# TIMBERLAND
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# Trees, Farms and Office Buildings:
# A Quick Look at Real Assets'
# 5-Year Record, 2021-2025

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# Introduction

The past five years confronted investors with a succession of extraordinary disruptions, or "black swan" events. The Covid-19 pandemic triggered sweeping lockdowns and restrictions, producing a sharp global economic downturn. What followed was an equally dramatic policy response, through monetary easing and record levels of government spending, that drove inflation to heights not seen in decades across many developed economies. Against this backdrop came a rapid surge in interest rates and the eruption of several armed conflicts. These are, in principle, precisely the conditions under which real assets are expected to demonstrate their value.

Many investors allocate portions of their portfolios to real assets on the premise that they can serve as a counterbalance to stocks and bonds. The thesis holds that real assets such as commercial real estate, farmland, and timberland should retain their value and continue generating income through periods of market volatility and economic stress.

Do the results bear this out? The macroeconomic disruptions of the past five years are probably as demanding a stress test as any recent period can offer. In this paper, we compare the performance of three major real assets classes, commercial real estate, farmland, and timberland, from 2021 through 2025; identify common themes and meaningful divergences; and offer perspective on how a real asset allocation might be positioned within a broader portfolio.

# Five-Year Returns of Real Estate, Farmland, and Timberland

Our analysis focuses on private investments in commercial real estate, farmland, and timberland in the United States, as tracked by the National Council of Real Estate Fiduciaries (NCREIF). Infrastructure investments would be a natural addition to this analysis; however, the absence of an established benchmark for the category prevents meaningful comparison. (see call out box).

**Why no Inclusion of Infrastructure**

Until recently, a quality benchmark for private equity investments in infrastructure did not exist. Then on July 2025, Wilshire Indices partnered with GCM Grosvenor to release the *FT Wilshire Private Markets Infrastructure Index*. However, history of this index only goes back to June 30, 2022, which is not deep enough for be included in our 2021-2025 performance review.

Figure 1 shows the 1-, 3- and 5-year returns through December 31, 2025, across the three real asset classes. Timberland posted the strongest five-year return at 8.58%. Real estate and farmland returned 3.90% and 4.20% respectively, roughly half that level. Despite the lower total returns, real estate and farmland generated higher income yields: 4.41% and 3.22%, respectively, compared to timberland's 2.54% (Table 1). The divergence in outcomes across these three categories reflects a distinct set of macroeconomic forces impacting each asset class.

Figure 1.
**1-, 3- and 5-Year Return of Real Assets Ending Dec. 31, 2025**
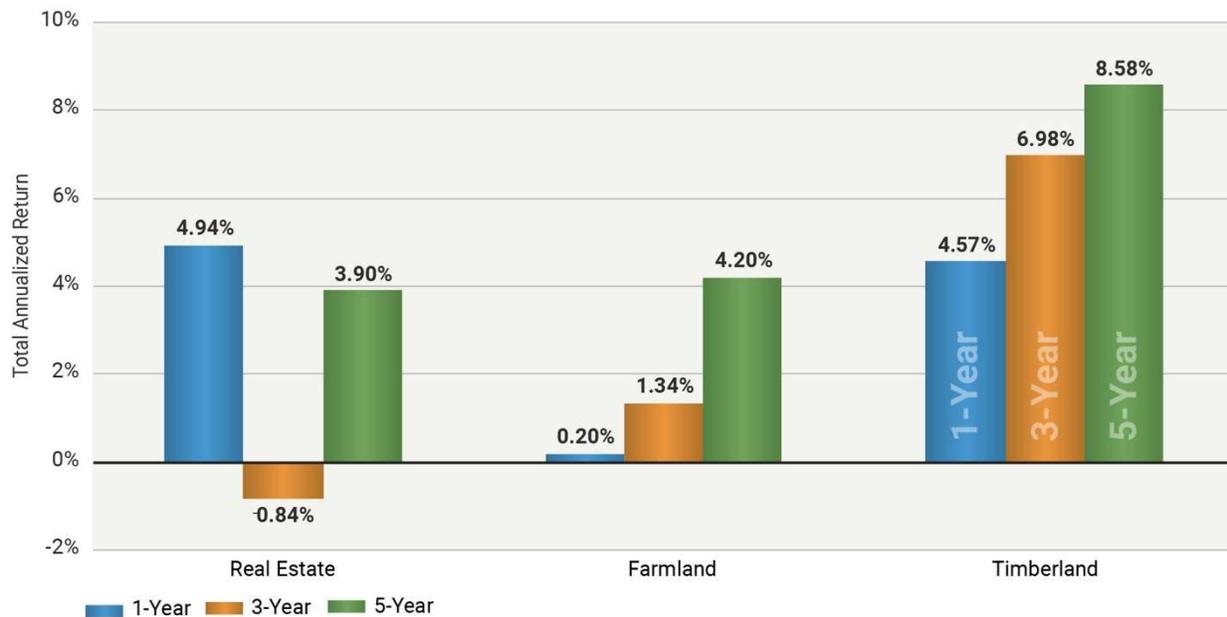


Sources: National Council of Real Estate Fiduciaries (NCREIF) National Property Index (Expanded), NCREIF Farmland Index, and NCRIEF Timberland Property Index.

## Real Estate

The lackluster returns from commercial real estate over the five-year period were driven by three main factors.

First, the Covid-19 pandemic led to a severe and lasting decline in office occupancy. Because office buildings represent a core component of many real estate funds, the fall in both the value and lease income of office assets weighed heavily on overall sector performance. Retail properties, including malls and shopping centers, experienced a comparable deterioration.

Second, the rapid rise in interest rates following the pandemic created significant stress across leveraged real estate portfolios. Real estate managers tend to use debt more aggressively than timberland or farmland managers, with leverage ratios of 40% or more common among real estate funds. As rates rose,

debt rollover became untenable for a meaningful portion of the market. Delinquency rates on office mortgages securitized into commercial mortgage-backed securities (CMBS) reached 11.8% in October 2025, a level exceeding what was recorded during the Global Financial Crisis.[1] As a consequence, some real estate owners defaulted or were forced to sell at discounted prices.

Third, several real estate categories experienced overbuilding during the pandemic years of 2021 and 2022. Apartments, warehouses, and laboratory construction expanded to record levels, producing excess capacity and placing downward pressure on rents and leases through 2024 and 2025.

More recently, conditions have begun to shift. Interest rates have reversed course, and their decline has helped stabilize many real estate markets. Office, apartments, and retail properties, appear to have turned a corner. At the same time, strong growth in AI datacenter demand is drawing significant capital investment and contributing to improved returns. These trends are reflected in the 1-year return for the period ending December 31, 2025, 4.94%, a measurable improvement over the 3-year figure of -0.84%.

## Farmland

Agricultural investments produced similarly restrained returns over the five-year period. Higher interest rates were a contributing factor, but the more significant headwind came from a broad-based decline in agricultural commodity prices following the pandemic. During the pandemic itself, panic buying and supply chain dislocations drove markets for many crops sharply higher. What followed was a difficult correction. Elevated food prices drew substantial capital into farmland, and food production expanded, but that increased output arrived at a time of slowing global economic growth. When supply outpaced demand in 2023, prices fell, in some cases severely. Cotton prices declined from USD $164 per ton in May 2022 to $74 by the end of 2025, a 55% decline.[2] Corn fell 41% from $348 per ton in April 2022 to $205 by December of 2025. Over the same period, soybeans declined from $618 to $392 per ton, a 37% reduction.

There are notable exceptions. Coffee, cocoa, and beef have remained at near record levels. Those exceptions aside, weak markets for many agricultural commodities compressed farm revenues while operating costs, including fertilizer, pesticides, and farm equipment, remained elevated. With many commodity prices still below their prior peaks, farmland's 1-year return through 2025 was effectively zero, at 0.20%, below the 3-year return of 1.34%.

## Timberland

Among the three real assets covered by NCREIF, timberland delivered the strongest performance over the past five years. Over extended time horizons, timberland tends to perform roughly in line with farmland and commercial real estate, generating high single-digit annual returns. Several factors account for its outperformance over the 2021-2025 period.

Timberland investors generally employ less leverage than their counterparts in commercial real estate. NCREIF Timberland Fund and Separate Account Index holdings, for example, carried a net leverage ratio of just 6.1% against net asset value. This lower debt load made timberland investments considerably less

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[1] Wolf Street, "Office CMBS Delinquency Rate Hits Record 11.8%, Much Worse than Financial Crisis. Multifamily Delinquencies Soar to 7.1%." (Nov. 1, 2025) www.wolfstreet.com

[2] Source: International Monetary Fund

sensitive to rising interest rates; few investors were pressured to sell assets at a discount because of an inability to service their obligations.

End-use markets for wood products also provided meaningful support to timberland investments. As the pandemic-era restrictions lifted, large segments of the urban population relocated to suburban and exurban areas. Homebuilders responded by expanding single-family home construction. The concurrent shift to remote work encouraged homeowners to undertake significant renovation and expansion projects. Demand for lumber, plywood and oriented strandboard (OSB) rose sharply. Lumber prices, for some grades, reached above $1,400 per thousand board feet, a record level relative to a more typical level near $400. As sawmills ramped up production to capitalize on record-high lumber prices, timber markets responded in kind. The average price of pine sawtimber in the U.S. South reached $27.91 per ton in the first quarter of 2022, the highest level since the Global Financial Crisis of 2008. Elevated timber prices supported both the income and the asset values of timberland investments across the United States through 2023.

Since 2024, lumber prices have moderated against a softer housing market. Housing starts and home repair and remodeling expenditures declined as interest rates rose, and sawmill production followed. Timber prices retreated across a number of wood markets. Consequently, Timberland's 1-year return through 2025 was 4.57%, down from the 5-year figure of 8.58%. That said, timberland's performance remained stronger than lumber price trends alone might suggest for two reasons. First, timber prices did not fall as sharply as lumber prices. Douglas fir sawlogs, a bellwether species in the U.S. Pacific Northwest, averaged $764 per thousand board feet (MBF) in 2025.[3] While that represents a decline from the $917/MBF recorded in 2022, it remains 18% above the pre-pandemic level of $649 in 2019. Similarly, southern pine sawtimber stumpage in 2025 averaged $24.88 a ton, modestly above the pre-pandemic level of $24.31 in 2019. Second, investor optimism around the expansion of natural capital markets, has helped compensate, in part, for weaker timber revenues.

## Risk and Correlation

Total return is a primary consideration for most investors. Also important, however, are risk characteristics and portfolio diversification.  In both respects, timberland demonstrated advantages over the 2021-2025 period, offering lower return volatility while maintaining a weak correlation with commercial real estate.

Table 1 shows the 5-year risk measures for all three real asset classes, expressed by the standard deviation of annual returns and the Sharpe ratio. The Sharpe ratio measures risk-adjusted performance, calculated as the return above the risk-free rate divided by the standard deviation. Over the 5-year period, timberland exhibited the lowest standard deviation, followed closely by farmland. Because timberland has historically served as an effective hedge against inflation, it was well positioned to perform through an environment characterized by elevated inflation and rising interest rates. The result was a Sharpe ratio superior to both real estate and farmland.

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[3]    Source: Forest Economic Advisors, *Timber Quarterly Forecast 2025 Q4* (December 3, 2025)

Table 1.
**Risk and Return of Real Assets (2021-2025)**

| Jan. 1, 2021 – Dec. 31, 2025 Period | Real Estate | Farmland | Timberland |
|---|---|---|---|
| **5-Year Total Return** 2021-2025 (annualized) | 3.90% | 4.20% | 8.58% |
| **5-Year Income Return** 2021-2025 (annualized) | 4.41% | 3.22% | 2.54% |
| **Risk** Standard Deviation of Annual Returns | 8.14% | 4.61% | 3.10% |
| **Risk-Adjusted Performance** Sharpe Ratio (higher the better) | 0.09 | 0.22 | 1.74 |

**Sharpe ratio =** (return − risk free rate)/(standard deviation) where the risk-free rate is the annual return of 90-day US Treasury Bills over the 2021-2025 period.
Sources: NCREIF, U.S. Treasury

Return correlation is another important consideration in portfolio construction. Low or negative correlation between holdings reduces collective portfolio risk. Timberland and farmland exhibited a close correlation of 0.88 over the 2021-2025 period (Table 2). By contrast, timberland and real estate showed a weak correlation of 0.38. For context, a correlation value of 1.0 represents perfect co-movement; a correlation of zero indicates that two variables move independently of one another.

Table 2.
**Correlation of Annual Returns Between Real Assets**

| Correlation 2021-2025 | Real Estate | Farmland | Timberland |
|---|---|---|---|
| Real Estate | 1.00 | 0.38 | 0.06 |
| Farmland | 0.38 | 1.00 | 0.88 |
| Timberland | 0.06 | 0.88 | 1.00 |

**Correlation value:**
1.0 = perfectly aligned movements
0.0 = independent movement
-1.0 = perfectly opposing movements

Sources: NCREIF

The combination of weak correlation between timberland and real estate, and timberland's relatively low return volatility, suggests that including timberland assets in a real asset portfolio could improve the portfolio's risk-adjusted performance, more so than a portfolio of commercial real estate alone.

# Capital Preservation

Some investors allocate to real assets in part as a defense against significant capital loss during periods of economic stress and market uncertainty. To examine the capital resilience of each real asset class, we calculated the rolling 4-quarter appreciation return, also known as capital return, of real estate, farmland, and timberland over the 5-year period, as measured by the NCREIF indices (Figure 2). The appreciation return captures both the realized and unrealized capital gains and, therefore, reflects the rise or fall of the market value of an asset.

The chart in Figure 2 shows that timberland maintained the most stable capital values through the period of economic and market volatility. Its largest annual capital loss was -1.23%, recorded in the four quarters ending in the first quarter of 2021. Commercial real estate, in contrast, experienced a -11.73% capital return for the trailing four quarters ending in the fourth quarter of 2023.

Figure 2.

**Rolling 4-Quarter Appreciation Return of Real Assets to Track Capital Gains or Losses**
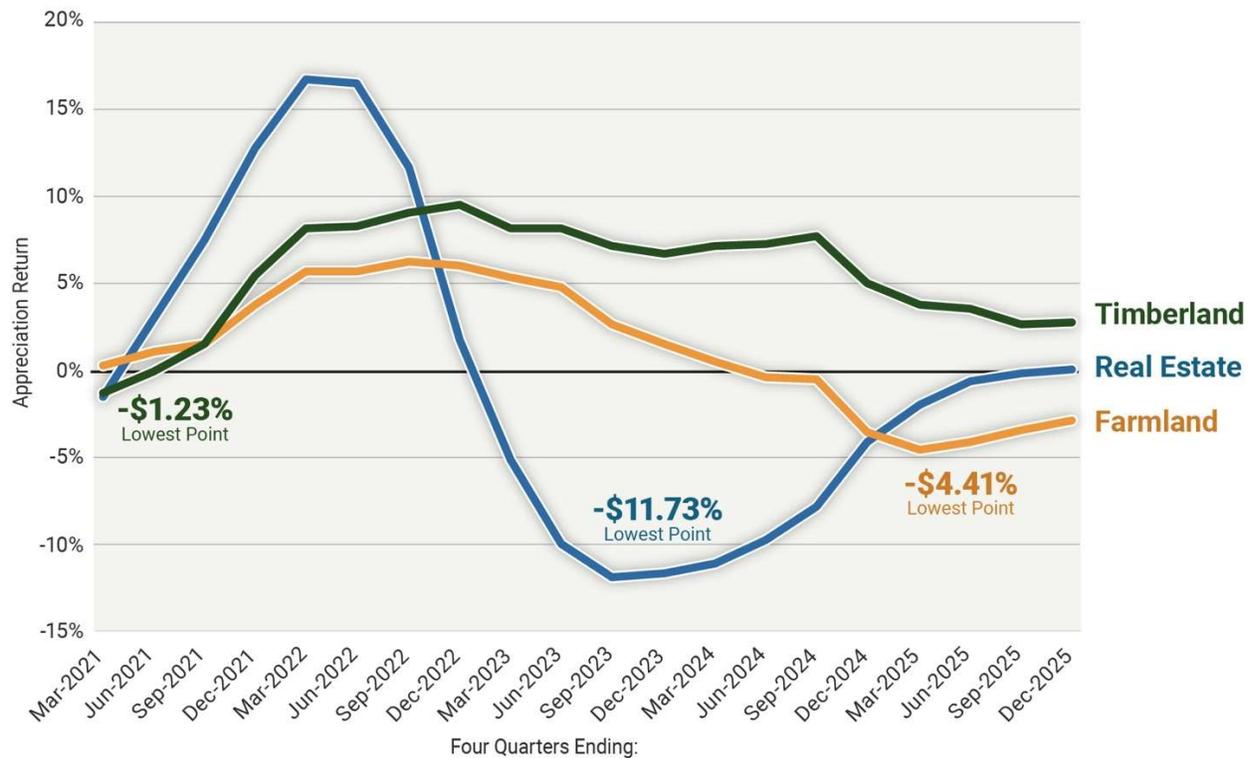


Sources: NCREIF

It is worth noting that these losses are modest relative to what investors in publicly traded equities experienced over the same period. The S&P 500, for example, fell 34% over the span of a single month beginning February 19, 2020, in the early weeks of the Covid-19 lockdowns. More recently, the index declined 19% over the course of 48 trading days beginning February 2, 2025, as markets reacted to the announcement of broad-based tariffs by the Trump Administration. Measured against equities, real assets provided a meaningful degree of capital protection.

# Risk and Correlation Against Stocks and Bonds

Many investors do not look to real assets to replace their equity or fixed income allocations. Rather, it is the lower risk profile and low correlation of real assets relative to stocks and bonds that tends to attract investors. Table 3 illustrates how a synthetic real assets portfolio, weighted 50% real estate,25% farmland, and 25% timberland, would have performed from 2021 through 2025 against stocks and bonds.

Over the period, such a real assets portfolio would have returned 5.2%. That falls short of equities, 14.4% for the S&P 500 and 12.2% for the MSCI World Index but compares favorably with long-term U.S. government bonds (-2.34%) and AAA corporate bonds ( -7.23%). More importantly, the risk profile of the real asset portfolio, as measured by the standard deviation of annual returns, was substantially lower than in either stocks or bonds over the period.

Table 3.
**Risk and Return of Real Assets, Stocks and Bonds (2021-2025)**

| Jan. 1, 2021 – Dec. 31, 2025 Period | Real Assets (RE, ag, timber) | Long-Term Govt Bonds | Corporate Bonds | S&P 500 US Large Cap | MSCI World Global Stocks |
|---|---|---|---|---|---|
| **5-Year Total Return** 2021-2025 (annualized) | 5.23% | -2.34% | -7.23% | 14.41% | 12.15% |
| **Risk** Standard Deviation of Annual Returns | 5.35% | 10.35% | 13.77% | 19.45% | 17.75% |
| **Risk-Adjusted Performance** Sharpe Ratio (higher the better) | 0.38 | -0.53 | -0.76 | 0.58 | 0.50 |

**Real Assets:** 50%:25%:25% weighted blend of the NCREIF National Property Index (expanded), the NCREIF Farmland Index, and the NCREIF Timberland Property Index.

**Long-Term Govt Bonds:** Bloomberg US Long Treasury Bond Index

**Corporate Bonds:** ICE BofA AAA US Corporate Bond Index

**Sharpe ratio =** (return − risk free rate)/(standard deviation) where the risk-free rate is the annual return of 90-day US Treasury Bills over the 2021-2025 period.

Sources: NCREIF, U.S. Treasury

Complementing this low risk profile is a low correlation with other asset classes. Between 2021 and 2025, a portfolio of real estate, farmland, and timberland assets frequently moved in the opposite direction from stocks and bonds (see Table 4). During this period of high market volatility, an allocation to real assets could have served as a counterweight to equity and fixed income holdings, and, in doing so, improved the risk-adjusted return of the whole portfolio. To test this, we created two synthetic portfolios: one portfolio held only stocks and bonds in a 60:40 ratio; the other portfolio added a 15% allocation to real assets. In comparing their 5-year performance through 2025, we see that adding real assets investments was moderately accretive to return yet lowered risk (Table 5). This improved the Sharpe ratio from 0.19 to 0.23, which suggests adding real assets to a portfolio could have enhanced the risk-adjusted return amid the market volatility faced in 2021-2025.

Table 4.

**Correlation of a Real Assets Portfolio of Real Estate, Farmland and Timberland Against Stocks and Bonds (2021-2025)**

| Stock or Bond Index | Correlation with Real Assets |
|---|---|
| **Long-Term Government Bonds**<br>Bloomberg US Long Treasury Bond Index | -0.55 |
| **Corporate Bonds**<br>ICE BofA AAA US Corporate Bond Index | -0.44 |
| **Large Cap U.S. Stocks**<br>Standard & Poor's 500 | -0.24 |
| **Global Stocks**<br>MSCI World | -0.33 |

**Real Assets:** 50%:25%:25% weighted blend of NCREIF National Property Index (expanded), NCREIF Farmland Index, and NCREIF Timberland Property Index, respectively.

**Correlation value:**
  1.0 = perfectly aligned movements
  0.0 = independent movement
 -1.0 = perfectly opposing movements

Sources: NCREIF, U.S. Treasury

Table 5.

**Risk and Return of Portfolios With and Without Real Assets (2021-2025)**

| Jan 1, 2021 – Dec 31, 2025 Period | Stocks & Bonds Only Portfolio | Stocks & Bonds w/ Real Assets |
|---|---|---|
| | 60% stocks : 40% bonds | 15% Real Assets : 85% stocks & bonds |
| **5-Year Return**<br>2021-2025 (annualized) | 6.13% | 6.19% |
| **Risk**<br>Standard Deviation of Annual Returns | 15.59% | 12.99% |
| **Risk-Adjusted Performance**<br>Sharpe Ratio (higher the better) | 0.19 | 0.23 |

**Stock Portfolio:** 50:50 allocation to S&P 500 and MSCI World Index

**Bond Portfolio:** 50:50 allocation to Bloomberg US Long Treasury Bond Index and ICE BofA AAA US Corporate Bond Index

**Real Assets Portfolio:** 50:25:25 allocation to NCREIF National Property Index (expanded), NCREIF Farmland Index and NCREIF Timberland Property Index

**Sharpe ratio** = (return – risk free rate)/(standard deviation) where the risk-free rate is the annual return of 90-day US Treasury Bills over the 2021-2025 period.

Sources: NCREIF, U.S. Treasury, S&P Global, Bloomberg, and ICE

# Conclusions and Recommendations

The period from 2021 and 2025 was one of sustained market turbulence and macroeconomic stress. Real assets demonstrated resilience through that environment, but not uniformly. Commercial real estate, farmland, and timberland investments, as represented by their respective NCREIF indices, each responded differently to the economic forces set in motion by the pandemic, the subsequent rise in interest rates, and elevated inflation. Those differences in performance are not merely historical; they represent an ongoing source of diversification within real assets.

Over the 5-year period through 2025, a portfolio of 100% real estate assets would have faced a worst-case 1-year capital loss of -12% and an annual return standard deviation (risk level) of 8.14%. A blended portfolio, weighted 50%/25%/25% to real estate, farmland, and timberland respectively, would have limited its worst annual capital loss to -3.7%, with a standard deviation of 5.35%, roughly one-third lower than the real estate-only portfolio.

The idiosyncratic and systemic risks of recent years are unlikely to be fully resolved in the near term. Because the future remains uncertain, investors are best served by maintaining a balanced, well-diversified portfolio. Given the strong performance of equity markets in recent years, many portfolios may be overweight in stocks, a condition that warrants a careful review. We recommend establishing a meaningful allocation to real assets, including commercial real estate, farmland, and timberland. Collectively, real assets offer the capacity to generate income, maintain low correlation to stocks and bonds, support capital preservation, and provide competitive risk-adjusted returns over the long term.

## For questions and additional information, contact:

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