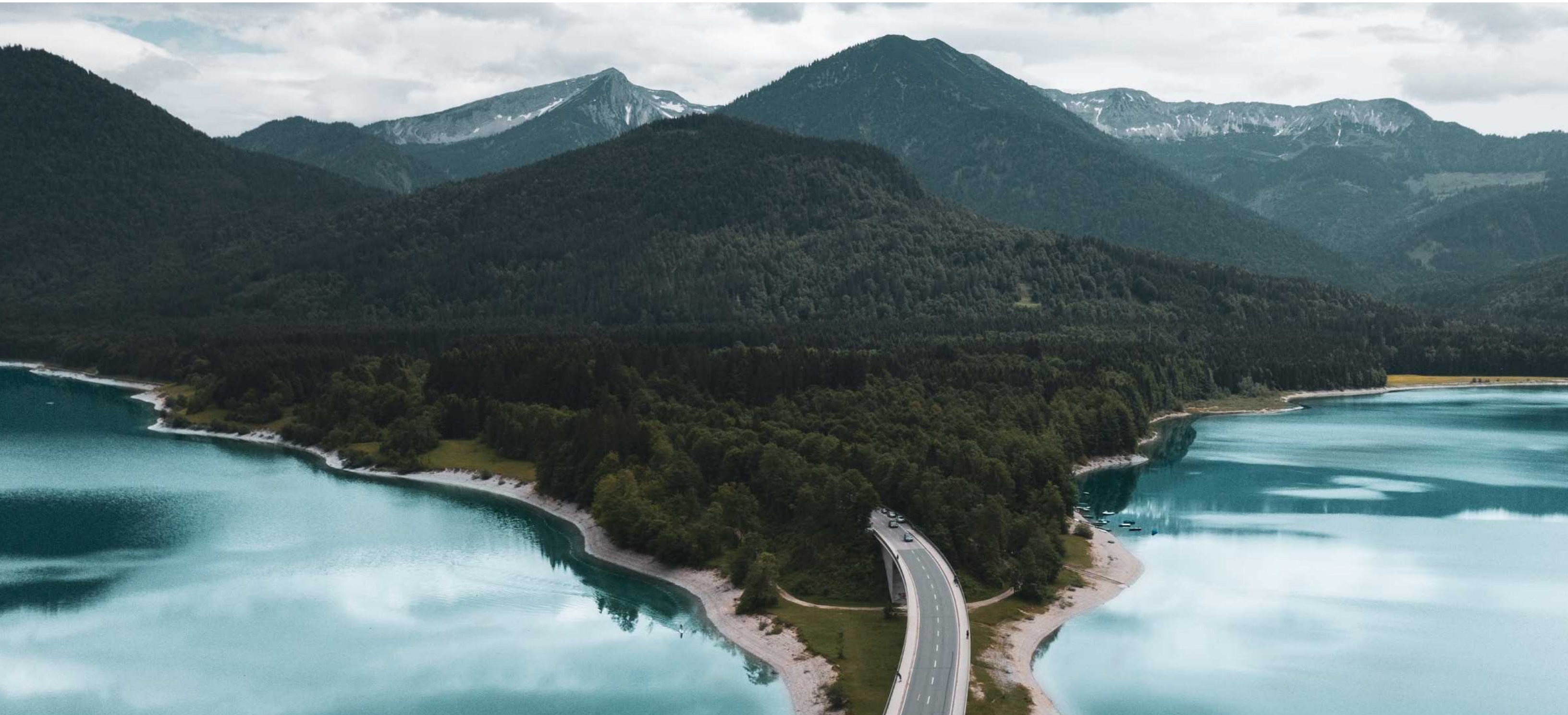
LOOMIS | SAYLES

Justin Teman, CFA, ASA
VP, Director, LDI Solutions

Srinivas Andra, PhD
VP, Quantitative Analyst

Fed Lift-Off: Implications on Pension Liabilities



The Federal Reserve kicked off its latest hiking cycle in March, lifting the federal funds rate from the zero lower bound to a range of 0.25% to 0.50%.

The pace and magnitude of further rate hikes are uncertain at this stage, but the market generally expects the Fed to hike well into 2023.

Corporate and non-profit pension plan sponsors may be wondering how this anticipated hiking cycle could impact pension liabilities and how they might position interest rate hedges. To explore these issues, we analyzed the three most recent periods of Fed rate hikes. If history holds, we don't expect this hiking cycle to have a material impact on pension liabilities.

Here, we explore how yields have moved during past periods and offer takeaways for pension investors to consider as they navigate the current cycle.

RESEARCH & PERSPECTIVES

APRIL 2022

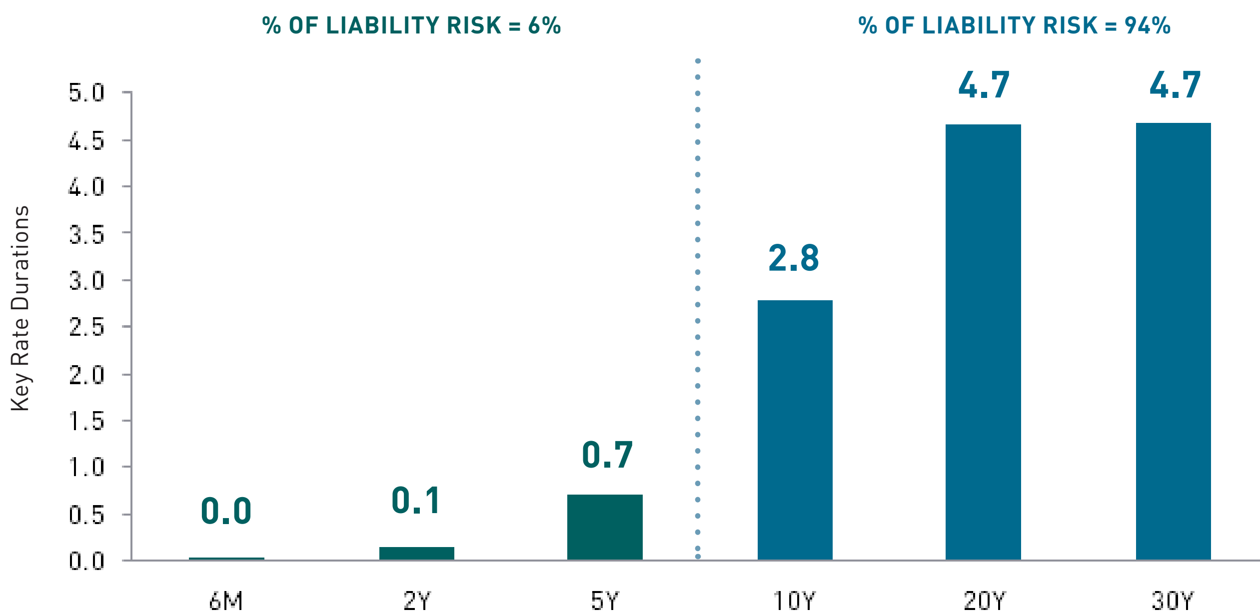
Key Takeaways

- Long-term yields have generally not kept pace with the fed funds rate during the past three hiking cycles.
- There is evidence that long-term yields have risen in the months leading up to the hiking cycle.
- In our view, pension plans with long-dated exposures should focus on the terminal fed funds rate as an indicator of where long-end yields could trade.
- Today, we believe much of the long-end yield shift has been priced in.

Short and Long Rates Don't Necessarily Move in Lockstep

First, it's important to remember the fed funds rate is an overnight rate that is largely disconnected from long-term yields. For most pension plans with liability durations in the 10-15 year range, the majority of pension liability risk is linked to yields that are at 10 years and beyond (as shown in the exhibit below). However, we tend to view the long end of the yield curve as a proxy for the terminal fed funds rate. The market generally does a good job anticipating Fed policy and discounting the future fed funds rate, which ultimately means that shifts in long-term yields are generally priced in before rate hikes begin. As a result, the long end of the yield curve generally stays flat as the Fed executes hikes.

SAMPLE PLAN LIABILITY KEY RATE EXPOSURES



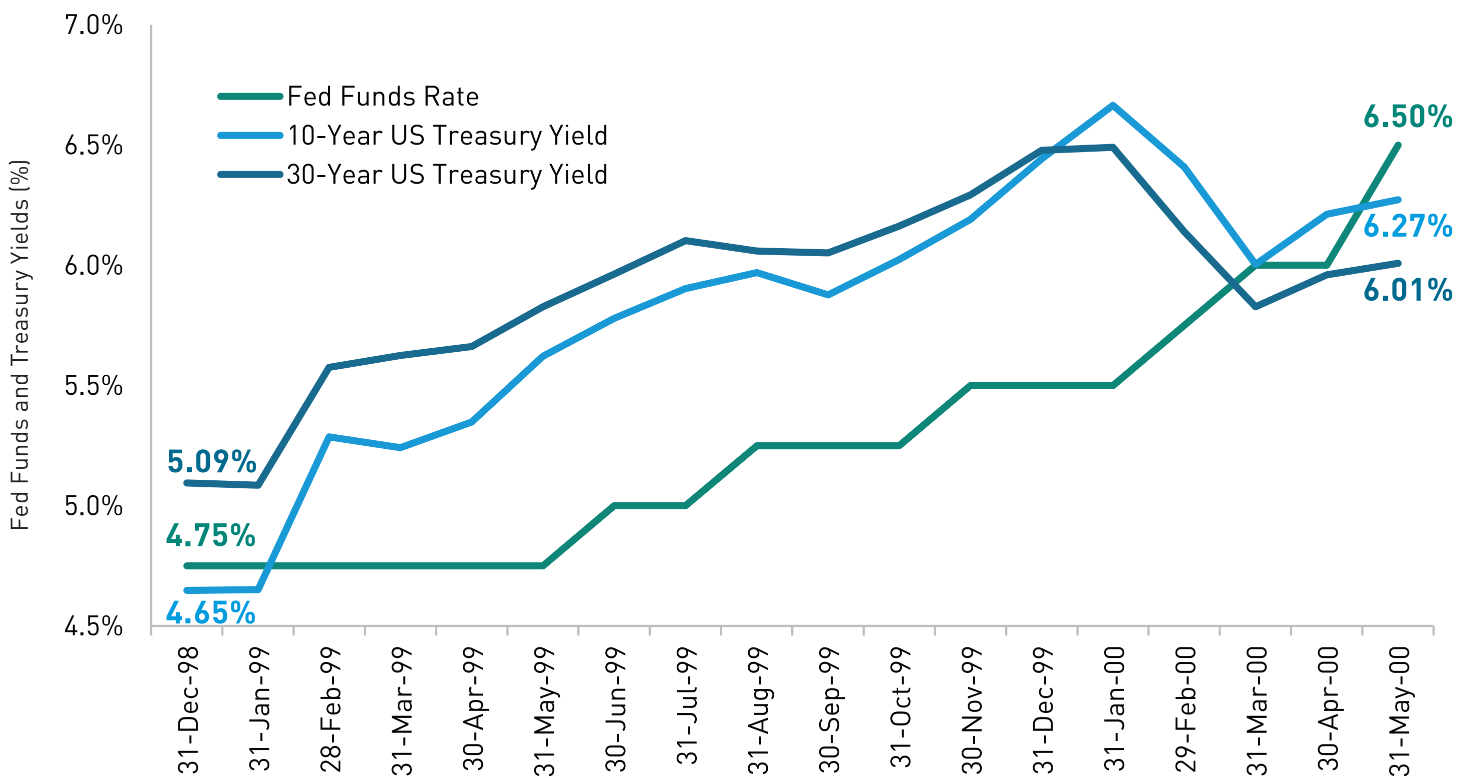
This graphic is shown for illustrative purposes only. The information is not intended to represent any actual portfolio. Liability key rates based on a sample plan with a 13-year liability duration discounted using the FTSE Pension Discount Curve as of 28 February 2022.

Revisiting Recent Rate Hikes

Below, we zoom in on the three most recent Fed rate hiking periods to see how each impacted 10-year and 30-year Treasury yields. We also incorporated the six-month period preceding each rate hike to illustrate how markets tended to anticipate and price in potential Fed policy.

PERIOD 1:
December 1998 to May 2000

Of the three hiking cycles we explored, this period started with the highest fed funds rate (4.75%) and was characterized by only a 1.75% total hike over 12 months. Long-term yields rose marginally throughout the period, although a significant portion of the move occurred in the 6 months prior to liftoff. Yields fell at the end of this period.

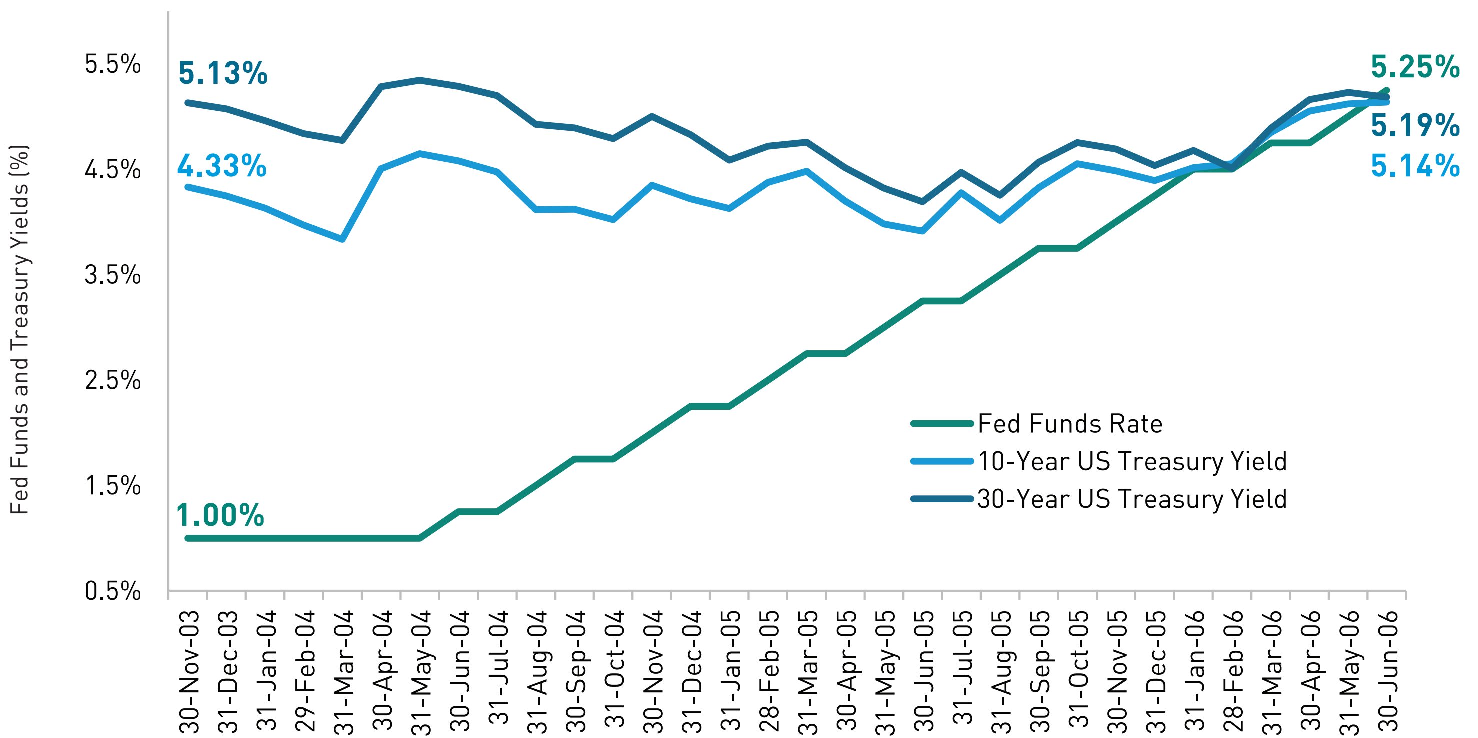


Source: Bloomberg.

PERIOD 2:

December 2003 to June 2006

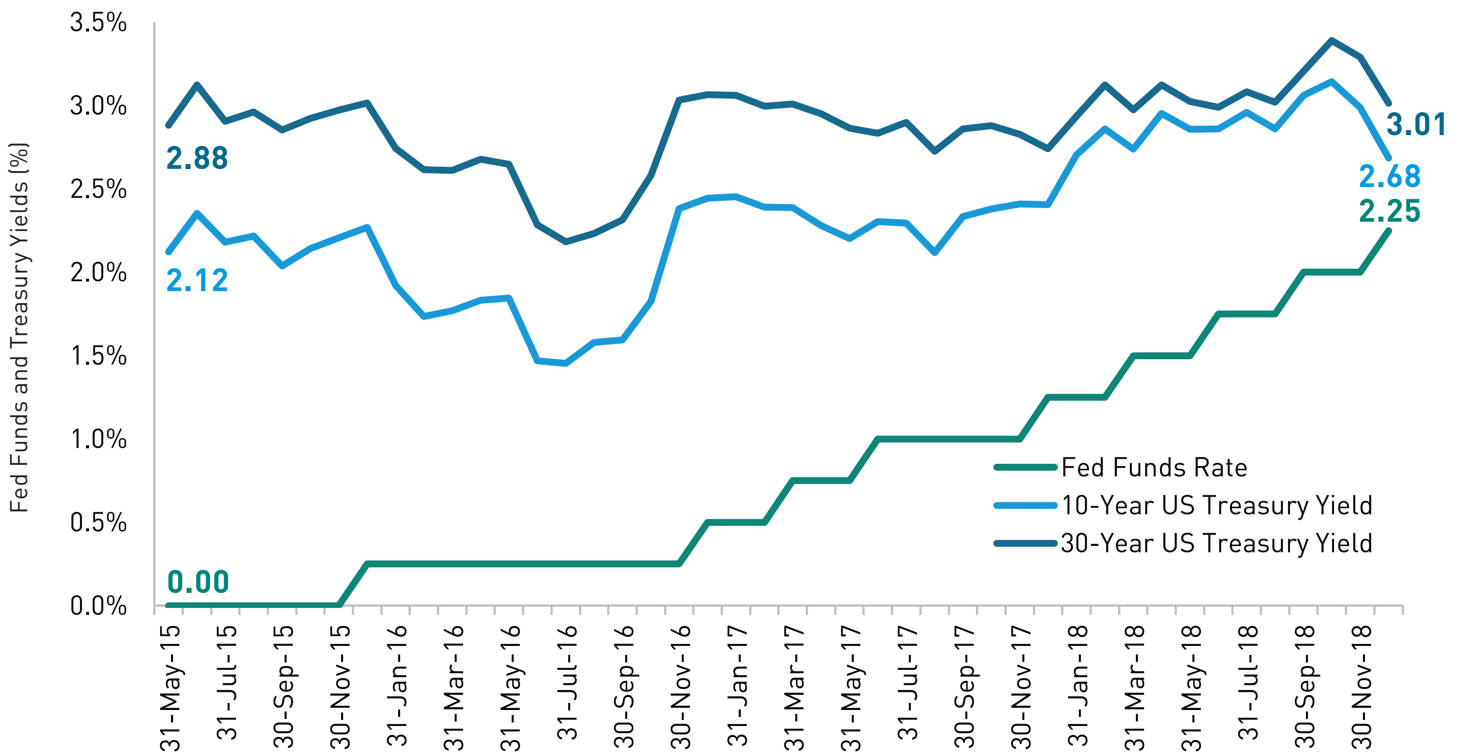
During the post-dot-com-bubble hiking cycle, the fed funds rate increased gradually from 1.0% up to 4.25% over a 26-month period. While there was some volatility in long-term yields leading up to the rate hikes (including a meaningful rise in April and May 2004), the 10-year and 30-year Treasury yields essentially stayed flat or declined slightly throughout the cycle.



Source: Bloomberg.

PERIOD 3:
June 2015 to December 2018

The most recent rate hiking cycle began in earnest following the Global Financial Crisis in December 2015, followed by a one-year pause before further hikes. As the chart shows, much of the rate volatility came during 2015 and 2016 as turmoil in oil, metals and mining, and disruptions related to Brexit put a hold on Fed tightening. As markets rebounded in late 2016, the market once again began to anticipate Fed policy, with a noticeable rise in long-term rates before the Fed resumed hikes. However, during the actual rate hiking period, long-term yields were largely flat before experiencing a pronounced decline toward the end of the period (similar to the tail end of the first period we analyzed), perhaps in anticipation of Fed easing.



Source: Bloomberg.

Summary

The table below shows a summary of these three periods. While each period reflects a specific scenario with many factors affecting the shape of the yield curve, the numbers show that long-term yields typically have not kept pace with the fed funds rate during hiking periods. In some cases, they barely budged. The 30-year part of the curve in particular has been largely flat over these periods. However, there is evidence that long-term yields typically have risen in the months leading up to the rate hiking cycle.

Period	Hike Start	Hike End	Number of Months	Change in Fed Funds (%)	Change in 10-Year US Treasury Yield (%)	Change in 10-Year US Treasury Yield including Preceding 6 Months (%)	Change in 30-Year US Treasury Yield (%)	Change in 30-Year US Treasury Yield including Preceding 6 Months (%)
1	5/31/1999	5/31/2000	12	1.75	0.65	1.56	0.18	0.95
2	5/31/2004	6/30/2006	25	4.25	0.49	0.80	-0.16	0.05
3	11/30/2015	12/31/2018	36	2.25	0.48	0.56	0.04	0.13

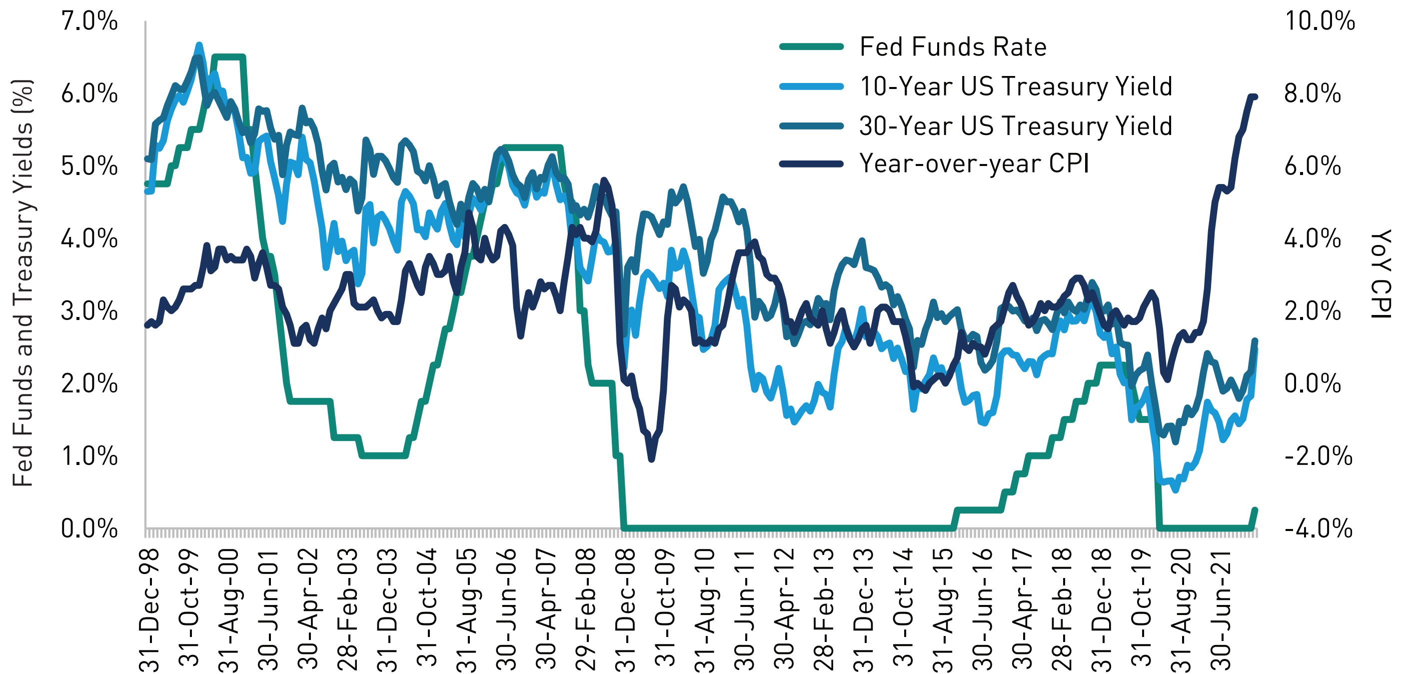
Implications for the Current Hiking Cycle

Having looked at the historical data, a next logical step is to ask the age-old question: “Will this time be different?” While only time will tell, we cannot attempt to answer this question without acknowledging the elephant in the room: inflation.

The chart on the following page shows the full period from March 2022 going back to 1998 with year-over-year CPI incorporated. The current inflationary environment, with CPI reaching almost 8.0%, is unprecedented over this period. As of this writing,[1] long-term yields have started to rise, but not to the same magnitude as the front end, which has led to a flat yield curve. The Fed has its work cut out in terms of reining in inflation against a backdrop of supply-side challenges and geopolitical turmoil.

[1] *Published 21 April 2022.*

FULL PERIOD:
With Inflation Incorporated



Source: Bloomberg, data as of 31 March 2022.

For pension plans focused on the long end of the yield curve, we believe it is critical to assess where the hiking cycle could end; i.e., the terminal fed funds rate. We view this as an indicator of where long-end yields will trade as the market anticipates and prices in the future fed funds rate. In an environment of persistent inflation, elevated commodity prices and slowing growth, we could see a terminal fed funds rate at or above 3.0%, which could lead to modest rises at the long end. If inflation cools at a faster pace, we believe the terminal fed funds rate may end up in the 2.0% to 2.5% range, which may not have a material impact on the long end given where yields are currently. In general, we expect the yield curve to remain flat absent a significant market event.

Overall, we believe much of the long-end yield shift has already been priced in in anticipation of Fed policy and, if history holds, we don't expect the rate hiking cycle to have a material impact on pension liabilities. We suggest plan sponsors generally continue to focus on optimizing their interest rate hedges at a strategic level within the context of their overall funding ratio risk budget and seek to avoid significant tactical positions related to Fed rate hikes.

AUTHORS

JUSTIN TEMAN, CFA, ASA
VP, Director, LDI Solutions

SRINIVAS ANDRA, PHD
VP, Quantitative Analyst

Disclosure

This paper is provided for informational purposes only and should not be construed as investment advice. Opinions or forecasts contained herein reflect the subjective judgments and assumptions of the authors only and do not necessarily reflect the views of Loomis, Sayles & Company, L.P. Other industry analysts and investment personnel may have different views and opinions. Investment recommendations may be inconsistent with these opinions. There is no assurance that developments will transpire as forecasted, and actual results will be different. Data and analysis does not represent the actual or expected future performance of any investment product. We believe the information, including that obtained from outside sources, to be correct, but we cannot guarantee its accuracy. The information is subject to change at any time without notice.

Created in 1994, the FTSE Pension Discount Curve is a trusted source for plan sponsors and actuaries to value defined-benefit pension liabilities in compliance with the SEC's and FASB's requirements on the establishment of a discount rate.

Commodity, interest and derivative trading involves substantial risk of loss.

Diversification does not ensure a profit or guarantee against a loss.

Market conditions are extremely fluid and change frequently.

Past performance is no guarantee of, and not necessarily indicative of, future results.

LS Loomis | Sayles is a trademark of Loomis, Sayles & Company, L.P. registered in the US Patent and Trademark Office.

Additional Notes

This material has been provided for information purposes only to investment service providers or other Professional Clients, Qualified or Institutional Investors and, when required by local regulation, only at their written request. This material must not be used with Retail Investors.

To obtain a summary of investor rights in the official language of your jurisdiction, please consult the legal documentation section of the website (im.natixis.com/intl/intl-fund-documents)

In the E.U.: Provided by Natixis Investment Managers International or one of its branch offices listed below. Natixis Investment Managers International is a portfolio management company authorized by the Autorité des Marchés Financiers (French Financial Markets Authority - AMF) under no. GP 90-009, and a public limited company (société anonyme) registered in the Paris Trade and Companies Register under no. 329 450 738. Registered office: 43 avenue Pierre Mendès France, 75013 Paris. Italy: Natixis Investment Managers International Succursale Italiana, Registered office: Via San Clemente 1, 20122 Milan, Italy. Netherlands: Natixis Investment Managers International, Nederlands (Registration number 000050438298). Registered office: Stadsplateau 7, 3521AZ Utrecht, the Netherlands. Sweden: Natixis Investment Managers International, Nordics Filial (Registration number 516412-8372- Swedish Companies Registration Office). Registered office: Kungsgatan 48 5tr, Stockholm 111 35, Sweden. **Or,**

Provided by Natixis Investment Managers S.A. or one of its branch offices listed below. Natixis Investment Managers S.A. is a Luxembourg management company that is authorized by the Commission de Surveillance du Secteur Financier and is incorporated under Luxembourg laws and registered under n. B 115843. Registered office of Natixis Investment Managers S.A.: 2, rue Jean Monnet, L-2180 Luxembourg, Grand Duchy of Luxembourg. Germany: Natixis Investment Managers S.A., Zweigniederlassung Deutschland (Registration number: HRB 88541). Registered office: Senckenberganlage 21, 60325 Frankfurt am Main. Belgium: Natixis Investment Managers S.A., Belgian Branch, Gare Maritime, Rue Picard 7, Bte 100, 1000 Bruxelles, Belgium. Spain: Natixis Investment Managers, Sucursal en España, Serrano n°90, 6th Floor, 28006 Madrid, Spain.

In Switzerland: Provided for information purposes only by Natixis Investment Managers, Switzerland Sàrl, Rue du Vieux Collège 10, 1204 Geneva, Switzerland or its representative office in Zurich, Schweizergasse 6, 8001 Zürich.

In the British Isles: Provided by Natixis Investment Managers UK Limited which is authorised and regulated by the UK Financial Conduct Authority (register no. 190258) - registered office: Natixis Investment Managers UK Limited, One Carter Lane, London, EC4V 5ER. When permitted, the distribution of this material is intended to be made to persons as described as follows: **in the United Kingdom**: this material is intended to be communicated to and/or directed at investment professionals and professional investors only; **in Ireland**: this material is intended to be communicated to and/or directed at professional investors only; **in Guernsey**: this material is intended to be communicated to and/or directed at only financial services providers which hold a license from the Guernsey Financial Services Commission; **in Jersey**: this material is intended to be communicated to and/or directed at professional investors only; **in the Isle of Man**: this material is intended to be communicated to and/or directed at only financial services providers which hold a license from the Isle of Man Financial Services Authority or insurers authorised under section 8 of the Insurance Act 2008.

In the DIFC: Provided in and from the DIFC financial district by Natixis Investment Managers Middle East (DIFC Branch) which is regulated by the DFSA. Related financial products or services are only available to persons who have sufficient financial experience and understanding to participate in financial markets within the DIFC, and qualify as Professional Clients or Market Counterparties as defined by the DFSA. No other Person should act upon this material. Registered office: Unit L10-02, Level 10 ,ICD Brookfield Place, DIFC, PO Box 506752, Dubai, United Arab Emirates

In Japan: Provided by Natixis Investment Managers Japan Co., Ltd. Registration No.: Director-General of the Kanto Local Financial Bureau (kinsho) No.425. Content of Business: The Company conducts investment management business, investment advisory and agency business and Type II Financial Instruments Business as a Financial Instruments Business Operator.

In Taiwan: Provided by Natixis Investment Managers Securities Investment Consulting (Taipei) Co., Ltd., a Securities Investment Consulting Enterprise regulated by the Financial Supervisory Commission of the R.O.C. Registered address: 34F., No. 68, Sec. 5, Zhongxiao East Road, Xinyi Dist., Taipei City 11065, Taiwan (R.O.C.), license number 2020 FSC SICE No. 025, Tel. +886 2 8789 2788.

In Singapore: Provided by Natixis Investment Managers Singapore Limited (company registration no. 199801044D) to distributors and qualified investors for information purpose only.

In Hong Kong: Provided by Natixis Investment Managers Hong Kong Limited to professional investors for information purpose only.

In Australia: Provided by Natixis Investment Managers Australia Pty Limited (ABN 60 088 786 289) (AFSL No. 246830) and is intended for the general information of financial advisers and wholesale clients only .

In New Zealand: This document is intended for the general information of New Zealand wholesale investors only and does not constitute financial advice. This is not a regulated offer for the purposes of the Financial Markets Conduct Act 2013 (FMCA) and is only available to New Zealand investors who have certified that they meet the requirements in the FMCA for wholesale investors. Natixis Investment Managers Australia Pty Limited is not a registered financial service provider in New Zealand.

In Colombia: Provided by Natixis Investment Managers International Oficina de Representación (Colombia) to professional clients for informational purposes only as permitted under Decree 2555 of 2010. Any products, services or investments referred to herein are rendered exclusively outside of Colombia. This material does not constitute a public offering in Colombia and is addressed to less than 100 specifically identified investors.

In Latin America: Provided by Natixis Investment Managers International.

In Uruguay: Provided by Natixis Investment Managers Uruguay S.A., a duly registered investment advisor, authorised and supervised by the Central Bank of Uruguay. Office: San Lucar 1491, Montevideo, Uruguay, CP 11500. The sale or offer of any units of a fund qualifies as a private placement pursuant to section 2 of Uruguayan law 18,627**.**

In Mexico: Provided by Natixis IM Mexico, S. de R.L. de C.V., which is not a regulated financial entity, securities intermediary, or an investment manager in terms of the Mexican Securities Market Law (Ley del Mercado de Valores) and is not registered with the Comisión Nacional Bancaria y de Valores (CNBV) or any other Mexican authority. Any products, services or investments referred to herein that require authorization or license are rendered exclusively outside of Mexico. While shares of certain ETFs may be listed in the Sistema Internacional de Cotizaciones (SIC), such listing does not represent a public offering of securities in Mexico, and therefore the accuracy of this information has not been confirmed by the CNBV. Natixis Investment Managers is an entity organized under the laws of France and is not authorized by or registered with the CNBV or any other Mexican authority. Any reference contained herein to "Investment Managers" is made to Natixis Investment Managers and/or any of its investment management subsidiaries, which are also not authorized by or registered with the CNBV or any other Mexican authority.

In Brazil: Provided to a specific identified investment professional for information purposes only by Natixis Investment Managers International. This communication cannot be distributed other than to the identified addressee. Further, this communication should not be construed as a public offer of any securities or any related financial instruments. Natixis Investment Managers International is a portfolio management company authorized by the Autorité des Marchés Financiers (French Financial Markets Authority - AMF) under no. GP 90-009, and a public limited company (société anonyme) registered in the Paris Trade and Companies Register under no. 329 450 738. Registered office: 43 avenue Pierre Mendès France, 75013 Paris.

The above referenced entities are business development units of Natixis Investment Managers, the holding company of a diverse line-up of specialised investment management and distribution entities worldwide. The investment management subsidiaries of Natixis Investment Managers conduct any regulated activities only in and from the jurisdictions in which they are licensed or authorized. Their services and the products they manage are not available to all investors in all jurisdictions. It is the responsibility of each investment service provider to ensure that the offering or sale of fund shares or third party investment services to its clients complies with the relevant national law.

The provision of this material and/or reference to specific securities, sectors, or markets within this material does not constitute investment advice, or a recommendation or an offer to buy or to sell any security, or an offer of any regulated financial activity. Investors should consider the investment objectives, risks and expenses of any investment carefully before investing. The analyses, opinions, and certain of the investment themes and processes referenced herein represent the views of the portfolio manager(s) as of the date indicated. These, as well as the portfolio holdings and characteristics shown, are subject to change. There can be no assurance that developments will transpire as may be forecasted in this material. The analyses and opinions expressed by external third parties are independent and does not necessarily reflect those of Natixis Investment Managers. Past performance information presented is not indicative of future performance.

Although Natixis Investment Managers believes the information provided in this material to be reliable, including that from third party sources, it does not guarantee the accuracy, adequacy, or completeness of such information. This material may not be distributed, published, or reproduced, in whole or in part.

All amounts shown are expressed in USD unless otherwise indicated.

Natixis Investment Managers may decide to terminate its marketing arrangements for this fund in accordance with the relevant legislation

NATIXIS
INVESTMENT MANAGERS