HARDWOOD EXPORTS: TRENDS AND PROSPECTS

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Abstract -- Hardwood exports average about $456 million annually. Exports grew rapidly during the seventies, but declined after 1980 in response to the recession in Europe. Lumber accounts for over half of total hardwood exports, followed by logs, veneer, and plywood, in that order. Although the long-term outlook is good for hardwood exports, the economic recession in Europe and the burgeoning U.S. federal deficit threaten the short-term outlook.

Additional keywords: Forest products, wood exports, lumber, logs, veneer, plywood, foreign trade, forest products trade.

INTRODUCTION

There are several reasons why southern forest economists should be interested in hardwood exports. First, hardwood exports may be modest relative to softwood, but hardwoods are an important part of the South's export business and, in some cases, exceed softwoods in importance. Second, hardwood exports tend to have a high unit value compared to softwood, and thus the value of exports is greater than indicated by the quantities involved. Third, there is evidence that the rapid increase in hardwood exports in recent years has had a significant effect on domestic hardwood prices, thereby indirectly influencing hardwood forest management practices.

The information presented in this paper was taken from a data set I have developed at Virginia Tech, based upon U.S. Department of Commerce export tapes on wood exports by customs region. The products exported out of a particular customs region do not necessarily originate within that region, nor are all products originating within a region exported out of that region's ports. In view of the low value-to-weight ratio of most solid wood products, however, it is likely that the bulk of the products exported out of a customs district originated within that district.

TRENDS IN HARDWOOD EXPORTS

Product Composition

Hardwood exports average about $456 million annually. The period of most rapid growth during the last two decades was from 1973 to 1980, when the value of exports increased almost four-fold, from $132 million in 1973 to $520 million in 1980, an average annual rate of growth of 22 percent. Exports declined sharply thereafter to $395 million in 1982.

Lumber accounts for over half of the total value of hardwood exports, followed by logs with 22 percent, veneer with 19 percent, and plywood 2 percent. This is a substantial change in the relative importance of the major product groups in 1967. At that time, logs made up over half of the total value of

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Oak lumber exports suffered setbacks in the recession years of 1968-70 and 1974-75, but quickly recovered and reached an all-time high of 273 million board feet in 1981. Exports declined nine percent to 248 million board feet in 1982, reflecting the recession in Europe. Red Oak has led oak lumber exports, increasing its share of total oak exports from 68 percent in 1974 to 72 percent in 1982. In addition to oak lumber, the United States has exported about 18 million board feet of oak flooring annually since 1980. This represents a substantial increase over the previous level of about 4 million board feet during the seventies.

The South exports about 70 million board feet of oak lumber annually, or 29 percent of the total. The composition of the South's oak lumber exports is markedly different than the rest of the United States. The South's oak exports are mainly white oak, which make up 56 percent of the total, contrasted to the rest of the United States, where red oak dominates. The explanation for this difference probably is the greater concentration of select white oak timber in the South.

Walnut lumber has the highest average unit value, followed by white oak, red oak, and hard maple, in that order. The differential between unit values has remained about the same, although the unit value of red oak is more stable than that of white oak. Interestingly, the unit values of white oak and walnut moved together quite closely during the 1970's. Although the unit value of white oak exceeds red oak, the difference is much less than it is for white and red oak log exports.

Veneer

The United States exports an average of 934 million square feet of veneer sheets annually, valued at $87 million, making veneer the third largest hardwood export after lumber and logs. Except for an unusually large shipment in 1976, veneer exports grew at a very rapid pace of 20 percent annually until 1980, whereupon they declined sharply in response to the recession. The growth in veneer exports can be divided into two distinct periods: 1967 to 1976, and 1976 to the present. The period of very rapid growth after 1976 corresponds to the period of sharp increases in European log prices. Hardwood veneer exports are primarily oak, with white oak comprising 46 percent and red oak 13 percent of the total. This is in contrast to lumber exports, where red oak dominates.

The South exports about 266 million square feet annually, or 29 percent of the total. The species composition of veneer exports from the South is about the same as for the U.S. as a whole, with oaks making up 56 percent of the total, followed by walnut with 11 percent. The South maintained its market share of hardwood veneer exports until 1978, but began to lose its share thereafter, declining from more than 40 percent prior to 1979 to only 25 percent in 1982.

Plywood

The United States exports only a modest amount of hardwood plywood, reflecting both the small size of U.S. hardwood plywood production and the preference of foreign manufacturers to import veneer logs or sheets and manufacture plywood to suit their own specifications.

Hardwood plywood exports increased sharply from 10 million square feet in 1971, to 60 million square feet in 1976, a six-fold increase in five years.

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Exports fluctuated widely thereafter, with a slight downward trend, declining to 41 million square feet by 1982. Unlike other hardwood exports, plywood does not appear to respond closely to movements in either the importing or exporting economies.

Oaks make up a much smaller portion of hardwood plywood exports than for the other product groups. Oak and birch each make up 23 percent of the total.

The South shipped less than one-quarter of U.S. plywood exports, most of which fall into the other species category. Hardwood plywood exports from southern ports have lagged behind the rest of the United States, with the South's share declining from 39 percent in 1967 to less than 25 percent today.

EXPORT MARKETS

All Products

Europe and Canada are the major markets for U.S. hardwood exports, absorbing 52 and 23 percent, respectively, or three-quarters of the total. The Caribbean Basin and Japan are the only other major markets, absorbing 5 percent each. The European Market has grown most rapidly, increasing from 44 percent of the total in 1967, to 58 percent in 1982. Meanwhile, Canada's share declined from 44 percent to 23 percent.

The European market grew most rapidly during the years 1971 to 1980, averaging 29 percent annually. Exports to Europe declined sharply after 1980, reflecting the slowdown in furniture manufacture in Europe in response to the economic recession.

Hardwood exports to Canada increased at a relatively steady rate until 1979, when the decline of the Canadian dollar made U.S. products more expensive, thereby reducing the cost advantage of shipping U.S. hardwoods to Europe by way of Canada.

Europe is the dominate market for all product groups, except plywood, where Canada and the Caribbean Basin are more important. The European Economic Community (EEC) countries dominate the European market. West Germany, in turn, accounts for half of all exports to the EEC. The Benilux countries make up almost one-quarter, followed by Italy with 13 percent and France 6 percent. Exports to Canada are concentrated in lumber and log exports.

West Germany has shown the most rapid growth, followed closely by Canada. The increase in the size of the EEC market, however, is due to the generally strong growth in EEC markets and not due just to West Germany. Although West Germany dominates the other EEC markets, its growth since 1967 was only slightly superior to that of Canada. The smaller economies played a key role in the overall growth of the EEC market. Taken as a whole, the EEC countries other than West Germany increased at a more rapid rate than did West Germany, 20 percent compared to 16 percent.

Europe is the South's most important hardwood export market, accounting for four-fifths of total southern hardwood exports. In contrast, Canada is the most important market for hardwood exports from non-southern ports.
Logs

Europe is the primary market for hardwood log exports (62%). This is a reversal of the situation two decades ago, when Canada was the most important market. The Canadian market has declined steadily since 1967.

Oak log exports are strongly concentrated by species group, source, and market. Canada absorbs almost half of the red oak exports, compared to only 6 percent of the white oak. On the other hand, 81 percent of the white oak goes to Europe, compared to only 31 percent of the Red oak. The South exports mainly white oak to Europe, and the non-southern regions export mainly red oak to Canada.

Lumber

Canada dominated the hardwood lumber export market until 1982, when exports to Canada dropped below the level of Europe. The strong surge in the European market began in 1976, following the 1978-75 recession. West Germany is the major European market, followed closely by Belgium-Luxembourg and the Netherlands.

As in the case of logs, the South's export markets for hardwood lumber are substantially different than those of the non-southern ports. Europe accounts for 85 percent of southern hardwood lumber exports. Japan is the only other major southern market, with 4 percent. In contrast, Canada is the major market for the non-southern ports, accounting for 46 percent of the total, followed closely by Europe with 45 percent.

The dominance of the European market is mainly attributable to oak lumber. Canada is the dominant export market for ash, hickory, beech, birch maple and walnut.

Veneer

Much of the growth in the European market for hardwood is attributable to the very strong growth in the hardwood veneer market. Virtually all of the growth in United States veneer exports since 1967 was due to increased shipments to Europe. Other markets have remained stagnant. Europe dominates as the market for all veneer species, but especially so for White oak.

Plywood

Export markets for hardwood plywood are markedly different than for other hardwood products. Canada is the most important market, followed by the Caribbean. Europe is of minor importance. The south exports mainly to the Caribbean (70%); whereas the nonsouthern ports export mainly to Canada (64%).

EXPANSION OF THE EUROPEAN MARKET

The dominant trend in hardwood exports during the last two decades was the rapid expansion of shipments of hardwood lumber and veneer to Europe and, more recently, to Asia. The rapid expansion of wood exports to Europe can be traced to changes in the European demand for furniture in the 1970's, the growing scarcity of the traditional furniture woods in Europe, Japan and Africa, the
decline in value of the U.S. dollar, and the superior supply response capability of America's oak forests.

The rapid growth of the major European economies after World War II generated a corresponding increase in the European demand for furniture. There is a close correlation between furniture expenditures and Gross Domestic Product. Increased furniture expenditures imply increased furniture production and an increase in the demand for hardwood.

Europeans traditionally have preferred high-quality solid wood furniture, especially oak furniture. Prior to the early 1970's, the bulk of this quality furniture was produced from French and Japanese Oak. Furniture produced for the rapidly expanding middle income market was manufactured primarily from tropical hardwoods, especially teak and African mahogany. Then, in the early 1970's, the middle income European furniture fashion shifted from the tropical hardwoods to oak (Ascherman 1983). A major reason for the shift away from the European, African and Asian woods was the growing price differential between these woods and American hardwoods.

European oak and tropical hardwood prices began a sharp upward trend in 1973. The increase in European oak prices reflected the combined effects of an increasing demand for oak in Europe, increasing harvesting costs and the inelasticity of European timber supply.

The years after the 1973-74 oil price increase were marked by faltering growth in most European economies (Peck 1983). The cost of European hardwood, especially oak, increased rapidly. Europe's wood production costs were high due to the fragmented structure of the forests, making harvesting inefficient. Other factors increasing European wood costs were high labor costs, increasing environmental constraints and the widespread application of biological criteria for calculating allowable cut.

The European forests had been severely depleted as a result of World War II and the post-war reconstruction period. European foresters restricted the allowable cut on their forests below the biological potential in an effort to correct for distortions in the age class distribution of European forests brought on by overcutting during the war and post-war years.

The increases in the prices of tropical hardwoods from Africa and Asia were in response to the depletion of the more accessible and high quality hardwood forests and the imposition of log export controls by Asian and African governments. Faced with rapidly increasing domestic and tropical hardwood prices, the European's preference for solid oak furniture, and the similarity of American white oak to the French and Japanese oak, European furniture manufacturers substituted American oak for the traditional oaks and tropical woods.

Another factor which contributed to the growing price advantage of the American woods was the decline in value of the U.S. dollar relative to the currencies of the major European wood importing countries during the sixties and seventies. For example, in West Germany and the Netherlands, the dollar declined in value, with the result that American wood became less expensive. In contrast, the dollar strengthened relative to the Lira, and American wood became more expensive in Italy.
PROSPECTS FOR THE FUTURE

The European Market

Looking into the future, I expect hardwood exports to remain at their current level or even decline temporarily until the European economies recover from their current depressed state, and the U.S. dollar depreciates to its true exchange value. It is likely that the European economic recovery will lag behind the United States. The European economies are suffering from very high levels of unemployment, complicated by high wage rates and a rapid growth in the labor force. Europe’s baby boom came about a decade after ours, and the children of that baby boom are just now entering the labor market, swelling the ranks of the unemployed and compounding the structural unemployment problems triggered by the reduction in production.

If the U.S. economy recovers while the European economy is still in recession, there will be an increase in the U.S. demand for hardwood unmatched by an increase in European demand. American hardwood prices will tend to rise relative to European wood prices, discouraging U.S. hardwood exports.

In addition to unemployment, Europe has a problem of overcapacity in many industries in relation to foreseeable demand (Peck 1983). In many European countries, housing construction has caught up with the post-war backlog, and the future level of housing construction is likely to be lower than in the past. Thus, it is likely that future growth in hardwood consumption will be less than in the past. FAO/ECE projects the growth in lumber consumption during the 1980's and 1990's at about one percent, and that of wood panels at two percent.

These forecasts of rather modest increases in European hardwood lumber and panel consumption suggest that in the years ahead we are not going to see anything approaching the growth of U.S. hardwood exports to Europe during the seventies. The rapid expansion of U.S. hardwood exports to Europe during the 1970's was only partly attributable to the increase in European demand. More important was the shift away from European, Japanese, and African woods toward U.S. oak. At the same time, a soft U.S. hardwood market meant that it was possible to ship large quantities of oak logs and lumber to Europe without inducing large increases in U.S. oak prices.

Thus, U.S. oak exporters enjoyed large short-term quasi-rents from oak exports during the 1970's, due to the change in the structure of Europe's hardwood supply and the greater supply response capability of U.S. oak producers compared with their European and African competitors. These large short-run profits have just about worked their way out of the system. U.S. oak has already gained a substantial share of the European market, and price margins of exported oak over domestic oak appear to be narrowing as more firms enter into the export business, attracted by the large profits.

In addition, Asian producers are beginning to substantially expand their lumber and plywood capacity. For example, Indonesia increased its hardwood plywood capacity from 18 mills with a daily capacity of 894,000 cu mts in 1979 to 2,300,000 cu mts in 1982, with a large number of mills still in the planning stage (Evans 1983). Although European consumers appear to prefer solid oak furniture, I predict that rising U.S. oak log and lumber price and the increasing availability of tropical hardwood plywood will trigger a shift in European furniture design to favor the use of plywood in furniture manufacture.
There is evidence that furniture design is sensitive to changes in the prices of wood (Wisdom and Wisdom 1983).

Thus, future increases in U.S. oak exports to Europe are likely to be limited largely to increases in the European demand for hardwood, dampened by increased competition from developing countries and rising oak prices in the United States. Evidence that the export demand for oak lumber is quite price elastic (Luppold 1984), suggests that upward pressure on U.S. oak prices are likely to trigger substantial reductions in oak exports.

The Asian Market

The Asian market has opened up in only the last four or five years, apparently the combined result of the westernization of Japanese homes and a need for U.S. hardwood producers to find alternative markets for their products during the housing recession in the United States. In contrast to the European oak market, which is restricted to the premium grades of oak (IF and Btr), the Asian market is more oriented towards the standard grade of common oak (Ascherman 1983).

The reduction in log exports from Indonesia to Japan and the decision by the Indonesian government to end all log exports by 1985 has raised the hope among American hardwood exporters that they may be able to capture a larger share of the lucrative Japanese market. How successful American producers will be in penetrating the Japanese market is difficult to predict. It is not at all clear that the Japanese will substitute American hardwoods for tropical hardwood logs from Indonesia. They may instead substitute softwoods for the utility uses, and import Indonesian and South American sawnwood and plywood to meet their high quality hardwood needs.

In any case, hardwood exports to Asia are small relative to the European market, and it is doubtful that increased sales to Asia will be sufficient to offset the anticipated decline in the growth of sales to Europe.

For these reasons, I anticipate a slowdown or even decline in hardwood exports until the European economies recover from the recession. In the long term, U.S. hardwood exports should recover, but future growth will not reach the levels experienced during the golden years of the seventies.

THE GROWING TRADE DEFICIT

Although the long-run prospects look good for hardwood exports, the burgeoning federal deficit is a serious threat to the short-term outlook. Since 1980, the American dollar has been appreciating in value relative to the currencies of our major trading partners. The strengthening of the dollar makes American goods less attractive to foreign consumers and foreign goods more attractive to American consumers. The result has been a steady worsening of the merchandise trade deficit.

Dollar appreciation discourages U.S. exports and encourages U.S. imports. Exporters and companies competing with imported goods suffer. The wood products industry suffers as exporters of lumber and plywood, and as competitors of imported tropical hardwood plywood and lumber.
The primary causes of the burgeoning trade deficit and the appreciating dollar are the huge federal deficit and the economic recession in our major export markets. The competition for loanable funds to finance the federal deficit drives up the rate of interest. Given the low rate of domestic saving, the huge federal deficit can only be financed by foreign savings. The rush of foreign savings to capture high U.S. interest rates bids up the price of the dollar in the foreign exchange market. As the dollar rises in value, our wood exports become less competitive abroad.

CONCLUSION

Despite the many uncertainties ahead in the hardwood export markets, I'm quite optimistic about the long-term prospects. I believe that export markets will continue to increase in importance and, in the higher grade woods, will eventually dominate hardwood sales and essentially determine hardwood stumpage prices.

I would like to close on a note of caution. In our enthusiasm to promote hardwood exports, we must be careful not to oversell the profit potential of the export business. There is no question that some firms earned handsome profits from exporting oaks during the seventies. But, tomorrow's exporters will be competing in the markets of tomorrow, not the market of the seventies. As more firms enter the export market, attracted by the large profits earned in the past by others, the competition is going to become increasingly intense, and it is going to be increasingly difficult to capture a share of the market.

Those firms that survive in the increasingly competitive export markets of the future are likely to be those who have taken the time and effort to develop a well-organized export division and who have based their export strategy on a sound market research program. There are no longer diamonds lying around on the ground just waiting to be picked up.

LITERATURE CITED


