

**ANNUAL BEST IDEAS** 

# INVESTING FOR A NEW DECADE

**Bolder Thinking For Better Outcomes** 

The next 10 years are sure to bring a different set of opportunities and obstacles than the past 10.

For Professional Investors only. All investments involve risk, including possible loss of capital.

#### **About PGIM**

PGIM, the investment management business of Prudential Financial, Inc. (PFI), is a top 10 investment manager with \$1.3 trillion in assets under management worldwide (as of 12/31/19)." With global scale and specialized asset class expertise across public and private markets, our 1,100 investment professionals deliver a broad range of actively managed solutions in fixed income, equities, real estate, alternatives and private capital to serve clients' needs. Built on a foundation of strength, stability and disciplined risk management, our deep investment expertise across asset classes helps achieve superior long-term performance for our clients. To learn more about PGIM, please visit www.pgim.com.

- \* 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.
- \*\* Pensions & Investments' Top Money Managers list, May 28, 2019; based on PFI total worldwide institutional assets under management as of December 31, 2018.

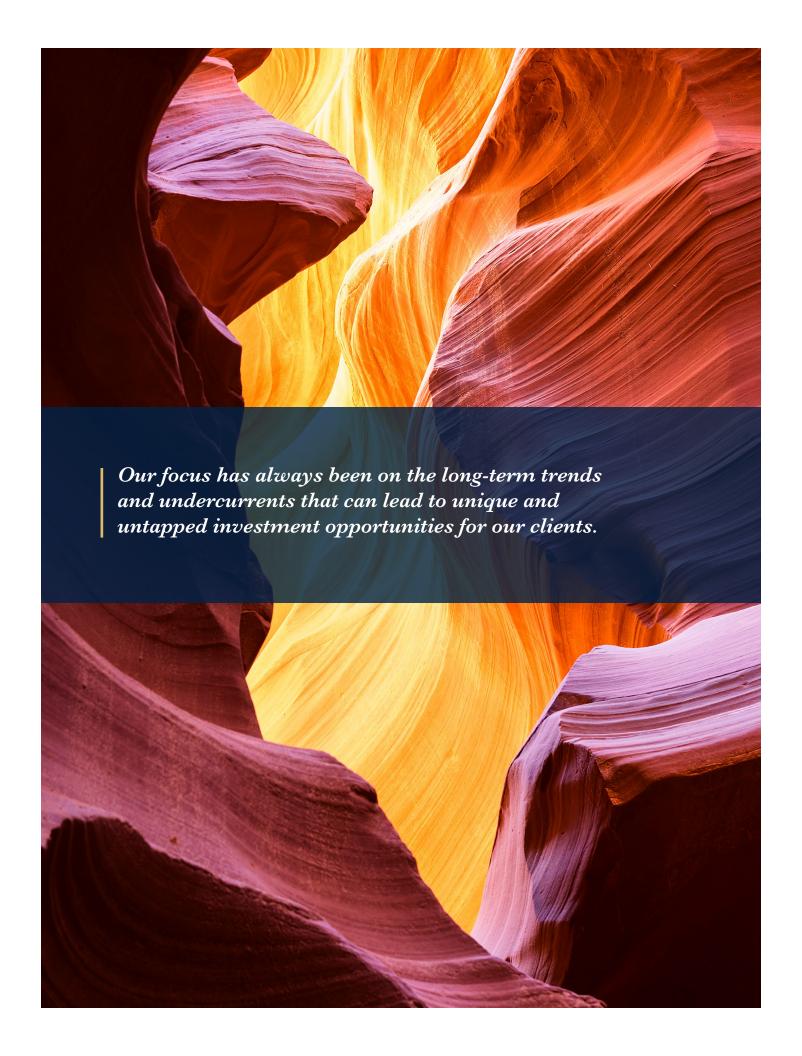
# INTRODUCTION

As we enter a new decade, the global investment community is faced with a startling set of challenges. The 2010s saw the longest bull market in history, while also experiencing unprecedented low inflation. At the same time, the decade brought with it a resurgence of nationalism and protectionism, and the return of great-power geopolitics. Investors enter 2020 with lofty stock prices, low to negative bond yields, trade tensions and a coming U.S. election that promises to have profound implications for both domestic and international policy. It all makes for a muddled future.

At PGIM, our focus has always been on the long-term trends and undercurrents that can lead to unique and untapped investment opportunities for our clients. The investment ideas offered here reflect the global footprint of our businesses, the deep asset-class specialization of our boutiques, and the informed convictions of our portfolio managers who partner with investors every day around the world. Indeed, a major advantage of PGIM's business model is that we can offer our clients specialized expertise at-scale from businesses that are autonomous and nimble.

The past decade has been a great teacher of humility. As such, the ideas we've laid out are not intended to serve as a panacea for the uncertainty that is sure to come. Instead, our aim is to shed light on a host of areas that we believe offer some of the more promising opportunities for investors who are open to being bold in their thinking and decisive in their investing.

In a world where the patterns of the past may be less than instructive, we believe that through bold insights and conviction, PGIM and its clients are favorably positioned to navigate the future ahead.



# **CONTENTS**





#### **Direct Lending**

# FILLING A VOID WHERE BANKS ONCE STOOD

Ask investors what their biggest concern is and many will cite the ongoing uncertainty in global financial markets. Negative interest rates, a trade war, geopolitical unrest and a bull market that's long in the tooth are among the issues that are conspiring to leave market participants jittery. Cynics might actually say that the direct lending asset class, which primarily exists to finance higher risk leveraged transactions, is at risk of a slowdown this deep into a robust expansion.

Matt Harvey, Managing Director at PGIM Private Capital, sees it differently.

"Like anything in private credit things need to be looked at from a long-term view and fundamentally it's healthy," said Harvey. "There are many different strategies in direct lending and ours is fairly specific, hugging the lower end of the risk spectrum but also producing differentiated returns. Actually, a little bit of a market correction could help us because we're pretty conservative. That starts to become advantageous when the market does start to correct, which it will at some point."

PGIM Private Capital is the private debt investment arm of PGIM, the global investment management business of PFI. In addition to its direct lending business, it offers strategies across the risk spectrum in investment grade and below investment grade private placements, infrastructure and real assets financing, and corporate and energy mezzanine investments. The firm is focused on building close and enduring local partnerships that are based on a steady commitment to its partners' long-term capital needs. The investment philosophy of PGIM Private Capital, established more than 75 years ago, is straightforward; it views its business through a long-term lens, leveraging its scale, relationships and experience while providing a consistent investment process.

The global financial meltdown helped change the face of leveraged middle-market lending from one driven largely by banks to one now dominated by non-bank, institutional lenders. Indeed, the direct lending market has become a structurally permanent source of debt capital for leveraged loan borrowers, principally an LBO-driven, sponsor-led market, but which relies on fundamental credit underwriting.

"Banks have largely gotten out of middle-market lending as a result of further regulation," said Harvey. "That helped open up the prospect of institutional firms offering nonbank capital in the marketplace in a way, quite frankly, that is better suited to what our borrowers want anyway, which is longer-dated and more flexible financing."

#### The firm focuses on five key strategic elements:

- Middle-market companies with EBITDA of \$10 million to \$50 million
- Borrowers with resilient cashflow dynamics, and/or meaningful collateral, with a key focus on loss-avoidance through cycles
- Sponsored and non-sponsored transactions

- Generalist industry approach with an emphasis on business services, consumer products and services, distribution and logistics, food and beverage, energy, packaging, chemicals, and manufacturing companies
- Experienced management teams and owners with an economic stake in the company's success

With more than \$90 billion in assets under management, PGIM Private Capital is one of the largest global managers in the asset class. The firm leverages its global origination network to find deals that don't necessarily fit the traditional bill of transactions such as broad auctions and leveraged-buyout financing, which make up the vast majority of the direct lending market. Instead, it looks to produce a more diverse portfolio between both private-equitybacked deals and also non-sponsored deals found through its network comprising privately held, often management or familyowned, companies.

"Ultimately, in private credit, origination is the biggest scarce asset, and we have origination capacity as deep as anyone in the world," Harvey said. "When you think about selectivity of investments, you accomplish that by not being a price taker, but by finding your own deals through your relationships. And keep in mind it's important to be selective not only when markets are fallow, but also when they're flush."

Direct lending should offer strong relative return from loss avoidance and portfolio diversification, not financial engineering or deeper investment risk for higher yield.

#### Deep, Local Coverage

Unique to PGIM Private Capital's direct lending model is the business's regional office network, with nearly 200 investment professionals in local markets around the world. It's a setup that allows the firm to take a macro-economic perspective on global trends that underlie its structuring and underwriting, and also provides the flexibility to offer cross-border financing structures, as well as transactions in any one domestic market.

"This is extremely important from our perspective," Harvey said. "Many other direct lenders typically sit in New York or London and they're usually calling on a finite set of transactional people. They're not going into northern Iowa or eastern Washington state and calling on family-owned companies over a long period of time. We want to get close to local markets and close to companies that issue capital across the risk spectrum, which enables us to capture a broader part of the market. And because of our scale we can do it over a long period of time; it's hard for others to replicate that."

Of course, it's not an overnight phenomenon. Harvey calls it the "everyday blocking and tackling" at the regional office level, as opposed to a one-time push for business.

"What I get most excited about is creating a differentiated portfolio of scale for our investors," he said. "I think our model allows us to provide a lower risk return than what the broader market is offering right now. But you can't just flip a switch - it takes time."

Learn more at pgimprivatecapital.com



#### **Global Disruptive Growth**

# FINDING LEADERS IN A WORLD OF INNOVATION

In a slow-growth world, finding companies with higher growth potential may be the key to investment success.

Technological innovation over the last two decades or so – ecommerce, smartphones, social media, digital payments, cloud computing – has created some extraordinary earnings growth and numerous compelling investment opportunities. We expect continued innovation to create opportunities in 2020, and beyond. Innovative companies with disruptive ideas challenge competitors and industries that have been either unwilling or unable to adapt. Disruptors displace established products, services, business models, and technologies.

In many cases, they create completely new markets. These disruptors can be extremely profitable, and when stock performance follows earnings growth, they can result in great alpha-generating investments over the long term.

"Throughout Jennison's 50-year history, much of our success has been driven by identification of secular shifts and the companies best positioned to benefit from them," says Jennison chairman and chief executive, Jeff Becker.

Of course, the duration and magnitude of growth is crucial; plenty of companies have considerable potential but lack the business-model strength or addressable market opportunities that foster sustained growth.

We focus on disruptive growth companies we think will have a major impact on industries globally. These companies often have difficult-to-replicate business models that create significant competitive barriers. They can maintain their dominant position by exploiting the innovations of others or acquiring strategic competitors. They also typically benefit from long-duration, secular tailwinds.

In 2020, as in any year, fundamental research of individual companies drives our stock selection. The focus on company fundamentals sometimes results in investment themes. In technology, we continue to find strong growth in cloud-based infrastructure, digital/mobile payment processing companies, and companies benefitting from growth in e-commerce. In health care, advances in medical innovation have led to opportunities in biotech, pharma, and medical device companies. In consumer discretionary, we're tilted toward internet-based retail and luxury spending, while in communication services, we're invested in video streaming and social media companies.

#### **Finding Sustainable Growers**

Creating a portfolio of innovative companies with competitive edges requires a flexible, opportunistic, and high-conviction approach unconstrained by region, country, or sector. It involves observing consumer buying patterns, new addressable market opportunities, innovative problem solving, and scientific breakthroughs. But identifying securities that can generate long-term earnings growth is easier said than done. As the world has learned, disruption occurs quickly – think mobile innovation – and

companies that have caused structural shifts in their industries have historically been rewarded with strong growth for many years. In the simplest of terms, successful disruptors address consumer convenience, raise business productivity, or create innovative solutions for societal or economic problems.

Along the way, the best companies evolve their models to incorporate new technologies or applications that enable them to layer on new revenue streams, expand their addressable markets, and strengthen their sustainable competitive advantages.

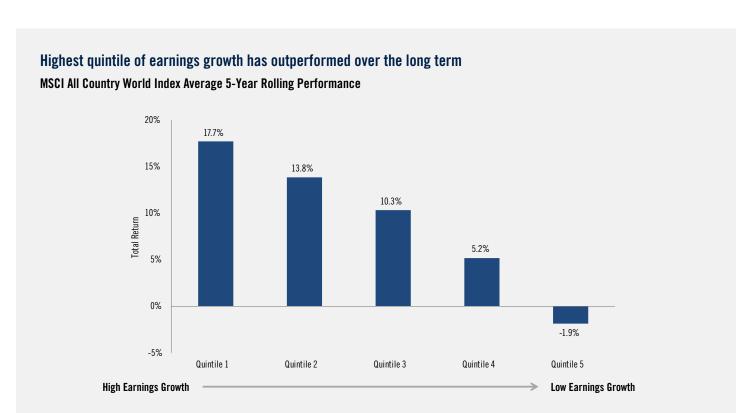
Of course, strong earnings growth doesn't automatically translate into strong stock performance. But historically, companies with the highest earnings growth have significantly outperformed companies with lower earnings growth. High-earnings-growth businesses can emerge in any sector or region; historically, the U.S. has produced

the majority of companies with these attributes, but investment opportunities can be found globally.

#### The Fastest Earnings Growers Have Outperformed

Growth and competitive advantages are rarely sustained by a single successful product. Durable growth stems from an ability to capture additional revenue streams from adjacent products or services as platforms or ecosystems expand. A blockbuster new product may lead to a first-mover advantage, but without a sustainable competitive advantage, a new pool of profits will soon face stiff competition. To benefit from the impact of transformative new business models and rapid innovation, investors will need to anticipate changing structures, dynamics, and behaviors of industries, businesses and consumers in 2020 and beyond.

#### Learn more at jennison.com



Source: FactSet as of 1/1/97 to 12/31/18. Chart was created by Jennison using FactSet data for the MSCI ACWI. The chart above reflects the median avg. annualized (rolling 5-Year) returns from 1997-2018. These are based on the Historical 5-Year Earnings Growth Quintiles 1-5; Quintile 1 represents the highest growth quintile while Quintile 5 represents the lowest growth quintile. Past performance does not guarantee future results. See benchmark descriptions at the end of this presentation.



#### **Emerging Markets Debt**

## RESILIENCY AND AN IMPROVING BACKDROP

Emerging markets showed their resiliency in an uncertain environment last year, and with the support of a global economic landscape that appears relatively stable, EM debt remains generally well positioned as 2020 commences.

The recent "phase one" trade agreement between the U.S. and China eases some (but not all) of the uncertainty that was hanging over global markets. Factor in the residual effects from 2019's broad easing in monetary policies, along with investors' ongoing search for yield amid generally limited supply, and the outlook for EMD appears broadly positive.

"Our view is that the global economy is likely to provide a favorable backdrop for markets and risk-taking in the year ahead," said Nathan Sheets, PGIM Fixed Income's Chief Economist and Head of Global Macroeconomic Research. "That's not because we expect global growth to be buoyant, but rather because growth is poised to plod along at a moderate pace."

In this environment, we believe EM hard currency assets will continue to perform well in 2020 (it's not uncommon to have successive years of strong performance in EMD assets). More specifically, we continue to believe a hard currency "barbell" position consisting of lower-quality, front-end sovereigns and higher-quality, back-end issues may capture the upside in a constructive backdrop (while limiting the downside in a volatile one).

At the front of the barbell trade, we continue to favor select B-rated sovereign issuers, including Ecuador, Ukraine, Egypt, the Ivory

Coast and a mix of sub-Saharan issuers, that are implementing reforms with proven market access and/or support from the International Monetary Fund. There are also some CCC-rated issuers that are trading at distressed levels, including Argentina and Lebanon, where recent developments are already priced in. For instance, if a resolution to Argentina's sovereign dollar bonds emerges that is more market friendly than indicated by current prices, then Argentina assets could perform well. In Lebanon, a political resolution, combined with international funding support, could contribute to higher bond prices.

At the other end of the barbell, we favor select Gulf Cooperation Council countries that trade wide of their credit ratings and quasisovereign names that trade wide of the sovereign, such as PEMEX, or feature improving credit quality, such as Petrobras.

In terms of the main risks to the current constructive backdrop, we see two: China and politics. Uncertainty surrounding the trade war is the principal risk for the global economy over the next year. While the recent "phase one" agreement has lifted some of the clouds on trade, we remain fully aware that less favorable outcomes remain on the table. Certainly, a re-escalation of the trade war could reverse the stabilization we are starting to see in global manufacturing.

A second risk lies in the U.S. presidential election, as markets could struggle to price in risks associated with the outcome and the outlook for 2021. If President Trump is re-elected, for instance, how might his priorities change now that he'd be unencumbered by another election? That could be a particularly poignant question on the trade front.

If a Democrat is elected, markets could grapple with a major shift in regulatory and administrative policies pertaining to consumer and labor rights, health care, energy, the financial sector, and the environment. Given the rhetoric regarding tax increases for certain entities, the tax cuts implemented in 2017 may also come into question.

Learn more at pgimfixedincome.com

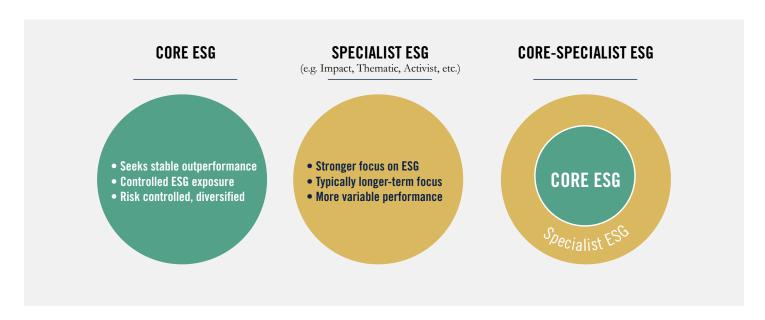
"When I look at hard currency spreads in a world where developed market central banks aren't acting as a headwind and growth is moderate, I continue to believe that there is value in lower-rated EM names."

 Cathy Hepworth, CFA, Co-Head, Emerging Markets Debt Team at PGIM Fixed Income



# **ESG CORE FRAMEWORK**

Environmental, social and governance (ESG) issues have become increasingly important to institutional investors. But there is no one-size-fits-all ESG solution. Nor is there a consensus around what constitutes best practices for sourcing ESG data.



At issue: investing strictly in ESG-friendly firms can result in a portfolio that trails non-ESG returns, which may conflict with investment managers' fiduciary responsibilities. The ideal ESG approach would incorporate ESG considerations while maximizing long-term risk adjusted returns. QMA believes that a core-satellite framework could be successful in this regard.

The core-satellite approach allows investors to pair complementary ESG strategies. A core manager (such as QMA) could contribute controlled ESG exposure with risk control and stable performance, while a specialist manager could provide a stronger focus on ESG with potentially more variable performance. The combination

of core and specialist managers may be more likely to deliver comprehensive investment performance and a stronger ESG outcome.

#### **Overcoming the Challenges of ESG**

"We view the quantitative manager's role as one of providing an objective, yet flexible data-driven perspective on ESG issues," said Gavin Smith, Managing Director and Portfolio Manager at QMA. "We do so by carefully balancing our clients' growing desire to invest responsibly with our goal to maximize their long-term, risk-adjusted returns."

#### QMA has identified three primary challenges to achieving this goal, along with proprietary quantitative solutions:

Evaluating ESG attributes: In the realm of ESG investing, more is not better. Indeed, QMA's proprietary research shows that focusing solely on ESG metrics that are material for each firm and industry is preferable to utilizing all available ESG metrics. QMA's refined, data-driven approach to evaluating ESG also seeks to eliminate "window dressing," in which companies may look attractive from an ESG perspective while hiding negative ESG traits. Our combination of effort, effect and controversy-based ESG metrics help us in this respect.

Expanding ESG insights: ESG information is voluntarily disclosed on a corporate level, so accurate data can be sparse (and questionable). In order to overcome limitations on data availability and quality, QMA utilizes a quantitative data completion methodology, which can significantly increase the breadth of ESG insights. We draw on statistical techniques and natural language processing (NLP) to overcome limited data. This allows us to delve into information sources beyond those directly disclosed by the company. Language from conference calls and other unstructured data can be used to quantify material ESG issues.

We also encourage companies to be more transparent about their ESG practices through participation in industry associations, effective lobbying, and other efforts, which seek to improve ESG stewardship on a wider level.

Integrating ESG into portfolio construction: QMA's quantitative process integrates ESG insights without changing alpha factor exposures by substituting stocks with more attractive ESG attributes for those that rank less attractively from an ESG

perspective. Focusing on portfolio-level factor and ESG exposures rather than individual firm-level exposures aids substitutability and alpha capture.

#### The Substitution Effect

ATTRIBUTES	✓ STOCK A	× STOCK B
Value	Cheap	Cheap
Growth	Increasing growth	Increasing growth
Quality	Fundamentally strong	Fundamentally strong
ESG	GOOD ESG	<b>⋈</b> BAD ESG

Source: QMA. For illustrative purposes only.

#### Targeted ESG

Investors will always have varying goals for their ESG portfolios. Our quantitative process allows us to adjust the ways in which we integrate ESG into portfolios and target different levels of active ESG exposure to produce varying levels of ESG investment for each client. Investors can then select the alpha and/or ESG exposure solution that best meets their needs. This can range from a moderate level of ESG exposure with additional expected alpha to a higher level of ESG exposure that offers expected returns more in line with their selected benchmark.

As demand for ESG investing continues to grow, more institutional investors will be forced to contend with the tricky balance of ESG issues and alpha capture. QMA's core-satellite approach allows investors to choose their own level of ESG investment, so they can "do good while doing well."

#### Learn more at gma.com



#### **Real Estate**

## THE GROWING OPPORTUNITIES IN DEBT

Debt has always been a component of a real estate investor's arsenal, but only in recent years has it become a more ubiquitous asset class for institutional investors.

As the global economy continues its longest-running expansion of the post-war era, investors who are interested in taking a more defensive position related to a potential economic slowdown are increasingly looking at debt strategies that, while not offering the upside of equity, come with structural characteristics that limit downside risk.

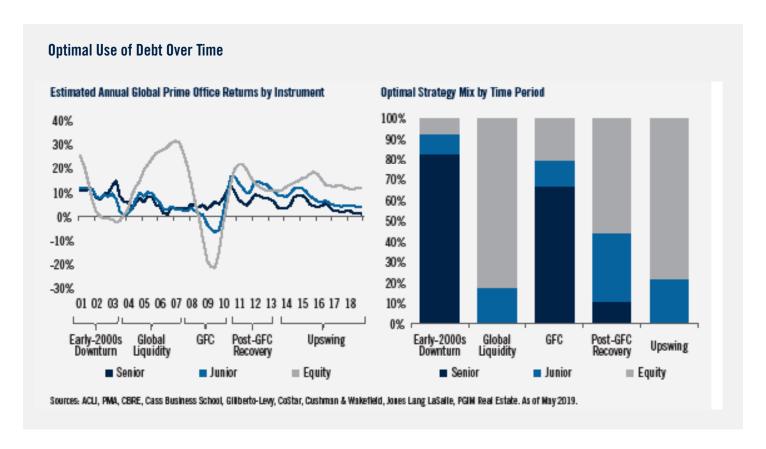
Indeed, part of the appeal of real estate debt in today's economic environment rests in its potential to ease the dilemma between taking on risk – attempting to capture any further upside through the economic cycle and, if the eventual correction is modest, into the next one – and being defensive to avoid the risk of capital loss and drag on performance in the event of a substantial correction.

"Looking at the last downturn, some of the results that we saw coming out of real estate debt portfolios were related to poor construction of the underlying real estate debt — interest-only lending, lending on speculative development, leverage on leverage in excessive ways," said Jackie Brady, Executive Director, Business Development, at PGIM Real Estate. "What we are seeing now are more protections being retained in lending. The asset class will look very different from how it looked in the last global financial crisis, largely because we haven't seen underwriting excesses in the same way. The underlying assets are real estate, so we don't expect that we will get a pass in another downturn. But we would enter that downturn on much stronger footing."

#### **Integrating Debt Into a Broader Portfolio**

Andrew Radkiewicz, Global Head of Private Debt Strategy and Investor Solutions at PGIM Real Estate, said investors shouldn't view real estate debt as a replacement for real estate equity. They should instead consider their expectations of future potential changes in real estate value as the determinant to where they position themselves, with an eye towards their target return; an investor with a Treasury-plus-100-basis-points target will behave differently than one seeking a double-digit return.

"If one is expecting a downturn, there would naturally be some benefit in dialing up real estate debt and, in other times, dialing it down versus an equity return," he said. "Although real estate debt gives up an element of future upside, the thinking should be what is that potential upside, and is that small or big enough to give you the downside protection at different parts of the cycle? From a portfolio construction perspective, we think adding real estate debt alongside private real estate equity investments is a good thing to do."



#### What's Driving the Growth?

The rapid growth of the market stems, in part, from its allure to both real estate and fixed income investors. For real estate investors, debt strategies look increasingly attractive compared to equity returns that, given the position of the cycle, are vulnerable to a correction. The attractiveness of holding debt, rather than equity, increases during a downturn.

What's more, increasing market scale and opportunity are encouraging capital flows to debt strategies. One offshoot of the global financial crisis is that banks have remained constrained by a heavier regulatory burden, creating an opportunity for alternative lenders to either expand from an established base, in the case of the United States, or grow significantly from a small base, as in Europe and Asia Pacific. The excess spreads offered by real estate loans are also attractive to a wide pool of investors, although conditions still favor specialist real estate lenders that can step in and manage a property to recover or grow values if the borrower defaults.

#### **Ignored for Too Long**

In the last two downturns, the optimal strategy mix for an investor with a combined equity and debt portfolio would have comprised debt holdings of 80% to 90%. Those numbers suggest it would be beneficial to maintain an allocation to debt strategies through the cycle. Given concerns that the global real estate cycle may suffer a period of weakness or a correction in the coming years, the ability of debt investments to provide downside protection means that the asset class could remain an attractive proposition for investors looking to optimize their global real estate portfolio.

"People recognize that this is a large market, it offers a breadth of risk-adjusted return opportunities, and it has been ignored for too long," said Radkiewicz.

Learn more at pgimrealestate.com



# Retirement Income in DC THIS TIME IT'S DIFFERENT

Generating income in retirement remains one of the Holy Grails of investing. For plan sponsors looking to design and implement robust offerings, the challenges are many, including demographics and an ever-changing regulatory environment.

Sponsors are looking for safe harbor and support from regulators to more effectively incorporate lifetime income solutions in their plans, and provisions in the just-passed SECURE Act (Setting Every Community Up for Retirement Enhancement) will help.

"The passing of the SECURE Act affirms the notion that the regulatory environment is different this time in terms of the support for retirement income in the DC space," said Josh Cohen, Managing Director, Defined Contribution, for PGIM's Institutional Relationship Group. "Going forward, a comprehensive solution to income will require thoughtful asset allocation, institutional investments, technology-enabled customization, an LDI framework to hedge risks and support a spend-down, and some form of guaranteed income to hedge longevity risk."

#### Why it's so Important

Over the past decade there's been a substantial change in some of the fundamental aspects that impact both employees and plan sponsors. Workers are clearly becoming more dependent on DC plans, and according to the U.S. Bureau of Labor Statistics, in 2008 18.9% of the workforce was 55 and older, while in 2018 that number was 23.5%. Meanwhile, plan sponsors are showing far greater appreciation for financial wellness, with a 2019 study from Alight Solutions showing that in 2018 65% of sponsors said that's something they focused on, versus just 30% in 2014.

"Financial wellness is about a lot of things, but effectively it's saying, 'If I have a workforce that's less financially stressed and more retirement ready, it's not only good for the employee but it's also good for the company," Cohen said.

Indeed, it's true that the cost of delayed retirement for corporate America is expensive. Research from PFI published in 2017 found an incremental cost to employers of over \$50,000 per employee for each additional year of working beyond when the employee could have otherwise retired.

#### **Evolving Solutions and Strong Communication**

Constructing a more retirement-income-friendly plan is about more than offering a specific product. Cohen notes that plan design is an integral part of any strong DC program. If DC 1.0 was a do-it-yourself plan, and 2.0 was built around enhancing participation and diversification to support accumulation, what he calls DC 3.0 is designed to help people really think about lifetime income.

#### What might DC 3.0 look like? Here are some features:

- Setting retirement readiness objectives and measuring results
- Communicating account balances to participants in terms of the projected retirement income they will generate
- Allowing for systematic withdrawals in addition to lump sums

- Default-driven solutions that utilize an institutional investment philosophy that incorporates asset-liability management, active and passive investment options, and alternative asset classes
- Offering non-guaranteed investment options designed to hedge retirement spending and duration risk
- Offering guaranteed income products that can be used to hedge unique risks, particularly longevity

Learn more at pgim.com/dc

Regardless of changes coming out of Washington, it's incumbent upon plan sponsors to help participants meet their long-term needs. Much of the focus up to this point in the DC industry has been on helping individuals accumulate enough assets to achieve their retirement goals. However, this is solving for only part of the challenge as participants will be faced with new risks in meeting their retirement spending needs. With discussions around retirement income within DC plans gaining momentum, now may indeed be the time for sponsors to make meaningful enhancements to their plans to support retirement income.

#### **Important Information**

The information contained herein is provided by PGIM, the principal asset management business of Prudential Financial, Inc. (PFI), PGIM is a trading name of PGIM, Inc. and its global subsidiaries and affiliates. PGIM, Inc., QMA LLC and Jennison Associates are each investment advisers registered with the US Securities and Exchange Commission. PGIM Fixed Income, PGIM Private Capital and PGIM Real Estate are business units of PGIM, Inc. 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.

In the European Economic Area ("EEA"), information is issued by PGIM Limited or PGIM Netherlands to persons who are professional clients as defined in Directive 2014/65/EU (MiFID II). PGIM Limited's registered office: Grand Buildings, 1-3 Strand, Trafalgar Square, London, WC2N 5HR. PGIM Limited is authorised and regulated by the Financial Conduct Authority ("FCA") of the United Kingdom (Firm Reference Number 193418). PGIM Netherlands B.V. is authorised by the Dutch Authority for the Financial Markets (Autoriteit Financiële Markten — AFM) as an alternative investment fund manager with MiFID top up service capabilities under registration number 15003620. PGIM Limited and PGIM Netherlands are authorized to provide services or operate with a passport in various jurisdictions in the EEA. In certain countries in Asia, information is presented by PGIM (Singapore) Pte. Ltd., a Singapore investment manager registered with and licensed by the Monetary Authority of Singapore. In Japan, information is presented by PGIM Japan Co. Ltd., registered investment adviser with the Japanese Financial Services Agency. In South Korea, information is presented by PGIM, Inc., which is licensed to provide discretionary investment management services directly to South Korean investors. In Hong Kong, information is presented by representatives of PGIM (Hong Kong) Limited, a regulated entity with the Securities and Futures Commission in Hong Kong to professional investors as defined in Part 1 of Schedule 1 of the Securities and Futures Ordinance. In Australia, this information is presented by PGIM (Australia) Pty Ltd ("PGIM Australia") for the general information of its "wholesale" customers (as defined in the Corporations Act 2001). PGIM Australia is a representative of PGIM Limited, which is exempt from the requirement to hold an Australian Financial Services License under the Australian Corporations Act 2001 in respect of financial services. PGIM Limited is exempt by virtue of its regulation by the FCA (Reg: 193418) under the laws of the United Kingdom and the application of ASIC Class Order 03/1099. The laws of the United Kingdom differ from Australian laws. 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 differ from Australian laws. In South Africa, PGIM, Inc. is an authorised financial services provider – FSP number 49012.

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.

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.

There is no guarantee that the investment managers' objectives will be achieved. Further, there is no assurance that any strategies, methods, sectors, or any investment programs herein were or will prove to be profitable, or that any investment recommendations or decisions we make in the future will be profitable for any investor or client. Professional money management is not suitable for all investors.

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. No risk management technique can guarantee the mitigation or elimination of risk in any market environment. Past performance is not a guarantee or a reliable indicator of future results and an investment could lose value. No liability what soever 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 and its affiliates may make investment decisions that are inconsistent with the recommendations or views expressed herein, including for proprietary accounts of PGIM or its affiliates. Any projections or forecasts presented herein are as of the date of this presentation and are subject to change without notice. Actual data will vary and may not be reflected here. Projections and forecasts are subject to high levels of uncertainty. Accordingly, any projections or forecasts should be viewed as merely representative of a broad range of possible outcomes. Projections or forecasts are estimated, based on assumptions, and are subject to significant revision and may change materially as economic and market conditions change. PGIM has no obligation to provide updates or changes to any projections or forecasts.

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: PGIM and its affiliates may have investment advisory or other business relationships with the issuers of securities referenced herein. PGIM and its affiliates, officers, directors and employees may from time to time have long or short positions in and buy or sell securities or financial instruments referenced herein. PGIM and its affiliates may develop and publish research that is independent of, and different than, the recommendations contained herein. PGIM's personnel other than the author(s), such as sales, marketing and trading personnel, may provide oral or written market commentary or ideas to PGIM's clients or prospects or proprietary investment ideas that differ from the views expressed herein.

© 2020 PFI and its related entities. PGIM, the PGIM logo, PGIM Private Capital, QMA, Jennison Associates, Jennison, PGIM Real Estate, and the Rock symbol are service marks of PFI and its related entities, registered in many jurisdictions worldwide, 20/1 - 1014

#### **Benchmark Descriptions**

The financial indexes referenced herein are provided for informational purposes only. The MSCI All Country World Index is a free float-adjusted market capitalization weighted index designed to measure the equity market performance of developed and emerging markets. The MSCI ACWI comprises 24 developed country market indexes and 21 emerging market country indexes. MSCI information may only be used for your internal use, may not be reproduced or redisseminated in any form and may not be used as a basis for or a component of any financial instruments or products or indices. None of the MSCI information is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such. Historical data and analysis should not be taken as an indication or guarantee of any future performance analysis, forecast or prediction. The MSCI information is provided on an "as is" basis and the user of this information assumes the entire risk of any use made of this information. MSCI, each of its affiliates and each other person involved in or related to compiling, computing or creating any MSCI information (collectively, the "MSCI Parties") expressly disclaims all warranties (including, without limitation, any warranties of originality, accuracy, completeness, timeliness, non-infringement, merchantability and fitness for a particular purpose) with respect to this information. Without limiting any of the foregoing, in no event shall any MSCI Party have any liability for any direct, indirect, special, incidental, punitive, consequential (including, without limitation, lost profits) or any other damages.(www. msci.com) All indexes referenced in this commentary are registered trade names or trademark/service marks of third parties. References to such trade names or trademark/service marks and data is proprietary and confidential and cannot be redistributed without Jennison's prior consent. Investors cannot directly invest in an index.



PGIM, Inc. 655 Broad Street Newark, NJ 07102

For media and other inquiries, please contact thought.leadership@pgim.com.

Visit us online at pgim.com

Follow us @PGIM on LinkedIn, Twitter and YouTube for the latest news and content.