Can impact strategies realize financial and environmental goals?

Judging by growing interest in land-based assets, investors certainly think so

A growing number of investors are looking to incorporate ESG-focused investments into portfolios, and the market for environmentally themed impact investing is on the up. However, many institutional investors remain unsure of how to best incorporate environmental targets into investment models.

     The traditional portfolio-level benefits of real assets are well-known – meaningful diversification through their inherent lack of correlation with capital market cycles. Farmland and timberland, for example, often generate long-term, steady income flows. In many cases, these income streams have inflation-hedging properties, either linked directly to inflation or as a component of price indexes. Often these land-based assets provide essential ecosystem services and are primary inputs to production, like food, fiber and timber.

     These traditional investment characteristics can be quantified with standard financial modeling frameworks, such as portfolio allocation frameworks, but what about investors who have both ESG and financial objectives – can traditional models be adapted to incorporate evolving investor demands?

What can environmental impact investing look like?

Impact strategies seek to achieve financial returns alongside other goals, which can vary and may include a range of social and environmental targets. The strategy takes a direct approach to investments, seeking to link capital inputs and management to positively affect outcomes. Investors have many other routes in which to incorporate an environmental focus, for example, by identifying assets that demonstrate best-in-class characteristics.

     A direct approach has its strengths, with investors allocating capital and resources to affect growth and outcomes tied to their specific investment goals. However, an impact strategy such as the ones used by Nuveen Natural Capital demands visibility to the assets and local expertise in the investment regions. This is particularly the case when investing in real assets, which will vary in needs and regulatory concerns across regions.

How can real assets help with environmental goals?

While environmental objectives for real assets can include land conservation, biodiversity protection, or improvements in water quality and quantity, increasingly, climate objectives are driving investor interest in land-based assets.

Gwen Busby, PhD
Head of Research and Strategy
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Management focused on reducing carbon emissions and increasing carbon sequestration in investments can lower carbon intensity of an entire portfolio, a force that will shape the structure of environmental investing into the future.

     Real assets offer characteristics that complement environmentally focused goals, while maintaining the fiduciary benefits of portfolio diversification, meaning there is the potential for impact strategies to provide further financial returns through environmental growth targets.

Real assets: the carbon angle

There is a broad understanding that atmospheric concentrations of carbon dioxide need to be reduced to avoid or mitigate the negative impacts of climate change. Increasing concentrations of CO_2 in the atmosphere are causing rising global temperatures. This in turn is causing more frequent and intense climate and weather extremes, and widespread negative impacts on agriculture, forestry, and urban infrastructure. To address this global challenge and achieve the Paris Climate Agreement's central goal of holding warming below 2°C requires emissions reductions across supply chains in addition to carbon sequestration projects.

     Climate research published by the UN Climate Action Summit noted over one-third of the cost-effective, scalable climate mitigation opportunities can come from forests, food, and land. These climate mitigation benefits can be realized by investing in nature-based climate solutions, offering investors in land-based assets the potential to generate verified carbon credits from their investments.

     Carbon credit markets create a mechanism for investors in land-based assets to realize the carbon value from investments in timberland and farmland. Carbon credits can be generated through timberland and farmland strategies that reduce greenhouse gas emissions and/or sequester and store CO_2 from the atmosphere. To quantify

the climate benefits of these changes, there are established crediting standards and mechanisms for monitoring, reporting, and independent verification.

As long-term efforts to decarbonize the global economy are underway, carbon credits can be used to help corporates and institutions efficiently progress toward climate targets. In the short-term, carbon credits can be used to complement emission reduction pathways, by compensating or offsetting hard-to-abate emissions. And in the long-term, as production systems and supply chains decarbonize, carbon credits can be used balance residual emissions in order to achieve net zero targets in 2050.
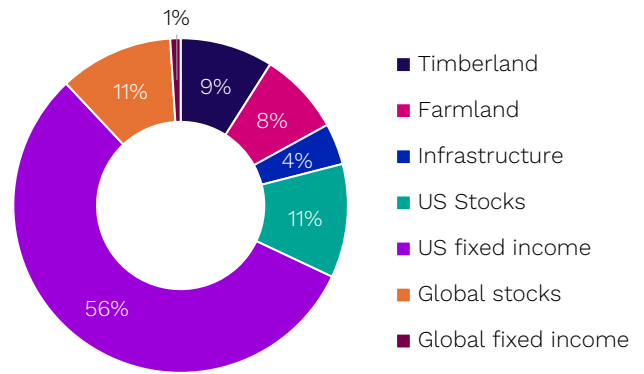
Optimizing portfolios for carbon

Creating an optimal portfolio to achieve environmental targets does not have to demand a sacrifice in returns or a dramatic shift in portfolio allocation. According to our recent research, an allocation of 20% to real assets has the potential to reach net zero or even net negative carbon emissions for a portfolio.

Timberland is currently the only scalable technology and investment that can sequester and store carbon. Our optimization model demonstrates a portfolio which is 80% invested in traditional equities and bonds and 20% in real assets has the ability to target environmental goals without sacrificing financial returns (see figure).

Real assets offer significant diversification benefits to a portfolio, with the ability to offer mitigating traits to offset the impact a traditional portfolio may have in a down market. Along with the economic benefits of these assets, they also provide a natural avenue for exploring impact investing with environmental goals.

| **Net zero portfolio with highest Sharpe ratio***

- Timberland
- Farmland
- Infrastructure
- US Stocks
- US fixed income
- Global stocks
- Global fixed income

Data are based on rolling one-year total returns, calculated on a quarterly basis for periods ended 31 Dec 1991 through 31 Dec 2020. See notes to Figure 1 for representative indexes and carbon intensity information.

Mean-variance optimization based on historical returns is intended for illustration purposes only and should not be considered investment recommendations.

Sources: NCREIF, FactSet, Nuveen, LLC.

Past performance is no guarantee of future results.

Full data set can be found in Nuveen "Think carbon optimization"

*Figures may not sum to 100% due to rounding

Gwen Busby is the Head of Research and Strategy for Nuveen Natural Capital and focuses on natural capital market analysis and portfolio allocation modeling. Previously, Gwen worked as a professor where she focused on stochastic modeling and risk analysis in forest and natural resource management. Gwen's work has appeared in journals and presentations at national and international environmental and economics conferences.

Nuveen Natural Capital is a land-focused investment manager with $9.7bn of assets under management as of September 30, 2022. Managing assets across diverse geographies, crop and tree species, commodity, value-add and environmental markets, and operating strategies, we provide investors access to global farmland and timberland opportunities. With over 35 years of investment experience and more than 200 employees located across 10 countries globally, the platform offers unparalleled geographic reach married with deep sector expertise.