Is now the right time to de-risk?

By Rohit Mathur, Amy Kessler and Scott Kaplan The authors explain why companies with well-funded plans should take bold steps to de-risk now.



Rohit Mathur Senior vice president, Global product and market solutions, Prudential Financial, Inc.



Amy Kessler Senior vice president, Head of longevity reinsurance, Prudential Financial, Inc.



Scott Kaplan Senior vice president, Global product and market solutions, Prudential Financial, Inc.

2013 was a year of historic improvement in pension funded status, particularly for those plans with high equity exposure. Specific financial market conditions – including an increase in interest rates for long-duration corporate bonds and a rise in equity markets – occurred to enhance the funded status of the typical defined benefit (DB) plan. Accordingly, the funded status of the 100 largest U.S. corporate DB pension plans improved to 88% as of year-end 2013.¹

Nevertheless, history remains unkind to plan sponsors around the globe. Consider this: twice in the past 13 years, U.S. corporate pensions have lost over 30% of funded status in market downturns.² Sponsors in the Financial Times Stock Exchange 350 (FTSE 350) also experienced declines, having lost over 25% in funded status during the financial crisis.³

Despite significant funded-status improvements, some companies may be further deferring potential de-risking actions, such as implementing liability driven investing (LDI) strategies combined with longevity protection or purchasing a buy-out or buy-in. These sponsors may be misjudging the risk they are taking, however, because relying on improvements in market conditions to close funding gaps is precarious, given that equities and interest rates are volatile.⁴

We believe that waiting for additional advancement in funded status is not optimal for well-funded plans, as sponsors are poorly compensated for bearing this risk. Once a plan's desired funding level is reached – such as 105% to 110% of plan liabilities, particularly for frozen plans – the plan sponsor receives little economic benefit from continued improvement, as excess funds in the plan cannot be used for other business purposes in the U.S.

Companies with well-funded plans have significant downside risk

We examined a hypothetical U.S. DB plan, 95% funded, to measure the likelihood of improved market conditions enhancing funded status. This plan has 65% / 30% / 5% allocation to equities, fixed income and cash, respectively, and liabilities of 58% retiree / 42% active employees. Prudential conducted 1,000 Monte Carlo simulations of how this plan's funded status would change over 10 years, assuming no incremental

contributions are made to the plan (yet benefit payments are made from plan assets). The analysis considered financial market conditions in the U.S. and interest rates and equity markets performance varied for each simulation path.

As shown in Exhibit 1, there is an approximately 47.8% probability that the plan's funded status will deteriorate at the end of 10 years. Moreover, there is an approximately 29.9% probability that the plan's funded status will deteriorate by 25% or more. These findings illustrate how specific financial market conditions - such as a sustained increase in both the interest rates for long-duration corporate bonds and in the equity markets - are required to improve the funded status of the typical DB plan. Conversely, under the scenario where favorable equity performance and a rise in interest rates results in a significant improvement in funded status, excess funds in the plan cannot be used for other business purposes in the U.S.

De-risking is a prudent strategy for wellfunded plans

DB plans might consider a buy-in or a buyout contract or LDI strategies combined with longevity protection to hedge downside risk. A buy-in is an insurance contract that enables sponsors to transfer longevity, investment, and interest rate risk to an insurer for a subset of a plan's participants. In Exhibit 2 and 3, we consider two different strategies - a buy-in strategy, and LDI with longevity protection for the same hypothetical U.S. DB plan. For this plan, we conducted 1,000 Monte Carlo simulations of how funded status would change over 10 years, and calculated the required contributions under U.S. funding rules for the current asset allocation and for the abovementioned strategies.

Exhibit 2 shows that under the current asset allocation, the upper end of the projected range of contributions is almost 6x the expected contributions, reflecting significant downside risk. Executing a buy-in for the retiree liability will reduce the upper end range of contributions by \$547 million, to more manageable 3.3x expected contributions. For this plan, however, the lower end of the projected range of plan contributions increases by only \$15 million.

As Exhibit 3 indicates, a robust LDI-pluslongevity insurance solution can also achieve

comparable risk reduction. Under such a strategy the lower end of the projected range of plan contributions increased by \$7 million, but the upper end reduces by approximately \$541 million. The upper end decreases significantly due to the replacement of a portion of the plan's equities exposure with fixed income assets that match the plan's liabilities.

Our analysis shows that both a buy-in solution and a robust LDI along with longevity protection are effective strategies for significantly reducing risk for companies with well funded plans. Proactive risk management would enhance shareholder value for such companies.

Fortune favors the prepared

Current market conditions and considerable improvements in funding levels have created attractive opportunities for de-risking action. However, these opportunities may be fleeting, and we believe it is critical that companies with well-funded plans begin preparing to transfer risk as soon as possible.

Currently there is ample capacity for transferring risk to insurers and reinsurers. While capacity is likely to be available in the future through traditional and/or new sources, the cost may increase as pressures mount on the supply-demand imbalance for long-dated corporate bonds. Furthermore, the business mix of insurers may shift as their own exposure to longevity risk increases, causing capital to become less abundant and command a higher return.

The time to start on the road to a lower risk future is now.

FOOTNOTES

¹ Milliman 100 Pension Funding Index, "Milliman analysis: Funded status drops by \$5 billion in March," 2 April, 2014

² "2014 Corporate Pension Funding Study", Milliman, April 2014

³ "Aon Hewitt Global Pension Risk Tracker,"

https://rfmtools.hewitt.com/PensionRiskTracker.

⁴ In fact, U.S. plans experienced an 8.5% funded status improvement from April to July 2013, while U.K. plans had a 5.5% improvement from May to July 2013. An opposite phenomenon occurred in 2011 when the funded status of U.S. and U.K. plans deteriorated by 14.2% and 8.5%, respectively, in a short period of time. (During June to September 2011 in the U.S., and July to August 2011 in the U.K.)

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Exhibit 1: Range of funded status outcomes for a U.S. plan in ten years without incremental plan contributions



Notes

Plan asset allocation at the beginning of the ten years is 65% equities, 30% fixed income, and 5% cash
Plan assets are re-balanced annually to match the starting asset allocation of the plan
No incremental plan contributions are made during the ten years
Analysis based on 1,000 Monte Carlo simulation of the DB plan over ten years. Barrie and Hibbert Economic Scenario

Generator assumptions used in Monte Carlo analysis Source: Prudential

Exhibit 2: Impact of Buy-in on a 95% Funded Plan



Exhibit 3: Impact of the LDI and Longevity Insurance Solutions



Notes for Exhibit 2 and 3

Analysis based on 1.000 Monte Carlo simulation of equity returns and interest rates to determine how the plan's funded status would change in 10 years. Lower end (10th percentile of plan contributions) captures scenarios where a rise in equity markets and high interest rates positively impact funded status and lower contributions) captures scenarios where a rise in equity markets and bigh interest rates positively impact funded status and lower contributions requirements. Median (50th percentile of plan contri-butions) reflects expected contributions. Our Upper end (or 95th percentile of plan contributions) reflects bad outcomes (or tailrisk) where significant decline in equity markets and fall in rates negatively impact funded status and contribution requirements. Source: Prudential Analysis

