



**PGIM**

**AGRICULTURAL FINANCE & INVESTMENTS**

# **LOW-HANGING FRUIT**

**Why You Should Plant U.S. Agriculture  
in Your Institutional Portfolio**



2026

**For Professional and Institutional Investors Only. All investments  
involve risk, including the possible loss of capital.**



## ABOUT US

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PGIM's Agricultural Investments group provides a fully integrated platform to serve third-party investors seeking equity exposure to farmland across the United States through both permanent crop and row crop strategies. With more than 40 years of fiduciary experience in owning and operating farms, we build each portfolio from the ground up and seek opportunities that are accretive to the portfolio while staying within the client's investment objectives.

## CONTACT INFORMATION



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# HISTORICAL RETURN AND DIVERSIFICATION BENEFITS

## Sustained Long-Term Performance

Farmland has generated competitive relative performance versus other major asset classes over the 10-, 15-, and 20-year time periods ended December 31, 2025.

### Historical Annualized Return (%)<sup>1,2</sup>

	Farmland	Timberland	Real Estate	Stocks	Bonds
1-Year	0.2	4.6	4.9	17.9	7.8
3-Year	1.3	7.0	-0.8	23.0	4.8
5-Year	4.2	8.6	3.9	14.4	-0.3
7-Year	4.1	6.4	3.9	17.3	2.1
10-Year	4.9	5.4	4.9	14.8	2.1
15-Year	8.3	5.9	7.3	14.1	2.5
20-Year	9.6	6.2	6.4	11.0	3.3

Performance: ■ Best ■ Second-Best

### Historical Risk-Adjusted Volatility Metrics (20-Year)<sup>1</sup>

	Farmland	Timberland	Real Estate	Stocks	Bonds
St. Deviation <sup>3</sup> (%)	6.3	5.4	8.7	16.9	4.9
Sharpe Ratio	1.1	0.6	0.5	0.6	0.1
Max 1-yr Return (%)	21.1	18.4	17.5	32.4	8.7
Min 1-yr Return (%)	-1.0	-4.7	-16.8	-37.0	-13.0
Neg. Returns (# yrs)	1	2	3	3	3

Performance: ■ Best ■ Second-Best

## Asset Class Diversification

Low or negative correlations to asset classes such as stocks and bonds can make farmland a powerful diversifier in a mixed-asset portfolio.

### Annual Return Correlations (20-Year)<sup>1</sup>

	Farmland	Timberland	Real Estate	Stocks	Bonds
Farmland	1.00	0.49	0.43	-0.26	-0.08
Timberland		1.00	0.39	-0.25	-0.34
Real Estate			1.00	0.05	-0.12
Stocks				1.00	0.27
Bonds					1.00

## High Income and Total Return

Direct farming operations and leases have provided a steady source of income return. Productivity gains, commodity price increases and a reduction in arable land for agriculture drive appreciation gains. Strong crop prices and robust net farm income have boosted farmland value returns significantly over the past 20 years.

Farmland has produced the  
**SECOND HIGHEST ANNUAL RETURNS**  
 and the  
**HIGHEST SHARPE RATIO**  
 over the past  
**20 YEARS**

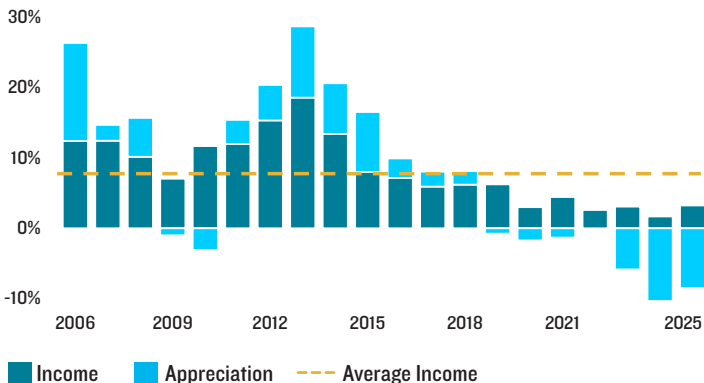
<sup>1</sup> Supporting indexes: (1) Farmland: NCREIF Farmland Index, (2) Timberland: NCREIF Timberland Index, (3) Real Estate: NCREIF Property Index, (4) Stocks: S&P 500 Index, (5) Bonds: Bloomberg US Aggregate Bond Index. Sources: Bloomberg, Global Investors, NCREIF, S&P, PGIM.

<sup>2</sup> Benchmark returns over different time periods ending December 2025.

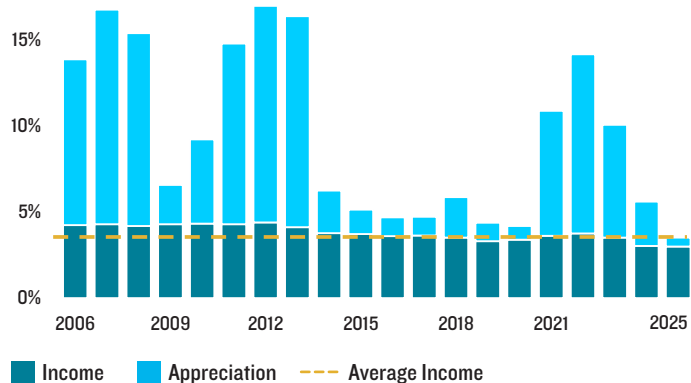
<sup>3</sup> Standard deviation is based on annual returns.

## HISTORICAL RETURN AND DIVERSIFICATION BENEFITS

NCREIF Farmland Permanent Crop Annual Returns (2006-25)<sup>4</sup>



NCREIF Farmland Row Crop Annual Returns (2006-25)<sup>4</sup>



### PERMANENT CROPS

Have generated total annual average gross returns over the last 20 years of:<sup>4</sup>

**9.4%**

Total

**8.1%**

Income

**1.3%**

Appreciation

### Row Crops

Have generated total annual average gross returns over the last 20 years of:<sup>4</sup>

**9.5%**

Total

**3.8%**

Income

**5.6%**

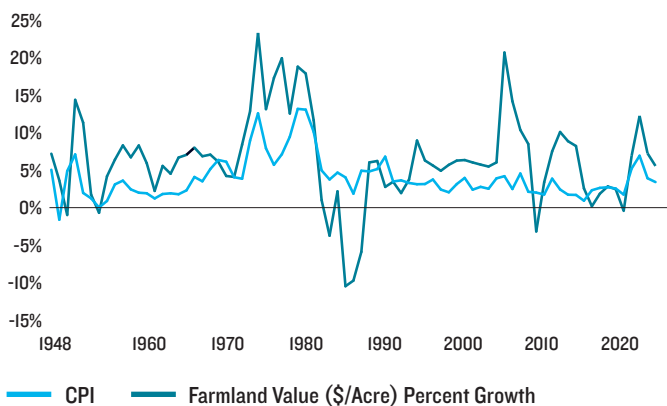
Appreciation

## CAPITAL PRESERVATION AND GROWTH

### Potential Inflation Hedge

Farmland is a real asset that has proved to be a better store of wealth than stocks or government bonds in periods of higher inflation.

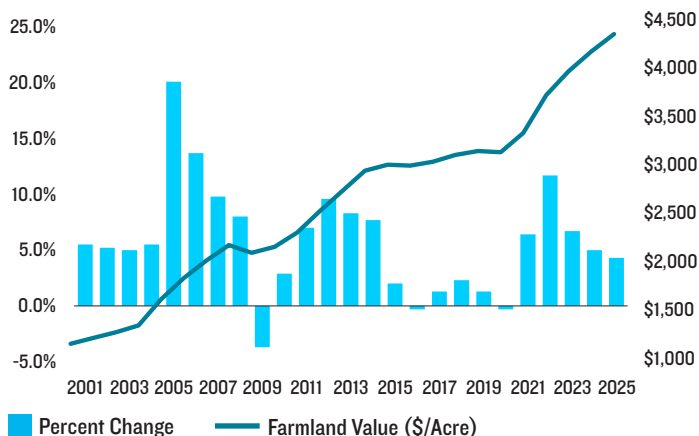
Farmland Value Percent Growth vs. Inflation (1948-2025)<sup>5</sup>



### Prolonged Value Growth

Farmland has posted mostly positive returns, proving effective in preserving capital under various market conditions.

Farmland Values \$/Acre and Annual Percentage Change (2001-2025)<sup>5</sup>



<sup>4</sup> The reported aggregate NCREIF Farmland Index AUM does not tie to the summation of the detailed AUM by NCREIF regions due to rounding and constraints imposed by masking in the publicly available data. Sources: NCREIF Farmland Index, PGIM.

<sup>5</sup> Sources: USDA Economic Research Service, U.S. Bureau of Labor Statistics, PGIM.

# EMERGING ASSET CLASS WITH ESTABLISHED BENCHMARK

## Emerging Institutional Asset Class

Despite robust growth, U.S. farmland institutional ownership is still in its nascent stage and is likely to increase.

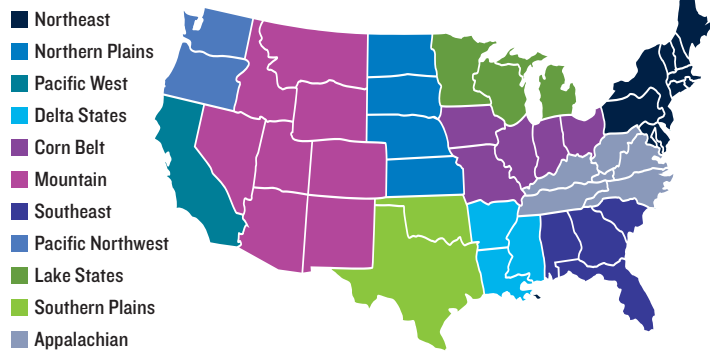
**2-3%** of U.S. Farmland Is Owned by Institutional Capital<sup>6</sup>

## Ability to Benchmark Performance

NCREIF Farmland Property Index provides transparency and enables investors to benchmark manager performance.

## NCREIF Farmland Property Index<sup>4</sup>

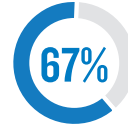
**1990** Inception Date      **100%** Institutionally Owned Properties



## NCREIF Farmland Property Index Market Value<sup>4</sup>

**\$16.2B**

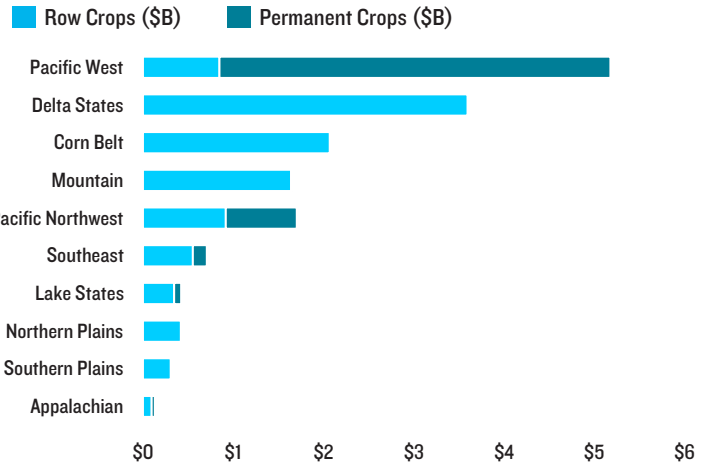
Total



Row Crops



Permanent Crops



<sup>6</sup> Source: USDA NASS, 2022 Census of Agriculture.

# COMPETITIVE ADVANTAGES OF INVESTING IN THE U.S.

## Production & Export Powerhouse

The U.S. is the leading producer and a top exporter of some of the world's most important commodities. The U.S. benefits from a large domestic market and a low per-unit production cost of several large commodities.

### Select U.S. Commodity Production and Exports Rankings (2025-26)<sup>7</sup>

Commodity	Production (Mil. Metric Tons)		U.S. (%)	U.S. Ranking	
	U.S.	World		Production	Exports
<b>Row</b>					
Corn	432.3	1,296.0	33.4	1	1
Soybeans	116.8	428.2	27.3	2	2
Wheat	54.0	841.8	6.4	5	5
Cotton	3.0	26.0	11.5	4	2
<b>Permanent</b>					
Apples	5.0	81.7	6.1	3	4
Fresh Oranges	2.2	45.9	4.7	6	3
Table Grapes	0.7	30.0	2.5	9	8
Walnuts	0.6	2.7	23.7	2	2
Orange Juice	0.1	1,351.0	0.0	3	5
Almonds	1.4	1.8	76.6	1	1
Pistachios	0.7	1.1	65.3	1	1

Performance: ■ Best ■ Second-Best ■ Third-Best

## Complete Commercial Base

The U.S. is the birthplace and heart of agricultural suppliers such as John Deere and Caterpillar. Also, widespread sales and distribution firms can provide long-term contracts for commodity production.

## Optimal Geographic Conditions

The U.S. has extensive, supply-constrained farm areas with favorable and diverse climatic and soil conditions for the production of a wide variety of major permanent crops and row crops.



## Advanced Infrastructure

Transportation infrastructure is a key variable in moving farm goods. The U.S. has an advanced network of strategically located highways, railroads, airports, and seaports that facilitates swift commodity shipment worldwide.



The Mississippi River Is the Premier Conduit for Transporting Commodities to Export Markets<sup>9</sup>

## Well-Capitalized Farm Economy

The U.S. is home to major commodity exchanges and a deep set of private- and government-sponsored financial institutions that provide consistent capital to the farm sector. This financial infrastructure facilitates farmland production through credit and risk transfers.

<sup>7</sup> Source: Foreign Agricultural Service USDA.

<sup>8</sup> Source: California Department of Food and Agriculture, 2024.

<sup>9</sup> Source: USDA / Federal Grain Inspection Service 2024 Annual Report.

<sup>10</sup> Source: World Bank, 2023.



# KEY INVESTMENT CATEGORIES

## Permanent Crops

**25+** Years Productive Life of Some Trees and Vines

- **Permanent crops:** Long-lived trees or vines that can take many years to grow enough to have a commercial crop.
- **Subcategories:** Developing and mature.
- **Planting:** Once planted, switching crops to react to market conditions is expensive and difficult.
- **Management:** Can directly operate the farm or lease to a tenant.
- **Returns:** Returns are weighted heavily to operating income.

## Row Crops

**ONE** Calendar Year Plant and Harvest Cycle of Most Row Crops

- **Row crops:** Crops planted annually that are typically mechanically harvested on a large scale.
- **Subcategories:** Commodity, vegetable, and specialty.
- **Planting:** Plantings changed quickly to react to market conditions.
- **Management:** Mostly leased to experienced regional farmers.
- **Returns:** Typically leased structure allows for steady income returns.

### IN THE TREE

Apples • Avocados  
Citrus • Nuts • Stone Fruit

### ON THE VINE

Berries • Grapes  
Hops • Kiwi

### IN THE FIELD

Wheat • Soybeans • Cotton  
Corn • Rice • Tomatoes  
Vegetables • Melons  
Potatoes

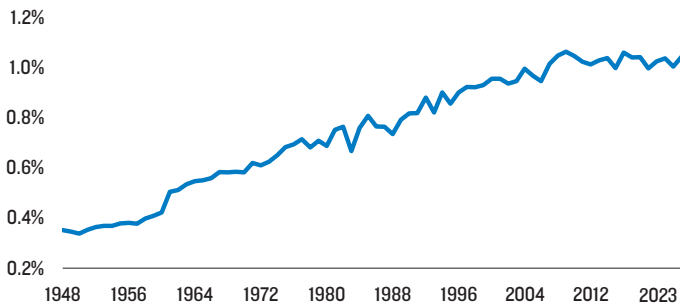
# WHY NOW IS A GOOD TIME TO INVEST

## Technology Driving Productivity

Farm productivity growth has been driven by government- and private sector-supported research. The U.S. is also home to innovative start ups focused on farming information technology, ag biotech, robotics, and automation.

**\$7B** Ag Tech Deal Value in 2025<sup>11</sup>      **50%** Share of World's Ag Tech VC in North America Since 2014<sup>12</sup>

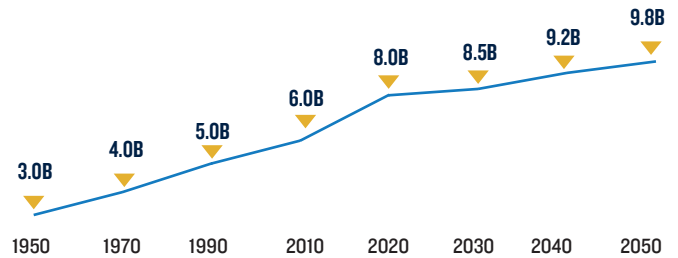
## Total Factor Productivity Growth of U.S. Agriculture (1948-2023)<sup>13</sup>



## Rising Global Demand

Increasing global demand for higher value-added crops that are healthy, tasty, and nutritious coupled with improved incomes and expanding diets will continue benefiting the U.S. farm sector.

## World Population in Billions (1950-2050)<sup>14</sup>



## Growing Institutional Opportunities

An aging farmer generation, fractional family ownership structure, and technological advances requiring sizable capital investment will naturally transition farmland holdings from individuals to institutions.

## U.S. FARMERS

**58%**  
Are Part Time<sup>5</sup>

**58.1**  
Average Age<sup>5</sup>

**95%**  
Farms Operated by Families<sup>5, 15</sup>



<sup>11</sup> Source: Agfunder Agrifood Tech Investing Report - Year in Review 2022.

<sup>12</sup> Source: Pitchbook, 2022.

<sup>13</sup> USDA Economic Research Service as of December 2021.

<sup>14</sup> U.S. Census Bureau, International database.

<sup>15</sup> Includes families, family partnerships, and family corporations.

# PORTFOLIO STRUCTURING

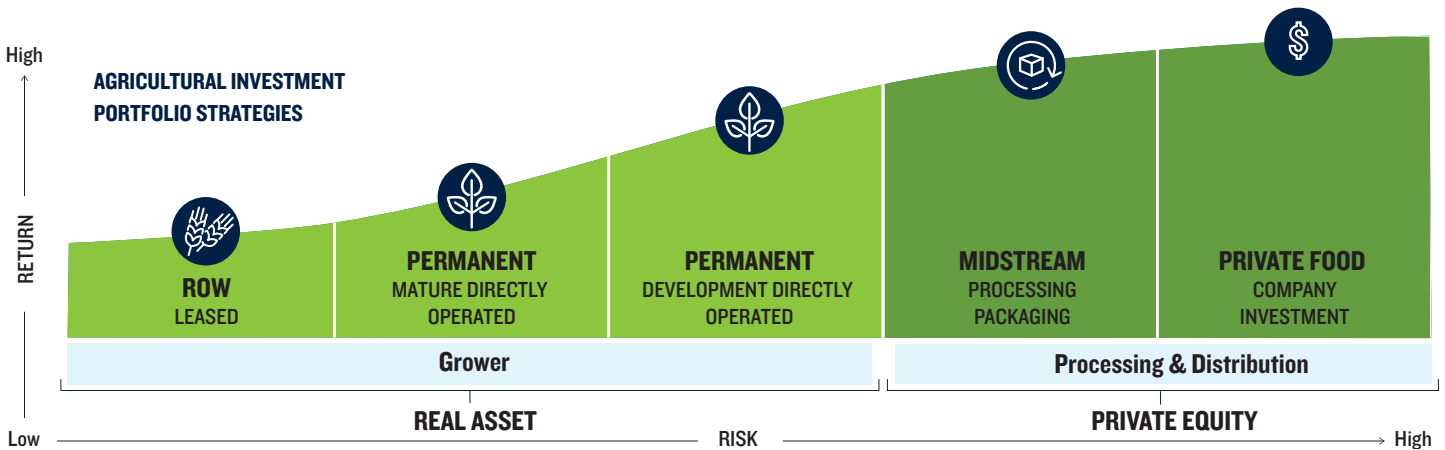
## Portfolio Strategy

Client return objectives and risk tolerance form the starting point for agricultural portfolio construction and influence whether the strategy is real-asset- or private-equity-driven.<sup>16</sup> This section focuses on a real asset, inside-the-farm-gate strategy. Portfolio considerations include:

**Investment Categories:** Row crops that can be readily adjusted to changing market conditions are typically viewed as being less risky than permanent crops. Within permanent crops, development is more risky than mature.

**Management Style:** Leased investments have credit exposure but can provide stable, bond-like cash flows. Directly operated investments have commodity exposure and give managers more control over the improvements. They offer access to full operating profits, which may vary annually.

**Diversification:** Crop type and geographic diversification are important components of risk management.



<sup>16</sup> No investment strategy or risk management technique can guarantee returns or eliminate risk in any market environment. Diversification does not assure a profit or protect against loss in declining markets.

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**NCREIF Farmland Index:** The NCREIF Farmland Index is a quarterly time series composite return measure of investment performance of a large pool of individual agricultural properties acquired in the private market for investment purposes only. All properties in the Farmland Index have been acquired, at least in part, on behalf of tax-exempt institutional investors - the great majority being pension funds. As such, all properties are held in a fiduciary environment. Reinvestment of dividends is not applicable to this asset class. Note: A benchmark Index is not professionally managed, does not have a defined investment objective, and does not incur fees or expenses. Investors cannot invest directly in an index. Source of the Benchmark: NCREIF - National Council of Real Estate Investment Fiduciaries.

**NCREIF Timberland Index:** The NCREIF Timberland Index is a quarterly time series composite return measure of investment performance of a large pool of individual U.S. timber properties acquired in the private market for investment purposes only. All properties in the Timberland Index have been acquired, at least in part, on behalf of institutional investors. As such, all properties are held in a fiduciary environment.

**The NCREIF Property Index (NPI):** The NCREIF Property Index ("NPI") is a quarterly index tracking the performance of core institutional property markets in the U.S. The objective of the NPI is to provide a historical measurement of property-level returns to increase the understanding of, and lend credibility to, real estate as an institutional investment asset class. The universe of investments is: (1) Comprised exclusively of operating properties acquired, at least in part, on behalf of tax-exempt institutions and held in a fiduciary environment.; (2) Includes properties with leverage, but all returns are reported on an unleveraged basis; and (3) Includes Apartment, Hotel, Industrial, Office and Retail properties, and subtypes within each type. The database fluctuates quarterly as participants acquire properties, as new members join NCREIF, and as properties are sold. Sold properties are removed from the Index in the quarter the sales take place (historical data remains). Each property's market value is determined by real estate appraisal methodology, consistently applied. Please note that when returns are computed for the NPI, the returns for the levered properties are computed on a de-levered basis, i.e., the impact of financing is excluded. Note: A benchmark Index is not professionally managed. Investors cannot invest directly in an index.

**The Bloomberg US Aggregate Bond Index:** The Bloomberg US Aggregate Bond Index is a broad-based flagship benchmark that measures the investment grade, US dollar denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, fixed rate agency MBS, ABS and CMBS (agency and non-agency). Provided the necessary inclusion rules are met, US Aggregate-eligible securities also contribute to the multi-currency Global Aggregate Index and the US Universal Index. The US Aggregate Index was created in 1986, with history backfilled to January 1, 1976.

Source of the Benchmark: Bloomberg Finance L.P.



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