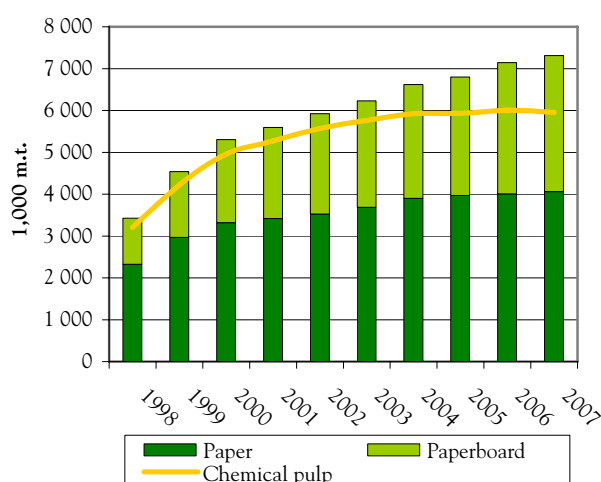
8.3 CIS subregion, focusing on Russia

8.3.1 Russia and the CIS subregion experience slower growth

In 2007 and the first half of 2008, Russia continued to experience growth in pulp and paper output (graph 8.3.1). However, the growth in Russia's paper and paperboard output has been slower in recent years than earlier in the decade, at 2.3% in 2007, 2.8% in 2006, and 1.7% in 2005, compared with 6.8% in 2004. Production in the CIS subregion increased even less in 2007, by 1.5% (versus 4.2% in 2006), rising to 8.7 million m.t. (table 8.3.1). Demand for pulp and paper products increased in Russia from 2004 to 2007 and into the first half of 2008. In 2007-2008, the Russian pulp and paper sector continued to expand its production of pulp, paper and paperboard, particularly the output of paperboard for packaging. However, during 2007, Russia's total output of pulp (both pulp for paper and paperboard and market pulp) decreased by 0.9%, while output of market pulp increased by just 1.6%. Russia's output of paper and paperboard increased by 2.3%, including a 4.2% increase in output of paperboard.

GRAPH 8.3.1

Production of pulp, paper and paperboard in the Russian Federation, 1998-2007



Sources: Goscomstat of the Russian Federation, PPB-express, and author's data interpretation, 2008.

TABLE 8.3.1

Paper, paperboard and woodpulp balance in the CIS, 2006-2007
(1,000 m.t.)

Paper and paperboard	2006	2007	Change %
Production	8 612	8 737	1.5
Imports	2 393	2 634	10.1
Exports	2 979	2 790	-6.3
Net trade	586	156	-73.4
Apparent consumption	8 026	8 581	6.9
Woodpulp			
Production	7 129	7 076	-0.7
Imports	191	229	19.9
Exports	1 920	1 901	-1.0
Net trade	1 729	1 672	-3.3
Apparent consumption	5 400	5 404	0.1

Source: UNECE/FAO TIMBER database, 2008.

8.3.2 Russian balance of trade

Although the tonnage of Russian pulp, paper and paperboard exports greatly exceeds the tonnage of imports, the trade balance in value has continued to deteriorate, as Russia continues to expand imports of higher value paper products. The annual trade deficit in paper and paperboard has been negative since 2001, and in 2007 it was more than \$1.6 billion. Since 2006, there has been a negative trade deficit not only in paper and paperboard, but also in pulp and paper products as a whole. The higher value of imports of paper and paperboard as compared to their exports is mainly due to the fact that Russia is importing rather expensive products, such as high quality materials for containers and packaging, coated paper, and tissue, whereas less expensive commodity products such as newsprint and kraft linerboard are being exported.

8.3.3 Russian export tariffs on roundwood

In February 2007, the Russian Government signed into law Resolution 75 with new levels of export taxes on roundwood, including pulplogs, for 2007-2011. Tariffs on softwood rose to €15 per m³ in April 2008. The export tariff on sawlogs is expected to increase to the prohibitive level of €50 per m³ in 2009 and to be applied to birch pulpwood in 2011. Significant quantities of birch pulpwood are currently exported to Finland, and these future export tariffs, if enacted, will undoubtedly disrupt the trade. Duties on roundwood exports were a focus of the talks about Russia joining the WTO and preparation of a new EU – Russia Agreement.

8.4 North America subregion

8.4.1 Capacity declining but prices near historic highs

North American paper and paperboard production and consumption both declined in 2007, but net exports increased substantially (table 8.4.1). Growth in US paper and paperboard demand was sluggish, but US prices for most paper, paperboard and woodpulp commodities were at or near historic highs. The US price indices for paper, paperboard and woodpulp have generally increased since 2002 as the exchange value of the US dollar has generally declined (graph 8.4.1).

TABLE 8.4.1

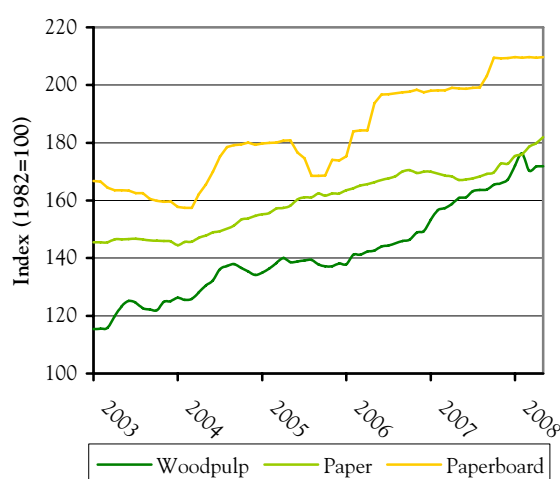
Paper and paperboard balance in North America, 2006-2007
(1,000 m.t.)

	2006	2007	Change %
Production	102 506	101 939	-0.6
Imports	19 419	17 803	-8.3
Exports	23 844	24 103	1.1
Net trade	4 426	6 300	42.3
Apparent consumption	98 080	95 639	-2.5

Source: UNECE/FAO TIMBER database, 2008.

GRAPH 8.4.1

US monthly price indexes for woodpulp, paper, and paperboard, 2003-2008



Source: US Department of Labor, Bureau of Labor Statistics, Producer Price Indexes, 2008.

8.4.2 Trade responds to shifts in currency values

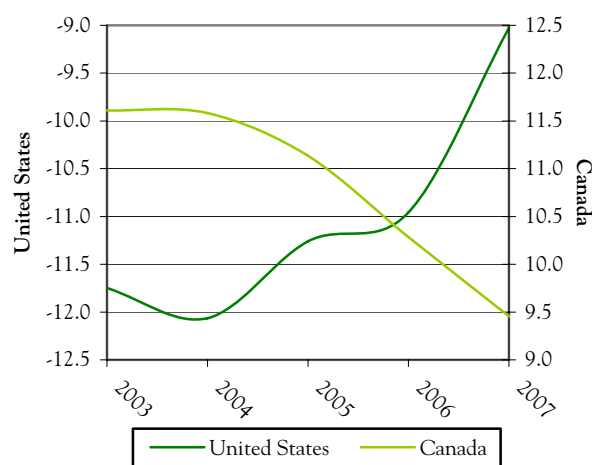
Net exports increased for US pulp and paper producers in 2007-2008, while net exports deteriorated for Canada (graph 8.4.2). Canada continued to be a large net exporter and the US a large net importer, but

Canadian net exports of graphic papers have declined by over two million m.t. since 2003, while US net exports increased by several million m.t. Capacity rationalization in Canada was underway, as the strong Canadian dollar plus higher input prices weakened competitiveness of Canadian pulp and paper firms. Conversely, US imports of graphic paper products declined as a percentage of domestic consumption quantity. In general, the weaker US dollar favoured increased US exports and decreased US imports of pulp, paper and paperboard products.

Pulp, paper and paperboard producers in both the US and Canada had to contend with higher costs for energy, chemicals, fibre, and freight, which have eroded profit margins over the past year. Product prices (in US dollars) continued to increase from 2007 into the first half of 2008, but production costs escalated at a higher rate, resulting in diminished profits. Lack of capacity growth and mill closures kept excess capacity in check and, combined with the weaker US dollar and higher input prices, generally forestalled erosion in US dollar pulp and paper prices, despite sluggish demand.

GRAPH 8.4.2

US and Canadian graphic paper net trade, 2003-2007
(Million m.t.)



Source: UNECE/FAO TIMBER database, 2008.

8.4.3 Graphic paper demands recede while other demands increase

Newsprint production and consumption in North America continued its downward spiral. US newsprint consumption has fallen every year since 2002, from an average of around 675,000 m.t. per month in 2003 to less than 500,000 m.t. per month in early 2008 (Newspaper Association of America, 2008). The decline is associated with declining newspaper circulation and a structural shift in advertising expenditures from newspapers to electronic media. After reaching an all-time high of 6.8

million m.t. in 2000, US newsprint capacity has declined by 29% to just 4.8 million m.t. in 2007, a capacity level last seen in 1980 according to the American Forest and Paper Association (AF&PA).

Printing and writing paper grades have also begun to experience erosion of demand in North America, primarily for uncoated free sheet paper, although not as steep as the decline in newsprint. Total US printing and writing paper capacity has been declining at an average annual rate of 1% since 2000 to 23.0 million m.t. in 2007, according to AF&PA. The largest category of printing and writing paper, uncoated free sheet, experienced the largest share of US capacity contraction, declining 3.1% in 2007 to 11.8 million m.t., with an average annual decline of 2% since 2000, according to AF&PA.

On the other hand, capacity increases were reported in the US for unbleached kraft paper (up 2.3% in 2007), bleached packaging and converting paper (up 4.4%), linerboard (up 1.9%), and bleached paperboard (up 3.2%), according to AF&PA. Tissue paper capacity declined slightly in 2007 and corrugating medium capacity declined by 2.8%, but both product categories were projected to make up losses with capacity increases in 2008, according to AF&PA.

8.4.4 Woodpulp, pulpwood, and recovered paper trends

US market pulp exports and prices surged upward in 2007-2008, while US imports declined, as US competitiveness was boosted by the weaker US dollar. Consequently, market pulp capacity expanded in the US by 3.8% in 2007 to 9.7 million m.t., reversing a declining trend. Market pulp capacity was projected to continue increasing in 2008 and 2009, according to AF&PA. The ongoing capacity expansion includes both bleached softwood and bleached hardwood kraft pulp.

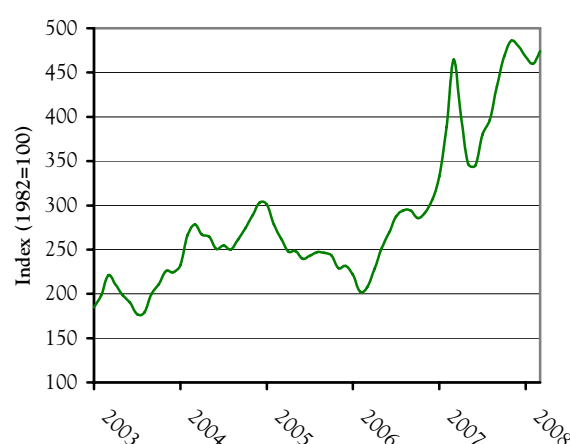
North American delivered pulpwood prices in most regions edged upward in 2007-2008, with higher diesel fuel costs resulting in generally higher pulpwood harvesting and transport costs. In addition, since 2006 the impact of the housing downturn on North American sawnwood and plywood production has reduced the supply of mill residues, which has led to higher pulp chip prices in regions that depend on mill residues for the majority of pulpwood supply, such as in the western US and Canada.

The 2007-2008 trends in US recovered paper markets reinforced patterns that have been observed since the late 1990s, in general, higher recovery of paper for recycling, and higher exports of recovered paper, but lower domestic utilization. US paper recovery for recycling climbed to a record 49 million m.t. in 2007 or just over 56% of US paper consumption, according to AF&PA. US exports of

recovered paper also jumped by 14%, to a record 18 million m.t. in 2007, and by 26% in the first quarter of 2008 relative to the first quarter of 2007, primarily driven by booming exports to China. The booming Asian demand, coupled with higher freight costs, contributed to substantially higher US prices for recovered paper in 2007-2008. For example, the price index for old corrugated containers, a major category of recovered paper, has more than doubled since 2006 (graph 8.4.4), and has approached historic peak levels in 2008.

GRAPH 8.4.4

US price index for recovered paper, 2003-2008



Note: Recovered paper price for old corrugated containers.

Source: US Department of Labor, Bureau of Labor Statistics, Producer Price Indexes, 2008.

8.4.5 Potential future competition for wood from biofuel

The US Energy Independence and Security Act of 2007 (see chapter 9 for details) includes the mandatory Renewable Fuel Standard, which requires expanded production of "advanced biofuels", meaning, specifically, fuel made from cellulosic biomass (such as wood). According to the leading trade association of US ethanol producers (the Renewable Fuels Association), the US ethanol industry is rapidly developing and expanding the basket of feedstocks available for ethanol production, and focusing specifically on cellulosic biomass. In general, it is likely that pulp and paper industry attention will be drawn increasingly toward topics such as future sustainability of fibre supply amid competition for wood from biofuel.

8.5 References

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