

### Key results

Funding ratios, which measure the amount of liabilities that available assets cover in defined benefit (DB) pension plans, evolved differently over the last decade across countries. The funding position of DB plans has improved in Finland, Germany and Switzerland, but deteriorated in Iceland, Mexico and the Netherlands among OECD countries and in Indonesia. Funding levels of DB plans were above 100% at the end of 2018 in all reporting countries but five: Iceland, Mexico, the United Kingdom and the United States among OECD countries, and Indonesia. Funding levels are calculated using national (regulatory) valuation methodologies of liabilities and hence cannot be compared across countries.

Providers of occupational defined benefit (DB) plans have faced challenges from low and falling interest rates over the last decade. A significant part of OECD pension assets is still in DB plans and other plans that offer return or benefit guarantees. Low and falling interest rates 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 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 liabilities that available assets cover, evolved differently over the last decade across countries. The funding position of DB plans has improved by 18 percentage points in Germany (from 105% in 2008 to 123% in 2018), 11 percentage points in Switzerland (from 95% in 2008 to 105% in 2018) and 6 percentage points in Finland (from 118% in 2011 to 125% in 2018). The opposite trend was observed in Iceland, Mexico and the Netherlands among OECD countries and Indonesia among other jurisdictions, where the funding ratio deteriorated between 6 percentage points (in Indonesia and the Netherlands) up to 17 in percentage points (in Mexico) over the last decade. The funding ratio remained more or less the same (within a -5/+5 percentage point range) in 2018 compared to the first year available since 2008 in Luxembourg, Norway, the United Kingdom and the United States.

Funding levels of DB plans were above 100% at the end of 2018 in all reporting countries but five: Iceland (32%), Mexico (67%), the United Kingdom (96%), the United States (58%) among OECD countries, and Indonesia (96%). Assets in DB plans in these five countries would not enable to cover the pension liabilities (the way they are calculated).

Funding levels are calculated using national (regulatory) valuation methodologies of liabilities and hence

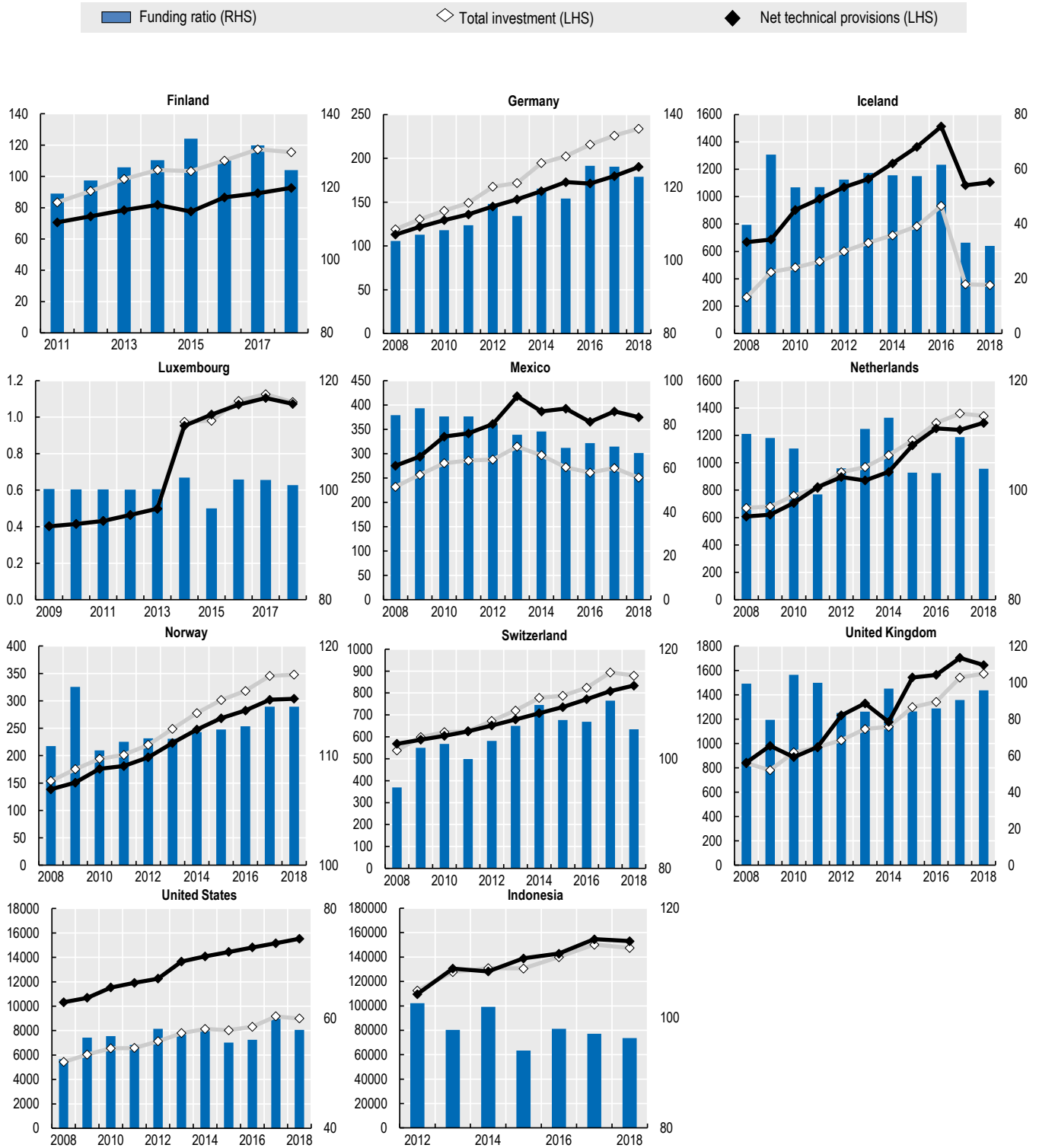
cannot be compared across countries. Some countries like Germany use fixed discount rates while others like the Netherlands use market rates as a discount rate. In Germany, the maximum discount rate for the calculation of technical reserves is set at 0.9% by regulation. The discount rate for Pensionskassen and Pensionsfonds offering insurance-like guarantees becomes fixed for the term of the contract. In the Netherlands, pension funds can use an Ultimate Forward Rate (UFR) for the valuation of liabilities. The UFR is an extrapolation of the observable term structure to take into account the very long duration of pension liabilities. The choice of the discount rate that is used to express in today's terms the stream of future benefit payments can have a major impact on funding levels.

### Definition and measurement

The funding position of DB plans is assessed in this publication as the ratio between the investments and the technical provisions (net of reinsurance) of DB plans. Investments of DB plans may be a low estimate of assets of DB plans as they would not include receivables and claims against the plan sponsor to cover the funding shortfall. Technical provisions represent the amount that needs to be held to pay the actuarial valuation of benefits that members are entitled to. This is the minimum obligation (liability) for all DB pension plans.

Liabilities are 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).

Figure 9.7. Assets and liabilities of DB plans (in billions of national currency) and their ratio (in per cent) in selected jurisdictions, 2008-2018



Note: LHS: left-hand side axis. RHS: right-hand side axis.  
Source: OECD Global Pension Statistics.

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