



High Interest Isn't All Bad

Interest rates have a profound impact on the operation of defined benefit (DB) pension plans, stemming from how we calculate plan liabilities. As a reminder, benefits in DB plans are typically defined as monthly annuities payable beginning at a participant's normal retirement date and continuing for that participant's lifetime (note that in practice, these benefits are often paid out as "equivalent" lump sums rather than as monthly lifetime annuities).

Essentially, we (as the plan's actuary) calculate the liability associated with a participant's benefit by developing an expected future payment stream, based on the participant's data, the plan provisions, and a set of actuarial assumptions. We then discount that projected future benefit stream back to today's dollars to arrive at a present value associated with that participant. The sum of present values for all plan participants equals the plan's liability. The higher the interest rate that we discount the payment streams at, the lower the liability, and vice versa. As a general rule of thumb, a 100 basis point movement in interest rates will typically impact DB plan liabilities by roughly 15%.

For over a decade, it seemed like I was having "Groundhog Day" type conversations with clients and advisors regarding low interest rates and the resulting relatively high DB plan liabilities. Sometime in 2012 or 2013 I stopped predicting that interest rates had "bottomed out"; in fact they hadn't, and continued to remain at more-or-less historically low levels through late 2021. But between December 31, 2021 and December 31, 2022, interest rates increased by over 200 basis points. In other words, over a span of just 12 months, DB plan liabilities that are based on spot (current) interest rates decreased by roughly 30% (all other factors held equal). And, aside from some short-term fluctuations, interest rates have remained at relatively that same level since.

We don't use (and aren't allowed to use) spot interest rates for several different measurement purposes, so the impact of sudden interest rate fluctuations is often muted and/or delayed. For example, when we develop the maximum deductible contribution for a given year, those rates are based on plan liabilities reflecting a 24-month average of interest rates. However, for other purposes (such as determining the lump sum equivalents of monthly lifetime annuities) we do use spot rates. Even with spot rates, though, there is often a lookback period, so the impact of interest rate fluctuations is delayed. For example, lump sums payable in 2024 can be based on spot interest rates as early as August 2023.

The relatively high interest rate environment is mostly good news for DB plan sponsors, but there are some potentially negative implications. The table on the following page summarizes how high rates can potentially impact plan operation.

If you've seen unexpected results within your DB plan lately, it may be due to the rapid change in interest rates. If you'd like to speak with a consulting actuary regarding the plan that you sponsor, regardless of whether we currently administer that plan, please contact us through our website or email us at info@indact.com.

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Author Profile:

This article was written by Steve Diess, EA, MAAA. Steve is an IAI consultant. He specializes in defined benefit plan design, retiree medical plan consulting, and public and private employer accounting for pension and OPEB plans.

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INDEPENDENT ACTUARIES, INC.

5 Centerpointe Dr, Ste 520
Lake Oswego, OR 97035
Phone: 503.520.0848
Fax: 503.520.1147
IndependentActuaries.com

email:
info@indact.com

Measurement	Spot Interest Rates?	Impact of Higher Interest Rates
Minimum required contributions	No	Given the current regulatory relief environment DB plans are operating under, higher interest rates have a very muted impact on near-term minimum required contributions.
Maximum deductible contributions	No	Given the 24-month averaging of interest rates used for this purpose, most DB plan sponsors are currently starting to see the impact of higher interest rates on maximum deductible contributions, with 2024 maximums being much smaller than 2023 maximums in some cases. Note that, coupled with the lack of impact on the minimum required contribution calculation, higher interest rates can dramatically shrink the width of the acceptable funding range, reducing the funding flexibility that DB plan sponsors have enjoyed in past years. In fact, for new DB plans, the minimum required contribution and maximum deductible contribution may be the same dollar amount.
ASC 715 reporting	Yes	Not all DB plan sponsors are required to account for the plan on their financial statements. But for those who do, the liabilities reported are based on spot rates without lookback, and higher interest rates are reflected immediately in lower liabilities.
Lump sum payouts	Yes, with lookback	High interest rates mean relatively lower lump sum payout amounts. This could be either good or bad news for a DB plan sponsor, depending on who is getting the payout.
PBGC premiums	No	Although in many cases PBGC premiums are entirely headcount-driven, in certain situations higher interest rates can dramatically lower the PBGC premium due.
Annuity purchase pricing	Yes	One strategy for reducing PBGC premiums is to purchase annuities for retired and/or vested terminated participants, thereby reducing headcount (annuity purchases are also often used in plan termination situations). With higher interest rates, insurance companies are bidding lower dollar amounts to purchase these annuities, which is good news for plan sponsors.

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5 Centerpointe Dr, Ste 520
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 Phone: 503.520.0848
 Fax: 503.520.1147
 IndependentActuaries.com

email:
info@indact.com