

Key results

Funding ratios, which measure the amount of liabilities that available assets cover in defined benefit (DB) pension plans, have evolved differently over the years across countries. Funding ratios withstood well the instability in financial markets in 2020, with most countries recording an improvement of the solvency of DB plans at end-2020 compared to end-2019. Funding levels of DB plans were above 100% at the end of 2020 (or latest available date) 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.

Funding ratios of DB plans, which measure the amount of liabilities that available assets cover, have evolved differently over the years across countries. Over the last decade or so, the funding position of DB plans improved by 25 percentage points in Germany (from 108% in 2010 to 133% in 2020), 11 percentage points in Finland (from 118% in 2011 to 129% in 2020), 11 percentage points in Ireland (from 105% in 2016 to 116% in 2020) and 9 percentage points in Switzerland (from 103% in 2010 to 112% in 2020). The funding ratio of DB plans also improved in Luxembourg, Norway and the United States between 2010 and 2020. However, the opposite trend was observed in Iceland, Indonesia, Mexico, the Netherlands and the United Kingdom where the funding ratio deteriorated between 6 percentage points (in Indonesia) and 22 percentage points (in Mexico) over the last decade.

The funding ratio of DB plans improved in 2020 in most reporting jurisdictions, with the strongest improvement recorded in Finland (from 125% at end-2019 to 129% at end-2020). Yet, national authorities and private-sector companies that monitored the funding ratio of DB plans closely in 2020 had usually found a deterioration of this ratio in the first quarter of 2020 such as in Finland, the Netherlands, Switzerland and the United Kingdom. This decline was partly due to the fall in the asset values of DB plans during the first quarter while liabilities may have also even been increasing in some cases. However, the recovery of financial markets after Q1 2020 has supported the improvement of the funding ratios during the rest of 2020, with assets increasing faster than liabilities at the end in most reporting jurisdictions in 2020. Exceptions include Ireland, the Netherlands and the United Kingdom.

Funding levels of DB plans were above 100% at the end of 2020 (or latest available date) in all reporting countries but five: Iceland (33%), Mexico (62%), the United Kingdom (95%) and the United States (64%) among OECD countries, and Indonesia (97%). Assets in DB plans in these five countries would not enable to cover the pension liabilities (the way they are calculated).

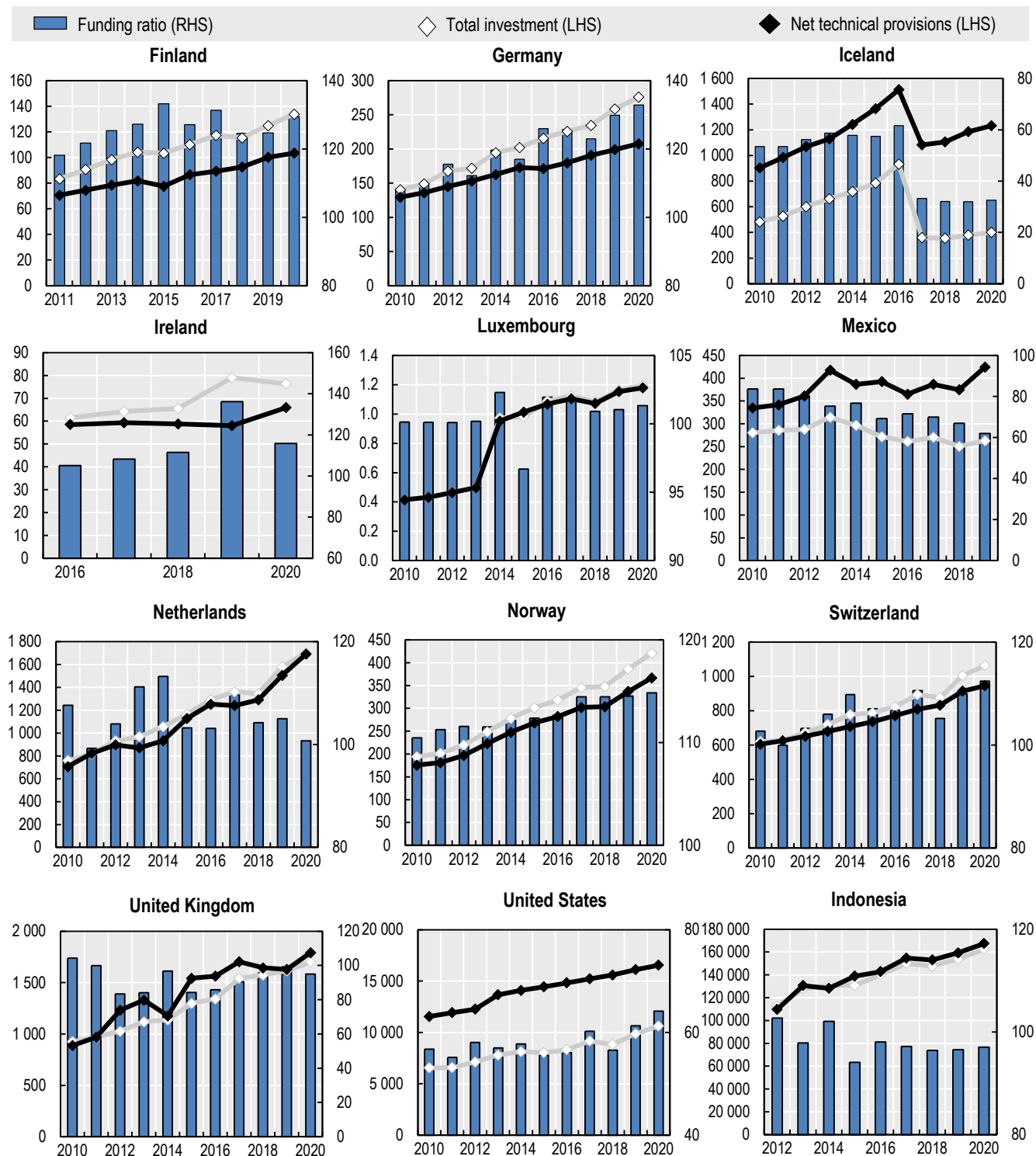
Funding levels are calculated using national (regulatory) valuation methodologies of liabilities and hence cannot be compared across countries. Some countries like Finland, Iceland and Luxembourg use fixed discount rates (at 3%, 3.5% and 5% respectively), while others like the Netherlands, the United Kingdom and the United States use market rates as a discount rate. 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 Pension Protection Fund in the United Kingdom uses conventional and index-linked gilt yields to calculate the liabilities of the DB plans in the scope of its index (PPF 7 800). Discount rates of single-employer pension plans in the United States are determined by reference to high-quality corporate bonds. 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) for example.

Figure 9.6. Assets and liabilities of DB plans (in billions of national currency) and their ratio (percentage) in selected jurisdictions, 2010-20



Note: LHS: left-hand side axis. RHS: right-hand side axis.

Source: OECD Global Pension Statistics.

StatLink  <https://stat.link/vlmga1>

9. FURTHER READING

- [6] International Organisation of Pension Supervisors (2018), *2018 Update on IOPS work on fees and charges*, IOPS Working Papers on Effective Pensions Supervision, No. 32, <http://www.iopsweb.org/WP-32-2018-Update-on-IOPS-work-on-fees-and-charges.pdf>.
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