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Agriculture: A New Asset Class Presents Opportunities for Institutional Investors

by Philippe de Lapérouse, Managing Director of HighQuest Partners

Over the last decade, there has been an increase in interest amongst institutional investors to invest in food and agriculture via a number of different vehicles, including alternative real asset funds, private equity and venture capital. While expectations of a global food crisis have moved off the front pages for the time being given the softening of crop prices over the past two years, interest in the sector remains strong due to a number of key attributes which this sector provides investors, including:

- strong long-term fundamentals based on secular trends (climate change, increased urbanization and rising GDP in emerging markets);
- attractive historical returns (based on a mix of current income and capital appreciation);
- uncorrelated returns with other financial instruments;
- a strong inflation hedge;
- capital preservation.

While institutional investors have increasingly been making allocations to ag venture capital and private equity, to date the major focus of their allocations to the ag sector has been real assets. Similar to large family offices, specialist hedge funds, pure-play public companies and sovereign wealth funds, they have been investing in funds acquiring farmland in North and South America, Australia and certain markets in Eastern Europe, as well as investing in projects managing long-term leaseholds in Eastern Europe and Sub-Saharan Africa. Investment strategies range from conservative (e.g., currently productive permanent cropland in the U.S.) to aggressive (e.g., developing raw land in emerging agricultural regions for crop production, as well as investing in ag tech ventures).

Following new rulings instituted in the U.S. in 1974 by the Internal Revenue Service (IRS) and the passage of Employee Retirement Income Security Act (ERISA), qualified pension plans were mandated to diversify a certain portion of their investments beyond their traditional allocation to fixed income securities to alternative investment vehicles (including equities and commercial real

estate) in order to minimize the risk of large losses. Large pension funds in the U.S. began investing in timberland being sold off in large parcels by forest products corporations, such as Weyerhaeuser, that were restructuring their balance sheets. While several pooled funds (including a hybrid timber/farmland fund and an exclusive timber fund) were launched in the late 1970s and early 1980s, institutional appetite for investing in farmland was curtailed by the farm crisis in the 1980s, reviving on a limited basis in the mid-1990s as profitability in the farming sector improved.

During the run-up in ag commodity prices during the 2005-2008 period culminating with the 2008 economic crisis, an increasing number of major institutional investors based in North America and Europe already invested in timberland began to allocate capital to vehicles investing in farmland. These have been focused primarily on acquiring farmland to grow row crops (oilseeds and feed grains) and to a lesser degree permanent crops (wine grapes, nuts, fruit trees and specialty crops) in North and South America. HighQuest estimates that over the past decade approximately \$45 billion of institutional capital has been invested globally in farmland. As recently at November 2015, TIAA raised a \$3 billion fund which included internally-generated funds as well as limited partnership contributions from peer institutions.

As shown below in Figure 1, we estimate that institutional investment in farmland represents less than 0.5% of the total value of farmland globally, as most land around the world is privately-held by farmers. However, institutional investment in farmland has been growing annually at 8-10%. While most investment has been concentrated in row cropland land in North and South America, institutional appetite for agricultural investment in Australia and Eastern Europe is increasing, as well as interest in permanent crops. While farmland is an immature asset class compared to timber, the investable universe for farmland is over three times (3x) the size of that for timber. This explains why many traditional institutional timber investors have already invested in farmland, or are currently considering doing so.

Figure 1

Comparison of the Universe of Farmland Investments to Timber – HighQuest Estimates

	FARMLAND USD \$ BILLION	TIMBER USD \$ BILLION
Total Land Value	8,300	425
Investable Universe	1,000	300
Institutional Ownership	45	60
Institutional Ownership as a % of the Investable Universe	0.5%	20.0%

Institutional investors are seeking to achieve alpha returns on their allocations, meaning returns that are not the result of general movement in the greater market but instead represent a return above an accepted benchmark.

The National Council for Real Estate Investment Fiduciaries (NCREIF) publishes the NCREIF index which tracks total returns for farmland investments by institutional investors in U.S. farmland on a quarterly basis. For the 10-year period ending December 31, 2015, the index showed a total cumulative return of 14.5% on all farmland—row and permanent crops combined (see Figure 2). Land investments provide current income in the form of either cash lease payments or from the sale of the crop and long-term appreciation of the land realized in an eventual sale of the property. In North America, lease

payments are typically contracted on a fixed dollar amount, while in South America annual payments are typically a fixed share of the production (i.e., the landholder shares the commodity risk/return directly).

ATTRACTIVE LONG TERM FUNDAMENTALS

Despite recent softening of crop prices, macro drivers cited above are bullish for agricultural crops over the next decade and beyond. Even accounting for potential improvements in production yields resulting from improved genetics and agronomic practices, additional acreage will need to be brought into production and land currently in production will require investment to achieve improved productivity.

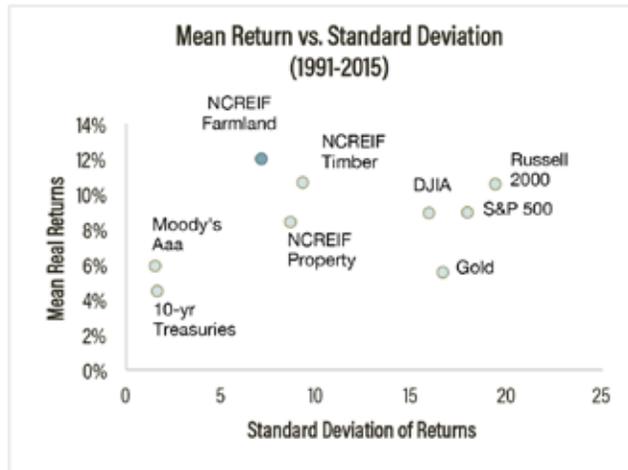
Figure 2



UNCORRELATED RETURNS

A major attractive feature of farmland investing is the low correlation between returns on farmland investments and the broader markets (see Figure 3). Over the past 10 years, the correlation of the quarterly returns on the NCREIF with the Dow Jones Industrial Average (DJIA) has been 0.101% and with the Standard & Poor's 500 (S&P) it has been 0.098%.

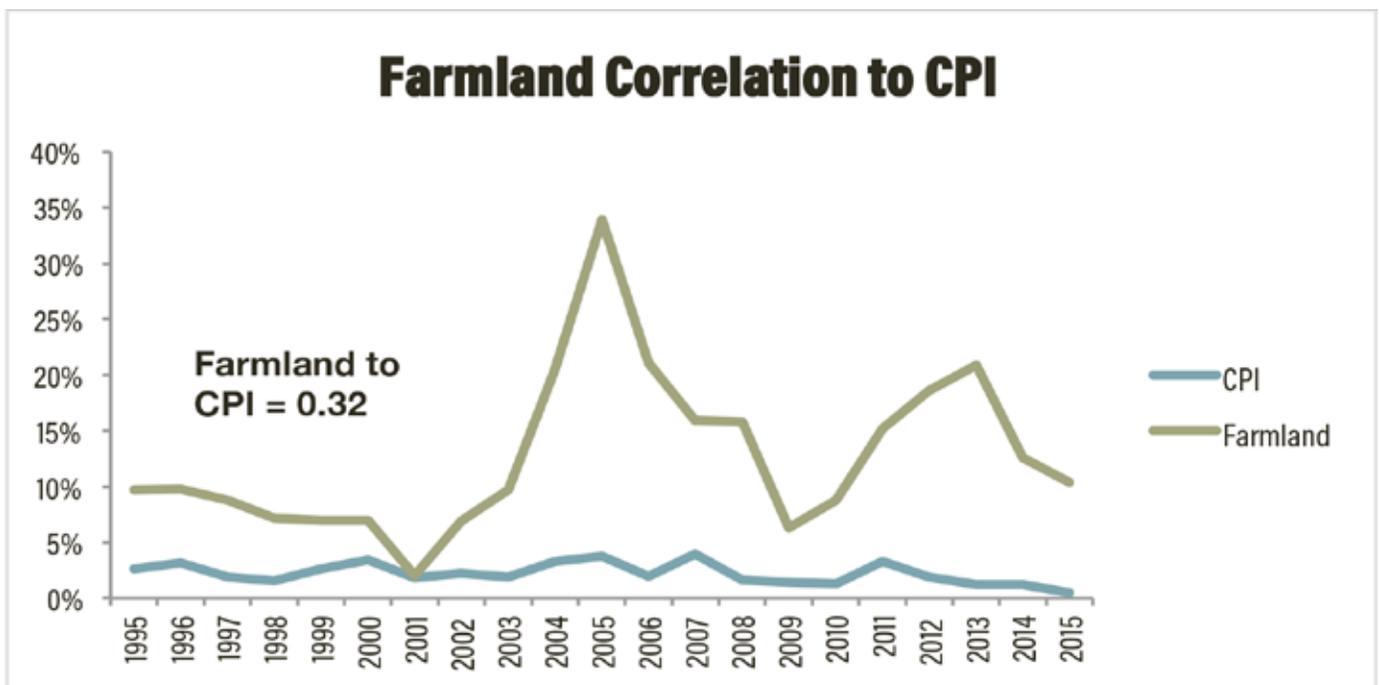
Figure 3



INFLATION HEDGE

Historically, farmland investments have provided an effective inflation hedge, with returns positively correlated to the Consumer Price Index (CPI). In each of the past 20 years, the return on the NCREIF has been higher than the CPI, and farmland returns have been positively correlated with inflation ($r = 0.32$) throughout the period 1995-2015 (see Figure 4). This supports the view that ownership of farmland assets can help to reduce the correlation of a traditional stock and bond portfolio to the stock market, thereby helping to mitigate the negative impact of market volatility on returns.

Figure 4



GLOBAL OPPORTUNITIES IN FARMLAND INVESTING

Today, a variety of investment strategies and vehicles are being devised and implemented to develop farmland production in different regions of the world. These approaches are customized to respond to local conditions:

- type of production;
- access to financial networks and sources of capital;
- political/legal/governance issues;
- infrastructure challenges;
- environmental sustainability constraints;
- overall risk/security challenges.

In North America, the most mature market for farmland, the average size of parcels remains relatively small compared to South America, Eastern Europe and parts of Sub-Saharan Africa. In North America, as there is little, if any, undeveloped farmland for conventional crops in the region (although opportunities exist to leverage genetic traits to produce on land previously considered marginal if unproductive). Therefore, returns are derived from current income as cash lease payments eventually from long-term appreciation of the land itself.

In contrast, agriculture in Brazil and Argentina is practiced on a massive scale, with operations consisting of tens of thousands of hectares where the operations tend to be integrated (crops grown for the cash markets—domestic and export—as well as used to feed livestock and poultry and produce energy).

While interest in investing in Russia, Ukraine and the former Commonwealth of Independent States (CIS) has waned due to geopolitical risks, other markets in the region are attracting investment, such as Romania, where farming is conducted on an industrial scale and continues to suffer from poor yields and lack of adequate infrastructure.

Over the past couple of years, we have also noted increased investor interest in permanent crops (avocados, nut trees, stone fruits, wine grapes and olive trees, for example) in the Americas and Australasia, which typically generate higher returns, albeit with higher operational risk.

DESIGNING A FARMLAND PORTFOLIO

Farmland should not be viewed as a homogeneous asset class, as investors can tailor a portfolio to meet their individual risk profiles by balancing investments across three key variables: geography, production type and operating model.

The graphic in Figure 5 below reflects that in order to achieve an objective of 6-10% on a sub-allocation in a farmland portfolio, one would invest in row crop land in North American on a cash lease basis. Pursuing other combinations of geography, asset type and operating model will obviously generate a different range of returns, with attendant risks.

Figure 5

Geography

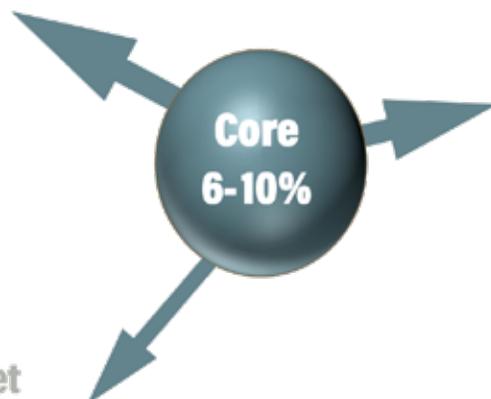
- Asia
- Australia
- South America
- Etc.

Operational / Development

- Land ownership (free title)
- Farm management
- Value chain investment
- Etc.

Type of Asset

- Permanent crops
- Dairy
- Aquaculture
- Etc.



OTHER OPPORTUNITIES TO INVEST IN AGRICULTURE ALONG THE VALUE CHAIN

While there are many ways to invest in most stages of the agricultural value chain via equities, corporate bonds, futures, options and Exchange Traded Funds (ETFs), the farming/production sector is not as easily investable, as it has traditionally been a fragmented industry with tightly held family-run enterprises. This is slowly changing due to increased consolidation, driven by the demographics of the farming community and pressures to achieve economies of scale in production.

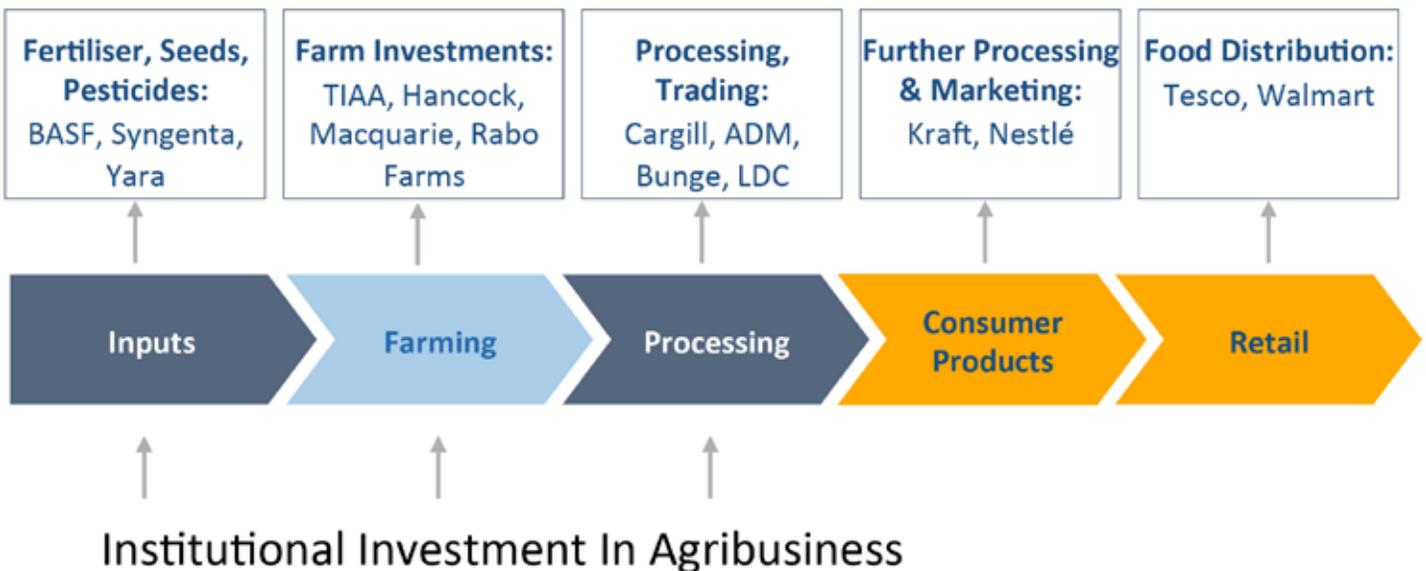
In addition to investing in farmland, opportunities exist for institutional investors to pursue investment opportunities upstream from production in inputs (products and services), which enable growers to produce more efficiently, as well as downstream from production (transportation, logistics and value-added primary processing of crops), which entail assuming operating risk with commensurate higher returns compared to farmland investments. Vehicles for investing at these points along the value chain can be structured as direct investments, closed-end funds or tailor-made structures. The graph in Figure 6 illustrates those areas that have attracted

substantial amounts of investment from specialized funds focused on real assets (farmland), ag private equity (operating assets upstream or downstream from crop production) and ag infrastructure (storage, transportation and logistics) that have raised capital from institutional investors.

For example, during the 2014-2015 period, approximately \$7 billion was raised for over 830 individual ag tech companies (early stage through C-round financings) from over 900 unique investor groups. While some of these investee companies are early stage, many have already begun to commercialize their products and services. The sectors in ag tech attracting capital include biologicals inputs, precision ag, big data applications (“smart farms”), novel feed/food ingredients and genetic prospecting (nexus of pharma/ag/food). Typically, these investments are led by specialist venture capital firms that invest on behalf of institutions which have invested in their funds as limited partners.

While more difficult to track and quantify, anecdotally we know that institutional investors are also investing in a wide range of private equity transactions both upstream and downstream from the crop production sector.

Figure 6



CONCLUSION

While farmland investments have been an integral part of the portfolios of wealthy individuals and families for centuries, in the current economic environment this asset class is attracting renewed interest from a wide range of institutional investors seeking alpha returns with inflation protection, which do not correlate with other paper assets and provide increased wealth protection during a period of market uncertainty. Growing world populations and rising income levels in the developing world are expected to accelerate demand for both vegetable protein and animal protein, and consequently for the crops used to produce them. The incremental demand for biomass as a feedstock for both biofuels and a range of green-chemicals (from polyethylene to detergents) will place additional pressure on scarce farmland resources to produce the necessary crop volumes. Even with anticipated increases in crop yields from seed genetics and more efficient farming practices, productive farmland will remain scarce for the next decade and beyond. These long-term fundamentals combined with historically uncorrelated returns generated by farmland investments make this an attractive asset class for the portfolios of many institutional investors.

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ABOUT THE AUTHOR



Mr. de Lap erouse is Managing Director of HighQuest Partners, a leading strategy consulting and advisory firm to the global food, agribusiness and biofuels sectors with offices in Boston and St. Louis. HighQuest advises strategic players operating in and financial investors allocating capital to the global food and agricultural value chains on making informed decisions on strategy and resource allocation.

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HighQuest Partners is hosting Global AgInvesting Asia 2016 on 13-15 September 2016 in Tokyo. This unique opportunity will educate participants about investing in the agricultural sector with a focus on farmlands and infrastructure, while also providing valuable opportunities for networking. For more information, please go to <http://www.globalaginvesting.com/events/gaia2016/>.

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