

## Why GAO Did This Study

Defined benefit plans use interest rates to “discount,” or determine the current value, of estimated future benefits. Experts in the United States have disagreed on both the approach that should be taken by plans to determine a discount rate and the appropriate rate to be used. Different discount rates can create large differences in the valuation of a plan’s obligations, which in turn can lead various stakeholders to draw different conclusions about a plan’s health, the value of a plan’s benefits, and the contributions required to fund them.

As requested, GAO examined different approaches used to determine the discount rate. This report addresses (1) the significance of differences in approaches used to determine discount rates among public and private plans; (2) purposes for measuring the value of a plan’s future benefits and key considerations for determining discount rate policy; and (3) approaches selected countries have taken to choose discount rates.

For this review, GAO analyzed provisions in relevant federal laws and regulations, as well as financial reporting and actuarial standards. GAO also reviewed relevant literature and interviewed experts, including experts in Canada, the Netherlands, and the United Kingdom—countries with significant defined benefit systems. In addition, GAO modeled hypothetical pension investment portfolios and cash flows to calculate average investment returns using available historical data.

## What GAO Recommends

GAO is not making any recommendations in this report.

View [GAO-14-264](#). For more information, contact Charles Jeszeck at (202) 512-7215 or [jeszeckc@gao.gov](mailto:jeszeckc@gao.gov) or Frank Todisco at (202) 512-2700 or [todiscof@gao.gov](mailto:todiscof@gao.gov).

## PENSION PLAN VALUATION

### Views on Using Multiple Measures to Offer a More Complete Financial Picture

#### What GAO Found

Public and private sector defined benefit pension plans are subject to different rules and guidance regarding discount rates—interest rates used to determine the current value of estimated future benefit payments. These differences can result in significant implications:

- Sponsors of public sector plans generally use discount rates using a long-term assumed average rate of return on plan assets. This approach results in reported obligations that generally appear lower than those of comparable private sector single-employer plans. Some experts believe this approach may encourage public plans to invest in riskier assets, which can increase the assumed return and thereby lower estimated obligations and plan contributions. Other experts believe this approach helps to maintain more predictable and lower costs. Private sector multiemployer plans generally use an assumed rate of return for funding purposes.
- Sponsors of private sector single-employer pension plans use bond-based discount rates, which are generally lower than assumed rates of return, for financial reporting of their plans’ liabilities. Experts believe this approach may encourage plans to invest in less risky assets, particularly high-quality bonds, to make pension costs less volatile, but it may increase current reported costs. Funding requirements for these plans are tied to historical interest rates, which can reduce funding compared to measures based on more recent interest rates.

Experts identified at least five purposes for measuring the value of future benefits where discount rates are used, including determining sponsor contributions, reporting plan liabilities to stakeholders, determining the amount needed to secure benefits, measuring the value of employee benefits, and determining lump sum settlement amounts. They also identified a variety of considerations in setting discount rate policy, including cost, risk, fairness, sustainability, transparency, and comparability. To address trade-offs among these varied and sometimes competing purposes and considerations, many experts saw value in reporting multiple measures of plan obligations, using different discount rates. Some experts also regarded assumed returns used by U.S. public plans as too high under current market conditions.

Selected countries we examined reported that they apply a variety of approaches to discounting. Canada requires determination of multiple measures of plan obligations, based on both assumed returns and high-quality bond rates and annuity prices. The Netherlands requires that plan obligations be measured based on market interest rates, but allows the use of assumed returns for determining plan contributions or developing recovery plans. In the United Kingdom, discount rates are determined on a plan-specific basis and can include some allowance for assumed returns in excess of high-quality bond rates, depending on plan characteristics and the strength of the sponsor. To the extent that plans in these countries use long-term assumed rates of return, they are generally lower than the 7.5 to 8 percent used by many U.S. public plans under recent market conditions. Experts GAO interviewed in these countries described a greater degree of government oversight which might help explain their use of lower assumed returns.