

Kingdom of Denmark

Rating Report


AAA
 STABLE
 OUTLOOK

Credit strengths

- Wealthy and competitive economy
- Sound public finances and low public debt
- Solid external position
- Strong institutional framework and stable governance

Credit challenges

- High levels of household debt
- Vulnerabilities related to high and rising property prices

Ratings and Outlook

Local and foreign currency

| | |
|--------------------------|-------------|
| Long-term issuer rating | AAA/Stable |
| Senior unsecured debt | AAA/Stable |
| Short-term issuer rating | S-1+/Stable |

Rating rationale:

Wealthy and competitive economy: Denmark has one of the highest GDP-per-capita ratios in Europe and ranks third in the 2021 IMD World Competitiveness Ranking. Economic output proved resilient during the Covid-19 pandemic and the economy is expected to return to its pre-pandemic growth path.

Public finances: Denmark benefits from sound public finances characterised by low structural deficits and a moderate debt burden. The country faces an ageing population and continued investment needs to support its strong competitiveness.

Strong external position: Denmark has generated a current account surplus in each year since 1998 and the IMF expects continued surpluses above 6% over the next five years. The credible commitment to maintaining its fixed exchange rate is backed by large official reserves.

Strong institutional framework: Denmark ranks among the top countries globally in governance indicators and has a strong track record in implementing structural reforms, maintaining fiscal discipline and conducting appropriate monetary policy.

Rating challenges include: i) vulnerabilities in the Danish financial system, including from high household debt; and ii) banking sector vulnerabilities related to high and rising property prices.

Denmark's sovereign rating drivers

| Risk pillars | Quantitative scorecard | | Reserve currency adjustment (notches) | Qualitative scorecard | Final rating |
|--------------------------|------------------------|-------------------|---------------------------------------|-----------------------|--------------|
| | Weight | Indicative rating | | Notches | |
| Domestic economic risk | 35% | aaa | AAA | +1/3 | |
| Public finance risk | 25% | aaa | | +1/3 | |
| External economic risk | 10% | aaa | | +1/3 | |
| Financial stability risk | 10% | aaa | | -1/3 | |
| ESG risk | | | | | |
| Environmental risk | 5% | aaa | +1/3 | | |
| Social risk | 5% | a- | 0 | | |
| Governance risk | 10% | aaa | +1/3 | | |
| Overall outcome | aaa | | 0 | +1 | |

Note: The sum of the qualitative adjustments, capped at 1 notch per rating pillar, is weighted equally and rounded to the nearest integer. The reserve currency adjustment applies to currencies in the IMF's SDR basket. For details, please see Scope's 'Sovereign Ratings' methodology. Source: Scope Ratings GmbH

Outlook and rating triggers

The Stable Outlook reflects Scope's view that risks to the ratings are balanced over the next 12 to 18 months.

Positive rating-change drivers

- Not applicable

Negative rating-change drivers

- A severe economic shock resulting in weaker medium-term growth prospects
- Deteriorating fiscal outlook resulting in an upward trend of government debt ratios
- Increasing banking system risks resulting in broader systemic risk

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Bloomberg: RESP SCOP

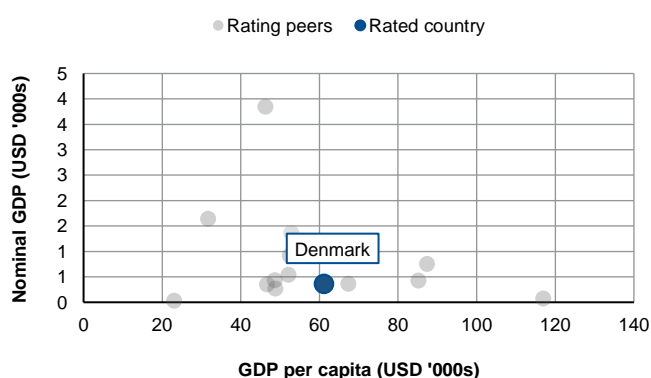
Domestic Economic Risks

- **Growth outlook:** Economic output proved resilient during the Covid-19 pandemic. Denmark's vaccination roll-out was among the fastest in the world and in September 2021 it became one of the first EU countries to remove all domestic Covid-19 restrictions. The resulting increase in consumption is a key driver for the economic recovery, bolstered by Denmark's high-value-added economy, which benefits from strong growth in key export markets. We expect the Danish economy to expand by 3.9% in 2021 and around 2.8% in 2022, placing Denmark back on its pre-pandemic growth trend.
- **Growth potential:** We estimate that Denmark's medium-term growth potential stands at around 1.5%, which is only slightly below the AAA rated peer average (around 1.6%). Potential output growth is supported by increased public sector investments related to the green transition, digitalisation and infrastructure. In light of an ageing population, supportive labour market initiatives include an increase in the pension age to 67 in 2022 (currently 66). The pension age is then expected to rise to 68 by 2030, after which it will be directly linked to any future increases in life expectancy. The government also introduced reform plans aimed at better integrating foreigners into the workforce and increasing structural employment over the next decade.
- **Labour market:** The wage compensation scheme introduced at the onset of the pandemic helped to limit the rise in the unemployment rate to 5.6% in 2020. We expect that the strong economic rebound will help to reduce the unemployment rate to 5.1% in 2021 but still to remain slightly above the pre-pandemic level of 5.0% in 2022. This will be largely driven by continued labour market frictions across manufacturing, construction and the private services sectors, as well as government efforts to increase labour force participation rates.
- **Monetary policy:** Denmark's central bank pegs the exchange rate to the euro. As euro area monetary policy targets an inflation rate of 2% over the medium term, the fixed-exchange-rate policy provides a framework for low and stable inflation. However, the limited monetary policy and exchange rate flexibility restricts the central bank's ability to address financial imbalances, control money supply and take unconventional measures such as quantitative easing.

Overview of Scope's qualitative assessments for Denmark's Domestic Economic Risks

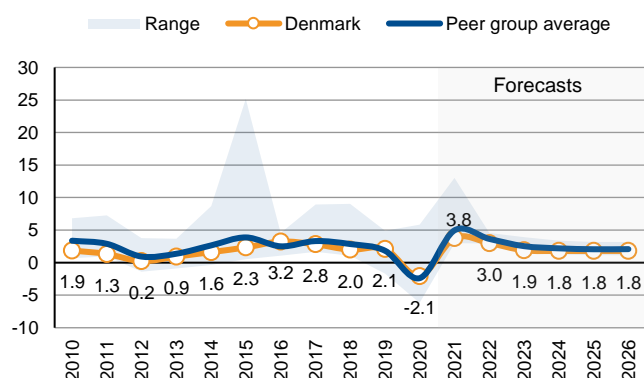
| CVS indicative rating | Analytical component | Assessment | Notch adjustment | Rationale |
|-----------------------|---|------------|------------------|---|
| aaa | Growth potential of the economy | Neutral | 0 | Robust growth potential, and pre-crisis track record of sustained growth |
| | Monetary policy framework | Neutral | 0 | The fixed-exchange-rate policy ensures low inflation and has supported external competitiveness, but restricts the central bank's ability to control money supply |
| | Macro-economic stability and sustainability | Strong | +1/3 | Competitive economy, favourable business environment and highly skilled labour force support productivity growth; highly flexible labour market |

Nominal GDP and GDP per capita, USD thousands



Source: IMF, Scope Ratings GmbH

Real GDP growth, %



Source: IMF, Scope Ratings GmbH

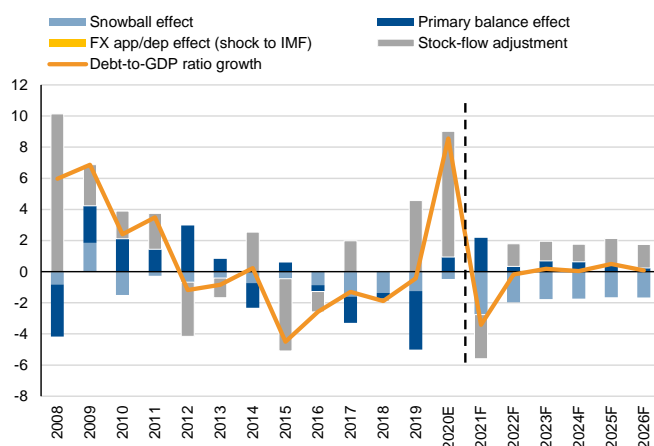
Public Finance Risks

- **Fiscal outlook:** To cushion the impact of the pandemic on the Danish economy, the government made large fiscal support measures available in addition to already strong automatic stabilisers. From the onset of the pandemic until mid-2021, support measures amounting to DKK 683bn (around 30% of GDP) were made available, although less than half of the amount was taken up. Given the strong economic recovery, many support measures such as the wage compensation scheme and the support provided to self-employed and individual businesses have already been withdrawn.
- **Debt trajectory:** Denmark's general government debt ratio declined in the years before the pandemic, falling from 46.1% in 2011 to 33.6% in 2019. Fiscal support measures caused the ratio to increase to 42.1% in 2020, which compares favourably to an average of around 50% in AAA rated peer countries. While Scope expects a fiscal deficit of 1.9% in 2021, the strong rebound in GDP will lower the government debt ratio to 38.7%. Spending pressures due to an ageing population and continued investment needs are expected to result in public debt levels remaining broadly stable over the next few years and rise slightly to 39.4% by 2026.
- **Market access:** Denmark benefits from a favourable debt structure and excellent market access. The country's 10-year yield remains low at -0.01% and the average maturity of government debt as of October 2021 at 8.0 years was longer than that of most governments in Denmark's sovereign peer group.

Overview of Scope's qualitative assessments for Denmark's Public Finance Risks

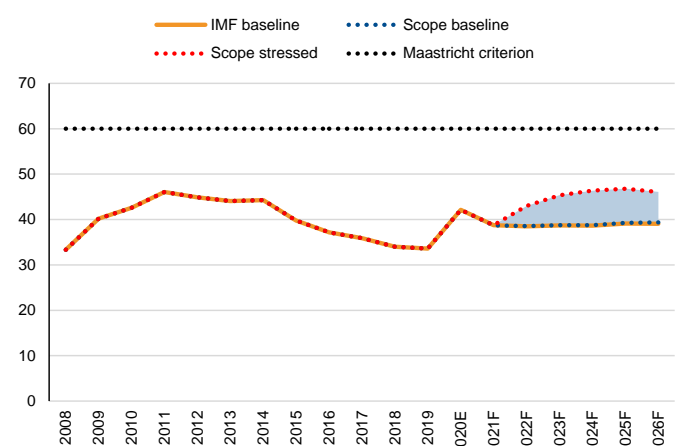
| CVS indicative rating | Analytical component | Assessment | Notch adjustment | Rationale |
|-----------------------|--------------------------------|------------|------------------|--|
| aaa | Fiscal policy framework | Strong | +1/3 | Appropriate response to Covid-19 shock with sizeable countercyclical stimulus; pre-crisis track record of balanced budgets; progressive pension reform to adapt retirement age |
| | Debt sustainability | Neutral | 0 | Stable debt trajectory |
| | Debt profile and market access | Neutral | 0 | Excellent market access, low government financing costs, in line with that of peers |

Contributions to changes in debt levels, pps of GDP



Source: Scope Ratings GmbH

Debt-to-GDP forecasts, % of GDP



Source: Scope Ratings GmbH

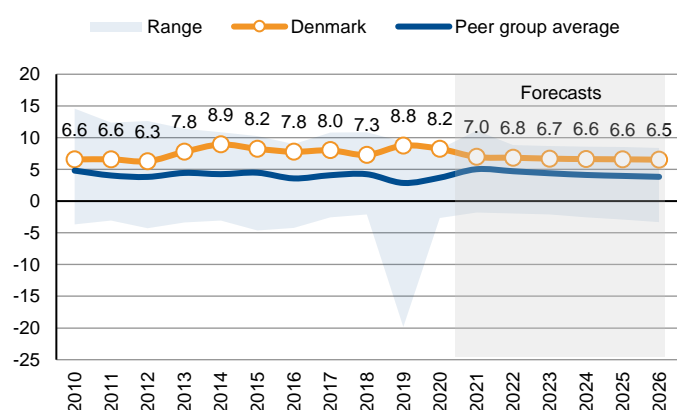
External Economic Risks

- **Current account:** The IMF forecasts Denmark's current account surplus to decrease slightly from 8.2% in 2020 to 7.0% in 2021 and remain above 6% over the subsequent five years. This follows more than two decades of persistent current account surpluses, reflecting Denmark's large financial sector, exceptionally high domestic savings and strong exports of high-value goods and services.
- **Exports:** Danish exports fell by 7% in 2020, mainly due to a decline in services activities, particularly in the transport, construction and IT sectors. Export growth has picked up in 2021 and is expected to increase by 6.2% according to the IMF. We expect continued growth in exports, including from the pharmaceuticals and machinery sectors, as Denmark's key export markets including Germany, Sweden and the Netherlands continue to recover from the pandemic shock.
- **External debt:** Danish external debt has declined from above 180% of GDP in 2010 to around 140% in 2019, before increasing again to 158% in 2020. This relates mainly to debts of the financial institutions sector (99% of GDP). Short-term debt relative to total gross external debt has also declined, from 52% in 2010 to 43% in 2020. Denmark's external position remains sound with a net international asset position of 74.3% of GDP as of 2020, up from -5% in 2008.
- **Currency reserves:** Since October 2019, Denmark's central bank has intervened repeatedly in foreign-exchange markets to support the krone's peg to the euro and was successful in maintaining it against initial depreciation pressures. Denmark's credible commitment to maintaining the fixed exchange rate is backed by its large official reserves, totalling DKK 491.9bn (23.5% of GDP) as of October 2021.

Overview of Scope's qualitative assessments for Denmark's External Economic Risks

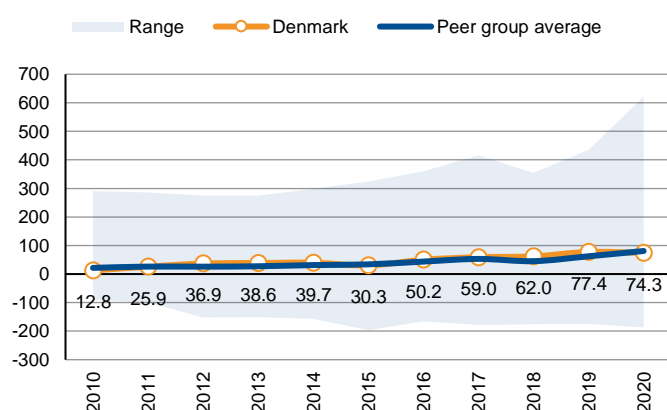
| CVS indicative rating | Analytical component | Assessment | Notch adjustment | Rationale |
|-----------------------|---------------------------------|------------|------------------|--|
| aaa | Current account resilience | Neutral | 0 | Low cyclicity of export composition and external sector competitiveness support current account resilience |
| | External debt structure | Neutral | 0 | Relatively-high external debt especially that of the financial institutions sector |
| | Resilience to short-term shocks | Strong | +1/3 | Very large net external creditor position, regional safe-haven currency |

Current account balance, % of GDP



Source: IMF, Scope Ratings GmbH

NIIP, % of GDP



Source: IMF, Scope Ratings GmbH

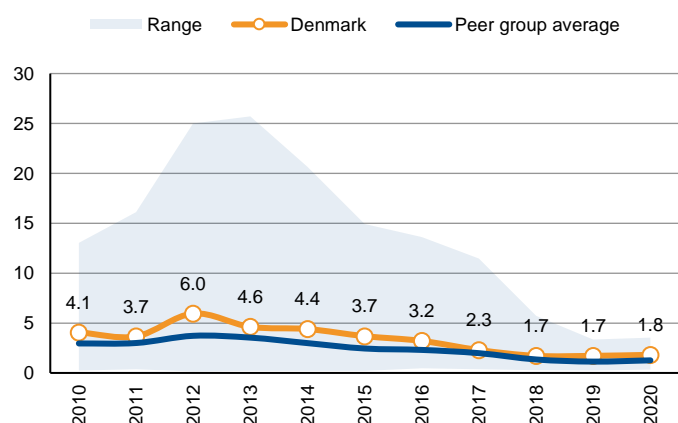
Financial Stability Risks

- **Private debt:** Household debt amounted to 257% of net disposable income during 2020, the highest among OECD countries. The high levels of mortgage debt have increased vulnerability to rising interest rates, increased unemployment and sharply declining house prices. However, these risks have to be viewed in the context of the very high levels of household assets, with households' net worth at 803% of their net disposable income in 2020. This provides a strong safety net against short-term income shocks, and we believe the credit risk of Danish residential mortgages remains low on aggregate.
- **Housing market:** House prices increased by around 21% in the period between the onset of the pandemic and Q2 2021, according to Eurostat. The financial system is exposed to the domestic housing sector, with real estate lending of mortgage banks comprising around 48% of total Danish financial sector assets. Denmark's large amounts of household savings and assets held in the pension system facilitated the development of the world's largest mortgage covered bond market. A sharp correction in the housing market could weigh on consumption and result in spill-over effects in Denmark's highly interconnected financial system of mortgage credit institutions, pension funds and insurance companies.
- **Macroprudential measures:** The Systemic Risk Council recommended that the government reactivate the countercyclical capital buffer at 1.0% from September 2022, which the government followed. However, the government did not follow the Council's recommendation to restrict homeowners' access to interest-only mortgages, which would have restricted borrowing when loan-to-value ratios exceeded 60%. While there are signs of slowing house price growth during the second half of 2021, we believe that the increased vulnerability of highly indebted homeowners with interest-only mortgages will need to be monitored carefully.

Overview of Scope's qualitative assessments for Denmark's *Financial Stability Risks*

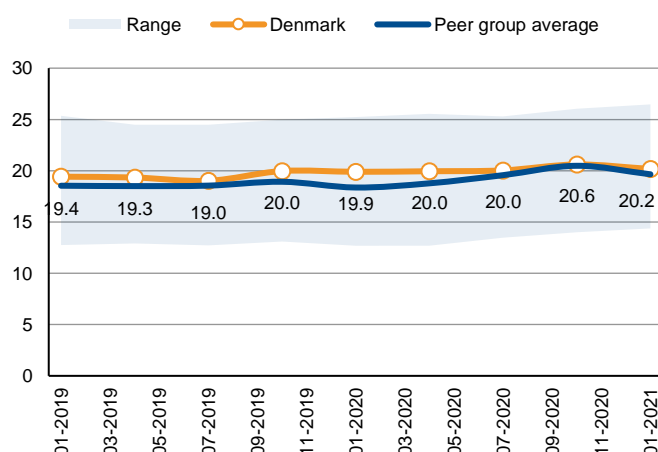
| CVS indicative rating | Analytical component | Assessment | Notch adjustment | Rationale |
|-----------------------|----------------------------|------------|------------------|--|
| aaa | Banking sector performance | Neutral | 0 | High capitalisation levels, and stable levels of non-performing loans |
| | Banking sector oversight | Neutral | 0 | Prudent oversight under Denmark's central bank and financial supervisory authority; improvements in anti-money laundering / combating the financing of terrorism framework |
| | Financial imbalances | Weak | -1/3 | High private-sector debt, large size of banking sector vis-à-vis the real economy, and high interconnectedness within the Danish financial system |

NPLs, % of total loans



Source: IMF, Scope Ratings GmbH

Tier 1 ratio, % of risk-weighted assets



Source: IMF, Scope Ratings GmbH

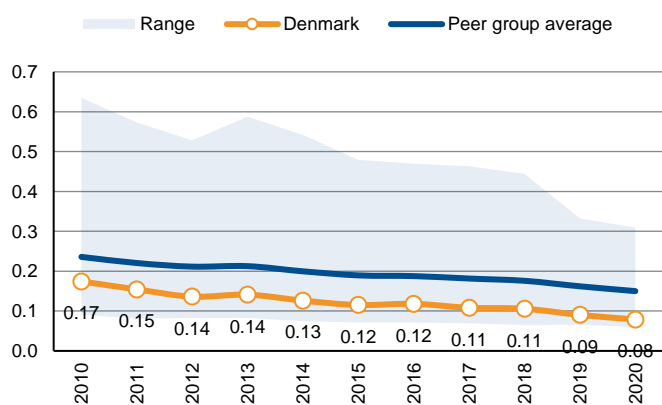
ESG Risks

- **Environment:** Denmark aims to reduce greenhouse gas emissions by 70% by 2030 (relative to 1990 levels) and reach carbon neutrality by 2050. The country has earmarked 60% of its share of the EU's Recovery and Resilience Facility on green initiatives, well above the 37% target required by funding conditions. Around 78% of the country's electricity comes from renewable sources and around 30% of its primary energy needs are met through renewables. Energy consumption from coal has declined rapidly over the past decade from 22% in 2009 to only 6% in 2019. The Danish Council on Climate Change noted in February 2021 that existing initiatives would lead to a carbon reduction of only 54% and that new initiatives are therefore needed. Since then, further climate policy initiatives have progressed, including binding carbon emission targets for the agricultural industry.
- **Social:** Denmark benefits from a high GDP per capita and an advanced social safety net, contributing to low income-inequality. However, the country faces an elevated old-age dependency ratio, with increasing demands on welfare services, particularly healthcare. Non-EU migrants experience a high jobless rate with persistent employment gaps relative to Danes due to insufficient job qualifications. The 'Denmark can do more' reform plans and increased investments in education and digitalisation should help to increase labour market participation in future.
- **Governance:** Since gaining representation in parliament requires only 2% of the vote, a large number of political parties are represented (currently more than 10) and minority governments are common, requiring broad coalition-building to pass specific pieces of legislation. A long history of consensus-building therefore supports longer-term policy continuity.

Overview of Scope's qualitative assessments for Denmark's ESG Risks

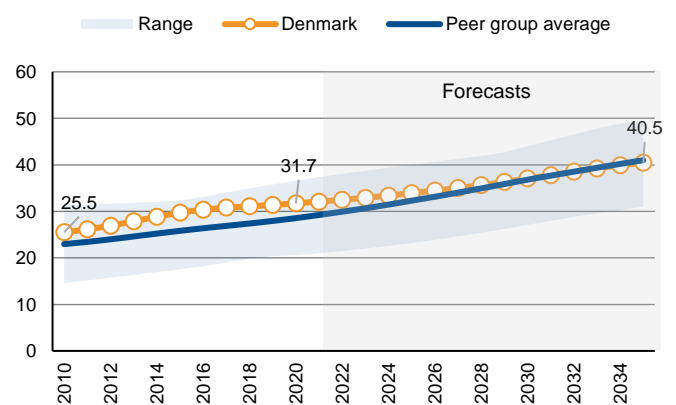
| CVS indicative rating | Analytical component | Assessment | Notch adjustment | Rationale |
|-----------------------|-----------------------------------|------------|------------------|--|
| aaa | Environmental risks | Strong | +1/3 | Strong environmental standards, and ongoing allocation of resources to achieve ambitious long-term targets for carbon neutrality and emissions reduction |
| | Social risks | Neutral | 0 | Relatively favourable demographics, well-established social safety nets, and inclusive labour market |
| | Institutional and political risks | Strong | +1/3 | High-quality institutions and stable political environment |

CO2 emissions per GDP, mtCO2e



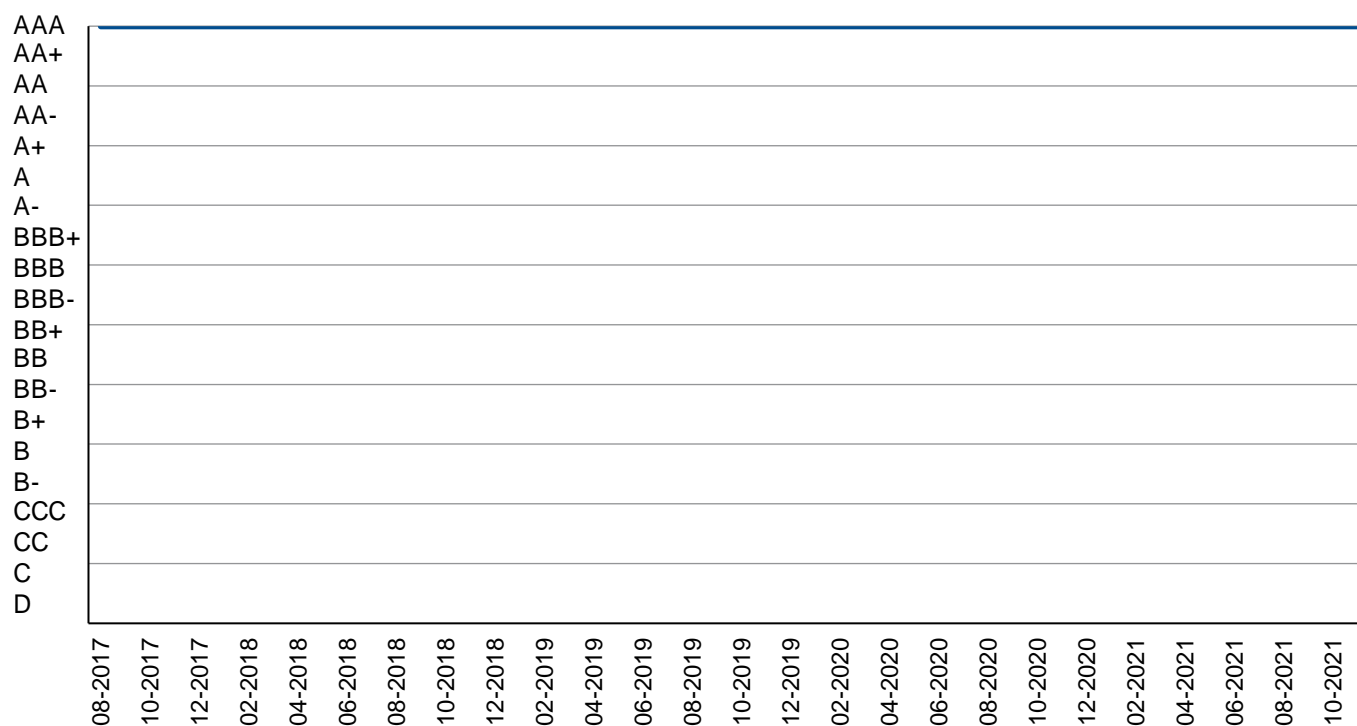
Source: European Commission, Scope Ratings GmbH

Old age dependency ratio, %



Source: United Nations, Scope Ratings GmbH

Appendix I. Rating history



Appendix II. Rating peers

Rating peers are related to sovereigns with an indicative rating in the same rating category or in adjacent categories per Scope's Core Variable Scorecard.

| Peer group |
|-------------|
| Austria |
| Denmark |
| Estonia |
| Finland |
| Germany |
| Ireland |
| Luxembourg |
| Netherlands |
| Norway |
| Sweden |
| Switzerland |

Publicly rated sovereigns only; the full sample may be larger.

Appendix III. Statistical table for selected CVS indicators

This table presents a selection of the indicators (24 out of 29) used in Scope's quantitative model, the Core Variable Scorecard.

| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021F | 2022F |
|---|-------|-------|-------|-------|-------|-------|-------|
| Domestic Economic Risk | | | | | | | |
| GDP per capita, USD 000s ¹ | 54.9 | 57.8 | 61.7 | 59.9 | 61.2 | 67.9 | 70.8 |
| Nominal GDP, USD bn | 313.1 | 332.1 | 356.8 | 347.6 | 356.1 | 396.7 | 414.6 |
| Real growth, % ¹ | 3.2 | 2.8 | 2.0 | 2.1 | -2.1 | 3.9 | 2.8 |
| CPI inflation, % | 0.0 | 1.1 | 0.7 | 0.7 | 0.3 | 1.4 | 1.6 |
| Unemployment rate, % ¹ | 6.0 | 5.8 | 5.1 | 5.0 | 5.6 | 5.1 | 5.1 |
| Public Finance Risk | | | | | | | |
| Public debt, % of GDP ¹ | 37.2 | 35.9 | 34.0 | 33.6 | 42.1 | 38.7 | 38.5 |
| Interest payment, % of government revenue | 1.0 | -0.2 | -0.7 | -0.6 | -0.6 | -0.6 | -0.8 |
| Primary balance, % of GDP ¹ | 0.4 | 1.7 | 0.4 | 3.8 | -0.9 | -2.2 | -0.3 |
| External Economic Risk | | | | | | | |
| Current account balance, % of GDP | 7.8 | 8.0 | 7.3 | 8.8 | 8.2 | 7.0 | 6.8 |
| Total reserves, months of imports | 4.7 | 5.0 | 4.2 | 4.0 | 4.6 | - | - |
| NIIP, % of GDP | 50.2 | 59.0 | 62.0 | 77.4 | 74.3 | - | - |
| Financial Stability Risk | | | | | | | |
| NPL ratio, % of total loans | 3.2 | 2.3 | 1.7 | 1.7 | 1.8 | - | - |
| Tier 1 ratio, % of risk weighted assets | 18.4 | 19.7 | 19.8 | 20.0 | 20.6 | 20.3 | - |
| Credit to private sector, % of GDP | 166.6 | 161.8 | 161.3 | 160.9 | 163.4 | - | - |
| ESG Risk | | | | | | | |
| CO ² per EUR 1,000 of GDP, mtCO ² e | 118.1 | 108.3 | 105.7 | 90.3 | 78.8 | - | - |
| Income quintile share ratio (S80/S20), x | 4.1 | 4.2 | 4.1 | - | - | - | - |
| Labour force participation rate, % | 77.4 | 77.9 | 78.2 | 79.0 | - | - | - |
| Old age dependency ratio, % | 30.5 | 31.2 | 31.9 | 32.6 | 33.3 | 33.9 | 34.5 |
| Composite governance indicator ² | 1.7 | 1.6 | 1.7 | 1.7 | 1.1 | - | - |

¹ Forecasted values are produced by Scope and may differ from those presented in the charts of the previous sections

² Average of the six World Bank Governance Indicators

Source: European Commission, IMF, World Bank, Scope Ratings GmbH

Appendix IV. Economic development and default indicators

IMF Development Classification

Advanced economy

5y USD CDS spread (bps) as of 12 November 2021

7.8



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