



SOUTH CAROLINA FOREST PRODUCTS: AN EXPORT OVERVIEW

A Survey of U.S. and South Carolina
Exports of Forestry Products



COMMISSIONED BY:
PROJECT BY:
AUTHOR:
DATE:

SC FORESTRY COMMISSION
SOUTH CAROLINA EXPORT CONSORTIUM
GREGORY HILTON, PROJECT MANAGER
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PREFACE

This guide is intended to help U.S. and South Carolina wood products producers, traders, and policy-makers examine and prepare for export markets by providing them with general information on the global market for forestry/solid wood products. The Trade Handbook also serves as a resource guide for trade-related issues, procedures, and entities that can assist the would be exporter in tackling the often daunting challenge of penetrating new markets and expanding the revenue generating capacity of his/her firm. This guide provides detailed, accurate export market information, trade data, country profiles, and a host of domestic and international contacts to foster and support export initiatives in the forestry industry. It also refers and links to numerous other information sources of interest to forest products organizations. This document also serves as a reference for policy-makers as to the importance of forestry products as an export commodity here in the state. This document should be utilized as a reference, and in conjunction with primary market information from key forestry organizations, to help formulate strategies and assess the general trends in today's forestry industry. The South Carolina Export Consortium will not be held liable for misuse or misinterpretation of information within this document.

Keywords: Wood products, export markets, exporting, market information, HS Classification, Forestry, trade association, business organization, market development, trade data, Market analysis, tariff, duty.

The information contained in this Forest Products Trade Handbook is intended to serve several important functions:

1. To provide the reader/would be exporter with specific terminology on key U.S. wood products being exported to other countries. This information comes in the form of product classifications, general trade terminology, forestry-specific terminology, and other terms on a case by case basis.
2. To provide the reader with key U.S. export data analysis as well a global demand for forestry products, to serve a guide in decision-making and in identifying trends in the international market for such goods. This data will be provided in a top-down analysis covering both primary and secondary (value-added) forestry markets.
3. To provide the reader with individual country profiles, specifically focused on trade and production of forestry-related products. This will allow the reader to gain fast and accurate access to key figures relating to the forestry products market in each country. This information in concert with the high-level trade data analysis is an excellent starting point for formulating international export market strategies for any sized firm.
4. To provide the reader with reliable domestic and international (in country) references for updating information on wood products and potential markets for forestry exports.

HOW TO USE

This document was designed in a way that makes it easy to navigate through information provided. The document is set up in the following manner. A U.S. Exports section opens the document, containing information on top products, top markets, and a general trend analysis. The next section contains information on the South Carolina Forestry Industry and its exports, with top products, top markets, and trend analysis. The following 10 chapters of this report focus on specific international markets for U.S. forestry products. Throughout the report, analysis and conclusions are weaved into the document to provide optimum information for the reader. These country market overviews are broken down into the following sections:

FOREST PROFILE- Information on the country's current forestry resources, policy, and species.

TRADE OVERVIEW- Information on top trading partners and top import commodities

IMPORT OVERVIEW- More specific information on key commodities imported by that country

U.S. EXPORT OVERVIEW- This section outlines exports of U.S. products that market. The section is broken down into primary and secondary products with an analysis of top products by size and by growth.

S.C. EXPORT OVERVIEW- This section details exports of U.S. forest products via South Carolina.

ACKNOWLEDGEMENTS

This report represents the collaboration of several key government and private sector organizations that are truly committed to developing the export potential of U.S. companies internationally. The South Carolina Export Consortium would like to offer our thanks to the following entities that assisted in the compilation, provision, and review of market information and trade data used as the foundation for analysis U.S. and South Carolina export markets. These organizations provided the resources, contacts, and market information that made this report a complete document, and we sincerely appreciate their expertise in the areas in question:

The South Carolina Forestry Commission, Tim Adams

The Center for International Trade in Forestry Products (CINTRAFOR)

The United States Department of Agriculture, Foreign Agricultural Service (FAS)- Forest and Fisheries Division

The Food and Agriculture Organization of the United Nations

The U.S. Department of Commerce

The U.S. Commercial Service, Trade Information Center

Global Trade Information Services, Inc.

The American Hardwood Export Council

The Southern Pine Council



EXECUTIVE SUMMARY

SCOPE

In mid-2004, the South Carolina Forestry Commission contracted the South Carolina Export Consortium to conduct a study into U.S. forest products exports. Special attention was to be paid to exports from South Carolina. This study covered the five year period from 1999 to 2003 in an overview of forest product exports from the U.S. as well as from South Carolina. The study was completed in late October, 2004. The purpose of the study was to determine the current position of U.S. forestry product exports to the world, focusing in on the top ten markets for U.S. exports. The intent of this report is to provide information, resources, and general trends in the forestry industry that will allow small and medium sized forest products companies to make more informed decisions in their domestic and international activities. The report is also intended to raise awareness as to the vital nature of the forestry sector in the state of South Carolina and the U.S.

METHODOLOGY

The SCEC, in concert with the assistance of forest products trade associations, university research centers, and federal/international forest products agencies, conducted an overall market study of current forest products trade between the United States and its major trading partners, focusing on export data. Trade data was compiled using various private and public resources including the Foreign Agricultural Service, the Global Trade Atlas, and the Center for International Trade in Forest Products. Product classifications were made using the Schedule B Harmonized System codes on record with the U.S. Department of Census. These classifications were cross-referenced with statistical data provided by the Foreign Agricultural Service's Forest and Fishery Products Division which actively tracks the flow of forest products yearly. In its review and analysis of U.S. export activity in the forest products industry, the SCEC analyzed export activity for Primary and Secondary forest products, including wood-based furniture, where applicable. Categories that were not included in this market research were Pulp & Paper, at the request of the contracting agency. As stated earlier, the purpose of the research was to provide information for small and medium sized businesses engaged in forest products activities. Research was broken down into three distinct sections:

GENERAL U.S. EXPORT OVERVIEW
GENERAL S.C. EXPORT OVERVIEW
COUNTRY MARKET PROFILES

The general U.S. export overview looked at macro trends in the export of forest products to the world; identifying top markets for U.S. forest products, identifying top commodities/categories of forest products exports, reporting of general trends in the export activity over the 5 year period mentioned above. The South Carolina overview followed the same format with top markets identified, South Carolina's ranking among other exporting states, and top commodities exported to the world via South Carolina. Upon identifying top markets for both the U.S. and South Carolina, the SCEC analyzed, in detail, current import and export trends within each top market. This information provides the reader with general trends and changes in the demand and supply chain for the top trading partners of the U.S. in the world. Countries profiled under this analysis were: Canada, Japan, Mexico, China, Spain, Italy, United Kingdom, Germany, Hong Kong, and South Korea. These markets represented the top ten markets for forest products exports from the U.S. Topics covered under each country section included: Country trade overview, Import overview, U.S. exports to target market, and South Carolina exports to target market. Once general trade data analysis was complete the SCEC identified general factors in each country that influenced demand for forest products, such as macro-economic growth, construction/housing industry, trade issues specific to the forestry industry, and recent policy changes that will effect U.S. exports to those markets.



RESULTS

US RESULTS

U.S. exports of forest products reached \$6.14 Billion in 2003, making us one of the largest exporters of forest products in the world. The results of the study showed that, although the U.S. is currently the world's 5th largest exporter, exports of forestry products to the world have been on the decline through the study period of 1999-2003. Diminished market share for the U.S. has come at the hands of emerging global forest products leaders such as Russia, Brazil, and China. Also, based on a country analysis, specific markets such as the European Union are now sourcing more products from within their regional market, and with the newly ascended Central and Eastern European countries entering the market, U.S. exports to the region will continue to decline as cheap imports from the CEE countries flood the market. However, the U.S., with its own preferential trading agreement (NAFTA), is trading the majority of its products with Mexico and Canada. The U.S. has continued to see growth in each market over the period, but more importantly, product expansion and diversification. Based on a regional analysis, top regions for U.S. exports were North America and the Asian-Pacific region, with European markets playing a secondary (and declining) role in exports. The U.S. saw significant export declines to most of the top ten markets, save Canada, Mexico, Hong Kong, and China. The most notable exception to this trend was China, where U.S. exports grew over 320% from 1999 to 2003. China is thought by many experts to be the next high volume export market for the U.S. The trend suggests that China's juggernaut pace of importing will continue. Gains were made in almost all major primary and secondary categories, with raw materials such as logs and lumber accounting for the bulk of both Chinese imports and U.S. exports

SOUTH CAROLINA RESULTS

Although data availability was limited at the state-level, South Carolina appeared to show marked expansion in its exports of forest products to the world, with increases over the period of 33%. South Carolina exported an estimated \$67 Million worth of primary and secondary products to the world in 2003. However, South Carolina is a minor exporter of forest products when compared to other states such as Washington, California, Oregon, or New York; being ranked as only the 25th largest exporting state for forestry products. Top markets for South Carolina exports were Japan, Canada, China, and the United Kingdom. These four markets represented nearly half (45%) of all demand for South Carolina-based products. Some emerging growth markets that saw significant increases in SC-based forest products were Hong Kong, Taiwan, Portugal, Mexico, Australia, and Malaysia. South Carolina exports to major markets showed a very different trend as compared to the U.S., with significant gains made in 8 of the top 15 markets. South Carolina exports to China have grown over 3,000% since 1999, and a strong trade relationship with other Asian markets was also present in the market research. Mexico was another strong market for South Carolina, although at much lower volumes. Major commodities exported via South Carolina included: Lumber, Builders' Carpentry, Furniture, Packing Material, and Logs. By far, South Carolina exports are defined by primary product exports, with primary exports accounting for nearly 70% of all products exported. The #1 product exported via South Carolina is Hardwood Lumber, constituting 49.6% of all exports from the state. Lumber products were also the largest category for nearly every market analyzed in this report.



CONCLUSIONS

U.S. CONCLUSIONS

While U.S. market share continues to erode on an international basis there are several strategic moves the forestry industry can make to position itself to be the dominant supplier where the growth is occurring. While each market had slightly different export profiles, an overwhelming conclusion can be drawn. China and other Asian markets represent the largest potential growth for forestry products exports from the U.S. Exports to the region support this theory with either significant gains made or lower comparative losses in markets where competitor exports declined. Heavy reliance on foreign supplies of forest products are attributed to underdeveloped forestry industries, strict policies enforcing forest removal, strong and sustained economic growth fueling construction and housing development, and production geared to value-added wood products that require immense sources of raw materials. In Europe, continued economic expansion of the EU, a harmonizing of standards, and entrance of partner countries with lower production costs for wood will continue to erode U.S. market share. U.S. companies seeking growth in the European market must compete with value-added products that fill niche consumer requirements. Continued and active marketing influence from major U.S. trade associations will continue to reshape the construction and housing sectors in these countries, but must convey a value proposition for U.S. forestry products. Several global issues that will come into play for U.S. prospects will be changing regulations regarding illegal timber trade, packaging/labeling of products, and sustainable wood initiatives. While global collaboration is under way to address many of these problems, U.S. firms must position themselves to take advantage of a changing demand landscape for wood products.

SOUTH CAROLINA CONCLUSIONS

As stated earlier, detailed trade data on state exports is not yet available in the forestry community. As such, analysis of export activity at the state level must complement internal assessments of forestry capacity, current production information, and U.S. export trends. Nonetheless, some conclusions can be drawn from the information analyzed. South Carolina's exports of forest products to the world are growing at a pace that far exceeds the national average. Compared to the total U.S. market, South Carolina is outperforming. Analysis indicates that strong trade relationships and not historic trade data, dictate the flow of commodities via South Carolina. This is apparent in several commodities and countries where SC export trends completely opposed the flow of U.S. forest products to these markets. While it is apparent the several key categories that are produced in South Carolina have not fared well in international markets, other commodities are performing well and should be the focus of production and marketing efforts. Trade data shows that South Carolina exports are concentrated in primary products such as logs and lumber and steps should be taken to diversify current export capacity for other value-added products within the state. Opportunities in key markets exist for products that have the capacity to be produced in South Carolina, at lower cost than other exporting states, such as panel products, building materials (builders' carpentry), and wood packing materials. To gain a better understanding of the relationship between production and exported products in the state, the SCEC recommends that further research into production/trade of forest products in South Carolina be initiated to truly understand the nature of the global competitiveness of South Carolina's forestry industry.

ORDERING INFORMATION

The full text of this report and other studies performed under contract with the South Carolina Forestry Commission are available at <http://www.state.sc.us/forest/prod.htm>.



PARTNER PROFILES

SOUTH CAROLINA EXPORT CONSORTIUM

The South Carolina Export Consortium is a private trade development partnership dedicated to developing the trade capacity of small to medium sized enterprises (SMEs).

Through its partnership with the University of South Carolina's Moore School of Business and Clemson University's College of Business, the Consortium offers market-based training, import/export consulting services, technical assistance, market research/information services, as well as international market development

In its seven years as an export multiplier, the Consortium has assisted over 600 clients in making international trade a reality. The Consortium has worked with clients from all walks of life; from small textiles operations to environmental technology firms, to large multinational companies seeking new markets. With experience in over 15 distinct industries, the Consortium is prepared to meet the needs of a global economy. Our export development group has implemented strategies in every segment of the export value chain; from global market identification, trade development, technical consulting, to negotiation of distribution contracts.

SCEC maintains strategic partnerships with state, federal and international entities, as well as private sector trading alliances to establish and expand the global footprint for its export clients.

SOUTH CAROLINA FORESTRY COMMISSION

The mission of the South Carolina Forestry Commission (SCFC) is to protect, promote, enhance, and nurture the forest lands of South Carolina in a manner consistent with achieving the greatest good for its citizens.

The Resource Development Division of the SCFC was created to bring together agency programs that support the sustainable development of South Carolina's forest resource. The South leads the nation in the production of forest products. South Carolina, alone, exports \$600 million dollars in forest products annually, providing 40,000 citizens with jobs and generating a payroll of \$1.6 billion. The total economic impact of South Carolina's forest products industry is \$14.7 billion per year. Forestry is important to the state's economy and it is especially critical to rural economic development because timber is the highest-value crop in South Carolina.

The Forestry Commission works closely with state and local economic development organizations, academic institutions, and the forestry community to create new markets and to expand existing markets for forest products.

USDA FOREST SERVICE STATEMENT:

The USDA Forest Service and the South Carolina Forestry Commission prohibits discrimination in all programs and activities on the basis of race, color, national origin, religion, age, disability, political beliefs, sexual orientation, or marital or family status. Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write to: USDA, Office of Civil Rights Director, Room 326-W, Whitten Building, 14th and Independence Ave., SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA and the SC Forestry Commission are equal opportunity providers and employers."

CLASSIFICATION AND ANALYSIS

INTRODUCTION TO TRADE DATA ANALYSIS

DISCLAIMER

Within the timber trade there is a broad range of factors which contribute to discrepancies in trade statistics. However, the specific factors that have a disproportionately large influence on discrepancies in timber trade statistics include: 1) incompatible volume measurement systems, 2) level of reporting detail employed within the Harmonized Trade System (HTS), 3) allocation of transportation charges (FOB vs. CIF) in product valuation, 4) time lags between reported exports and reported imports, 5) incorrect or unknown specification of origin or destination of shipment (including triangular trade), 6) under-invoicing of exports, 7) mis-specification of wood products or timber species, and 8) illegal trade and smuggling.

Despite the fact that, these factors may or may not contribute to discrepancies within the trade statistics, they distort the trade statistics and contribute to unsustainable forest management practices and policies while reinforcing negative perceptions of the timber industry and international timber trade. Therefore it is of paramount importance that timber trade statistics be as accurate as possible to facilitate sustainable forest management practices, support the development of responsible government policies relating to forest management and timber trade, and promote a more positive public perception of the international timber trade.

TRADE DATA SOURCES

In order to evaluate the extent to which discrepancies in trade statistics occur within the forest products sector, trade matrices based on the value of trade for the major exporters and importers of logs, lumber, and plywood were compiled. The trade aggregation files were carefully designed to ensure that the products included in the matrices would best represent the overall forest products industry. The trade data for each product/country was obtained from the following sources: **All U.S. export trade data is calculated based on FAS value (Free Alongside), which would add inland transportation and packaging costs to the total value of total exports.** This is approved by the US Census Bureau and the U.S., Department of Commerce.

The Global Trade Atlas- GTA is an online searchable database for imports and exports. The statistics used in the GTA are official statistics compiled and published by customs in each country. These statistics for U.S. exports are based on the Schedule B Harmonized Codes, as classified by the U.S. Census Bureau.

Foreign Agricultural Service- The FAS product classifications and trade data were used and compared with GTA values. The forestry products division of the FAS maintains active and up-to-date U.S. Export information for the public. The FAS also categorizes products based on their status as primary or secondary. For the intents of this publication, this methodology was suitable for utilization.

FORESTRY PRODUCTS INDUSTRY DEFINED

The **primary industry** is defined as those industry sectors in which the principle raw material remains basically unprocessed and/or is used as the principle raw material input for other products or value adding processes.

The **secondary forest products industry** is defined as that forest products sector which utilizes the output from the primary forest products industry as well as output from other industries to create further value added forest products. Secondary products classifications are more accurate due to lack of specific species information for each product. The following table displays major primary and secondary categories along with sub-categories associated with each commodity. This is the basis for analysis of forest products trade data:

PRIMARY PRODUCTS		SECONDARY PRODUCTS	
4401	FUEL WOOD & WOOD CHIPS	4409	WOOD, CONTINUOUSLY SHAPED
	HW Chips		HW Flooring, Molding, Siding, & Dowel Rods
	SW Chips		SW Flooring, Molding, Siding, & Dowel Rods
	Fuel Wood	4414	WOOD FRAMES ETC.
	Waste Scrap	4415	WOOD PACKING MATERIAL
4402	WOOD CHARCOAL		Cases, boxes, crates, drums and similar
4403	LOGS		Pallets, box pallets and other load boards
	HW Logs	4416	COOPERAGE PRODUCTS
	SW Logs		Casks, Barrels, Hogsheads
4404	HOOPWOOD, POLES, PICKETS, STAKES		Staves & Hoops
4405	WOOD WOOL	4417	TOOL & BROOM BODIES
4406	RR TIES	4418	BUILDERS' CARPENTRY
4407	LUMBER		Wood Windows & Frames
	HW Lumber		Wood Doors & Frames
	SW Lumber		Parquet Panels
4408	VENEER SHEETS		Formwork (shuttering)
	HW Veneer Sheets		Shingles
	SW Veneers Sheets		Other (Fab. Structural Wood Members)
4410	PARTICLEBOARD	4419	WOOD TABLEWARE & KITCHENWARE
	OSB/Waferboard	4420	WOOD MARQUETRY ETC.
	Other Particleboard	4421	ARTICLES OF WOOD, NESOI
4411	FIBERBOARD		Clothes Hangers
	Fiberboard: 0.35-0.5 g/cm ³		Other
	Fiberboard: 0.5-0.8 g/cm ³	94	ALL WOOD FURNITURE
	Fiberboard: >.8 g/cm ³		Wood Framed Seats
	Other Fiberboard		Wood Household Furniture
4412	PLYWOOD & PANELS		Wood Office Furniture
	Plywood: 1 outer ply of tropical wood		Wood Kitchen Furniture
	Plywood: 1 outer ply of HW		Wood Furniture, Other
	Plywood: Both outer plies of SW		Wood Furniture Parts
	Other Plywood		
4413	DENSIFIED WOOD SHAPES		

PRODUCT CLASSIFICATION

Harmonized System is a system the U.S. has adopted as the basis of its export & import classification system. Each HS code consists of 10 digits that combine to indicate a specific product. There are approximately 8,400 of these classification codes that enable the U.S. government to track all import and export activity. Internationally, codes are utilized at the 6 digit level with the remaining four digits utilized for country specific classification. This allows for universal commodity tracking of all U.S. and foreign produced goods.

The SCEC used as the basis of its macro analysis, the Schedule B Export Codes located in the appendices of this report. These classifications can be found online at the website of the U.S. Census Bureau, the agency charged with classifying all commodities entering and exiting the U.S. The website is: <http://www.census.gov/foreign-trade/schedules/b/>.

Due to the U.S. wood products industry's significant expansion in the volume and variety of traded products over the last several years and the addition of dozens of new commodities to the Department of Commerce's export and import classification system in 1997, the Forest and Fishery Products Division developed new export and import groupings.

For specific product level analysis the SCEC chose to utilize the export commodity groupings commonly used by the **Forest and Fishery Products Division** in its circulars and in answering general inquiries for U.S. trade information. The list includes only the Harmonized System codes effective since January, 2002. While these categories are generated based on classification under the Schedule B classifications exhibited in the appendices, they have been modified to group commodities into specific primary and secondary categories for the purpose of analysis. This categorization does lead to some discrepancies when comparing the two classification methods, but gives a much more detailed overview of specific commodity trade.

To qualify specific product trade data, please visit http://www.fas.usda.gov/ffpd/wood_tradedata.htm, and click on the FAS Forest Product Groupings (Defined), Exports link which will take you to the commodity aggregation database.

Note: Periodically, commodity codes are replaced, re-defined or re-categorized. These codes become obsolete and are replaced by new codes. Once a code becomes obsolete, data is no longer reported for it. Instead, it is reported in the newly defined code(s). The list of commodity codes that changed can be found at the following location:

<http://www.fas.usda.gov/ffpd/forestcirculars.htm/classifications.html>

OVERVIEW OF U.S. FORESTRY INDUSTRY¹

LAND USE AND OWNERSHIP

- One-third of U.S. land is covered by forests (302 million hectares), making forestland the number one type of land use in the United States.
- Alaska is the state with the most forestland, ahead of California & Oregon.
- A majority of the states with the most forestland are in the West, but all of the top ten states with the highest percentage of timberland making up their land area are in the East.
- One-fifth of U.S. land is timberland (204 million hectares), which is land capable of producing 1.38 cubic meters per hectare of industrial wood annually.
- Most of the U.S. timberland is in the Southeast and the Northwest.
- Georgia is the state with the most total timberland, followed by Oregon and Montana.
- Maine is the state with the highest percentage of land area that is timberland (86 percent), ahead of New Hampshire, West Virginia, and Vermont.
- Overall, 71 percent of all timberland in the U.S. is privately owned, while 29 percent is publicly owned.
- All 13 states with more than 50 percent of their timberland publicly owned are located in the West.
- Nearly 85 percent of private timberland is not owned by the forest industry.
- In 1997, a little over one-third of U.S. timber removals were hardwood (169 million m³) and about two-thirds were softwood (285 million m³).
- Tree planting occurred on 509 thousand hectares of private land and 98 thousand hectares of public land in 1998.
- The relative amounts of removals versus plantings show positive trends in terms of sustainability. The states with the most removals are the ones doing the most planting.

MANUFACTURING

- The total number of wood businesses in the U.S. is 86,000, including 19,000 primary manufacturers, 53,000 secondary manufacturers, and 14,000 furniture manufacturers.
- All 50 states have wood manufacturing businesses, with the number of establishments ranging from 8 in Rhode Island to 1,900 in Alabama.
- The value of U.S. solid wood shipments in 1997 was \$127 billion. Furniture manufacturers contributed another \$21 billion.
- The highest values for shipments come from Oregon, California, and North Carolina. Oregon leads as the nation's top primary and secondary manufacturer, while North Carolina is first in furniture production.
- Georgia is ranked first for most removals and only seventh for total value of shipments.

EMPLOYMENT AND TRADE

- The U.S. solid wood industry employed 588,000 persons in 1997 and furniture manufacturing employed another 285,000.
- North Carolina is ranked number one for industry employment, followed by California and Oregon. While Oregon & California each have more employment in the primary and secondary sectors, North Carolina employs more in the furniture sector.
- U.S. solid wood exports were \$6.0 billion in 1999, with 36 percent leaving from the East Coast, 37 percent leaving from the West Coast, and 27 percent leaving from all other regions.
- The ports with the highest percentage of the country's shipments are in Washington, New York, and Oregon.

¹ Source: USDA FAS, An Economic Overview of the U.S. Solid Wood Industry.
<http://www.fas.usda.gov/ffpd/Economic-Overview/overview.html>

OVERVIEW OF U.S. EXPORT ACTIVITY

U.S. EXPORT SUMMARY

Overall, the United States is the 5th largest exporter of primary and secondary products in the world with \$6.14B in 2003. The U.S. commands 5.8% of the global market for forestry products. U.S. exports trail Canada (14.2%), Germany (7.1%), China (6.9%), and Italy (6.6%). U.S. exports have seen marked declines since highs of \$7.3B in 2000. From 1999-2003, total U.S. exports declined by -12.0%. The primary factors contributing to the decline included increased world production of wood products and the resultant increased competition, a strong U.S. dollar and slow economic growth in many of the United States' major markets. Also, increased activity from top competitors has led to declines in market share in major markets. U.S. market share over the 5yr. period has been eroded by increased exports from countries like Germany (27.8%), Russia (58.8%), Brazil (55.3%), and China (141.1%).

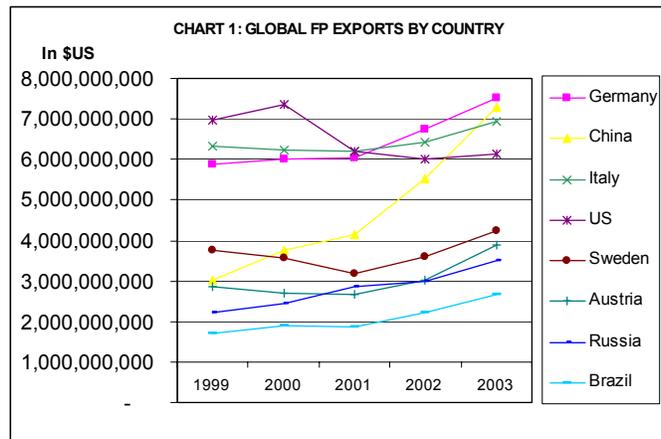
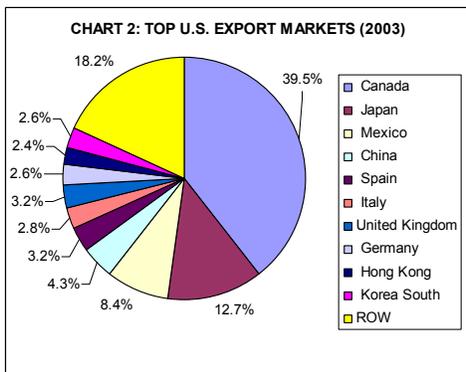


Chart 1 shows top competitor growth compared to U.S. performance. Canadian exports were excluded from this chart, due to the volume and size of exports from that country. Exports from Canada reached \$12.6Bn (non-furniture), and made them the largest exporter of forest products in the world. Staggering increases from countries like China, however, have fueled raw materials demand from that country leading to significant export gains to the Chinese market for U.S. forest products. The rapid forestry expansion of countries like Russia is flooding the global market with lower cost wood products, leading to depressed pricing and depressed demand for U.S. products.

U.S. EXPORTS BY COUNTRY



In 2003, the U.S. forestry industry had 141 actively trading markets for its products. However, the top 10% of export markets account for nearly 90% of the total value of U.S. exports. The U.S. forestry industry has a rather concentrated portfolio of export markets, with the top ten markets representing nearly 82% of global demand for U.S. forestry products. The rest of the world accounts for only 18% of U.S. exports. As indicated by Chart 2, Canada is by far the most dominant trading partner for U.S. exports with almost 40% of the total U.S. export market. That corresponds to over \$2.4B exported in 2003. Japan (\$780M), which traditionally represented a much larger percentage has dropped significantly over the past 5 years (discussed under Japan Market Overview). Other dominant export markets are Mexico (\$518M), China (\$264M), and Spain (\$200M).

TOP MARKETS

COUNTRY/PRODUCT MATRIX

HS CODE	Category	#1	#2	#3	#4	#5
4407	Lumber	Canada	Mexico	China	Japan	Spain
4403	Logs	Japan	Canada	S. Korea	China	Germany
4408	Veneer Sheets	Canada	Germany	Spain	China	Italy
4418	Builders Carpentry	Canada	Japan	Bahamas	UK	Mexico
4409	Wood, Cont. Shaped	Canada	Mexico	China	Japan	UK
4412	Plywood	Canada	Mexico	Bahamas	Dom. Republic	Germany
4401	Wood Chips	Japan	Canada	S. Korea	Italy	Taiwan
4410	Particleboard	Canada	Mexico	Japan	China	Taiwan
4411	Fiberboard	Canada	Mexico	UK	France	China

entire export market, and is a representative sample of U.S. exports. Countries marked with light green, represent North American trading partners. Asian trading partners are marked in aqua marine, and EU trading partners are marked in orange. Based on this, one can see the dominance of Canada and Mexico in the U.S. export market. However, China

The following is a listing of top markets for the leading wood products categories. This list shows the top 5 markets for each category, and is to be used as supplemental information for the country analysis section that follows in this document. These categories represent the major contributors (by total value) to the U.S. forestry export market. As mentioned above, the top 10 categories accounted for nearly 83% of the

has swiftly become one of the dominant export markets for a number of forest products categories, such as Lumber, Logs, Veneer Sheets, Particleboard, and Fiberboard. If one were to redo this matrix in 3-5 years, one would see a predominance of wood exports to Mexico and China, being the two largest growing export markets for the U.S.

TRENDS

As overall market share has witnessed declines in recent years, most major markets were contributors to this trend. The U.S. has seen declining market share in most major markets to which it exports. Some notable exceptions are Mexico (9.8%, 5YR) and China (324.1%, 5YR). However, as exports to the Rest of the World (ROW), have declined at twice the rate of total U.S. exports, this gives evidence to a U.S. consolidation of major export partners, such as Canada, China,

Partner Country	2001	2002	2003	1YR Δ	5YRA	% SHARE
World	6,198,317,263	6,007,154,096	6,146,488,610	2.3%	-12.0%	100.0%
Canada	2,174,548,742	2,222,510,786	2,430,177,819	9.3%	12.3%	39.5%
Japan	1,108,323,840	845,212,755	779,946,409	-7.7%	-51.1%	12.7%
Mexico	472,606,039	492,040,244	518,165,037	5.3%	9.8%	8.4%
China	144,901,983	229,539,675	263,693,328	14.9%	324.1%	4.3%
Spain	211,588,103	201,343,493	199,721,212	-0.8%	-10.7%	3.2%
Italy	172,161,645	168,293,319	174,575,380	3.7%	-16.3%	2.8%
United Kingdom	236,844,741	205,203,231	196,366,105	-4.3%	-26.4%	3.2%
Germany	170,824,477	145,385,554	160,233,701	10.2%	-29.0%	2.6%
Hong Kong	138,178,373	166,088,666	144,566,314	-13.0%	32.9%	2.4%
Korea South	127,654,593	157,179,543	160,948,975	2.4%	-1.2%	2.6%
ROW	1,240,684,727	1,174,356,830	1,118,094,330	-4.8%	-25.2%	18.2%

Mexico, and Hong Kong. All three markets demand a large % of raw materials (Logs & Lumber) to fuel rapidly expanding economies and secondary goods markets such as furniture, value-added wood products, and construction expansion. In 1998, Japan was the leading export market for U.S. wood products. By 1999, Canada replaced Japan as the top market for wood products. U.S. exports to the EU, especially softwood

lumber, have also fallen on hard times due mainly to increased competition from Russia, Poland and Latvia, as the newly ascended EU countries have geared up their production capacity. Hardest hit were exports to Germany (-29.0%) and the United Kingdom (-26.4%). China, which wasn't even in the top 10 export markets for the U.S. in 1999, has jumped to 4th overall. This growth comes on the back of reduced tariffs, market reforms, and logging bans that have stimulated China's demand for imported wood products.

TOP 10 MARKETS-GROWTH (1YR & 5 YR)

Analysis of top growth markets for U.S. exports focused on top performing export destinations with the highest volume of exports. Thus, countries listed in Chart 4 below represent countries that have a combination of the following two factors: High growth and/or export volume of at least \$1.0M. China is obviously the most attractive market for wood products, since it is included as one of the U.S.'s largest trading partners, as well as, one of the fastest growing export markets for U.S. wood products as well.

Partner Country	2001	2002	2003	1YR Δ	5YRA	% SHARE
Macau	53,565	838,638	1,407,611	67.8%	2152.8%	0.0%
Vietnam	6,596,934	19,093,295	20,763,016	8.7%	1049.4%	0.3%
China	144.9M	229.5M	263.6M	14.9%	324.1%	4.3%
Lithuania	652,299	798,295	1,520,991	90.5%	319.5%	0.0%
Czech Republic	1,818,373	2,117,361	5,978,540	182.4%	294.7%	0.1%
Estonia	761,180	1,452,995	1,099,299	-24.3%	163.7%	0.0%
El Salvador	9,753,623	8,445,831	9,320,834	10.4%	125.9%	0.2%
Jordan	5,334,395	4,578,363	5,393,128	17.8%	83.6%	0.1%
Oman	1,036,791	785,898	1,785,945	127.2%	71.3%	0.0%
Cyprus	2,708,842	2,548,391	3,762,722	47.7%	60.7%	0.1%
Syria	2,481,975	3,672,392	3,429,482	-6.6%	45.8%	0.1%
Qatar	4,131,116	3,714,142	3,753,031	1.0%	38.8%	0.1%

Vietnam showed remarkable growth and a relatively large volume of exports from 1999-2003. This trend is likely to continue as economic development, spurred by construction and industrialization, increases demand for wood and construction products. Excluding reduced demand in Japan, the Asian region was the fastest growing region in the world for U.S. forestry product exports, with significant volume increases as well. This trend will also continue as record economic growth in many countries (China, S. Korea, Thailand, Vietnam, Malaysia) is set to continue its upward trend. The countries highlighted showed strong growth in demand for U.S. wood products over the course of the period analyzed, and represent good market potential for U.S. forestry companies due to their relative size.

U.S. EXPORTS BY PRODUCT

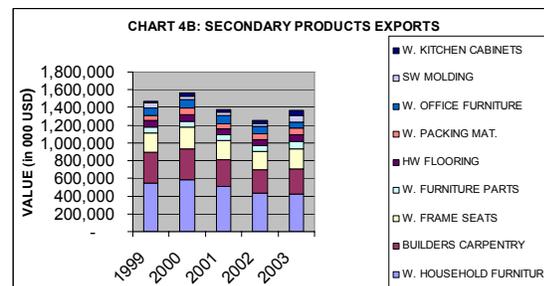
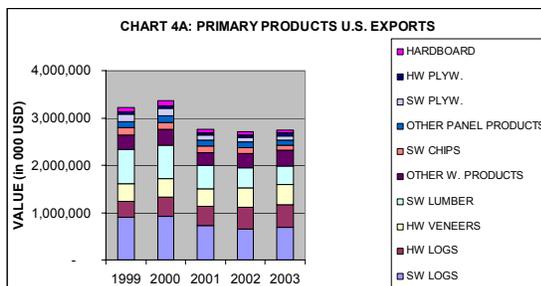
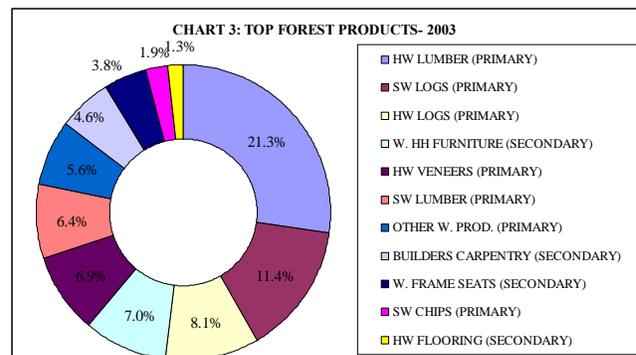
TABLE 3: GLOBAL PRODUCTS EXPORTS		US VALUE	WORLD VALUE	U.S. %	U.S. RANK
Products	Description	\$1,000,000	\$1,000,000	%	RANK
4401	Wood Chips	179	2,144.90	8.3%	3
4402	Wood Charcoal	5.3.0	254.4	2.1%	16
4403	Wood Logs	1,280.30	6,474.20	19.8%	2
4404	Piles, Pickets, Stakes	6.8	110.6	6.1%	6
4405	Wood Wool	4.4	32.6	13.5%	3
4406	RR Ties	34	169.7	20.0%	1
4407	Lumber	1,746.50	22,665.90	7.7%	3
4408	Veneer Sheets	486.9	2,420.70	20.1%	1
4409	Wood, Continuously Shaped	236.1	3,108.80	7.6%	3
4410	Particleboard	153.2	5,553.80	2.8%	7
4411	Fiberboard	152.4	5,447.50	2.8%	11
4412	Plywood	179.2	7,102.80	2.5%	9
4413	Densified Wood	43.5	362.6	12.0%	2
4414	Wooden Frames	20.7	876.6	2.4%	10
4415	Packing Material	69	1,736	4.0%	7
4416	Cooperage Products	54.2	435	12.5%	2
4417	Tools/Tool Bodies	50.2	215.4	23.3%	1
4418	Builders Carpentry	293.9	8,426.80	3.5%	9
4419	Table/Kitchenware	6.8	527.9	1.3%	12
4420	Wood Marquetry	33.3	1,031.60	3.2%	6
4421	Miscellaneous Wood	130.5	3,231.10	4.0%	5

furniture sector. Table 3 shows a breakdown of U.S. exports by product along with corresponding rankings.

TOP 10 PRODUCTS- SIZE

Below, you will find a more detailed listing of top export products. Discrepancies in the data may exist, due to classification by the Foreign Agricultural Service (the basis for micro-analysis). As shown in Chart 3, HW Lumber was the dominant export product for the U.S. in 2003, with 21.3% of the entire market. SW Logs were the 2nd most exported product with 11.4% of the U.S. export market. The next largest categories were HW Logs (8.1%), Wood Household Furniture (7.0%), HW Veneers (6.5%), SW Lumber (6.4%), and Other Wood Products (5.6%). Primary products represented 74.3% of the U.S. export market, while secondary products represented 25.7% of the market. This is characteristic with the global size of the forest products market, as raw materials are the dominant products in demand. The top secondary products exported from the U.S. were: Wood Household Furniture (7.0%), Builders Carpentry (4.6%), and Wooden Framed Seats (3.8%). Charts 4A and 4B show product category contributions to both primary and secondary U.S. exports. These charts show total exports in each year, and the contributions/impact of each on total U.S. exports. As evidenced by the charts below, HW/SW Logs & Lumber were the primary contributors to primary exports in the U.S., while Household Furniture and Builders Carpentry led U.S. secondary exports. By far, the largest secondary category represented in U.S. Exports is Wooden Furniture (14.8%), which is broken down into the following: Wood Framed Seats, Wood Office Furniture, Wood Household/Bedroom Furniture, Wood Kitchen Furniture (Cabinets), Furniture Parts, and Miscellaneous Furniture.

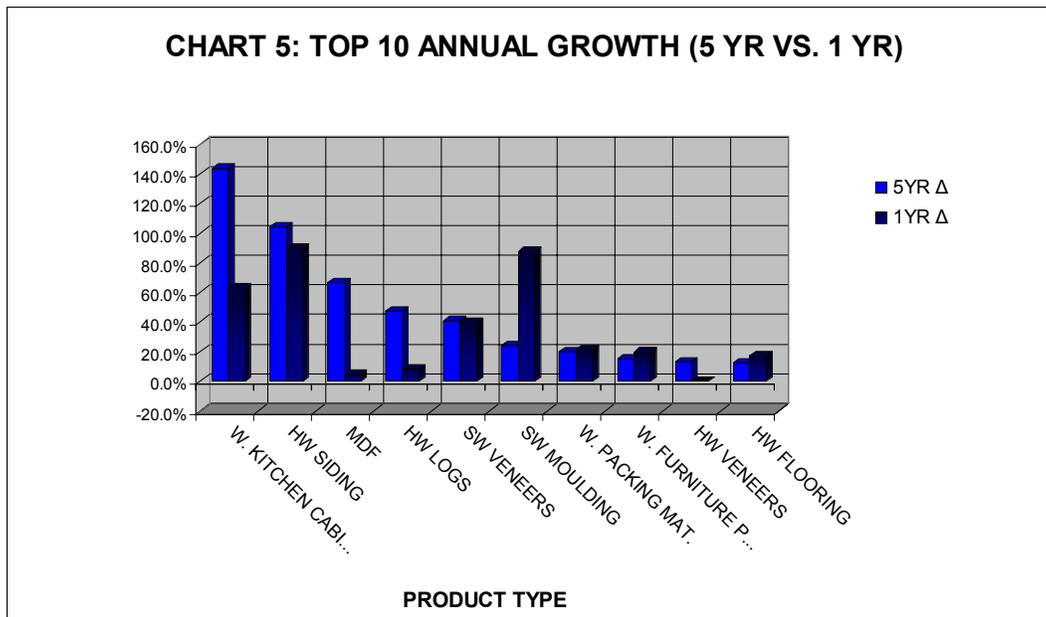
Overall, the U.S. is the second largest exporter of wood products in the world, behind Canada. In 2003, the U.S. ranked #1 in the following categories: Railroad Ties, Veneer Sheets, and Tools & Tool Bodies. The U.S. was the 2nd largest exporter of these products: Wood Logs, Densified Wood, and Cooperage Products. The largest export categories for the U.S. in 2003 were: Lumber, Logs, Veneer Sheets, Builders Carpentry, and Continuously Shaped Wood. Top Global export categories were: Lumber, Builders Carpentry, Plywood, Logs, and Particleboard. As evidenced by Table 3 below, the U.S. is a dominant exporter in categories 4403, 4405, 4406, 4408, 4413, 4416, and 4417. The largest global export market is Lumber, of which the U.S. currently holds a 7.7% market share. Wood Furniture is not included in this graph as the FAS does not classify Wood Furniture as a forest product. Subsequent analysis will follow for the



TOP 10 PRODUCTS- GROWTH (1YR & 5YR)

TABLE 4:		TOP GROWTH UNITS: \$1,000 USD		
PRODUCT TYPE	CATEGORY	2003	1YR Δ	5YR Δ
W. KITCHEN CABINETS	(SECONDARY)	61,330	63.1%	143.7%
HW SIDING	(SECONDARY)	2,121	90.1%	104.3%
MDF	(PRIMARY)	48,964	4.4%	66.5%
HW LOGS	(PRIMARY)	488,723	8.5%	47.5%
SW VENEERS	(PRIMARY)	55,640	39.7%	40.9%
SW MOULDING	(SECONDARY)	67,329	87.5%	24.1%
W. PACKING MAT.	(SECONDARY)	77,110	21.4%	20.2%
W. FURN. PARTS	(SECONDARY)	82,527	19.6%	15.4%
HW VENEERS	(PRIMARY)	417,630	-0.3%	12.9%
HW FLOORING	(SECONDARY)	78,135	17.4%	12.3%

Top growth categories for U.S. exports were almost entirely in secondary categories or smaller value primary categories such as Medium Density Fiberboard (66.5%) and SW Veneers (40.9%, 5YR). This information is helpful in tracking increases in global demand for specific product categories and assists in assessing future trends within the forestry industry. The top growth commodity for the 5-yr period was Wooden Kitchen Cabinets, with a monstrous 143.7% growth rate from 1999-2003. HW Siding was another top performing category, doubling in value over the 5yr period. Two notable exceptions that were large volume categories were HW Logs (47.5%) and HW Veneers (12.9%). HW Log exports reached almost \$500M in 2003, with HW Veneers following closely. Both 1yr and 5yr growth rates were utilized to assess recent trends in export growth and to validate the data series. Table 4 and Chart 5 illustrate the categories that have experienced significant growth over the period. Some products experienced strong 5yr growth despite weak year over year growth (HWV, MDF, HWL), while other categories have had consistent growth over the entire period (WKC, HWS, SWM). Again, these growth numbers represent total value due to aggregate reporting discrepancies.



VOLUME VS. VALUE

The following two tables show U.S. export data based on the FAS system. The purpose of these tables is to show the difference in Quantity vs. Value in analyzing U.S. export data. Due to the danger associated with aggregate quantity levels, this report focuses on total value of exports and imports to determine best prospects for markets and products. However, in comparing general trends between quantity and value, a consistent pattern can be established for many product categories. These tables also help in demonstrating contribution to total exports by sub-categories within individual product categories.

TABLE 5A: U.S. EXPORTS BY VOLUME

U.S. EXPORTS			MARKET: WORLD			UNITS: QUANTITY					
TYPE	CATEGORY	UNIT	1999	2000	2001	2002	2003	SHARE	1YR Δ	5YR Δ	
PRIMARY	LOGS	M3	9,285,274	9,387,127	8,706,208	8,843,476	9,080,160	100.0%	2.7%	-2.2%	
PRIMARY	SW LOGS	M3	7,592,422	7,406,315	6,612,939	6,563,054	6,911,874	76.1%	5.3%	-9.0%	
PRIMARY	HW LOGS	M3	1,692,852	1,980,812	2,093,269	2,280,422	2,168,286	23.9%	-4.9%	28.1%	
PRIMARY	LUMBER	M3	5,775,064	5,738,704	4,519,428	4,462,232	4,374,742	100.0%	-2.0%	-24.2%	
PRIMARY	SW LUMBER	M3	2,983,967	2,795,389	1,886,967	1,697,143	1,635,732	37.4%	-3.6%	-45.2%	
PRIMARY	HW LUMBER	M3	2,791,097	2,943,315	2,632,461	2,765,089	2,739,010	62.6%	-0.9%	-1.9%	
PRIMARY	WOOD CHIPS	MT	5,967,476	5,171,258	3,846,903	2,747,704	2,257,260	100.0%	-17.8%	-62.2%	
PRIMARY	SW CHIPS	MT	2,137,851	1,878,887	1,767,496	1,633,681	1,623,268	71.9%	-0.6%	-24.1%	
PRIMARY	HW CHIPS	MT	3,829,625	3,292,371	2,079,407	1,114,023	633,992	28.1%	-43.1%	-83.4%	
PRIMARY	VENEERS	M2	305,495,927	320,873,987	301,594,150	345,195,134	340,992,885	100.0%	-1.2%	11.6%	
PRIMARY	SW VENEERS	M2	28,520,928	30,302,968	20,587,538	24,232,519	36,987,407	10.8%	52.6%	29.7%	
PRIMARY	HW VENEERS	M2	276,974,999	290,571,019	281,006,612	320,962,615	304,005,478	89.2%	-5.3%	9.8%	
PRIMARY	PLYWOOD	M3	705,243	667,455	513,715	497,217	487,851	100.0%	-1.9%	-30.8%	
PRIMARY	SW PLYWOOD	M3	525,798	507,538	369,996	337,663	284,715	58.4%	-15.7%	-45.9%	
PRIMARY	HW PLYWOOD	M3	179,445	159,917	143,719	159,554	203,136	41.6%	27.3%	13.2%	
PRIMARY	FIBERBOARD	M3	367,670	427,854	373,390	361,504	361,928	100.0%	0.1%	-1.6%	
PRIMARY	HARDBOARD	M3	267,909	277,500	232,950	197,144	191,044	52.8%	-3.1%	-28.7%	
PRIMARY	MDF	M3	99,761	150,354	140,440	164,360	170,884	47.2%	4.0%	71.3%	
PRIMARY	PARTICLEBOARD	M3	299,001	294,840	347,918	383,819	312,222	100.0%	-18.7%	4.4%	
PRIMARY	PARTICLEBOARD	M3	140,000	136,340	200,180	210,584	172,738	55.3%	-18.0%	23.4%	
PRIMARY	OSB/WAFERBOARD	M3	159,001	158,500	147,738	173,235	139,484	44.7%	-19.5%	-12.3%	
PRIMARY	RAILROAD TIES	M3	456,453	337,024	383,248	580,396	432,236		-25.5%	-5.3%	
PRIMARY	POLES	NO	1,302,762	986,373	850,889	1,113,599	3,246,422		191.5%	149.2%	
PRIMARY	OTHER PANEL PRODUCTS	M3	443,570	479,720	418,529	476,658	403,210		-15.4%	-9.1%	
SECONDARY	FLOORING	M2	4,567,703	4,533,221	3,784,534	3,774,417	4,172,854	100.0%	10.6%	-8.6%	
SECONDARY	SW FLOORING	M2	717,803	658,128	430,413	439,992	318,152	7.6%	-27.7%	-55.7%	
SECONDARY	HW FLOORING	M2	3,849,900	3,875,093	3,354,121	3,334,425	3,854,702	92.4%	15.6%	0.1%	
SECONDARY	SIDING	M2	40,738	33,962	56,971	36,209	42,985	100.0%	18.7%	5.5%	
SECONDARY	SW SIDING	M2	32,211	24,733	19,570	25,707	24,853	57.8%	-3.3%	-22.8%	
SECONDARY	HW SIDING	M2	8,527	9,229	37,401	10,502	18,132	42.2%	72.7%	112.6%	
SECONDARY	TREATED LUMBER	M3	244,954	186,783	144,460	126,097	114,836	100.0%	-8.9%	-53.1%	
SECONDARY	BUILDERS CARPENTRY	NO	5,400,853	5,813,851	5,567,949	4,164,358	4,594,649	100.0%	10.3%	-14.9%	
SECONDARY	COOPERAGE PRODUCTS	NO	10,427,585	20,654,058	15,257,519	12,762,004	18,904,493	100.0%	48.1%	81.3%	
SECONDARY	WOOD PACKING MATERIAL	NO	13,734,135	13,410,465	10,431,156	11,895,755	14,909,554	100.0%	25.3%	8.6%	
SECONDARY	PENCIL SLATS	WT	9,600,079	10,220,557	9,445,174	2,692,787	881,611	100.0%	-67.3%	-90.8%	
SECONDARY	PREFABRICATED BUILDINGS	NO	850,201	1,000,212	818,796	656,629	521,100	100.0%	-20.6%	-38.7%	
SECONDARY	OTHER WOOD PRODUCTS	M3	211,390	277,916	241,309	263,133	685,671	100.0%	160.6%	224.4%	

TABLE 5B: U.S. EXPORTS BY VALUE

U.S. EXPORTS		MARKET: WORLD					UNITS: \$1,000		
TYPE	CATEGORY	1999	2000	2001	2002	2003	SHARE	1YR Δ	5YR Δ
PRIMARY	LOGS	1,231,861	1,319,002	1,138,581	1,106,501	1,176,948	100.0%	6.4%	-4.5%
PRIMARY	SW LOGS	900,492	926,770	720,950	655,873	688,225	58.5%	4.9%	-23.6%
PRIMARY	HW LOGS	331,369	392,232	417,631	450,628	488,723	41.5%	8.5%	47.5%
PRIMARY	LUMBER	2,093,387	2,134,917	1,712,475	1,662,839	1,670,232	100.0%	0.4%	-20.2%
PRIMARY	SW LUMBER	737,119	710,234	488,071	421,708	384,735	23.0%	-8.8%	-47.8%
PRIMARY	HW LUMBER	1,356,268	1,424,683	1,224,404	1,241,131	1,285,497	77.0%	3.6%	-5.2%
PRIMARY	WOOD CHIPS	447,106	401,048	293,333	196,473	158,379	100.0%	-19.4%	-64.6%
PRIMARY	SW CHIPS	141,847	145,339	130,100	121,035	112,937	71.3%	-6.7%	-20.4%
PRIMARY	HW CHIPS	305,259	255,709	163,233	75,438	45,442	28.7%	-39.8%	-85.1%
PRIMARY	VENEERS	409,560	439,574	400,039	458,564	473,270	100.0%	3.2%	15.6%
PRIMARY	SW VENEERS	39,489	39,166	30,108	39,825	55,640	11.8%	39.7%	40.9%
PRIMARY	HW VENEERS	370,071	400,408	369,931	418,739	417,630	88.2%	-0.3%	12.9%
PRIMARY	PLYWOOD	210,251	207,737	156,938	150,306	148,027	100.0%	-1.5%	-29.6%
PRIMARY	SW PLYWOOD	146,716	148,787	104,805	94,950	80,824	54.6%	-14.9%	-44.9%
PRIMARY	HW PLYWOOD	63,535	58,950	52,133	55,356	67,203	45.4%	21.4%	5.8%
PRIMARY	FIBERBOARD	118,668	147,556	116,328	116,129	108,832	100.0%	-6.3%	-8.3%
PRIMARY	MDF	29,408	43,191	40,048	46,886	48,964	45.0%	4.4%	66.5%
PRIMARY	HARDBOARD	89,260	104,365	76,280	69,243	59,868	55.0%	-13.5%	-32.9%
PRIMARY	PARTICLEBOARD	83,642	80,555	84,736	88,506	71,598	100.0%	-19.1%	-14.4%
PRIMARY	OSB/WAFERBOARD	47,688	43,908	38,628	41,052	36,519	51.0%	-11.0%	-23.4%
PRIMARY	PARTICLEBOARD	35,954	36,647	46,108	47,454	35,079	49.0%	-26.1%	-2.4%
PRIMARY	RAILROAD TIES	36,988	29,481	27,601	29,824	33,993	100%	14.0%	-8.1%
PRIMARY	POLES	44,394	51,647	32,104	28,153	27,945	100%	-0.7%	-37.1%
PRIMARY	OTHER PANEL PRODUCTS	136,857	142,694	126,665	115,603	102,969	100%	-10.9%	-24.8%
SECONDARY	FLOORING	80,094	84,542	70,271	72,218	82,241	100.0%	13.9%	2.7%
SECONDARY	SW FLOORING	10,504	9,043	5,699	5,664	4,106	5.0%	-27.5%	-60.9%
SECONDARY	HW FLOORING	69,590	75,499	64,572	66,554	78,135	95.0%	17.4%	12.3%
SECONDARY	SIDING	4,166	3,832	4,727	3,933	5,066	100.0%	28.8%	21.6%
SECONDARY	SW SIDING	3,128	2,507	1,870	2,817	2,945	58.1%	4.5%	-5.9%
SECONDARY	HW SIDING	1,038	1,325	2,857	1,116	2,121	41.9%	90.1%	104.3%
SECONDARY	MOLDING	83,921	61,596	60,585	71,659	83,556	100.0%	16.6%	-0.4%
SECONDARY	SW MOLDING	54,240	36,237	39,552	35,909	67,329	80.6%	87.5%	24.1%
SECONDARY	HW MOLDING	29,681	25,359	21,033	35,750	16,227	19.4%	-54.6%	-45.3%
SECONDARY	TREATED LUMBER	55,382	38,776	30,608	27,361	20,876	100%	-23.7%	-62.3%
SECONDARY	BUILDERS CARPENTRY	345,939	356,688	296,397	261,886	277,104	100%	5.8%	-19.9%
SECONDARY	COOPERAGE PRODUCTS	85,381	104,677	80,646	57,387	52,683	100%	-8.2%	-38.3%
SECONDARY	W. PACKING MAT.	64,157	68,112	55,276	63,496	77,110	100%	21.4%	20.2%
SECONDARY	PENCIL SLATS	37,933	37,090	31,824	8,959	2,508	100%	-72.0%	-93.4%
SECONDARY	PREFABRICATED BUILDINGS	55,107	47,025	41,736	36,820	41,422	100%	12.5%	-24.8%
SECONDARY	OTHER W. PRODUCTS	306,799	334,222	276,730	303,966	341,083	100%	12.2%	11.2%

OVERVIEW OF SC EXPORT ACTIVITY

METHODOLOGY

All state export statistics on this website are drawn from the Census Bureau's Origin of Movement (OM) state export series. The OM series is based on information supplied by U.S. exporters on official Shippers Export Declarations (SEDs) for goods leaving the United States. All statistics in the OM series are on a **free-alongside-ship (f.a.s.)** basis and include both domestic exports and re-exports. The OM series seeks to measure state exports on the basis of transportation origin—i.e., the location from which exports begin their journey to the port (or other point) of exit from the United States.

The OM series covers exports of merchandise only. Exports of services are excluded from the data. OM statistics are available only at the state level. There are currently no equivalent figures for exports by metropolitan areas, counties, zip codes, or other sub-state areas.

State-level assessments of export activity pose many challenges in validating the data. The most accurate and up-to-date method available currently is called Origin of Movement data analysis. The OM series, available since 1987, provides export statistics based on the state from which the merchandise starts its journey to the port of export; that is, the data reflect the transportation origin of exports.

Limitations. In certain cases, the origin of movement is not the transportation origin. Whenever shipments are consolidated, the state of origin of movement will reflect the consolidate point. This effect is particularly noticeable for agricultural shipments. Intermediaries located in inland states ship agricultural commodities down the Mississippi River for export from the port of New Orleans. In this case, they would report Louisiana, the state where the port of New Orleans is located, as the state of origin of movement. The primary impact is on the state distribution of non-manufactured exports, which are generally exported by intermediaries. The most visible result is a tendency to understate exports from some agricultural states and to overstate exports from states like Louisiana that have ports that handle high-value shipments of farm products.

The series **DOES NOT** represent the production origin of U.S. export merchandise. In some cases considerable manufactured exports are attributed to states that are known to have little manufacturing capability. One reason is that commodities produced by out-of-state suppliers can be shipped from in-state distribution centers. Another factor is shipments of manufactured commodities from in-state warehouses and other distribution centers that are arranged by exporters located out-of-state. In both cases, manufactured exports from the non-industrial state are magnified in the OM series.

NOTE: State-level export data is compiled on a six-digit basis. This means that classifications requiring more detail than a 6-digit code can provide cannot be drawn out of the aggregate data. For example, Softwood Logs and Lumber, at the 6-digit level do not provide enough information to determine species type. This is seen as critical when evaluating state-level data as geographic conditions have much more impact on the types of forest products produced in a certain region. Nevertheless, the SCEC has attempted to analyze the overall export potential of the state at the 4 and 6-digit product levels. The reader should be aware of this limitation when analyzing the following export information, as well as the SC information in each country market overview.

OVERVIEW OF FORESTRY EXPORTS

STATE-LEVEL EXPORTS

Wood products (Chapter 44) exports in 2003, represented about .5% of the total SC export market, yielding \$67.8M in value. This number represents a combination of primary and secondary products (along with wood furniture sales). Wood products exports ranked 24th overall for SC exports behind Paper & Paperboard (\$340M) and Woodpulp (\$214.9M). These categories are products of the forestry industry, but were not analyzed for the scope of this report, since larger more established firms operate in the two markets in question. Overall, SC ranked 25th in exports of wood products in the U.S. The top exporting states for wood products in the U.S. were:

Washington (13.1%)
 California (7.5%)
 Pennsylvania (7.05%)
 Oregon (6.24%)
 New York (5.42%)

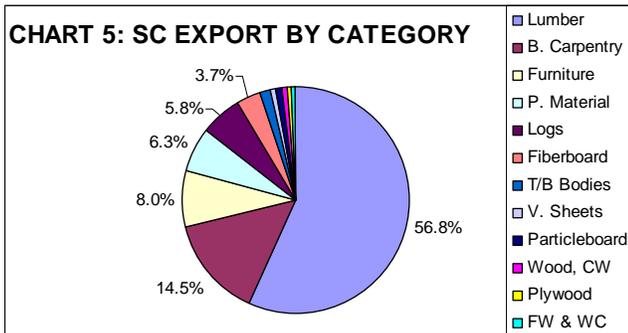
The largest export total from a state was Washington with \$679M, and the smallest exports were recorded from the District of Columbia with \$255,000 in 2003. The average per state export value of wood products was \$94.3M, but obviously exports were heavily weighted towards the top 10 states.

SC EXPORTS BY PRODUCT

TABLE: 6 TOP S.C. EXPORTS BY CATEGORY						UNITS	SUS	
	PRODUCT	2001	2002	2003	% TOTAL	% PROD	1YR Δ	5YR Δ
44+94	TOTAL	67,535,699	64,019,773	67,831,184	100.0%		8.8%	33.3%
4407	Lumber	26,077,242	32,298,872	38,117,406	56.2%	100.0%	18.0%	43.1%
	Hardwood	20,774,627	25,826,200	33,649,826	49.6%	88.3%	30.3%	99.4%
	Softwood	5,302,615	6,472,672	4,467,580	6.6%	11.7%	-31.0%	-54.3%
4418	Builders' Carpentry	6,836,036	7,851,815	9,703,623	14.5%	100.0%	23.6%	220.2%
	Other	1,025,612	4,529,649	6,985,816	10.3%	72.0%	54.2%	1491.5%
	Windows	5,728,652	2,752,518	2,246,220	3.3%	23.1%	-18.4%	-9.8%
	Doors	76,328	569,648	393,976	0.6%	4.1%	-30.8%	283.3%
	Parquet Panels	-	-	77,611	0.1%	0.8%		
	Formwork	5,444	-	-	0.0%	0.0%		
94	All Wood Furniture	8,510,651	4,675,493	5,389,030	7.9%	100.0%	15.3%	-47.2%
	Other	5,026,905	2,004,070	3,535,623	5.2%	65.6%	76.4%	-33.3%
	Bedroom	2,510,912	1,932,764	1,424,126	2.1%	26.4%	-26.3%	-4.8%
	Upholstered Seats	743,051	494,829	176,197	0.3%	3.3%	-64.4%	-93.9%
	Kitchen	47,835	91,069	157,999	0.2%	2.9%	73.5%	967.0%
	Office	157,102	126,154	85,490	0.1%	1.6%	-32.2%	-72.2%
	Un-upholstered Seats	20,494	26,607	9,595	0.0%	0.2%	-63.9%	-93.0%
4415	Packing Material	2,530,883	2,596,408	4,245,345	6.3%	100.0%	63.5%	258.9%
	Cases, Boxes, Crates	2,041,766	1,148,509	3,357,596	4.9%	79.1%	192.3%	396.4%
	Pallets, Loading Boards	489,117	1,447,899	887,749	1.3%	20.9%	-38.7%	75.2%
4403	Logs	1,945,064	6,485,818	3,875,790	5.7%	100.0%	-40.2%	218.3%
	Softwood	437,236	1,501,242	2,927,550	4.3%	75.5%	95.0%	998.2%
	Hardwood	1,407,086	4,896,675	948,240	1.4%	24.5%	-80.6%	10.5%
	Treated	100,742	87,901	-	0.0%	0.0%	-100.0%	-100.0%
4411	Fiberboard	1,838,357	2,780,981	2,509,441	3.7%	100.0%	-9.8%	6.0%
	Other-Light Density	566,020	1,854,513	1,775,569	2.6%	70.8%	-4.3%	8436.8%
	MDF	620,507	815,902	633,424	0.9%	25.2%	-22.4%	-61.0%
	Hardboard	651,830	110,566	100,448	0.1%	4.0%	-9.2%	-86.1%
4417	Tool & Broom Bodies	425,655	404,066	858,285	1.3%	100.0%	112.4%	54.9%
4408	Veneer Sheets	7,410,775	4,581,848	584,626	0.9%	100.0%	-87.2%	-52.9%
4410	Particleboard	326,610	310,335	543,087	0.8%	100.0%	75.0%	-47.1%
4409	Wood, continuously worked	761,726	1,126,620	534,647	0.8%	100.0%	-52.5%	-58.1%
4412	Plywood & Panels	117,091	205,789	404,085	0.6%	100.0%	96.4%	-20.4%
4401	Fuel Wood/Wood Chips	9,812,493	23,000	366,181	0.5%	100.0%	1492.1%	744.6%

SC EXPORTS BY PRODUCT (CONT.)

The \$67.8 M worth of exports via SC were dominated by a few primary sectors. The top 10 wood products categories for SC accounted for more than 97% of total exports leaving the state. The top overall categories are listed in Table 5 above. The top commodities exported by SC in terms of total value and market share in 2003 were HW Lumber (\$33.6M, 47.5%), Builders Carpentry (\$9.7M, 14.5%), Wood HH Furniture (\$4.9M, 7.0%), and SW Lumber (\$4.5M, 6.3%). Table 6 displays top products along with their market share and growth patterns over the last 5 years. SC



exports of wood products performed very well over the period, increasing by 33.3% from 1999-2003. This increase came on the back of strong growth in Builders Carpentry (220%), Lumber (43.1%), Wood Packing Material (258.9%), and Logs (218.3%). SW Logs (998.2%), HW Lumber (99.4%) contributed the most growth to the Log and Lumber categories, respectively. It is interesting to note that HW Lumber accounted for nearly 90% of all Lumber exports leaving the state, while SW Lumber exports have been steadily declining. As Southern Yellow Pine is probably the largest contributor to the SW category, SC trends are following and U.S. decline in Southern Yellow Pine exports. The opposite was true of Log exports through the period. SW Logs in this case, contributed both the strongest growth and highest market share in that category, ending 2003 with sales of nearly \$3.0M. HW Veneers represented a very strong category for SC exports, but have been on marked decline since 1999 levels. Wood Furniture exports have also seen significant decline, with a -47% loss in value since 1999.

Note: Due to lack of classification data past the 6 digit level, Prefabricated Buildings data includes exports of all Prefabricated Buildings whether made of wood, aluminum, or other material. This data is separated out at the U.S. level, but not at the state level. The category is not as large as data above indicates. However, U.S. level data indicates strong growth in the wooden prefabricated housing market and thus the SCEC opted to leave this data in the analysis.

Table 7 shows the relative strength of the SC wood products export industry. It should be noted that many categories in this list did not have 50 total states in the calculation, and thus must be analyzed in concert with actual % market share in the analysis above. In general though, SC exports were competitive on a state level in the following categories:

- Wood Packing Material
- Builders Carpentry
- Fiberboard
- Lumber
- Tools & Broom Bodies

TABLE 7: SC EXPORT RANKING BY CATEGORY		STATE
HS	CATEGORY	RANKING
44	ALL WOOD PRODUCTS	25
4401	FUEL WOOD & WOOD CHIPS	19
4402	WOOD CHARCOAL	36
4403	LOGS,	29
4404	HOOPWOOD, POLES, PICKETS, STAKES	26
4406	RR TIES	27
4407	LUMBER	17
4408	VENEER SHEETS	27
4409	WOOD, CONTINUOUSLY WORKED	30
4410	PARTICLEBOARD	23
4411	FIBERBOARD	16
4412	PLYWOOD	30
4413	DENSIFIED WOOD SHAPES	19
4414	WOOD FRAMES ETC.	29
4415	WOOD PACKING MATERIAL	6
4416	COOPERAGE PRODUCTS	18
4417	TOOL & BROOM BODIES	17
4418	BUILDERS' CARPENTRY	9
4419	WOOD TABLE WARE/KITCHENWARE	28
4420	MARQUETRY ETC.	15
4421	ARTICLES OF WOOD, nesoi	34

SC EXPORTS BY COUNTRY

TABLE 8: US Exports (Origin of Movement - Total) to the World Via South Carolina
Commodity: 44 + 94, Wood and Wood Furniture

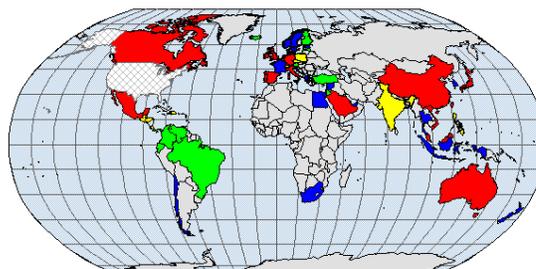
U.S. Dollar									
Country	1999	2000	2001	2002	2003	Share	1YR Δ	5YR Δ	RANK
World	50,903,960	65,532,492	67,535,699	64,019,773	67,831,184	100.0%	6.0%	33.3%	
Japan	4,076,465	16,846,262	15,349,088	6,104,699	11,241,206	16.6%	84.1%	175.8%	1
Canada	12,585,990	10,859,276	9,568,305	10,850,698	8,332,048	12.3%	-23.2%	-33.8%	2
China	210,446	390,834	2,449,192	3,899,998	6,860,547	10.1%	75.9%	3160%	3
UK	3,711,105	4,803,898	4,510,022	4,196,805	4,426,735	6.5%	5.5%	19.3%	4
Spain	4,131,561	5,268,784	4,532,321	5,575,343	4,035,599	5.9%	-27.6%	-2.3%	5
Hong Kong	863,898	1,333,685	4,088,462	4,733,671	3,633,528	5.4%	-23.2%	320.6%	6
Taiwan	1,156,576	342,617	702,678	2,802,493	2,900,868	4.3%	3.5%	150.8%	7
Italy	3,205,810	1,585,492	1,932,632	1,574,354	2,440,798	3.6%	55.0%	-23.9%	8
Portugal	859,616	837,010	1,915,723	2,393,321	2,254,912	3.3%	-5.8%	162.3%	9
Mexico	437,043	432,156	1,739,617	2,191,332	1,944,889	2.9%	-11.2%	345.0%	10
Germany	3,612,339	1,860,294	1,772,728	1,201,441	1,512,985	2.2%	25.9%	-58.1%	11
Australia	93,930	148,803	1,224,407	1,671,787	1,458,763	2.2%	-12.7%	1453%	12
Korea	1,008,659	1,361,765	698,421	936,666	1,342,016	2.0%	43.3%	33.0%	13
Malaysia	253,411	1,094,091	1,172,485	1,363,557	1,148,802	1.8%	-15.7%	353.3%	14
Belgium	1,861,767	1,916,903	1,654,803	1,337,210	1,140,275	1.8%	-14.7%	-38.8%	15

The top markets for SC wood products in 2003 are shown in Table 8. This table provides some interesting trend data for assessing the potential value of current markets in the future. For example, unlike aggregate U.S. exports, SC exports to Canada have been steadily dropping since 1999. South Carolina also outperformed the U.S. average in other markets. For example, exports to China have grown 10 times faster than that of the U.S. rate. U.S. exports to Japan have lost more than 50% of their value since 1999, but SC exports have almost tripled over the 5yr period, to reach a value of \$11.2M in 2003. The top markets for SC wood products in 2003 were Japan (16.6%), Canada (12.3%), China (10.1%), the United Kingdom (6.5%), and Spain (5.9%). SC maintains a rather diverse export market for forestry products, with the top ten markets accounting for just over 70% of the entire export market. The major performing markets from 1999-2003 showed extraordinary growth in exports over the period surveyed. The top performing markets, based on 5-yr growth figures, were China (3160%), Australia (1453%), Mexico (345%), Hong Kong (320.6%), and Japan (175.8%). Of these top 5 fastest growing markets, Japan, China, and Hong Kong were the largest and represented the largest total increase in volume through the period. SC exports to these 5 countries grew by an estimated \$19.4 M in 5 years. These represent the top prospects for SC forest products and companies in the near-term future. SC shares many of the same top markets as total U.S. exports do with Japan, Canada, China, UK, Spain, Hong Kong, Italy, Mexico, Germany, and S. Korea taking the top ten for the U.S. However, thanks to strong growth in exports to countries such as Taiwan (150.8%), Portugal (162.3%), Australia (1453%), and Malaysia (353.3%), SC has some additional markets in which to tap.

SOUTH CAROLINA EXPORTS- MAP

State export values available on this web page cover the years 1999-2002 and are tabulated on a NAICS (North American Industry Classification System) basis for broad product categories (3-digit level of detail).

2003 Wood Products (in thousands)
EXPORTS from South Carolina



All figures are for total exports (domestic exports plus re-exports), reflect initial unrevised data, and are on a Free Alongside Ship (FAS) value basis. (For definitions of technical terms and other information on U.S. trade data, visit <http://www.census.gov/foreign-trade/guide/>). From now on all state data disseminated by Census and featured on the website will be exclusively on an OM basis. For a more complete explanation of the Census Bureau decision to terminate the EL series, visit <http://www.census.gov/foreign-trade/Press-Release/notice.html>.¹

¹ Source: TradeStats Express™- State Export Data, <http://ese.export.gov>