

Second Quarter 2020

As of June 30, 2020 unless otherwise noted. For Professional Investor use only. All investments involve risk, including the possible loss of capital.



A Global Leader in Asset Management



Strong Momentum

- 10th largest asset manager globally¹
- 8th largest manager of institutional assets globally²
- 8th largest manager of actively managed assets globally³
- **8**th largest U.S. defined contribution manager⁴

Strong Institutional Relationships

- 1,500+ third-party clients; 200+ with relationships longer than 20 years
- 110 third-party clients have over \$1 billion invested
- 81 of the largest 100 U.S. pension funds⁵
- 163 of the largest 300 global pension funds⁶

Unless otherwise disclosed, all information current as of June 30, 2020. Assets under management are based on company estimates and are subject to change. Totals may not sum due to rounding. **1.** Prudential Financial, Inc. (PFI) is the 10th largest investment manager (out of 527 firms surveyed) in terms of global assets under management based on Pensions & Investments' Top Money Managers list published on June 1, 2020. This ranking represents global assets under management by PFI as of March 31, 2020. **2** PFI is the 8th largest investment manager (out of 527 firms surveyed) in terms of global institutional assets under management based on Pensions & Investments' Top Money Managers list published on June 1, 2020. This ranking represents institutional assets under management by PFI as of December 31, 2019. **3.** PFI is the 8th largest investment manager (out of 185 firms surveyed) in terms of actively managed assets under management based on IPE's Top 500 Managers list published June 2020. This ranking represents assets under management on an active basis by PFI as of December 31, 2019. **4.** PFI is the 8th largest investment manager (out of 226 firms surveyed) in terms of U.S. defined contribution assets under management based on Pensions & Investments' Top DC Money Managers list published on June 1, 2020. This ranking represents a of December 31, 2019. **5.** Based on PGIM client list as of June 30, 2020 compared to U.S. PI as of December 30, 2020 compared to U.S. PI as of December 31, 2019. **5.** Based on PGIM client list as of June 30, 2020 compared to U.S. Plan Sponsor rankings in Pensions & Investments as of September 30, 2019, published February 2020. **6** Based on PGIM client list as of June 30, 2020 compared to P&I/Towers Watson Top 300 Pension Funds ranking, data as of December 31, 2018, published September 2019.

Prudential Financial, Inc. 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.

Positions of Strength

PGIM

We are recognized as an industry leader for our global scale, deep asset class expertise and consistent performance.

GLOBAL SCALE

TOP 10

Asset Manager Worldwide¹

	TOP MANAGERS	ASSETS (\$ Bn)
1	BlackRock	\$6,466
2	Vanguard Group	\$5,269
3	Fidelity Investments	\$2,900
4	State Street Global	\$2,689
5	J.P. Morgan Asset Management	\$2,239
6	Goldman Sachs	\$1,818
7	BNY Mellon Investment Management	\$1,796
8	Capital Group	\$1,700
9	Amundi	\$1,684
10	PFI ¹	\$1,481

Active Asset Manager Worldwide²

	TOP MANAGERS	ASSETS (€ Bn)
1	Capital Group	€1,832
2	J.P. Morgan Asset Management	€1,790
3	BlackRock	€1,757
4	BNY Mellon Investment Management	€1,428
5	T. Rowe Price	€1,057
6	Wellington Management	€1,028
7	Amundi	€1,013
8	PGIM ²	€898
9	Invesco	€840
10	Natixis Investment Managers	€783

Institutional Asset Manager Worldwide³

	TOP MANAGERS	ASSETS (\$ Bn)
1	BlackRock	\$4,475
2	Vanguard Group	\$3,960
3	State Street Global	\$2,130
4	Legal & General Investment	\$1,531
5	BNY Mellon Investment Management	\$1,510
6	Fidelity Investments	\$1,496
7	J.P. Morgan Asset Management	\$1,192
8	PFI ³	\$1,156
9	Wellington Management	\$1,153
10	Amundi	\$1,104

DEEP ASSET CLASS EXPERTISE

TOP 3

- Real Estate Manager Worldwide⁴
- Assets in Investment-Grade Credit Strategies⁵

Data as of June 30, 2020 unless otherwise noted. **1.** Pensions & Investments Top Money Managers list, June 1, 2020; ranking reflects largest money managers by assets under management as of March 31, 2020; based on PFI total worldwide assets under management as of March 31, 2020. **2.** IPE Top 500 Managers list, June 2020; based on PGIM total worldwide assets under management on an active basis as of December 31, 2019. **3.** Pensions & Investments Top Money Managers list, June 1, 2020; based on PGIM total worldwide assets under management as of December 31, 2019. **3.** Pensions & Investments Top Money Managers list, June 1, 2020; based on PFI total worldwide real estate assets under management as of December 31, 2018. **5.** Investment Grade Credit Manager Survey, IPE International Publishers Limited, January 2020. AUM as of September 30, 2019.

Global Footprint

With 1,300 investment professionals located in 38 offices across 16 countries, our experts are present in key financial centers around the world.



Data as of June 30, 2020.



Deep Asset Class Expertise & Global Scale



DEEP ASSET CLASS EXPERTISE

- Providing diversified solutions across public fixed income, public equity, private credit, real estate and alternatives
- · Autonomous investment processes in each business
- · Focusing on consistent, long-term investment performance
- Expert investment professionals average 14 years with PGIM, 23 years of industry experience

SCALED TO MEET CLIENT NEEDS

- Global presence 38 offices in 16 countries
- 1,300 investment professionals
- Uncompromising risk management processes
- Deeply resourced businesses execute nimbly
- Cross-asset-class research and portfolio advisory capabilities

As of June 30, 2020. All assets under management (AUM) are net unless otherwise noted. **1** Includes \$19 billion in assets managed by PGIM Fixed Income for affiliated businesses, \$111 billion in PGIM Japan assets, and \$136 million of which is sub-advised by PGIM Private Capital. **2** Includes equity \$127 billion, fixed income \$66 billion, and private credit and other alternatives \$466 million. **3** AUM totals include: assets managed by QMA and QMA Wadhwani LLP (QMAW), \$63 billion in directly managed mandates, \$43 billion of institutional and retail assets managed by various affiliated and third-party managers. **4** Total AUM reflected as gross. Net AUM is \$120.4 billion and AUA is \$39 billion. **5** Represents total combined assets of the PGIM Global Partners businesses, including \$86 billion from joint ventures in which PFI does not have a controlling interest, and therefore does not correspond to assets under management and administration as reported by PFI. AUM also includes \$6 billion in assets sub-advised by other PGIM units and included in their totals. **6** Sub-advised by other PGIM business units and included in their totals.

BUSINESS OVERVIEW Broad Range of Investment Capabilities

PGIM

PGIM's businesses provide deep asset class expertise across public and private markets to meet our clients' investment objectives.



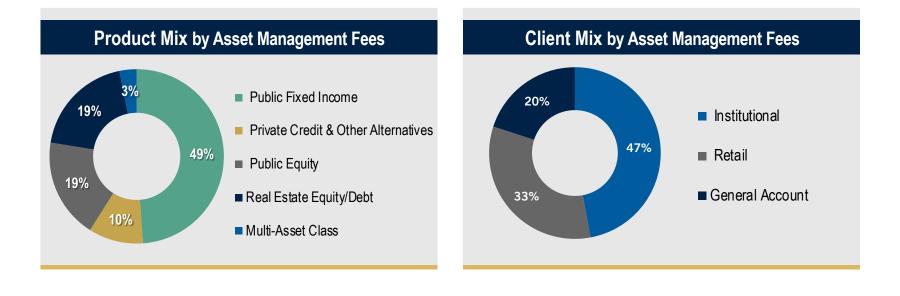
MULTI-ASSET-CLASS STRATEGIES AND SOLUTIONS

BUSINESS OVERVIEW



Well-diversified Products and Clients

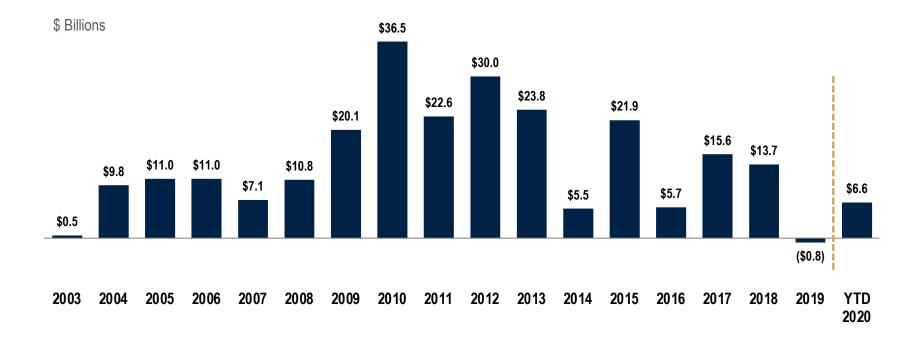
By diversifying our risk, we achieve stability and longevity for our clients.





Consistent Third-Party Net Flows Record¹

We achieve long-term performance and results by making the best possible investment decisions for our clients.

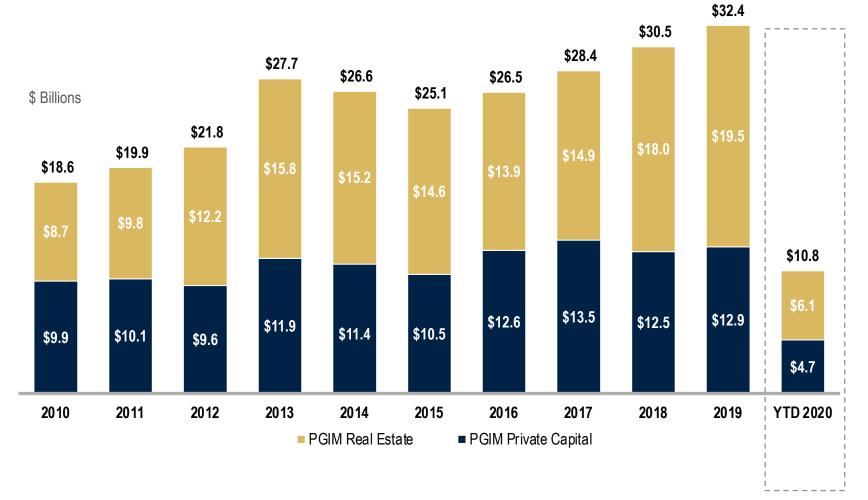


Data as of June 30, 2020.

1 Represents unaffiliated third-party net flows; excludes flows from the General Account and other affiliated PFI businesses. 2003 and 2004 third-party net flows shown in chart represent only institutional third-party net flows.



Strong Private Originations





Diversification of Strategies and Products

\$2.8 bn

Cumulative seed investments since 2010¹

Institutional Strategies seeded since 2010²

64

U.S. Mutual fund assets in 1st and 2nd quartile in terms of fees to drive asset growth³

89%



Record assets raised in most recent private mezzanine fund close⁴

Targeted efforts across our business in alternatives and high-growth strategies

Real Assets

International Originations

Global and Non-US Strategies

Absolute Return Strategies

Data as of June 30, 2020 unless otherwise noted. **1.** Strategic investments includes real estate co-investments, CLO's, UCITS and ETFs, and excludes European CLOs. **2.** Vehicle composition institutional strategies include closed-end real estate funds, mutual funds, hedge funds, separate accounts and Cayman Unit Trust Funds; and excludes CLOs, UCITS and ETFs. **3.** 89 % of mutual fund assets are in the top 2 quartiles in terms of fees across all share classes based on Like to Like Share Classes within each Morningstar category. **4.** Record assets raised in PGIM Private Capital Partners V, L.P, sponsored by PGIM Private Capital which manages a private capital portfolio of more than \$97 billion (as of June 31, 2020) of investment grade and below investment grade private debt, mezzanine and private equity.

Expertise Across Liquid and Illiquid Alternatives

Bringing together the benefits of global scale and deep asset-class expertise across both public and private markets, PGIM manages a broad range of alternative strategies for some of the largest institutional investors in the world.

- 🗭 - Deep Expertise and Track Record

With a long and consistent history successfully raising, deploying and managing capital risk and liquidity preferences, PGIM experts are uniquely positioned to evaluate the outperformance and portfolio-diversification benefits of alternative investments.

Global Scale and Resources

From liquid to illiquid alternative strategies, across private and public markets. PGIM develops and seeds a broad range of strategies within the alternative opportunity set that spans the full spectrum of investment vehicles and liquidity terms.

Specialization and Focus of a Boutique Manager

PGIM's investment philosophy and culture cultivate world-class active management within an autonomous, multi-manager "boutigue" structure. Our affiliate are deeply resourced with technology, market research, and investment experts that organically develop and manage strategies across the full lifecycle of alternative investments.

Data as of June 30, 2020 (unless otherwise noted). Totals may not sum due to double counting. 1. Alternative AUM includes hedge fund, mezzanine and other private credit, real asset and infrastructure strategies across all PGIM businesses. 2. Real Estate AUM includes real estate equity and debt strategies. 3. Private Debt AUM includes all private debt assets managed by PGIM Private Capital. 4. Infrastructure AUM includes Jennison utility equity, natural resources, global infrastructure, Master Limited Partnership (MLP) strategies, and PGIM Private Capital's private credit infrastructure and energy strategies. MLP-structured investments may have different tax outcomes for investors in different jurisdictions. Private debt infrastructure and energy strategies are also captured under Private Debt and are included in its AUM total.

PGIM ALTERNATIVES



PGIM

ASSETS UNDER MANAGEMENT

ASSET CLASS	ASSETS (\$ BILLIONS)
Real Estate	\$143 ²
Private Debt	\$97 ³
Infrastructure	\$23 ⁴

Expansion of Global Funds



Focused partnerships



Global infrastructure with localization



Institutional strategies at core of product suite

U.S. Mutual Funds

4th fastest organic U.S. mutual fund AUM growth¹

#1 by YTD Net Flows (consistently top 15 for the last four years)²

#17 by mutual fund assets (up from #37 in $2010)^2$

1 of 10 asset managers selected as Strategic Partner by Edward Jones

UCITS

74 institutional clients invested across18 strategies

29 funds totaling \$6.7 bn in AUM with registration in 17 countries

ETFs

6 ETFs launched since 2018; 4 QMA (Equity) and 2 PGIM Fixed Income

\$947+ mn in AUM for first ETF launched just a year ago

Data as of June 30, 2020 unless otherwise noted. 1. Strategic Insights/Simfund among top 50 competitors between 2008 and 2Q20. Excludes ETFs, Fund of Funds, and money market funds. 2. Sources: Morningstar and Strategic Insight/Simfund. Excludes ETFs and money markets.



Committed to Investing Responsibly

As active investors, we strive to embed ESG best practices throughout our investment, risk and talent management processes, while delivering investment performance to our clients.



Active Approach

- PGIM takes an active approach to ESG investing
- Incorporating ESG factors across investment processes
- Continually expanding sustainability product offerings



- PGIM provides a customizable, client-driven approach, paired with a long-term perspective
- Employing robust and transparent ESG investing processes
- Delivering sustainable business and environmental outcomes for stakeholders



- PGIM affiliates offer detailed applications of ESG principles
- Multi-manager model enables clients to access customized investment solutions across asset classes
- Each autonomous manager offers deep expertise across public and private to meet the needs of clients

Signatories of Principles for Responsible Investment (PRI)









Since 2015



JENNISON ASSOCIATES

Since 2020



OUR ASSET MANAGERS

14

Confidential - For Internal Use Only





Established: 1928

Investment Focus: Public and Alternative Fixed Income

Headquarters: Newark, New Jersey

Affiliate Offices:

London, Amsterdam, Tokyo, Hong Kong and Singapore

Investment Professionals: 304

BUSINESS HIGHLIGHTS

Continuity and Expertise:

- Senior investment professionals average 29 years investment experience and 24 years with the Firm
- A balanced organization with specialized expertise and an integrated investment process
- Rigorous research and risk management focused

One of the Largest Fixed Income Managers in the U.S.²

- \$567 billion of third-party assets
 - \$388 billion in institutional assets
 - \$179 billion in retail assets
- \$353 billion in proprietary assets

AUM BY ASSET CLASS

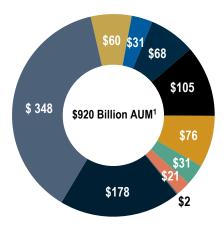
High Yield

- Bank Loans
- Emerging Markets
- Securitized Products
- Money Markets
- Municipals
- Mortgages
- Other
- Governments/Agencies
- Corporates

As of June 30, 2020 unless otherwise stated. Asset class breakdown based on company estimates and subject to change. 1. Includes \$19 billion in assets managed by PGIM Fixed Income for affiliated businesses, \$111 billion in PGIM Japan assets, and \$136 million of which is sub-advised by PGIM Private Capital. 2. Pensions & Investments, May 27, 2019, based on U.S. institutional tax-exempt assets under management as of December 31, 2018. 3. Beginning with first quarter 2019, PGIM Fixed Income's methodology of reporting clients has changed to include individual Collateralized Loan Obligation (CLO) vehicles. 4. Source of Fortune 500 list: Fortune issued June 2020. 5. Source of Global Pension Fund data: P&I/Willis Towers Watson 300 Largest Pension Funds ranking, data as of December 31, 2018, published September 2019.

Long-Term Commitment

- 848 Clients worldwide³
- 40 of the Fortune 100 companies⁴
- 33 of the 100 largest global pension funds⁵
- 18 Sovereign wealth funds and central banks



JENNISON ASSOCIATES

\$188.0 Billion in AUM¹

Established: 1969

Investment Focus: Fundamental Equity & Public Fixed Income

Locations: New York, Massachusetts

Investment Professionals: 68

HIGHLIGHTS

Invested with Conviction

A skilled approach based on rigorous fundamental research and conviction-based investing.

Entrepreneurial Culture

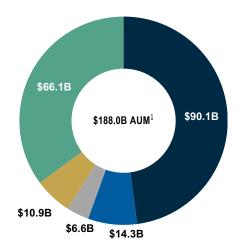
- Entrepreneurial culture focused on investment outperformance.
- Collaboration and insight sharing across independent investment teams.

Long-Term Commitment

Enduring client relationships that we believe reflect our focus on client service, long-term outperformance, and seasoned investment teams.

AUM BY INVESTMENT CAPABILITIES

- Growth Equity
- Global, International & EM Equity
- Small, Mid & SMid Equity
- Value/Core Equity
- Fixed Income



1. AUM is as of June 30, 2020. Blended portfolios are shown in their respective underlying capabilities. Due to rounding, individual product assets may not sum to total AUM

shown.



\$106.1 Billion in AUM¹

Established: 1975

Investment Focus: Quantitative Equity and Global Multi-Asset Solutions

Headquarters: Newark, New Jersey

Investment Professionals: 76

HIGHLIGHTS

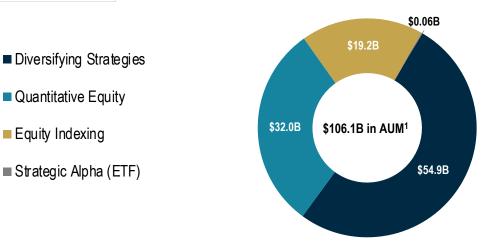
A Pioneer and Leader in Quant Investing:

- We built our first multi-factor portfolios over 40 years ago; a strong intellectual heritage underpins our continued leadership today.
- With the ability to customize solutions while staying true to our investment philosophy, we manage portfolios for a wide variety of institutions around the world.

Stability and Focus:

- Our stable investment philosophy and research-driven, team-oriented culture has successfully navigated a broad range of market environments.
- Focused on long-term performance, we target robust, sustainable sources of attractive risk-adjusted returns.

AUM BY ASSET CLASS



As of June 30, 2020 .

1The AUM total above includes AUM assets for both QMA and QMA Wadhwani LLP (QMAW). In January 2019, QMAW was acquired by PGIM, the global investment management business of PFI. QMAW, while remaining a separate legal entity, is now operating as part of the business of QMA. QMA's and QMAW's respective investment platforms, however, operate independently of each other. QMAW's AUM is only attributed to the Diversifying Strategies portion of the chart. Specifically, the Diversifying Strategies AUM amount of \$54.9 billion includes both QMA's Global Multi-Asset Solutions and QMAW's Multi-Asset strategies assets.

QMA's Global Multi-Asset Solutions AUM includes \$18.3 billion that QMA's Global Multi-Asset Solutions team directs to equity strategies advised by QMA; in this pie chart, these assets are only included in the Quantitative Equity and Equity Indexing AUM in order to avoid double counting. QMA also provides model portfolios for certain accounts, the assets of which (Assets Under Administration) are not included in our quarterly Assets Under Management. As of 6/30/2020, QMA had \$5.2 billion of Assets Under Administration. AUM totals may not sum due to rounding. QMA is the primary business name of QMA LLC.



\$96.5 Billion in AUM¹

Established: 1925

Investment Focus: Private Placements and Mezzanine Debt

Headquarters: Chicago, Illinois

Office Locations:

U.S. – Newark, New Jersey, New York, Atlanta, Chicago, Dallas, Minneapolis, Los Angeles, San Francisco; International – Frankfurt, London, Mexico City², Paris, Milan, Sydney³

Investment Professionals: 189

Private Placement Size and Scale

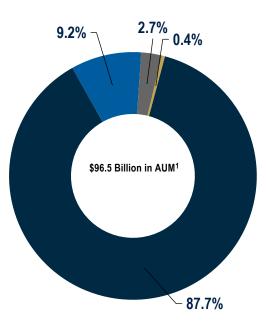
- One of the largest institutional investors in the private fixed income market today⁴ (\$12.8 billion in private capital invested in 2019 across the credit risk spectrum).
- Emphasis on capital preservation through strong covenant and prepayment protection.
- Mezzanine investment capabilities with five middle-market mezzanine funds (\$5.6 billion combined commitment).

Strong and Experienced Credit Culture

31-member senior management team averaging 28 years of asset-management experience.¹

AUM BY ASSET CLASS

Investment Grade
Below Investment Grade
Mezzanine
Equity



As of June 30, 2020.
 Operates through PGIM Real Estate Mexico S.C.
 Operates through PGIM (Australia) Pty Ltd

4 SourceMedia Private Placement Monitor & PPC as of 12/31/17.



\$142.7*

Billion in AUM

Established:

1970

Deep Experience & Expansive Insights

HIGHLIGHTS

Leveraging a 140-year history in real estate finance and more than five decades of real estate investing, we apply our expansive insights across global real estate markets to provide our clients with a broad range of debt and equity solutions that span the risk-return spectrum and geographies.

Local Market Expertise & Execution

Our dedicated professionals, located in 32 cities around the world, combine their deep local expertise and network of on-theground relationships to access markets, uncover opportunities and create better outcomes for clients.

Research-Driven Process

We combine a research-driven regional and global investment process with excellence of execution and rigorous risk management.

Trusted Partner

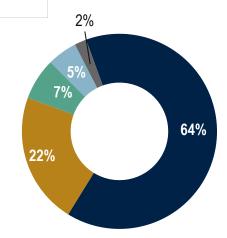
We partner with investors and borrowers to meet their distinct needs. We have earned their trust through our commitment to working with transparency and integrity, and a strong track record of successfully navigating multiple market cycles.

AUM/AUA BY REGION / TYPE

- United States
- Agency & Other Loan Servicing
- Europe
- Asia Pacific
- Latin America

As of June 30, 2020 *AUM reflected as gross. Net AUM is \$120.4B. **Approximate





Investment Focus: Real Estate Equity, Debt, Public

\$39.3

Billion in AUA

REIT Securities and Specialized Strategies

Office Locations:

U.S.: Arlington, Atlanta, Boston, Charlotte, Chicago, Cleveland, Dallas, Denver, Dublin (Ohio), Los Angeles, Madison, Miami, New York, Newark, San Diego, San Francisco, Seattle, St. Louis and Tampa

Global: Frankfurt, Hong Kong, London, Luxembourg, Mexico City, Milan, Munich, Paris, Seoul, Shanghai, Singapore, Sydney and Tokyo

Investment Professionals: 550+**

$\widehat{}$ \mathbf{PGIM} global partners

\$94.4 Billion in AUM

Established: 1998

Investment Focus: Domestic Asset Managers in Italy, China, Taiwan, and India

Locations: Milan, Shanghai, Taipei, Mumbai

Investment Professionals: 171

HIGHLIGHTS

Local Teams

Strong, in-country management and investment teams with local expertise.

Global Capabilities

 Ability to leverage the global capabilities, deep asset class expertise and scale of PGIM.

Diverse Product Lines

 Offerings include equity, fixed income, and balanced mutual funds and separately managed accounts.

Full Service Asset Managers

Pramerica SGR | Milan, Italy \$69.4 Billion in AUM

- Joint venture with UBI Banca established: 2002
- Investment Professionals: 58
- Distribution: UBI Banca branch network and select third-party banks
- Products: balanced, equity, fixed income, money market, and managed accounts

PGIM SITE | Taipei, Taiwan \$7.2 Billion in AUM

- Established: 2000
- Investment Professionals: 36
- Distribution: third party and direct
- Products: balanced, equity, fixed income, fund of funds, and money market

Client Focus

 Solid client relationships and broad distribution across various retail and institutional channels in each market.

Strategic Partnerships

 Working together with in-country partners who bring local presence, market knowledge, and distribution connections.

Everbright PGIM Fund Management | Shanghai, China \$17.1 Billion in AUM

- Joint venture with Everbright Group established: 2004
- Investment Professionals: 60
- Distribution: third party and direct
- Products: balanced, equity, fixed income, quantitative, money market, and separate accounts

PGIM India Mutual Fund | Mumbai, India \$0.7 Billion in AUM

- Established: 2010
- Investment Professionals: 17
- Distribution: third party and direct
- Products: balanced, equity, fixed income, money market, and separate accounts

As of June 30, 2020. Assets cited above include assets managed by joint ventures in which PFI does not have a controlling interest, and therefore does not correspond to assets under management and administration as reported by PFI. AUM for each business may also include assets sub-advised by other PFI units and counted in their totals elsewhere in this document. Total AUM may differ from the sum of the underlying business AUM due to rounding.

Disclosures



Professional Investor Use Only. All investments involve risks including possible loss of principal.

The information contained herein is provided by PGIM, Inc., the principal asset management business of Prudential Financial, Inc. (PFI). PGIM is a trading name of PGIM, Inc. and its global subsidiaries and affiliates. Prudential Financial, Inc. 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.

These materials are for informational or educational purposes only. The information is not intended as investment advice and is not a recommendation about managing or investing assets. In providing these materials, PGIM is not acting as your fiduciary.

In the United Kingdom and various other European jurisdictions information is issued by PGIM Limited, an indirect subsidiary of PGIM, Inc. PGIM Limited registered office: Grand Buildings, 1-3 Strand, Trafalgar Square, London, WC2N 5HR is authorised and regulated by the Financial Conduct Authority of the United Kingdom (registration number 193418) and duly passported in various jurisdictions in the EEA. These materials are issued to persons who are professional clients or eligible counterparties as defined in Directive 2014/65/EU (MIFIDII), investing for their own account, for funds of funds or discretionary clients. In Singapore, information is issued by PGIM (Singapore) Pte. Ltd. (PGIM Singapore), a Singapore investment manager that is licensed as a capital markets service licence holder by the Monetary Authority of Singapore and an exempt financial adviser (registration number: 199404146N). These materials are issued by PGIM Singapore for the general information of "institutional investors" pursuant to Section 304 of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA") and "accredited investors" and other relevant persons in accordance with the conditions specified in Section 305 of the SFA. In Japan, information is presented by PGIM Japan, Co. Ltd., ("PGIM Japan"), a registered Financial Instruments Business Operator with the Financial Services Agency of Japan. In South Korea, information is presented by representatives of PGIM (Hong Kong) Limited, a regulated entity with the Securities and Futures Ordinance. PGIM, Inc. is exempt from the requirement to hold an Australian Financial Services License under the Corporations Act 2001 in respect of financial services. PGIM, Inc. is exempt by virtue of its regulation by the Securities and Exchange Commission under the laws of the United States of America, including applicable state laws and the application of ASIC Class Order 03/1100. The laws of the United States of America, including applicable state laws and the application of ASIC Class Order 0

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, is prohibited. Certain information contained herein has been obtained from sources that PGIM believes to be reliable as of the date presented; however, PGIM 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 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 not a guarantee or a 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.

These materials 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.

© 2020 Morningstar, Inc. All rights reserved. The information contained herein (1) is proprietary to Morningstar and/or its content providers; (2) may not be copied or distributed; and (3) is not warranted to be accurate, complete, or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information. Past performance does not guarantee future results. PGIM does not review the Morningstar data and, for mutual fund performance, you should check the fund's current prospectus for the most up-to-date information concerning loads, fees, and expenses.

Securities products and services are distributed by Prudential Investment Management Services LLC, a Prudential Financial company and member SIPC. QMA, Jennison Associates and PGIM, Inc. are registered investment advisors and Prudential Financial companies. QMA is the primary business name of Quantitative Management Associates LLC, a wholly owned subsidiary of PGIM, Inc. PGIM Fixed Income and PGIM Real Estate are units of PGIM, Inc.

© 2020 PFI and its related entities. PGIM, the PGIM logo, PGIM Private Capital, QMA, Quantitative Management Associates, Jennison Associates, Jennison, PGIM Real Estate, and the Rock symbol are service marks of PFI and its related entities, registered in many jurisdictions worldwide 20/8 - 1497.