

Finland

Key Rating Drivers

High Governance, Debt, Demographics: Finland's 'AA+' ratings are supported by very high governance indicators, high income per capita, eurozone membership and the pension system's strong asset position. Public indebtedness will remain above both the 'AA' and 'AAA' medians and is projected to continue increasing. The potential growth rate of the economy is low.

Elections, Change in Government: Following parliamentary elections in April, a coalition government was formed with Petteri Orpo, leader of the centre-right National Coalition Party, the largest party in parliament, as prime minister. The right-wing Finns Party and the much smaller Swedish People's Party and Christian Democrats complete the coalition.

New Government Consolidation Plans: The government's programme highlights the reduction of the budget deficit as a main objective, with a longer-term goal to stabilise and reduce overall indebtedness. The programme sets out measures aimed at reducing public spending-to-GDP. The government aims to narrow the government deficit to 1% of GDP by 2027 through a net consolidation of EUR6 billion (2.2% of 2022 GDP).

Fiscal Deficit to Rise in 2023: Fitch expects the deficit to rise from 0.8% of GDP in 2022 to 2.5% this year due to effect of a slowing economy on revenues; higher spending on measures to address the effect of high prices; higher inflation-linked spending; and the implementation of healthcare and social services reform. We expect the government's plans to lead to lower deficits in 2024 and 2025, of 1.9% and 2.2% of GDP respectively, and assume that expenditure cuts worth 0.8% of forecast GDP will be implemented between 2024 and 2025.

Government Debt Rising: Government debt was 72.9% of GDP at end-2022, up from 72.5% at end-2021. We forecast the debt ratio will rise to 74.7% this year and increase further, reaching 76.7% by end-2025. This means the ratio would be higher than both the 'AA' and 'AAA' median forecasts (43.6% and 38.4%, respectively). In Fitch's view, the government's consolidation plans should slow the increase in public debt, but it will take further consolidation measures, possibly over more than one parliamentary term, to stabilise the debt ratio.

Risks to debt sustainability and pressures on public finances from population ageing are mitigated by a strong public sector balance sheet bolstered by large pension assets (overall pension assets in Finland were about 90% of GDP in 1Q23, of which about 37% was in the public sector system). Debt servicing costs are rising, but remain below the 'AA' median (interest-to-revenue ratio in 2025 forecast at 2.6%, compared with the 'AA' median of 3.1%).

Stagnant Economy, Recovery in 2024: Real GDP rose by 0.4% quarter on quarter (qoq) in 1Q23, although we expect real GDP to decline marginally this year. Falling inflation and higher wages will support real incomes later in the year, and improved business sentiment encouraging investment and stronger growth among Finland's main trading partners will translate into real GDP growth of 1.3% next year, and 1.2% in 2025, driven mainly by domestic demand.

Falling Inflation, Wage Strength: Consumer price inflation peaked in November 2022, before falling to 4.2% in July. We expect inflation to lower to 2.6% in 2024 and 2.1% in 2025. Pay rises agreed between the end of last year and the first months of this year suggest that pay will outpace consumer prices this year, allowing households' real incomes to recover.

House Prices, Indebtedness Falling: House prices have declined in nominal terms since 2Q22, with a year-on-year (yoy) fall of 8% in May 2023. Lower demand for housing implies an easing in indebtedness. The debt-to-income ratio edged down to 129.9% in 1Q23, after peaking at 133.0% in early 2022. At the same time, debt service increased, with about 80% of mortgage loans at variable interest rates. While debt service has risen, the distribution suggests that those most affected by rate rises are also those with the largest asset or savings buffers.

This report does not constitute a new rating action for this issuer. It provides more detailed credit analysis than the previously published Rating Action Commentary, which can be found on www.fitchratings.com.

Ratings

Foreign Currency

Long-Term IDR	AA+
Short-Term IDR	F1+

Local Currency

Long-Term IDR	AA+
Short-Term IDR	F1+

Country Ceiling

AAA

Outlooks

Long-Term Foreign-Currency IDR	Stable
Long-Term Local-Currency IDR	Stable

Rating Derivation

Component

Sovereign Rating Model (SRM)	AA+
Qualitative Overlay (QO)	0
Structural features	0
Macroeconomic	0
Public finances	0
External finances	0

Long-Term Foreign-Currency IDR	AA+
--------------------------------	-----

Source: Fitch Ratings

Data

	2023F
GDP (USDbn)	300
Population (m)	5.6

Source: Fitch Ratings

Applicable Criteria

[Sovereign Rating Criteria \(April 2023\)](#)
[Country Ceilings Criteria \(July 2020\)](#)

Related Research

[Fitch Affirms Finland at 'AA+'; Outlook Stable \(August 2023\)](#)
[Global Economic Outlook \(June 2023\)](#)
[Interactive Sovereign Rating Model](#)
[Fitch Fiscal Index - Analytical Tool](#)
[Click here for more Fitch Ratings content on Finland](#)

Analysts

Alex Muscatelli
+49 69 768076 272
alex.muscatelli@fitchratings.com

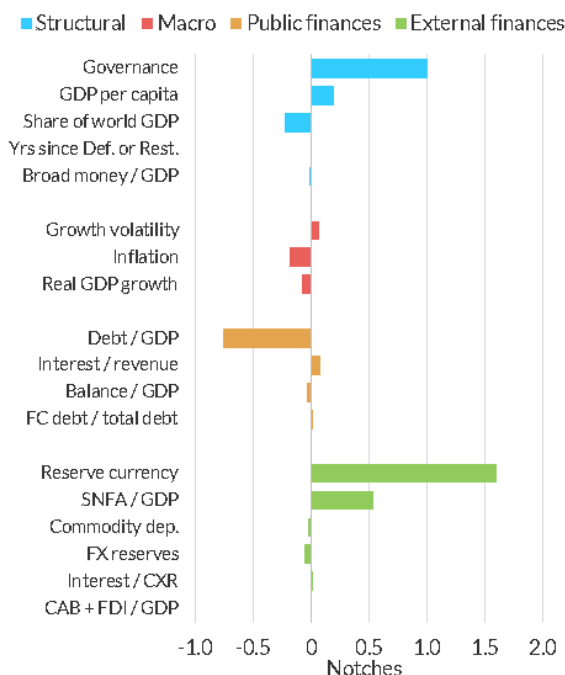
Hannah Dimpker
+49 69 768076 263
hannah.dimpker@fitchratings.com

Rating Summary

Long-Term Foreign-Currency Issuer Default Rating: AA+

Sovereign Rating Model: AA+

Contribution of variables, relative to AA Median



Qualitative Overlay: 0

Adjustments relative to SRM data and output

Structural features: 0 notch(es)/No adjustment.

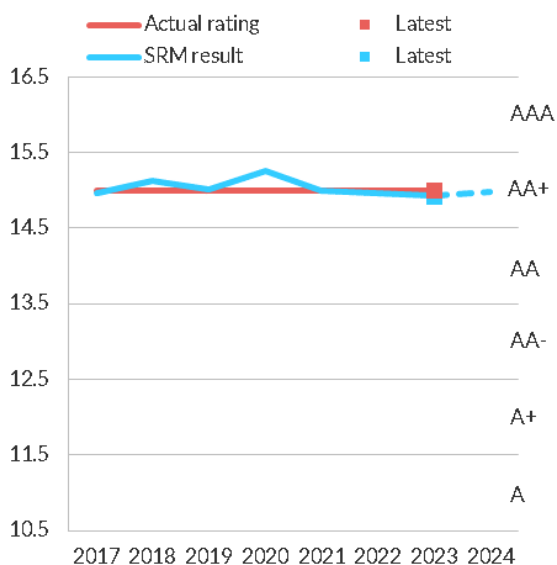
Macroeconomic outlook, policies and prospects: 0 notch(es)/No adjustment.

Public finances: 0 notch(es)/ No adjustment.

External finances: 0 notch(es)/No adjustment.

Note: See Peer Analysis table for summary data, including rating category medians; see the Full Rating Derivation table for detailed SRM data.
Source: Fitch Ratings

Sovereign Rating Model Trend



Recent Rating Derivation History

Review Date	LTFC IDR	SRM Result ^{ab}	QO S	QO M	QO PF	QO EF
Latest	AA+	AA+	0	0	0	0
17 Feb 23	AA+	AA+	0	0	0	0
9 Sep 22	AA+	AA+	0	0	0	0
8 Apr 22	AA+	AA+	0	0	0	0
22 Oct 21	AA+	AA+	0	0	0	0
23 Apr 21	AA+	AA+	0	0	0	0
30 Oct 20	AA+	AA+	0	0	0	0
26 Jun 20	AA+	AA+	0	0	0	0
24 Jan 20	AA+	AA+	0	0	0	0
26 Jul 19	AA+	AA+	0	0	0	0

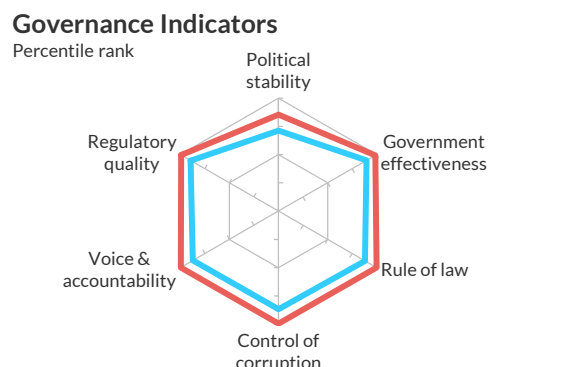
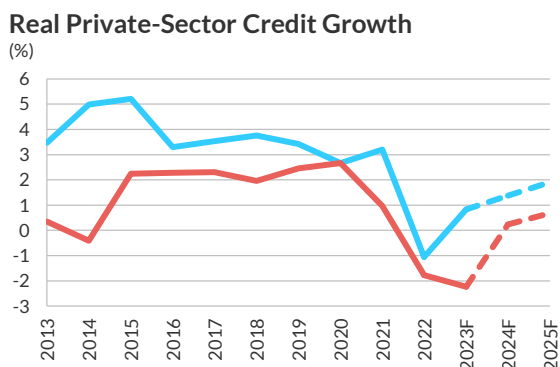
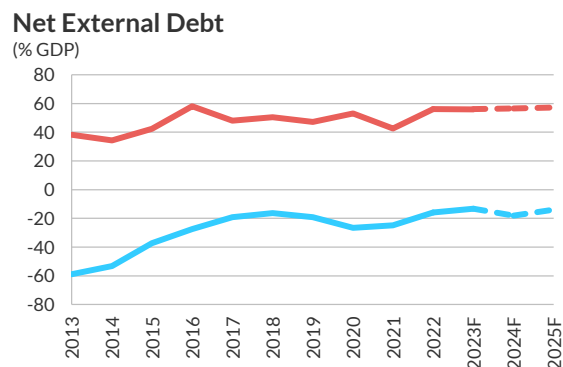
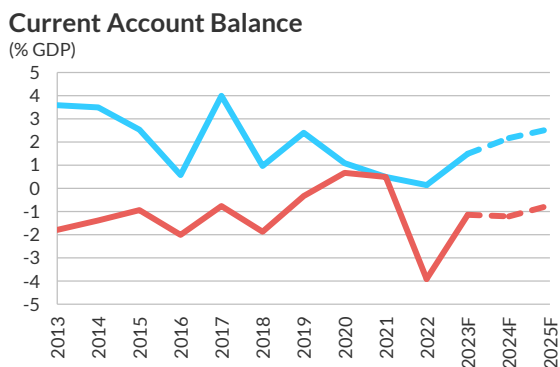
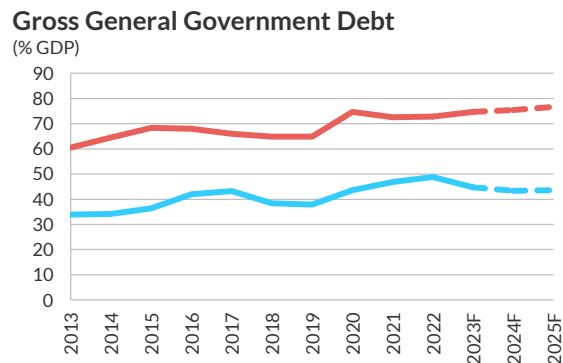
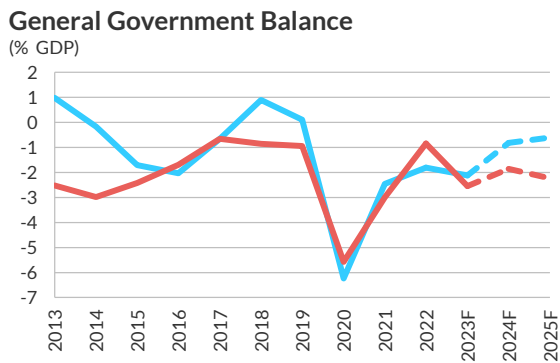
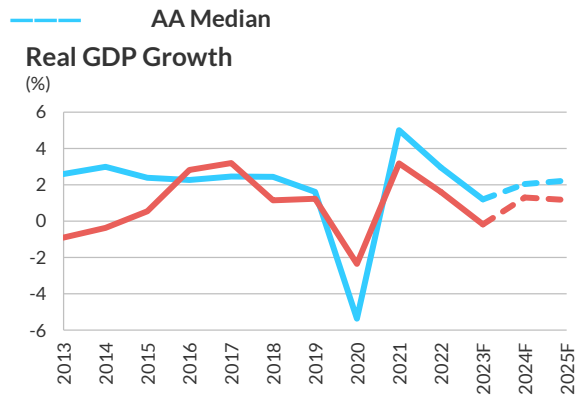
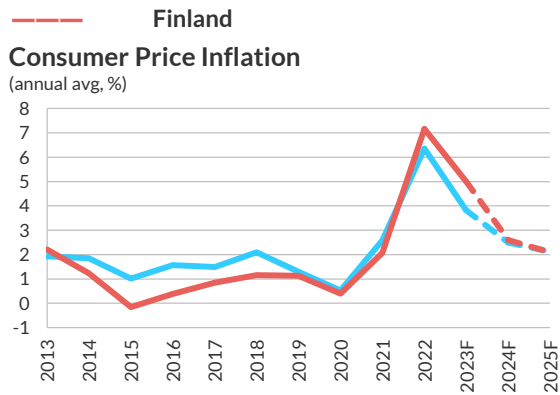
^a The latest rating uses the SRM result for 2023 from the chart. This will roll forward to 2024 in July 2024).

^b Historical SRM results in this table may differ from the chart, which is based on our latest data, due to data revisions.

Abbreviations: LT FC IDR = Long-Term Foreign-Currency Issuer Default Rating; SRM = Sovereign Rating Model; QO = Qualitative Overlay

Source: Fitch Ratings

Peer Analysis



F - Forecast. Source: Fitch Ratings, Statistical Office, Eurostat, IMF

Peer Analysis

2023F ^a	Finland	AA median	AAA median	A median
Structural features				
GDP per capita (USD) [SRM]	53,927	51,146	72,200	31,652
Share in world GDP (%) [SRM]	0.3	0.0	0.0	0.0
Composite governance indicator (percentile, latest) [SRM]^b	97.0	84.1	93.9	75.1
Human development index (percentile, latest)	94.7	89.4	94.7	82.4
Broad money (% GDP) [SRM]	89.0	98.4	93.4	88.9
Private credit (% GDP, 3-year average)	92.9	102.9	122.6	73.5
Dollarisation ratio (% bank deposits, latest)	3.5	12.8	16.8	10.3
Bank system capital ratio (% assets, latest)	21.8	16.5	15.0	15.9
Macroeconomic performance and policies				
Real GDP growth (% , 3-year average) [SRM]	0.9	2.2	2.0	3.7
Real GDP growth volatility (complex standard deviation) [SRM]	2.2	2.4	1.9	3.0
Consumer price inflation (% , 3-year average) [SRM]	4.9	2.2	1.8	2.3
Unemployment rate (%)	7.3	5.1	5.4	6.4
Public finances (general government)^c				
Balance (% GDP, 3-year average) [SRM]	-1.8	-0.9	-0.2	-2.4
Primary balance (% GDP, 3-year average)	-0.9	0.5	1.1	-0.6
Interest payments (% revenue, 3-year average) [SRM]	1.6	3.5	3.6	4.5
Gross debt (% revenue, 3-year average)	141.3	141.1	113.5	136.3
Gross debt (% GDP, 3-year average) [SRM]	74.3	40.5	43.9	42.1
Net debt (% GDP, 3-year average)	72.8	34.2	37.2	36.6
FC debt (% gross debt, 3-year average) [SRM]	0.0	0.8	0.0	9.8
External finances^c				
Current account balance (% GDP, 3-year average)	-2.1	1.2	4.9	0.9
Current account balance + net FDI (% GDP, 3-year average) [SRM]	-3.2	0.6	2.1	2.4
Commodity dependence (% CXR) [SRM]	22.7	15.2	14.4	11.5
Gross external debt (% GDP, 3-year average)	200.0	119.9	178.1	65.9
Net external debt (% GDP, 3-year average)	56.3	-2.3	13.5	-8.1
Gross sovereign external debt (% GXD, 3-year average)	25.2	17.8	12.2	19.0
Sovereign net foreign assets (% GDP, 3-year average) [SRM]	57.0	7.7	-4.6	11.9
External interest service (% CXR, 3-year average) [SRM]	3.7	4.1	7.3	2.3
Foreign-exchange reserves (months of CXP) [SRM]	1.3	3.0	1.4	4.4
Liquidity ratio	40.3	59.9	51.5	98.4

^a 3-year averages are centred on this year. Fitch does not forecast indicators labelled 'latest', meaning data may be lagging.

^b Composite of all six World Bank Worldwide Governance Indicators (see chart on the previous page).

^c See Appendix 2: Data Notes and Conventions for details of data treatment for public finances and external finances.

Source: Fitch Ratings, Statistical Office, Ministry of Finance, IMF, World Bank, United Nations

Supplementary Information

BSI / MPI = n.a. / 1. About the BSI and MPI: Fitch's bank systemic indicator (BSI) equates to a weighted average Viability Rating. The macro-prudential risk indicator (MPI) focuses on one potential source of financial stress, ranging from '3' - high potential vulnerability to financial stress over the medium term based on trends in credit expansion, equity and property prices and real exchange rates - to '1' - low likelihood. For more information, refer to Fitch Ratings' most recent Macro-Prudential Risk Monitor report.

Year cured from the most recent default or restructuring event, since 1980 = No event.

The de facto exchange rate regime, based on the latest IMF Annual Report on Exchange Arrangements and Exchange Restrictions report, is 'Free floating (EMU)'.

Rating Factors

Strengths

- Finland's governance scores outperform both the 'AA' and 'AAA' medians. Strong institutions underpin its structural strengths.
- GDP per capita is higher than the 'AA' median and around three-quarters of the 'AAA' median.
- Finland is a core eurozone issuer, with a low interest-to-revenue ratio compared to the 'AA' median.
- The sovereign has a large net financial asset position, estimated at about 60% of GDP at end-2022.

Weaknesses

- Low productivity growth and a stable working-age population imply low medium-term growth potential. Demographic trends will raise the dependency ratio.
- General government debt (forecast at 74.3% of GDP this year) is higher than the 'AA' and 'AAA' medians (45% and 39% of GDP, respectively).
- Finland is a large net external debtor (2023 forecast: 56.2% of GDP, compared to a net creditor position for the 'AA' median). Banks' liabilities account for over half of gross external debt.

Rating	Sovereign
AAA	Australia
	Denmark
	Germany
	Luxembourg
	Netherlands
	Norway
	Singapore
	Sweden
	Switzerland
AA+	Finland
	Austria
	Canada
	New Zealand
	United States of America
AA	Abu Dhabi
	Macao
	Taiwan

Source: Fitch Ratings

Rating Sensitivities

Factors that Could, Individually or Collectively, Lead to Negative Rating Action/Downgrade

- **Public Finances:** A significant and lasting increase in the government debt/GDP ratio, for example, due to insufficient fiscal consolidation.
- **Macroeconomics/Public Finances:** A severe economic and financial shock causing broader macroeconomic stress and a renewed fiscal deterioration, leading to a ratcheting up of government indebtedness.
- **Structural:** Substantial worsening of geopolitical risks, notably in the context of an escalation of tensions with Russia.

Factors that Could, Individually or Collectively, Lead to Positive Rating Action/Upgrade

- **Public Finances:** An improved fiscal performance which leads to an expectation of a reduction in government indebtedness over the medium term.
- **Macroeconomics:** An improvement in medium-term growth prospects, potentially supported by structural reforms and sustained gains in competitiveness.

Forecast Summary

	2020	2021	2022	2023F	2024F	2025F
Macroeconomic indicators and policy						
Real GDP growth (%)	-2.4	3.2	1.6	-0.2	1.3	1.2
Unemployment (%)	7.8	7.6	6.8	7.3	7.0	7.0
Consumer price inflation (annual average % change)	0.4	2.1	7.2	5.0	2.6	2.1
Policy interest rate (annual average, %)	0.0	0.0	0.7	3.9	4.2	3.3
General government balance (% GDP)	-5.6	-3.0	-0.8	-2.5	-1.9	-2.2
Gross general government debt (% GDP)	74.7	72.5	72.9	74.7	75.5	76.7
EUR per USD (annual average)	0.9	0.8	1.0	0.9	0.9	0.9
Real private credit growth (%)	2.7	1.0	-1.8	-2.2	0.2	0.7
External finance						
Merchandise trade balance (USDbn)	3.2	2.7	-1.4	3.2	3.3	4.8
Current account balance (% GDP)	0.7	0.5	-3.9	-1.1	-1.2	-0.7
Gross external debt (% GDP)	244.5	190.1	204.6	199.2	196.2	196.5
Net external debt (% GDP)	53.1	42.6	56.2	56.2	56.5	57.1
External debt service (principal + interest, USDbn)	66.4	63.0	58.5	57.4	59.3	60.8
Official international reserves including gold (USDbn)	13.5	16.7	16.0	18.1	19.3	20.4
Gross external financing requirement (% international reserves)	523.1	426.0	381.1	343.2	315.3	295.3
Real GDP growth (%)						
US	-2.8	5.9	2.1	1.2	0.5	2.4
China	2.2	8.4	3.0	5.6	4.8	4.7
Eurozone	-6.4	5.4	3.5	0.8	1.4	1.7
World	-3.0	6.1	2.7	2.4	2.1	2.9
Oil (USD/barrel)	43.3	70.6	98.6	80.0	75.0	70.0

Source: Fitch Ratings

Sources and Uses

Public Finances (General Government)

(EURbn)	2023F	2024F
Uses	29.8	29.7
Budget deficit	7.1	5.4
MLT amortisation	22.7	24.3
Domestic	9.1	18.1
External	13.6	27.2
Sources	29.8	29.7
Gross borrowing	27.8	28.7
Domestic	11.1	11.5
External	16.7	17.2
Privatisation	-	-
Other	-	-
Change in deposits	2.0	1.0

Analysts: consider if customised calcs appropriate for this table.

F - Forecast

Source: Fitch Ratings

External Finances

(USDbn)	2023	2024
Uses	55.0	57.1
Current account deficit	3.4	3.8
MLT amortisation	51.6	53.2
Sovereign	12.7	13.1
Non-sovereign	38.9	40.1
Sources	55.0	57.1
Gross MLT borrowing	68.5	65.9
Sovereign	13.9	15.1
Non-sovereign	54.6	50.7
FDI	-2.8	-0.6
Other	-8.6	-7.0
Change in FX reserves	-2.1	-1.2

Source: Fitch Ratings

Credit Developments

New Government Programme; Fiscal Consolidation Plans

Following parliamentary elections in April, a coalition government was formed in mid-June with Petteri Orpo, leader of the centre-right National Coalition Party (NCP), the largest party in parliament, as prime minister. Riika Purra, the right-wing Finns Party leader is minister of finance and deputy prime minister; the much smaller Swedish People's Party and Christian Democrats complete the coalition, which has replaced a left-leaning coalition headed by Sanna Marin's Social Democrats. The governing coalition holds 108 seats out of 200 in parliament.

Among the main objectives of the new government is closing the gap between revenues and spending to ensure a reversal of the rise in public indebtedness; this should be achieved through a reduction in public spending as a share of GDP; the tax burden will be adjusted while maintaining a stable revenue-to-GDP ratio. It also plans to improve the economy's growth potential through higher structural employment and investment. It aims to improve the general government balance so that the deficit narrows to 1% of GDP by 2027 through a net consolidation of EUR6 billion (2.2% of 2022 GDP).

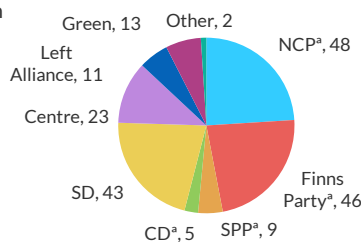
The plans incorporate a fixed-term investment programme of EUR4 billion (about 1.4% of GDP), focused on transport infrastructure projects. Financing will come from the sale of government assets, implying that it should not be deficit-increasing. Given the uncertainty surrounding the timetable of asset sales, we have not included this programme in our public finance or macroeconomic projections. The programme also highlights an increase in research and development and innovation (RDI) spending, so that RDI reaches 4% of GDP by 2030 (up from about 3% in 2021).

The general government deficit in 2022 was 0.8% of GDP, a decline from 2.8% in 2021. Public finance outturns at central government level for January to May point to a substantially higher deficit this year. We expect the deficit to increase to 2.5% this year, due to a combination of a slowing economy affecting revenues, and higher spending driven by policy measures to address the impact of high prices, higher social transfers linked to inflation and the implementation of the reform of healthcare and social services.

We expect fiscal consolidation plans to translate to lower deficits in 2024 and 2025, of 1.9% and 2.2% of GDP respectively. In particular, we assume that expenditure cuts worth EUR2.4 billion will be implemented over 2024 and 2025 (0.8% of forecast GDP). Most of the savings will come through lower housing and unemployment benefits and a freeze in indexation adjustments to some benefits. The budgetary rounds for 2024 may provide further clarity over the consolidation strategy, as the government programme focussed mainly on the discretionary elements.

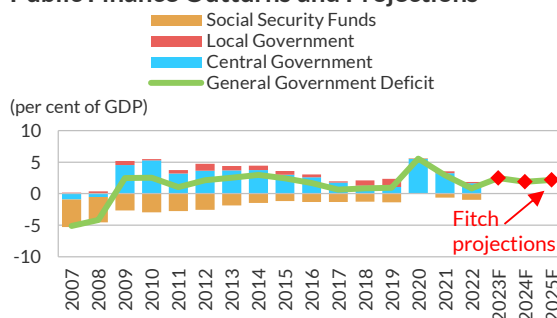
Parliamentary Election, April 2023

Seats in parliament - parties with ^a indicates member of coalition



Source: Fitch Ratings, Ministry of Justice - Information and Result Service

Public Finance Outturns and Projections



Source: Fitch Ratings, Statistics Finland

Government debt is estimated at 72.9% at end-2022, up slightly from 72.5% at end-2021. Our public finance projections are consistent with the debt ratio rising to 74.7% this year, and then increasing further over the next two years, reaching 76.7% by end-2025. Our initial analysis of the government's fiscal consolidation plans imply that these would at least slow the increase in public indebtedness, but that stabilising the debt ratio may require consolidation measures beyond the current parliamentary term.

Stagnant Economic Activity This Year; Inflation Falling

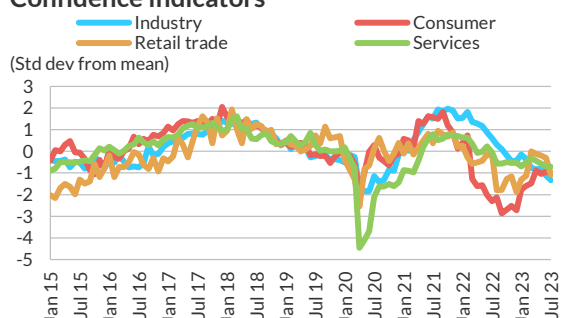
Real GDP increased by 0.4% qoq in the first quarter of this year, with strong growth in real government spending and falling imports (which are subtracted from GDP) offsetting declines in investment, unwinding of inventory levels and stagnating private consumption. With the vast majority of mortgage interest rates variable, there is a rapid passthrough from official rates to those faced by borrowers. There is a clear reduction in demand for housing and investment is weak, with investment in buildings falling for four consecutive quarters from 2Q22 (with a cumulative fall of 8.3%), and annual house price inflation negative from October 2022.

Consumer confidence has recovered over recent months, but remains at low levels, while business confidence has weakened. Overall, we expect real GDP to decline marginally this year, as business and building investment are constrained by high interest rates, and consumers continue to face the squeeze in real incomes from high inflation. That said, the preliminary estimate for real GDP for the second quarter, which recorded qoq growth of 0.7%, point to stronger than expected activity this year.

Falling inflation and higher wages will support real incomes; and improved business sentiment encouraging investment and stronger growth among Finland's main trading partners will translate to real GDP growth of 1.3% next year, and 1.2% in 2025, driven by domestic demand.

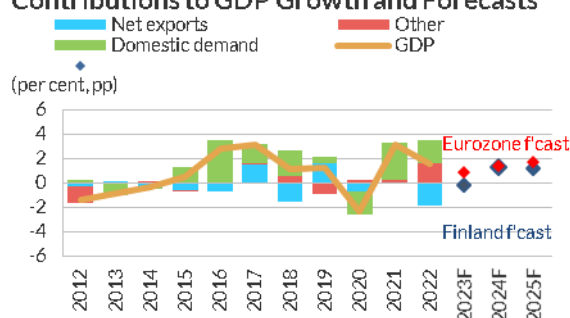
The slowdown in economic activity has meant that labour market pressures are easing. The ratio of vacancies to unemployed, which had risen to all-time highs in early 2022, has fallen back, while remaining at historically high levels. The rate displayed volatility from month to month in 2022 but averaged 6.8%, compared to 7.6% in 2021; we expect the rate to rise only slightly this year, before falling back to 7.0% in 2024, in the context of a rising participation rate.

Confidence indicators



Source: Fitch Ratings, European Commission

Contributions to GDP Growth and Forecasts



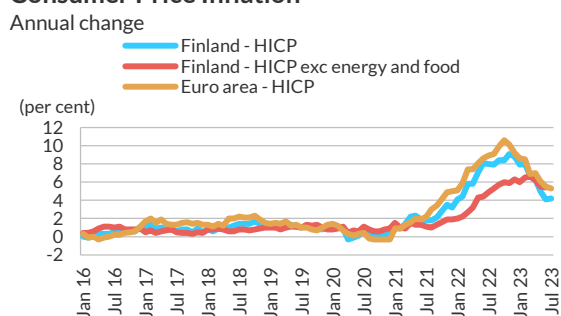
F - Forecast Source: Fitch Ratings, Statistics Finland

Consumer price inflation peaked in November 2022, with the Harmonised Index of Consumer Prices (HICP) at 9.1%, and has declined since, to 4.1% in June, and was almost unchanged in July (4.2%). Core inflation (excluding energy and unprocessed food) has displayed less volatility and, in June, was substantially higher than headline at 5.4%. We expect headline inflation to average 5.0% this year, before falling to 2.6% in 2024 and 2.1% in 2025.

Pay settlements agreed between the end of last year and the first months of this year suggest that wage growth will outpace consumer prices this year, allowing households' real incomes to recover. Unit labour costs have been increasing at a faster pace than in the Eurozone as a whole (annual growth of 5.0% over the four quarters to 1Q2023 compared to 4.0% in the Eurozone as a whole), but this is offset by terms of trade developments that have been more relatively more favourable in Finland.

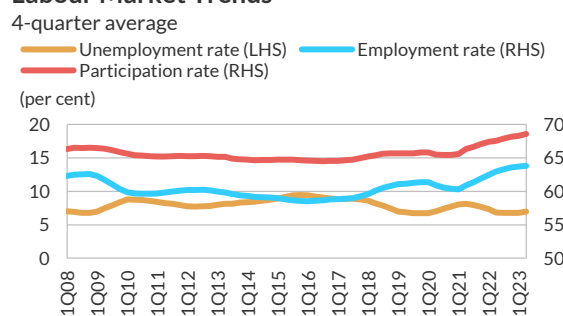
We expect the current account deficit to narrow substantially this year. Last year's outturn of a 3.9% deficit – the largest since the early 1990s – was driven by a much-worsened services deficit, with the trade in goods and the primary income balances turning negative – the latter for the first time since 2008; we expect these two elements to unwind, translating into a deficit of 1.1% of GDP this year, 1.2% in 2024 and 0.7% in 2025.

Consumer Price Inflation



Source: Fitch Ratings, Eurostat

Labour Market Trends



Source: Fitch Ratings, Statistics Finland

House Prices Falling; Households’ Indebtedness Easing

House prices have been declining in nominal terms since 2Q2022, with a decline of 8.0% between May 2022 and May 2023, but the level of prices remains above the pre-pandemic level. Other housing market indicators point to continued weakness in demand, with permits for residential buildings in the three months to May 70% lower than in the same period a year earlier, and housing starts about 29% lower over the same period.

Although still positive, the increase in loans to corporates slowed sharply over the first half of this year, as the cost of finance rose and demand weakened. The number of bankruptcies edged up further over the first six months of this year, especially in the construction sector.

Lower demand for housing implies an easing in the pace of increase of household indebtedness, as annual loan growth to households for mortgages turned negative, and loan growth for consumer credit has slowed down. Household debt to income in 1Q23 edged down to 129.9%, after peaking at 133.0% in early 2022. At the same time, household debt servicing increased, as about 80% of mortgage loans are at variable rates. Interest payments as a share of disposable income averaged 1.6% of disposable income over the four quarters to 1Q2023, the highest level for 10 years, and compared to 1.1% in 2015-2019.

While households’ debt service increased, the distribution of debt across domestic households suggests that those most affected by interest rate rises are also those with the largest buffers in terms of assets or savings, as home ownership and indebtedness are more common for higher income households.

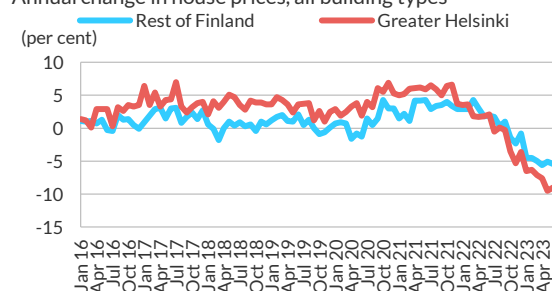
Since January 2023, the financial supervisory authority had a recommendation for the introduction of a ‘stressed’ debt-service-to-income limit of 60% of the borrower’s net income, which should be calculated on a loan with a maturity of up to 25 years and an interest rate of 6%. Since July, new macroprudential regulations have limited the length of housing company loans and introduced loan-to-value caps.

Higher debt service has not yet translated into asset quality metrics for banks in Finland. There were further falls in The non-performing loans ratio for Finnish banks fell further, to 0.93%, down from 1.25% at the end of 2021, according to end-2022 data from the European Banking Authority. Banks in Finland remained well-capitalised, with the CET1 capital ratio at end-2022 at 17.3%, compared to 17.9% a year earlier.

Stress tests conducted by the European and Finnish authorities indicate that local banks would withstand a big weakening of their operating environment. For some, however, the buffers in that stressed scenario would be limited.

House Price Inflation

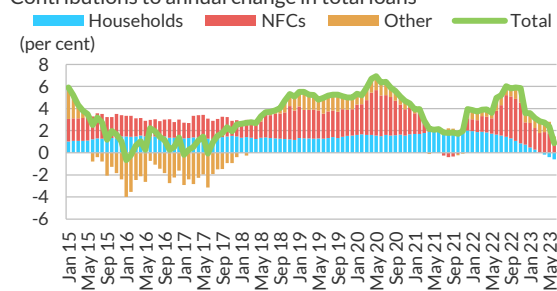
Annual change in house prices, all building types



Source: Fitch Ratings, Statistics Finland

Bank Lending to Private Sector

Contributions to annual change in total loans



Source: Fitch Ratings, Bank of Finland

Public Debt Dynamics

Gross general government debt should increase to about 79% of GDP by 2027, according to Fitch's baseline projections. Scenarios with lower growth, higher interest rates and no fiscal consolidation would result in the debt ratio rising to 82%-83% by 2027. Structural surpluses in social security funds are not used to pay down debt, and therefore appear as debt-increasing stock flow adjustments.

Debt Dynamics - Fitch's Baseline Assumptions

	2021	2022	2023	2024	2025	2026	2027
Gross general government debt (% of GDP)	72.5	72.9	74.7	75.5	76.7	77.8	78.8
Primary balance (% of GDP)	-2.5	-0.3	-1.7	-0.7	-0.8	-0.4	-0.2
Real GDP growth (%)	3.2	1.6	-0.2	1.3	1.2	1.2	1.2
Average nominal effective interest rate (%)	0.7	0.8	1.3	1.6	1.9	2.1	2.3
EUR/USD (annual average)	0.8	1.0	0.9	0.9	0.9	0.9	0.9
GDP deflator (%)	2.2	5.4	3.8	2.5	2.3	2.0	2.0
Stock-flow adjustments (% of GDP)	0.0	0.0	1.8	1.7	1.5	1.5	1.5

Source: Fitch Ratings

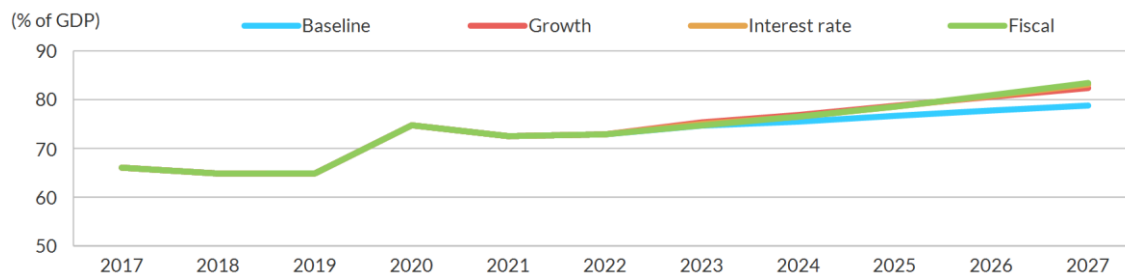
Debt Sensitivity Analysis: Fitch's Scenario Assumptions

Growth	GDP growth 0.9% lower (half standard deviation lower)
Interest rate	Marginal interest rate 250bp higher
Fiscal	Stable primary balance deficit of 1.7% of GDP from 2023

Source: Fitch Ratings

Sensitivity Analysis

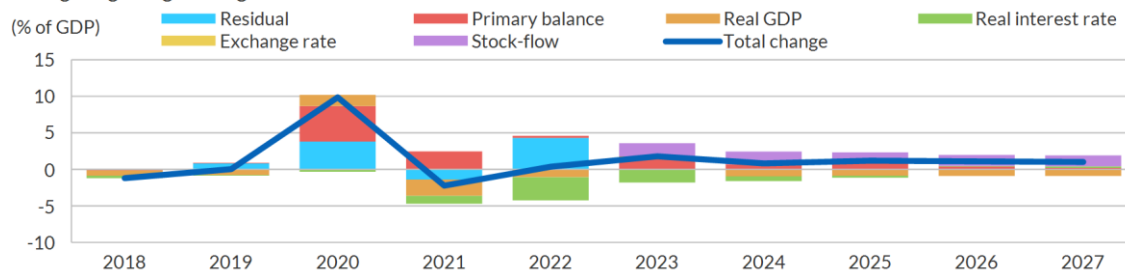
Gross general government debt



Source: Fitch Ratings, Fitch Debt Dynamics Model

Baseline Scenario: Debt Creating Flows

Change in gross general government debt



Source: Fitch Ratings, Fitch Debt Dynamics Model

About the Public Debt Dynamics

Fitch uses stylised projections for a sovereign's gross general government debt/GDP ratio to illustrate the sustainability of its debt burden and its sensitivity to economic growth, the cost of borrowing, fiscal policy and the exchange rate.

Data Tables

General Government Summary

(% GDP)	2017	2018	2019	2020	2021	2022	2023F	2024F	2025F
Revenue	53.0	52.5	52.4	51.6	52.7	52.5	52.6	52.6	52.8
Expenditure	53.6	53.4	53.3	57.2	55.7	53.4	55.2	54.5	55.0
o/w interest payments	1.0	0.9	0.9	0.7	0.5	0.6	0.9	1.1	1.4
Interest payments (% revenue)	1.9	1.8	1.6	1.4	1.0	1.0	1.6	2.2	2.6
Primary balance	0.3	0.1	-0.1	-4.9	-2.5	-0.3	-1.7	-0.7	-0.8
Overall balance	-0.7	-0.9	-0.9	-5.6	-3.0	-0.8	-2.5	-1.9	-2.2
Gross government debt	66.0	64.8	64.9	74.7	72.5	72.9	74.7	75.5	76.7
% of government revenue	124.7	123.4	123.8	144.8	137.5	138.7	141.9	143.4	145.3
Domestic debt	16.5	22.1	22.7	30.5	32.8	29.6	30.3	30.6	31.1
External debt	49.6	42.8	42.1	44.2	39.7	43.3	44.4	44.9	45.6
Local currency	66.0	64.8	64.9	74.7	72.5	72.9	74.7	75.5	76.7
Foreign currency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Central government deposits	1.5	1.4	1.1	3.7	2.4	2.2	1.4	1.0	1.3
Net government debt	64.5	63.5	63.8	71.0	70.2	70.7	73.2	74.5	75.3
Financing		0.9	0.9	5.6	3.0	0.8	2.5	1.9	2.2
Domestic borrowing		6.1	1.2	7.6	3.9	-1.1	1.8	1.5	1.5
External borrowing		-7.3	-0.3	5.7	-5.5	4.0	3.4	2.1	2.2
Other financing		2.1	0.0	-7.8	4.6	-2.1	-2.6	-1.7	-1.5
Change in deposits (- = increase)		0.1	0.3	-2.6	1.1	0.0	0.7	0.3	-0.3
Privatisation		-	-	-	-	-	-	-	-
Other		2.0	-0.3	-5.2	3.5	-2.0	-3.3	-2.1	-1.2

F – Forecast

Source: Fitch Ratings, Eurostat, ECB

Balance of Payments

(USDbn)	2017	2018	2019	2020	2021	2022	2023F	2024F	2025F
Current account	-2.0	-5.2	-0.9	1.8	1.5	-11.1	-3.4	-3.8	-2.4
% GDP	-0.8	-1.9	-0.3	0.7	0.5	-3.9	-1.1	-1.2	-0.7
Goods	1.7	0.3	2.6	3.2	2.7	-1.4	3.2	3.3	4.8
Services	-1.6	-3.8	-2.2	-2.8	-2.5	-6.4	-4.9	-5.2	-4.9
Primary income	0.2	1.0	1.3	4.7	4.7	-0.4	1.1	1.1	0.5
Secondary income	-2.3	-2.7	-2.6	-3.3	-3.4	-2.8	-2.9	-3.0	-2.9
Capital account	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Financial account	-7.2	-18.9	-10.3	-1.4	-5.0	-2.8	-5.3	-4.8	-3.3
Direct investment	-3.5	13.7	-8.6	7.4	-4.6	6.0	2.8	0.6	2.5
Portfolio investment	-3.2	-24.6	-28.4	-0.1	23.7	-5.7	-2.9	-2.0	0.4
Derivatives	-5.0	-0.7	0.5	-1.7	2.3	-6.2	-1.2	-1.3	-1.6
Other investments	4.4	-7.3	26.1	-7.0	-26.4	3.0	-4.1	-2.2	-4.6
Net errors and omissions	-5.9	-14.0	-9.0	-2.4	-3.2	8.5	0.0	0.0	0.0
Change in reserves (+ = increase)	-0.4	-0.1	0.6	1.0	3.4	0.4	2.1	1.2	1.1
International reserves, including gold	10.5	10.3	11.4	13.5	16.7	16.0	18.1	19.3	20.4
Liquidity ratio (%)	34.1	26.8	46.3	39.7	35.1	38.8	40.3	40.4	40.0
Memo									
Current external receipts (CXR)	116.2	128.3	132.5	121.3	145.9	150.9	160.7	169.4	178.1
Current external payments (CXP)	118.2	133.5	133.4	119.5	144.4	162.0	164.1	173.2	180.5
CXR growth (%)	12.7	10.4	3.3	-8.5	20.3	3.5	6.5	5.4	5.1
CXP growth (%)	9.4	13.0	-0.1	-10.4	20.9	12.2	1.3	5.5	4.2
Gross external financing requirement	43.5	39.7	55.3	59.8	57.4	63.8	55.0	57.1	57.0
% International reserves	415.2	377.7	536.1	523.1	426.0	381.1	343.2	315.3	295.3
Net external borrowing	23.5	31.8	29.0	-4.4	-7.3	72.3	20.4	17.9	22.5

F – Forecast

Source: Fitch Ratings, IMF

External Debt and Assets

(USDbn)	2017	2018	2019	2020	2021	2022	2023F	2024F	2025F
Gross external debt	404.3	557.1	606.3	663.2	564.3	578.2	598.6	616.5	639.0
% GDP	158.5	202.1	225.8	244.5	190.1	204.6	199.2	196.2	196.5
% CXR	347.9	434.1	457.5	546.9	386.9	383.1	372.5	364.0	358.8
Short-term debt (% GXD)	57.3	51.2	49.2	55.6	53.3	55.4	55.5	55.7	56.0
By debtor									
Sovereign	143.1	129.9	128.0	148.9	139.0	149.0	150.3	152.3	154.9
Monetary authorities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
General government	143.1	129.9	128.0	148.9	138.9	149.0	150.3	152.3	154.9
Banks	218.1	373.3	383.6	445.9	373.6	372.7	387.8	403.4	424.1
Other sectors	43.2	53.8	94.6	68.3	51.8	56.4	60.5	60.8	60.0
Gross external assets (non-equity)	281.9	418.3	479.6	519.1	438.0	419.5	429.8	438.9	453.2
Sovereign	89.1	78.9	146.4	153.6	121.9	146.3	150.9	154.6	158.3
International reserves, including gold	10.5	10.3	11.4	13.5	16.7	16.0	18.1	19.3	20.4
Other sovereign assets	78.6	68.6	135.0	140.1	105.2	130.3	132.8	135.3	137.9
Banks	94.0	245.4	234.7	255.1	212.1	229.4	235.7	239.9	248.9
Other sectors	98.9	94.0	98.5	110.3	104.0	43.8	45.0	47.0	49.4
Net external debt	122.4	138.8	126.6	144.1	126.3	158.7	168.8	177.6	185.8
% GDP	48.0	50.4	47.2	53.1	42.6	56.2	56.2	56.5	57.1
Sovereign	54.1	51.0	-18.4	-4.7	17.0	2.7	1.1	0.3	0.0
Banks	124.0	127.9	148.9	190.8	161.5	143.3	152.1	163.5	175.1
Other sectors	-55.7	-40.1	-3.9	-42.0	-52.2	12.7	15.5	13.8	10.6
International investment position									
Assets	281.9	418.3	479.6	519.1	438.0	419.5	429.8	438.9	453.2
Liabilities	404.3	557.1	606.3	663.2	564.3	578.2	598.6	616.5	639.0
Net	3.3	-15.0	10.9	-11.8	2.8	-7.7	-	-	-
Net sovereign	72.7	72.2	162.8	168.9	166.5	162.1	171.4	178.2	185.3
% GDP	28.5	26.2	60.6	62.3	56.1	57.4	57.0	56.7	57.0
External debt service (principal + interest)	46.8	39.8	60.0	66.4	63.0	58.5	57.4	59.3	60.8
Interest (% CXR)	4.5	4.1	4.3	4.0	2.8	3.8	3.6	3.6	3.5

F - Forecast

Source: Fitch Ratings, IMF

Full Rating Derivation

Long-Term Foreign-Currency Issuer Default Rating (SRM + QO)

AA+

Sovereign Rating Model					Applied Rating ^d			AA+
Input Indicator	Weight (%)	2022	2023	2024	Model result and predicted rating			14.93 = AA+
					Adjustment to final data	Final data	Coefficient	Output (notches)
Structural features								10.74
Governance indicators (percentile)	21.4	n.a.	97.0	n.a.	-	97.0	0.077	7.51
GDP per capita (USD)	12.4	n.a.	53,927	n.a.	Percentile	85.6	0.038	3.28
Nominal GDP (% world GDP)	13.9	n.a.	0.30	n.a.	Natural log	-1.2	0.627	-0.76
Most recent default or restructuring	4.6	n.a.	None	n.a.	Inverse 0-1 ^a	0.0	-1.822	0
Broad money (% GDP)	1.2	n.a.	89.0	n.a.	Natural log	4.5	0.158	0.71
Macroeconomic performance, policies and prospects								-0.84
Real GDP growth volatility	4.6	n.a.	2.2	n.a.	Natural log	0.8	-0.728	-0.56
Consumer price inflation	3.4	7.2	5.0	2.6	3-year average ^b	4.9	-0.067	-0.33
Real GDP growth	2.0	1.6	-0.2	1.3	3-year average	0.9	0.065	0.06
Public finances								-1.83
Gross general govt debt (% GDP)	8.9	72.5	74.3	75.1	3-year average	74.0	-0.023	-1.68
General govt interest (% revenue)	4.5	1.0	1.7	2.2	3-year average	1.6	-0.044	-0.07
General govt fiscal balance (% GDP)	2.4	-0.8	-2.5	-1.9	3-year average	-1.8	0.044	-0.08
FC debt (% of total general govt debt)	2.7	0.0	0.0	0.0	3-year average	0.0	-0.007	0
External finances								2.09
Reserve currency (RC) flexibility	7.3	n.a.	3.1	n.a.	RC score 0 - 4.5 ^c	3.1	0.509	1.60
SNFA (% of GDP)	7.4	57.4	57.0	56.7	3-year average	57.0	0.011	0.61
Commodity dependence	1.2	n.a.	22.7	n.a.	Latest	22.7	-0.004	-0.09
FX reserves (months of CXP)	1.5	n.a.	1.3	n.a.	n.a. if RC score > 0	0.0	0.029	0
External interest service (% CXR)	0.4	3.8	3.6	3.6	3-year average	3.7	-0.007	-0.02
CAB + net FDI (% GDP)	0.1	-6.1	-2.1	-1.4	3-year average	-3.2	0.001	-0.00
Intercept Term (constant across all sovereigns)								4.76

^a Inverse 0-1 scale, declining weight; ^b of truncated value (2%-50%); ^c Declining weight; ^d Sovereign rating committee can override SRM Predicted Rating if a marginal change in the Model Result leads to a notch change which is judged to be temporary or caused by a re-estimation of the SRM, a process that Fitch undertakes on at least an annual basis. Please refer to the Rating Action Commentary for further information when the Applied Rating differs from the Predicted Rating.

Note: This table contains data as at the date of the most recent rating action. There may be minor differences to data presented elsewhere in this report, which may have been updated where appropriate, for example in the event of subsequent data releases.

Source: Fitch Ratings

Qualitative Overlay (Notch Adjustment, Range +/-3)	0
Structural features	0
Macroeconomic outlook, policies and prospects	0
Public finances	0
External finances	0

Source: Fitch Ratings

About the SRM and QO

Fitch's SRM is the agency's proprietary multiple regression rating model that employs 18 variables based on three-year centred averages, including one year of forecasts, to produce a score equivalent to a Long-Term Foreign-Currency IDR. Fitch's Qualitative Overlay (QO) is a forward-looking qualitative framework designed to allow for adjustment to the SRM output to assign the final rating, reflecting factors within our criteria that are not fully quantifiable and/or not fully reflected in the SRM.

Supplementary Ratings

Local-Currency Rating

Finland's credit profile does not support a notching-up of the Long-Term Local-Currency IDR above the Foreign Currency equivalent. In Fitch's view, neither of the two major factors cited in the criteria that support upward notching of the Long-Term Local-Currency IDR is present, namely: strong public finance fundamentals relative to external finance fundamentals and previous preferential treatment of Local- relative to Foreign-Currency creditors. Finland is also a eurozone country, which constrains the Long-Term Local-Currency IDR at the same level as the Foreign-Currency version.

Country Ceiling

The Country Ceiling for Finland is 'AAA', 1 notch above the Long-Term Foreign-Currency IDR. This reflects very strong constraints and incentives, relative to the IDR, against capital or exchange controls being imposed that would prevent or largely impede the private sector from converting local into foreign currency and transferring the proceeds to non-resident creditors to service debt payments.

Fitch's Country Ceiling Model produced a starting point uplift of +1 notch above the IDR. Fitch's rating committee did not apply a qualitative adjustment to the model result.

Full Rating History

Date	Foreign-Currency Rating			Local-Currency Rating			Country Ceiling
	Long-Term	Short-Term	Outlook/Watch	Long-Term	Short-Term	Outlook/Watch	
24 Jan 20	AA+	F1+	Stable	AA+	F1+	Stable	AAA
03 Aug 18	AA+	F1+	Positive	AA+	F1+	Positive	AAA
22 Jul 16	AA+	F1+	Stable	AA+	F1+	Stable	AAA
11 Mar 16	AA+	F1+	Stable	AA+	-	Stable	AAA
20 Mar 15	AAA	F1+	Negative	AAA	-	Negative	AAA
22 Dec 05	AAA	F1+	Stable	AAA	-	Stable	AAA
17 Jun 04	AAA	F1+	Stable	AAA	-	-	AAA
21 Sep 00	AAA	F1+	Stable	AAA	-	-	-
05 Aug 98	AAA	F1+	-	AAA	-	-	-
14 Jul 98	AA+	F1+	-	AA+	-	-	-
29 Apr 97	AA+	F1+	-	AAA	-	-	-
12 Mar 96	AA	F1+	-	AAA	-	-	-
26 Oct 95	AA-	F1+	-	AAA	-	-	-
10 Aug 94	AA-	-	-	-	-	-	-

Source: Fitch Ratings

Appendix 1: Environmental, Social and Governance (ESG)

Credit Relevance Scores

General Issues	Key Sovereign Issues	SRM QO Score ^a	
Environmental (E)			
GHG Emissions and Air Quality	Emissions and air pollution as a constraint on GDP growth	2	2
Energy Management	Energy resource management, including potential for 'stranded assets', affecting exports, government revenues and GDP	3	2
Water Resources and Management	Water resource availability and management as a constraint on GDP growth	2	2
Biodiversity and Natural Resource Management	Natural resource management, including potential for 'stranded assets', affecting exports, government revenues and GDP	3	2
Natural Disasters and Climate Change	Effect of adverse climate trends, and likelihood of and resilience to shocks	3	2
Social (S)			
Human Rights and Political Freedoms	Social stability, voice and accountability, regime legitimacy	4	2
Human Development, Health and Education	Impact of human development, health and education on GDP per capita and GDP growth	3	2
Employment and Income Equality	Impact of unemployment and income equality on GDP per capita, GDP growth and political and social stability	3	2
Public Safety and Security	Impact of public safety and security on business environment and/or economic performance	3	2
Demographic Trends	Population decline or aging, rapidly rising youth population; pensions sustainability	3	2
Governance (G)			
Political Stability and Rights	Political divisions and vested interests; geo-political risks including conflict, security threats and violence; policy capacity: unpredictable policy shifts or stasis	5	2
Rule of Law, Institutional & Regulatory Quality, Control of Corruption	Government effectiveness, control of corruption, rule of law and regulatory quality	5	2
International Relations and Trade	Trade agreements, membership of international organisations, bilateral relations; sanctions or other costly international actions	3	2
Creditor Rights	Willingness to service and repay debt	4	2
Data Quality and Transparency	Availability, limitations and reliability of economic and financial data, including transparency of public debt and contingent liabilities	3	2

Source: Fitch Ratings

About ESG Credit Relevance Scores

The scores signify the credit relevance of the respective E, S and G issues to the sovereign entity's credit rating, according to the following scale:

- 5 – Highly relevant to the rating, a key rating driver with a high weight.
- 4 – Relevant to the rating, a rating driver.
- 3 – Relevant, but only has an impact on the entity rating in combination with other factors.
- 2 – Irrelevant to the entity rating but relevant to the sector (sovereigns).
- 1 – Irrelevant to the entity rating and irrelevant to the sector (sovereigns).

The score for each 'General Issue' is comprised of a component SRM and QO score, and is simply the higher of the two. SRM scores are fixed across all sovereigns as the weights in the SRM are the same for all sovereigns; QO component scores vary across all sovereigns.

All scores of '4' or '5' result in a negative impact on the rating, unless indicated otherwise. Where a positive impact is occurring, the score of '4' or '5' is appended with a '+' symbol. Scores of '3', '2' and '1' do not have a direction of impact assigned.

Please refer to [ESG Relevance Scores for Sovereigns](#) for further information on the framework, including 'Sovereign Rating Criteria References' (which identify specific potentially related SRM variables and QO factors for each 'General Issue').

Credit Relevant ESG Derivation

Finland has an ESG Relevance Score of '5[+]' for Political Stability and Rights as World Bank Governance Indicators have the highest weight in Fitch's SRM and are, therefore, highly relevant to the rating and a key driver with a high weight. As Finland has a percentile rank above 50 for the respective Governance Indicator, this has a positive impact on the credit profile.

Finland has an ESG Relevance Score of '5[+]' for Rule of Law, Institutional & Regulatory Quality and Control of Corruption as World Bank Governance Indicators have the highest weight in Fitch's SRM and are, therefore, highly relevant to the rating and are a key rating driver with a high weight. As Finland has a percentile rank above or below 50 for the respective Governance Indicators, this has a positive or negative impact on the credit profile.

Finland has an ESG Relevance Score of '4[+]' for Human Rights and Political Freedoms as the Voice and Accountability pillar of the World Bank Governance Indicators is relevant to the rating and a rating driver. As Finland has a percentile rank above 50 for the respective Governance Indicator, this has a positive impact on the credit profile.

Finland has an ESG Relevance Score of '4[+]' for Creditor Rights as willingness to service and repay debt is relevant to the rating and is a rating driver for Finland, as for all sovereigns. As Finland has a track record of 20+ years without a restructuring of public debt and captured in our SRM variable, this has a positive impact on the credit profile.

Except for the matters discussed above, the highest level of ESG credit relevance, if present, is a score of '3'. This means ESG issues are credit neutral or have only a minimal credit impact on the entity, either due to their nature or to the way in which they are being managed by the entity. For more information on Fitch's ESG Relevance Scores, visit www.fitchratings.com/esg.

Appendix 2: Data Notes and Conventions

Acronyms

Acronyms used in the above table and elsewhere in report are: Current External Receipts (CXR), Current External Payments (CXP), Current Account Balance (CAB), Foreign Direct Investment (FDI), World Bank Worldwide Governance Indicators (WBI), Sovereign Rating Model (SRM). For a full list of indicator definitions, please refer to the most recent Sovereign Data Comparator.

Medians

Medians underlying the SRM relative to rating category chart on the Rating Summary page and as reported in the Peer Analysis table on page 4 are long-term historical medians. These are based on actual data since 2000 for all sovereign-year observations when the sovereign was in the respective rating category at year-end. Current year ratings and data are excluded.

Chart medians on page 3 are based on data for sovereigns in the respective rating category at the end of each year. Latest ratings are used for the current year and forecast period.

Notes for Finland

All data are on a calendar-year basis, which aligns with the domestic fiscal year for this sovereign.

Public finances data referenced in this report relate to the consolidated general government, as per our principal approach, unless specifically noted otherwise where cited.

The external balance sheet data referenced in this report are derived from the international investment position dataset, as per our principal approach.

SOLICITATION & PARTICIPATION STATUS

For information on the solicitation status of the ratings included within this report, please refer to the solicitation status shown in the relevant entity's summary page of the Fitch Ratings website.

For information on the participation status in the rating process of an issuer listed in this report, please refer to the most recent rating action commentary for the relevant issuer, available on the Fitch Ratings website.

DISCLAIMER & DISCLOSURES

All Fitch Ratings (Fitch) credit ratings are subject to certain limitations and disclaimers. Please read these limitations and disclaimers by following this link: <https://www.fitchratings.com/understandingcreditratings>. In addition, the following <https://www.fitchratings.com/rating-definitions-document> details Fitch's rating definitions for each rating scale and rating categories, including definitions relating to default. Published ratings, criteria, and methodologies are available from this site at all times. Fitch's code of conduct, confidentiality, conflicts of interest, affiliate firewall, compliance, and other relevant policies and procedures are also available from the Code of Conduct section of this site. Directors and shareholders' relevant interests are available at <https://www.fitchratings.com/site/regulatory>. Fitch may have provided another permissible or ancillary service to the rated entity or its related third parties. Details of permissible or ancillary service(s) for which the lead analyst is based in an ESMA- or FCA-registered Fitch Ratings company (or branch of such a company) can be found on the entity summary page for this issuer on the Fitch Ratings website.

In issuing and maintaining its ratings and in making other reports (including forecast information), Fitch relies on factual information it receives from issuers and underwriters and from other sources Fitch believes to be credible. Fitch conducts a reasonable investigation of the factual information relied upon by it in accordance with its ratings methodology, and obtains reasonable verification of that information from independent sources, to the extent such sources are available for a given security or in a given jurisdiction. The manner of Fitch's factual investigation and the scope of the third-party verification it obtains will vary depending on the nature of the rated security and its issuer, the requirements and practices in the jurisdiction in which the rated security is offered and sold and/or the issuer is located, the availability and nature of relevant public information, access to the management of the issuer and its advisers, the availability of pre-existing third-party verifications such as audit reports, agreed-upon procedures letters, appraisals, actuarial reports, engineering reports, legal opinions and other reports provided by third parties, the availability of independent and competent third-party verification sources with respect to the particular security or in the particular jurisdiction of the issuer, and a variety of other factors. Users of Fitch's ratings and reports should understand that neither an enhanced factual investigation nor any third-party verification can ensure that all of the information Fitch relies on in connection with a rating or a report will be accurate and complete. Ultimately, the issuer and its advisers are responsible for the accuracy of the information they provide to Fitch and to the market in offering documents and other reports. In issuing its ratings and its reports, Fitch must rely on the work of experts, including independent auditors with respect to financial statements and attorneys with respect to legal and tax matters. Further, ratings and forecasts of financial and other information are inherently forward-looking and embody assumptions and predictions about future events that by their nature cannot be verified as facts. As a result, despite any verification of current facts, ratings and forecasts can be affected by future events or conditions that were not anticipated at the time a rating or forecast was issued or affirmed.

The information in this report is provided "as is" without any representation or warranty of any kind, and Fitch does not represent or warrant that the report or any of its contents will meet any of the requirements of a recipient of the report. A Fitch rating is an opinion as to the creditworthiness of a security. This opinion and reports made by Fitch are based on established criteria and methodologies that Fitch is continuously evaluating and updating. Therefore, ratings and reports are the collective work product of Fitch and no individual, or group of individuals, is solely responsible for a rating or a report. The rating does not address the risk of loss due to risks other than credit risk, unless such risk is specifically mentioned. Fitch is not engaged in the offer or sale of any security. All Fitch reports have shared authorship. Individuals identified in a Fitch report were involved in, but are not solely responsible for, the opinions stated therein. The individuals are named for contact purposes only. A report providing a Fitch rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. Ratings may be changed or withdrawn at any time for any reason in the sole discretion of Fitch. Fitch does not provide investment advice of any sort. Ratings are not a recommendation to buy, sell, or hold any security. Ratings do not comment on the adequacy of market price, the suitability of any security for a particular investor, or the tax-exempt nature or taxability of payments made in respect to any security. Fitch receives fees from issuers, insurers, guarantors, other obligors, and underwriters for rating securities. Such fees generally vary from US\$1,000 to US\$750,000 (or the applicable currency equivalent) per issue. In certain cases, Fitch will rate all or a number of issues issued by a particular issuer, or insured or guaranteed by a particular insurer or guarantor, for a single annual fee. Such fees are expected to vary from US\$10,000 to US\$1,500,000 (or the applicable currency equivalent). The assignment, publication, or dissemination of a rating by Fitch shall not constitute a consent by Fitch to use its name as an expert in connection with any registration statement filed under the United States securities laws, the Financial Services and Markets Act of 2000 of the United Kingdom, or the securities laws of any particular jurisdiction. Due to the relative efficiency of electronic publishing and distribution, Fitch research may be available to electronic subscribers up to three days earlier than to print subscribers.

For Australia, New Zealand, Taiwan and South Korea only: Fitch Australia Pty Ltd holds an Australian financial services license (AFS license no. 337123) which authorizes it to provide credit ratings to wholesale clients only. Credit ratings information published by Fitch is not intended to be used by persons who are retail clients within the meaning of the Corporations Act 2001.

Fitch Ratings, Inc. is registered with the U.S. Securities and Exchange Commission as a Nationally Recognized Statistical Rating Organization (the "NRSRO"). While certain of the NRSRO's credit rating subsidiaries are listed on Item 3 of Form NRSRO and as such are authorized to issue credit ratings on behalf of the NRSRO (see <https://www.fitchratings.com/site/regulatory>), other credit rating subsidiaries are not listed on Form NRSRO (the "non-NRSROs") and therefore credit ratings issued by those subsidiaries are not issued on behalf of the NRSRO. However, non-NRSRO personnel may participate in determining credit ratings issued by or on behalf of the NRSRO.

Copyright © 2023 by Fitch Ratings, Inc., Fitch Ratings Ltd. and its subsidiaries. 33 Whitehall Street, NY, NY 10004. Telephone: 1-800-753-4824, (212) 908-0500. Fax: (212) 480-4435. Reproduction or retransmission in whole or in part is prohibited except by permission. All rights reserved.