

# INWARD AND OUTWARD FOREIGN DIRECT INVESTMENT: THE CASE OF U.S. FOREST INDUSTRY

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## ABSTRACT

In the 13 years preceding 1995, foreign direct investment in the U.S. forest industry increased 54 percent, but the U.S. direct investment in forest industry abroad nearly doubled. The forest industry's share of total foreign investment in the U.S. manufacturing sector declined, but its share of foreign investment abroad increased. During the same period, the U.S. forest industry attracted only about one-fourth as much as the foreign direct investment in the Canadian forest industry, although its size is six times as big as its Canadian counterpart. Foreign investors, both in the United States and other countries, have been attracted to the paper and allied sector much more than the wood products sector. The relatively stable political and economic system and the size of the U.S. market appear to be the main attractions for foreign investors to invest in the United States. The continuing decline in timber availability may be the main cause for U.S. forest industry firms to invest abroad, especially in timber-rich countries. Market structure and economies of scale could explain the concentration of investment in the paper and allied industry. This pattern of foreign investment has important implications for economic development and long-term competitiveness of the industry.

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The influence of foreign capital in the U.S. economy has become controversial. It was an issue during the 1988 and 1992 presidential elections (11). Since the early 1980s, the U.S. export-import account has been in deficits. This could be the result of a lack of private and government savings and government deficits. Foreign investment inflows balance the deficits in the export-import account.

Public debate focuses on two aspects of this issue. One is the trend in foreign investment in the United States, especially whether it is increasing or decreasing in terms of both its absolute level, and its relative share in particular industries. The other aspect of the issue is the form of the investment, particularly whether it represents passive portfolio investment or control of U.S. firms and resources. A pessimistic view regards surplus in a capital account as foreign

control of U.S. resources. On the other hand, some policymakers see this as a good thing, because foreign capital helps boost the employment and productivity of U.S. industry. The parties in the debate tend to be polarized and their arguments are political and uncompromising. The only accurate way to evaluate the issue is through a careful analysis of the magnitude and form of foreign investment in particular industries, how foreign investment affects the U.S. political economy, and its related conse-

quences for Americans with reference to the broad objectives of public policy.

This debate has taken place in some developing countries for many years, mainly about firms from the United States and other developed countries taking over their resources. This paper examines recent trends in foreign direct investment in the U.S. forest industry (inward foreign direct investment) and the U.S. direct investment in the forest industry abroad (outward foreign direct investment), and provides an overview of related issues. This industry historically has not been the focus of much of the broader debate about foreign investment and control. However, as will be shown, recent developments in public policy, especially spillovers from regulations that protect endangered species, have drawn attention to the outflow and the consequences of foreign investment by American firms (1,3).

The paper consists of three parts. The first documents trends in foreign direct investment in the U.S. forest industry and the U.S. direct investment in forest industry abroad. The amount and proportion of foreign investment in recent years are traced and the trends in each of the major sectors of the wood products industry and pulp and paper manufacturing are analyzed. United States inward and outward foreign investment in for-

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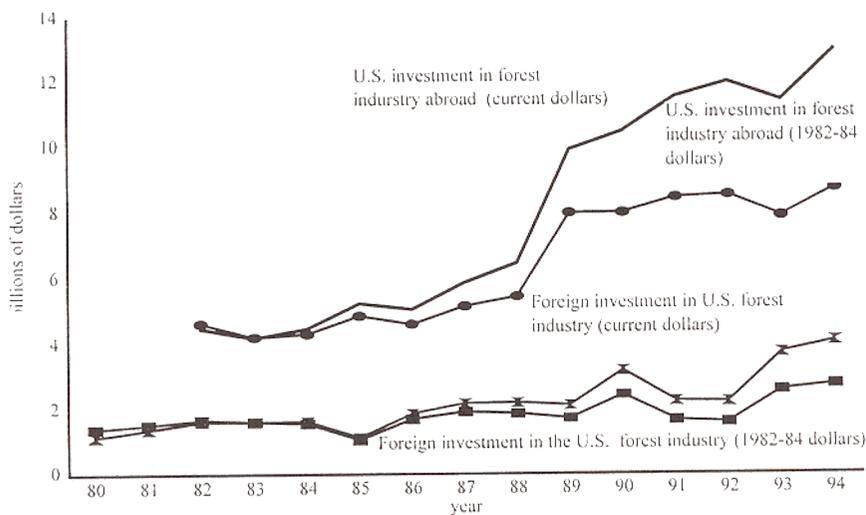


Figure 1. — U.S. inward and outward foreign direct investment in the forest industry (SIC 24 and 26).

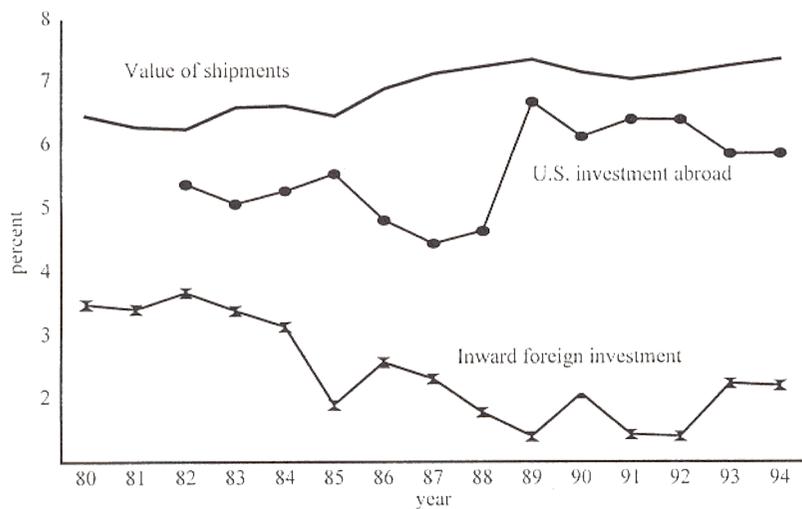


Figure 2. Share of forest industry in U.S. manufacturing sector.

estry is also briefly mentioned. The second part offers an explanation of the observed trends in terms of changing international circumstances in forest products production and marketing and the incentives of foreign investors. The final section discusses the policy implications of the observed trends.

#### RECENT TRENDS IN FOREIGN INVESTMENT

##### LEVEL AND FORM OF FOREIGN INVESTMENT

Foreign direct investment means direct or indirect ownership of foreign enterprises in amounts or in kinds that en-

able the foreign investor to influence the management of the enterprise (21). Investment is classified as direct when the investor owns at least 10 percent of the voting securities of an incorporated business enterprise, an equivalent interest in an unincorporated business enterprise, or a 10 percent or more interest in real property transaction (16,21). However, in addition to the equity owned, it includes any other long-term claims against the enterprise in such forms as bonds, debentures, loans, and advances. This is in contrast with portfolio investment, which usually consists of financial assets such

as stocks and bonds in amounts considered unlikely to convey a controlling influence in decision making within the enterprise. Portfolio investors are less concerned with influencing policy and the operations of an enterprise. However, it is important to note that under this classification, both direct and portfolio investors may hold both equity and debt issued by an enterprise. This paper focuses only on direct investment due to its importance to foreign control of resources and data availability.

The U.S. Department of Commerce has provided detailed information regarding foreign direct investment in the U.S. forest industry since 1980 and the U.S. investment in forest industry abroad since 1982 (19). Figure 1 shows foreign direct investment in the U.S. forest industry over the last 15 years and the U.S. direct investment in forest industry abroad over the last 13 years, measured in current dollars. It suggests that the level of foreign direct investment in the U.S. forest industry and U.S. direct investment in forest industry abroad rose fairly steadily during the study period, and that U.S. direct investment in the forest industry abroad is roughly three times that of foreign direct investment in the U.S. forest industry. During the period from 1980 to 1994, foreign investment increased from \$1.2 billion to \$4.1 billion and U.S. overseas investment increased from \$4.2 billion in 1982 to \$13.0 billion in 1994 (19).

To illustrate the real trend in foreign investment, adjusted for inflation, Figure 1 also shows these annual flows expressed in constant 1982-1984 dollars. This shows that one-third of the apparent increase over the study period is attributable to inflation, and that the real value of foreign investment in the United States actually only increased 54 percent in 13 years. However, the U.S. investment abroad rose steadily until 1988, then accelerated, and increased 86 percent during the same time. As a result, the net outflow of capital from the forest industry (i.e., the difference between the U.S. direct investment in forest industry abroad and foreign direct investment in the U.S. forest industry) increased 178 percent in the last 13 years, from \$2.98 billion in 1982 to \$5.98 billion in 1994, all in constant 1982-1984 dollars. (For the purpose of comparison, this paper will use the 1982 figures as baseline for

both foreign investment in the United States and U.S. investment abroad.)

### SHARE OF FOREIGN DIRECT INVESTMENT

These trends in foreign investment were undoubtedly influenced by a variety of factors in addition to government policies. One is the pattern of overall investment in the U.S. manufacturing sector, which is highly correlated with the overall health of the U.S. economy. This can be traced with the help of U.S. Department of Commerce data, by comparing the share of forest industry over the U.S. manufacturing sector as a whole. These are shown in Figure 2.

Figure 2 reveals that the U.S. forest industry's share in the U.S. manufacturing sector's outward direct investment increased about 0.5 percent during the 13 years, while the industry's share in the sector's inward foreign investment declined by about 1.5 percent. This happened during the period when the industry's contribution to total manufacturing output in the U.S. increased slightly, from 6.3 percent in 1982 to 7.3 percent in 1994 (20). This means that while the U.S. forest industry is getting a larger share in the manufacturing sector's output, its share in inward direct foreign investment is declining and outward foreign direct investment is increasing.

Another interesting finding is revealed by comparing foreign direct investment in the U.S. forest industry with that in the Canadian forest industry, using data from a different source (12).<sup>1</sup> While the size of the U.S. forest industry is about six times as large as its Canadian counterpart, it only receives about one-fourth of the foreign direct investment that the Canadian forest industry receives (Fig. 3). This suggests that the U.S. forest industry is not as competitive as the Canadian forest industry as far as foreign investors are concerned. Moreover, a significant portion of foreign investment in the Canadian forest industry has originated from the United States (12). Because data for the Canadian forest industry's investment abroad are not

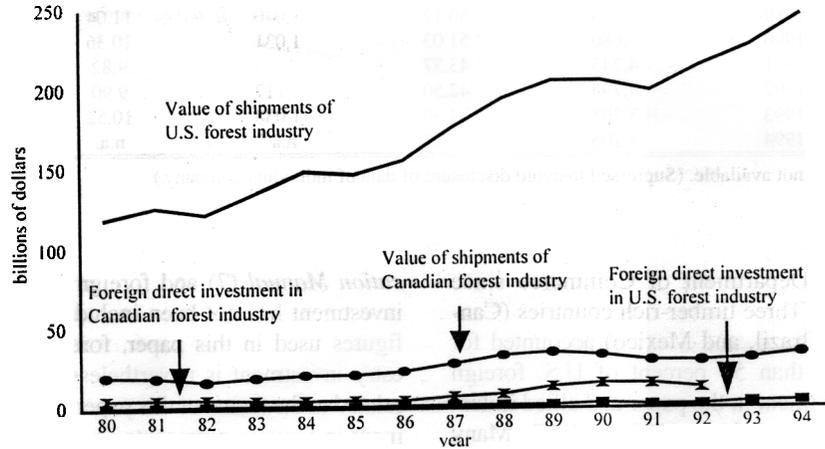


Figure 3. Foreign direct investment in and the size of U.S. and Canadian forest industry.

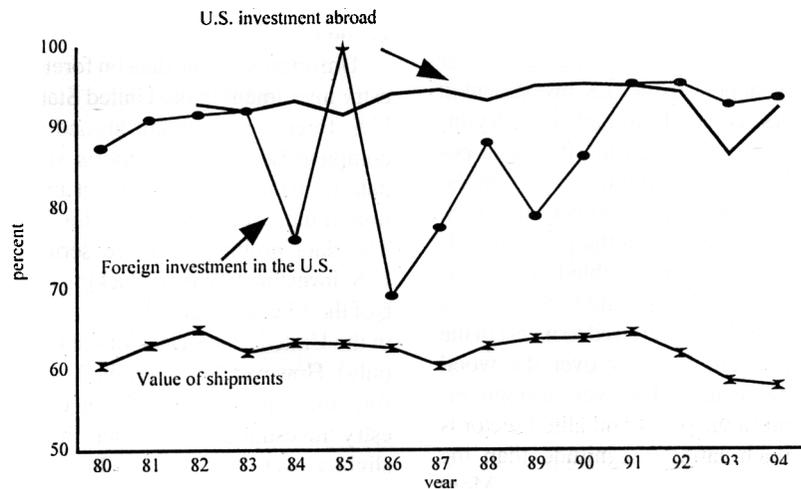


Figure 4. Share of paper and allied industry in the U.S. forest industry (SIC 24 and 26).

available, no comparison is made for the direct investment abroad from the two countries.

### FOREIGN INVESTMENT BY INDUSTRY SECTOR

The U.S. Department of Commerce also provides data that enable tracking certain trends in foreign investment in the United States and the U.S. direct investment abroad within the principal sectors of the forest industry: lumber and wood products (Standard Industrial Classification (SIC) 24), and paper and allied industry (SIC 26). Figure 4 shows

the relative size of foreign investment in the United States and U.S. direct investment abroad in the pulp and paper industry and the wood products industry (mainly sawmilling).<sup>2</sup> It shows that the paper and allied industry dominates foreign investment in the United States and abroad, even though it only represents some 60 percent of the value of shipments of the forest industry as a whole.

Table 1 shows the limited information available on U.S. direct investment abroad in paper and allied industry, by countries, that has been provided by the

<sup>1</sup> The definition of foreign direct investment is consistent in Canada and the United States (17,18).

<sup>2</sup> Among wood products there are also chemical derived from wood (SIC 2861 — gum and wood chemicals). However, the U.S. Dept. of Commerce does not identify investments in this specialty industry category.

TABLE 1. — U.S. direct investment abroad in paper and allied industry by country: 1989 to 1994 (nominal value).

Year	Canada		Brazil		Mexico		Total (million \$)
	(million \$)	(%)	(million \$)	(%)	(million \$)	(%)	
1989	4,720	50.12	1,040	11.04	478	5.08	9,419
1990	5,080	51.03	1,031	10.36	594	5.97	9,954
1991	4,743	43.37	1,074	9.82	637	5.82	10,936
1992	4,795	42.50	1,117	9.90	667	5.91	11,282
1993	3,393	34.38	1,038	10.52	638	6.46	9,869
1994	4,206	35.22	n.a. <sup>a</sup>	n.a.	622	5.21	11,942

<sup>a</sup> n.a. = not available. (Suppressed to avoid disclosure of data of individual company.)

U.S. Department of Commerce since 1989. Three timber-rich countries (Canada, Brazil, and Mexico) accounted for more than 50 percent of U.S. foreign investment in the paper and allied industry abroad from 1989 to 1993. Many country-specific data on the wood products industry were suppressed, and no data are available on the origins of foreign countries investing in the United States.

Data from the U.S. Department of Commerce also reveal that while foreign investment in the U.S. wood products industry stayed roughly the same over the 13-year period, the U.S. investment in the overseas wood products industry increased 72 percent during the same period. However, foreign investment in the U.S. paper and allied industry and U.S. overseas investment in the paper and allied industry nearly doubled. This indicates that both foreign and U.S. investors appeared to have preferred to invest in the paper and allied sector over the wood products sector. Moreover, foreign investment in the paper and allied sector is of a much larger magnitude than the overall size of the industry implied. More analysis of this is warranted.

Inward and outward foreign direct investment in forestry (SIC 08) provides additional information. Although forestry (SIC 08) is classified as part of the agriculture, forestry, and fishing division in the 1987 *Standard Industrial Classifi-*

*cation Manual* (7) and foreign forestry investment has not been included in all figures used in this paper, foreign forestry investment is nevertheless closely related to the theme of this paper.<sup>3</sup> Investment in forestry represents some degree of control of raw material supply. It includes timber and land acquisition, improvement, and management. Thus, the difference in forestry direct investment inside and outside the United States, which we intend to reveal here, is a good indicator of resource availability in the country.

Unfortunately, the data on foreign forestry investment in the United States and U.S. forestry investment abroad are incomplete because the reports suppress data to avoid disclosure about information of individual companies for 7 years. The data problem is more serious for U.S. investment abroad (lacking data for 6 of the 13 years) than foreign investment in the United States (lack of data in 1992 only). However, based on the limited information, it is observed that U.S. forestry investment abroad has increased slightly over the 13 years (Table 2). On the other hand, foreign forestry investment in the United States increased sharply until 1986, then plunged for 3 years, before reaching a historical high of \$278 million in 1990. In the last 3 years prior to 1995 it declined dramatically.

#### INTERPRETATION OF TRENDS

The forces shaping these changes in foreign participation in the U.S. forest industry and the industry's engagement overseas are inevitably varied and complicated. However, it is possible to explain the main trends in terms of the determinants of international capital movement generally, developments in regional patterns of supply and demand for forest products, the structural character of the forest industry, and governmental policies. A review of these influences follows.

TABLE 2. — Foreign forestry (SIC 08) investment in the United States and U.S. forestry investment abroad: 1980 to 1994.

Year	Foreign forestry investment in the U.S.	U.S. forestry investment abroad
	(million \$, nominal value)	
1980	58	
1981	89	
1982	95	69
1983	132	70
1984	144	77
1985	145	70
1986	169	57
1987	82	63
1988	-5	n.a. <sup>a</sup>
1989	64	n.a.
1990	278	77
1991	81	n.a.
1992	n.a. <sup>a</sup>	n.a.
1993	25	n.a.
1994	25	n.a.

<sup>a</sup> n.a. = not available. (Suppressed to avoid disclosure of data of individual company.)

#### FINANCIAL RETURNS

In making investment decisions, investors, foreign or domestic, can be assumed to be guided in the first instance by their expectations about returns and risks on capital invested in alternative ways. Many also seek to diversify risk in whole portfolios of investments. Investors' decisions about foreign investment in a country's forest industry are thus guided primarily by the expected financial performance of the industry relative to other possible investments. In comparing forest products companies in the United States and Canada, Swindt (15) found that "...financial performance, both in aggregate, and by product specialization group, is roughly similar across countries." However, he further concluded that although Canadian companies lagged slightly in return on equity, they performed slightly better in return on total capital employed. This is consistent with the finding of this paper that foreign investors have found the Cana-

Despite its standard industrial classification, many consider forestry a part of the forest industry. One might argue that the figures used in this paper should include the foreign forestry investment. However, unavailability of data makes it impossible to do so. Moreover, it is obvious from Figure 1 and Table 2 that forestry investment represents only less than 1 percent of foreign investment in the U.S. forest industry and the U.S. investment in the forest industry abroad. Therefore, excluding foreign forestry investment does not affect any conclusions of this paper. This practice has been used by other researchers (12).

dian forest industry more attractive than the U.S. counterpart in terms of foreign direct investment.

#### THE POLICY ENVIRONMENT

When considering investments in foreign countries, direct investors also look carefully for political stability, sound economic and trade policies, favorable tax policies, the availability of a competent labor force, secure supplies of energy and raw materials, and suitable infrastructures (13). In these respects, broadly referred to as the "investment climate," the United States is generally considered to offer an attractive environment for foreign investors.

However, a governmental policy, such as protection of endangered species, can be expected to affect direct investment. The case in the United States is unique in this respect because the controversy regarding northern spotted owls has reduced timber supply from federal and state lands in the Pacific Northwest by 80 percent (4). In fact, the spurt of U.S. forest industry investment abroad coincides with the court challenge and subsequent listing of the owls as endangered species in the late 1980s, suggesting that this policy may have contributed to the increase of foreign investment by U.S. firms to secure raw material supply and maintain market shares through production in foreign countries (3). This may also explain, at least partly, the decline in foreign direct investment in the U.S. forest industry by foreign firms in the early 1990s.

#### REGIONAL SUPPLY AND DEMAND

The disparity between demand for forest products and resource supply among world regions is significant and increasing. While demand has continued to grow in the traditional consuming areas of Europe and the United States, consumption has expanded vigorously in the Asia/Pacific region in recent years. On the supply side, the scope for expanded production of timber, particularly softwoods, is limited mainly to Canada, potentially Russia, and the countries with expanding plantation forestry such as New Zealand and Chile (4,12). The imbalance between regional supplies and demands has been aggra-

vated by the elimination of some traditional sources of supply for industrialized countries of the Asia/Pacific region. Prohibitions on log exports have been adopted in countries such as Indonesia, Malaysia, and Thailand (10).

As a source of supply of raw material for Asia/Pacific countries for many years, U.S. export of forest products to that region has dramatically declined (22). Although the timber supply in Canada has been reduced in recent years, its magnitude is much smaller than in the United States (12,14). Therefore, investors from the Asia/Pacific region and the United States continue to increase their investment in Canada. Although disputes about lumber subsidies occur between Canadian and American lumber producers and the newly signed United States-Canada lumber agreement forces the Canadian government to tax its softwood lumber export to the United States beyond a certain quota, the North American Free Trade Agreement generally gives producers in Canada access to the U.S. market. Thus, it is not necessary for Canadian producers to invest in the United States in order to secure their share of U.S. markets and avoid tariffs. Again, government policies have influenced foreign investment decisions.

No data are available on the sources of foreign investment in the United States and the host countries of U.S. foreign investment. Information is limited to a few, casual observations and conversations with industry executives, which suggest that the U.S. forest industry's foreign investment is concentrated in relatively timber-rich countries such as Canada, Brazil, Argentina, Mexico, and Russia.<sup>4</sup> This is understandable for firms that seek to secure their raw material supply for U.S. mills and for firms that look for new opportunities to apply their technical, financial, managerial, or marketing skills to maintain and expand their market share by producing forest products in other countries if their opportunity in the United States is limited.

#### CAPITAL INTENSITY AND MARKET STRUCTURE

An earlier analysis of trends reveals that foreign investment in the U.S. paper and allied industry has greatly exceeded that in the wood products industry. The U.S. investment overseas shows the same trends. These reflect, in part, the fact that the paper and allied industry accounts for many more assets than the

wood product sector, the former being both larger and more capital intensive.

A conspicuous characteristic of the paper and allied industry is its economy of scale. The combination of scale economy and capital intensity means that pulp and paper ventures involve huge amounts of capital and large plant size — much more and larger than solid wood processing ventures. Foreign-owned plants are larger and more capital intensive than U.S.-owned plants in the United States, because the income and other benefits that normally accrue to large plants are sought out to offset the inherent disadvantages foreign investors tend to face when investing and subsequently operating their businesses in the United States (9). The preference of foreign investors to invest in a capital-intensive industry means that the paper and allied industry is naturally more attractive than the wood products industry.

The scale economy and capital intensity of the pulp and paper sector also serve as barriers to new entrants in the industry, and contribute to its characteristic oligopolistic industrial structure (2). Moreover, paper consists of highly varied products, lending itself to the development of market imperfection. On the other hand, the bulk of lumber is a homogeneous commodity and wood products industries are relatively competitive, at least in North America. In this more highly competitive international lumber industry, monopolistic rents cannot be gained, nor can market share be secured. These differences undoubtedly help to explain the much greater activity of foreign investors in the paper and allied industry than in the wood products industry, both in and outside of the United States

Another factor contributing to the preference for the paper and allied industry may be the expectation of faster growth in this sector. Pulp and paper consumption is considerably more responsive to rising incomes than is the demand for solid wood products (5,6). Because of expected higher incomes, the Food and Agriculture Organization of the United Nations (8) predicts relatively strong growth in pulp and paper demand in the near future.

#### SUMMARY AND POLICY IMPLICATIONS

Measured in constant dollars, foreign investment in the U.S. forest industry

<sup>4</sup>Bond, Steve. Personal communication. Champion International Corp., Courtland, Ala.

increased 54 percent between 1982 and 1994. However, the U.S. direct investment in forest industry abroad was even greater, with the result that its share in outward direct investment in the manufacturing sector increased. On the other hand, the industry's share in inward foreign direct investment in the U.S. manufacturing sector declined. Compared to Canada's forest industry, the U.S. forest industry only received about one-fourth the inward foreign investments in spite of its much larger size. Foreigners and U.S. investors both preferred to invest in the paper and allied industry over the wood products industry.

#### **POLICY SPILLOVER**

These trends suggest that the forest industry, unlike other industries, does not have much foreign investment, and foreign investors have not "taken over" U.S. forest resources. On the contrary, the industry has increased its investment abroad. The net outflow of capital may draw attention to the adequacy of its domestic investment.

These trends have important implications for several public policy issues. Most apparent are the impacts of protecting endangered species on timber supply and foreign investment. It is not the position of this paper to deliberate the merits and costs of the Endangered Species Act or establishment of critical habitats for endangered species. It is noticeable, however, that the listing of several endangered species such as the northern spotted owl has had a negative impact on timber supply and sent investors away to other countries (3). Moreover, the North American Free Trade Agreement and proliferations of international trade and capital movement might have contributed to these impacts.

#### **PROMOTION OF U.S. COMPETITIVENESS**

Attracting foreign and domestic investment is one element in a broader economic policy aimed at promoting U.S. competitiveness in the emerging global economic order. This objective has dominated the economic agendas of federal and state governments in recent years, evidenced by attention to free trade, tax reform, and the "incentive legislation." Promoting the United States has become more urgent because of the decline in productivity growth in the 1980s, especially in manufacturing, relative to other industrial countries (21).

In this context, new capital is seen as a key to improved competitiveness of U.S. industry through its effect in enhancing the productivity of labor and other inputs in production. For the longer term, new capital investment (both domestic and foreign) is regarded as a means of introducing the advanced equipment, new production technologies, and research and development needed to build a stronger and more diversified economy (21). To attract this investment capital, the United States needs a favorable investment climate. Among other conditions that contribute to the perception that the United States is a good place to invest (such as political and economic stability, skilled labor, good infrastructures, social security, etc.) is a hospitable policy toward domestic and foreign investment.

These issues were analyzed in an economic model for competitiveness in an increasingly global world economy by Porter (13). In Porter's model, the continued growth of a competitive industry or economy depends on the strength of the interconnected elements in his "diamond," which includes factor endowments, domestic demand, support industries and competition, as well as government policy. Although a rich natural resource base is not sufficient to sustain international competitive advantage, resources are still a necessity for development. Facing a tight supply of raw materials, the forest industry has to rely on strengthening the other elements of the diamond and continuing to advance technology and innovation. Having realized this, the industry has set a research agenda and called for a government-industry partnership to upgrade its competitive advantage in sustainable forest management and capital effectiveness (1).

#### **FOREIGN INVESTMENT AND ECONOMIC DEVELOPMENT**

Investment also relates to economic development. More U.S. firms and individuals investing abroad means less capital available for economic development in the United States. For this reason, state governments may find it harder to recruit forest industry, thus affecting economic development of forest resource-dependent regions and communities.

Resource-based economic progress depends on the development of linkages from the resource sectors forward and backward to other industries to generate a process of continuing economic growth

and diversification. International capital flows can accelerate this process. The current globalization is characterized by multinational enterprises that link investment and trade. A growing proportion of trade is intra-enterprise, resulting from foreign investment. Investment abroad by U.S. companies may generate a positive increase in the export of U.S. equipment, technology, and products. However, U.S. investment in foreign forest industries is unlikely to bring more U.S. exports of forest products.

Because foreign-owned plants tend to be larger and concentrated in the capital-intensive paper and allied industry, the security of the timber supply is a bigger concern for foreign investors than domestic investors. Increases in environmental regulations have decreased timber removals from public lands and may limit timber removals from private lands. Considerable efforts have been made by federal and state legislatures to protect private property rights from government regulatory takings in recent years (23). These efforts in defining the boundary of government power and private property rights may make private landowners feel they are secure to grow and harvest timber on their land and, therefore, may provide more timber in the future.

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