# S12. Debt sustainability assessment

This section uses the Maq (Casey and Purdue, 2021), a macro-fiscal model, to assess paths for the government debt ratio. It draws on past relationships between variables and detailed debt security data to gauge probabilities associated with different outcomes, while also exploring potential shocks around the Department of Finance's "central" forecasts.
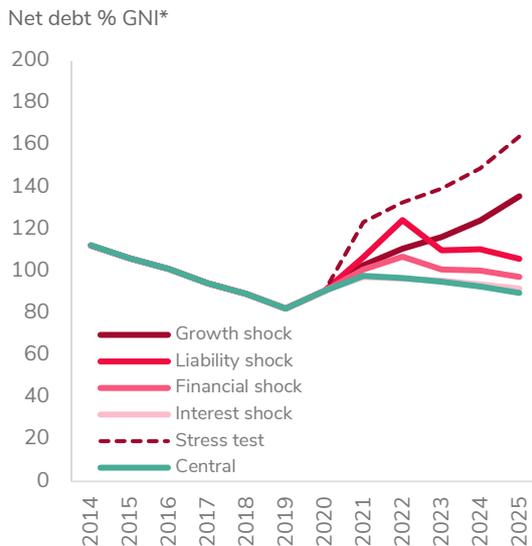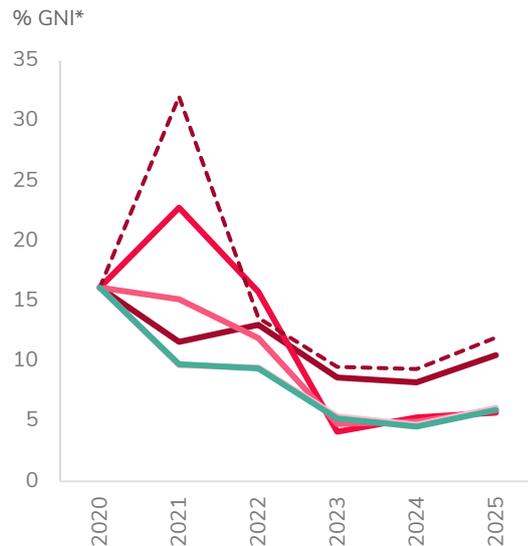
## Gross debt fan chart
% GNI*
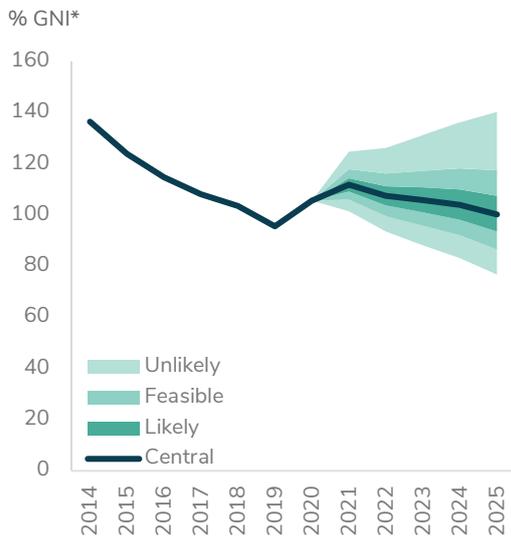


## Net debt fan chart
% GNI*
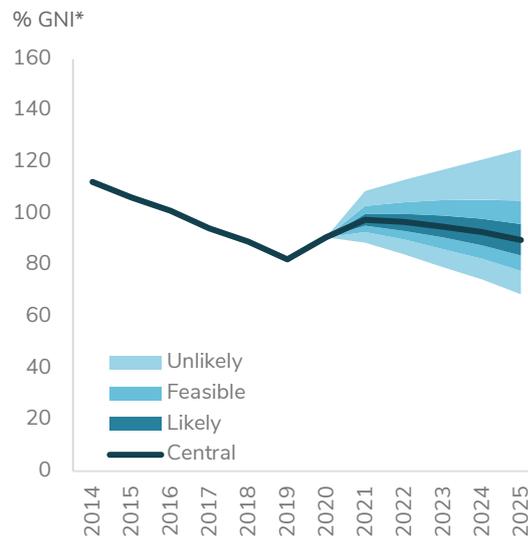


## Shock scenarios
Net debt % GNI*



## Gross financing needs
% GNI*



Sources: Department of Finance forecasts; CSO outturns; NTMA data on debt securities and Fiscal Council workings.
Notes: In the stochastic fan chart projections, "Likely" covers the 30% confidence interval, "Feasible" the rest of the 60% interval; and "Unlikely" the rest of the 90% interval. The "Growth shock" assumes real GNI* growth rates 3.6pp (one standard deviation, 1996-2019 excl. financial crisis) weaker than the Central scenario for 2 years (leaving output about 7% below the central scenario). The "Liability" and "Financial" shocks, respectively, assume 15% and 10% GNI* contingent liabilities materialise, based on an historical assessment of fiscal risks internationally. The "Interest shock" assumes marginal interest rates rise by 2pp for the full period. The "Stress test" combines all previous shocks.