

**FINANCIAL TRENDS**  
**IN THE FOREST PRODUCTS INDUSTRY**

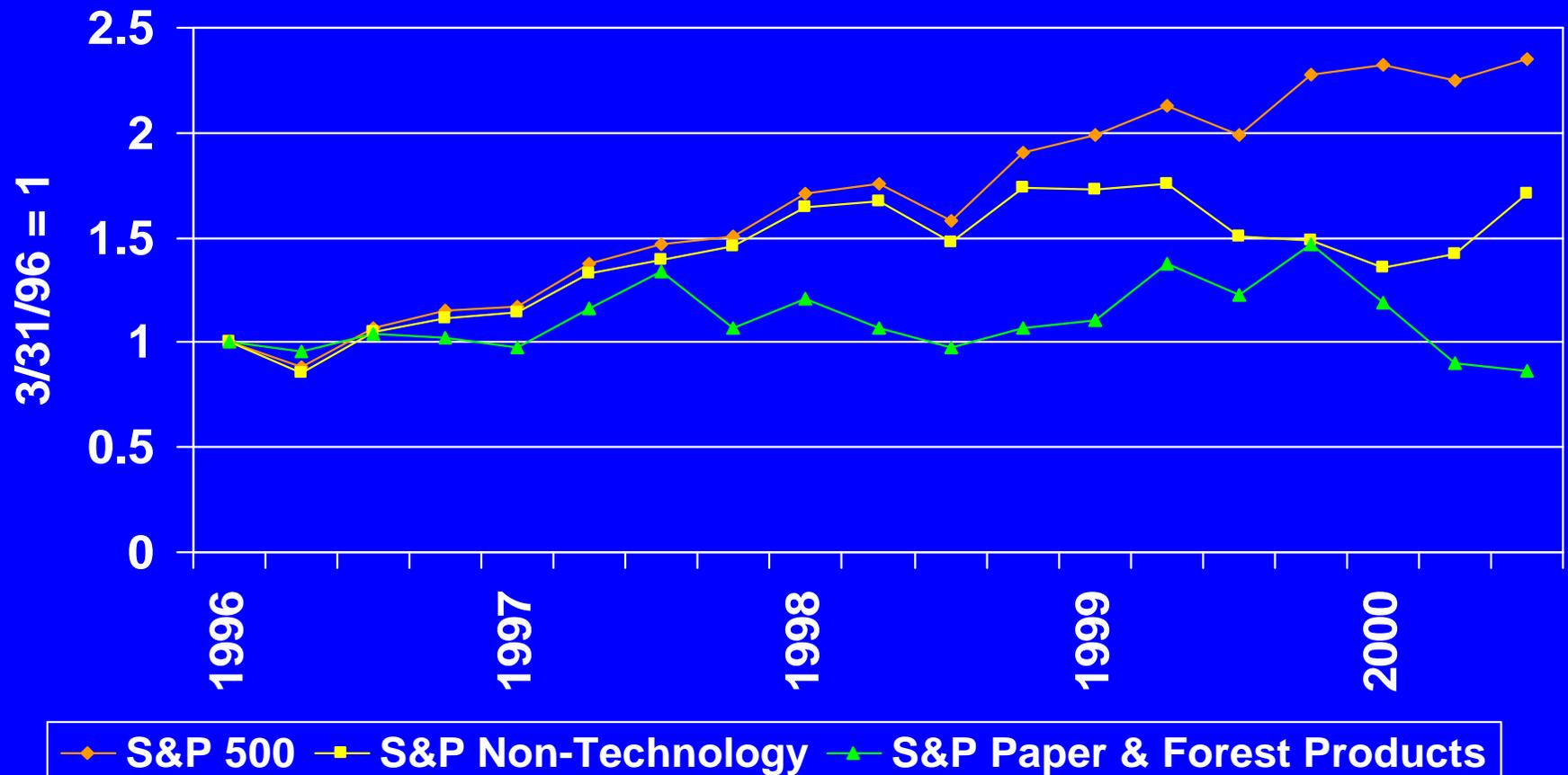
**PRESENTATION TO**  
**INTERNATIONAL FOREST PRODUCTS MARKETING CONFERENCE**  
**CENTER FOR INTERNATIONAL TRADE IN FOREST PRODUCTS**  
**UNIVERSITY OF WASHINGTON, SEATTLE, WASHINGTON**

**NOVEMBER 13, 2000**

**BY**

**EVADNA S. LYNN, CFA**  
**FOREST PRODUCTS CONSULTANT**  
**SAN FRANCISCO, CALIFORNIA**  
**(415) 673-0587**

# RELATIVE QUARTERLY PERFORMANCE OF SELECTED S&P INDICES



# U.S. HOUSING STARTS

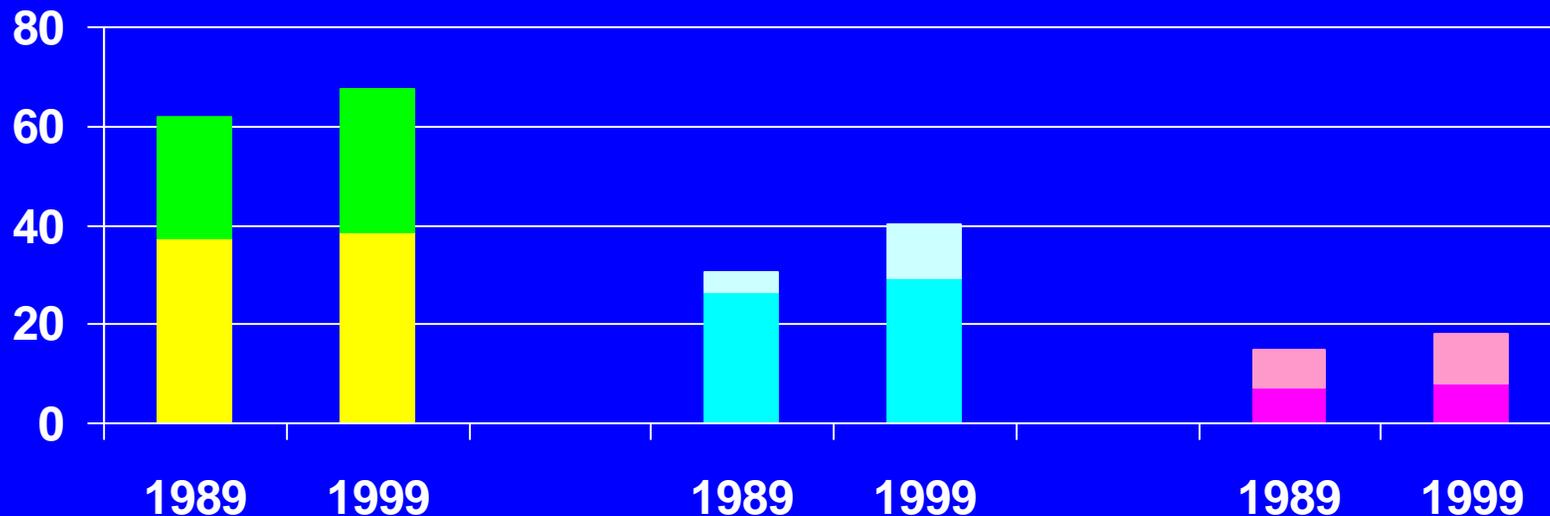
Million units, quarterly SAAR



Source: National Assn. of Home Builders

# CHANGE IN NORTH AMERICAN FOREST PRODUCTS OUTPUT

(Lumber: BBF; Panels: BSF; Pulp: MM tons)



■ Lumber-US

■ Structural Panels-US

■ Market Pulp-US

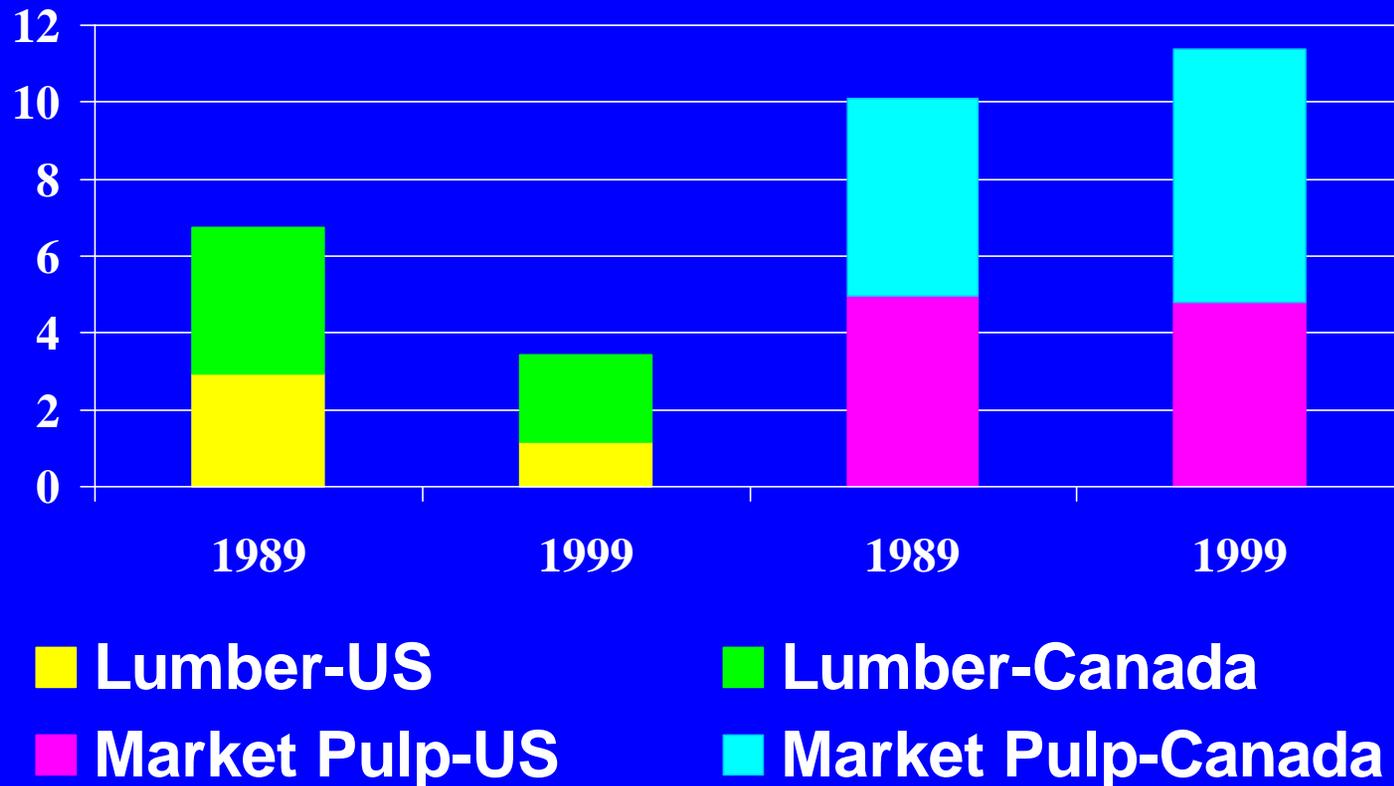
■ Lumber-Canada

■ Structural Panels-Canada

■ Market Pulp-Canada

# CHANGE IN NORTH AMERICAN OVERSEAS EXPORTS

(Lumber: BBF; Market Pulp (MM tons))



I have been asked to discuss the financial trends affecting the forest products industry with you this afternoon. Although the topic is virtually unlimited, I would like to focus on three main points in the time we have. These are:

- ? How financial markets currently view the forest products companies.
- ? Challenges facing forest products companies in the new world of globalization, environmental consciousness, and e-commerce.
- ? And, finally, the potential success of steps now being taken to meet these challenges.

**First, let's look at how financial markets currently view the forest products companies as reflected in the recent stock market performance of the S&P Paper & Forest Products Index compared with the overall stock market.**

Between the beginning of 1996 and the end of 2000's third quarter, the S&P Paper & Forest Products Index fell 13% compared with a 135% gain for the S&P 500 Index. I have also adjusted the S&P 500 Index to remove the technology component. Even that adjusted index has outperformed the Paper & Forest Products Index, moving up 71% compared with the 13% drop for the Paper & Forest Products Index.

Periodically in the last year, the Paper & Forest Products Index has outperformed the non-technology stocks. For example, last December they shot up sharply, enabling the group to move up 37% last year vs. the 14% decline in the non-technology stocks as a group. It appears that late 1999 was the apex of relative performance for the group in this cycle.

**This year, we saw many paper and forest products stocks hit new five-year lows in late September and early October, although the group rebounded a bit in the last few weeks as the technology group has been hammered.** This volatile relative performance reflects a struggle between the belief that the paper and forest product sector is significantly undervalued and now improving cyclically and the worry that the economy – and demand for paper and wood -- is slowing. The recent softness in market pulp prices and the lowest lumber prices since the second quarter of 1995 are providing fundamental support for this latter camp.

The overall stock market will likely be roughly flat in 2000, following four years of 20-25% annual gains. This sluggish performance reflects a partial correction of the excessive price/earnings multiples that were accorded many “growth” stocks, particularly those in the technology sector. As money has been pulled out of the “dot-com” and other weakening technology sectors, it has been funneled into “old economy” stocks, including those in the paper and forest products sector.

The Fed’s attempt to reign in the economy’s rampant growth appears to be taking effect with real GDP growth slowing to a 2.7% preliminary pace in the third quarter from the 5.9% average growth during the four previous quarters. Even during that previous period of growth, however, demand for paper remained sluggish – through August, shipments of uncoated free sheet paper rose only three tenths of one percent, while corrugated box shipments fell one-half of one percent year-to-year. Housing starts have slipped to a 1.53 million rate in recent months, off 12% from a 1.73 million annual rate in 2000’s first quarter. However, dimension lumber prices have fallen back to second-quarter 1995 levels – when housing starts were only at a 1.295 million rate. No wonder that the stocks of lumber producers have fallen sharply this year!

Mortgage rates have fallen back to year-previous levels in recent weeks, but housing is more likely to stabilize near recent levels than rebound back to previous peaks. With the drying up of the IPO (initial public offering) market and the drop in the high-flyers among the technology stocks, one key source of recent housing market strength has diminished sharply. Although consumer confidence has held up quite well, disposable income has been squeezed by higher energy and housing prices and plans for home-buying have slipped.

**We forecast that housing starts will slip slightly below 1.6 million units this year, before dropping to the 1.5 million level for 2001.** Data for this year will be supported by the strong rate of housing activity early in the year, as indicated in this chart, which shows the rebound in 2000’s first quarter to a 1.73 million unit rate and the subsequent slide to a 1.53 million start annual rate by the third quarter. We see further slippage during the next couple of quarters, reflecting, first, eroding consumer confidence and the effect of delays as buyers wait for prices to soften; and, second, the weakness in the sectors of the stock market that have provided the largest gains in the last few years, eroding those gains as sources for housing down-payments. However, 1.5 million housing starts would still be higher than starts in the any of the years 1988 through 1997.

In addition, repair and remodeling demand is likely to erode. In recent weeks, funding for remodeling (other than that associated with existing home sales) has shifted from stock market capital gains to home equity loans, as the recent increases in home values have held up better than the earlier stock market gains – at least for now. As the economy slows, it is likely that some major remodeling plans will be postponed. Thus, we anticipate that U.S. demand for lumber will drop 2.4% this year, after rising 4.1% in 1999, and that demand will fall a further 2.8% next year. Structural panel demand will fall less sharply, reflecting the continued penetration of structural panel products into the lumber market, but will still be negative.

This slump in demand comes in the face of significant increases in supply – from domestic producers, from Canada, and from other overseas producers who face excess capacity in their home markets. That excess supply is why wood products prices and earnings are so weak in the face of what not long ago would have been considered “robust housing demand”.

**Thus, it appears unlikely that underlying industry fundamentals will support a major or sustained rebound in the paper and forest products stocks until such time as the economy weakens enough to cause the Fed to lower interest rates. At that point, we may see a more sustained rebound in investor interest in cyclical stocks, particularly those affected by stronger construction activity.**

Thus, the near-to-intermediate term outlook for paper and forest products companies' stock market prices is lackluster. Although unlikely to decline significantly from recent levels, they are also unlikely to post robust gains.

**On top of the weak supply/demand outlook, forest products managements also face the challenges of major change in the structure of their markets:**

- ? Markets have become global.
- ? Environmental forestry and certification continue to gain support.
- ? E-commerce is changing the way business is done.

**Globalization started at home, with both the wood and paper industry becoming truly North American during the last decade.**

Canadian producers have captured most of the increase in North American output during the 1990s in key grades such as lumber, structural panels, and market pulp, as indicated on this slide. This shift has put increased pressure on U.S. producers, who have been hampered during most of the decade by a relatively strong dollar and higher environmental costs. Since the beginning of 1990, the Canadian dollar has dropped more than 20% from \$0.85 per U.S. dollar to \$0.67. That has not only aided the Canadian position in the U.S. market but also in export markets compared with that of U.S. producers.

Furthermore, during the last decade, European producers of both wood and paper products have expanded and modernized output, while domestic consumption has remained relatively stable. As a result, North American producers are facing increased European competition in world markets. Meanwhile, radiata pine plantations in New Zealand, Brazil, and Chile have matured, putting additional softwood fiber on the world market. Indonesia has emerged as a major player in the pulp and paper markets, despite its recent turmoil, and is likely to be the primary long-term supplier of incremental pulp to China. Furthermore, most of this competition is lower-cost than North American output and excess production has

found its way not only into potential North American export markets but also into the United States market.

With the European lumber market being supplied from expanded internal sources and the Japanese market likely to remain weak, North American export opportunities have shrunk, particularly on the wood products side, as indicated on this slide. Thus, the globalization of the wood products industry has been a net negative for North American wood products producers and, really, for pulp/paper producers as their share of potential export markets has declined. Linerboard has been one of the few bright spots in the export market, with U.S. exports rising from 2.5 million tons in 1989 to 3.3 million tons in 1999, but shipments so far this year are up less than 1%. Effectively, rising output within China and other Asian markets has been able to supply much of the incremental demand in those growth markets.

Thus, globalization has been a net negative for U.S. forest products companies.

**The increased sensitivity to environmental forestry has been developing for more than a decade.** The first major impact was the wave of sawmill and plywood plant closures related to the Endangered Species Act, which was used by environmental groups to effectively shut down timber harvests in western federal forests. Restrictions now affect harvests on most federal forests in the United States. State forests have also been affected, although to a lesser degree. More recently, environmental pressures have taken the guise of requiring certification that the timber used for lumber and other wood products has come from forests managed for sustainability.

From the standpoint of wood producers, this movement will require more stringent management control of wood harvest and manufacturing operations, but will probably enhance the marketability of their product longer-term. The globalization of the marketplace is also requiring the standardization of timber management and

product grading standards. These are generally associated with enhanced environmental standards. On the wood side, the rise of third-party certification of forest management practices, whether under ISO 14001, the Forest Stewardship Council or under “approved” forest management systems such as the AF&PA’s Sustainable Forestry Initiative or the Canadian Standards Association, is raising the standards for forest management.

Within the last 18 months, Home Depot, the world’s largest home improvement retailer, pledged to stop selling wood products from environmentally sensitive areas – including certain luan, redwood, and cedar products – and to give preference to “certified” wood. This demand for environmentally-friendly product, already strong in Europe, is likely to continue spreading globally.

**The newest challenge is the developing world of e-commerce.** The emergence of Internet activities has been slower to develop in the forest products industry than in many markets because of the highly fragmented character of the market, both as to buyers and sellers. This drawback has been reinforced by the inherent conservatism of both builders and forest products company managements, particularly those in the smaller companies.

So far, e-commerce appears to be affecting the wood products industry in two ways. **First, it is facilitating supply-chain management for both producers and users.** Eventually, wood products companies will not have to control all facets of the production process – they can buy timber, resins, equipment and other supplies through a more efficient exchange process. On the sales side, e-commerce techniques will help companies to align themselves with the most appropriate customers, maximizing the market and profit for a mill’s optimal output. In this way, e-commerce should facilitate the development of strategic alliances while keeping markets competitive.

Earlier this year, International Paper, Georgia-Pacific, and Weyerhaeuser announced plans to develop a global business-to-business e-commerce marketplace in an effort to create common industry standards and to help stimulate the use of e-commerce in the industry. This effort is proceeding slowly – but it indicates that change is taking place.

Although larger companies are the most obvious beneficiaries, given their breadth of product and logistic alternatives, e-commerce should also aid smaller producers by expanding their market horizon at lower cost. The companies most at risk are the office wholesalers who in the past have benefited from facilitating the movement of product between producer and end user. Distribution centers, whether company-owned, independent, or buyer-owned will become logistical facilitators rather than inventory depositories.

**Secondly, wood products trading is likely to become more open,** with the close person-to-person relationships between company and wholesaler traders and buyers becoming less important than in the past. Potential constraints on trade from distribution channel conflicts will be minimized. Computer-based trading has been

used in stock and bond markets for years, and has more recently been making inroads in paper markets. The auction markets in commodity grades of lumber and structural panels appear logical targets for such computerized trading systems. The entrepreneurial nature of the e-commerce business insures that creative attempts to develop new processes for today's somewhat antiquated auction markets will be made, whether by key producers or by other entrepreneurs.

Several Internet markets are already developing, including TALPX Inc., PaperExchange.com and fibermarket.com that are aimed at making markets in various wood, pulp and fiber products. TALPX has estimated that 20% of North American lumber production will be represented by its site this year. Furthermore, producers in other regions, such as Finland, are beginning to use TALPX to move product into the U.S. market.

In addition, several web sites have been established to help builders locate product more efficiently as well as to facilitate the liquidation of excess building product inventories. E-commerce is coming, whether or not industry traditionalists encourage it!

**Now, lets look at the ways in which managements are facing up to these changes.**

There have been four inter-related responses by forest products industry managements to these challenges. In summary, these are:

- ? To reduce capital investment and use surplus funds to repurchase stock.
- ? To increase the use of marginal economics to maximize profits.
- ? To accelerate industry consolidation, whether as a buyer or seller.
- ? To sell timber assets to raise capital.

Let's take a closer look at these responses and how they are affecting the industry in the face of the new financial challenges of globalization, environmental responsibility, and e-commerce.

**The initial response of the paper industry was to reduce capital investment to levels below depreciation**, bringing expansion in North America to a virtual halt. U.S. capacity to produce paper and paperboard is projected to increase only 0.7% per year over the next three years, only one-third of the 2.1% average during the last 10 years. This move has come in response to two key factors: (1) the high-cost position of North American producers in world markets, and (2) the low returns in the industry as a result of excess supplies that have made difficult the ability to finance new projects. Similar limits for wood products expansion has occurred, except in the case of OSB and engineered wood products where high margins and strong demand growth encouraged continued rapid capacity expansion – perhaps at rates that exceed the growth in demand.

**Another response was the adoption of "marginal economics"**. Based on work done by Anderson Consulting, several firms have adopted the concept that the "last ton" is not necessarily the most profitable one. The same concept applies to wood

product operations, based on the higher costs for outlying wood and overtime. This concept reinforces previous analyses of total mill costs, creating a cost matrix for facilities that can be balanced against demand – and price. Effectively, management is looking for ways to improve the efficiency of production – and making it easier to curtail output when demand weakens. So far, the concept has proven much more successful in the more concentrated paper segment than in the more fragmented wood products sector.

**The goal of these capacity-related management decisions has been to bring supply into better balance with demand** on both a long-term and short-term basis in order to improved prices, return on capital – and, hopefully, stock market evaluation of the companies. Historically, improved cash flow over the cycle was invested in new capacity. Now it is being used to repurchase stock, thus enhancing earnings per share growth – or to acquire existing companies to create accretive earnings growth.

**It appears inevitable that the trend to increased consolidation in the industry will continue.** Until mid-1999, most of the consolidation took place on the paper side of the industry, with the newsprint sector experiencing the greatest consolidation under Abitibi-Consolidated, which with its Donohue acquisition now controls 34% of the North American newsprint capacity. Elsewhere in North America, International Paper played the major role in the process with its acquisitions of Federal Paper Board, Union Camp, and, most recently, Champion International. It has been followed closely by Jefferson Smurfit (now Smurfit-Stone Container) with its most recent acquisitions of Stone Container and St. Laurent Paperboard. Bowater has been expanding worldwide, including its acquisitions of Canada's Avenor and two newsprint mills in Korea. Georgia-Pacific's pending acquisition of Fort James, itself the result of a merger, is the most recent North American consolidation move.

Consolidation has also been happening within Europe, where the cross-border mergers of Stora and Enso to form Stora Enso, followed by its acquisition of the U.S.'s Consolidated Papers, and of United Paper Mills and Kymmene to form UPM-Kymmene were the key moves.

On the wood side, transactions prior to mid-1999 focused primarily on timberlands or individual mill assets (or were by-products of paper company mergers), although in Europe we did see StoraEnso's acquisition of Austria's major lumber producer, Holzindustrie Schweighofer AG.

However, during the last year, activity in the wood products sector has accelerated and is having significant repercussions in North American wood markets. Such wood-oriented consolidation includes Louisiana-Pacific's purchase of Le Group Forex, Canfor's acquisition of Northwood, and Weyerhaeuser's acquisitions of MacMillan Bloedel and TJ International. Abitibi's acquisition of Donohue, although primarily a newsprint consolidation, made Abitibi the fifth largest lumber producer in North America, another step in wood products industry consolidation.

**The wave of consolidation is likely to continue.** The fact that the last few acquisitions have been at prices as much as 70% above the current market value of the stocks of the acquired companies supports the belief that managements are skeptical that their stock prices would recover to the prices being achieved through the merger process during the expected recovery in the paper markets because of the apparent reluctance of the general investing public to invest long-term outside of the technology sector. Thus, selling managements (and their shareholders) are more likely to support such consolidations than in the past when corporate pride was much stronger – and fewer executives had their compensation tied to their company's stock price.

**The primary rationale for consolidation has been the hope that it will improve price stability over the cycle** by limiting the number of players and by giving the resultant larger companies greater ability to adjust production downward during weaker markets without major penalty to earnings. These changes in industry structure are also making the North American industry more responsive to the new challenges. The larger companies appear to have an edge in global markets as their greater market recognition facilitates the ability of a company to penetrate new global markets efficiently. Furthermore, the larger companies tend to find it easier to establish marketing and/or production beachheads in developing markets in eastern Europe and Asia, while at the same time minimizing the risk of such ventures to the corporation itself.

**These consolidation trends are being mirrored on the customer front.** Not only are the retail home centers like Home Depot and Lowe's now dominating the remodeling market and increasing their share of the small builder market, but as they move into international markets, they have become more sensitive to environmental issues and the need for global servicing by suppliers. Consolidation in the home builder market is also creating bigger and stronger buyers. However, the larger homebuilders still account for only a third of housing starts, so the builder market is still highly fragmented. The need for economies of scale will continue to drive this consolidation movement, although the competitive position of smaller builders may improve as they learn to use the Internet.

**The timber markets are also being affected by these trends.** As consolidation raises the level of debt throughout the paper industry, several managements have sold timber to raise cash to reduce debt back to more appropriate levels. Georgia-Pacific's pending sale of its timberlands to Plum Creek Timber is just the latest illustration of this trend. Most of these timber sales have ended up in the hands of timber specialists – both publicly and privately owned. The long-term nature of timber investment has made it appropriate as an inflation-hedged investment for pension funds and insurance companies that have longer-term maturity (return) horizons. Furthermore, these new owners have focused much more intensively than most previous owners on the returns from the timberlands.

Even now, the North American timber industry has been able to offset the timber supply constraints imposed by the reduction in Federal timber sales during the early 1990s, resulting in record lumber output in 1999. Longer-term, we expect

improved silvicultural methods to enable the wood products industry to continue growing at its historic 2-3% annual rate of real growth. But the ownership patterns are changing. Perhaps this trend will also accelerate as more and more companies focus on supply-chain management in the new era of e-commerce. That acceleration would be even more rapid if corporate capital gain taxes were reduced significantly.

**Thus, in summary, we conclude that the forest product industry is facing more rapid change than it has ever before – much like the entire world economy.** The challenge to managements will be to understand these changes, to throw off the industry's traditional mantle of conservatism, and to adapt to new ways of doing business. Their success in operating in environmentally sensitive, global markets using e-commerce technology and options will determine the future outlook for the companies – and the price of their stocks. Perhaps eventually the stock market will look at the remaining companies as dynamic and profitable “new economy” representatives rather than as cyclical members of the “old economy” despite a lack of dramatic growth in traditional markets for wood products.

Thank you for your attention this morning. Now let's open the floor to questions.