
PINCHOT INSTITUTE FOR CONSERVATION

2007 Pinchot Distinguished Lecture¹

The Rise and Fall of the Timber Investment Management Organizations: Ownership Changes in US Forestlands

Clark S. Binkley

Introduction

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The 1980s were heady times of “leveraged buy outs” and hostile takeovers—corporate raiders taking over companies, breaking them up into their component parts, and selling them off to the highest bidder. Forest products companies were ripe targets. Corporate raiders like Sir James Goldsmith recognized that timberlands owned by forest products companies were hugely undervalued assets. He set about purchasing companies like Crown Zellerbach, selling off the forest lands and other assets, and turning a quick and substantial profit (most of the companies, like Crown Zellerbach, no longer exist). Other companies, hoping to avoid such a fate, took pre-emptive action and sold off their fee-owned timberlands themselves, usually with some long-term wood supply agreement with the new owners.

Who were these new owners? In many cases it was a timber investment management organization (TIMO), a new class of private forest owner in the US—not industry and not owned by families or individuals. Nearly a decade ago, the Pinchot Institute held one of the first conferences aimed at promoting a better public understanding of TIMOs and institutional timberland investors—who they were, what their goals and objectives were, and how they might be expected to influence sustainable forest management and forest land use in the US. The assessment of TIMOs by conservationists was quite positive—the forests would now be separated from the mills, and timber harvesting would no longer be driven by the mills’ demands.

¹ The Pinchot Distinguished Lecture for 2007 was given at the Cosmos Club in Washington, DC on March 2, 2007. The Pinchot Distinguished Lecturer is selected annually by the board of directors of the Pinchot Institute for Conservation.

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Leadership in Forest Conservation Thought, Policy and Action



One of the speakers issued a note of caution, however. TIMOs were not, and had not intention of being, conservation organizations. Their objectives were simple and direct—maximize financial return to the investors. If growing timber on longer rotations for higher-value wood products was the best way to do this, then that’s what would be done. If selling forest land for conversion to development was the best way to maximize investor return, then that is certainly what would be done. The cautionary speaker that day was Clark Binkley, then Vice President and Chief Investment Officer for Hancock Timber Resource Group, and offshoot of Hancock Insurance.

Today, we in the forestry and conservation community are deeply concerned that private forest lands are being converted to development at a rate of 6,000 acres/day—an average of 4 acres per minute. With nearly 50 million acres of private forest land in the US owned by TIMOs, it is important to know whether they will be a part of the solution to stemming the loss of forest land to development, or part of the problem.

There is no one better qualified to answer that question than our 2007 Pinchot Distinguished Lecturer, Dr. Clark S. Binkley.



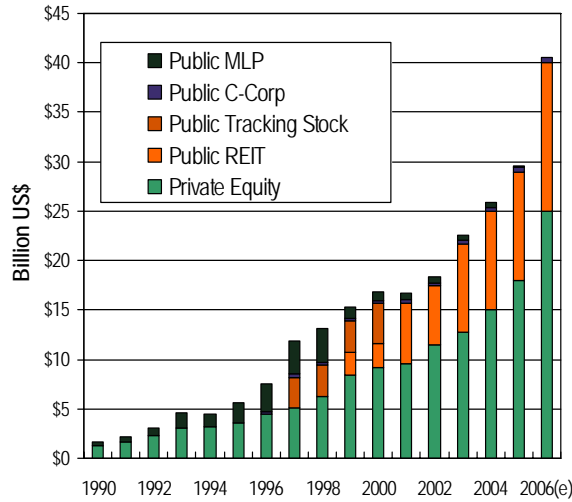
Clark S. Binkley

There has been a major shift in industrial forestland ownership in the United States since the 1970’s due to the disintegration of the forest products industry. The forest products industry, at one time, owned not just the trees, but also the manufacturing facilities, including pulp and saw mills. However, over the past 20 – 30 years these components have been separated into their own entity, and the timberland is no longer part of an entire system but rather an input into another system; namely the investment market, facilitated by Timberland Investment Management Organizations (TIMOs).

Most of the investment markets (i.e. pension plans, endowment and private equity funds, insurance companies, and foundations) rely on TIMOs to advise them about their investments in timberlands. The investment organizations don’t actually own the timberland, but rather arrange for someone else to own the land. Figure 1 identifies the growth of institutional investment over the past two decades. Private held partnerships and other entities, managed by TIMOs, own the majority of the land and equity. The next major owner of timberland is the Real Estate

Investment Trust (REITs), public MLPs, Master Limited Partnerships, have since been converted to REITs. There are currently about half a dozen publicly traded timber REITs in the United States, and REIT ownership continues to grow with organizations like Potlatch, Rayonier, and Plum Creek acquiring publicly traded lands.

Figure 1: Timberland Investment By Entity



Publicly traded entities also include some taxable and traditional corporations and limited partnerships. The commensurate growth of REITs came about after the fall of Tracking Shares, as can also be seen in Figure 1. Tracking Shares are stock shares that only represent one, usually profitable, area of a larger company. For instance, Georgia Pacific offered a Tracking Share for timberland, where shareholders earn profits from just the timberland even though it is part of the entire corporation and the larger share. A collapse in Tracking Shares followed shortly after the sale of these smaller Tracking Shares and Plum Creek then acquired Georgia Pacific. REITs, then, began surfacing in more and more investment corporations at a rate of about 20% per year since 1980.

REITs do however have antecedents in the 70s. For example, Sir James Goldsmith did leveraged buy-outs, dismembered and sold Diamond International and Crown Zellerbach. Many companies, such as International Paper and Rayonier, were worried about the buy-outs, which led to a strategic preventative plan. These companies banded together with the idea to split off the timberlands into a limited partnership, separately listed on the stock exchange so companies, like Sir Goldsmith's, can't buy all the shares to acquire the timberland for free. This was accomplished in a convoluted way. The companies would divide there shares into separate

categories: A and B. A-shares were profitable for the first 20 years, and then B-shares would become profitable. This made the acquisition of all the shares difficult for companies such as Goldsmith's.

The establishment of TIMOs predates the surfacing of REITs in the 1980's, and in fact started in the 1970s in the United States. For example, Eastern Airlines and British Coal Board own timberland as part of their pension plan, and both of these investments predate what can be seen as the survivors of the TIMOs.

TIMOs began from the idea of agricultural lending, as 20-30 years ago most American farms had forestland associated with the farmland. Therefore, when companies such as Hancock would lend money to the farms they would consider the trees as part of the collateral asset base of the entire farm. When some of the farms would be unable to repay the loans and the lenders acquired the land, they often considered the timberland to be of more value than agricultural land. As a senior employee of Hancock expressed, the trees often paid off more agriculture loans than row crops or swine did. Once the high value of trees was realized, lenders began making loans with trees as collateral. The public does not hear about tree loans, but rather the lenders 'private equity operations.'

The success of lenders private equity operations spurred the involvement of large insurance companies. Insurance companies need somewhere to invest policy holders' premiums to generate high returns, and timberlands did just that. Therefore, trust companies began to get involved, holding forestland as a valuable asset, which they began to offer to third parties. This ignited the development of many TIMOs, including Forest Investment Advisors (FIA) one of the larger investment firms.

There are two major factors that have fueled the rapid growth of timberland as a financial asset: a combination of supply and demand factors. The supply of timberlands, coming out of the disintegration of the forest products company, "why do they want to sell?", and the demand, "why did somebody want to buy?" These questions are particularly poignant, as there has been no formal research done on the risks and returns of timberlands until recently. So, why then, have people been investing in timberlands for hundreds of years?

Economists and accountants measure risk by the correlation of the returns of an asset with other assets that are held by that entity. For example, if you have two assets of equal proportion, and one of them is going up while the other is going down at the same time, your portfolio is completely level, and vice versa. However, if you have two assets that are negatively correlated, or even poorly correlated, you get some benefit, in terms of smoothing your returns, of your overall portfolio. To measure risk then, the contribution of that asset's volatility to the volatility of the entire portfolio is compared. If the contribution is small, there is a low risk, and if the contribution is high, there is a high risk to acquiring that asset.

After close examination, timberland holding is considered a very low risk asset, so it provides great benefit diversification, which drove many companies to invest in timberland. Another reason for the growth of timberland investment is that they are also a good barrier for unexpected inflation. Timberland is an asset in which the value rises with inflation rather than staying stagnant like many other types of investments. Why, if timberland ownership is a low risk asset and timberland value fluctuate with inflation, do companies want to sell?

One reason to sell is because returns from integrated forest products companies over the last 20 years have not been very high. The returns are sometimes lower than the initial investment, therefore; analysts have pressed timberland investors to monetize their timberland, i.e. sell it. The United States Generally Accepted Accounting Principles (US GAAP) accountants believe trees do not grow and depreciate though; this belief comes from the mandatory reports submitted to the US GAAP by all publicly traded companies. To explain, consider some recently purchased bare land in which trees are planted. The cost is held stable for this land in the accounting ledger. The trees may be worth \$1000 initially. When harvested they may be worth \$10,000, yet the value on the books is still \$1000, which is the value at which they are "depleted". The gain of \$9000 is added to the balance sheet but it doesn't show this value as having come from tree growth and the increasing asset value of the forest itself. This method, however, is not an accurate assessment of timberland, but it is what the US GAAP mandates.

A more precise method of measuring returns would be to follow the International Financial Reporting Standards (IFRS) "mark to market" regime. In the aforementioned example of purchasing bare land and planting trees, each year the value of growth is shown on the income statement and the increased value should be recorded on the balance sheet. This would show full recognition on the official account of the value of tree growth.

Demand for timberland by investment companies was spurred from the Employee Retirement Income Security Act of 1974 (ERISA), which ignited many pension plans to invest in timberlands. Through ERISA, congress regulated private pension plans, requiring them to diversify their holdings. Many pension plans just held bond portfolios, or bond and stock portfolios so, under times of high inflation, pension plans became severely under funded. ERISA then stepped in requiring diversification to secure employee pensions and timberlands became a desirable asset.

A final reason purchasing timberland became so popular was due to the tax treatment of the revenue generated from the timberland. The Internal Revenue code IRC 631b provides capital gains tax preference for individuals. Which translates into only a 15% tax if an individual owns trees for a determined amount of time, follows all other regulations, then cuts and sells the trees, rather than a 30%-40% tax paid on traditional income. This also creates passive income, which is crucial for pension plans, endowments, and foundations. These types of entities are tax exempt, which means they can only invest in passive activities. An example of this is the Sierra Club bookstore, an active business. The Sierra Club has 501 c (3) status, but they have to pay taxes on their active business, therefore it would behoove them to invest passively. The Internal Revenue Service says growing trees doesn't generate unrelated business taxable income. So, for these reasons, either wealthy individuals or pension plans, endowments, and foundations have an advantage in owning trees, as they don't pay taxes, which in turn will generate higher returns.

A final reason for an increase in demand for timberland is that a few years ago the rules about REITs were changed when it was discovered that timberland could be put into a REIT, causing the acquisition of timberland to increase drastically. Previously, REITs included such investments as commercial office buildings, shopping centers, and so on. Since REITs are not taxable, when companies such as Potlatch put their timberland into a REIT they went from paying 35% tax on all revenue to paying zero taxes. One bottleneck to owning REITs is that they are real estate; therefore, it cannot own a substantial amount of processing capacity.

The maximum amount of non-grid REIT assets are around 20% of the total asset base. Although, Rayonier, for example, has found a way around this by owning a pulp plant in which they put a lot of debt in to bring down the net asset value even though they are a REIT. In the case of

Potlatch who sold some of their pulp mills, they actually got rid of many of the manufacturing assets. Therefore, this tax policy is forcing companies to divest their timberland.

The growth of REITs and TIMOs is almost over as there are almost no integrated forest product company lands left to sell. There are three companies that have yet to sell all their land; MeadWestvaco, who has announced they are selling part of their land, Temple Inland who is selling all of their timberland, and Weyerhaeuser. Weyerhaeuser is under increasing pressure to also sell, as it's shareholders argue that Weyerhaeuser is giving up to 35% of their income away to the government. The market is also demanding a change in land ownership; for instance, when Temple Inland announced they were selling their timberland, their shares rose by \$8. Subsequently, Weyerhaeuser shares rose \$2, which indicates the market thinks selling is a good idea and Weyerhaeuser, being the last integrated forest products company with timberland, will follow in Temple Inland's foot steps.

A second reason for the stunted growth of REITs and TIMOs is it is possible that the amount of land held by institutional investors is going to decline in the future due to Higher and Best Use sales (HBU). Currently, entities like Plum Creek and private equity entities like TIMOs, generate around a third of their total income from real estate sales, not from timberland. Therefore, as they continue to operate these funds, or their companies, they sell off land in parcels, and if that land is not replaced, the amount of land held by these entities will eventually decline.

A third reason for the slowed growth rate of REITs and TIMOs is fixed term funds, meaning investor's investment terms are expiring. Many TIMOs raised money and invested in timberland in the 1990's with the understanding by their investors that there were ten years to operate the fund and then five years to sell the asset in fragmented parcels; not as the originally purchased package of millions of acres. This process is not a sustainable business model because the timberland is being fragmented into parcels that the TIMOs themselves cannot buy. While the investment terms are expiring, there has been virtually no new bare land planting in the United States, therefore, there has not been a replacement of the forestland that is being sold and developed.

Finally, the returns on timberlands are falling, causing a decrease in the number of investments made in the form of REITs and TIMOs. Sellers are becoming more sophisticated and have investment bankers, such as Goldman Sachs, involved in all transactions. This translates into more efficient auctions, with the last dollar being extracted from each transaction. Large blocks

of timberland have sold comparatively readily. The California Public Employees' Retirement System (CALPERS) and Harvard each sold over a billion dollars worth of timberland. There are large transactions that occur relatively quickly, meaning the asset class is far more liquid than previously thought. Capitol is now moving into the asset class.

There is still a lot of investing in timberland, not only in the U.S. but also in Europe and Canada. There is also a lot of debt flowing into timberland. A new TIMO entity, Timberstar, just bought some timberland in the International Paper transaction and raised 72% debt through a public bond. That means they only had to invest 28% of the equity, and they were able to raise the remainder 72% in debt markets. There is more competition for timberland now with more managers in the market. At auctions, there are five to ten people that show up rather than one, as was seen in the past.

What is the significance of TIMOs rise and fall? A recent quote from Henry Kravis, a principle in the private equity firm Kolberg, Kravis, Roberts, and Co. extracted from an article in *The Economist* said, "part of equity investing leaves not only the value creation, but also the economic and social benefits, for example, increases in employment innovation, research, and development." However, can this same idea be applied in the forest sector?

There has been a focus on forest management as a stand-alone entity. In many companies, the forestry operation was a cost center under the scrutiny of the pulp mill managers, so liberating forestry and foresters to become their own managers was a positive move. There has been a marked reduction in research and development, however. Forest companies such as International Paper, Weyerhaeuser, and MeadWestvaco have invested considerably in R&D. Institutional investors are not investing any money into forestry research, though, causing the reduction in R&D. What these investors do not realize is that research can generate high returns if it applied on the ground. The reduction in R&D by integrated companies has opened the arena for specialized companies that do forestry research to provide knowledge products to the sector.

TIMOs can lead to fragmented ownership of the timberland. There are buyers who are looking for small parcels of timberland: only 1000, 100 or even 50 acres. This leads to fragmented ownership and may lead to a fragmented forest if the land is developed into housing developments or strip malls, however, that is a trend that needs to be further analyzed.

Finally, economic inducements for financial investors and agricultural subsidies have caused further discussion. For example, forest products companies may be approached to sell their land and ultimately pulp mill to financial investors. The financial investor may put a conservation easement on part of the land, purchase the pulp mill to develop, and collect the tax break for the easement and revenue from the development. Financial investors respond to revenue building transactions, which may include eco-system services as well. This may include such activities as collecting carbon credits for the trees carbon sequestration abilities.

Agricultural subsidies are capitalized into land values and keep the land at a higher value than it actually should be, which has led to no new bare land planting of trees. Although, if forward looking returns become low enough, bare land planting may become more attractive than the acquisition of mature timberland by investors. This may lead to more agricultural land being purchased for tree planting. It may be beneficial to make agriculture subsidies and forestry incentives equal.

In conclusion, institutions do not have to own timberland but do have to own equities. Investors that do own timberland are going to sell that land if the returns are not favorable, and recently, returns have been low, which led CALPERS and Harvard to sell all of their timberland in the United States. So, the possibility exists that as returns are low, more investors will sell their land, which, in turn, will drive returns back up. Is this a fall of TIMOs or the beginning of another rise?

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**Clark S. Binkley** is president of International Forestry Investment Advisors in Cambridge, Massachusetts. IFIA ([www.ifiallc.com](http://www.ifiallc.com)) is a firm providing “innovative, socially responsible forestry investment strategies for sophisticated investors.” Previously, Clark served as managing director and chief investment officer at Hancock Timber Resource Group with responsibility for equity capital raising, investment strategy and research. Clark has served as dean of the Faculty of Forestry at the University of British Columbia, as the Frederick K. Weyerhaeuser Professor of Forest Resources Management at the Yale School of Forestry & Environmental Studies, and as Associate Professor of Resource Management at the Yale School of Management. He has served on the boards of directors of several publicly traded forest products companies and private timberland ventures, and has consulted to numerous forest products companies, governmental agencies and private conservation groups. Clark holds degrees in applied mathematics and engineering from Harvard University and a doctorate in forestry and environmental studies from Yale University.

## *The Pinchot Distinguished Lecture*

The legacy of Gifford Pinchot—both his place in conservation history and his respect for principled and provocative speech and prose—is the premise for the Pinchot Distinguished Lecture series. Through the series, the Pinchot Institute seeks to advance the understanding and current thinking about contemporary issues in natural resource conservation.

The Pinchot Distinguished Lecture is an annual event sponsored by the Pinchot Institute, focused on major trends that are influencing the future, or have influenced the history, of forests and forest conservation. The individual selected to give the Pinchot Distinguished Lecture is determined each year by the Institute’s board of directors, in recognition of his or her outstanding contributions to the theory or practice of natural resource conservation.

These lectures reach a diverse audience of natural resource conservation professionals and policymakers in the nation’s capital, and often provide new and innovative insights that influence future decision making. In doing so, these lectures help advance the broader mission of the Pinchot Institute to continue the legacy of Gifford Pinchot by providing leadership in forest conservation thought, policy and action. The Institute also publishes each Pinchot Distinguished Lecture, making it available in both print and electronic form to reach the broadest possible audience.

## About the Pinchot Institute

### Mission

The Pinchot Institute for Conservation is an independent, non-profit public interest organization dedicated to leadership in forest conservation thought, policy, and action. The mission of the Pinchot Institute is to advance conservation and sustainable forest management through independent research, and the development of innovative, practical and broadly-supported solutions to conservation challenges and opportunities. The Pinchot Institute accomplishes this mission by:

- Providing research, education and technical assistance to improve the science, policy and practice of sustainable forest management
- Carrying forward Gifford Pinchot's legacy of conservation leadership by facilitating development of practical solutions that improve the ecological soundness, economic viability and social responsibility of forest conservation and management
- Bridging the interests of a diversity of public interests in natural resource conservation to develop practical long-term solutions to conservation challenges, and catalyze the public consensus needed to implement them effectively
- Fostering the development of new leaders in natural resource conservation in public, private and nonprofit institutions locally, nationally and internationally.

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