

Why Do Institutions Invest in Timberland?

BY CLARK S. BINKLEY

Institutional investors now own timberland worth at least \$50 billion. Many foresters now work directly or indirectly for those investors, or maybe your personal 401K plan includes timberland investments, so you might be interested in understanding their motivations for making and holding these investments.



Let's start by defining "institutional investors." These are organizations that invest on behalf of others. Examples include pension-plan sponsors that invest on behalf of plan participants; university endowments that invest on behalf of university students and faculty; insurance companies that invest on behalf of insurance reserves or annuity holders; and family offices that invest on behalf of family members.

Such entities generally seek to generate regular returns to offset recurring obligations to those for whom they invest. The returns could be in the form of actual cash distributions or increases in the underlying capital value of their portfolio of assets. Two key points follow from this: (1) volatility in returns increases the risk that the institution cannot meet its obligations; and (2) volatility is measured across their entire portfolios, not just on an asset-by-asset basis.

The benefits of diversification

With this background, let's answer the question posed in the title: Diversification. This might seem like an unlikely answer because timberland offers other benefits—organic growth, inflation protection, and low-but-stable returns, to name a few.

Diversification has been said to be the only free lunch in investing. If an investor seeks to avoid return volatility, diversification is a "free" way to do so. As noted above, institutions desire to avoid return volatility.

Consider two portfolios of \$100 each with two possible assets, both

with the same expected long-term return. Portfolio A is concentrated with \$100 in a single asset that increases \$10 every even year and falls in value by \$10 every odd year. This portfolio would have \$10 (or 10%) of annual volatility. Portfolio B consists of investments of \$50 in each of two assets. These both have annual volatility of \$5 (the same 10%), but one rises in even years and falls in odd years, and the other vice versa. Portfolio B has no volatility with exactly the same long-term return as Portfolio A. This is the power of portfolio diversification. In investment parlance, the risk-adjusted return has increased as a result of the diversification. In our example, the returns of the two assets in Portfolio B are perfectly negatively correlated, but the same principle applies as long as the returns are not perfectly positively correlated.

Following the logic of diversification, the Employment Retirement Income Security Act of 1974 (ERISA) required private-sector pension plans to diversify out of their traditional reliance on bonds alone as a means of protecting pension pay outs. The first moves were into publicly traded stocks, then real estate, and finally, in the early 1980s, timberland.

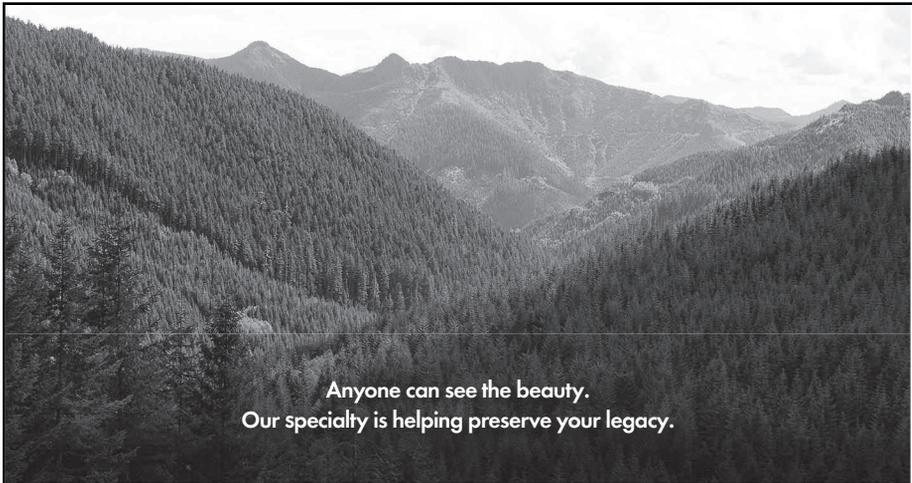
Many have studied the correlation of timberland returns with those of

other assets available to institutions—corporate and government bonds, large capitalization US stocks, foreign equities, real estate, and oil and gas partnerships, for example. The precise findings depend on how the timberland returns are measured and which asset is examined. But timberland returns generally have low positive or small negative correlations with these other assets. This means that even small doses of timberland in a large mixed asset portfolio can provide meaningful diversification benefits. Indeed, unconstrained portfolio optimization models based on historical returns will load far more timberland into most portfolios than there is timberland to acquire!

Institutional investment in timberland

There is a bit of dispute within the industry as to who was "first" to organize institutional investment in timberland, but three organizations have credible claims: Hancock Timber Resource Group, Forest Investment Associates, and Resource Investment Associates (evolved into Global Forest Partners). The former grew out of the agricultural lending group at the John Hancock Life Insurance Company; the

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second out of the trust division of First National Bank of Atlanta; and the third as an independent investment advisory group. From early beginnings in the US South, there are now over 20 timberland investment management organizations (TIMOs) investing on behalf of institutions on all continents except Antarctica (where there were once trees, albeit only fossilized ones now).

TIMOs manage “private equity” timberland. “Private” refers to the fact that the timberland assets are directly held and not regularly traded in public securities markets. Institutions can also access timberland by holding shares in publicly traded timberland-intensive companies generally organized as Real Estate Investment Trusts (REITs). These include Weyerhaeuser, Rayonier, Potlatch-Deltic, and Catchmark in the US, and Acadian in Canada. These investments can be made directly, via exchange-traded funds (WOOD), or through the actively managed timberland mutual fund run by Pictet Asset Management.

Although the underlying asset—timberland—is similar in public and private equity ownership, there are differences. Specifically, the publicly traded companies generally include manufacturing assets and are “marked to



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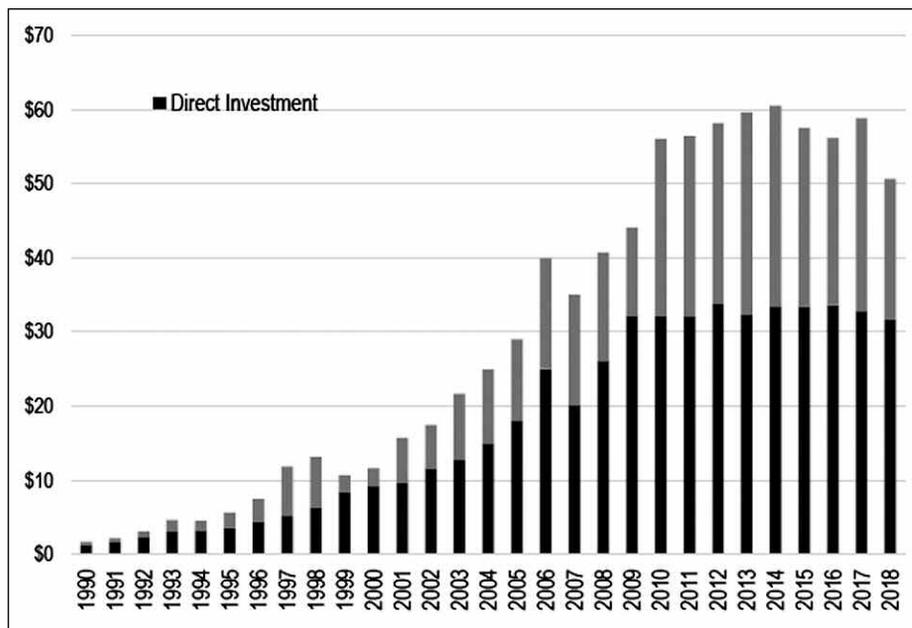
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SOURCE: TIMBERLINK, UNITED STATES SECURITIES AND EXCHANGE COMMISSION, HNRG; COURTESY OF HNRG

Figure 1. Equity Investment in Timberland Investment, 1990-2018. This figure shows the development of equity ownership of timberland, both public and private.

market” with daily pricing on stock exchanges. Manufacturing adds the volatility of forest products markets to that of timberland. Daily valuation subjects publicly traded companies to the vicissitudes of such macro-economic factors as trade policy and changes in expectations related to Federal Reserve moves, among others. Both give rise to additional volatility that does not exist (or, is not measured) in private markets.

As shown in Figure 1, private-equity timberland grew rather quickly in the 1990s through the Global Financial Crisis (GFC) starting in 2009. Two factors drove the growth. The first was the disintegration of the forest products industry in the US, and to a smaller extent, in Canada and Western Europe. Public companies in the US are required to report under US “generally accepted accounting principles” (US GAAP). At the time, US GAAP consistently understated timberland returns—those rules “depleted” timber as it was harvested, writing down the asset value, but not recording the increased value of the asset as it grew. In contrast, institutional investors regularly measure “total returns”: cash flow plus change in asset value. This mismatch in valuation metrics provided an opportunity for institutions to acquire timber-

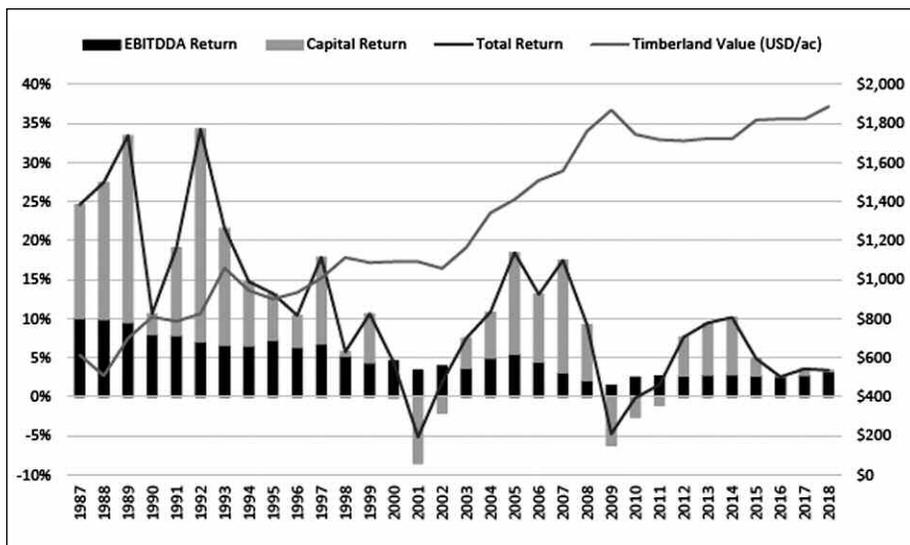
land from integrated companies with a value increase for both.

The second factor was a series of changes in the US tax code that allowed timber and timberland to escape corporate taxation as long as certain stringent requirements were met. For example, only a small fraction of the company’s assets could be in activities other than timberland itself. These changes forced companies such as Weyerhaeuser to sell their valuable pulp and paper assets and focus on timberland as a way to maximize returns to shareholders. These “tax efficient” structures also benefitted private equity investors.

Along with the changes in the US, investors became more comfortable with investments outside the US and moved into Australia, New Zealand, Chile, Brazil and even to frontier markets of Laos, Malaysia, and Mozambique.

What about the future of institutional investment in timberland?

The National Council of Real Estate Investment Fiduciaries (NCREIF) Timberland Property Index measures returns from individual timberland properties held by institutions. The figures are self-reported and reflect a changing mix of assets. It is not an “investable index” like the S&P 500,



SOURCE: GREENWOOD RESOURCES

Figure 2. US Timberland Returns, 1987-2018. This figure shows timberland returns as measured by NCREIF Timberland Property Index.

but it is generally accepted as the best available measure for timberland returns in the US.

In the 1980s and early 1990s timberland returns were quite high. Two factors drove these high returns. In the early 1990s, protective measures for the endangered northern spotted owl rapidly reduced federal timber supply. These unanticipated supply reductions pushed up timber prices, providing windfall gains for early investors. In addition, in the early phase of disintegration, timberland asset markets were relatively inefficient, with buyers and sellers just beginning to understand each others' valuation metrics and processes.

But, as more capital pressed against a relatively fixed base of investable timberland, asset values moved up and returns moved down. The after effects of the GFC kept timber prices low, especially in the South. Housing starts, a key demand driver for timber, have not yet returned to trend levels, a decade after their collapse in 2009. As a result of persistent weakness in returns, some early timberland investors are reducing their exposure to the asset class. For example, the California Public Employees Retirement System (CalPERS), one of the earliest institutional investors in timberland, has completely exited. Harvard University has pulled back significantly as well.

The emerging recognition that trees offer a "natural climate solution" offers some positive news for timberland

investors. Plants are the only proven and scalable technology for actually removing heat-trapping carbon dioxide from the atmosphere. Among plants, trees are uniquely positioned to be an effective part of a "net zero" carbon economy: trees not only remove the carbon dioxide from the atmosphere, but also store it, possibly for quite a long time. The carbon can be stored in the tree itself, and the trees can be converted into long-lived building products that avoid the emissions associated with carbon dioxide-intensive alternatives concrete or steel. While controversial, there can be posi-

tive climate benefits if the residuals are converted to heat and power, offsetting the use of fossil fuels.

US and broadly global strategies for reaching Paris Climate Agreement targets rely heavily on afforestation, reforestation, and improved forest management to achieve their goals. Such policy measures as carbon taxes or cap-and-trade systems support these strategies. If implemented, substantial new timberland investment opportunities could become available to institutions. Already the California carbon market provides meaningful incremental returns to timberland ownership, albeit on a small scale with somewhat idiosyncratic rules. Hundreds of billions of dollars of new investments are required to achieve the Paris Agreement goals, and the private sector is likely to be the main source of this capital. The good news for timberland investors is that returns from carbon-offset investments appear to offer still more diversification benefits from timberland investments. ♦

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