**DB FUNDING RATIOS**

**Key results**

Despite the prolonged low interest rate environment, average funding ratios of defined benefit pension plans have remained relatively steady over the last years. These ratios were however still below 100% at the end of 2016 in Canada, Iceland, Mexico, the United Kingdom and the United States, suggesting that the value of assets in DB plans would not enable to cover pension liabilities. Funding levels are calculated using national (regulatory) valuation methodologies and hence cannot be compared across countries.

Providers of occupational defined benefit (DB) plans have faced challenges coming from low and falling interest rates over the last years. A significant part of OECD pension assets is still in DB plans and other plans which offer return or benefit guarantees. Falling interest rates may increase the values of liabilities of the providers of benefit promises (which depend on a discount rate generally based on long-term government bond yields) and can lower the amount of assets accumulated as fixed income securities (including long-term government bonds) represent an important part of pension providers’ portfolios.

Funding ratios which measure the amount of assets over liabilities remained relatively stable over the last years in most countries with DB plans. In Belgium, Canada and Ireland, providers of DB plans have improved their funding position, increasing the average funding ratio by 27 percentage points in Belgium (from 126% in 2012 to 153% in 2015), by 26 percentage points in Canada (from 69% in 2012 to 95% in 2016) and by 9 percentage points in Ireland (from 96% in 2013 to 104.5% in 2016). The opposite trend can be observed in Mexico and Portugal where providers of DB plans saw their funding position decline by 2 percentage points in Mexico (from 54.9% in 2014 to 52.9% in 2016) and 3 percentage points in Portugal (from 106% in 2012 to 103% in 2016). The funding ratio in the other reporting countries has improved by less than 4 percentage points compared to 2012.

Funding levels were still below 100% in five reporting countries at the end of 2016. Providers of DB plans were underfunded at the end of 2016 in Canada, Iceland, Mexico, the United Kingdom and the United States. For Iceland, the low funding ratio refers to pension funds for public sector workers. Iceland passed a bill at the end of 2016 to transform DB pension funds covering the A-division of civil servants into defined contribution funds.

Funding levels are calculated using national (regulatory) valuation methodologies and hence cannot be compared across countries. Differences in methodology are substantial as some countries like Germany use fixed discount rates while others like the Netherlands use market rates. Discount rates can have a major impact on funding levels. Pension funds in the Netherlands can use an ultimate forward rate (UFR) for long maturities as the discount rate. Since 2015, the UFR is set at the 10-year moving average of the 20-year forward interest rate and is therefore tied to market expectations about future long-term interest rates.

**Definition and measurement**

The level of funding, that is, the ratio of pension plan assets to liabilities, is estimated using country-specific methodologies. Methodologies differ across countries with respect to the formula used, the discount rate (e.g. a market discount rate, or a fixed discount rate), or with the way future salaries are accounted for (e.g. liabilities can be based on current salaries or on salaries projected to the future date that participants are expected to retire). In addition, some countries calculate a funding ratio for each pension provider and calculate an average (simple or weighted) thereafter, while other countries only calculate an aggregate funding ratio for the whole industry.
8.11. Average funding ratio of occupational DB pension plans in selected OECD countries, 2012-16

In per cent

Source: OECD Global Pension Statistics and other sources.

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