

Diversifying with natural capital

Improving efficiency in traditional stock-bond portfolios through diversification may be limited because the average correlation across securities can be high. In contrast, the lack of correlation across diverse natural capital investment strategies offers great potential for efficiency improvements via portfolio design.

Diversifying a natural capital portfolio can help investors reduce risks associated with timberland and farmland, such as weather, operating strategy and crop type. But the asset class can also address more common portfolio risks such as policy and geopolitical dynamics through diversification (Figure 1).

Geographic and political risks can be an opportunity

Investing across geographies can offer investors a way to diversify geopolitical and policy risks. Geopolitical risks linked to diplomatic or military conflict can result in trade restrictions between countries. Recent examples include sanctions against Russian exports after the invasion of Ukraine in 2022 and China's restrictions on specific Australian imports in 2020. Diplomatic tensions between major nations can influence and disrupt global commodity trade flows.

A recent example of geopolitical risk impacting farmland is the ongoing diplomatic tension between the U.S. and China. U.S. exports of soybeans to China have decreased as a result of trade restrictions, China's efforts to diversify sources of agricultural imports, and the availability of alternative, price-competitive supplies.

With demand from China shifting away from the U.S., U.S. row crop farmland experienced lower appreciation due to reduced export demand and lower U.S. soybean prices. Simultaneously, Chinese demand for Brazilian soybeans increased, lifting local prices and producer profitability, spurring higher farmland appreciation.

Between 2016 and 2018, Brazil's share of China's soybean market increased from 33% to 74%. In this instance, having Brazilian farmland exposure in a portfolio alongside U.S. farmland helped mitigate the negative impact of these trade tensions.

Given the high volumes of agricultural and wood products traded internationally, trade restrictions like tariffs, quotas or import bans can have a major impact on markets and pricing in a single producing region.

Figure 1: Sources of diversification

SOURCE	RISK MITIGATED	EXAMPLES OF DIVERSIFICATION	
Geopolitical	Geopolitical	Developed	US; Australia; New Zealand; Europe
	Policy	Emerging	Brazil; Chile; Uruguay; Paraguay; Costa Rica; Panama
	Geography	Climate	Climatic zone
Hazard exposure			Likelihood of extreme weather events (e.g., drought; flooding; wildfire; hurricanes/tropical storms)
Growth and yield		Growing season	Seasonality in northern and southern hemispheres
Market	Price	Commodity	Row crops (e.g., barley, beans, chickpeas, corn, cotton, rapeseed, rice, sorghum, soybeans, sunflower, wheat, sugarcane) Softwood and hardwood species for pulp and lumber markets (e.g., pine, Douglas-fir, hemlock, eucalyptus, birch)
		Demand	High-value
Crop/species		Environmental	Carbon; ecological restoration; biodiversity; conservation

Source: NNC.

Varied climates can provide added farmland diversification

Climate risk is a key determinant of crop growth and yield, directly affecting natural capital portfolio returns, and can also be mitigated through geographic diversification. Annual crop yields are highly dependent on intra-year weather conditions as well as longer-term trends.

Severe weather patterns can prove detrimental to crop yields, and have the potential to negatively affect portfolios. However, different growing seasons and harvesting windows provide portfolios another source of diversification for farmland investments. Seasonality can vary across regions within the same country and more significantly across the northern and southern hemispheres.

For example, crops in California have complementary harvesting windows for select permanent crops compared to Chile. Producers in the southern hemisphere can at times receive a premium price on their crop when northern hemisphere supplies are constrained by seasonality of production.

Climate change is increasing the frequency and severity of extreme weather events like drought, heat waves, wildfire and flooding, with some regions more affected than others. A diversified portfolio, together with

active management to mitigate impacts of extreme events when they occur, can insulate against the effects of extreme weather events on investment performance.

Timberland crop diversification can offer correlation benefits

Different agricultural crop types and tree species supply a wide range of end-use markets, creating a second source of diversification in natural capital portfolios. End-use markets span commodity markets—for example, sugar, grains, building materials and pulp—and high-value crop and solidwood product markets—such as wine grapes, pistachios and teak.

Diverse timber markets feature unique demand drivers, consumer markets and supply conditions. Softwood sawlogs, like pine, Douglas-fir and hemlock, are typically milled into lumber and used in the housing or construction sectors. Eucalyptus logs in Latin America are primarily used to produce pulp, which is exported and made into tissue products. High-value hardwoods like teak are used to produce furniture, case goods and decking. As a result of these diverse markets, we observe low or negative correlations across a range of investments.

Exposure to environmental markets can provide additional sources of uncorrelated return for timberland and

farmland investors. For example, forest management for carbon alongside commercial timber production can provide exposure to verified carbon credit markets. Beyond market diversification, allocations to low carbon, land-based asset classes can reduce carbon intensity of traditional portfolios. This carbon diversification can provide a hedge against carbon-intensive allocations and reduce potential volatility of an institutional portfolio as countries and economies decarbonise.

What to consider when allocating to natural capital

Natural capital assets such as farmland and timberland have long delivered high-level diversification to portfolios. However, when looking at how the assets vary from region to region, it becomes clear the level of diversity that is available within natural capital.

It is possible to build diversified timberland and farmland portfolios across crop types within a single country and/or regions. Geographies where meaningful diversification within a farmland portfolio is feasible include the U.S., California, Brazil, Europe and Australia. Similarly for timberland, meaningful diversification is achievable within the U.S., Brazil and Australia.

An asset manager with a proven record of selecting and maintaining assets on a global scale across crop types and tree species has the potential to overcome the challenges of natural capital and tap into the diversification benefits of the asset class.

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