

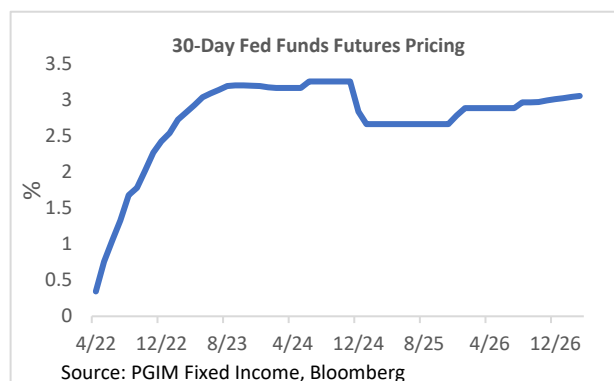
From Bear Flattening to Steepening

WEEKLY VIEW FROM THE DESK | April 11, 2022

[QUICK LINK TO THE RETURNS TABLE](#)

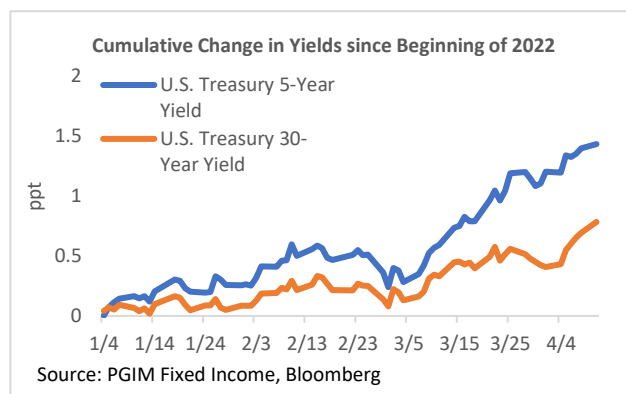
MACRO

- A strong consensus seems to be building on the likelihood of a recession in the near term, even though so far the labor market has shown no signs of cooling. Looking at short-term interest rates, the market is pricing in much less recession risk than the chatter suggests. After raising rates to more than 3%, the Fed is priced by fed funds futures to gradually reduce borrowing costs back to a terminal rate of around 2.4%, rather than begin an abrupt easing cycle to combat a recession.
- While the economic rebound enabled U.S. companies to notch up their estimates just before earnings season for the past several quarters, that temporary trend is coming to an end as the economy cools. Also, the costs of goods are getting so high that firms may begin to lose pricing power, and we may begin to see pressure on margins in the coming earnings season.
- We are certainly aware that both the economic and market cycles are moving at hyperspeed and the environment could deteriorate very quickly as confidence and the growth trajectory take a sharp turn. In fact, the selloff in risk assets that resurfaced just this week could be a sign that investors are beginning to suss out this new, challenging reality. The abundance of capital and cheap financing in recent years has allowed U.S. firms to operate with tremendous amount of leverage, but cash flows can dry up as quickly as they grew, making careful assessment of the credit environment more important than ever.
- In Europe, as France heads to a runoff election in two weeks, we see around an 80% chance of Macron's re-election, leaving a non-negligible probability for an upset by the right-wing candidate Le Pen. France's recovery has been strong and it's economically less vulnerable to Russia's war on Ukraine; and Macron's longer-term economic reforms are beginning to bear fruit, boosting his chance of reelection.



RATES

- The selloff in global rates continues, but the epicenter of higher yields has moved from the front end to the 10- and 30-year points, which rose by more than 30 bps in the U.S. and around 15 bps in Germany last week. The Fed minutes and Vice Chair Brainard's comments regarding quantitative tightening contributed to the shift from bear flattening to steepening. Most analysts expect the Fed to let as much as \$60B of Treasuries run off every month, meaning it will likely only reinvest maturing securities to the tune of around \$40-60B during the four coupon-issuing months in the coming year.
- Expectations for QT don't seem to diminish rate hike expectations, as the market continues to price in successive 50 bp hikes at the May, June, and July meetings. While the pace of hikes seems astonishingly rapid to some, the current projected path is in fact no steeper than the 1988 and the 1994 cycles. The very gradual and patient trajectory that was taken during the most recent Fed tightening may have colored our perception of what an average rate-hike cycle looks like. More rapid hikes are also being priced for the European Central Bank, as two hikes are expected by October and potentially the third by December.
- Mortgage-backed securities cheapened last week due to higher implied volatility and increased originations in 4-5% coupons. The surge in mortgage rates has been relentless and the national 30-year average now stands at the highest since 2010. Meanwhile, the Fed's oncoming balance sheet runoff will likely hurt the 30-year 2% and 2.5% sectors the most, and we continue to maintain our focus on parts of the universe where the Fed makes a smaller impact.



IG CORPORATES

- US IG corporate bonds spreads widened marginally during the week. Earnings, ratings, and US-dollar yields remain attractive, but growth has peaked, investors consider valuations to be full, and geopolitical/event risk has reared its head. Bonds issued by utilities and higher-quality bonds generally outperformed but industrials lagged. First-quarter earnings season comes under way this week, starting with JPMorgan.

- Around \$25B in new US IG corporate issues priced last week, with concessions compared to secondary markets averaging around 10 bps. Lower volume was expected for this week, until Amazon's announcement that it plans to issue up to seven bonds with maturities of up to 40 years. US IG issuance increased in the first quarter, year on year, while European IG issuance declined. Bank of America lowered its expectations for full-year US IG issuance to \$150B, mainly due to reduced expected issuance by US financials, as US interest rates rise.
- Among European IG corporate bonds, the French election was mostly felt in French bank bonds, whose spreads widened around 20 bps, while other European bank spreads widened 2-3 bps. A quiet week lies ahead in European IG bonds, with an ECB meeting on Thursday, followed by the long Easter weekend.

HIGH YIELD

- U.S. high yield spreads and yields widened last week with ETFs dictating most of the price action. Weakness was consistent across all quality tiers, with BBs slightly underperforming. High yield bond mutual fund flows turned modestly positive while the primary market ramped considerably. In all, nine deals priced for \$7.1B in proceeds. Some of the largest deals (Fortescue, Entegris, and Holly) priced within talk and ended the week wrapped around new issue price. Including last week, YTD gross issuance currently stands at \$53B, considerably off the pace over the same period last year.
- Loan mutual funds saw another strong inflow, bringing YTD inflows to \$17.5B. The strong technical, combined with muted new issuance, has helped drive YTD total returns into positive territory. While only 1.3% of the Index is currently bid above par, we expect to see that rise over the near term.
- We remain constructive on loans and expect inflows and robust CLO formation to continue as investors continue to seek out floating rate assets. Assuming a base rate of one-month Libor, a 50 bp rate hike by the Fed in May should lead to higher overall coupons as approximately 90% of the market begins to float. On the flip side, interest coverage ratios can be expected to decline by a turn of 0.7 for every 100 bp rise in rates, on average, depending on how successfully the issuer is able to pass on rising costs to customers.
- In Europe, high yield posted negative returns as risk markets generally underperformed. Loans, however, posted a positive return as the strong technical remained in place. While the high yield market remained effectively closed, five new loan deals launched as the market continues to show signs of re-opening.

EMERGING MARKETS

- EM hard-currency bonds display remarkable resilience and issuers in this segment remain bifurcated, with commodity exporters, outperforming commodity importers. Outperformers included Saudi Arabia, Qatar, and Angola, which launched a tender offer for its 2025 bonds. Cash spreads remained substantially unchanged last week, with IG spreads marginally outperforming HY spreads, but EM hard-currency derivatives spreads widened. The technical background improved, with around \$2B of inflows last week.
- The US banned Russia from making payments on its hard-currency bonds with reserves that are subject to the US asset freeze. When Russia initiated the maturity payment on a US-dollar bond, due April 4, by placing Russian rubles into the relevant custody account, Standard & Poor's declared a selective default. Russia has a 30-day grace period, raising the possibility that it will be declared in default before 25 May, when a US license for Russia to make payments to existing bondholders expires. As a result, the price difference between bonds on which Russia can make payments in rubles and those on which it cannot narrowed.
- EM corporates tightened 15 bps last week, to their end-2021 level, another show of the asset class's resilience. The new issue market saw \$7B of transactions last week, and our portfolios participated in a new issue by Indonesia Freeport. Chinese property sector bonds continued to perform well after the Chinese government announced support measures and stronger-than-expected credit figures were announced.
- EM local-currency bond yields rose, in line with those in developed markets. But in contrast to developed markets, EM local-currency yield curves mostly continued to flatten. Inflation data in Brazil, Chile, and Mexico came in higher than expected, so bond yields there may rise further still. EM currencies continued to weaken, relative to the US dollar. The theme of commodity exporters outperforming importers stalled last week and, instead, EM currencies appeared more sensitive to rises in inflation-adjusted rates. We maintain a long US-dollar bias.

SECURITIZED PRODUCTS

- U.S. conduit AAA CMBS spreads were 2 bps tighter last week on limited supply. SASB floater spreads were unchanged after a multi-billion dollar industrial deal and a multi-billion dollar mall deal priced slightly wider than initial talk.
- U.S. CLOs remained firm at the top of the capital structure in the secondary market as primary spreads were unchanged. The basis between primary and secondary continues to converge across the capital structure. However, primary spreads continue to lag secondary spreads at the AAA level. We believe spreads for U.S. benchmark issuers are ~3M SOFR+142/200/250/360/735 for AAA/AA/A/BBB/BBs, respectively, for five-year reinvestment period deals. We expect euro spreads will coalesce in the 3E+115-120 area, with dealers focusing on new issue transactions as they look to clear deals from their pipelines.
- ABS spreads were slightly tighter last week, with decent two-way flow. New issuance picked up, with \$7B placed and most deals clearing at or tighter than initial guidance. Specifically, a \$750M Avis rental car 5yr priced at T+117 bps, 8 bps tighter than initial guidance. While fundamentals continue to be stable, we remain cautious on ABS and would continue to add selectively.

MUNICIPAL BONDS

- The negative trend in munis continued last week with \$5.2B in outflows—the 13 consecutive week of outflows for a total of \$27.1B. Although munis outperformed Treasuries in the 10-year and 30-year areas of the curve, the overall tone remained weak, with hawkish Fed minutes escalating rate volatility.

THE RETURNS TABLE As of April 8, 2022

| Sovereign Rates | Duration | YTM | OAS | Yield/ OAS Change (BPS) | | | | Total Return (%) | | | |
|--------------------------------|----------|-------|-----|-------------------------|-----|-----|------------|------------------|-------|--------|------------|
| | | | | WTD | QTD | YTD | Prior Year | WTD | QTD | YTD | Prior Year |
| U.S. 2-Year | 1.9 | 2.52 | --- | 6 | 18 | 178 | 237 | -0.12 | -0.40 | -2.89 | -3.40 |
| U.S. 5-Year | 4.6 | 2.76 | --- | 20 | 29 | 149 | 192 | -0.92 | -1.50 | -6.46 | -7.32 |
| U.S. 10-Year | 8.8 | 2.71 | --- | 32 | 36 | 119 | 108 | -2.91 | -3.33 | -9.85 | -7.53 |
| U.S. 10-Year Breakeven | -- | 2.89 | --- | 7 | 6 | 29 | 57 | --- | --- | --- | --- |
| U.S. 10-Year TIPS | 4.9 | -0.18 | --- | 25 | 31 | 92 | 51 | -2.11 | -2.78 | -6.14 | 2.40 |
| U.S. 20-Year | 15.4 | 2.94 | --- | 32 | 31 | 98 | 72 | -5.30 | -5.17 | -14.89 | -9.13 |
| U.S. 30-Year | 21.0 | 2.75 | --- | 29 | 27 | 82 | 41 | -6.60 | -6.11 | -16.82 | -7.49 |
| UK 10-Year | 8.4 | 1.75 | --- | 14 | 14 | 78 | 100 | -1.15 | -1.14 | -5.91 | -6.28 |
| Germany 10-Year | 9.8 | 0.70 | --- | 15 | 16 | 89 | 104 | -1.46 | -1.53 | -7.49 | -7.49 |
| Japan 10-Year | 9.7 | 0.23 | --- | 1 | 2 | 16 | 13 | 0.15 | 0.15 | 0.15 | 0.15 |
| Australia 10-Year | 9.3 | 2.96 | --- | 14 | 12 | 129 | 122 | -1.19 | -1.07 | -10.79 | -8.77 |
| Canada 10-Year | 8.8 | 2.63 | --- | 20 | 23 | 121 | 117 | -1.72 | -1.96 | -9.36 | -7.18 |
| MAJOR FI MS INDICES | | | | | | | | | | | |
| Global Aggregate Unhedged | 7.4 | 2.35 | 44 | 1 | 1 | 8 | 11 | -1.77 | -2.33 | -8.35 | -9.39 |
| Global Aggregate Hedged | 7.4 | 2.35 | 44 | 1 | 1 | 8 | 11 | -1.17 | -1.35 | -6.26 | -5.60 |
| U.S. Aggregate | 6.8 | 3.22 | 42 | 1 | 2 | 6 | 11 | -1.82 | -2.08 | -7.89 | -6.71 |
| Euro-Aggregate (Unhedged) | 7.3 | 1.20 | 75 | 3 | 5 | 18 | 26 | -1.15 | -1.44 | -6.78 | -7.88 |
| Japanese Aggregate | 9.5 | 0.26 | 1 | 0 | 0 | 0 | 0 | -0.23 | -0.22 | -1.77 | -1.60 |
| MAJOR FI CREDIT INDICES | | | | | | | | | | | |
| Mortgage-Backed (Agency) | 6.2 | 3.33 | 31 | 6 | 7 | -1 | 19 | -1.72 | -2.08 | -6.95 | -7.20 |
| Global IG Corporate Bonds | 7.0 | 3.35 | 124 | 1 | 0 | 27 | 31 | -2.10 | -2.43 | -9.69 | -9.33 |
| U.S. IG Corporate Bonds | 8.1 | 3.91 | 116 | 1 | 0 | 24 | 27 | -2.36 | -2.47 | -9.96 | -7.41 |
| European IG Corporate | 5.1 | 1.71 | 131 | 1 | 2 | 36 | 44 | -0.71 | -0.81 | -5.73 | -6.35 |
| U.S. High Yield Bonds | 4.7 | 6.41 | 338 | 19 | 13 | 55 | 46 | -1.34 | -1.49 | -6.25 | -2.86 |
| European High Yield Bonds | 3.8 | 4.64 | 391 | -2 | -4 | 73 | 85 | -0.36 | -0.30 | -4.42 | -2.77 |
| U.S. Leveraged Loans | 0.3 | 6.00 | 437 | -11 | -2 | -2 | -8 | 0.35 | 0.48 | 0.38 | 3.37 |
| European Leveraged Loans | 0.3 | 6.22 | 472 | -13 | +1 | +57 | +50 | 0.17 | 0.20 | -0.36 | 2.64 |
| EM Hard Currency Sovs. | 7.4 | 6.75 | 399 | -1 | -1 | 30 | 48 | -1.71 | -1.94 | -11.77 | -10.15 |
| EM Corporates | 4.7 | 5.86 | 312 | -15 | -19 | 0 | 11 | -0.42 | -0.51 | -9.29 | -8.01 |
| EM Currencies | --- | 4.64 | --- | -1 | 8 | 31 | 195 | -0.69 | -0.82 | -6.31 | -7.50 |
| EM Local Rates | 5.0 | 6.42 | 6 | 0 | 0 | 1 | 2 | -0.76 | -0.85 | -8.90 | -11.30 |
| CMBS | 5.0 | 3.54 | 82 | -3 | -2 | 14 | 14 | -0.99 | -1.42 | -6.93 | -6.43 |
| ABS | 2.3 | 3.11 | 60 | 3 | 4 | 22 | 26 | -0.24 | -0.48 | -3.35 | -3.60 |
| CLOs | | 1.26 | 126 | -3 | -4 | 18 | 17 | 0.11 | 0.11 | -0.45 | -0.47 |
| Municipal Bonds | 5.1 | 2.78 | --- | 17 | 18 | 167 | 168 | -0.83 | -0.83 | -7.01 | -5.69 |

| Equity/Volatility | Level | Total Return (%) | | | | FX/Commodities | Spot | % Change | | | |
|-------------------|--------|------------------|-------|--------|----------|----------------|--------|----------|------|------|------------|
| | | WTD | QTD | YTD | Prior Yr | | | WTD | QTD | YTD | Prior Year |
| S&P 500 Index | 9,442 | -1.24 | -0.90 | -5.46 | 11.08 | EUR/USD | 1.1 | -1.5 | -1.7 | -4.3 | -8.7 |
| DAX | 14,230 | -1.13 | -0.91 | -10.08 | -6.05 | USD/JPY | 124.3 | 1.5 | 2.2 | 8.0 | 13.8 |
| Stoxx 600 | 245 | 0.37 | 0.79 | -5.07 | 6.85 | GBP/USD | 1.3 | -0.7 | -0.9 | -3.7 | -5.2 |
| Nikkei 225 | 26,822 | -2.46 | -3.00 | -5.51 | -7.55 | USD/CHF | 0.9 | 0.9 | 1.3 | 2.3 | 1.0 |
| Shanghai Comp. | 3,167 | -0.94 | -0.01 | -10.66 | -4.62 | USD (DXY) | 99.8 | 1.2 | 1.5 | 4.3 | 8.4 |
| MSCI ACWI | 363 | -1.44 | -1.29 | -6.58 | 2.92 | Oil | 77.0 | -1.0 | -2.0 | 27.6 | 64.9 |
| FTSE 100 | 7,649 | 1.87 | 2.17 | 5.13 | 14.57 | Gold | 1947.5 | 1.1 | 0.5 | 6.5 | 10.9 |
| MOVE Index | 125 | 15.25 | 16.82 | 61.95 | 107.82 | | | | | | |
| VIX Index | 22 | 7.79 | 2.92 | 22.88 | 24.84 | | | | | | |

Past performance is not a guarantee or a reliable indicator of future results. See Notice for important disclosures and full index names. All investments involve risk, including possible loss of capital. Sources: Bloomberg except EMD (J.P. Morgan), HY (ICE BofAML), Bank Loans (Credit Suisse), and CLOs (Palmer Square). European returns are unhedged in euros unless otherwise indicated. An investment cannot be made directly in an index.

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

NOTICE: IMPORTANT INFORMATION

Source(s) of data (unless otherwise noted): PGIM Fixed Income as of April 2022

PGIM Fixed Income operates primarily through PGIM, Inc., a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended, and a Prudential Financial, Inc. ("PFI") company. Registration as a registered investment adviser does not imply a certain level of skill or training. PGIM Fixed Income is headquartered in Newark, New Jersey and also includes the following businesses globally: (i) the public fixed income unit within PGIM Limited, located in London; (ii) PGIM Netherlands B.V., located in Amsterdam; (iii) PGIM Japan Co., Ltd. ("PGIM Japan"), located in Tokyo; (iv) the public fixed income unit within PGIM (Hong Kong) Ltd. located in Hong Kong; and (v) the public fixed income unit within PGIM (Singapore) Pte. Ltd., located in Singapore ("PGIM Singapore"). 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.

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. Clients seeking information regarding their particular investment needs should contact their financial professional. These materials represent the views and opinions 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 Fixed Income is prohibited. Certain information contained herein has been obtained from sources that PGIM Fixed Income believes to be reliable as of the date presented; however, PGIM Fixed Income 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 Fixed Income 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. **All investments involve risk, including the possible loss of capital. 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 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 Fixed Income and its affiliates may make investment decisions that are inconsistent with the recommendations or views expressed herein, including for proprietary accounts of PGIM Fixed Income 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: PGIM Fixed Income and its affiliates may have investment advisory or other business relationships with the issuers of securities referenced herein. PGIM Fixed Income 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 Fixed Income and its affiliates may develop and publish research that is independent of, and different than, the recommendations contained herein. PGIM Fixed Income'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 Fixed Income'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 2A of PGIM Fixed Income's Form ADV.

In the **United Kingdom**, information is issued by PGIM Limited with 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). In the **European Economic Area** ("EEA"), information is issued by PGIM Netherlands B.V., an entity authorised by the Autoriteit Financiële Markten ("AFM") in the Netherlands and operating on the basis of a European passport. In certain EEA countries, information is, where permitted, presented by PGIM Limited in reliance of provisions, exemptions or licenses available to PGIM Limited under temporary permission arrangements following the exit of the United Kingdom from the European Union. These materials are issued by PGIM Limited and/or PGIM Netherlands B.V. to persons who are professional clients as defined under the rules of the FCA and/or to persons who are professional clients as defined in the relevant local implementation of Directive 2014/65/EU (MiFID II). In certain countries in **Asia-Pacific**, 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 provided by PGIM (Hong Kong) Limited, a regulated entity with the Securities & Futures Commission in Hong Kong to professional investors as defined in Section 1 of Part 1 of Schedule 1 (paragraph (a) to (i) of the Securities and Futures Ordinance (Cap.571). 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. In **South Africa**, PGIM, Inc. is an authorised financial services provider – FSP number 49012. In **Canada**, pursuant to the international adviser registration exemption in National Instrument 31-103, PGIM, Inc. is informing you that: (1) PGIM, Inc. is not registered in Canada and is advising you in reliance upon an exemption from the adviser registration requirement under National Instrument 31-103; (2) PGIM, Inc.'s jurisdiction of residence is New Jersey, U.S.A.; (3) there may be difficulty enforcing legal rights against PGIM, Inc. because it is resident outside of Canada and all or substantially all of its assets may be situated outside of Canada; and (4) the name and address of the agent for service of process of PGIM, Inc. in the applicable Provinces of Canada are as follows: in **Québec**: Borden Ladner Gervais LLP, 1000 de La Gauchetière Street West, Suite 900 Montréal, QC H3B 5H4; in **British Columbia**: Borden Ladner Gervais LLP, 1200 Waterfront Centre, 200 Burrard Street, Vancouver, BC V7X 1T2; in **Ontario**: Borden Ladner Gervais LLP, 22 Adelaide Street West, Suite 3400, Toronto, ON M5H 4E3; in **Nova Scotia**: Cox & Palmer, Q.C., 1100 Purdy's Wharf Tower One, 1959 Upper Water Street, P.O. Box 2380 - Stn Central RPO, Halifax, NS B3J 3E5; in **Alberta**: Borden Ladner Gervais LLP, 530 Third Avenue S.W., Calgary, AB T2P R3.

© 2022 PFI and its related entities.

U.S. Investment Grade Corporate Bonds: Bloomberg Barclays U.S. Corporate Bond Index: The Bloomberg Barclays U.S. Investment Grade Corporate Bond Index covers U.S.D-denominated, investment-grade, fixed-rate or step up, taxable securities sold by industrial, utility and financial issuers. It includes publicly issued U.S. corporate and foreign debentures and secured notes that meet specified maturity, liquidity, and quality requirements. Securities included in the index must have at least 1 year until final maturity and be rated investment-grade (Baa3/ BBB-/BBB-) or better using the middle rating of Moody's, S&P, and Fitch.

European Investment Grade Corporate Bonds: Bloomberg Barclays European Corporate Bond Index (unhedged): The Bloomberg Barclays Euro-Aggregate: Corporates bond Index is a rules-based benchmark measuring investment grade, EUR denominated, fixed rate, and corporate only. Only bonds with a maturity of 1 year and above are eligible.

U.S. High Yield Bonds: ICE BofAML U.S. High Yield Index: The ICE BofAML U.S. High Yield Index covers US dollar denominated below investment grade corporate debt publicly issued in the US domestic market. Qualifying securities must have a below investment grade rating (based on an average of Moody's, S&P and Fitch), at least 18 months to final maturity at the time of issuance, and at least one year remaining term to final maturity as of the rebalancing date.

European High Yield Bonds: ICE BofAML European Currency High Yield Index: This data represents the ICE BofAML Euro High Yield Index value, which tracks the performance of Euro denominated below investment grade corporate debt publicly issued in the euro domestic or eurobond markets. Qualifying securities must have a below investment grade rating (based on an average of Moody's, S&P, and Fitch). Qualifying securities must have at least one year remaining term to maturity, a fixed coupon schedule, and a minimum amount outstanding of €100 M. ICE Data Indices, LLC, used with permission. ICE DATA INDICES, LLC IS LICENSING THE ICE DATA INDICES AND RELATED DATA "AS IS," MAKES NO WARRANTIES REGARDING SAME, DOES NOT GUARANTEE THE SUITABILITY, QUALITY, ACCURACY, TIMELINESS, AND/OR COMPLETENESS OF THE ICE DATA INDICES OR ANY DATA INCLUDED IN, RELATED TO, OR DERIVED THEREFROM, ASSUMES NO LIABILITY IN CONNECTION WITH THEIR USE, AND DOES NOT SPONSOR, ENDORSE, OR RECOMMEND PGIM FIXED INCOME OR ANY OF ITS PRODUCTS OR SERVICES.

U.S. Senior Secured Loans: Credit Suisse Leveraged Loan Index: The Credit Suisse Leveraged Loan Index is a representative, unmanaged index of tradable, U.S. dollar denominated floating rate senior secured loans and is designed to mirror the investable universe of the U.S. dollar denominated leveraged loan market. The Index return does not reflect the impact of principal repayments in the current month.

European Senior Secured Loans: Credit Suisse Western European Leveraged Loan Index: All Denominations EUR hedged. The Index is a representative, unmanaged index of tradable, floating rate senior secured loans designed to mirror the investable universe of the European leveraged loan market. The Index return does not reflect the impact of principal repayments in the current month.

Emerging Markets U.S.D Sovereign Debt: JP Morgan Emerging Markets Bond Index Global Diversified: The Emerging Markets Bond Index Global Diversified (EMBI Global) tracks total returns for U.S.D-denominated debt instruments issued by emerging market sovereign and quasi-sovereign entities: Brady bonds, loans, and Eurobonds. It limits the weights of those index countries with larger debt stocks by only including specified portions of these countries' eligible current face amounts of debt outstanding. To be deemed an emerging market by the EMBI Global Diversified Index, a country must be rated Baa1/BBB+ or below by Moody's/S&P rating agencies. Information has been obtained from sources believed to be reliable, but J.P. Morgan does not warrant its completeness or accuracy. The Index is used with permission. The Index may not be copied, used, or distributed without J.P. Morgan's prior written approval. Copyright 2021, J.P. Morgan Chase & Co. All rights reserved.

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

Emerging Markets Local Debt (unhedged): JPMorgan Government Bond Index-Emerging Markets Global Diversified Index: The Government Bond Index-Emerging Markets Global Diversified Index (GBI-EM Global) tracks total returns for local currency bonds issued by emerging market governments.

Emerging Markets Corporate Bonds: JP Morgan Corporate Emerging Markets Bond Index Broad Diversified: The CEMBI tracks total returns of U.S. dollar-denominated debt instruments issued by corporate entities in Emerging Markets countries.

Emerging Markets Currencies: JP Morgan Emerging Local Markets Index Plus: The JP Morgan Emerging Local Markets Index Plus (JPM ELMI+) tracks total returns for local currency-denominated money market instruments.

Municipal Bonds: Bloomberg Barclays Municipal Bond Indices: The index covers the U.S.D-denominated long-term tax-exempt bond market. The index has four main sectors: state and local general obligation bonds, revenue bonds, insured bonds, and pre-refunded bonds. The bonds must be fixed-rate or step ups, have a dated date after Dec. 13, 1990, and must be at least 1 year from their maturity date. Non-credit enhanced bonds (municipal debt without a guarantee) must be rated investment grade (Baa3/BBB-/BBB- or better) by the middle rating of Moody's, S&P, and Fitch.

U.S. Treasury Bonds: Bloomberg Barclays U.S. Treasury Bond Index: The Bloomberg Barclays U.S. Treasury Index measures U.S. dollar-denominated, fixed-rate, nominal debt issued by the U.S. Treasury. Treasury bills are excluded by the maturity constraint but are part of a separate Short Treasury Index.

Mortgage Backed Securities: Bloomberg Barclays U.S. MBS - Agency Fixed Rate Index: The Bloomberg Barclays U.S. Mortgage Backed Securities (MBS) Index tracks agency mortgage backed pass-through securities (both fixed-rate and hybrid ARM) guaranteed by Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC). The index is constructed by grouping individual TBA-deliverable MBS pools into aggregates or generics based on program, coupon and vintage.

Commercial Mortgage-Backed Securities: Bloomberg Barclays CMBS: ERISA Eligible Index: The index measures the performance of investment-grade commercial mortgage-backed securities, which are classes of securities that represent interests in pools of commercial mortgages. The index includes only CMBS that are Employee Retirement Income Security Act of 1974, which will deem ERISA eligible the certificates with the first priority of principal repayment, as long as certain conditions are met, including the requirement that the certificates be rated in one of the three highest rating categories by Fitch, Inc., Moody's Investors Services or Standard & Poor's.

Palmer Square AAA CLO DM Index represents the discount margin of CLO AAA rated tranches in the Palmer Square CLO Senior Index, which is designed to reflect the investable universe of U.S CLO senior original rated AAA and AA debt issued after Jan 1, 2011.

Global Aggregate Bond Index is a measure of global investment grade debt from twenty four local currency markets. This multi-currency benchmark includes treasury, government-related, corporate and securitized fixed-rate bonds from both developed and emerging markets issuers.

U.S. Aggregate Bond Index: Bloomberg Barclays U.S. Aggregate Bond Index: The Bloomberg Barclays U.S. Aggregate Index covers the U.S.D-denominated, investment-grade, fixed-rate or step up, taxable bond market of SEC-registered securities and includes bonds from the Treasury, Government-Related, Corporate, MBS (agency fixed-rate and hybrid ARM passthroughs), ABS, and CMBS sectors. Securities included in the index must have at least 1 year until final maturity and be rated investment-grade (Baa3/ BBB-/BBB-) or better using the middle rating of Moody's, S&P, and Fitch.

Euro Aggregate Bond Index is a broad-based flagship benchmark that measures the investment grade, euro-denominated, fixed rate bond market, including treasuries, government-related, corporate and securitized issues. Inclusion is based on currency denomination of a bond and not country of risk of the issuer.

Japanese Aggregate Bond Index The Japanese Aggregate Index contains fixed-rate investment-grade securities denominated in Japanese yen and registered as domestic bonds. The index is composed primarily of local currency sovereign debt but also includes government-related, corporate, and securitized bonds.

The S&P 500® is widely regarded as the best single gauge of large-cap U.S. equities. There is over U.S.D 9.9 trillion indexed or benchmarked to the index, with indexed assets comprising approximately U.S.D 3.4 trillion of this total. The index includes 500 leading companies and captures approximately 80% coverage of available market capitalization.

The DAX Index is a total return index of 30 selected German blue chip stocks traded on the Frankfurt Stock Exchange. The equities use free float shares in the index calculation. The DAX has a base value of 1,000 as of December 31, 1987. As of June 18, 1999 only XETRA equity prices are used to calculate all DAX indices.

The STOXX 600 Index is derived from the STOXX Europe Total Market Index (TMI) and is a subset of the STOXX Global 1800 Index. With a fixed number of 600 components, the STOXX Europe 600 Index represents large, mid and small capitalization companies across 17 countries of the European region.

The Nikkei 225 Index is a price-weighted average of 225 top-rated Japanese companies listed in the First Section of the Tokyo Stock Exchange. The Nikkei Stock Average was first published on May 16, 1949.

Shanghai Composite Index is a capitalization-weighted index. The index tracks the daily price performance of all A-shares and B-shares listed on the Shanghai Stock Exchange. The index was developed on December 19, 1990.

MSCI ACWI is a free-float weighted equity index. It was developed with a base value of 100 as of December 31 1987. MXWD includes both emerging and developed world markets.

FTSE 100 is a capitalization-weighted index of the 100 most highly capitalized companies traded on the London Stock Exchange. The equities use an investibility weighting in the index calculation. The index was developed with a base level of 1000 as of December 30, 1983.

MOVE Index is a yield curve weighted index of the normalized implied volatility on 1-month Treasury options. It is the weighted average of volatilities on the CT2, CT5, CT10, and CT30. (weighted average of 1m2y, 1m5y, 1m10y and 1m30y Treasury implied vols with weights 0.2/0.2/0.4/0.2, respectively).

VIX Index is a financial benchmark designed to be an up-to-the-minute market estimate of the expected volatility of the S&P 500® Index, and is calculated by using the midpoint of real-time S&P 500 Index (SPX) option bid/ask quotes.

Bloomberg Commodity Index Bloomberg Commodity Index (BCOM) is calculated on an excess return basis and reflects commodity futures price movements. The index rebalances annually weighted 2/3 by trading volume and 1/3 by world production and weight-caps are applied at the commodity, sector and group level for diversification. Roll period typically occurs from 6th-10th business day based on the roll schedule.

The U.S. Dollar Index indicates the general international value of the USD. The USDX does this by averaging the exchange rates between the USD and major world currencies. The ICE US computes this by using the rates supplied by some 500 banks.

2022-2624