Evolving strategies in timberland investment bring emerging opportunities for investors

Institutions and wealthy individuals have been investing in timberland for current income and capital growth for many years, seeking to benefit from the compelling advantages of the asset class — strong, predictable returns, diversification benefits and protection from inflation.

Investors also get the benefit of a unique means of risk management: flexible harvesting. Under certain circumstances, landowners can be flexible in how they harvest timber, choosing to produce immediate cash flow once trees are of commercial age, or delaying harvest at low cost so the trees — and their value as assets — continue to grow.

Institutional interest in timberland has increased markedly in recent years, as investors are drawn to the asset’s consistent positive performance and risk management characteristics. As a result, investment in the domestic U.S. timber market’s highest quality assets has become competitive and, as a result, asset values have increased and forward looking returns have moderated or declined. However, new approaches to investing in timberland, including farm-like management for higher productivity, innovative acquisition strategies and a geographic focus on higher return markets have arisen, providing fresh opportunities for investors.

At TIAA-CREF, we have been investing in timber as an asset class since 1998, and through our partnerships with some of the industry’s most experienced and astute asset managers, including our majority owned subsidiary GreenWood Resources, Inc., we have centuries of collective experience in timber investing. In the pages that follow, we will outline the traditional case for timberland investment, describe the changes that are currently underway in this sector and discuss our strategy for capturing opportunities in an evolving market.
The historic case for timberland

Timberland — and the timber it generates — is vital to the global economy, providing resources for heat, energy, housing, packaging, and communications. For many decades, timberland was owned primarily by governments, wealthy families and corporate operators. But that has changed.

The institutional market for timberland developed rapidly during the 1980s after the passage of ERISA a few years earlier, which encouraged pension funds to fulfill their fiduciary duty by "diversifying the investments of the plan so as to minimize the risk of large losses." ERISA created a strong demand for timberland, which was met partly by restructuring the forest products industry so that ownership of timberland shifted from operating companies to financial investors. Timber investment management organizations (TIMOs) arose to facilitate these transactions and to organize and manage partnerships for investment into the asset class. Many of these new strategies built compelling track records over the subsequent years, demonstrating timber's unique ability to produce strong, consistent returns through both current income and capital appreciation. As a result, timberland has become an enduring part of many institutional portfolios.

Because of these and other factors, including the establishment of tree plantations on bare land, private ownership of forestland has been increasing. The Food and Agriculture Organization of the United Nations (FAO) estimates that of the 4 billion hectares of forested land, about 19 percent is privately owned — and those numbers have been increasing steadily.¹

The argument for investing in timberland, then as now, rests on three basic principles:

Attractive returns

Over the last 25 years, timberland has outperformed all other major asset classes with an average annual return of 13.5%. Timberland has exceeded the returns from traditional assets like stocks and bonds, as well as other alternative assets, providing nearly double the return of private equity (7.0%) and commercial real estate (7.7%) and significantly greater return than venture capital (9.7%).

Timberland has generated these returns while simultaneously offering strong downside risk protection. In fact, timberland's standard deviation of 11.2% over the last 25 years is significantly lower than the S&P 500 (17.9%), Russell 3000 (17.6%), international stocks (20.3% for the MSCI International Equity Index) and venture capital (28.4%).

¹ Global Forest Resources Assessment 2010, the Food and Agriculture Organization of the United Nations (FAO), Rome 2010.

² The NCREIF Timberland Index is a quarterly time series composite return measure of the investment performance of a large pool of individual timberland properties in the United States acquired in the private market for investment purposes only. All properties in the Timberland Index have been acquired, at least in part, on behalf of tax-exempt institutional investors - the great majority being pension funds and endowments. As such, all properties are held in a fiduciary environment.
Low correlation to other asset classes

The strong returns of timberland have also traditionally exhibited little correlation with other major asset classes, as the table below illustrates. Though the U.S. housing market’s boom and bust cycle has had a powerful effect on correlations among all assets, as market volatility subsides traditional patterns should, based on history, reestablish themselves. In the meantime, trees continue to grow and should position discerning timberland owners for stronger returns going forward.

<table>
<thead>
<tr>
<th>NCREIF Timberland Index 25-Year Correlations</th>
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<tbody>
<tr>
<td>S&amp;P 500®</td>
<td>0.26</td>
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<tr>
<td>Russell 3000</td>
<td>0.26</td>
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<tr>
<td>International Equities (MSCI EAFE)</td>
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<tr>
<td>Long-Term Corporate Bonds</td>
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<td>U.S. Treasury Total Return</td>
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<td>Venture Capital</td>
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<tr>
<td>Private Equity</td>
<td>0.20</td>
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<tr>
<td>NCREIF Commercial Real Estate</td>
<td>0.00</td>
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For period ended 12/31/11. Past performance is not a guarantee of future results.

A hedge against inflation

While providing consistent returns, low volatility and diversification, timberland ownership also demonstrates inflation protection. Over the past quarter-century, timberland returns have exhibited a positive correlation with consumer price inflation, indicating a strong relationship between price levels and timber return performance. As a result, timberland, like many real assets, can provide valuable protection against inflation risk. Timberland also offers a particularly strong hedge against unanticipated inflation — that is, the asset performs well in environments when investors fail to predict rising price levels. Such environments are typically very negative for traditional assets like stocks and bonds, suggesting that an allocation to timberland can significantly reduce a portfolio’s exposure to inflation risk.

When the above factors are combined, the reasons for strong institutional interest in timberland as a cornerstone portfolio investment are clear. But challenges remain in creating the appropriate strategy for today’s market. Increased investor interest in this unique asset class has made the market more competitive. Investing in timber today requires deep market knowledge, global partnerships, and the conviction to capitalize on emerging opportunities.

A changing environment

The market for timberland continues to evolve for both cyclical and structural reasons. Investors need to be aware of these developments, aligning with a manager capable of navigating a complex marketplace. Some of the key factors currently changing the face of timberland investments include:

- **An end to industry restructuring:** During the 1980s and 90s, forest products manufacturing companies decided to sell their timberland and buy the trees back from the new owners. This transition in timberland owners created a new opportunity for institutional timberland investment. Initially, timberland was undervalued, because it was illiquid and not well understood. Additionally, operating companies were subject to different tax rules, which made timberland less valuable to them than to financial investors. As this industry restructuring matured, more buyers have taken advantage of the unique qualities of the asset. Consequently, the market has become increasingly competitive and return expectations on domestic timberland investments have moderated.

- **Shifting macro environment:** The global recession has reduced demand for manufactured products of all types, timber included. The U.S.-based NCREIF index, in particular, has been affected by the prolonged struggles of the American housing market. However, even as developed markets slow, new markets have opened. Growing populations and a burgeoning middle class in the emerging markets are generating increased demand, even as developed economies moderate. Also, as the need for alternative energy continues to be a global concern, wood pellets and biomass are continuing to be pursued aggressively. This growing demand, coupled with the world’s focus on sustainability and better management and protection of our global natural forests, has resulted in the need for improved management of existing timber assets and the development of new sustainable tree farms to meet increasing demand in the future.

- **Moderating returns in U.S. markets:** Domestic timberland investments have provided lower returns in recent years, as the U.S. market has completed its restructuring and the recession has reduced domestic demand for timber products. This shift in returns provided by the domestic market can be seen in the benchmark NCREIF Timberland Index, where returns have fallen from an annual average of 15.8% from 1987-2003 to 8.5% from 2004-2011. In addition, the components of returns have shifted, with less coming from cashflow and more from capital appreciation associated with declining capitalization rates. Nonetheless, though domestic returns have slowed, those investors carving out strategies in international markets have been less exposed to the maturing U.S. market and weakness in U.S. housing.

- **Higher correlations as housing drives all markets:** Though correlation with other major asset classes was largely negative through the 1960s, 1970s and 1980s, since the mid-1990s the relationship has shifted to mildly positive. From the mid-1990s through today, we have seen the pattern of a bull market coinciding with and driven by a housing boom, while the subsequent bust brought correlations across seemingly every major asset class.

All these factors have made it more difficult to take advantage of the investment opportunity that timberland offers — and more critical to work with an experienced, forward-looking manager. The market as a whole may be more competitive than in years past, but astute investors can still find compelling opportunities.
Strategies for today’s markets

The old model for investing in timberland is becoming outdated. Today’s timberland market offers exceptional opportunities for investors who are experienced in and capable of creating and identifying value. With the market evolving, investors must be flexible, and seek out new ways of analyzing, acquiring and managing timber investments. At TIAA-CREF and GreenWood Resources, we have identified five innovative strategies for enhancing returns in timber investments.

- **Create value by enhancing tree growth rates:** The income portion of timberland returns — which comes from growing and harvesting trees — is significant, stable and largely uncorrelated to the returns of other assets. Income has become a less important component of return in developed markets. However, particularly in the developing world, experienced timberland managers can potentially realize real returns of 10% to 15% per year via aggressive, short-rotation plantation strategies, regardless of land price movements.

- **Increase productivity:** Cutting edge forestry management can increase yields by 1% to 3% per year, potentially creating 150 to 450 basis points of incremental yield for investors. Managers with a strong commitment to research and development — and the resources to defer current cash flow for future gains — have the best opportunity to maximize yields.

- **Acquire land at attractive prices:** Land prices have generally risen, but pockets of opportunity remain for disciplined buyers. We see compelling opportunities in the emerging markets, particularly in regions where capital and technology are scarce.

- **Seek out new sources of demand:** Demand for forest products is strong and growing in the emerging markets, particularly Asia. In the developed world, an emerging appetite for biomass as a source of energy has become an important driver of forest product demand. Managers who can identify emerging opportunities early, and position their timberland portfolios appropriately, will flourish in the new environment.

- **Protect assets through sustainable land management:** Environmental stewardship has become a key component of forestland management, as governments all over the world seek higher standards of protection for natural resources. Sustainable practices can enhance performance over time by conserving key assets like land, water, trees and energy, and ensure that timberland remains productive and profitable for generations. In addition, sometimes there are opportunities exist to monetize these environmental assets if they have been well managed.
Invest with leaders

Timberland investing is entering a new era, one that demands knowledge and innovation. Timber managers need to be able to buy opportunistically, manage aggressively and tap into a new global market for forestry products.

TIAA-CREF has been investing in timberland since 1998, building a strong track record for performance and risk management. The timberland group draws on the organization’s robust capabilities in real assets, with expertise in specialized investments like agricultural land, infrastructure and timber. Adding to TIAA’s timberland expertise is majority-owned affiliate GreenWood Resources Inc. (GWR), one of the nation’s leading timberland investment management organizations. GWR specializes an innovative and established independent timber asset manager focused on developing and managing sustainable tree farms and their products, specializing in short-rotation, fast-growing species.

Together, TIAA and GWR own or manage timber investments totaling approximately $1.8 billion, with investments covering 840,000 acres around the world in North America, Latin America, South America, Central Europe, Asia and Oceania. The combination of TIAA and GWR’s experience and scale provides investors with a well-defined strategy for capitalizing on opportunities in the timber asset class, extensive market knowledge, local access through global operations, access to diverse opportunities, and institutional asset management approach that focuses on sustainability and transparency.

Find out more about investing in timberland

To learn more about timberland and TIAA-CREF and GreenWood Resources’s investment approach, please contact us.

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