Five reasons to invest in timberland

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Capital allocation across industries is competitive and, like all alternative asset classes, timberland must earn its position in an institutional portfolio. The case for investing in timberland rests on five principles.



Timberland represents a direct investment in a carbon removal technology. Trees' natural ability to sequester and store carbon is currently the only proven and scalable technology to remove greenhouse

gas emissions from the atmosphere. Furthermore, as demand for low-carbon building materials and sustainable inputs to production increases, demand for timber from sustainably managed forests is expected to grow.

As an asset class, timberland has the lowest average carbon intensity — or net CO_2 emissions per dollar invested — among both alternatives and traditional asset classes. An allocation to timberland, with its net negative carbon profile, can balance more emissions-intensive sectors within an institutional portfolio, helping to achieve climate targets efficiently and without having to unnecessarily sacrifice returns.

Beyond these portfolio-level benefits, timberland's potential to generate verified carbon credits creates additional value for investors. Credits can be monetised to boost financial returns, retained by the landowner to offset their emissions or simply retired. Benefits are quantified through both carbon credit verification and standardised reporting in alignment with EU Taxonomy and IPCC guidelines.



The correlation between timberland returns and inflation has remained reliably positive for many decades, suggesting that as inflation increases timberland performance should keep pace with or even outpace inflation.

What are the underlying drivers behind the positive correlation with inflation? Timberland assets produce the raw materials for many products in the CPI basket of goods (e.g., building materials, furniture, tissue, paper and packaging). Rising inflation reflects increasing prices for these goods and an ability to pay more for timber. Higher prices for timber increase cash yields and ultimately lead to higher values for the underlying asset, supporting the positive correlation between inflation and timberland performance. Higher timber prices can also increase the capital appreciation component of return as they are incorporated into asset valuations.



Investors seek asset classes with low and negative correlations to improve diversification and reduce risk to improve portfolio efficiency. Over the past several decades, U.S. timberland returns

have exhibited limited correlation with traditional asset classes.

Research continues to show that private investments in relatively illiquid categories of real assets — timberland, farmland and commercial real estate — have exhibited low or negative correlations to equities and fixed income. Indeed, between 1992 and 2020 and in the years since the global financial crisis (2008-2020) low and negative correlations between timberland returns and traditional asset classes show that timberland provided efficiency gains for institutional investors.

One of the main drivers behind this lack of correlation is that a portion of the investment return is generated through biological growth, which is independent of market movements.

Payments for ecosystem services, like carbon credits, provide an additional source of uncorrelated return and have the potential to enhance diversification benefits from timberland investment.



Our analysis shows that over the past three decades, U.S. timberland returns have been highly competitive with traditional asset classes. For the period 1992 – 2020 and across a range of asset classes, timberland

outperformed U.S. and non-U.S. fixed income and non-U.S. equities by between 177 and 377 basis points. On a risk-adjusted return basis, timberland outperformed U.S. equities.

We also found that the cash yield component of total timberland return tends to be resilient over time independent of economic cycles, while the capital appreciation component of return tends to be more sensitive to economic cycles. However, as a store of value, timberland has been resilient over the last four U.S. recessions.

This long-term resilience is the result of the dual sources of return (capital appreciation and cash yield) and the fact that tree growth is not affected by market volatility or business cycles. The steady increase in commercial timber volume year after

year is independent of variable economic conditions. Additionally, if timber pricing in a given quarter or micro market is unfavorable, timberland owners may have the option to delay harvest, storing the timber "on the stump" until prices improve.



Investing in timberland is a fundamental way to benefit from growing worldwide demand for wood. As populations expand and become wealthier, their large and growing demand for wood provides attractive

opportunities for timberland investors in key geographies.

In both emerging and developed market countries, the world's expanding population and economic growth support the demand for wood and a wide range of forest products.

Beyond 2020, GDP per capita is expected to increase, rising from about US\$10,500 today to over US\$16,500 by 2040. Increases in per capita income are expected to be greatest in emerging market countries like India and China, where demand for forest products for domestic consumption and export is expected to rise. In developed markets like the U.S. and E.U., economic growth is also expected to increase demand for wood, increasingly as a low-carbon input to production.



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About Nuveen

Nuveen is the global asset management arm of TIAA, managing \$1.2 trillion in assets for over 1,200 institutional clients in 40 countries worldwide, across fixed income, equities, alternatives and solutions-based strategies (as at 30 Sept 2021).

Nuveen Natural Capital is a land-focused investment manager with \$9.4 billion of assets under management. Managing assets across diverse geographies, crop and tree species and operating strategies, we provide investors access to global farmland and timberland opportunities. With over 30 years of investment experience and more than 230 employees located across 10 countries globally, the platform offers unparalleled geographic reach married with deep sector expertise.

Discover opportunities in timberland at nuveen.com/realassets

Timberland investments are illiquid and their value is dependent on many conditions beyond the control of portfolio managers. Estimates of timber yields associated with timber properties may be inaccurate, and unique varieties of plant materials are integral to the success of timber operations; such material may not always be available in sufficient quantity or quality. Governmental laws, rules and regulations may impact the ability of the timber investments to develop plantations in a profitable manner. Investments will be subject to risks generally associated with the ownership of real estate-related assets and foreign investing, including changes in economic conditions, currency values, environmental risks, the cost of and ability to obtain insurance and risks related to leasing of properties. Past performance is no guarantee of future returns. GAR-2004155PR-00222X