Sibson Consulting
Segal Rogerscasey

Prism
A QUARTERLY REVIEW OF FUNDED STATUS

Pension Plan Funded Status Drops Due to Interest Rate Declines in Q1 2016

During the first quarter of 2016 (Q1 2016), the funded status of the model pension plan examined in each issue of *Prism* decreased by 4 percentage points: from 83 percent to 79 percent. This decline was the result of a 3 percent asset increase and a 9 percent liability increase during the quarter. See Graph 1. (The liability increase is discussed in greater detail on page 2.)

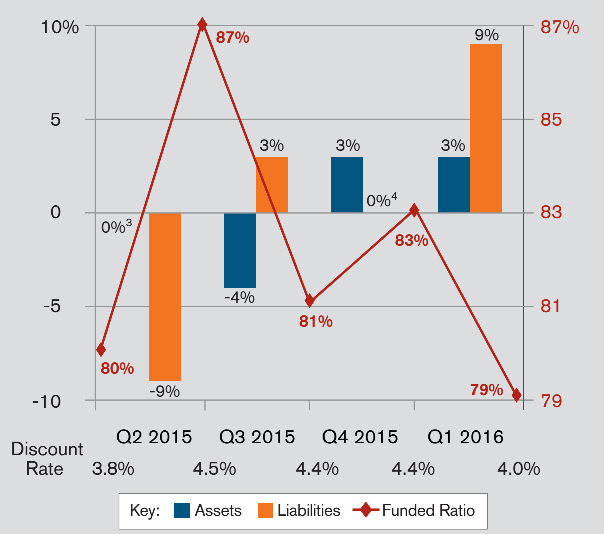
About *Prism*

Prism examines the effect of changes in the assets and liabilities of a model pension plan on its funded ratio over the four most recent quarters, viewing such changes through a marked-to-market lens. The primary focus is to understand the combined impact of asset movement and interest rate shifts on perhaps the most important financial metric to plan sponsors: the plan's funded status.

Aspects of Investment Performance

Global equities were slightly negative during Q1. Emerging market stocks outperformed both domestic and international developed stocks. On the international side, developed market stocks were negative while emerging market stocks were positive. In the U.S., large-cap stocks beat small-cap stocks and value stocks outpaced growth stocks. Fixed-income returns were positive across the board. Treasury rates fell across the yield curve due in part to the Federal Reserve's decision again not to raise interest rates during its January and March meetings. International fixed-income markets were positive in both local currency terms and U.S. dollar terms.

Graph 1: Change in Assets,[1] Liabilities and Funded Ratio[2]



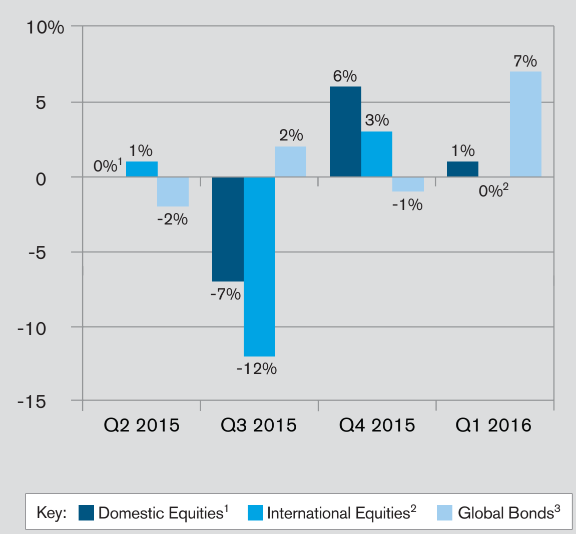
[1] The model plan's portfolio has a simple, passively invested asset allocation of 45 percent to domestic equities, 15 percent to international equities and 40 percent to global bonds.

[2] This is the ratio of a defined benefit (DB) plan's assets to accrued liabilities. The funded ratio data in the graph is the ratio at a point in time at the beginning or end of the quarter. The funded percentage for the model DB plan was reset as of January 1, 2016, to reflect the average actual funded percentage of large pension plans.

[3] In Q2 2015, assets decreased 0.5 percent.

[4] In Q4 2015, liabilities increased 0.2 percent.

Graph 2: Investment Performance



[1] Russell 3000 (The return for domestic equities was 0.14 percent in Q2 2015.)

[2] Morgan Stanley Capital International All Country World Index Ex-U.S. (MSCI ACWI Ex-U.S.) (The return for international equities was -0.26 percent in Q1 2016.)

[3] Citigroup World Government Bond Index (WGBI) Unhedged, which includes U.S. and international bonds

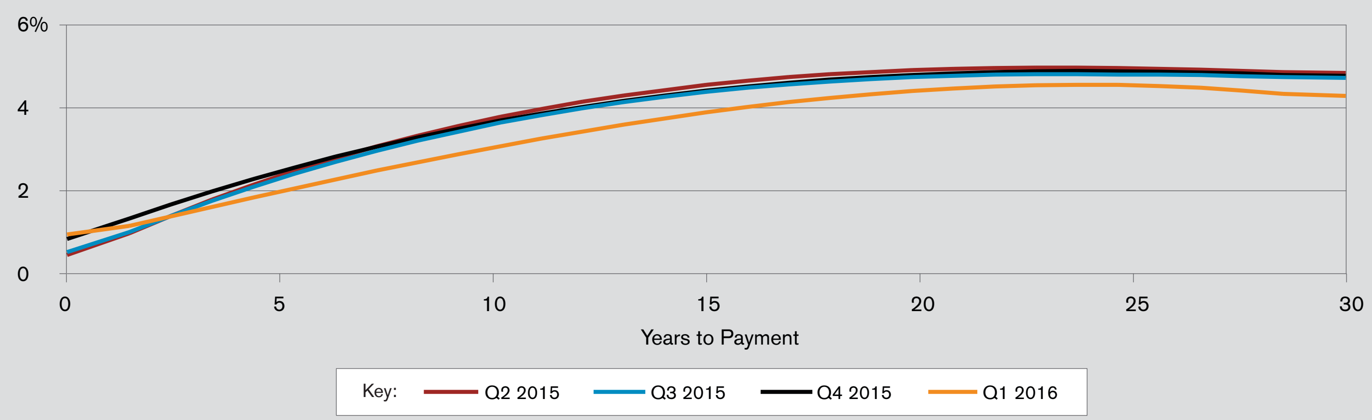
Prism

Changes in the Yield Curve

High-quality corporate yields declined by about 45 basis points* during Q1 2016. This decrease is the net result of a 45-basis-point decline in Treasury rates and credit spreads that remained flat. During the quarter, the yield curve flattened modestly, with short-term yields dropping less than longer-term yields. The general shape of the yield curve remained broadly similar to previous quarters: an upward-sloping yield curve that peaks between 20 and 25 years and then levels off, as illustrated by the above-median curves shown in Graph 3 below.

The decrease in the yield curve level during Q1 2016 resulted in a decline in the effective interest rate and, consequently, increased the model pension plan's liability by about 9 percent. Any change in the shape of the yield curve could have a different impact on liabilities for plans with different maturities. (For background on yield curves, read our online primer.)

Graph 3: Changes in the Yield Curve[1]



[1] This curve reflects the average yield, at each duration, for corporate bonds rated AA that have yields above the median for that duration.

Important: Examine Your Own DB Plan's Experience

Plan sponsors should examine changes in their own DB plans' assets, liabilities and funded ratios from the vantage point of both accounting and funding metrics.† Segal Rogerscasey and Sibson Consulting can help employers project their DB plans' funded ratios through:

- **Deterministic Modeling**, which projects results under a specific set of assumptions but does not offer insight into the likelihood of these outcomes; and
- **Stochastic Asset-Liability Modeling (ALM)**, which offers a more complete view of the range of a plan's possible future statuses and can act as an early warning sign of potential challenges through a long-term time horizon.

* As a reminder, 10 basis points (bps) equals 0.1 percent.

† Individual plan results will differ from this model for a host of reasons, including different funded positions, liability duration and contribution patterns.

Sibson Consulting Segal Rogerscasey

For more information about how ALM can help you manage your plan, contact your Segal Rogerscasey investment consultant or your Sibson retirement consultant.

To receive future issues of *Prism* and other publications of interest to employers as soon as they are available online, join our email list.

Sibson Consulting and Segal Rogerscasey are members of The Segal Group.

www.sibson.com www.segalrc.com