

Chapter 10

Gradual upturn underway in paper, paperboard and woodpulp markets¹

Highlights

- European and North American pulp and paper markets began to show signs of a gradual upturn during the first half of 2002, after a downturn that lasted from 2000 through 2001.
- Spot prices for market pulp, recovered paper, and some paper and paperboard grades turned upward in the first half of 2002, and some producers raised list prices in the second quarter.
- Profits were weak in 2001, for most North American and European producers, especially for United States producers who were burdened by an exceptionally strong dollar (however the dollar lost value rapidly in mid 2002).
- United States paper and paperboard demand and output contracted through 2001 and into the first quarter of 2002, extending a multi-year downturn from historical peaks in the second half of 1999.
- European and Canadian pulp and paper production receded also in 2001, after producers had achieved record levels of paper and paperboard output earlier in the year 2000.
- Capacity rationalization continued in the United States in 2001 with closure of 26 paper and paperboard mills and shut down of some other mills' paper machines.
- Russia's pulp and paper sector continued to experience growth, although at a slower pace, boosted by low currency exchange rates, record high exports, political stabilization and tax reform.
- Contrary to declines in North America and EU/EFTA, production of paper, paperboard and woodpulp increased in "Other Europe" in 2001, however consumption fell indicating greater export volume.
- Globally, pulp and paper capacity growth remains well below historical growth rates, with the exception of ongoing capacity growth in parts of Asia, particularly in China.

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Secretariat introduction

Pulp, paper and paperboard markets are global, yet this chapter's analysis by experts within each subregion of the UNECE illustrates that market developments vary between the UNECE subregions. There are also many similarities among the observed trends. Dr. Peter J. Ince, Research Forester, USDA Forest Service coordinated the production of this chapter. His co-authors were Professor Eduard Akim, PhD, Saint Petersburg State Technological University of Plant Polymers and the All-Russian Research Institute of Pulp and Paper Industry and Mr. Bernard Lombard, Recycling and Economics Manager, Confederation of European Paper Industries (CEPI).

This is the third time that Dr. Ince has helped us with this chapter and Dr. Ince is a member of the new UNECE&FAO Team of Specialists on Forest Products Markets and Marketing. He also has contributed to the Timber Committee market discussions as well as has collaborated in other projects of the Committee's teams of specialists. Simultaneously we express our appreciation to the USDA Forest Service, Forest Products Laboratory and International Forestry Division for making available the time and travel possibilities to work with us in Geneva.

Professor Akim is also on the UNECE&FAO Team of Specialists on Forest Products Markets and Marketing and he is a member of the FAO Advisory Committee on Paper and Wood Products. Once again, in his second participation in this project, he contributed his insight into the state of the pulp and paper industry in the Russia Federation. He too has participated at the Timber Committee market discussions, sometimes on broader issues than pulp and paper markets.

Mr. Lombard and his colleague from CEPI, Mr. Eric Kilby, Statistics Manager, have contributed their expertise on European markets for the second time to the chapter which we greatly appreciate. Collaboration of CEPI was ensured by Ms. Marie Arwidson, Director General of CEPI.

10.1 Introduction

This chapter explains recent trends in European, North American and Russian paper and paperboard markets, along with trends in woodpulp and fibre markets. These market trends relate to pulpwood use trends which are discussed in preceding chapters in the context of overall trends in wood raw material use. This chapter also reports UNECE/FAO statistics for pulp, paper and paperboard organized into the sub-regions of CIS, EU/EFTA, Other Europe and North America. When industry statistics from the Confederation of

European Paper Industries (CEPI) or other sources are used, the text indicates the different basis.

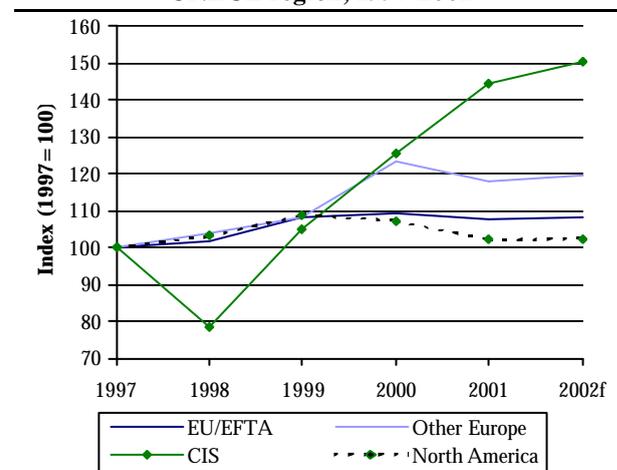
10.2 Paper and paperboard markets

Paper and paperboard markets, along with global economic growth, appeared to be in the early stages of an upturn by mid 2002, following an economic downturn that extended from late in 2000 through 2001. A drop in overall industrial production in Europe and North America translated directly into a corresponding drop in demand for packaging grades of paper and paperboard, while an abrupt halt in overall business growth and business investment led to an even larger drop in business spending for advertising and demand for graphic papers used in business and advertising applications. The decline in paper and paperboard consumption was evident in three UNECE subregions in 2001, North America down 4.8%, EU/EFTA down 1.3% and "Other Europe" down 4.2% (graph 10.2.1). Only in the CIS subregion did consumption increase, led by a 19% gain in the Russian Federation, continuing the 3-year trend (complete apparent consumption tables appear in the annex).

In pulp, paper and paperboard markets, declining demand, declining prices, and declining industry profits had characterized the recent downturn from the second half of the year 2000 through 2001, but signs of an upturn became widely apparent in the first half of 2002. Spot prices for market pulp and recovered paper turned upward early in 2002, followed by an upturn in spot prices for some paper and paperboard commodities in the second quarter. Toward the end of the second

GRAPH 10.2.1

Consumption of paper and paperboard in the UNECE region, 1997-2002



Note: f = The Timber Committee's forecast trend for 2001 to 2002, made at the October 2001 session, was applied to the 2001 figure.

Source: UNECE/FAO TIMBER database, 2002.

quarter, higher list prices were announced for paper and paperboard by many producers in Europe and North America. Market pulp inventories were also declining as prices were firming up in the first half of 2002. Nevertheless, although pulp, paper and paperboard commodity prices were firming up by mid year, they still remained well below the preceding peak levels of the year 2000, and far below the historical peak levels of 1995. For example, prices for bleached sulphate market pulp recovered to a level in the vicinity of \$500 per m.t. in Europe and North America by mid-year 2002, after having dipped to lows in the range of \$400 to \$450 earlier in the year. However, prices still remained well below the \$700 per m.t. levels observed late in 2000, and far below the \$900 per m.t. levels of 1995.

European and Canadian pulp and paper production levels receded in 2001, particularly in the case of graphic papers, after reaching record levels of paper and paperboard output earlier in the year 2000 (table 10.2.1). Apparent consumption of paper and paperboard dropped by about 4% in Europe (according to data from CEPI) and by 4.8% in North America (table 10.2.2). Consumption reportedly increased by 15% in Russia and by 14.2% among the CIS countries as a whole, although consumption in Russia still remains below the historical peak consumption levels of the 1988 to 1989 period. United States paper and paperboard consumption and production continued to decline sharply in 2001 (and even well into the first quarter of 2002) extending a protracted United States downturn that went back to historical peaks in 1999. The downturn in paper and paperboard consumption and production in both Europe and North America reflects the broader economic downturn that occurred globally from 2000 into 2001.

The broad nature of the recent economic downturn also suggests that the ongoing upturn in pulp and paper markets is likely to unfold gradually through 2002 and into 2003. The recent downturn was spawned by a broad decline in overall industrial production and capacity utilisation, along with dislocation of business investment and exceptional currency exchange values. It seems likely to take some time, perhaps well into 2003 or beyond, before global industrial output, capacity utilisation, business investment, and business growth can return to levels experienced in the late 1990s prior to the recent downturn.

10.2.1 Paper and paperboard in Europe

In comparison with the previous two years, 2001 proved to be a difficult one for most paper and paperboard producers in Europe. Although the final quarter of the year showed a small improvement in

volume terms over the previous quarter, the overall output in 2001 was below that of 2000. With only one or two exceptions, most European countries saw a contraction in paper and paperboard output in 2001.

Although the year started with production almost matching 2000 levels, output dipped during the middle quarters and only recovered slightly in the final three months, according to data compiled by CEPI. During 2001 CEPI member countries produced 88.2 million m.t. of paper and paperboard, or about 94% of total European production (EU/EFTA and "other Europe")². This was a decrease of 2.7% over 2000. However, this was a less dramatic decline than that experienced in some other regions of the world, particularly North America for example. Also, despite this decline, the overall level of European production remains high, with the 2001 total exceeding 1998 by over 5 million m.t. The average annual increase since 1998 has been around 2.5% per annum. The operating rate (capacity utilisation) in the paper industry fell from 93% in 2000 to 89% in 2001.

When looking at the output of different grades according to CEPI production data, an inconsistent picture emerges. Although overall output of graphic paper grades declined by 4%, newsprint production rose by 1.3%. Production of uncoated graphic grades fell by 3%, while output of coated grades fell by 7.9%, reflecting a steep drop in printing paper demand. Mechanical grades (dropping by 4.9%) achieved better comparative output levels than woodfree grades (dropping by 6.2%). Production of packaging grades fell by 1.7% with case materials virtually unchanged, and carton board down by 1.8%. Output of wrappings fell by 3.7%. Hygienic paper manufacturers increased their output by 1.3%. The overall consumption of paper and paperboard among CEPI member countries in 2001 fell by 3.8% from its year 2000 level, a decrease of 3.2 million m.t. to 81.3 million m.t. At the same time GDP among CEPI member countries increased by 1.6% (Eurostat - EU15). The slowing down of the European economy, beginning towards the end of 2000, was

² CEPI is a non-profit-making organization representing pulp and paper producers in 18 member countries, including 13 of the 15 European Union Member States (less Greece and Luxembourg) plus Norway and Switzerland along with three Associate Members, Hungary, the Czech and Slovak Republics. Through its member countries, CEPI represents some 1,000 pulp, paper and board-producing companies across Europe, from small and medium-sized enterprises to multinationals. Data reported by CEPI on European pulp and paper trends tends to be more current than data reported to UNECE by some EU/EFTA countries, and hence CEPI data are used in this discussion.

reflected in the paper and board market throughout 2001.

As in 2000, there was no great divergence in consumption trends among major sectors, however the trends were consistently downward rather than upward. Consumption of graphic paper grades decreased by 5.7% (2.4 million m.t.). Deliveries of graphic paper within CEPI countries fell by 5.8%, with imports down by 4.4% and exports down by 1.5%. Overall consumption of packaging grades decreased by 2.3% by 0.8 million m.t. However, imports of packaging

grades also dropped by 1.9%, while exports rose fairly significantly, by 11.5%. Deliveries of packaging grades within CEPI countries declined by 2.3%. Consumption of newsprint decreased by 1.2% to 10.9 million m.t. among CEPI countries. Imports from outside the CEPI area fell by 2%. Deliveries to export markets fell for the second year by 10% and deliveries within the internal CEPI market decreased by 1.1%.

TABLE 10.2.1
Production of paper and paperboard in the UNECE region, 1998-2001
(1,000 m.t.)

	1998	1999	2000	2001	Change 2000 to 2001	
					Volume	%
GRAPHIC PAPERS						
EU/EFTA	41 336	42 586	44 821	42 923	-1 898	-4.2
of which:						
Finland	9 243	9 392	9 810	8 955	-855	-8.7
Germany	8 260	8 401	9 335	8 923	-412	-4.4
Sweden	5 023	5 125	5 378	5 254	-124	-2.3
Other Europe	2 109	2 327	2 413	2 420	7	0.3
of which:						
Poland	594	667	590	600	10	1.7
Slovakia	221	511	568	591	23	4.0
Russian Federation	1 869	2 188	2 269	2 298	29	1.3
North America	42 964	44 618	45 193	41 340	-3 853	-8.5
Canada	13 736	14 884	15 534	14 504	-1 030	-6.6
United States	29 228	29 734	29 659	26 836	-2 823	-9.5
SANITARY AND HOUSEHOLD						
EU/EFTA	4 716	4 937	5 054	5 206	73	1.4
of which:						
Italy	1 102	1 182	1 219	1 224	6	0.5
Germany	931	954	1 017	1 027	10	1.0
United Kingdom	635	718	724	738	14	1.9
Other Europe	764	776	740	768	27	3.7
of which:						
Croatia	181	179	179	179	0.0	0.0
Slovakia	114	84	105	118	13	12.4
Russian Federation	94	106	111	120	9	8.1
North America	6 598	6 876	6 922	7 047	125	1.8
Canada	624	664	652	685	33	5.1
United States	5 974	6 212	6 270	6 362	92	1.5

Sources: UNECE/FAO TIMBER database and CEPI, 2002.

TABLE 10.2.1 (contd.)
Production of paper and paperboard in the UNECE region, 1998-2001
(1,000 m.t.)

	1998	1999	2000	2001	Change 2000 to 2001	
					Volume	%
PACKAGING MATERIALS						
EU/EFTA	31 845	33 074	34 793	34 147	-646	-1.9
of which:						
Germany	5 983	6 217	6 561	6 737	176	2.7
Sweden	4 429	4 527	4 968	4 857	-111	-2.2
France	4 347	4 395	4 600	4 360	-240	-5.2
Other Europe	3 502	3 344	3 895	4,046	151	3.9
of which:						
Turkey	918	940	1 067	1 088	21	2.0
Poland	886	873	1 051	1 050	-1	-0.1
Russian Federation	1 242	1 705	2 479	2 773	294	11.9
North America	53 511	55 257	53 044	50 844	-2 200	-4.1
Canada	4 365	4 582	4 585	4 489	-96	-2.1
United States	49 146	50 675	48 459	46 355	-2 104	-4.3
OTHER PAPER AND PAPERBOARD						
EU/EFTA	3 497	3 606	3 964	3 863	-101	-2.5
of which:						
Germany	1 137	1 170	1 270	1 192	-78	-6.1
United Kingdom	464	515	480	459	-21	-4.4
Spain	420	400	439	469	30	6.8
Other Europe	338	456	493	497	4	0.9
of which:						
Poland	116	182	184	190	6	3.3
Croatia	57	135	135	119	-16	-11.9
Russian Federation	390	536	451	405	-46	-10.2
North America	2 253	2 305	2 307	2 125	-182	-7.9
Canada	150	150	150	150	0	0.0
United States	2 103	2 155	2 157	1 975	-182	-8.4

Sources: UNECE/FAO TIMBER database and CEPI, 2002.

Imports from outside the CEPI area represented nearly 11% of newsprint demand.

Within the graphic papers category, demand for uncoated mechanical paper grades fell by 3.2% to 4.7 million m.t., with imports, exports and internal deliveries all showing decreases. Growth in demand for coated mechanical grades fell back to their 1999 level, declining by 7.1% to 6.5 million m.t.. Demand for coated woodfree grades fell by 1 million m.t. or 10.2%. Internal deliveries of coated woodfree paper by CEPI producers to purchasers within CEPI countries decreased by 9.6%. Consumption of uncoated woodfree paper grades fell by 6.7%, although both

imports and exports increased. Overall demand for coated grades fell by 8.8% and uncoated grades by 5.5%.

Consumption of packaging grades of paper and paperboard held up slightly better than graphic paper markets, decreasing by just 2.3% to 32.7 million m.t. Among the packaging grades, consumption of corrugated case materials decreased by 1.5%, carton board rose by 0.4%, wrappings fell by 4.7% and other paper and board for packaging dropped by 9.2% (to 3.2 million m.t.). Imports decreased by 1.9%.

TABLE 10.2.2
Consumption¹ of paper and paperboard in the UNECE region, 1998-2001
(1,000 m.t.)

	1998	1999	2000	2001	Change 2000 to 2001	
					Volume	%
EU/EFTA	73 267	78 199	82 456	79 178	-3 278	-4.0
of which:						
Germany	17 073	17 766	19 672	18 767	-905	-4.6
United Kingdom	11 413	11 871	12 907	12 560	-347	-2.7
France	10 743	10 955	11 946	11 365	-581	-4.9
Italy	9 592	10 461	11 075	10 735	-340	-3.1
Spain	5 462	8 047	6 826	6 402	-424	-6.2
Netherlands	3 894	4 164	4 105	3 826	-279	-6.8
Other Europe	8 595	8 962	10 212	9 783	-429	-4.2
of which:						
Poland	2 088	2 268	2 409	2 396	-13	-0.5
Turkey	2 075	2 142	2 756	2 016	-740	-26.9
Czech Republic	782	803	849	929	80	9.4
Slovakia	489	703	823	886	63	7.7
CIS	2 817	3 712	4 446	5 075	630	14.2
of which:						
Russian Federation	2 128	2 848	3 415	3 925	511	15.0
North America	98 738	104 240	102 804	97 831	-4 973	-4.8
Canada	6 871	8 370	9 118	9 132	14	0.2
United States	91 866	95 870	93 686	88 699	-4 987	-5.3

¹Apparent consumption = production + imports – exports for those countries from the UNECE/FAO TIMBER database. However for those countries from the CEPI database, for this table and related analysis, consumption = domestic deliveries + imports.

Sources: UNECE/FAO TIMBER database and CEPI, 2002.

Exports increased by 11.5%, with exports particularly strong for case materials which increased by 31.1% (0.3 million m.t.).

Demand for sanitary and household grades grew by 3% to 5.6 million m.t., primarily the result of internal deliveries rising by 3.3%. Imports and exports, which both represent about 3% of consumption, fell. Exports declined by 5% and imports by 6.8%.

Despite a relatively disappointing contraction in production, in global terms the CEPI countries maintained their share of the world paper and paperboard output in 2001. Exports to countries outside the CEPI area increased by 2.8% to 10.5 million m.t., while imports into the area fell by 4.5% to 4.9 million m.t. This perhaps reflects some benefit to the euro currency countries of a favourable euro/dollar exchange rate in 2001. The proportion of total deliveries to outside the CEPI area increased to 11.9%. Exports to both North and South America fell back to 1999 levels but were offset by a resurgence of deliveries to Asian

markets. In aggregate, 32% of exports went to Asia, 25% to the rest of Europe, 20% to North America, and the remainder to other world regions. Imports into the CEPI countries contributed 6% to total European paper and paperboard consumption in 2001. Imports from North America fell for the fourth consecutive year. Imports from Latin America recovered from last year's fall. Deliveries from the rest of Europe into CEPI countries, primarily from eastern Europe, rose by 9.9% to 2.1 million m.t., and now represent the highest level of imports from any region, accounting for 44% of CEPI imports while just 38% of imports came from North America in 2001.

The CEPI production figures for the first quarter of 2002, although showing a paper and paperboard output of 22.5 million m.t. for the quarter, were slightly lower than in the same period of 2001. However, the production volume was over 4% higher than in the final quarter of 2001, indicating a market upturn at least in the first quarter. A slow economic upturn, currently forecast for late 2002, should however benefit

European paper and paperboard markets hit by a real contraction of activity since the middle of 2001.

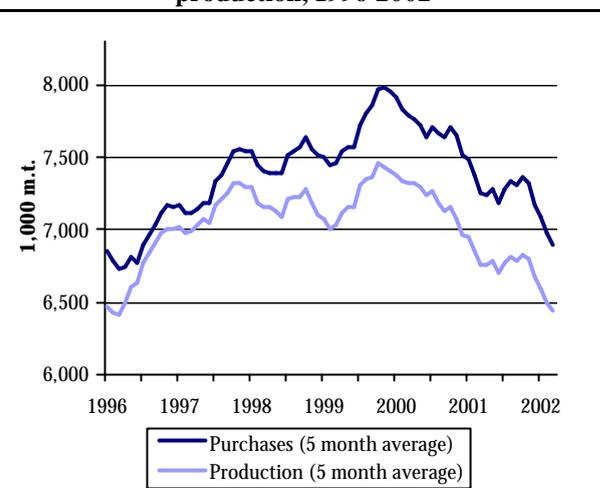
The outlook for paper and paperboard trade between Europe and the United States has been complicated by the prospect of increased import tariffs, as the European Commission (EC) formally proposed in 2002 a set of retaliatory tariffs against paper and paperboard products imported from the United States in response to tariffs on steel imports by the United States. The EC submitted a proposed tariff increase of 15% to the World Trade Organization (WTO) on a long list of paper and paperboard products imported from the United States. The EC list of paper and paperboard products subject to the proposed tariff increase was reportedly refined following EC consultation with the European Union's 15 member states. The list includes all uncoated paper products used for printing, writing and graphics applications, corrugated boxes, cartons, bags and other containers, tissue and sanitary paper products, and books, ledgers, business forms, albums and writing pads all subject to a proposed 15% tariff increase. The tariffs for all items on the EC list could be applied if the WTO rules that United States steel import tariffs are illegal and safeguard measures are not removed. In addition to the EC action, China too has proposed increased tariffs on imports of certain paper products from the United States, subject to ruling by WTO on the United States steel import tariffs. A WTO decision on this matter is not expected until possibly 2003.

10.2.2 Paper and paperboard in North America

Domestic purchases and production of paper and paperboard in the United States declined through 2000, 2001 and into 2002, dropping by more than 10% off the peak historical levels of 1999 (graph 10.2.2). By the first quarter of 2002 United States paper and paperboard production and consumption on an annual basis were both running about 11% below the peak volumes of 1999. Thus the recent downturn ranks among the most significant for United States paper and paperboard markets in the past 50 years, exceeded only by the downturn that occurred during the so-called energy crisis of the 1970s (when annual United States consumption dropped by 17% and production fell by 15% between 1973 and 1975). With domestic demand and production falling in 2001, industry-wide profits likewise fell to abysmal levels illustrated by the trend since 1995 in unadjusted after-tax quarterly profits for the entire United States paper and allied products industry (graph 10.2.3). Corresponding to the drop in demand and profits there were numerous mill closures in North America, and particularly in the United States where not less than 26 paper and paperboard mills were

GRAPH 10.2.2

United States paper and paperboard purchases and production, 1996-2002



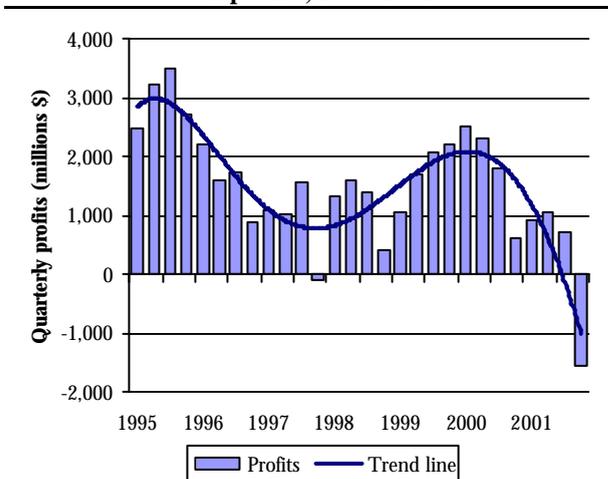
Source: American Forest & Paper Association, 2002.

shut down in the year 2001. Dozens of paper machines were also shut down at other locations. Employment in the United States paper and allied trades sector dropped by 7.2% from 1999 to the first quarter of 2002, a loss of 48,000 jobs. However, industry profit data for the first quarter of 2002 suggest that a market rebound is underway. Significant questions are how the rebound will unfold and whether it can be sustained. The recent United States economic downturn was spawned by a steep rise in the exchange value of the United States dollar since 1996, leading to an expanded United States trade deficit in goods and ultimately a precipitous decline in United States industrial output.

The abrupt decline in United States manufacturing,

GRAPH 10.2.3

United States paper & allied products industry after-tax profits, 1995-2001



Source: United States Department of Commerce, Quarterly Financial Report, 2002.

business growth and investment activity beginning in 2000 also precipitated a broad decline in domestic demand for printing, advertising, packaging and other business applications of paper and paperboard products. Thus, already facing weakness in exports and rising imports since 1996 with the stronger dollar, the United States paper industry encountered simultaneously a large drop off in domestic demand for paper and paperboard from 2000 through 2001. The Canadian industry, heavily dependent on exports to the United States, also experienced a sharp downturn of production and shipments in 2001.

Continued gradual upturn rather than dramatic recovery in United States business activity and in the United States pulp and paper sector appears more plausible in 2002 and 2003. The timing of proposed tariffs on paper and paperboard products (by the EC and China in response to United States steel import tariffs) could hardly be less propitious for the United States pulp and paper sector, which has been reeling from years of expanded trade deficits since 1996 under the weight of an exceptionally strong United States dollar. A weakening trend in the United States dollar exchange value since February of 2002 (according to the broad dollar indexes) provides some prospect for improvement in the United States trade balance, but that prospect could be dimmed in the future by trade barriers. Also looming over the United States economy is the threat of renewed terrorist attacks, emphasized by warnings from senior government officials that a new terrorist attack on the United States is very likely.

In the year 2001, paper and paperboard demand in North America dropped by around 5%, with a 5.2% decline in reported domestic purchases in the United States and a negligible decline in Canada. In the United States domestic purchases of paper and paperboard commodities (excluding building paper) fell from a record level of 93.8 million m.t. in 1999 to 91.7 million m.t. in 2000, and to 86.9 million m.t. in 2001 (based on data reported by the American Forest & Paper Association (AF&PA) *Paper, Paperboard & Wood Pulp, Monthly Statistical Summary*). Purchases data for the first quarter of 2002 indicate an annual rate of only 83.6 million m.t., a decline of roughly 11% from 1999 into 2002, although it can be noted that markets appeared to be turning upward in the second quarter of 2002. The decline in paper and paperboard demand stands in contrast with United States GDP growth which slowed down in recent years but nevertheless increased by 7% from 1999 to the first quarter of 2002. The decline in paper and paperboard demand reflects impacts of the recession in United States manufacturing and record United States trade deficits.

In the United States, production of paper and paperboard (including estimates for building paper) dropped in 2001 by 5.8%, from 86.5 to 81.5 million m.t., somewhat more than the 5.2% drop in United States domestic purchases of paper and paperboard (indicating further widening of the trade deficit in tonnage of paper and paperboard, although both imports and exports receded with the economic downturn in 2001). On an annual basis, United States production of paper and paperboard in 2001 was 8.2% lower than production in the peak year of 1999, and production in the first quarter of 2002 (running at an annual rate of around 78 million m.t.) was roughly 11% lower than the annual production rate of 1999. Mill closures and limited capacity growth contributed to a decline in United States paper and paperboard production capacity by 1.3% in 2001, but nevertheless capacity utilisation dropped from around 91% in 2000 to an average of about 87% in 2001, and reached a low point at around 80% in December of 2001 before recovering to levels above 85% in the first half of 2002.

Price trends for paper and paperboard commodities generally follow industry capacity utilisation trends, and thus prices were generally declining through the end of the year 2001, and then prices levelled off in the first half of 2002 and began to show signs of firmness with an upturn in spot prices for some grades. For example, spot prices for containerboard (kraft linerboard and semi-chemical corrugating medium) were falling through the year 2001 and into 2002, reaching a trough during February and March, but then turned upward from April through June of 2002 (see www.paperloop.com). Increases in list prices for containerboard grades were announced for June and July by a number of leading producers, but reported contract prices for containerboard remained unchanged in June (*Pulp & Paper Week*). Continued weakness in the printing and publishing sector delayed the market upturn for newsprint, although some producers announced price increases for newsprint in June. United States demand for newsprint reportedly increased in May for the first time on a year-to-year basis since January of 2000, although year-to-date North American newsprint production and shipments in 2002 were still down by 10% relative to 2001 (according to data from the Pulp and Paper Products Council of Canada). Prices for other printing paper grades such as the coated paper grades remained weak at mid-year 2002 but were no longer declining since the first quarter.

Although an upturn was observed in overall United States industrial production in 2002, the industrial output index of the large United States printing and publishing sector continued to recede into the first quarter of 2002, down by 9.6% relative to the first quarter of 2001

(United States Federal Reserve Board, G.17 Report). In addition, mail volume data reported by the United States Postal Service showed declines over the past year, with notable declines in the volume of catalogues and periodicals such as magazines. However, indicators of business trends in commercial printing generally showed gradual improvement from the fall of 2001 into the first half of 2002. The Print Business Index of the National Association for Printing Leadership (NAPL) edged up in March and April of 2002 to levels indicating that business was finally picking up for the majority of commercial printers, for the first time since October 2000 (see www.napl.org). The print sector's recovery from recession paused as the index showed that business was not picking up for the majority of commercial printers in May, a further indication that the ongoing recovery will be gradual and at times halting. Nevertheless, print sector trends still pointed upward, and NAPL analysis indicated that commercial print sales could grow by 2.2% to 3.4% in 2002, mainly in the second half of the year, and by as much as 7.3% in 2003.

Among principal commodity groups, United States newsprint production was off by 13.5% in 2001, dropping from 6.7 million m.t. in 2000 to 5.8 million m.t. in 2001. Although newsprint demand is driven in large part by business advertising expenditures, which collapsed in 2001 along with business profits, it is noteworthy that surveys have also shown gradually declining newspaper readership and newspaper circulation in the United States, with declining per capita consumption of newsprint since the late 1980s. Shipments of other graphic papers (printing & writing papers excluding bristols and thin papers) dropped by 8.4%, from 23.0 million m.t. in 2000 to 21.1 million m.t. in 2001. Containerboard production (case materials) dropped by 4.9%, from 30.9 million m.t. in 2000 to 29.4 million m.t. in 2001, roughly in line with the drop in United States industrial production. Other categories of paper and paperboard used for packaging and other industrial applications dropped by 3.4%, from 17.6 million m.t. in 2000 to 17.0 million m.t. in 2001. Production increased only for sanitary and household paper products (tissue and sanitary paper), up by 1.5%, from 6.3 million m.t. in 2000 to 6.4 million m.t. in 2001. The decline in production of packaging grades and containerboard directly reflected the downturn in United States industrial production, while larger declines in newsprint and other graphic paper production reflected a larger drop in United States print advertising activity and lower demands for paper in business applications, associated with the broader downturn in business investment and business growth as well as the downturn in industrial production.

In 2001, the Canadian pulp and paper industry suffered the sharpest year-over-year drop in sales in almost two decades but still managed to post a small aggregate profit, due mostly to a weaker Canadian dollar. This summary of Canadian trends is drawn from *The Canadian Pulp and Paper Industry: A Review and Outlook*, Canadian Pulp and Paper Products Council (PPPC) [see www.pppc.org/en/1_0/index.html]. Canadian shipments of paper and paperboard dropped by 5.8% (from a record 20.8 million m.t. in 2000 to 19.6 million m.t. in 2001). The decline was primarily the result of weaker exports. A significant decrease in advertising expenditures in the United States led to a 7% decline in shipments of communication papers (newsprint and other graphic papers) to the United States. Domestic sales by Canadian producers to markets within Canada held up fairly well, decreasing by only 0.2% despite a slowing economy and a 4% increase in imports. With only fractional declines in capacity, the overall capacity utilisation rate for the Canadian pulp and paper industry declined by six percentage points to an average level of 89% in 2001. It was estimated by PPPC that the average United States dollar price paid for Canadian industry shipments (weighted by Canadian shipments) fell by almost 8% in 2001 when compared on average to prices in 2000. The decline in Canadian shipments combined with weaker prices resulted in a significant decline in overall industry profits. Preliminary estimates for 2001 put the industry's net earnings on pulp and paper operations at \$800 million (Canadian dollars) compared to net earnings of \$3.0 billion Canadian dollars in 2000.

The decline across the Canadian paper and paperboard sector extended to most major product lines. Canadian industry shipments of newsprint (to domestic and foreign markets) dropped by 9.8%, from 9.3 million m.t. in 2000 to 8.4 million m.t. in 2001. Other graphic paper (printing & writing paper) shipments dropped by 3.4%, from 6.3 to 6.1 million m.t., while shipments of packaging paper and paperboard dropped by 2.4%, from 4.5 to 4.4 million m.t. By the first quarter of 2002 it was recognized that the United States economy was slowly recovering from the recession in the United States manufacturing sector, and as a result PPPC projected a 2.3% increase in Canadian pulp and paper industry shipments in 2002.

10.2.3 Paper and paperboard in the Russian Federation

In 2000 and 2001, output of paper and paperboard products continued to increase in the Russian Federation, although in 2001 the growth in output was slower than in the year 2000. According to data from PPB Magazine and author estimates, annual rates of growth in Russian output for principal categories of paper and paperboard in 2001 were as follows (as compared to growth rates in the year 2000)³:

- total paper and paperboard – up by 5.1% (versus 14.6% in 2000)
- all paper grades (excluding paperboard) – up by 2.9% (versus 12.5% in 2000)
- newsprint only – up by 2.2% (versus 4.7% in 2000)
- all paperboard grades – up by 10.1% (versus 21.3% in 2000).

According to UNECE data reported in table 10.2.1, the largest increase was in output of packaging materials, which increased by 11.9% from 2.5 to 2.8 million m.t. Output of graphic papers in Russia increased by only 1.3%, at 2.3 million m.t. in 2001. Output of sanitary and household papers increased by 8.1%. Similar to Europe and North America, there was less robust demand for graphic papers than for other categories of paper and paperboard.

In the 2000 to 2001 period, most Russian forest, pulp and paper enterprises increased their output and raised their profitability. This was associated with their adaptation to market conditions and by structural reorganization of both individual enterprises and the industry as a whole.

Growth in Russian output of paper and paperboard continued also through the first four months of 2002. Total production of paper and paperboard in the period from January through April of 2002 was up by 6.4% relative to the same four-month period in the year 2001. During the same period paper output was up by 2.8% and paperboard output was up by 12.2%.

Important economic and political changes continued to unfold in Russia in 2000 and 2001, contributing to a certain degree of political stabilization and economic progress, all of which continued to have a positive influence on growth in the Russian pulp and paper sector. Tax reform was implemented, including unification of

the individual income tax rate at 13%. The profit tax of industrial enterprises was drastically reduced by up to 24%. The rouble/dollar exchange rate experienced relatively minor adjustments in the 2000–2001 period, with the exchange rate hovering in the range of 26.5 to 28.5 roubles per dollar in the year 2000 and shifting to upwards of 30 roubles per dollar in 2001. The relatively low rouble exchange rate against major currencies continued to favour production of goods in Russia, including paper and paperboard, for both the domestic and export markets. The political and economic stability in Russia also helped encourage foreign investment, which increased above \$14 billion in 2001.

Russia and other CIS countries experienced growth in per capita paper and paperboard consumption in recent years, after a temporary decline in the early 1990s. In 2001, consumption of paper and paperboard products reached 28 kilograms per capita in Russia. Consumption of paper and paperboard in Russia increased by 15%, from 3.4 million m.t. in 2000 to 3.9 million m.t. in 2001, with most of that increase provided by increased domestic production.

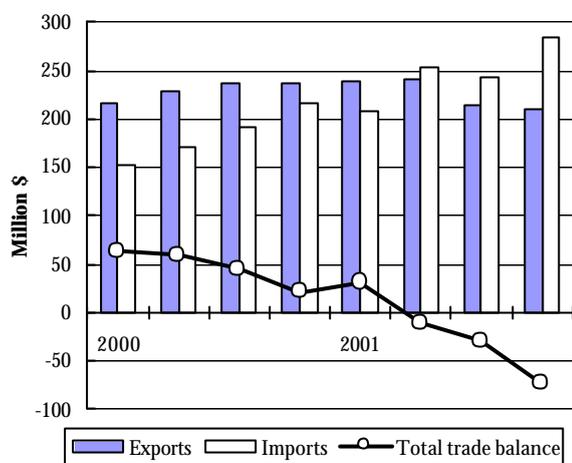
Russia and the other CIS countries showed particularly strong economic growth, for the third consecutive year. Thus, the increase in output of pulp and paper products continued in Russia (while at a slower rate compared to the previous year) against the background of the downturn in pulp and paper production in North America and western Europe.

However, international trade and the value of Russian imports and exports continued to evolve along with shifting global prices for pulp and paper commodities. In general, global woodpulp prices fell more precipitously in 2001 than paper and paperboard prices. Since the second quarter of 2001 the Russian trade balance for paper and paperboard became negative, this process being intensified in the third and fourth quarters of 2001 (graph 10.2.4). This was largely due to expanded imports and slower growth in exports of the more expensive paper and paperboard grades and products, and it stands in contrast to the fact that Russian exports of pulp, paper and paperboard were increasing in total tonnage in 2000 and 2001. However, while the tonnage of Russian market pulp exports increased by 9.4% in 2001, global prices for market pulp were rapidly receding, offsetting the value of pulp exports. Global prices for paper and paperboard did not drop as much as market pulp prices in 2001, but the tonnage of Russian paper and paperboard exports increased by only 1.3% in 2001.

Restructuring of enterprise ownership was in progress in the Russian pulp and paper industry. For example, there was replacement of owners at several major enterprises such as OAO Volga, the Syktyvkar

³Data on paper and paperboard production reported to UNECE from the Russian Federation (shown in Table 10.2.1) show slightly lower rates of growth in Russian output, 5.4% in 2001 and 17.1% in 2000, but the trends are generally in agreement with author estimates discussed in the text.

GRAPH 10.2.4

Russia's pulp and paper exports and imports, 2000 and 2001

Sources: State Customs Committee, *PPB Express* and the author's data handling, 2002.

Forest Industrial Complex, and the Ust Ilimsk Forest Industrial Complex. In the summer of 2002 owners were also replaced at the Kotlas Pulp and Paper Mill. Russia's largest enterprises increased their use of biofuels for example, OAO Svetogorsk, the Arkhangelsk Pulp and Paper Mill, the Kotlas Pulp and Paper Mill.

One manifestation of the Russian industry's structural reorganization is the fact that it has become an export-oriented industry. The export share of Russian market pulp output was more than 83% in 2001, while the export share of Russian paper and paperboard output was 45%. Despite the fact that Russia's pulp and paper industry has not yet recovered to the historical peak output levels of the 1988 to 1989 period, Russia's export sales reached record historical levels in the 2000 to 2001 period. However, while primarily exporting less expensive kinds of products (newsprint, kraft liner and market pulp), Russia has simultaneously increased its imports of high value paper and paperboard products, notably clay-coated grades. This explains the overall negative trade balance for pulp, paper and paperboard in 2001.

Late in 2001 and continuing into the first half of 2002, a Russian Forestry Complex strategy continued to be worked out for the period up to 2015. The Forestry Complex strategy options were based on the current political stability in Russia, with high political ratings of Russian Federation President Vladimir Putin, on the strategic partnership with the United States connected to support for anti-terrorist operations after the events of 11 September 2001, as well as Russia obtaining broader recognition in 2002 as a country with a market-based

economy. At the same time, economic and political cooperation with China was being developed, essentially in the framework of the Shanghai Organization for Cooperation.

The development strategy for Russia's pulp and paper industry in the period to 2015 is based on expectations of internal market growth (in particular expectations of rapid growth in consumption of information carriers for Internet and other information technologies as well as growth in packaging for food industries, etc.). The strategy is also based on assessment of potential foreign markets, primarily those of CIS countries, China, eastern Europe, India, and Pakistan. Consideration of key principles in the Forestry Complex strategy took place at the enlarged session of the State Council under the guidance of President Putin and at the session of the Government of the Russian Federation. Discussion of national interests underlined the need for abandoning the policy of roundwood export, which is viewed as forestalling development of more extended wood processing in the immediate vicinity of areas where timber is being grown in Russia.

It can be noted that the contribution of roundwood to total Russian wood product exports increased from 45% to 55% in the period from 1990-2000. It can also be recognized that Finland occupies first place among importers of Russia's roundwood and accounts for about one third of the total exports of Russia's roundwood. Over the last 10 to 20 years there was more than a two-fold increase in roundwood exports from Russia to Finland (from 4 to 6 million m³ per year in 1982-1993 to 10-11 million m³ per year in 1998-2000). Finland has roughly doubled its output of paper and paperboard within the same period.

A specific feature of Russia's pulp industry is its large proportion of sulphite pulp capacity and the need for environmental reconstruction of sulphite pulp mills. One of the key environmental problems is the necessity to unify approaches to environmental regulations in Russia and in western European countries. Step by step environmental reconstruction is still in progress at various Russian pulp and paper mills. The Saint Petersburg Goznak Paper Mill for example was a pioneer in holding an ISO 14000 certificate. Local treatment systems with KWI flotators were put into operation at the Neman Mill. The Vyborg Mill was converted to gas fuel.

Russia has yet to return to the peak historical pulp and paper production levels of the 1988 to 1989 period although annual production of newsprint and offset paper products have now exceeded their previous historical levels. Russia has experienced steady expansion since 1997 in production of woodpulp, paper

and paperboard products, and the expansion continued in 2000 and 2001. This continued expansion of production in Russia occurred at a period when production declined in most of western Europe and North America.

Looking to the future, the main problem recognized within the Forestry Industrial Complex of Russia as a whole (and within various Federal Areas, such as the North-Western Federal Area) is inadequate in-depth wood processing in the immediate areas where wood is growing. Wood raw material (roundwood) dominates the exports of forest-based products. This results in a loss of significant amount of jobs, in reduced currency earnings, slowed economic growth of the country as well as in negative environmental impacts because of increased transportation costs, or lack of complex use of forest resources. Because of this, the development of complex in-depth wood processing at an accelerated pace (including the pulp and paper industry) is considered by Russian authorities as a foundation strategy.

A more favourable investment climate is being created in certain areas of Russia, such as the North-Western Region, and in particular the Leningrad Oblast area. The Region has the capability to provide scientific and staff support to investment programs. A number of enterprises located in the area (for example the OAO Svetogorsk, the Goznak Paper Mill) have had their production certified to comply with the ISO 9000 International Standards System. Late in 2001, as mentioned above, the Saint Petersburg Goznak Paper Mill became the first enterprise of the Russian Forestry Complex to receive the certificate of the Environmental Management System in accordance with the ISO 14000 international standards.

In 2001 and 2002, a number of UNECE projects aimed at development of Russia's forestry sector were continuing. Three scientific and practical conferences were held in Saint Petersburg devoted to: "Sustainable Development and Certification in the Forestry Complex", "Sustainable Development and Biofuel Use", and "Strategy of Forestry Complex Development in Russia's North-Western Area.

10.3 Woodpulp

In 2001, woodpulp production receded in most of Europe and in North America, with a drop of 3.7% by 1.5 million m.t. in Europe as a whole and a drop of 7.8% by 6.1 million m.t. in North America (United States and Canada), (table 10.3.1). For European countries as a whole, the drop of woodpulp production in 2001 was a decline from recent record production levels in the year 2000, whereas peak North American

production levels had occurred a number of years earlier in the 1990s. In the United States, woodpulp production and pulpwood receipts at woodpulp mills have been receding since their historical peaks in the mid-1990s, and by 2001 both were more than 10% below the historical peaks.

10.3.1 Woodpulp in Europe

Output of woodpulp in Europe fell in 2001, according to data reported by CEPI. Total production, of both integrated and market pulp, reached 37.9 million m.t. among CEPI member countries, a decrease of 3.6% relative to 2000 production levels. Production at integrated mills fell by 4.7%, while output of market pulp declined by 0.8%. The drop in chemical pulp output was 1.7%, while production of mechanical and semi-chemical pulp declined by 4.1%. The operating rate (capacity utilisation rate) in the pulp industry fell from 92% in 2000 to 87% in 2001.

Overall consumption of woodpulp in the CEPI area (including consumption at integrated mills, market pulp, and imports) fell to 43.9 million m.t. by 4.1%. Exports, at 1.4 million m.t. in 2001, increased significantly by 47.4%, while imports, at 7.8 million m.t., declined by 1.4%. Consumption of mechanical and semi-chemical pulp decreased by 3.6% to 14.1 million m.t. Consumption of chemical pulp was 28.9 million m.t., down by 3.3%. Consumption of recovered paper continued to increase according to data for the CEPI area. Utilisation was up by 0.8% at 42 million m.t. Apparent collection also increased, by 1.8%, to 44.7 million m.t. Recovered paper (recycled fibre) represents 50% of the European paper industry consumption of fibres.

Recovered paper markets in Europe began to show signs of a fairly strong market rebound in the second quarter of 2002, after more than a year of relatively weak markets, according to the second quarter recovered paper market report issued by the Bureau of International Recycling (BIR) in Brussels. There were broad increases reported in prices for recovered paper commodities during the second quarter in most European countries. The firming up of recovered paper markets was reportedly due to increased production levels at European paper and paperboard mills coupled with increased demand for export of recovered paper to Asia.

10.3.2 Woodpulp in North America

For Canadian woodpulp producers, the only notably positive market development was a substantial rebound in market pulp shipments to China (increasing by 47% in 2001 relative to 2000). Overall woodpulp exports from Canada declined by 5.4%, from 10.8 million m.t.

TABLE 10.3.1
Production of woodpulp in the UNECE region, 1998-2001
(1,000 m.t.)

	1998	1999	2000	2001	Change 2000 to 2001	
					Volume	%
MECHANICAL WOODPULP						
EU/EFTA	12 655	12 436	14 190	13 572	-618	-4.4
of which:						
Finland	4 137	4 102	4 819	4 621	-198	-4.1
Sweden	3 026	3 029	3 566	3 346	-220	-6.2
Norway	1 664	1 644	1 761	1 736	-25	-1.4
Other Europe	330	342	390	392	1	0.4
of which:						
Poland	113	126	103	100	-3	-2.9
Czech Republic	79	62	68	88	20	29.4
Russian Federation	981	1 129	1 196	1 590	394	32.9
North America	15 772	16 331	17 486	15 912	-1 574	-9.0
Canada	10 481	11 222	12 340	11 409	-931	-7.5
United States	5 291	5 109	5 146	4 503	-643	-12.5
CHEMICAL WOODPULP¹						
EU/EFTA	23 472	23 600	24 004	23 158	-846	-3.5
of which:						
Sweden	7 523	7 664	7 951	7 654	-297	-3.7
Finland	7 310	7 567	7 102	6 548	-554	-7.8
Portugal	1 708	1 755	1 774	1 806	32	1.8
France	1 913	1 817	1 698	1 615	-83	-4.9
Spain	1 545	1 617	1 623	1 589	-34	-2.1
Other Europe	2 460	2 551	2 885	2 902	18	0.6
of which:						
Poland	841	786	891	873	-18	-2.0
Slovakia	339	551	603	668	65	10.8
Czech Republic	490	504	569	596	27	4.7
Russian Federation	3 010	3 980	4 646	4 811	165	3.6
North America	67 596	67 413	67 040	62 500	-4 541	-6.8
Canada	13 363	14 160	14 356	13 376	-980	-6.8
United States	54 233	53 253	52 684	49 124	-3 561	-6.8

¹Including semi-chemical woodpulp and dissolving grades

Sources: UNECE/FAO TIMBER database and CEPI, 2002.

in 2000 to 10.3 million m.t. in 2001. Capacity utilisation rates for market pulp producers in Canada dropped from an average of 95% in 2000 to 89% in 2001. Spot prices for northern bleached softwood kraft (sulphate) pulp in North American and global markets declined through the year 2001, reaching a trough in the market around February and March of 2002, having dropped at that point by roughly 35 to 40% or nearly

\$250 per m.t. from previous peak levels late in the year 2000. Subsequently however, from April to June of 2002, spot prices for market pulp had rebounded by 15% or more (by \$30 to \$50 per m.t.).

Woodpulp production in the United States (including production for paper and paperboard at integrated pulping and papermaking facilities plus market pulp and estimated dissolving pulp production)

receded from 57.9 million m.t. in 2000 to 53.7 million m.t. in 2001, and during the first quarter of 2002 production was running at an annual rate of only about 51 million m.t. United States production of market pulp for paper products (excluding dissolving pulp) dropped from 7.9 million m.t. in 2000 to 7.4 million m.t. in 2001 (AF&PA, Paper, Paperboard & Wood Pulp, Monthly Statistical Summary). United States imports and exports of market pulp changed very little between 2000 and 2001, indicating that most of the drop in market pulp shipments in 2001 was associated with a drop in domestic fibre demands, with total consumption of woodpulp dropping by just over 4 million m.t. in the United States.

As was the case for northern bleached softwood kraft pulp, North American spot prices for bleached hardwood kraft and southern bleached softwood kraft pulp receded in the year 2001, reaching a trough in February and March of 2002, before rebounding in April and May. Global spot prices for market pulp (including commodities such as radiata pine pulp, Eucalyptus pulp, and mixed hardwood pulp in Asia) exhibited a similar trend, reaching low points around February and March of 2002 before rebounding in April and May. By May of 2002, many North American producers had announced increases in list prices for market pulp, pushing list prices for bleached kraft pulps to a range of around \$460 to \$500 per m.t. in June, after prices had fallen to lows of \$400 to \$460 per m.t. late in the year 2001. The fact that list prices had been in a range of \$650 to \$700 in the second half of 2000 gives an indication of the severity of the downturn in market pulp prices that occurred in 2001.

Prices for some recovered paper commodities also began to increase in the first half of 2002, particularly old corrugated containers (OCC) used primarily at paperboard mills. By mid-year 2002, the reported United States average prices for OCC had more than doubled relative to prices in the first quarter (Pulp & Paper Week), reflecting growth in overseas demands for recycled fibre and a modest upturn in domestic paperboard production. A number of new paper and paperboard mills began operation recently in Asia, and more were scheduled to begin operation in the near future (particularly in China). Included among new Asian mills are some of the largest and fastest paper machines in the world. Many of the new Asian mills are operating on the basis of imported market pulp (in the case of paper mills) but many others are operating on the basis of recycled fibre (often imported fibre in the case of paperboard mills). Although much of the imported market pulp for Asian mills comes from sources in proximity to Asian markets, such as hardwood pulp from mills in Indonesia or softwood

pulp from mills in Russia, growing fibre demands in Asia create growing demands for recovered paper directly from North America and Europe. Fibre demands in Asia began to recover in 2002, leading to an upturn in export prices for some categories of recovered paper, particularly OCC. In general however, recovered paper prices in North America were still well below preceding peak levels of 2000, having generally receded from 2000 into 2001. Prices for old newspapers and pulp substitute grades of recovered paper remained weak by mid-year 2002 due to continued weakness in newsprint and printing paper markets.

10.3.3 Woodpulp in the Russian Federation

In 2000 and 2001 the output of woodpulp continued to increase in the Russian Federation, although growth was slower in 2001 than in 2000. According to data from PPB Magazine and author estimates, annual rates of growth in output for principal categories of woodpulp in 2001 were as follows (compared to growth in the year 2000)⁴:

- all woodpulp – up by 6.3% (in 2000 – up by 17.4%).
- market pulp – up by 5.8% (in 2000 – up by 16.2%).

Growth in Russian output of woodpulp continued also through the first four months of 2002 (with output of market pulp increasing by 7.2% during that period relative to the same four-month period in 2001). In 2001 a record level of market pulp exports was achieved, equal to 1.8 million m.t. (an increase of 9.4% over the previous year).

The structure of Russian pulp exports continued to change. China became the dominant destination for Russian market pulp exports. China's share approximated half of total Russian market pulp exports in 2001. Expansion of paper mill capacity continues in China, much of it based on purchased market pulp.

In terms of total woodpulp production in Russia, mechanical woodpulp accounted for just one fourth of total woodpulp production in 2001 and chemical woodpulp grades accounted for three fourths of output. However, more than two thirds of the increase in Russian woodpulp production was mechanical woodpulp.

⁴ Data on woodpulp production reported to UNECE from the Russian Federation (shown in Table 10.3.1) show somewhat higher rates of growth in Russian output of woodpulp in 2001, 9.6%, but lower growth in 2000, at 14.3%, but the UNECE data and author estimates are in agreement that Russian output of woodpulp increased by a total of 24% over the two-year period of 2000 and 2001.

10.4 UNECE paper, paperboard and woodpulp trade flows

10.4.1 Paper and paperboard trade flows

Roughly three quarters of the world trade flows of paper occur with and within the UNECE region. Within the EU/EFTA subregion, 42.1% of global paper trade flows occurred based on a 1997 to 2000 average, compared to 15.2% within North America for the same period (table 10.4.1). The dynamics of these two large trading subregions display the same trends from 1998 to 2000, with intra North American trade rising and intra EU/EFTA subregion trade falling (graph 10.4.1).

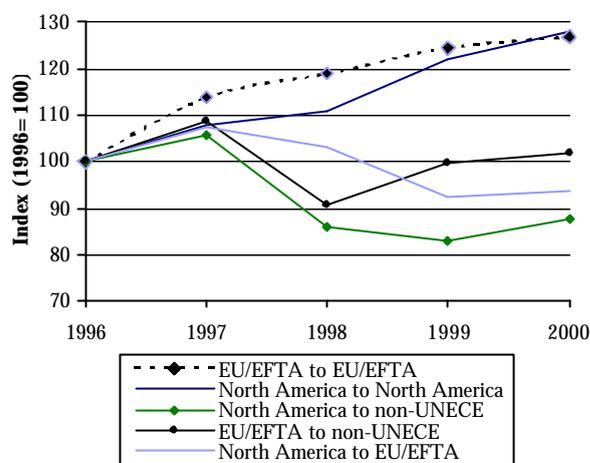
Trends in paper and paperboard trade flows show that North American exports to non-UNECE region countries (e.g. Asia) were the trade flows most significantly affected during the recent period of exceptional shifts in currency values, from 1996 to 2000. There were big downward shifts in trade flows from North America to non-UNECE regions, chiefly Asia, and also from North America to the EU/EFTA region. These downward shifts in trade reflect the decline in North American exports to Asia during the Asian financial crisis in 1997, and also a decline in exports from North America to Europe. Later in 1999 and 2000 the large paper and woodpulp trade flows within EU/EFTA also began to decline, with significant expansion of domestic production in countries like Germany. Meanwhile trade flows from EU/EFTA to non-UNECE region countries and trade flows within North America changed relatively little during the period from 1996 to 2000 (although Canadian exports to the United States dropped in 2001).

10.4.2 Woodpulp trade flows

The trade flows of wood pulp follow the same patterns of trade as for paper and paperboard for the 1996 to 2000 period, and for the same basic reasons (graph 10.4.2 and table 10.4.2). The UNECE region accounts for approximately 76% of the world's woodpulp trade flows. Within the EU/EFTA subregion, 19.9% of the global trade occurs, based on the 1997 to 2000 average. Within North America, the percent of world trade is 14.2%. Trade between subregions, as percent of global trade, varies from 19.5% for North America to non-UNECE region countries to 1.6% for EU/EFTA countries to non-UNECE countries.

GRAPH 10.4.1

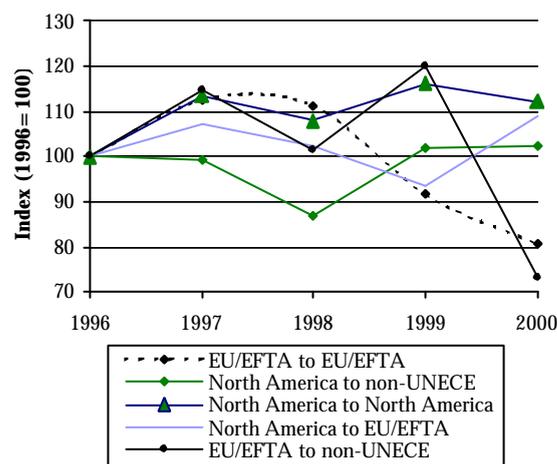
Major industrial paper trade flows in the UNECE region, 1996-2000



Source: UN COMPTRADE/EFI, 2002.

GRAPH 10.4.2

Major industrial woodpulp trade flows in the UNECE region, 1996-2000



Source: UN COMPTRADE/EFI, 2002.

TABLE 10.4.1

Major paper trade flows, by major countries, a average 1997-2000

(% of global trade)

To:		From:																			Grand total				
		EU/EFTA										Other Europe		CIS		North America			Non-UNECE						
		FIN	SWE	DEU	FRA	AUT	NLD	ITA	GBR	NOR	Total	POL	Total	RUS	Total	CAN	USA	Total	KOR	IDN		JAP	CHN	BRA	Total
EU/EFTA	Germany	2.2	2.0		1.1	1.0	0.7	0.4	0.3	0.4	9.3	0.1	0.4	0.2	0.2	0.1	0.3	0.4						0.1	10.4
	United Kingdom	1.8	1.7	1.1	0.7	0.2	0.3	0.2		0.5	7.0		0.1	0.1	0.1	0.4	0.3	0.7						0.2	8.1
	France	0.8	0.6	1.5		0.3	0.5	0.5	0.3	0.1	6.2		0.1			0.1	0.1	0.2						0.1	6.6
	Italy	0.4	0.6	0.8	0.6	0.4	0.1			0.1	3.4	0.1	0.3			0.1	0.3	0.4						0.1	4.3
	Netherlands	0.6	0.8	0.9	0.3	0.2				0.2	3.6						0.3	0.3							4.0
	Spain	0.8	0.4	0.4	0.6	0.1		0.2	0.1	0.1	3.1		0.1				0.2	0.3						0.1	3.6
	Belgium	0.4	0.1	0.3	0.2			0.2		0.1	1.4							0.1							1.6
	Switzerland	0.2	0.1	0.4	0.1	0.1					1.1														1.2
	Denmark	0.3	0.5	0.2						0.1	1.2														1.2
	Austria	0.1	0.1	0.4	0.1						1.0		0.1												1.1
	Total	8.7	7.8	6.6	4.1	2.5	2.2	1.6	1.6	1.6	42.1	0.4	1.3	0.6	0.6	1.0	1.7	2.7	0.2				0.2	0.7	47.5
Other Europe	Poland	0.2	0.1	0.4		0.1					0.9		0.1												1.1
	Turkey	0.1	0.1	0.1		0.1					0.6		0.1	0.2	0.2										1.0
	Israel		0.1								0.3						0.1	0.2							0.6
	Total	0.7	0.5	1.0	0.2	0.5	0.1	0.2	0.1		3.4	0.1	0.9	0.4	0.5	0.1	0.2	0.3						0.1	5.1
CIS	Russian Federation	0.1									0.2					0.1									0.3
	Total	0.2									0.3		0.1	0.3	0.4										0.8
North America	USA	0.8	0.1	0.4	0.1		0.1	0.1	0.1	0.2	2.1			0.1	0.1	13.1		13.1	0.3	0.1	0.2		0.1	1.0	16.3
	Canada	0.1									0.3						2.2	2.2							2.5
	Total	0.9	0.2	0.4	0.1	0.1	0.1	0.1	0.1	0.2	2.3			0.1	0.1	13.1	2.2	15.2	0.3	0.1	0.2		0.1	1.1	18.7
Non-UNECE	China	0.1	0.1	0.1							0.4			0.2	0.2	0.1	0.6	0.7	0.7	0.5	0.3	0.7		2.9	4.2
	Hong Kong	0.1		0.1							0.4					0.2	0.5	0.7	0.8	0.4	0.4	0.2		2.5	3.6
	Japan	0.2									0.3					0.3	0.9	1.1		0.1		0.1		0.2	1.7
	Mexico										0.1						1.2	1.2							1.4
	Australia	0.2		0.1				0.1			0.6						0.2	0.2	0.1	0.1				0.5	1.3
	Malaysia										0.2					0.1	0.1	0.2	0.1	0.2	0.1			0.7	1.1
	Brazil	0.1		0.1							0.3					0.3	0.2	0.5						0.1	0.9
	Total	1.8	1.1	1.0	0.5	0.3	0.3	0.3	0.4	0.2	6.3	0.1	0.4	0.8	0.8	2.0	6.4	8.4	2.4	2.2	1.4	1.1	0.8	12.1	28.0
Grand total		12.2	9.5	9.1	4.8	3.4	2.6	2.3	2.2	2.1	54.4	0.7	2.7	2.1	2.3	16.2	10.5	26.7	2.8	2.5	1.7	1.1	1.0	13.9	100.0

Note: AUT = Austria, BEL = Belgium, BRA = Brazil, CAN = Canada, CHE = Switzerland, CHL = Chile, CHN = China, CZE = Czech Republic, DEU = Germany, ESP = Spain, EST = Estonia, FIN = Finland, FRA = France, GAB = Gabon, GBR = United Kingdom, HRV = Croatia, HUN = Hungary, IDN = Indonesia, ITA = Italia, JAP = Japan, KOR = Republic of South Korea, LVA = Latvia, MAL = Malaysia, MEX = Mexico, MYS = Malaysia, NLD = Netherlands, NOR = Norway, NZL = New Zealand, PNG = Papua New Guinea, POL = Poland, P.o.C = Province of China, PRT = Portugal, RUS = Russian Federation, SVK = Slovakia, SWE = Sweden, THA = Thailand, USA = United States, ZAF = South Africa.

Source: UN COMPTRADE/EFI, 2002.

TABLE 10.4.2
Major woodpulp trade flows in UNECE region 1997-2000
(% of global trade)

To:		From:																				Grand total		
		EU/EFTA									Other Europe		CIS		North America			Non-UNECE						
		SWE	FIN	PRT	ESP	NOR	FRA	DEU	NLD	Total	CZE	Total	RUS	Total	CAN	USA	Total	BRA	CHL	IDN	ZAF		NZL	Total
EU/EFTA	Germany	1.7	2.0	0.5	0.6	0.4	0.2		0.5	6.5	0.1	0.3	0.1	0.1	2.1	0.9	3.0	0.4	0.1	0.1		0.7	10.6	
	Italy	0.3	0.3	0.1	0.4	0.1	0.4	0.3		2.8	0.1	0.3	0.2	0.2	1.9	1.7	3.6	0.5	0.5	0.2	0.1		1.5	8.4
	France	0.4	0.3	0.4	0.2	0.3			0.2	2.4	0.1	0.1			0.9	0.8	1.7	0.4	0.2		0.1		1.0	5.1
	United Kingdom	0.3	0.7	0.3	0.3	0.2				1.8			0.1	0.1	0.9	0.8	1.6	0.6	0.1		0.2		0.9	4.5
	Netherlands	0.5	0.2	0.6	0.2	0.1				1.9					0.6	0.6	1.2	0.1	0.1	0.2			0.5	3.6
	Spain	0.1	0.1	0.4			0.3			0.9					0.2	0.2	0.5		0.1				0.2	1.6
	Austria	0.2		0.1	0.1			0.1	0.1	0.9		0.2			0.2		0.2	0.1			0.2		0.3	1.5
	Switzerland	0.1	0.1		0.1			0.1		0.6			0.2	0.2	0.2		0.2	0.1	0.1				0.2	1.3
	Sweden		0.2	0.2	0.1	0.2				0.7						0.1	0.1							0.8
	Finland									0.1					0.1		0.1							0.3
	Total	4.1	4.3	2.7	2.0	1.4	1.1	0.8	1.0	19.9	0.4	1.0	1.1	1.1	8.1	5.6	13.7	3.5	2.1	0.6	0.7		7.7	43.4
Other Europe	Turkey									0.1					0.2		0.2						0.2	0.6
	Total	0.3	0.2	0.1				0.2		1.1	0.3	0.5	1.0	1.0	0.1	0.4	0.5	0.1					0.3	3.4
CIS	Russian Federation									0.1														0.1
	Total									0.1														0.3
North America	USA									0.2					13.6		13.6	2.0	0.1		0.2	0.1	2.6	16.4
	Canada															0.6	0.6							0.6
	Total									0.2					13.6	0.6	14.2	2.0	0.1		0.2	0.1	2.6	17.0
Non-UNECE	Japan	0.1		0.1						0.3					3.8	2.1	5.9	1.2	0.4	0.2	0.1	0.6	2.5	8.7
	China		0.1							0.2			1.0	1.0	1.8	0.6	2.4	0.3	0.5	1.6		0.1	2.9	6.6
	Republic of South Korea									0.1			0.2	0.2	1.7	1.4	3.1	0.4	0.3	0.6	0.1	0.2	2.0	5.3
	Brazil														0.1	0.4	0.5		0.1				0.4	0.9
	Total	0.6	0.3	0.2	0.1	0.1	0.1	0.1	0.1	1.6			1.4	1.4	10.2	9.3	19.5	2.6	2.8	3.3	1.2	1.8	13.3	35.9
Grand total		5.0	4.9	3.0	2.2	1.6	1.3	1.2	1.0	23.0	0.7	1.6	3.6	3.6	32.0	15.9	47.9	8.2	5.1	4.1	2.2	1.9	23.9	100.0

Note: AUT = Austria, BEL = Belgium, BRA = Brazil, CAN = Canada, CHE = Switzerland, CHL = Chile, CHN = China, CZE = Czech Republic, DEU = Germany, ESP = Spain, EST = Estonia, FIN = Finland, FRA = France, GAB = Gabon, GBR = United Kingdom, HRV = Croatia, HUN = Hungary, IDN = Indonesia, ITA = Italia, JAP = Japan, KOR = Republic of South Korea, LVA = Latvia, MAL = Malaysia, MEX = Mexico, MYS = Malaysia, NLD = Netherlands, NOR = Norway, NZL = New Zealand, PNG = Papua New Guinea, POL = Poland, P.o.C = Province of China, PRT = Portugal, RUS = Russian Federation, SVK = Slovakia, SWE = Sweden, THA = Thailand, USA = United States, ZAF = South Africa.

Source: UN COMPTRADE/EFI, 2002.

10.5 Conclusion

By the first half of 2002, the United States dollar began to weaken, and the United States economy began to recover. Real United States GDP increased in the first quarter of 2002 by 1.5% (at a seasonally adjusted annual rate of 6.1 percent), eclipsing growth of the entire preceding year as business activity was ramping up in anticipation of a broader economic recovery. Growth however is expected to be slower during the remainder of the year. In Europe, North America and globally, pulp, paper and paperboard spot prices were firming up and beginning to recover from cyclical lows, which appear to have been reached in the first quarter of 2002. Given that the recent downturn in pulp and paper markets was spawned by a decline in industrial production, and as it will take some time before historical average levels of industrial capacity utilisation, business investment, and exchange rates are reached, it is logical to assume that the ongoing recovery will continue to unfold gradually through the year 2002 and into 2003, barring any unforeseen or dramatic events in world affairs.

Prospects for growth in the pulp and paper sectors of Europe, North America and Russia continue to hinge in the short run upon trends in currency exchange values, particularly trends in the dollar/euro exchange rate and the rouble/dollar and rouble/euro exchange rates, as well as trends in overall manufacturing and trends in overall GDP growth.

Also complicating the outlook for paper and paperboard markets is the prospect of increased tariffs, notably the potential for EC countries to impose import tariffs on a broad array of paper and paperboard products from the United States in response to the imposition of tariffs on steel imports by the United States.

10.6 References

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