3Q 2021

Pension Fiscal Fitness Monitor

US pension funding ratios decreased over the third quarter of 2021

LGIM America announced today in its Pension Fiscal Fitness Monitor, a quarterly estimate of the change in health of a typical US corporate defined benefit pension plan, that pension funding ratios decreased over the third quarter of 2021. LGIM America estimates the average funding ratio declined from 89.9% to 89.7% over the quarter based on market movements.

Equity markets saw a decline over the quarter with global equities[1] falling 1.0% and the S&P 500 modestly increasing 0.6%. Further, plan discount rates were estimated to have increased roughly 9 basis points in total, while plan assets with a traditional "60/40" asset allocation decreased 0.5%. These changes resulted in a 0.2% decrease in funding ratios over the third quarter of 2021.

Chris Wroblewski, Solutions Strategist, said, "We estimate that funding ratio levels for the typical plan with a traditional asset allocation decreased slightly over the third quarter, primarily due to falling equity values outpacing the slight drop in liabilities." Wroblewski added, "The third quarter saw liabilities fall modestly due to higher Treasury yields and wider credit spreads; however, asset values fell further, contributing to a decrease in funding ratios. Volatility experienced in the Treasury market shows the importance of decoupling risks that can impact pension plan funded status, such as interest rate and credit spread risk. Separating these risks can help plans design and implement a more appropriate LDI strategy. Adopting a completion framework is one way pension plans can manage uncompensated risk more effectively through volatile market environments."

The Pension Fiscal Fitness Monitor assumes a typical liability profile using an approximate duration of 12 years and 60% MSCI AC World Total Gross Index/40% Bloomberg Barclays US Aggregate Index ("60/40") investment strategy, and incorporates data from LGIM America research, ICE indices and Bloomberg.

For further information, please contact:

Name:	Natalie Short
Company:	Edelman
Email:	natalie.short@edelman.com
Tel:	310.425.9917

About LGIM America

LGIM America (LGIMA) was founded in 2006 with the purpose of helping people achieve their long-term financial goals. We offer a range of strategies to help our institutional clients (corporations, healthcare agencies, non-profit, education, public plans and Taft-Hartley) manage their investment objectives, which can range from market-based alpha-oriented strategies to those that are designed to be more liability-centric, derivative overlays, or indexed solutions. Encouraging a diverse and inclusive environment coupled with a solutions-focused culture allows us to increase our breadth of knowledge and the likelihood of improved client outcomes and stronger financial performance. We have teams of experienced, innovative professionals committed to helping plan sponsors meet their pension promises, managing investment exposures efficiently to seek enhanced returns while mitigating risks, and working to generate returns while making a positive societal difference. As of June 30, 2021, LGIM America had $257 billion assets under management.

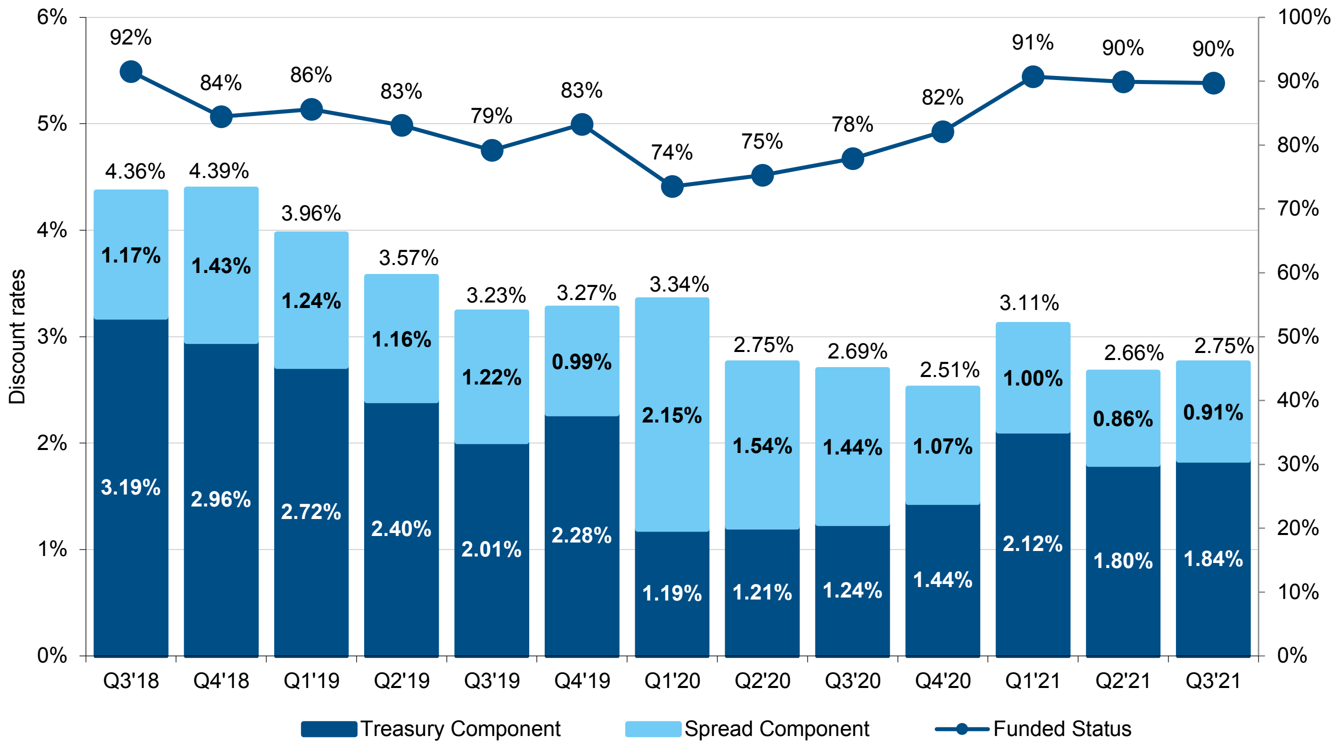
Pension funded status market summary:

- Negative asset portfolio returns (60/40) led to a decline in funding ratios
- Equity markets were weak with global equities down roughly 1%

Funded status risk	Q3 2021
Equities	↓
Interest rates	↑
Credit spreads	↑

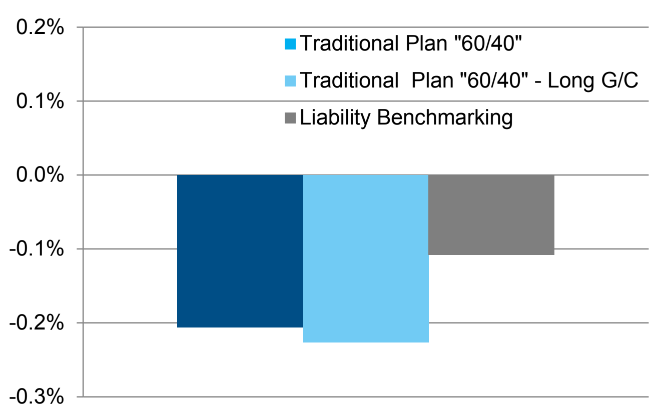
Sources: LGIM America, ICE indices and Bloomberg. Data as of September 30, 2021.

Discount rates (end of quarter)



Sources: LGIM America, ICE indices and Bloomberg. Data as of September 30, 2021.

Funding ratio performance of select pension investment strategies (over the quarter)



Sources: LGIM America, ICE indices and Bloomberg. Data as of September 30, 2021.

The Pension Fiscal Fitness Monitor measures the historical market-related funding ratio performance of the traditional "60/40" investment strategy and highlights a few different approaches to implementation.

For each of the three approaches to implementation, we analyze how funding ratio performance would have changed for two different levels of global equity exposure – 60% and 40%. We define two different LDI approaches as follows:

- Traditional: Allocating 60% to global equities and 40% to either aggregate fixed income or Long G/C
- Liability Benchmarking: Custom liability benchmark and derivative overlay designed within a total portfolio context
  - Custom implementation shown for comparison purposes and is chosen based upon the funding ratio of "a typical US corporate defined benefit pension plan" as of the beginning of the quarter

Traditional	Equity	Liability Hedging Assets
60/40 Aggregate	60% MSCI AC World Total Gross Index	40% Bloomberg Barclays US Aggregate Index
60/40 Long G/C	60% MSCI AC World Total Gross Index	40% Bloomberg Barclays US Long Gov/Credit Index
Liability Benchmarking		
40% Equities / 90% IR Hedge	60% MSCI AC World Total Gross Index	33% Bloomberg Barclays US Long Credit A-AAA Index, 27% Treasuries and Futures

1. "Global equities" referred to here is represented by the MSCI AC World Total Gross Index