Studies in Management and Accounting for the
FOREST PRODUCTS INDUSTRIES

Fundamentals of Financing
Major Timber Acquisitions

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INTRODUCTION

Acquiring timber properties has become increasingly attractive in recent years due to the economic benefits to be derived from the active management of forest land and the strategic benefits to forest products companies from controlling the sources of supply for their basic raw materials. Nevertheless, surprisingly little has been written on the principles involved in structuring and financing major timber acquisitions.

The primary purpose of this monograph, thus, is to describe the fundamental factors used to design a financial structure that most appropriately meets the objectives of the “Buyer” and the “Seller” in a timber transaction (either timberland and/or stumpage). We have classified these factors as property interests, payment terms, and acquisition vehicles, and as we discuss them, we will point out the advantages and disadvantages associated with each.

In discussing the structural aspects, we will consider alternative approaches to achieving the objectives of the Buyer and the Seller in a timber transaction. Generally, these objectives will relate to such motives as: (1) assuring control of timber resources, (2) properly allocating risks, (3) maximizing operating flexibility, (4) minimizing tax payments, (5) maximizing financing flexibility, (6) achieving desired financial reporting effects, and (7) minimizing financing costs.

PROPERTY INTERESTS

A primary issue in structuring a major timber transaction is the determination of what property interests will be conveyed. Although there are a multitude of possible combinations, the major alternatives usually include: (1) fee interests in timber, (2) cutting rights with respect to timber, (3) common stock in a corporation which owns timber, and (4) options to purchase timber in the future.

The transfer of a fee interest, particularly one which is unencumbered, generally maximizes the Buyer’s operating flexibility and limits the extent of ongoing involvement between the Buyer and Seller. Forest products companies may seek fee interests to fulfill their strategic objectives of: (1) maximizing fiber self-sufficiency for their paper and wood products mills, and (2) having a stable land base for their natural resource and forest products development plans. Buyers outside the forest products industry may also seek a fee interest, since the potential appreciation in underlying land values forms part of timber’s investment appeal.

Nevertheless, a transfer of fee interests may not be feasible or desirable in many situations because of problems such as: (1) the Seller’s unwillingness to convey residual interests in the property, (2) the Seller’s exposure to a potentially large amount of capital gains, (3) the Buyer’s lack of desire or financial capacity to purchase all of the ownership interests, or (4) the Buyer’s desire to minimize the balance sheet effects of the transaction.

Cutting Rights

Another way to transfer timber is to sell a leasehold interest in the form of a cutting con-

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tract, typically referred to as “cutting rights.” Cutting rights are contractual agreements which allow the Buyer to cut specified quantities of timber within a specified time period. In some instances, the cutting rights are for very long periods of time (e.g., 100 years). In addition, the Buyer and Seller might establish a straight long-term lease in which the Buyer is given relatively free access to manage and operate the properties during the term of the lease, irrespective of the actual quantities of timber which are harvested.

One of the principal advantages of using cutting rights is that the Buyer can be assured of a supply of timber over a period of years without requiring the Seller to relinquish the residual interests in the land or stumpage. In addition, a cutting rights transaction can be structured according to the provisions of Section 631(b) of the Internal Revenue Code, so that the payment of capital gains taxes by the Seller can be deferred until the time the timber is actually cut. Of particular importance to some companies is that the ownership of cutting rights can be a method of controlling timber without increasing the liabilities reported on the Buyer's balance sheet. Depending upon the specific circumstances, the transaction may take the form of an executory contract and, except for any advance deposits, no liability will be reflected on the Buyer's balance sheet (although footnote disclosure is usually required).

Establishing a cutting rights contract may also be superior to purchasing a fee interest due to tax allocation considerations. In a major timber purchase, the Buyer's cost must be allocated among land, pulpwood, and sawtimber. Because (1) land can not be amortized for tax purposes, (2) pulpwood is depleted at a different rate from sawtimber, and (3) pre-merchantible timber can not be depleted until it becomes commercially usable, there is the potential in a fee transaction for the purchase price to be allocated to the various assets on an unfavorable basis for tax purposes. By using a cutting rights contract, it may be possible to maximize the current deductibility of the lease payments, thus resulting in more attractive cash flows for the Buyer on a net present value basis.

In addition, the sale of cutting rights may facilitate financing in some situations by assuring a predictable cash flow stream to service debt obligations. A specific possibility is for the Buyer to arrange a cutting rights contract with the Seller, who then assigns the cutting rights contract to a lender, perhaps with a back-up guarantee by the Seller or a third party. Under these conditions, the lender looks primarily to the cutting rights obligation as the basis for extending credit.

Another specific possibility is for the Buyer to sell cutting rights to a third party as a method of financing the purchase of a fee interest. For example, the Buyer may pay cash to the Seller in a timber transaction, then negotiate a cutting rights contract with a third party. In this way the Buyer will have conveyed an intermediate-term interest in the timber assets to help finance the acquisition of a long-term interest in those assets.

As advantageous as cutting rights may seem, there are definite limitations regarding the situations in which this property interest can be effectively utilized. Most important, the cutting rights concept may be contrary to the Buyer's strategic desire to acquire an unlimited interest in the properties. Furthermore, there are inherent problems with cutting rights in establishing the payment arrangements to the mutual satisfaction of the parties involved. For example, the Seller's desire to receive fixed payments may conflict with the Buyer's desire to obtain off balance sheet accounting treatment. Moreover, the Buyer may object to paying for the timber before it has actually been cut. On the other hand, if a variable payment schedule is used, the Buyer may be exposed to an unacceptable level of market risk with respect to the price which is paid for the timber, or the Seller may find it undesirable to have such a degree of uncertainty with respect to the timing and amounts of the resulting cash flows. In addition, there may be problems in a variable payment structure regarding the procedures to follow in case the contracted timber has not been cut by the end of the contract term.

Another limitation to the cutting rights approach is the requirement that the "economic interest" must be retained by the Seller in order to preserve capital gains treatment under Section 631(b) of the Internal Revenue Code. If the Seller receives fixed payments from the Buyer and there is no procedure for returning payments for uncut timber, then the Internal Revenue Service may argue that the Seller has not retained an economic interest in the timber and is merely receiving "rent" from the Buyer. On the other hand, if there is a provision for returning payments to the Buyer, then the Seller will be left with substantial risk with respect to the price which is received for the timber and with no guarantees of compensation ever being received from the Buyer. The requirement that the Seller have an "economic interest" in the property usually also means that the risks of fire, insect and disease damage must be re-
tained by the Seller. Unless commercial insurance is available to him on reasonable terms, the Seller may find this an unacceptable risk over an extended period.

A general summary of the potential advantages and problems with alternative payment arrangements for cutting rights is shown in the table which follows:

### Payment at Fixed Intervals

<table>
<thead>
<tr>
<th>Fixed Price</th>
<th>Market Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possible Advantages:</td>
<td>Possible Advantages:</td>
</tr>
<tr>
<td>(1) Facilitates leveraged financing arrangements through assured cash flow streams.</td>
<td>(1) May permit off balance sheet financing (although footnote disclosure likely).</td>
</tr>
<tr>
<td>(2) Facilitates planning due to fixed payments schedule.</td>
<td>(2) Ensures that prices paid for products by Buyer will not exceed their fair value and that Seller will not receive less than fair value.</td>
</tr>
</tbody>
</table>

Possible Disadvantages:

(1) Possible need for reserve arrangements to return payments in case cuttings are not made.
(2) Liability likely to be shown on Buyer’s balance sheet.
(3) Difficult to prove retention of “economic interest” by Seller; may lose capital gains tax treatment under §631(b).

### Payment at Time of Cutting

<table>
<thead>
<tr>
<th>Fixed Price</th>
<th>Market Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possible Advantages:</td>
<td>Possible Advantages:</td>
</tr>
<tr>
<td>(1) Buyer can cut and pay for timber as needed.</td>
<td>(1) Buyer can cut and pay for timber as needed.</td>
</tr>
<tr>
<td>(2) Facilitates planning somewhat due to fixed price schedule, although there is still uncertainty with respect to timing of payments.</td>
<td>(2) May permit off balance sheet financing (although likely to be footnote disclosure).</td>
</tr>
</tbody>
</table>

Possible Disadvantages:

(1) Liability likely to be shown on Buyer’s balance sheet.
(2) Possible need for method to handle end of term in case all cuttings are not made.
(3) Buyer can postpone cuttings without any price penalty, thereby benefiting from time value of money.
(4) Difficult to prove retention of “economic interest” by Seller; may lose capital gains treatment under §631(b). |

Possible Disadvantages:

(1) Uncertain cash flow streams, which make planning and financing more difficult.
(2) Possible need for method to handle end of term in case all cuttings are not made.
(3) Buyer can “play the market,” making more cuttings on subject properties during periods when market prices are low; Seller has no offsetting controls.

Despite the inherent problems in structuring cutting rights contracts, they remain a viable alternative in many situations, particularly when one party wishes to establish a fixed-income interest or to employ a leveraged financing arrangement. Indeed, the Buyer and Seller may attempt to compromise on the payment arrangements by using a fixed price with escalations based on a market index or by setting minimum amounts which must be met each year in a “take-or-pay” agreement. In general, cutting rights contracts are comparatively flexible devices which often can facilitate the allocation of market risks, potential returns and tax benefits among the parties at interest.

### Common Stock

If the assets to be conveyed are held by a corporation, then a transaction may be consummated via a transfer of common stock ownership. A particular advantage to this approach is that it may permit the acquisition to be characterized for Internal Revenue Service purposes as a tax-free reorganization. If so characterized, the Seller will not pay capital gains taxes at the time of transfer, subject to the basic limitations which are summarized briefly below:

(1) The corporation which is sold must be sufficiently viable on a stand-alone basis to withstand IRS scrutiny. For example, if a new subsidiary is formed solely for a specific transaction, then it is likely that the “corporate veil” will be pierced and a capital gains tax imposed.

(2) At least half of the overall consideration paid must be in the form of common or preferred equity securities.

(3) The Seller will still be liable for capital gains or ordinary income taxes to the extent that cash, property, or other “boot” is received.

(4) The Seller will still be liable for capital gains taxation if and when the equity securities received in the transaction are sold or redeemed.

As indicated by the sample of transactions in Exhibit I, the acquisition of entire companies has been a popular method of acquiring timber properties in recent years. In the current inflationary and natural resource conscious environment, several corporate acquisitions have occurred specifically because the acquirees’ stock prices have been low relative to the estimated market values per share of their underlying timber assets.

### Purchase Options

Another way to transfer timber, albeit infrequently used, is to have the Buyer arrange for a purchase option. The principal advantage of this method is that the Buyer can secure future timber requirements and avoid having to tie up large amounts of capital or showing substantial balance.
sheet effects. In brief, the amount paid for a purchase option must be funded by the Buyer and recorded as a balance sheet asset, but this amount usually will be much less than the value of the timber assets which are thereby controlled.

The Seller's potential returns from the sale of a purchase option are a function of: (1) the price paid for the option, (2) the level of the exercise price, (3) the time until expiration, and (4) the range of possible market values at expiration. Through the process of setting the option's exercise price and maturity, the Buyer and Seller can structure an option transaction which allocates the market risk between them. For example, the Buyer may pay the Seller $100 today for the right to buy an acre of timberland at $1000 in ten years. If the Buyer wants to decrease the price of the option, the exercise price may be increased or the maturity shortened. It is also possible to negotiate exercise prices which will be different for alternative expiration dates.

A purchase option is not a viable alternative, however, if the Buyer needs timber immediately or if the Buyer is unwilling to pay a risk premium to the Seller. Moreover, the Seller may be unwilling to relinquish the opportunity to realize potentially higher prices for the timber assets. In particular, Sellers may be reluctant to negotiate purchase options which have lengthy maturities. From a practical perspective, it may be difficult for the Buyer to find a Seller who is willing to negotiate a purchase option for a period in excess of a year.

A variation of the purchase option method is to negotiate a right of first refusal. From the perspective of the Buyer, this is the weakest alternative for securing timber requirements. Nevertheless, there may be situations in which the Buyer is willing to pay a risk premium to ensure that a supply of timber or a tract of timberland will not be sold to an alternative purchaser at a price which the Buyer is willing to match. For example, rights of first refusal on timber are often used in conjunction with long-term cutting rights contracts. In this way the Buyer can assure access to the land over the indefinite future while still allowing the Seller to retain an "economic interest" in the property for tax purposes. As another example, rights of first refusal often are the consideration paid by small landowners to forest products companies in exchange for assistance received pursuant to land management advisory programs.

**PAYMENT TERMS**

Several types of consideration can be used to pay for timber assets. In general, however, the basic alternatives are: (1) cash, (2) installment notes, (3) equity securities, and (4) land.

**Cash**

As shown in Exhibit I, cash is used as the means of payment in the large majority of major timber acquisitions. The cash normally is obtained from the Buyer's cash on hand or from short-term borrowings, usually from commercial banks, and may be refinanced at a later date by long-term issues in the public or private capital markets.

The principal advantage to using cash as a payment mechanism is that cash is an objective measure of relative value, and such objectivity is particularly important when there are competing bids for the same timber properties by different Buyers. Another advantage to using cash is that it eliminates the need for post transaction involvement between the Buyer and Seller.

The principal disadvantage to using cash is that it produces a taxable event, which usually exposes the Seller to an immediate capital gains tax liability. Consequently, cash is most suitable for an asset transaction (which is likely to be a taxable event anyway) or a situation in which the Seller will realize little capital gain (or even a loss) due to the transaction.

**Installment Notes**

A method often used in conjunction with cash payments is for the Buyer to give installment notes to the Seller. The installment notes used in major transactions in recent years usually have been payable over a 4 to 5 year period, although longer terms of 10 to 25 years have been negotiated.

By using installment notes, the transaction can be structured so that the Seller can elect to use the installment sale method of reporting income for federal income tax purposes. By so electing, the Seller will not be liable for capital gains taxes until such time as principal payments are made on the notes, although ordinary income taxes will be paid on the interest income as received. Another advantage with installment notes is that the delayed payment schedule may permit the Buyer and Seller to match more closely their respective cash flow requirements and to utilize the subsequent cash flows which are generated from the timber.

The principal disadvantage to using installment notes is the Seller's lack of liquidity: nontransferability is an important requirement if the transaction is to be structured as an installment sale.
action is to be tax deferred. Another disadvantage is that the Seller must judge and rely on the credit-worthiness of the Buyer, although this disadvantage may be lessened in some cases if the Buyer arranges a third party guarantee or otherwise assures payment.

As an additional consideration, it should be noted that the typically short-term nature of installment notes relative to the long-term nature of timber assets is likely to result in the need for the Buyer to make additional financing arrangements at a later date. For this reason, it is important for the Buyer to assess the possible cash flow implications of meeting the notes' principal repayment schedule.

**Equity Securities**

Issuing common and preferred stock can have a number of advantages in a timber transaction. First, if the Buyer is acquiring the Seller's common stock, the transaction can be structured as a tax-free reorganization. Second, so long as at least 90% of the consideration paid is in the form of the Buyer's common stock (and as long as other specific accounting requirements are met), the Buyer can account for the acquisition as a "pooling of interests" transaction, thereby avoiding the necessity of "writing-up" the timber assets for "book" accounting purposes. Pooling of interests accounting may be advantageous if the Buyer is paying in excess of book value; adjusting timber assets to their market values in a "purchase" transaction may result in a reduction in the Buyer's reported earnings (although not cash flows) due to the depletion of higher timber values. Third, the Buyer may finance the transaction with equity securities at a time when equity financing in the public market is unattractive. Fourth, through the use of a relatively high conversion premium on a convertible preferred stock issue, it may be possible for the Buyer to issue equity without seriously diluting future earnings per share. Such a high conversion premium may be perfectly acceptable to the Seller (even desirable since it is generally offset by a higher dividend rate) at a time when such a financing is not feasible in the public markets.

On the other hand, there are definite disadvantages to using equity securities in the acquisition of timber assets. From the perspective of the Buyer, the principal disadvantage is the high after-tax cost of equity capital relative to the after-tax cost of debt. From the perspective of the Seller, there is the problem of evaluating the Buyer's equity, particularly in the case of common stock, which involves an evaluation of the stock's price appreciation potential, dividend safety, and market liquidity. Because of the uncertain values which may be attributed to common stock as a payment mechanism, companies with large market capitalizations and relatively strong performing stocks have a marked advantage in their ability to use common equity to effect timber transactions.

A popular payment mechanism in recent years has been the issuance of sinking fund preferred stock. Use of preferred stock permits the transaction to be treated as a tax-free reorganization, yet still allows the Buyer to replace the equity at a later date with a more favorable method of long-term financing. However, the option of accounting for the acquisition as a "pooling of interests" is not available if preferred stock is exchanged. In addition, unless the maturity of the sinking fund preferred is sufficiently long, there is the danger that the credit rating agencies and others will treat the preferred as debt rather than equity in their evaluation of the Buyer's credit standing.

**Land**

Timber can also be acquired by exchanging land or other property. If the property is considered "like-kind" under Section 1031 of the Internal Revenue Code, the transaction can occur without triggering a taxable event, although there may still be the necessity to recognize income on a "book" accounting basis. In addition, an exchange of land reduces or eliminates the Buyer's need for employing external financing to pay for the assets.

Land swaps can be expected to occur with increasing frequency in the future as forest products companies seek to develop further efficiencies in their integrated operations. In particular, companies can be expected to swap land in one location for land which is more proximate to their pulp mills or other fiber-dependent facilities. Furthermore, an increasing emphasis on land swaps for strategic reasons can be expected; for example, a company may trade timber in one geographic region of the country for that in another region, or a company may exchange a tract of hardwood for a tract of softwood.

The principal disadvantage with land swaps is the difficulty in identifying desirable property for exchange and in determining the appropriate values of the properties, particularly if the properties are not being used productively at the time of exchange. Moreover, if the properties are not comparable in value and a cash supplement is used, this supplement will be taxable as "boot."
ACQUISITION VEHICLES

A wide variety of acquisition vehicles can be used by the Buyer to effect a timber transaction. Generally, however, the structures are a variation of the following basic alternatives: (1) a direct company investment, (2) a wholly owned subsidiary, (3) a leveraged lease, or (4) a joint venture.

Direct Investment

The simplest approach is for the Buyer to make a direct investment in the timber. As shown in the summary of selected transactions in Exhibit I, direct company investments are used in the overwhelming majority of circumstances. Indeed, a direct company investment probably is the best acquisition vehicle in most instances. If debt financing is to be used, the Buyer can utilize the cash flows from a variety of sources to meet the debt service requirements. Since timber usually is to be utilized in connection with the Buyer's integrated operations, then it is logically consistent that the resources of the Buyer’s overall operations should be available to finance the acquisition. In addition, if the timber investment is to be acquired with equity securities, then the Buyer may be the only entity which has equity securities with adequate liquidity for use in the transaction.

A direct company investment is usually the most favorable vehicle from the standpoint of leveraging the acquisition. Unlike a typical real estate transaction, there usually is not an assured cash flow in connection with a timber investment. Timber depletion, although tax-deductible, is only available at the time timber is actually cut; it does not provide a stream of tax-sheltered cash as does depreciation. Moreover, reforestation and many timber management expenses are capitalized for tax purposes and not deducted until the timber is harvested, which may be as long as 40 years later. In short, although timber has been an excellent store of value as measured by price trends over the past two decades, it is difficult to finance as a stand-alone capital asset. Unless the timber is capable of being cut on an annual basis, there is no direct cash flow from the investment which can be used to service fixed-income obligations. The only alternative is to utilize cutting rights arrangements, which have the limitations discussed previously. In addition, timber may be considered relatively risky compared to other capital assets since it is subject to such risks as fire, floods, insects and disease.

Wholly Owned Subsidiary

An alternative acquisition vehicle for a timber transaction is a wholly owned subsidiary of the Buyer. The subsidiary approach is particularly appropriate if the acquisition is to be paid for from borrowed funds and the fixed-income investors are to be given a security interest in the timber assets. By lending to a subsidiary rather than to the Buyer itself, the lenders may become preferred creditors with respect to the acquired assets without the necessity of specifically pledging the assets pursuant to a mortgage indenture. In addition, the use of a wholly owned subsidiary can facilitate a transaction if the Buyer intends to operate the acquired company as a separate subsidiary subsequent to the acquisition. A typical procedure in this type of transaction is for the Buyer to form a new “shell” subsidiary to acquire the assets and then, after consummation of the transaction, to operate the acquired assets in the separate corporation, with the shell subsidiary often having its name changed to that of the acquired entity.

There are, however, limitations to the subsidiary approach. First, the restrictive covenants or other provisions of the Buyer's outstanding indentures or loan agreements may not permit the transaction. Second, it is arguable whether the approach can lower or even maintain the Buyer's overall cost of financing; lenders to the Buyer will be cognizant of the extent to which valuable assets have been placed in subsidiaries and will adjust their evaluations of the parent company’s creditworthiness accordingly.
It is also possible for the use of a wholly owned subsidiary to result in sub-optimal tax allocations between the subsidiary and its parent, particularly due to the substantial capital gains benefits which can result from timber ownership. This potential disadvantage can almost always be avoided, however, by filing a consolidated return for tax purposes, even if the entities are not consolidated for legal or accounting purposes.

The wholly owned subsidiary approach may have particular appeal to some Buyers if the subsidiary can be accounted for on an unconsolidated basis, similar to the accounting for many finance and real estate subsidiaries of industrial companies. However, non-consolidation is usually not a viable approach for acquisitions by companies in the forest products industry since a general criterion for non-consolidation is that the subsidiary's lines of business be unrelated to those of the parent.

**Leveraged Lease**

A leveraged lease is a possible acquisition vehicle for a timber transaction, particularly in conjunction with medium-term cutting rights contracts. In this structure, equity and fixed income funds are contributed through third party investors in exchange for the rights to a stream of cash flows and capital gains tax benefits. Often a single party is both Buyer and Seller to a leveraged lease transaction, using the vehicle to accomplish certain financing, tax planning, or balance sheet objectives in a sale-and-leaseback transaction.

A leveraged lease transaction involves the formation of an owner trust which: (1) enters into an ownership trust agreement with the equity investor, which typically contributes between 20% and 40% of the timber's cost, and (2) issues debt obligations equal to the remainder of the cost. The debt obligations are nonrecourse to the general credit of the equity investor and are secured by
a first mortgage lien on the timber as well as by an assignment of the cutting rights payments to an indenture trustee acting on behalf of the lenders. Cutting rights payments are paid by the Buyer to the indenture trustee, which pays debt service to the lenders and gives the remainder of the cutting rights payments to the equity investor (which may, in fact, be the Seller, the Buyer, or a third party).

Leveraged leases have little appeal for most forest products companies at the present time, and it is not surprising that there are no leveraged lease structures in the sample of major timber transactions shown in Exhibit I. First, the capital gains tax benefits from owning timberland are of value to companies in the forest products industry, and it is difficult to get equity investors to pay full value for these tax benefits. Second, to qualify for off balance sheet accounting treatment, leases must be structured to meet the technical accounting requirements and this structuring may cause the arrangement not to fulfill: (1) the Buyer's strategic objective of assuring meaningful control of timber resources, (2) the Seller's objective of selling the assets for a known amount, or (3) the lenders' objective of having an assured source of cash flows to meet debt service requirements. Third, a series of pre-established payments at fixed time intervals in a leveraged lease may not coincide with the Buyer's plans for actually cutting and using the timber, thus resulting in a loss of operating flexibility. Fourth, it is impossible in a leveraged lease situation for the Seller to grant a cancellation privilege to the Buyer. Finally, it is often difficult to attract equity investors at reasonable rates of return.

**Joint Venture**

A joint venture may be used as a means of sharing the equity investment risks among two or more parties, either on a leveraged or unleveraged basis. A joint venture may also be an attractive approach for Buyers who have an investment interest in timber but lack the skills to manage a complex forest products operation (e.g., non-forest products companies or foreign institutions).

In addition to permitting capital infusions from third party sources, the joint venture concept may be used to obtain nonrecourse, off balance sheet financing under certain circumstances and/or to make timber investments which the parties individually can not make based on their own financial resources.

A special case of the joint venture concept is for the Buyer and Seller to form such an entity. For example, the Seller can contribute timber to a joint venture, receiving stock ownership or a partnership interest in return. Since this is a contribu-
tion of capital and not a sale, usually no taxable event has occurred until the Seller receives actual cash flows from the joint venture.

The principal disadvantage to a joint venture structure is the impingement upon operating flexibility, particularly if the equity participants intend to engage in transactions with the joint venture entity. Such insider dealings impose a burden on the parties to demonstrate that they have transacted their business on an arms-length basis at all times; in particular, it is necessary to transact business in such a way that the other participants in the joint venture will not be harmed. Another major disadvantage with the joint venture concept is the general difficulty of getting two or more equity participants to agree on strategic decisions and business policies.

In structuring a joint venture arrangement, there are essentially three forms of organization which can be utilized: (1) an undivided joint interest, (2) a separate corporation, or (3) a partnership.

(1) Undivided Joint Interest

In an undivided joint interest form of organization, the equity participants own undivided interests as tenants in common in the real and personal property constituting the joint venture and share in the benefits and risks of the venture in direct proportion to their ownership interests. The duties and obligations of all the parties are set out in an operating agreement which normally stipulates that liabilities arising out of the project will be borne, without limit, by the equity participants severally in proportion to their ownership percentages. As a hedge against potential liabilities, the venture usually purchases extensive commercial insurance covering general business liabilities.

Normally the joint venture agreement stipulates that the equity participants will bear responsibility for raising their shares of the venture’s external financing requirements by whatever means are appropriate to their circumstances. These separate financing arrangements have particular appeal when equity participants of disparate credit strength are involved in the joint venture.

Since an undivided joint interest is not an entity for accounting purposes, the participants reflect their proportionate share of project assets, revenues and expenses directly in their own financial statements.

If the special requirements of Section 761 of the Internal Revenue Code can be met, the equity participants may be permitted to file an election to exclude the joint venture from the rules relating to the taxation of partnerships. Exclusion from partnership taxation permits the equity participants to elect tax accounting methods most appropriate to their own tax situation. Irrespective of whether the undivided joint interest is taxed as a tenancy in common or as a partnership, joint venture deductions arising from interest expenses, property management, and investment tax credits will flow-through directly to the equity participants and “double taxation” of the joint venture income will be avoided. It should be noted, however, that in some instances the IRS has deemed an undivided joint interest to be an “association” which is treated as a corporation for tax purposes.
(2) Separate Corporation

The most common form of organization for a joint venture is a new corporation which raises funds from sponsors' equity contributions and through the issuance of securities. The principal advantage with this form of organization is the limited nature of the participants' potential liabilities.

Furthermore, if a participant owns 50% or less of a joint venture's common equity and does not exercise effective control, the joint venture usually will be accounted for on a non-consolidated basis. It will be necessary, however, for the participants to disclose in a footnote: (1) any material contingent liability with respect to the joint venture, and (2) summary financial statements if the investment is material with respect to their overall operations.

Assuming that no single participant owns sufficient equity to consolidate for tax purposes (80% of voting control plus 80% of each non-voting class except non-voting preferred), the corporate joint venture is a separate taxable entity. Consequently, there is the danger that this form of organization will result in a sub-optimal allocation of tax benefits among the parties at interest; for example, the joint venture may be in a "gap" position from timber capital gains benefits at a time when its equity participants are not. Furthermore, dividends are subject to income taxes at each participant's applicable rate after allowance for the 85% intercorporate dividend exclusion; to this extent there may be a "double taxation" of the joint venture's earnings. Consequently, it may be desirable to use a corporate structure with disproportionate dollar amounts of voting and non-voting securities. For example, if the joint venture's equity consists of $1,000 of non-voting preferred and $100 of voting common stock, it may be possible for a participant which owns $80 of the common stock to consolidate the project entity for tax purposes and thereby receive a direct flow-through of related tax benefits.

(3) Partnership

In this form of organization, a partnership owns and operates the joint venture and issues securities, either directly or through a corporate borrowing vehicle. General partners have joint and several liability for obligations of the partnership. Limited partners do not have such unlimited liability but there must be at least one general partner that does.

The exposure of general partners to the joint venture liabilities can be reduced in two ways. First, a wholly owned corporate subsidiary may be created to act as the general partner; there is some risk, however, that a court may "pierce the corporate veil" and impose liability at some later point. Second, the partnership can stipulate in its borrowing contracts that recourse will be limited to partnership assets.

If a partner owns 50% or less of partnership equity and does not exercise effective control, the partner's investment usually will be accounted for on an off balance sheet basis. There may, however, have to be footnote disclosure of contingent liabilities and summary financial statements.

Although the partnership is a separate entity for tax reporting purposes, the net income or loss is passed through to the partners. Each partner receives a proportionate share of partnership income or loss, as well as proportionate capital gains deductions or investment tax credits. The use of a buffer subsidiary for liability purposes does not limit the general partner's ability to utilize the tax benefits so long as the subsidiary is consolidated for tax purposes. As in the case of an undivided interest, the partnership tax treatment may be avoided if a Section 761 election is obtained. There is the risk with this form of organization, however, that the IRS will treat the partnership as an association and subject it to taxation on a corporate basis.

CONCLUSION

Designing an appropriate financial structure for a major timber acquisition requires an appreciation for: (1) the specific facts of the situation, especially the characteristics of the property under consideration, and (2) the objectives and capabilities of the parties involved. In particular, it is necessary to consider such factors as the following:

(1) The nature of the timber: What is the maturity and condition of the stumpage? What are the alternative uses for the land? What are the potential end uses for the stumpage? What is the proximity to various mills and plants? Is the property contiguous with other timber properties? What is the degree of accessibility? What are the risks of disease, insects or fire? What is the degree to which the property must be managed? What are the existing encumbrances or contractual arrangements with respect to the property?

(2) The nature of the Buyer: What is the timing of the Buyer's timber supply needs? Does the Buyer have a strong desire for ownership of fee interests? What is the availability of alternative timber sources? What is the Buyer's skill in managing timber properties? What is the Buyer's access to the capital markets? What is the Buy-
er’s marginal cost of capital? What is the Buyer’s ability to utilize capital gains deductions and investment tax credits? What is the Buyer’s desire for off balance sheet financing? What is the Buyer’s willingness and capacity to bear risks?

(3) The nature of the Seller: What are the Seller’s cash flow requirements? Does the Seller have a strong desire to retain ownership of fee interests? What is the Seller’s tax basis in the properties? What are the Seller’s estate tax considerations? What is the Seller’s ability to utilize capital gains deductions? What is the Seller’s skill in managing timber properties? What is the Seller’s access to the capital markets? What is the Seller’s willingness and capacity to bear risks?

The objectives in designing financing arrangements for a major timber acquisition are quite interrelated and the effects of a financing strategy must be balanced against the resulting effects on various other objectives. Above all, the determination of the appropriate property interests, payment terms, and acquisition vehicle for a given transaction must be approached with an explicit awareness of the inherent trade-offs which are involved.

Although it is not possible to conclude in the abstract that one set of financing arrangements is superior to another, it should be possible to make such relative judgements in a particular situation. By carefully analyzing the facts of a transaction and the objectives of the parties at interest, it should be possible to evaluate the basic alternatives and—with appropriate guidance from financial, tax and accounting experts—derive an optimal approach to financing the timber acquisition.
<table>
<thead>
<tr>
<th>Year</th>
<th>Buyer/Seller</th>
<th>Size of Transaction</th>
<th>Property Interests</th>
<th>Payment Terms</th>
<th>Acquisition Vehicle</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973</td>
<td>Georgia-Pacific/ Boise Cascade</td>
<td>$120,000,000</td>
<td>Assets of Union Lumber Company, including 225,000 acres of timberland, two lumber mills and one particle board plant in California</td>
<td>Cash</td>
<td>Direct company investment</td>
</tr>
<tr>
<td>1973</td>
<td>Louisiana Pacific/ Boise Cascade and Georgia-Pacific</td>
<td>$28,000,000</td>
<td>Assets of Boise Cascade's softwood plywood plant and Georgia-Pacific's 49,500 acres of timberland in California</td>
<td>Cash</td>
<td>Direct company investment</td>
</tr>
<tr>
<td>1973</td>
<td>Louisiana Pacific/ Midstate Development</td>
<td>$3,000,000</td>
<td>Assets including sawmill and logging equipment plus cutting rights to 500 million board feet of timber in Montana</td>
<td>Cash</td>
<td>Direct company investment</td>
</tr>
<tr>
<td>1973</td>
<td>International Paper/ Hudson Pulp and Paper</td>
<td>$10,000,000</td>
<td>115,000 acres of timberland in Maine</td>
<td>Cash</td>
<td>Direct company investment</td>
</tr>
<tr>
<td>1974</td>
<td>St. Regis Paper/Whitewater</td>
<td>Undisclosed</td>
<td>15,000 acres of timberland in Florida, Mississippi, Alabama, and Georgia</td>
<td>Land (11,000 acres of timberland in Wisconsin)</td>
<td>Direct company exchange</td>
</tr>
<tr>
<td>1974</td>
<td>Crown Zellerbach/ Biles-Coleman Lumber</td>
<td>$26,600,000</td>
<td>Common stock representing all the assets of Biles-Coleman including a sawmill, a plywood plant, and 48,000 acres of timberland in Washington</td>
<td>Common stock</td>
<td>Direct company investment</td>
</tr>
<tr>
<td>1974</td>
<td>Crown Zellerbach and the Southern Timber Trust/ Tremont Lumber</td>
<td>$185,000,000</td>
<td>All the assets of Tremont Lumber including 215,000 acres of timberland, two sawmills, a plywood plant, and producing oil properties in Louisiana</td>
<td>Cash</td>
<td>Joint venture²</td>
</tr>
<tr>
<td>1974</td>
<td>International Paper/ Herman Wilson Lumber</td>
<td>$9,000,000</td>
<td>All of the assets of Herman Wilson Lumber and its related timberland in Arkansas</td>
<td>Cash</td>
<td>Direct company investment</td>
</tr>
<tr>
<td>1974</td>
<td>Louisiana Pacific/ Commander Industries</td>
<td>$30,000,000</td>
<td>Assets including sawmills, equipment, cutting rights for 50,000 acres of timberland, and cutting rights for 150 million board feet of U.S. Forest Service timber in California</td>
<td>Cash</td>
<td>Direct company investment</td>
</tr>
<tr>
<td>1974</td>
<td>International Paper/ Cabe Land and Gurdon Lumber</td>
<td>$145,000,000</td>
<td>Common stock representing all the assets of Cabe Land, and a purchase of all the assets of Gurdon Lumber including 260,000 acres of timberland and two sawmills in Arkansas</td>
<td>$20 million in cash and $125 million in installment notes due over a four-year period</td>
<td>Direct company investment</td>
</tr>
<tr>
<td>Year</td>
<td>Buyer/Seller</td>
<td>Size of Transaction</td>
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<td>Payment Terms</td>
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<td>------</td>
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<td>---------------------</td>
</tr>
<tr>
<td>1974</td>
<td>Willamette Industries/Johns-Manville</td>
<td>$34,000,000</td>
<td>Common stock representing all the assets of Johns-Manville Timber Corp. including 60,000 acres timberland in Virginia</td>
<td>Cash</td>
<td>Direct company investment</td>
</tr>
<tr>
<td>1974</td>
<td>International Paper/U.S. Steel</td>
<td>$65,000,000</td>
<td>50,000 acres of timberland in Alabama</td>
<td>Cash</td>
<td>Direct company investment</td>
</tr>
<tr>
<td>1975</td>
<td>Weyerhaeuser/Flintkote</td>
<td>$5,000,000</td>
<td>Timberland assets in Mississippi</td>
<td>Cash</td>
<td>Direct company investment</td>
</tr>
<tr>
<td>1976</td>
<td>Champion International/Kimberly-Clark</td>
<td>$38,800,000</td>
<td>Options to purchase 388,000 acres of timberland in Wisconsin and Michigan at prices which range from $100 to $146 per acre for options expiring in 1978, 1980 and 1982, respectively</td>
<td>$11.3 million in cash for the options; the options could be satisfied through the payment of cash or timber properties of approximately like value</td>
<td>Direct company investment</td>
</tr>
<tr>
<td>1976</td>
<td>Louisiana Pacific/FMC's 50% of Ketchikan Pulp</td>
<td>$46,000,000</td>
<td>Common stock representing assets including a pulp mill, four sawmills and a long-term contract for 4.9 billion feet of timber in Alaska</td>
<td>Cash</td>
<td>Direct company investment</td>
</tr>
<tr>
<td>1976</td>
<td>Louisiana Pacific/Church of the Latter Day Saints</td>
<td>$10,000,000</td>
<td>2,000 acres of timberland in California</td>
<td>Cash</td>
<td>Direct company investment</td>
</tr>
<tr>
<td>1977</td>
<td>Champion International/Hoerner Waldorf</td>
<td>$362,200,000</td>
<td>Common stock representing all Hoerner Waldorf's assets including 268,000 acres of timberland primarily in North Carolina, Virginia and Michigan</td>
<td>Common stock</td>
<td>Direct company investment</td>
</tr>
<tr>
<td>1977</td>
<td>International Paper/Arkansas Louisiana Gas</td>
<td>$18,500,000</td>
<td>Assets including 33,000 acres of timberland, a plywood plant and related equipment in Arkansas</td>
<td>$3.5 million in cash and $15 million in installment notes due over a four-year period</td>
<td>Direct company investment</td>
</tr>
<tr>
<td>1977</td>
<td>St. Regis Paper/Private Landowner</td>
<td>Undisclosed</td>
<td>38,000 acres of timberland in Mississippi and Louisiana</td>
<td>Cash</td>
<td>Direct company investment</td>
</tr>
<tr>
<td>1977</td>
<td>Weyerhaeuser/Murfreesboro Lumber</td>
<td>Undisclosed</td>
<td>Common stock representing all the assets including a lumber mill and 35,750 acres of timberland in Arkansas</td>
<td>Cash</td>
<td>Direct company investment</td>
</tr>
<tr>
<td>1977</td>
<td>St. Regis Paper/Southland Paper Mills</td>
<td>$250,000,000</td>
<td>Common stock representing all the assets of Southland Paper including 570,000 acres of timberland in Texas</td>
<td>Common stock</td>
<td>Direct company investment</td>
</tr>
</tbody>
</table>
## EXHIBIT I (Continued)

**FUNDAMENTALS OF FINANCING MAJOR TIMBER ACQUISITIONS**

**Selected Examples of Major Timber Acquisitions**

<table>
<thead>
<tr>
<th>Year</th>
<th>Buyer/Seller</th>
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<tbody>
<tr>
<td>1978</td>
<td>Louisiana Pacific/Fibreboard</td>
<td>$57,000,000</td>
<td>Common stock representing all the assets of Fibreboard including 145,000 acres of timberland in California and cutting rights to 220 million board feet primarily on U.S. Forest Service land in California</td>
<td>Cash</td>
<td>Wholly owned subsidiary</td>
</tr>
<tr>
<td>1978</td>
<td>Georgia Pacific/ Hudson Pulp and Paper</td>
<td>$162,500,000</td>
<td>Common stock representing all the assets of Hudson including pulp, kraft and tissue operations and 502,000 acres of timberland in Florida and Maine</td>
<td>Preferred stock</td>
<td>Direct company investment</td>
</tr>
<tr>
<td>1978</td>
<td>Time/Inland Container</td>
<td>$270,000,000</td>
<td>Common stock representing all the assets of Inland, including a 50% interest in the Georgia Kraft joint venture which owns 888,000 acres and leases 125,000 acres of timberland in Georgia and Alabama</td>
<td>45% cash and 55% convertible preferred stock</td>
<td>Direct company investment</td>
</tr>
<tr>
<td>1978</td>
<td>Willamette Industries/ Bolinger Lumber</td>
<td>$27,000,000</td>
<td>21,500 acres of timberland in Louisiana</td>
<td>Cash</td>
<td>Direct company investment</td>
</tr>
<tr>
<td>1978</td>
<td>Johns-Manville/Olinkraft</td>
<td>$584,000,000</td>
<td>Common stock representing all the assets of Olinkraft including 584,000 acres of timberland in Louisiana, Arkansas and Texas</td>
<td>49% cash and 51% preferred stock</td>
<td>Wholly owned subsidiary</td>
</tr>
<tr>
<td>1979</td>
<td>Southwest Forest Industries/ International Paper</td>
<td>$220,000,000</td>
<td>425,000 acres of timberland, a container board mill and the common stock of Atlantic &amp; Saint Andrews Bay Railroad in Florida</td>
<td>$150 million cash and $70 million in preferred stock</td>
<td>Direct company investment</td>
</tr>
<tr>
<td>1979</td>
<td>Santa Fe Industries/ International Paper</td>
<td>$22,400,000</td>
<td>22,000 acres of timberland in Texas</td>
<td>Cash</td>
<td>Wholly owned subsidiary</td>
</tr>
<tr>
<td>1979</td>
<td>International Paper/Bodcaw</td>
<td>$805,000,000</td>
<td>Common stock representing all the assets of Bodcaw including a linerboard mill, oil &amp; gas interests, more than 300,000 acres of timberland and cutting rights to an additional 100,000 acres in Louisiana</td>
<td>Cash and installment notes due from 5 to 25 years</td>
<td>Direct company investment</td>
</tr>
<tr>
<td>1979</td>
<td>Weyerhaeuser/ Delta Industries</td>
<td>$22,000,000</td>
<td>Common stock representing all the assets of Delta Industries including plywood mills and 4,200 acres of timberland in Alabama and Mississippi</td>
<td>Common stock</td>
<td>Direct company investment</td>
</tr>
</tbody>
</table>
# FUNDAMENTALS OF FINANCING MAJOR TIMBER ACQUISITIONS

Selected Examples of Major Timber Acquisitions

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<tr>
<td>1979</td>
<td>Roseburg Lumber/ Kimberly-Clark</td>
<td>$252,000,000</td>
<td>323,000 acres of timberland and two sawmills in California</td>
<td>Cash</td>
<td>Direct company investment</td>
</tr>
<tr>
<td>1979</td>
<td>Timber Properties*, St. Regis Paper and Georgia-Pacific/Amax</td>
<td>$103,000,000</td>
<td>Timber Properties purchased common stock representing the assets of Amax Forest Products including 60,000 acres of timberland and lease-holds on 7,000 acres in Georgia, Florida and South Carolina, and a sawmill in Georgia; St. Regis purchased 40,000 acres in Georgia; and Georgia-Pacific purchased 40,000 acres in Georgia</td>
<td>Cash</td>
<td>Joint venture and direct company investment</td>
</tr>
<tr>
<td>1979</td>
<td>Kohlberg, Kravis, Roberts &amp; Co./Pack River</td>
<td>$115,000,000</td>
<td>180,000 acres of timberland and 15 sawmills and planing mills in Washington, Idaho and Montana</td>
<td>Cash</td>
<td>Joint venture (leveraged buyout)</td>
</tr>
<tr>
<td>1979</td>
<td>Willamette Industries/ Woodard-Walker Lumber</td>
<td>$86,000,000</td>
<td>Common stock representing all the assets of Woodard-Walker including 50,000 acres of timberland in Louisiana, a plywood mill, and one-half interest in another plywood mill</td>
<td>Cash</td>
<td>Direct company investment</td>
</tr>
</tbody>
</table>

**NOTES**

1 The sample of companies from which these examples were taken includes: Boise Cascade, Champion International, Crown Zellerbach, Georgia-Pacific, International Paper, Kimberly-Clark, Louisiana Pacific, St. Regis Paper, Weyerhaeuser, and Willamette Industries. In addition, significant mergers and acquisitions in which timberland was an important factor have been included. The transactions recorded in this exhibit represent timberland acquisitions during the period from January, 1973 through November, 1979 for which the terms were publicly announced. This summary does not represent a comprehensive list of all timberland acquisitions of the sample companies.

2 The joint venture dissolved on December 30, 1974 when Crown Zellerbach exercised its continuing option to purchase all of the assets at book value for cash and the assumption of mortgage debt.

3 St. Regis Paper withheld the purchase price of the timberland at the request of the landowner.

4 Timber Properties is a joint venture in which E. F. Hutton Group Inc. and Tree Farmers of America, Inc. are equal partners.
The authors would like to acknowledge the assistance of Gerald L. Brodsky, who is in charge of Morgan Stanley's "Forest Products Group," and Donald R. Kendall, Jr. who is in charge of Morgan Stanley's "Secured Asset Financing Group."

**Monographs published to date:**

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(This monograph was revised and reissued in January 1976).


(A supplement to this monograph was issued in March 1977.)


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