

AGRICULTURAL INVESTMENTS

LOW-HANGING FRUIT

WHY YOU SHOULD PLANT U.S. AGRICULTURE
IN YOUR INSTITUTIONAL PORTFOLIO

A Comprehensive Guide to
Making an Investment Decision

2024

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

ABOUT US

PGIM Real Estate'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



JAMIE SHEN
Head of Agriculture
jamie.shen@pgim.com
(415) 291-5025



SARAH ANGUS
Vice President
Agricultural Investments
sarah.angus@pgim.com
(615) 476-2447



LARRY TEITELBAUM
Managing Director
Business Development
larry.teitelbaum@pgim.com
(212) 515-6116

HISTORICAL RETURN AND DIVERSIFICATION BENEFITS

Sustained Long-term Performance

Farmland has consistently performed well relative to stocks, bonds, timberland and real estate over the past 20 years.

HISTORICAL ANNUALIZED RETURN ^{1,2}

	FARMLAND	TIMBERLAND	REAL ESTATE	STOCKS	BONDS
1-Year	5.0%	9.5%	-7.9%	26.3%	5.5%
3-Year	7.4%	10.5%	4.6%	10.0%	-3.3%
5-Year	6.0%	6.6%	4.3%	15.7%	1.1%
7-Year	6.1%	5.7%	5.1%	13.4%	1.3%
10-Year	7.3%	5.8%	6.8%	12.0%	1.8%
15-Year	9.4%	4.7%	6.5%	14.0%	2.7%
20-Year	12.3%	7.1%	7.8%	9.7%	3.2%

Performance: ■ Best ■ Second-Best

 Farmland Has Produced the Highest Annual Returns and Sharpe Ratio Over the Past 20 Years and Has Not Generated a Negative Annual Return

HISTORICAL RISK-ADJUSTED VOLATILITY METRICS (20-YEAR)¹

	FARMLAND	TIMBERLAND	REAL ESTATE	STOCKS	BONDS
St. Deviation ³	7.5%	6.1%	9.2%	16.6%	4.8%
Sharpe Ratio	1.28	0.71	0.58	0.50	0.09
Max 1-yr Return	33.9%	19.4%	20.2%	32.4%	8.7%
Min 1-yr Return	3.1%	-4.7%	-17.0%	-37.0%	-13.0%
Neg. Returns (# yrs)	0	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.

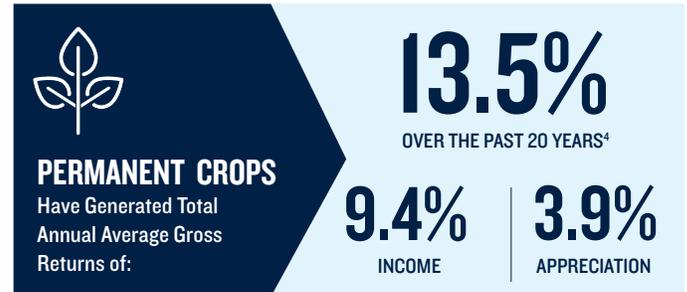
ANNUAL RETURN CORRELATIONS (20-YEAR)¹

	FARMLAND	TIMBERLAND	REAL ESTATE	STOCKS	BONDS
Farmland	1.00	0.70	0.52	-0.20	-0.05
Timberland		1.00	0.49	-0.27	-0.30
Real Estate			1.00	0.05	-0.12
Stocks				1.00	0.29
Bonds					1.00

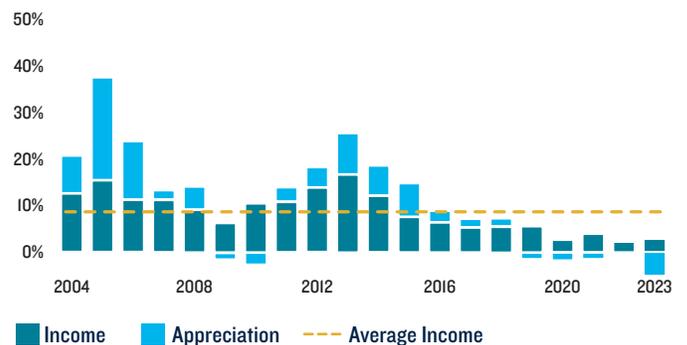
PAST PERFORMANCE IS NOT A GUARANTEE OR RELIABLE INDICATOR OF FUTURE RESULTS. DIVERSIFICATION DOES NOT ASSURE A PROFIT OR PROTECT AGAINST LOSS IN DECLINING MARKETS.

High Income and Total Return

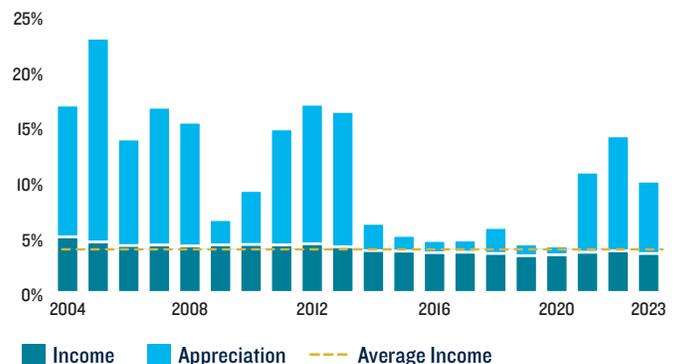
Direct farming operations and leases have provided a steady source of income return. Productivity gains and commodity price increases drive appreciation gains. Strong crop prices and robust net farm income have boosted farmland values significantly over the past 20 years.



NCREIF FARMLAND PERMANENT CROP ANNUAL RETURNS (2004-2023)⁴



NCREIF FARMLAND ROW CROP ANNUAL RETURNS (2004-2023)⁴

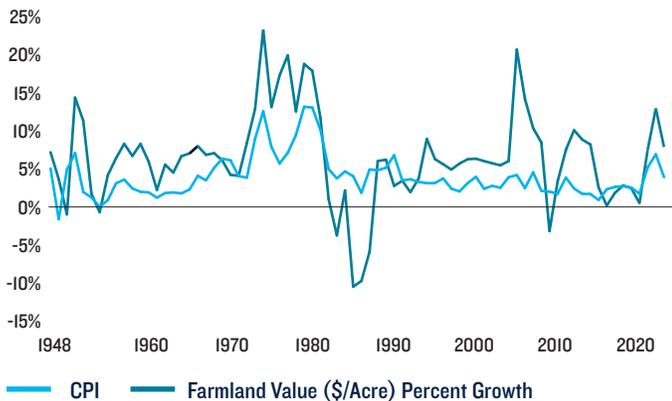


CAPITAL PRESERVATION AND GROWTH

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.

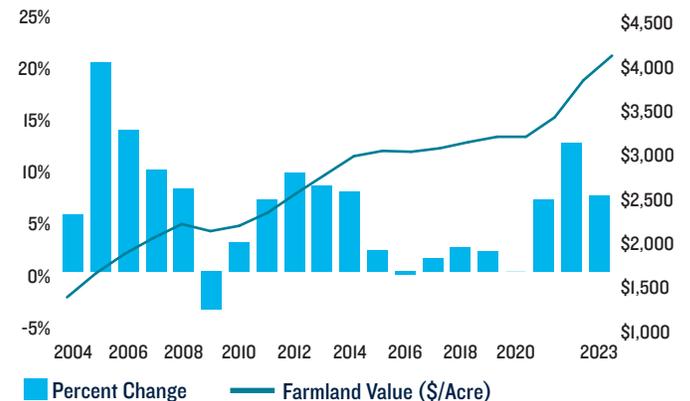
FARMLAND VALUE PERCENT GROWTH VERSUS INFLATION (1948-2023)⁵



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 (2004-2023)⁵



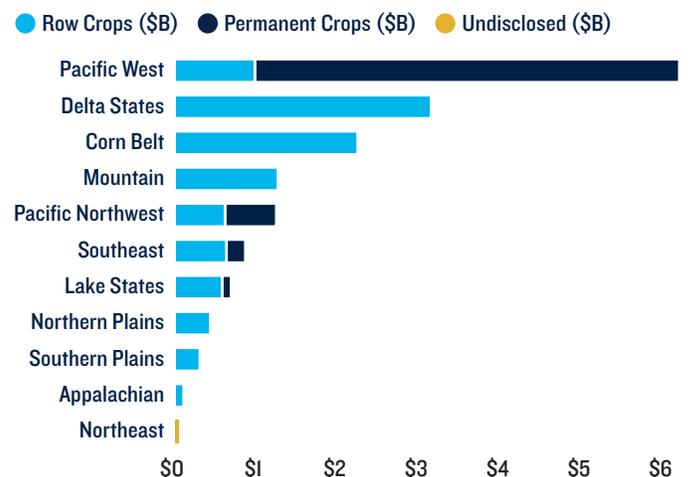
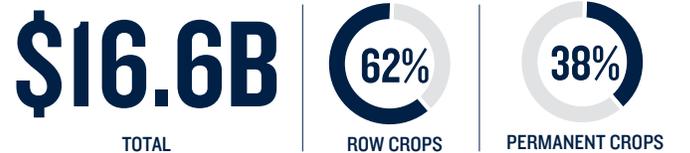
EMERGING ASSET CLASS WITH ESTABLISHED BENCHMARK

Emerging Institutional Asset Class

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

2.0% OF U.S. FARMLAND IS OWNED BY INSTITUTIONAL CAPITAL⁶

NCREIF FARMLAND PROPERTY INDEX MARKET VALUE⁴

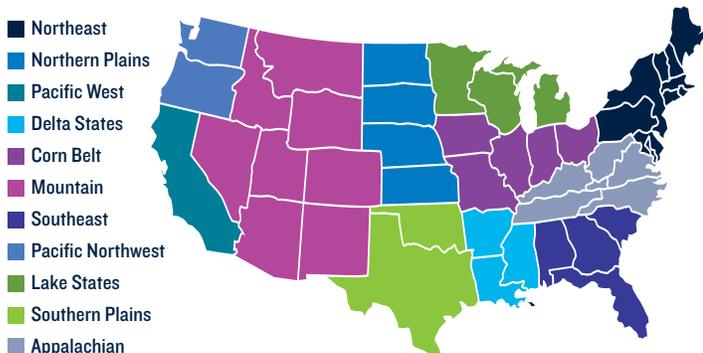


Ability to Benchmark Performance

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

NCREIF FARMLAND PROPERTY INDEX⁴

1990 INCEPTION DATE | **100%** INSTITUTIONALLY OWNED PROPERTIES



All returns shown are gross of fees. **Past performance is not a guarantee or reliable indicator of future results.** Data as of December 2023 unless otherwise noted. ¹ 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 Barclays US Aggregate Bond Index. Sources: Barclays, Global Investors, NCREIF, S&P, PGIM Real Estate. ² Benchmark returns over different time periods ending December 2023. ³ Standard deviation is based on annual returns. ⁴ 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 Real Estate. ⁵ Sources: USDA Economic Research Service, U.S. Bureau of Labor Statistics, PGIM Real Estate. ⁶ Source: USDA NASS, 2017 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 (2023/2024)⁷

	PRODUCTION (MIL. METRIC TONS)			U.S. RANKING	
	U.S.	WORLD	U.S. (%)	PRODUCTION	EXPORTS
ROW					
Corn	389.7	1,232.6	31.6%	1	2
Soybeans	113.3	398.2	28.5%	2	2
Wheat	49.3	785.7	6.3%	5	5
Cotton	2.7	24.6	11.0%	4	1
PERMANENT					
Apples	4.4	83.1	5.2%	4	3
Fresh Oranges	2.5	48.8	5.2%	6	3
Table Grapes	0.9	28.4	3.1%	8	7
Walnuts	0.7	2.7	25.9%	2	1
Orange Juice	0.1	1.5	7.0%	3	5
Almonds	1.2	1.5	78.2%	1	1
Pistachios	0.7	1.1	63.4%	1	1

Complete Commercial Base

The U.S. is the birthplace and heart of agricultural suppliers such as John Deere and Caterpillar. Also, large and well-recognized processors and marketing 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 and seaports that facilitates swift commodity shipment worldwide.



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.

KEY INVESTMENT CATEGORIES FOR A PORTFOLIO

PERMANENT CROPS

25+ YEARS | PRODUCTIVE LIFE OF SOME TREES AND VINES

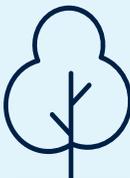
PERMANENT CROPS: Long-lived trees or vines that can take many years to grow enough to have a commercial crop.

SUBCATEGORIES: Developing and mature.

PLANTING: Once planted, switching crops to react to market conditions is expensive and difficult.

MANAGEMENT: Can direct operate the farm or lease to a tenant.

RETURNS: Returns are weighted heavily to operating income.



IN THE TREE

- Apples
- Avocados
- Citrus
- Nuts
- Stone Fruit



ON THE VINE

- Berries
- Grapes
- Hops
- Kiwi

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: Leased mostly allow for steady income returns.

IN THE FIELD

Wheat | Soybeans | Cotton | Corn | Rice

Tomatoes | Vegetables | Melons



WHY NOW IS A GOOD TIME TO INVEST

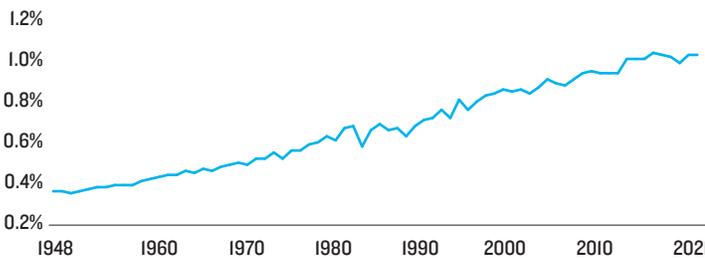
Technology Driving Productivity

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.



NUT CROPS ARE MECHANICALLY HARVESTED

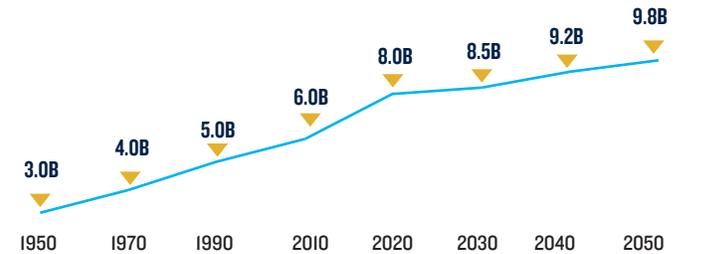
TOTAL FACTOR PRODUCTIVITY GROWTH OF U.S. AGRICULTURE (1948-2021)¹²



Rising Global Demand

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

WORLD POPULATION IN BILLIONS (1950-2050)¹³



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. FARMER



58%
 ARE PART-TIME⁵

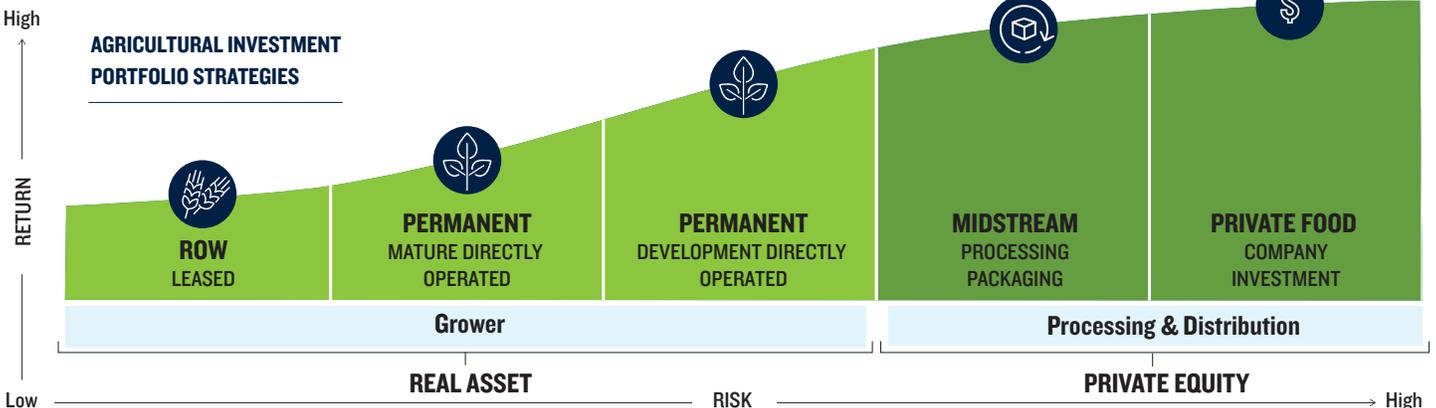
58.1
 AVERAGE AGE⁵

95%
 FARMS OPERATED BY FAMILIES^{5,14}

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.¹⁵ 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.

⁷ Source: Foreign Agricultural Service USDA. ⁸ Source: California Department of Food and Agriculture. ⁹ Source: USDA / Federal Grain Inspection Service 2024 Annual Report. ¹⁰ Source: Agfunder Agrifood Tech Investing Report - Year in Review 2022. ¹¹ Source: Pitchbook. ¹² USDA Economic Research Service as of December 2021. ¹³ U.S. Census Bureau, International database. ¹⁴ Includes families, family partnerships, and family corporations. ¹⁵ 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.

EXPLORE OPPORTUNITIES AND LEARN MORE

www.pgimrealestate.com/aginvesting



For Professional and Institutional Investors only. All investments involve risk, including the possible loss of capital. Past performance is not an indicator of future results. Target returns are not guaranteed. Links to videos and websites are intended for informational purposes only and should not be considered investment advice or recommendation to invest.

PGIM Real Estate is the real estate investment management business of PGIM, the principal asset management business of Prudential Financial, Inc. (“PFI”), a company incorporated and with its principal place of business in the United States. PGIM is a trading name of PGIM, Inc. and its global subsidiaries. PGIM, Inc. is an investment adviser registered with the U.S. Securities and Exchange Commission (the “SEC”). Registration with the SEC does not imply a certain level of skill or training. PFI of the United States is not affiliated in any manner with Prudential plc, incorporated in the United Kingdom or with Prudential Assurance Company, a subsidiary of M&G plc, incorporated in the United Kingdom. Prudential, PGIM, their respective logos and the Rock symbol are service marks of PFI and its related entities, registered in many jurisdictions worldwide. In the United Kingdom, information is issued by PGIM Real Estate (UK) Limited with registered office: Grand Buildings, 1-3 Strand, Trafalgar Square, London, WC2N 5HR. PGIM Real Estate (UK) Limited is authorized and regulated by the Financial Conduct Authority (“FCA”) of the United Kingdom (Firm Reference Number 181389). These materials are issued by PGIM Real Estate (UK) Limited to persons who are professional clients as defined under the rules of the FCA. In the European Economic Area (“EEA”), information is issued by PGIM Luxembourg S.A. with registered office: 2, boulevard de la Foire, L1528 Luxembourg. PGIM Luxembourg S.A. is authorized and regulated by the Commission de Surveillance du Secteur Financier in Luxembourg (registration number A00001218) and operating on the basis of a European passport. In certain EEA countries, this information, where permitted, is presented by PGIM Limited in reliance of provisions, exemptions, or licenses available to PGIM Limited under the temporary permission arrangements following the exit of the United Kingdom from the European Union. PGIM Limited has its registered office: Grand Buildings, 1-3 Strand, Trafalgar Square, London WC2N 5HR. PGIM Limited is authorized and regulated by the FCA of the United Kingdom (Firm Reference Number: 193418). These materials are issued by PGIM Luxembourg S.A. and/or PGIM Limited to persons who are professional clients as defined in the relevant local implementation of Directive 2014/65/EU (MiFID II) and/or to persons who are professional clients as defined under the rules of the FCA. PGIM operates in various jurisdictions worldwide and distributes materials and/or products to qualified professional investors through its registered affiliates including, but not limited to: PGIM Real Estate (Japan) Ltd. in Japan; PGIM (Hong Kong) Limited in Hong Kong; PGIM (Singapore) Pte. Ltd. in Singapore; PGIM (Australia) Pty Ltd in Australia; PGIM Luxembourg S.A., and PGIM Real Estate Germany AG in Germany. For more information, please visit pgimrealestate.com.

GENERAL/CONFLICTS OF INTEREST

These materials represent the views, opinions and recommendations of the author(s) regarding the economic conditions, asset classes, securities, issuers or financial instruments referenced herein. Distribution of this information to any person other than the person to whom it was originally delivered and to such person’s advisers is unauthorized, and any reproduction of these materials, in whole or in part, or the divulgence of any of the contents hereof, without prior consent of PGIM Real Estate is prohibited. Certain information contained herein has been obtained from sources that PGIM Real Estate believes to be reliable as of the date presented; however, PGIM Real Estate cannot guarantee the accuracy of such information, assure its completeness, or warrant such information will not be changed. The information contained herein is current as of the date of issuance (or such earlier date as referenced herein) and is subject to change without notice. PGIM Real Estate has no obligation to update any or all of such information; nor do we make any express or implied warranties or representations as to the completeness or accuracy or accept responsibility for errors.

These materials are not intended as an offer or solicitation with respect to the purchase or sale of any security or other financial instrument or any investment management services and should not be used as the basis for any investment decision. Past performance is no guarantee or reliable indicator of future results. No liability whatsoever is accepted for any loss (whether direct, indirect, or consequential) that may arise from any use of the information contained in or derived from this report. PGIM Real Estate and its affiliates may make investment decisions that are inconsistent with the recommendations or views expressed herein, including for proprietary accounts of PGIM Real Estate or its affiliates.

The opinions and recommendations herein do not take into account individual client circumstances, objectives, or needs and are not intended as recommendations of particular securities, financial instruments or strategies to particular clients or prospects. No determination has been made regarding the suitability of any securities, financial instruments or strategies for particular clients or prospects. For any securities or financial instruments mentioned herein, the recipient(s) of this report must make its own independent decisions.

Conflicts of Interest: Key research team staff may be participating voting members of certain PGIM Real Estate fund and/or product investment committees with respect to decisions made on underlying investments or transactions. In addition, research personnel may receive incentive compensation based upon the overall performance of the organization itself and certain investment funds or products. At the date of issue, PGIM Real Estate and/or affiliates may be buying, selling, or holding significant positions in real estate, including publicly traded real estate securities. PGIM Real Estate affiliates may develop and publish research that is independent of, and different than, the recommendations contained herein. PGIM Real Estate personnel other than the author(s), such as sales, marketing and trading personnel, may provide oral or written market commentary or ideas to PGIM Real Estate's clients or prospects or proprietary investment ideas that differ from the views expressed herein. Additional information regarding actual and potential conflicts of interest is available in Part 2 of PGIM's Form ADV.

INFORMATIONAL PURPOSES

These materials are for informational or educational purposes. In providing these materials, PGIM (i) is not acting as your fiduciary and is not giving advice in a fiduciary capacity and (ii) is not undertaking to provide impartial investment advice as PGIM will receive compensation for its investment management services.

These materials do not take into account the investment objectives or financial situation of any client or prospective clients. Clients seeking information regarding their particular investment needs should contact their financial professional.

The information contained herein is provided on the basis and subject to the explanations, caveats and warnings set out in this notice and elsewhere herein. Any discussion of risk management is intended to describe PGIM Real Estate's efforts to monitor and manage risk but does not imply low risk.

These materials do not purport to provide any legal, tax or accounting advice. These materials are not intended for distribution to or use by any person in any jurisdiction where such distribution would be contrary to local law or regulation.

BENCHMARK/INDEX DEFINITIONS

The financial indices referenced herein as benchmarks are provided for informational purposes only. The holdings and portfolio characteristics is expected to differ from those of the benchmark(s), and such differences may be material. Factors affecting portfolio performance that do not affect benchmark performance may include portfolio rebalancing, the timing of cash flows, credit quality, diversification and differences in volatility. In addition, financial indices do not reflect the impact of fees, applicable taxes or trading costs which reduce returns. Unless otherwise noted, financial indices assume reinvestment of dividends. You cannot make a direct investment in an index. The statistical data regarding such indices has not been independently verified by PGIM Real Estate.

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.

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 sub-types 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.

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.

REF: 007606

@2024 PFI and its related entities, registered in many jurisdictions worldwide.

