

Pension Plan Funded Status Decreases Due to Continued Interest Rate Declines in Q2 2016

During the second quarter of 2016 (Q2 2016), the funded status of the model pension plan examined in each issue of *Prism* dropped by 3 percentage points: from 79 percent to 76 percent. This decline was the result of a 2 percent asset increase and a 6 percent liability increase during the quarter. See Graph 1.

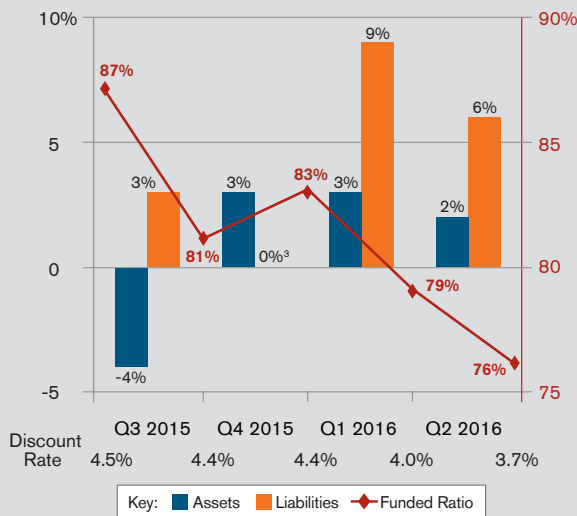
About Prism

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 performed well during Q2. Domestic stocks outperformed both developed international and emerging market stocks. On the international side, developed market stocks were slightly negative while emerging market stocks were slightly positive. Developed international stocks performed particularly poorly following the United Kingdom's June 23 vote to leave the European Union. In the U.S., small-cap stocks beat large-cap stocks and value stocks outpaced growth stocks. Fixed-income returns were consistently positive as Treasury rates fell across the yield curve, particularly in June. International fixed-income markets were positive in both local currency terms and U.S. dollar terms. Local currency returns were a bit better owing to the strengthening dollar during the quarter.

Graph 1: Change in Assets,¹ Liabilities and Funded Ratio²

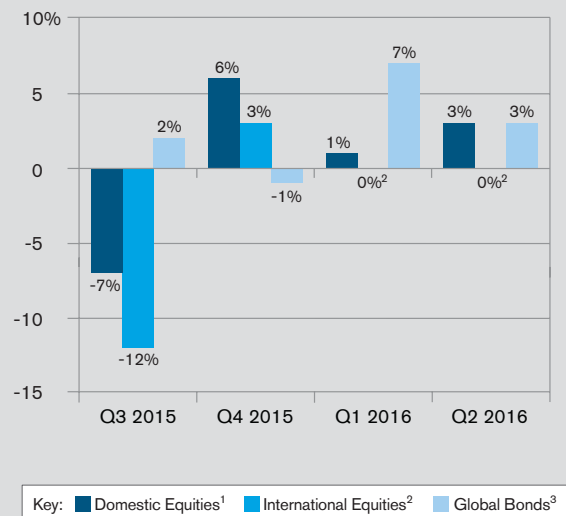


¹ The model plan's portfolio has a simple, passively invested asset allocation of 45 percent to domestic equities, 15 percent to international equities and 40 percent to global bonds.

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 Q4 2015, liabilities increased 0.2 percent.

Graph 2: Investment Performance



¹ Russell 3000

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 and -0.4 percent in Q2 2016.)

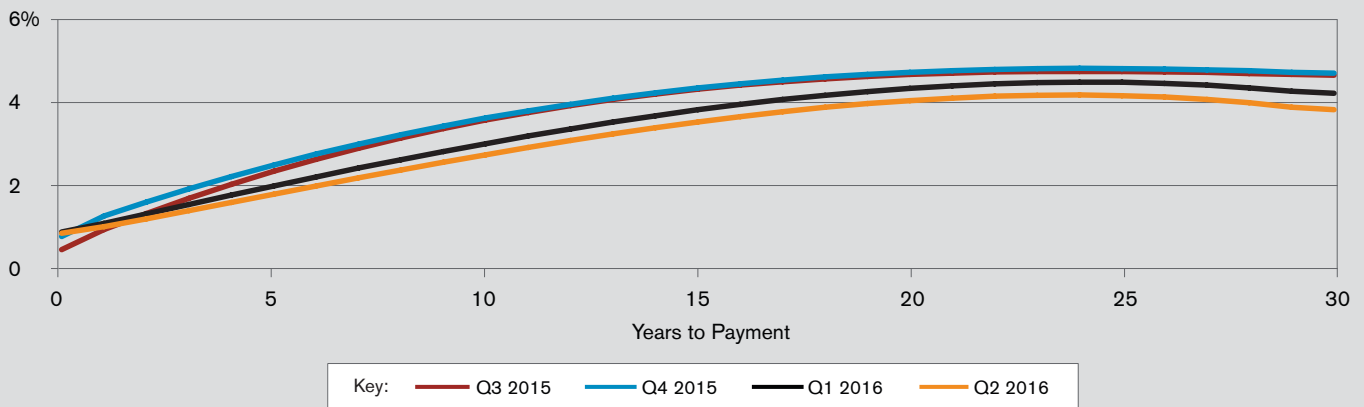
³ Citigroup World Government Bond Index (WGBI) Unhedged, which includes U.S. and international bonds

Changes in the Yield Curve

High-quality corporate yields declined by about 30 basis points* during Q2 2016. This decrease was the net result of a 30-basis-point decline in Treasury rates while credit spreads 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 Q2 2016 resulted in a decline in the effective interest rate and consequently increased the model pension plan's liability by about 6 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 Curve¹



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.

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 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.

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