INTERNATIONAL MONETARY FUND

IMF Country Report No. 23/38

FINLAND

January 2023

2022 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR FINLAND

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2022 Article IV consultation with Finland, the following documents have been released and are included in this package:

- A **Press Release** summarizing the views of the Executive Board as expressed during its January 18, 2023, consideration of the staff report that concluded the Article IV consultation with Finland.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on January 18, 2023, following discussions that ended on November 17, 2022, with the officials of Finland on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on December 20, 2022.
- An **Informational Annex** prepared by the IMF staff.
- A **Statement by the Executive Director** for Finland.

The documents listed below have been or will be separately released.

Financial Stability System Assessment

The IMF's transparency policy allows for the deletion of market-sensitive information and premature disclosure of the authorities' policy intentions in published staff reports and other documents.

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PRESS RELEASE

PR23/09

IMF Executive Board Concludes 2022 Article IV Consultation with Finland

FOR IMMEDIATE RELEASE

Washington, DC –January 23, 2023: The Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with Finland on January 18, 2023.

The strong post-Covid recovery is faltering due to the spillovers from Russia's invasion of Ukraine. Government policies has helped bring output back to the pre-pandemic trend and employment to a record-high level. But growth turned negative in the third quarter of 2022, reflecting the fallout from the war: reduced trade with Russia and higher energy prices weighing—alongside higher interest rates—on private consumption and investment. Energy prices are passing through to core prices, sustaining inflation. Wage growth has remained moderate, but recent agreements in the public sector point to pressures.

Economic activity is expected to stall in 2023. Further contraction in private demand is expected to be only partially offset by higher public spending. Growth is projected to start recovering in 2024 and return to a subdued trend rate of around 1¼, reflecting adverse demographics and low productivity growth. Risks are skewed to the downside given uncertainties related to the war. Headline inflation is expected to remain at about 4½ percent in 2023, and to return to the 2 percent target in the medium term.

The fiscal deficit is expected to widen, providing a mild stimulus in 2023 and putting public debt on a riskier path. The deficits are projected to be higher than the pre-war path by about 1 percentage point. The widening of the 2023 deficit reflects the impact of measures to compensate for higher energy prices along with higher security-related spending. The latter persists into the medium term. Under unchanged policies, the debt ratio would increase from around 72 percent of GDP in 2022 to close to 80 percent by 2028.

The banking sector is well-capitalized and profitable, and in terms of solvency, resilient to adverse macroeconomic shocks. However, the banking sector is also large, concentrated, highly connected with other financial systems in the Nordic region, and heavily reliant on wholesale funding which exposes it to liquidity shocks. Household debt remains elevated and corporate debt has also risen.

Executive Board Assessment[2]

Executive Directors commended the authorities' decisive response to the spillovers from Russia's war against Ukraine, including finding alternative energy sources. They also

[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

[2] At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: http://www.IMF.org/external/np/sec/misc/qualifiers.htm.

welcomed the adoption of structural reforms to boost employment and productivity. However, they noted that the economic outlook has deteriorated, and inflation remains elevated. In that context, Directors encouraged the authorities to focus their policy efforts on enhancing fiscal sustainability, while continuing to implement reforms necessary to address remaining structural impediments, reinforce the resiliency of the financial system, and advance Finland's ambitious green agenda.

Directors agreed that fiscal policy, in the near term, should be supportive of monetary policy. They generally concurred that a slightly tighter fiscal stance relative to 2022 would be desirable in 2023 and agreed that security spending and support to the vulnerable should be prioritized. While acknowledging implementation difficulties in a short timeframe, Directors encouraged the authorities to better target the support measures in response to elevated energy prices. Noting widening fiscal deficits over the medium term, Directors agreed that a gradual but sustained fiscal consolidation is needed to put the public debt ratio on a declining path and create room for aging-related spending. The authorities' plan to strengthen the fiscal framework and carry out a comprehensive spending and tax revenue reviews to identify possible consolidation measures is welcome.

Directors agreed that boosting employment and productivity remains key for growth and sustainability. They called for further measures to reduce work disincentives, improve access to tertiary education and attract foreign labor, and for more flexibility within the coordinated wage bargaining framework to support employment. They welcomed government's proposal to increase R&D spending to 4 percent of GDP in the medium term and called for the spending to be targeted.

Directors agreed that the financial system remains resilient post pandemic. They welcomed the progress in recent years in strengthening the oversight of the Finnish financial system and broadly supported the key policy recommendations of the 2022 Financial Sector Assessment Program (FSAP). Directors concurred that additional measures, including strengthening the operational independence of the financial supervisory authority (FIN-FSA), reinstating systemic risk buffers, enhancing the banking sector's resilience to liquidity shocks and cross-border exposures in the Nordic region, and improving the macroprudential toolkit to address vulnerabilities from high household indebtedness, are needed. Directors also encouraged the authorities to legislate a positive neutral rate for the countercyclical capital buffer to help build macroprudential policy space in the medium term. Further strengthening of the AML/CFT supervision remains important.

Directors commended Finland's ambitious climate goals but emphasized that further measures, including reforms to carbon pricing, would be needed to achieve the 2035 carbon neutrality target.

It is expected that the next Article IV consultation with Finland will be held on the standard 12-month cycle.

Finland: Selected Economic and Social Indicators, 2020–28

	2020	2021	2022	2023	2024	2025	2026	2027	2028
						Proj.			
			(Percentage change, unless otherwise indicated)						
Output and demand (volumes)									
GDP	-2.2	3.0	2.0	0.0	1.3	1.3	1.3	1.3	1.2
Domestic demand	-2.0	2.8	3.5	0.1	0.8	1.6	1.3	1.3	1.3
Private consumption	-4.0	3.7	2.5	-0.1	0.6	0.7	0.9	0.8	0.8
Public consumption	0.3	2.9	1.9	0.9	0.1	0.9	0.9	1.0	1.0
Gross fixed capital formation	-0.9	1.5	4.3	-0.3	1.0	3.5	2.0	2.1	2.1
Net exports (contribution to growth in percent of GDP)	-0.7	-0.2	-1.5	-0.1	0.5	-0.3	0.0	0.0	0.0
Prices, costs, and income									
Consumer price inflation (harmonized, average)	0.4	2.1	7.2	4.4	2.5	2.2	1.8	1.8	1.8
Labor market									
Labor force	-0.4	2.2	1.9	0.5	0.1	0.0	0.2	0.0	0.0
Employment	-1.5	2.4	2.8	0.0	0.4	0.2	0.2	0.2	0.0
Unemployment rate (in percent)	7.8	7.6	6.8	7.3	7.0	6.9	6.9	6.8	6.8
Potential output									
Output gap (in percent of potential output)[1]	-2.7	-0.9	0.1	-0.8	-0.5	-0.3	-0.1	0.0	0.0
Growth in potential output	0.9	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.2
					(Percent of GDP)				
General government finances[2]									
Overall balance	-5.5	-2.7	-1.5	-2.6	-2.2	-2.5	-2.5	-2.7	-2.8
Primary balance[3]	-5.4	-2.8	-1.6	-2.6	-2.2	-2.4	-2.4	-2.6	-2.8
Structural balance (in percent of potential GDP)[4]	-3.4	-2.2	-1.8	-2.0	-1.9	-2.3	-2.4	-2.6	-2.7
Structural primary balance (in percent of potential GDP)[5]	-3.3	-2.2	-1.9	-2.0	-1.9	-2.2	-2.2	-2.5	-2.7
Gross debt	74.8	72.3	72.1	73.6	74.7	75.9	77.1	78.7	80.3
Net debt[6]	-64.1	-72.1	-66.5	-61.3	-56.8	-52.3	-48.2	-44.1	-40.0
Balance of payments									
Current account balance	0.7	0.6	-2.9	-2.9	-1.7	-0.9	-0.6	-0.5	-0.3
Goods and services balance	0.2	0.2	-3.0	-3.1	-2.1	-1.6	-1.3	-1.2	-1.1
Net international investment position	-4.5	-1.4	-4.1	-6.8	-8.2	-8.7	-8.9	-9.1	-9.0
Gross external debt	222.7	208.1	211.9	215.1	216.3	216.1	216.5	217.4	217.4

Sources: Bank of Finland, BIS, International Financial Statistics, IMF Institute, Ministry of Finance, Statistics Finland, and IMF staff calculations.

[1] A negative value indicates a level of actual GDP that is below potential output.

[2] Fiscal projections include measures as specified in the General Government Fiscal Plan.

[3] Adjusted for interest expenditures and receipts.

[4] Not adjusted for COVID-related one-off measures.

[5] Adjusted for interest expenditures and receipts. Not adjusted for COVID-related one-off measures.

[6] Defined as the negative of net financial worth (i.e., debt minus assets).

INTERNATIONAL MONETARY FUND

FINLAND

STAFF REPORT FOR THE 2022 ARTICLE IV CONSULTATION

December 20, 2022

KEY ISSUES

Context: The economy recovered swiftly from the pandemic, but Russia's war in Ukraine has worsened the outlook given Finland's exposures to the fallout through trade and increase in energy prices, while high inflation and rising interest rates are weighing on household purchasing power. Long-standing structural challenges—from adverse demographics and low productivity growth—remain. Tighter financial conditions will test the resilience of Finland's large financial system: banks are well-capitalized, but vulnerable to liquidity shocks and exposed to credit risks from other Nordics and high household debt.

Fiscal policy: A mild fiscal policy tightening—mainly through better targeting of energy-cost relief—is appropriate to help contain inflation pressures in 2023. Over the medium term, a gradual, but sustained adjustment—based on measures identified in a comprehensive spending and tax review—should be undertaken to put debt on a declining path. Staff welcome the Ministry of Finance's proposal to anchor Finland's fiscal framework in debt sustainability, expand the coverage of expenditure ceilings, and limit room for deviations.

Structural policies: Further measures to boost employment and productivity remain key to growth and sustainability. Advancing labor market reforms and making the collective wage bargaining more flexible while strengthening the coordination mechanism should play a supportive role and facilitate adjustment to shocks.

Climate policies: Progress in phasing out fossil fuels has improved energy security. Further measures are required to achieve the goal of carbon neutrality by 2035, including higher and better harmonized carbon prices (when energy prices subside from the current high levels) and increased taxation of carbon-intensive peat production.

Financial policies: Liquidity buffers should be strengthened and, when circumstances allow, systemic buffers re-instated and cyclical tools enhanced by introducing a positive neutral rate for the countercyclical capital buffer. A debt-to-income cap should be legislated to address vulnerabilities in household finances.

Approved By
Oya Celasun (EUR) and Martin Sommer (SPR)

Mission took place in Helsinki, Finland on November 7–17, 2022. The team comprised Wojciech Maliszewski (head), Salvatore Dell'Erba, Raju Huidrom, and Seyed Reza Yousefi (all EUR). Fuda Jiang, Hannah Jung, and Rohan Srinivas (all EUR) assisted from headquarters. Mr. Pösö (OED) and Mr. Brandão (MCM; FSAP head) joined the discussions. The mission met with Ms. Saarikko, Minister of Finance; Mr. Rehn, Governor of the Bank of Finland; Mr. Majanen, Permanent Secretary of the Ministry of Finance; Mr. Kurenmaa, head of the FIN-FSA; other senior officials; the ECB; social partners; think tanks; representatives of the financial sector; and academic communities.

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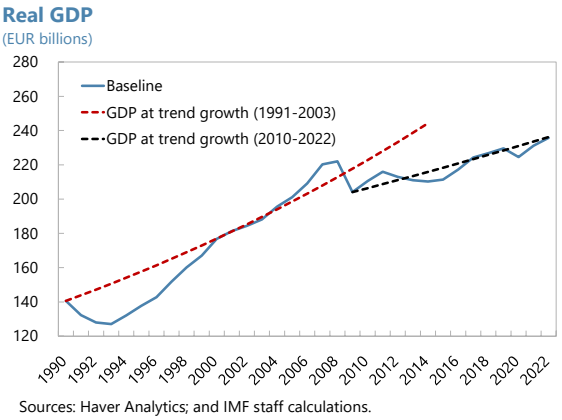
ANNEXES

CONTEXT

1. Finland's economy swiftly recovered from the pandemic—capitalizing on policy support and supply-side reforms—but grapples with the war shock and structural challenges. The government has successfully steered Finland through the pandemic and output has returned to the pre-pandemic trend, supported by structural reforms to boost employment. However, trend growth has remained slow since industry-specific shocks shrunk Finland's high-value-added manufacturing and the population has started rapidly aging. The structural challenges are now amplified by the fallout from Russia's invasion of Ukraine.

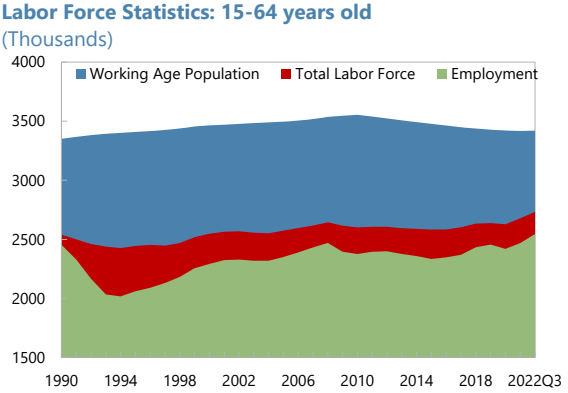
Background

GDP recovered from the pandemic, but has remained on a slow trend since the late 2000s.



Sources: Haver Analytics; and IMF staff calculations.

Employment has increased, but the working-age population has been shrinking.

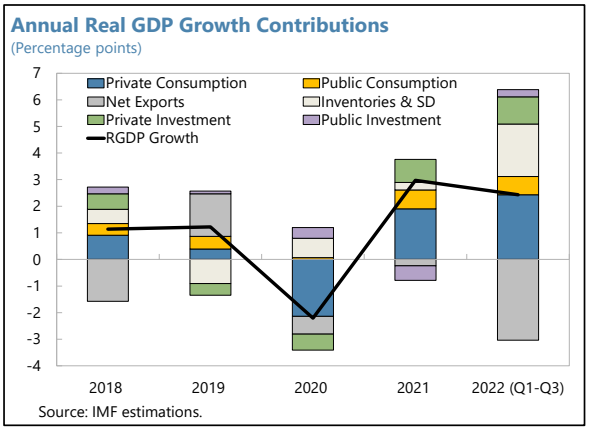


Sources: Haver Analytics; and Statistics Finland.

2. The next parliamentary elections will be held in April 2023. Key economic policy decisions will be taken after the elections: the focus will remain on responding to the war-related crisis and tackling longer-term challenges.

RECENT ECONOMIC DEVELOPMENTS

3. The post-Covid recovery is faltering after Russia's invasion of Ukraine. GDP grew by 3 percent last year and by 3½ percent on annual basis in the first half of 2022, supported by private consumption and investment. But preliminary figures show that output contracted by about ¼ percent in the third quarter of 2022 and annual growth in the first three quarters slowed to 2.4 percent affected by the immediate impact of the war (Box 1), including reduced trade flows with Russia (partly re-oriented to other markets), the ceasing of energy imports since May (even if cushioned by a low incidence of gas in the energy mix and access to alternative sources), and higher energy prices weighing—alongside higher interest rates—on private consumption.



Source: IMF estimations.

Box 1. Spillovers from Russia's Invasion of Ukraine

Russia's invasion of Ukraine and the related sanctions are affecting Finland mostly through trade.[1]

Trade with Russia—one of the top five export destinations pre-war—has fallen sharply. Exports—mostly of machinery and equipment, basic metals, plastics and paper, equivalent pre-war to about 1½ percent of GDP in value-added terms—as of September declined by 76 percent on an annual basis. Imports—mainly mineral products, about a half of oil and gas imports—declined by 60 percent. Trade links with Belarus and Ukraine are small.

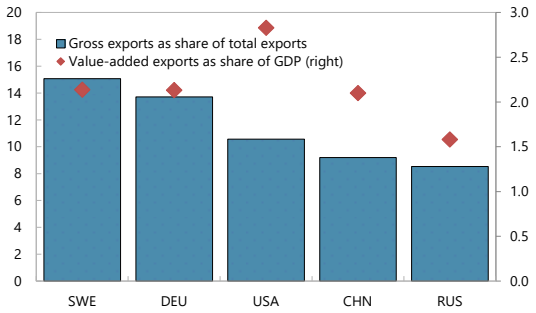
Gas and electricity imports from Russia stopped in May, but the loss has been offset by access to alternative sources. Gas—used mostly by industry—accounts for only 5 percent of energy consumption and has been replaced by flows from the Balticconector (via Estonia) and in the future from a new LNG floating terminal to be placed in Finland. Electricity from Russia has been substituted by import from the Nordpool (Sweden and Norway) and Finland should be self-sufficient in supply once the new Olkiluoto 3 nuclear power plant becomes operational in 2023.

Tourists' arrivals started recovering from pandemic lows, but post-war restrictions have brought them to a halt. The absolute number of arrivals is small, but it has a significant regional impact in Eastern Finland.

Refugees' arrivals had so far limited employment impact. Around 42 thousand refugees have applied for temporary protection, the majority of which of are working age population. About 20 percent have registered as job seekers.

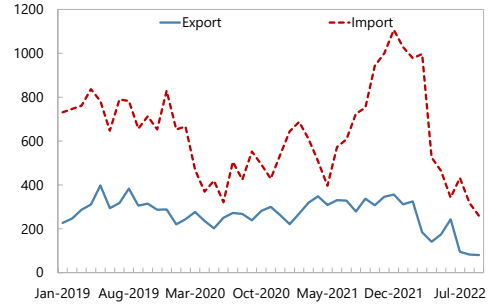
Financial linkages are small. Direct exposure to Russia accounts for less than 0.1 percent of the banking sector's assets, and only 0.3 percent of the total assets of insurance companies.

Finland's Top Export Destinations
(Percent, 2018)



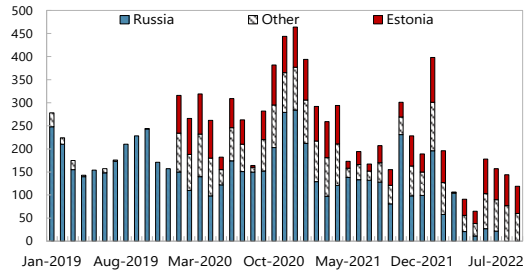
Sources: OECD TiVA; and IMF staff calculations.

Trade with Russia
(EUR Millions)



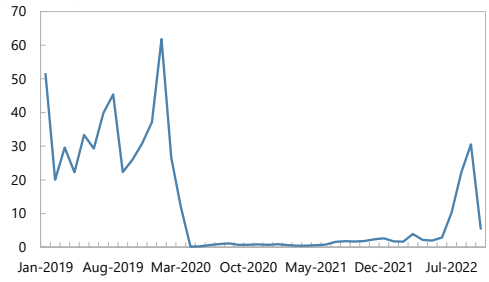
Sources: Haver Analytics; and Eurostat.

Imports of Natural Gas
(Millions of m³)



Sources: Haver Analytics; and Eurostat.

Number of Tourists Arrivals from Russia
(Thousands)



Sources: Haver Analytics; and Statistics Finland.

[1] In line with the EU-wide agreement, Finland joined sanctions imposed on Russia in response to its invasion of Ukraine. The list of EU sanctions is available here. Exchange restrictions including measures related to capital flow management have been imposed for national and international security reasons and by means of Regulations of the Council of the European Union.

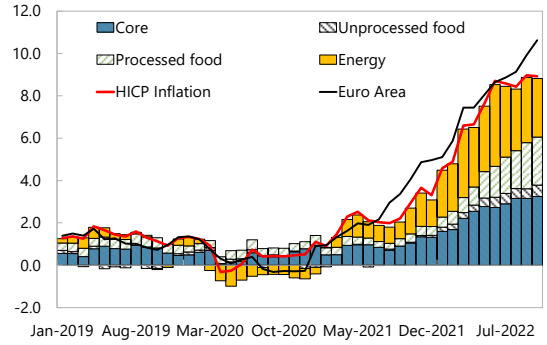
4. High energy prices are passing through to core prices, sustaining high inflation. Headline inflation stabilized in November at around 9 percent—below the euro area inflation rate—reflecting a moderation in energy prices (with fuel prices falling and electricity prices stabilizing). But core inflation at 4¾ percent suggests broadening price pressures.

Prices

Headline inflation has been driven by energy prices, but has slowed down compared to the euro area.

Contribution to Headline Inflation

(Percent, annual change)

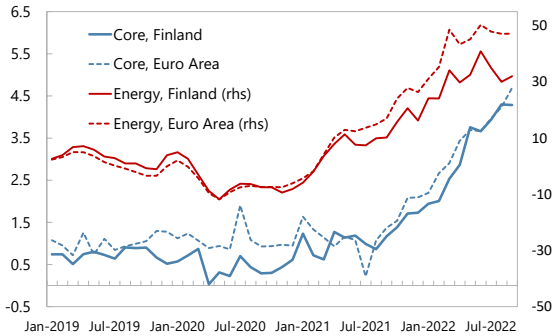


Sources: Haver Analytics; and IMF staff calculations.

The slowdown has been driven by the recent moderation in energy price; core inflation has stabilized.

Core and Energy Inflation

(Percent, annual change)



Sources: Haver Analytics; and Eurostat.

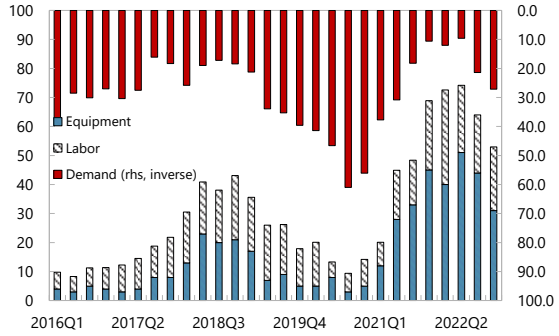
5. The tightness in the economy—now receding—has contributed to inflation pressures. Following the exit from the pandemic, the share of businesses reporting labor (and to a lesser extent, equipment) shortages has reached historical peaks. The employment rate has reached a record-high level (even if working hours has remained below the pre-pandemic level). However, vacancies have now come down, unemployment has inched up, and more businesses start reporting demand shortages. Output gap is estimated to be slightly positive on average in 2022, but is now shrinking.

Production and Labor

Supply constraints are easing and demand shortages emerging in manufacturing…

Factors Limiting Production: Manufacturing

(Percent, SA)

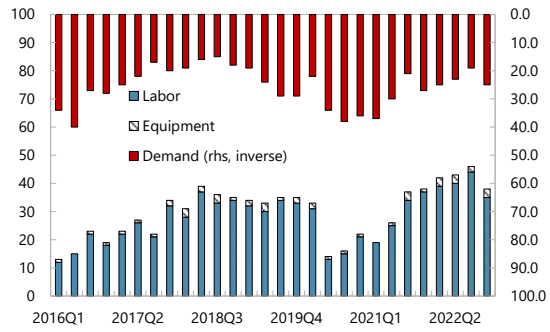


Sources: Haver Analytics; and European Commission.

…and—to a lesser extent—in the services sector.

Factors Limiting Production: Services

(Percent, SA)

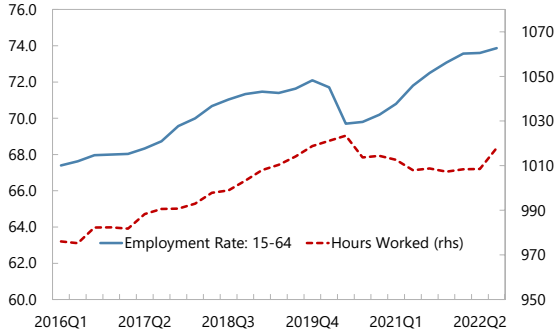


Sources: Haver Analytics; and European Commission.

Employment rate is at a record high even as hours worked have stayed below the pre-pandemic level.

Hours Worked and Employment

(Percent, 100,000 hours, Trends)

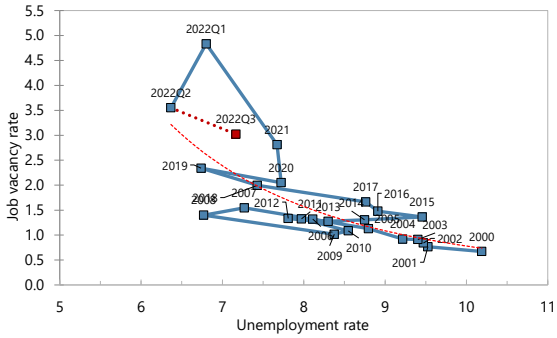


Sources: Haver Analytics; and Statistics Finland.

High vacancies have come down, but unemployment rate has inched up recently.

Beveridge Curve

(Percent)



Sources: Haver Analytics; and IMF staff calculations.

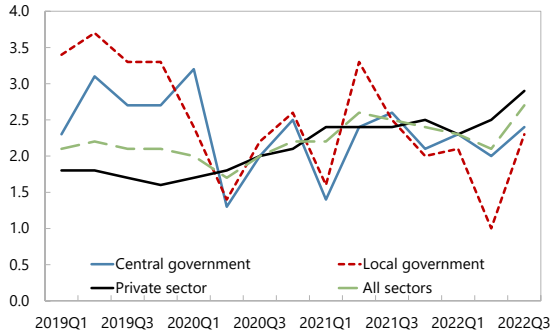
6. Inflation has reduced real incomes, weighing on consumption. Collective agreements in the private sector concluded earlier in 2022 called for moderate annual wage increases of around 2 percent. Breaking with the tradition, later agreements in the municipal and health sectors have not followed (thus, weakening the wage coordination mechanism), but added a premium over private sector wages for the next 5 years, with annual increases of around 3 percent. Actual wage growth in the total economy in the first three quarters of 2022 has been modest of around 3 percent, below inflation. Thus, the real income began contracting and households started tapping savings accumulated during the pandemic (likely more so for low-income households).

7. The fiscal deficit in 2022 will likely be lower than projected (by ½ percentage point), even with additional war-related spending. The take-up of Covid-related support has been less than envisaged and the recovery buoyed revenues. This more than offsets new war-related spending of around 1 percent of GDP: about ¼ percent of GDP to compensate for high energy prices (including through an additional round of indexation of social benefits to inflation for households, and subsidies to transport and agriculture), and the rest on defense, humanitarian aid (mainly refugees) and energy security.

Earning, Income and Savings

Earnings growth has remained moderate....

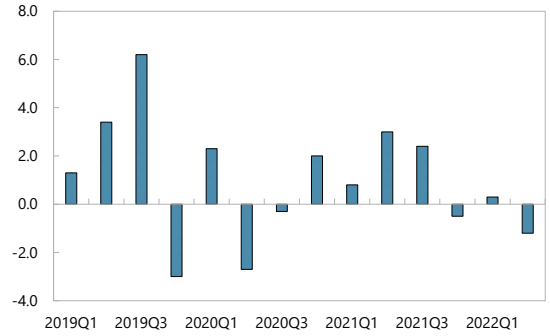
Wages and Salary Earnings
(Percent, annual change)



Source: Statistics Finland.

...and real disposable income started declining.

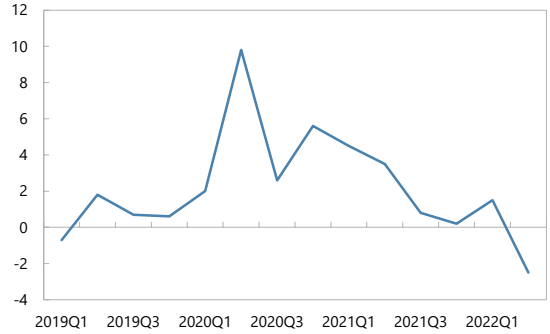
Real Disposable Income
(Percent, annual change)



Source: Statistics Finland.

Savings accumulated during the pandemic are cushioning the impact on consumption...

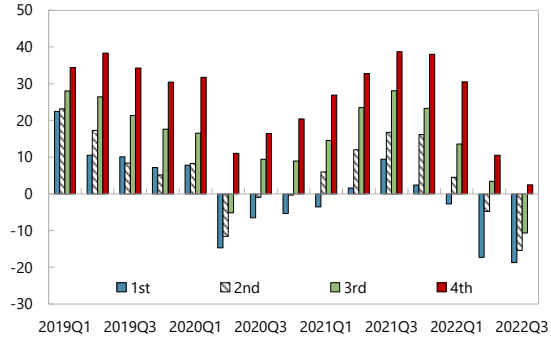
Households Saving Rate
(Percent, SWDA, net)



Sources: Haver Analytics; and Statistics Finland.

...with buffers among low-income households likely to diminish faster.

Conditions for Savings
(Percent, favorable conditions at present, by income quartile)



Sources: Haver Analytics; IMF staff calculations.

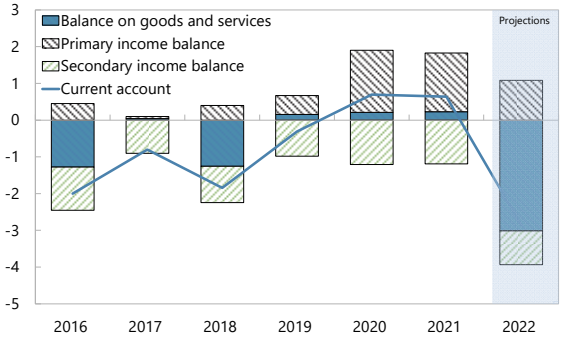
8. The current account has deteriorated. The current account strengthened to around 1 percent of GDP in 2021, supported by the suspension of banks' dividend payments, boosting net primary income. There has been a rapid deterioration in the first half of 2022 after the suspension was lifted, imports of services have recovered, and terms-of-trade have worsened on the back of higher energy costs. Based on a preliminary assessment, the external position is weaker than implied by the fundamentals (Annex I).

9. The financial system posted strong results in 2021, but structural vulnerabilities remain. The banking sector is well-capitalized and profitable, but also large, concentrated, and highly connected with other financial systems in the Nordic region (Figure 1). Banks are liquid by standard metrics, but rely heavily on wholesale funding, exposing them to liquidity shocks.

External Sector

The current account will deteriorate in line with higher costs of imports in 2022.

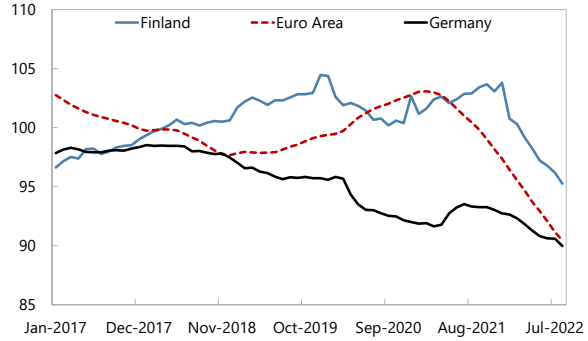
Current Account and Its Components
(Percent of GDP)



Source: Statistics Finland.

Terms of trade have been declining in line with the rest of the Euro Area.

Terms of Trade
(Index, 2015=100, SWDA, 12-month average)



Sources: Haver Analytics; and IMF staff calculations.

10. Moreover, the shocks amplified borrower-side vulnerabilities:

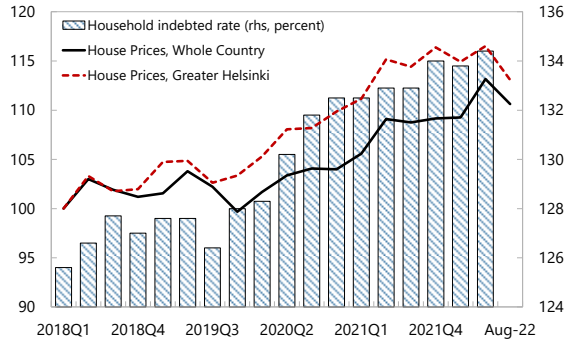
- *Household indebtedness (mostly mortgage debt) continues to increase, albeit at a slower pace than in past years.* Household debt reached 134 percent of net disposable income in the second quarter of 2022 and loan-to-value ratios are significantly higher for new loans, particularly for lower-income buyers. Most loans are of variable rate and less than a third are protected by interest rate caps. Banks stringently stress test new mortgage loans, but risks remain, and rising interest rates will in any case have a large impact on aggregate demand. Housing market has also been softening with the tightening of financial conditions (Figure 1).

- *Corporate debt has also risen.* Corporate profitability has been strong and there have been no signs of stress, but some sectors may be vulnerable to high energy prices (e.g., export-oriented metals and paper production (Annex II)) and energy companies—while profitable—experienced a "cash-crunch" in September (as costs were rising faster than electricity prices built into forward contracts). The government has offered a temporary liquidity support of up to 17.3 billion euros. However, take up has been very small due to the steep terms, and companies—in energy, but also in other sectors affected by high prices—have resorted to borrowing from banks instead.

Private Balance Sheet Vulnerabilities

Household credit and house prices have stabilized at an elevated level.

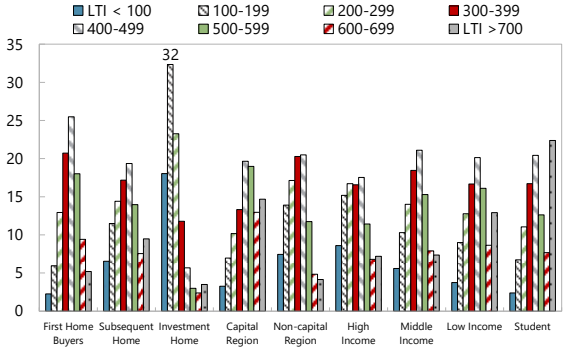
Household Credit and House Prices
(Index, 2018Q1=100)



Sources: BIS; Haver Analytics; Bank of Finland; and IMF staff calculations.

Loan-to-income ratios for recent mortgage issuance are high, particularly for lower-income buyers.

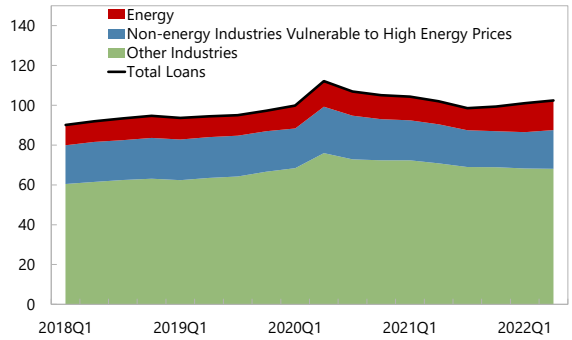
Share of New Mortgage Loans by LTI ratio
(Percent, 2021Q3)



Source: Bank of Finland; FIN-FSA and IMF staff calculations.

Corporate debt has increased for energy companies and in sectors vulnerable to high energy prices…

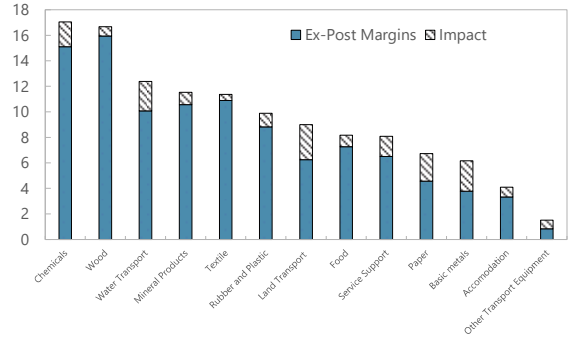
Loans to Non-Financial Corporations
(Percent of GDP, SA)



Sources: Bank of Finland; and IMF staff calculations.

…identified as those with an above-median projected reduction in profits after the energy price shock.

Impact of Energy Shock on Operating Margins
(Percent)



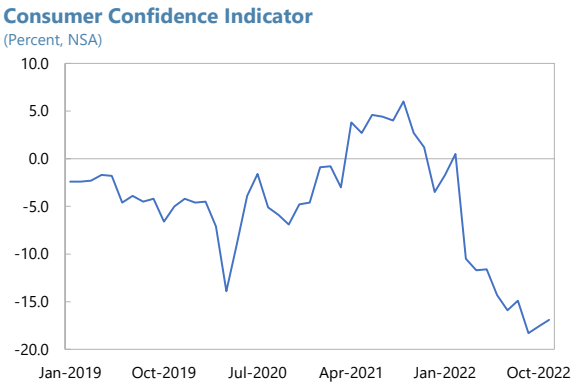
Sources: Statistics Finland and IMF staff calculations

OUTLOOK AND RISKS

11. Economic activity is projected to stall in 2023 and start recovering in 2024. The full impact of higher energy prices and interest rates on consumption is expected to be felt in the first half of 2023 as mortgage rates are more fully reset, fixed-price energy contracts increasingly expire, and savings buffers are slowly exhausted. The global slowdown and the tightening of financial conditions will further reduce net exports and investment. These factors weigh on consumer and business confidence—survey indicators have deteriorated sharply. With the contraction in private demand expected to be offset by public spending, GDP growth is projected to be around zero in 2023. Unemployment will increase, and output gap will turn negative. Headline and core inflation will remain high in 2023 at around 4½ and 4 percent respectively as the impact of the energy price shock will dissipate slowly given the initial output gap and monetary policy transmission lags. Over the medium term, GDP growth will stabilize at around 1¼ percent and inflation at around 2 percent.

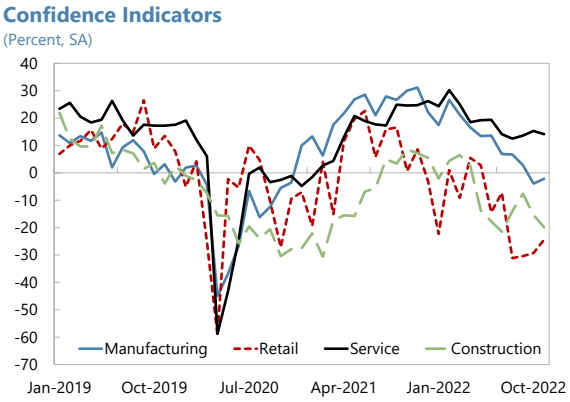
Confidence Indicators

Consumer confidence is at the lowest level in over a decade.



Sources: Haver Analytics; and European Commission.

Business confidence has deteriorated across all sectors.



Sources: Haver Analytics; and European Commission.

12. Risks to growth are tilted to the downside, and inflation to the upside (Annex III):

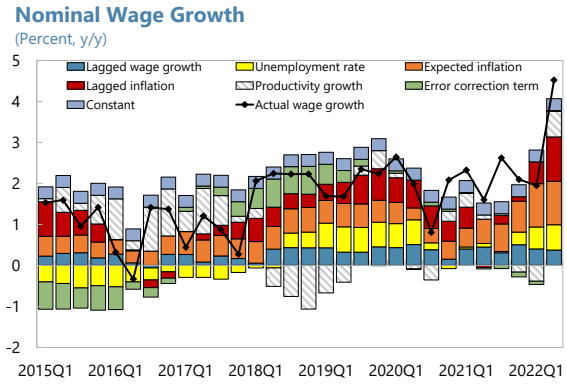
- *Even in the absence of new shocks, there is a risk of a wage-price spiral.* Inflation expectations appear to be stabilizing, but the historically backward-looking wage formation process in Finland implies that stronger wage pressures may emerge, driving inflation higher than in the baseline and reducing competitiveness (Annex IV).

Wage-Price Dynamics

Inflation expectations are receding from the recent peak.

Sources: Haver Analytics; and Statistics Finland.

In addition to expectations, lagged Inflation contributes to nominal wage dynamics.

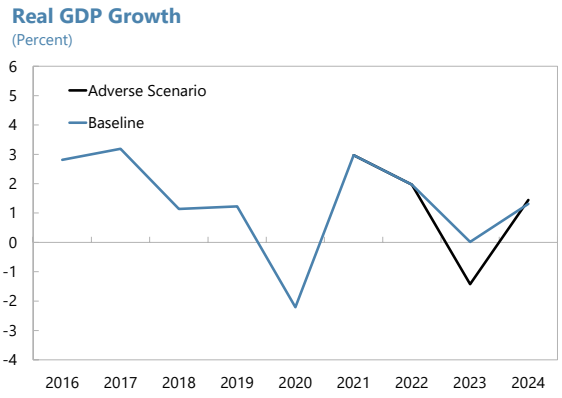


Sources: Haver Analytics; and IMF staff estimates.

- *Shocks from Russia's war could also intensify.* Supply chain disruptions and higher energy prices would weigh on external demand and increase the risk of a wage-price spiral. Monetary policy and financial conditions would tighten. A simulation of an adverse scenario (Annex V) for Finland, with a contraction in external demand of 2½ percent and higher oil prices, shows that GDP would decline by 1½ percent and inflation would become more persistent.

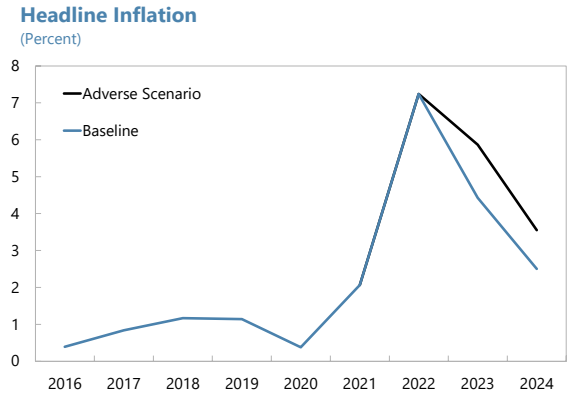
Baseline and Adverse Scenarios[1]

GDP growth declines in the adverse scenario…



Source: IMF staff calculations.

…while headline inflation will remain high by historical standard.



Source: IMF staff calculations.

[1] The adverse scenario assumes partners' GDP growth is -2.5 percent and oil prices are 50 percent higher in 2023.

Authorities' Views

13. The authorities broadly agreed with the assessment of outlook and risks. They noted that the war and its ramifications are already weighing negatively on economic activity and may bring a mild recession in 2023. A prolonged war and its impact on the energy markets are the main risks. The outlook for inflation will be affected by the evolution of expectations and the outcome of the wage negotiations. While wage growth has been moderate, lack of coordination among partners in the negotiations create upside risks to inflation and potentially weaken external competitiveness. The authorities agreed that, notwithstanding progress in the implementation of reforms to boost employment, medium-term growth prospects remain subdued due to demographic headwinds.

POLICY PRIORITIES

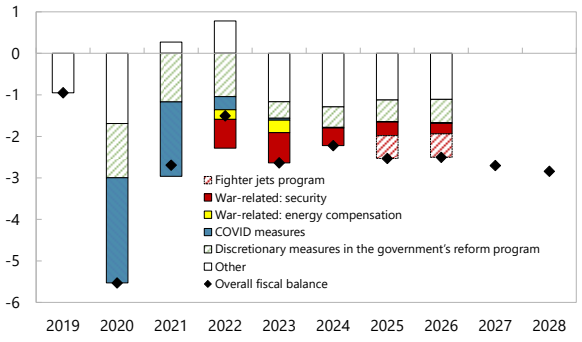
The end of the 'low-for-long' era (with markets becoming more discerning) and war-related shocks make safeguarding fiscal sustainability a priority. This should be done through a gradual, but sustained consolidation plan based on measures identified in a comprehensive spending and tax review. Structural reforms—including to the collective bargaining system—should play a supportive role by facilitating adjustment to the shocks and providing a boost to long-term growth. Tighter financial conditions will test the resilience of the large and inter-connected financial system—hence the importance of pre-emptively strengthening liquidity buffers, restoring systemic buffers when conditions allow, and expanding the macroprudential toolkit.

A. Securing Fiscal Sustainability Amid New Priorities

14. War-related spending pressures will widen fiscal deficits: in 2023 and the medium term by about 1 percentage point above the pre-war path. In 2023, additional measures to compensate for high energy prices will increase spending by ¼ percent of GDP (temporarily; Box 2) and higher-than-projected public sector wages—reflecting wage premia negotiated by municipality workers and nurses—by additional ¼ percent (permanently). This will result in a mildly stimulative fiscal impulse, as reflected in a deteriorating structural primary balance. War-related spending on security will fall from around 1 percent of GDP in 2022 and in 2023 to an average of ¼ percent per year in 2024–27, but the pre-war fighter jets program will add ½ percent per year in 2025–30, sustaining deficits in the medium-term (overall, defense spending will stay above 2 percent of GDP—consistent with NATO commitments). The additional pressures are on top of earlier discretionary measures (gradually expiring) in the 2019 government's reform program to boost employment and productivity and reinforce climate action. Staff and authorities' projections are broadly aligned.

Aside from discretionary measures in the government reform program, war-related measures will deteriorate deficits over the medium term…

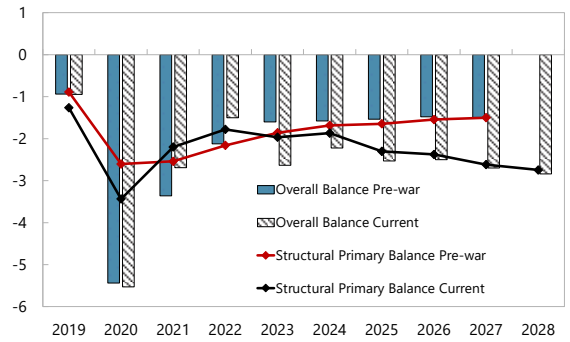
Overall Fiscal Balance and Discretionary Measures
(Percent of GDP)



Sources: IMF, World Economic Outlook; MOF; and IMF staff calculations.

…resulting in larger deficits relative to pre-war projections.

Overall Fiscal and Structural Primary Balances
(Percent of GDP; Percent of Potential GDP)



Sources: IMF, World Economic Outlook.

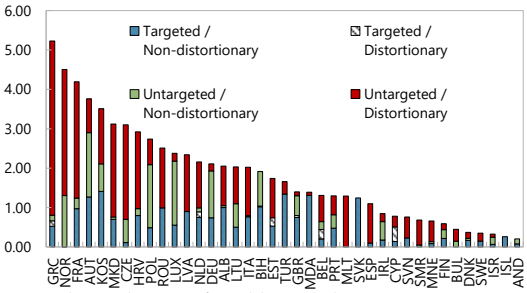
15. The worsened fiscal outlook puts public debt on a riskier path. Higher fiscal deficits in the medium term make the already upward sloping projected debt path steeper. Moreover, the recent re-classification of guaranteed loans to social housing developers as public debt has produced a level shift (in 2021 by about 6 percent of GDP, more than offsetting a better fiscal outcome in 2022). The change better reflects risks from this large scheme, particularly as interest rates are rising. Under unchanged policies, the debt ratio would increase from around 72 percent in 2022 to close to 80 percent of GDP by 2028.

Box 2. Measures to Compensate for Higher Energy Prices

Finland's social safety nets and compensation measures would mitigate some of the impact from higher energy prices. Compensation measures amount to about ½ percent of GDP during 2022–23, small relative to the European average (of close to 2 percent), but commensurate with the estimated incidence on vulnerable households (Annex II). Some measures—notably a faster indexation of social benefits to cost of living—are targeted. But most—e.g., cuts to electricity VAT, childcare allowances—are not, and/or impede price passthrough.

The overall size of compensation measures for higher energy prices is relatively small,…

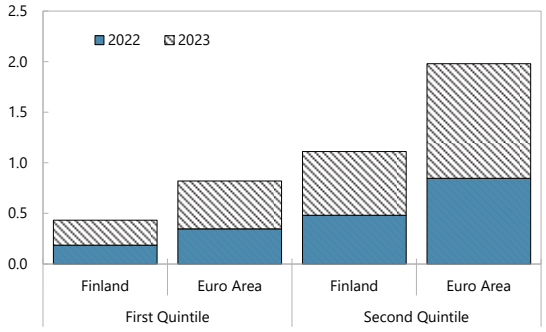
Fiscal Costs of Household Support Measures in 2022 and 2023
(Percent of GDP)



Source: Based on a September 2022 survey of country desk economists at the IMF's European Department.
Note: (i) Fiscal support measures specifically targeting firms and sectors were excluded. (ii) Only 24 of the 39 surveyed countries provided fiscal costs estimates for 2023. For those countries with no such estimates, the numbers shown in the table likely underestimated the total fiscal costs for 2022 and 2023.

…but broadly commensurate with estimated incidence

Fiscal Costs of Compensating Low-Income Households
(Percent of GDP)



Source: IMF staff estimates.

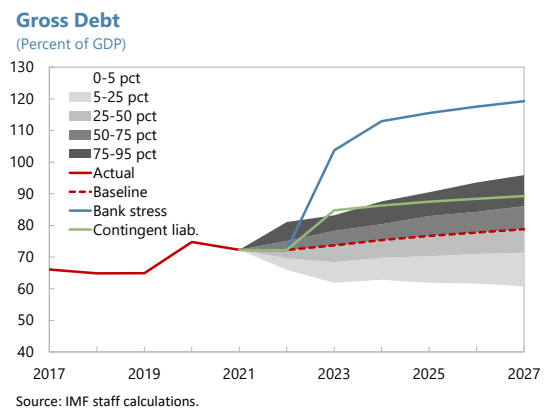
Fiscal Measures to Compensate for Higher Energy Prices

Category	Measures	EUR million		Percent of GDP	
		2022	2023	2022	2023
Targeted; non-distortionary	Additional indexation of social benefits	99	10	0.04	0.00
Less targeted; non-distortionary	Increased deduction for commuting; for household system renovations; child care allowances	263	150	0.10	0.05
Less targeted; distortionary	Fixed-term fuel subsidy; fixed-term electricity tax credits; temporary reduction of biofuel obligation (negative impact)	1	263	0.00	0.09
Broad; distortionary	Reduction of electricity VAT, transport VAT	0	350	0.00	0.13
Support for production	Cost support for agriculture sector	219	0	0.08	0.00
Miscellaneous		33	61	0.01	0.02
Total		**615**	**834**	**0.23**	**0.30**

Source: MOF; and IMF staff calculations.

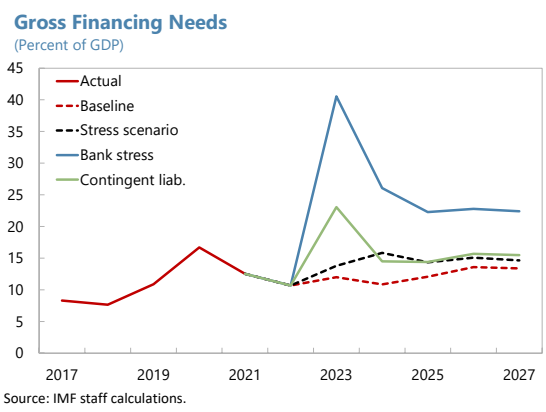
16. Staff assess the risk of sovereign stress to be still low, but increasing. DSA results (Annex VI) show the risk as low in the medium term given the moderate projected debt level (for the strength of Finland's institutions) and manageable gross financing needs. But the higher probability of debt non-stabilization—one of the mechanical signals derived from the fan chart—now flags a 'moderate' risk of sovereign stress (compared to 'low' previously). Debt paths are much higher in the standard DSA banking crisis scenario (with the public sector absorbing the loss of 10 percent of banking sector assets net of tier 1 capital) or if contingent liabilities are triggered (given high government guarantees, equivalent to 25 percent of GDP in June 2022).

Risk of debt non-stabilization has deteriorated,



Source: IMF staff calculations.

...but refinancing risks are low.

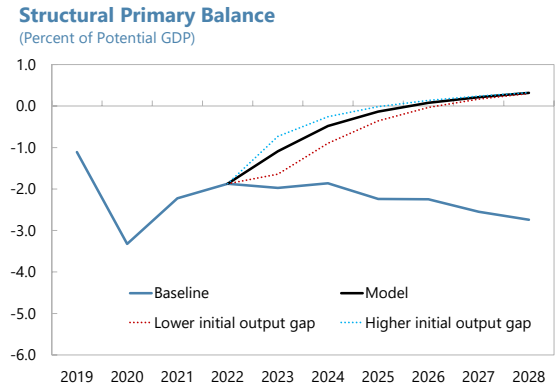


Source: IMF staff calculations.

17. For 2023, fiscal policy should be supportive of monetary policy while prioritizing support to the vulnerable and security spending. A slightly tighter fiscal stance—by about ¼ percent of GDP relative to the fiscal position in 2022—would strike a balance between containing aggregate demand and inflation pressures and taking a step toward placing public financing on a more sustainable footing, while still accommodating war-related spending. The needed savings could be found by better targeting energy compensation measures (towards the vulnerable), which should also incentivize energy conservation (most 2023 measures are not targeted and/or impede price passthrough(Box 2)). To contribute to the fiscal effort, a one-time solidarity tax could be considered in lieu of windfall taxes on "excess" profits of energy companies, as the latter may undermine investment and energy supply. If near-term downside risks materialize, automatic stabilizers should be allowed to operate, and a severe recession may warrant additional support, but only if the rise in slack is more sizeable than anticipated and wage pressures are absent.

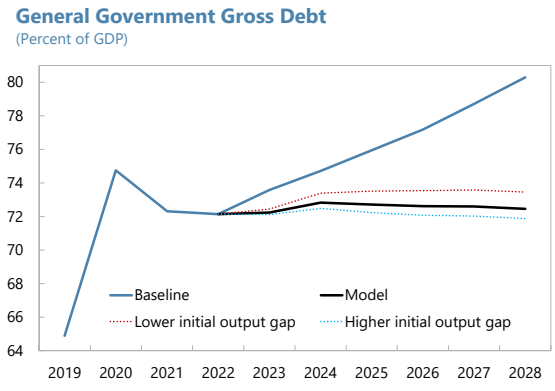
18. Over the medium term, a gradual, but sustained fiscal consolidation is needed to put the debt ratio on a declining path and make room for aging-related spending. A 'buffer stock' model (Annex VII)—optimizing over the objectives of cyclical stabilization and minimizing sovereign stress risk—is calibrated to Finland to derive recommended paths for structural primary deficits. The optimal consolidation is presented as a range, reflecting the current uncertainty around output gap estimates. For 2023, the model recommends a small improvement in the structural balance even if the gap is negative (as suggested by the reappearance of slack in high-frequency indicators), which is consistent with easing demand pressures to reduce inflation. Beyond, the recommended path gradually closes the structural deficit over the medium term, reducing it in 2028 by 2¼ percentage points of GDP from 2022, moving towards closing the authorities' estimate of the sustainability gap—consolidation needed to stabilize public finances in the long term—of 3 percent. The recommended path implies an average annual adjustment of around ½ percentage point, which seems realistic given the historical experience (realism assessment in DSA). Debt starts declining at the end of the projection horizon.

A consolidation plan that gradually closes structural deficits over the medium term…



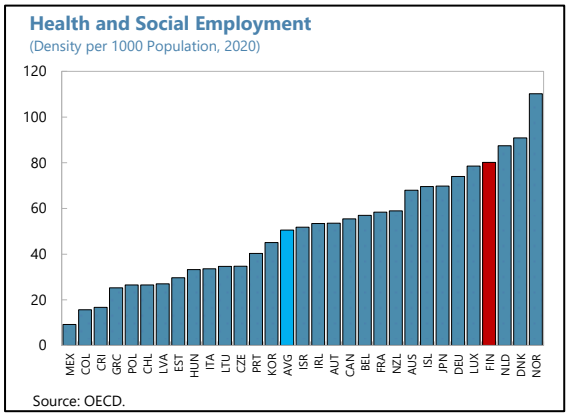
Sources: IMF staff estimates.

…will put debt on a declining path and help build fiscal buffers.



Sources: IMF staff estimates.

19. Revisiting fiscal policy objectives and identifying specific measures would be critical for the medium-term consolidation plan. Staff welcome the ongoing work in the Ministry of Finance on spending and tax reviews. Regarding spending, the health and social services should be an area of focus: employment in the sector is high (even relative to other countries with ageing societies); wage increases larger than in other sectors; and planned reforms envisage higher spending needs until the 2030s. The reform has a potential to produce efficiency gains from consolidation and new technologies, but financial incentives to deliver them are weak, and may need to be strengthened if the reform does not generate savings. Some revenue measures could also be considered: the tax base for the standard-rate VAT could be broadened and there is some scope to increase relatively-low property tax revenues (IMF, 2022).

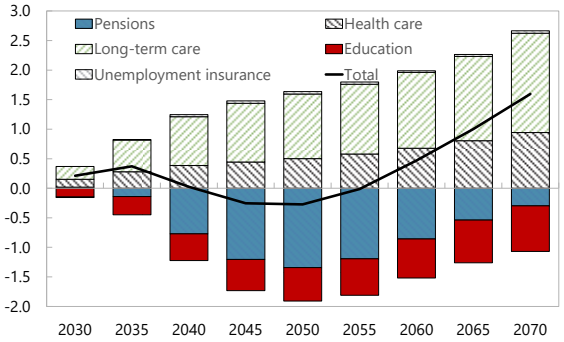


Source: OECD.

20. The consolidation would help address aging-related fiscal pressures. In the baseline, the intertemporal net worth of the public sector—a comprehensive indicator of fiscal sustainability that combines public sector balance sheet with the costs of future fiscal policy—is in negative territory. In addition to the projected medium-term deficits, this reflects increases in aging-related costs in the long-term, mainly on health and elderly care. The proposed consolidation path would bring the net worth to a 'safe' range of above 30 percent of GDP—a buffer to accommodate potential shocks (Brede and Henn, 2018). A margin of safety should also be maintained in the pension system. While higher returns in 2021 and an increase in assets of pension companies improved financial viability of the system, they mask lower projected contributions and higher spending (Finnish Centre for Pensions—ETK (2022); relative to ETK (2019)). Given uncertain future asset returns, this calls for a conservative approach to adjusting pension contribution rates (set annually).

Rising demand for healthcare and social services will stress public finances in the long term…

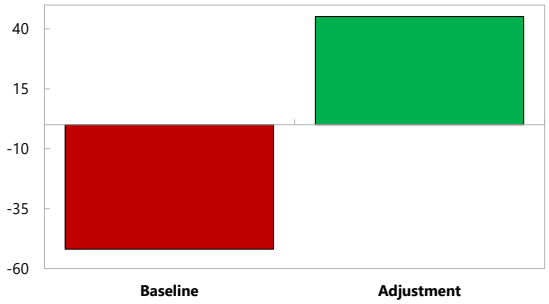
Change in Age- Related Expenditure
(Relative to 2026, percent of GDP)



Source: Ministry of Finance.

…and long-term pressures would bring intertemporal net worth of the public sector to negative territory under the current fiscal path.

Intertemporal Financial Net Worth Under Various Scenarios
(Percent of GDP)



Sources: Brede and Henn (2018); IMF staff calculations.
1/ Public sector balance sheet augmented with the net present values of all future fiscal balances.

21. A more robust expenditure ceilings framework would help maintain fiscal discipline and facilitate communication. The current spending limits system is not a statutory instrument; it is set in the government program at the start of each parliamentary term and applies to about 80 percent of central government expenditures (MOF, 2020). Appropriately, the limits accommodated COVID-related spending and now war-related expenses. They were, however, undermined by accommodating additional 2022–23 spending in the government program and some spendings overlap with regular government programs (National Audit Office, 2022). The Ministry of Finance has recently proposed a new fiscal framework, wherein debt sustainability would underpin both fiscal balance and expenditure ceilings targets, guiding fiscal policy over a longer horizon. It also extends central government expenditure ceilings to cover well-being service counties and sets stricter conditions for breaching the limits while allowing an adequate room to maneuver through unallocated budget reserves. Staff welcome the proposal, which is also broadly in line with IMF (2022) and the recently published European Commission Communication on that matter.

Text Table 1. Finland: Changes to Expenditure Limits Level
(Million euros)

	2020	2021	2022	2023
Covid-related	8437	2348	839	…
War-related	…	…	1,992	1,998
Others 1/	…	…	900	686
Total	**8,437**	**2,348**	**3,731**	**2,684**

Sources: National Audit Office of Finland; IMF staff calculations.

1/ Includes funding of beneficiaries of Veikkaus (Finnish National Lottery) due to projected decline in proceeeds from gambling activities.

Authorities' Views

22. The authorities agreed that fiscal policy should not work at cross-purpose with monetary authorities' efforts to bring down inflation, and shared staff's concerns of longer-term sustainability. The Ministry of Finance (MOF) saw merit in better targeting energy-related measures, but pointed out practical difficulties in designing them in a short time. Windfall taxes are currently under discussion, but there is no plan to further broaden/increase solidarity taxes (already in place since pre-pandemic). The MOF sees scope for further discretionary loosening only in the event of a severe adverse shock, while underscoring that any such measures must be targeted, temporary, and not add to inflationary pressures. Beyond the near term, the authorities shared staff's assessment of fiscal pressures and risks, and the need to put debt on a declining path over the medium term. In this regard, the MOF has proposed a new fiscal framework that builds on and strengthens the current system. The MOF is also conducting a comprehensive spending and tax review to identify possible consolidation measures. They concurred with staff that there is potential for efficiency gains in the health and social services reform.

B. Structural Reforms

23. Further boosting employment and productivity remains key to sustainability. Employment measures—mainly reforming activation policies—have underpinned the government fiscal adjustment strategy, but staff previously assessed revenue gains from them as small and uncertain (IMF, 2022). Still, increasing employment is an important part of the growth strategy. The employment rate has substantially increased as unemployment benefits for those close to retirement have been tightened. Staff recommend continuing to close routes to early retirement, and reforming in-work and out-of-work benefits to reduce work disincentives, including for women with care responsibilities (IMF, 2020). The government's proposal to increase R&D spending to 4 percent of GDP would help boost productivity, but the authorities should direct R&D tax incentives toward startups and SMEs where the impact of incentives will be the strongest (OECD, 2022). Addressing skill shortages would help better leverage the increased R&D spending. Improving access to tertiary education and attracting skilled foreign labor—important on its own—would help in this regard.

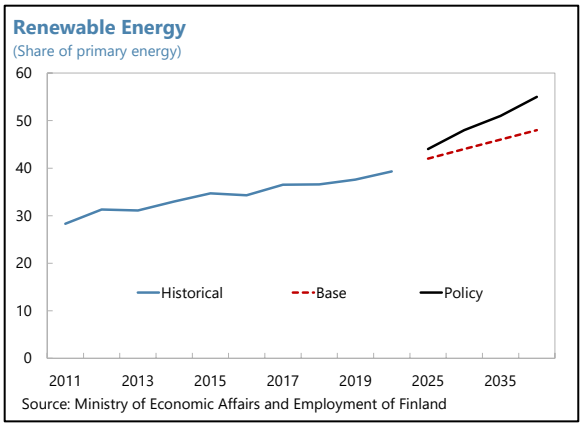
24. More flexibility within the coordinated wage bargaining framework would improve resilience to shocks and support labor market outcomes. The recent wage agreements in the public sector have weakened the wage coordination mechanism in Finland, which is already less formal relative to peer countries (IMF, 2022). Also, wages in Finland are compressed and misaligned with productivity across sectors, adding to labor market rigidities and further weighing on productivity. To support employment and productivity, staff recommend a system where high-level agreements set broad framework conditions, but with more flexibility in firm-level contracts, especially for firms that are currently subject to automatic extensions of the sectoral agreement. Wage flexibility is even more important in the conjuncture as energy shocks entail an asymmetric impact across firms and sectors.

Authorities' Views

25. The authorities broadly agreed on the need for structural reforms—including to the wage bargaining framework—to boost growth and secure sustainability. They concurred with staff on continuing to close routes to early retirement, but noted that additional employment gains may be small (as most have been realized). They maintained that reducing home care benefits would be politically difficult. The authorities saw potential in improving work-based immigration, especially skilled foreign labor. On tertiary education, they pointed out recent uptick in enrollment (as admission procedures have been streamlined), but noted the need to increase study places going forward. The authorities remain committed to raising R&D spending to 4 percent of GDP by the end of the decade, which they assess as having a positive impact in the long run. On wage bargaining, they saw scope for more wage flexibility as well as the need to strengthen the coordination mechanism, which would help safeguard competitiveness.

C. Achieving Energy Security in the Context of the Climate Agenda

26. Achieving authorities' climate goals requires further measures. The energy crisis has demonstrated the importance of shifting away from fossil fuels and Finland has made considerable progress in this direction (Box 1). The National Climate and Energy Strategy projects a share of renewable energy above Finland's indicative minimum target in the EU's Fit for 55 Package by 2030. However, achieving carbon neutrality by 2035 (enshrined in the law) will require further policy measures, especially given recent estimates suggesting that the land use sector has turned into a source of emissions instead of serving as a sink. Policies could include higher and better harmonized carbon prices (when energy prices subside from the current high levels) while addressing competitiveness and distributional concerns, and increased taxation of carbon-intensive peat production.



Authorities' Views

27. The authorities agreed with staff that further measures are needed to meet the climate target. They acknowledged emission shortfalls relative to the target under current policies. They saw merit in carbon pricing to reduce emissions but noted that addressing carbon leakages is a crucial consideration.

D. Strengthening the Resilience of the Financial Sector

28. Banks are well-capitalized, but vulnerable to liquidity shocks and systemic events in the Nordic region. The recent FSAP stress tests indicate that financial sector remains solvent in a severe adverse scenario (of a deeper recession, stronger inflation pressures, and higher interest

rates). However, there could be a major second-round impact on banks' funding costs and availability, and a separate liquidity stress test shows potential liquidity shortfalls in case of large outflows. The high reliance on wholesale funding—particularly short-term—thus creates risks to financial stability and of a pro-cyclical contraction in credit. The stress tests also indicate high sensitivity to credit events in other Nordic countries given large cross-border exposures.

29. Liquidity regulations should thus be tightened, and, when circumstances allow, systemic buffers re-instated and cyclical tools strengthened. Given liquidity risks, regulatory changes should encourage financial institutions to enhance liquidity buffers to cover a predetermined level in a wholesale funding outflow scenario, improve high-quality-liquid-assets, and perform regular liquidity stress tests (Annex VIII). Given structural risks from exposures to Nordic financial systems (and from elevated household indebtedness), systemic buffers should be re-activated. As counter-cyclical buffers (CCyBs) were at zero at the outset of the pandemic, the authorities relaxed macro-prudential policy in response to a deterioration in cyclical conditions by releasing systemic risk buffers (SyRB) and partly lowering the Other Systemically Important Institution (O-SII) buffer requirements. The O-SII buffers for two of the three systemically important institutions will be increased by ½ percentage point on January 1, 2023, and the FIN-FSA should also re-introduce the SyRB once uncertainty related to the war in Ukraine abates. The pandemic showed that credit contractions could happen even without signs of excessive credit buildup, and the authorities could thus initiate legislative changes to allow for a positive neutral rate for the CCyB to prepare for unexpected downturns.

30. The authorities have taken steps to address borrower-side vulnerabilities; a debt-to-income (DTI) or a debt-service-to-income (DSTI) cap should still be legislated. The government package of macroprudential enhancements (to be implemented in mid-2023) extends the coverage of the Finnish Financial Supervisory Authority (FIN FSA) supervision to non-bank institutions, imposes a 30-year maximum maturity limit on housing loans, and introduces an amortization requirement and a 60 percent loan-to-value limit on housing company loans. Separately, the FIN FSA has issued a non-binding recommendation on DSTI limits, as those were dropped from the legislative package because of distributional concerns (impact on the youth – Annex IX). However, FSAP analytical findings suggest that, over the cycle, DTI/DSTI limits could contain leverage at a lower economic cost for all income groups than other measures, and staff thus recommend enshrining them in the law.

31. Systemic risk monitoring should be further enhanced. A Nordic-wide stress test—covering interlinkages, spillovers, and liquidity-solvency interactions—would shed more light on risks from large cross-border exposures. Regarding the assessment of vulnerabilities from household indebtedness, the positive credit register (expected to be operational in 2024) will provide microdata on indebtedness and income, but it would be useful to additionally collect data on collateral values and on housing company loans. The FIN-FSA and the Bank of Finland (BoF) should also further develop corporate sector vulnerability analysis (including using firm-level data) and more fully disclose the analysis and assessment of macroprudential risks in the non-bank financial intermediation sector.

32. The FSAP recommends additional measures to enhance the oversight of the financial system (Annex VIII): further improvements to governance and resourcing for supervision and regulation; ensuring the effective operationalization of crisis management arrangements; addressing procyclicality in the pension insurance sector; and strengthening AML/CFT supervision. Regarding AML/CFT policy, staff welcome recent improvements in strengthening the supervisory framework but further measures are needed to improve its effectiveness, in particular to address risks from cross-border and non-resident transactions (drawing upon the regional IMF AML technical assistance project).

Authorities' Views

33. The authorities broadly concurred with recommendations to strengthen the resilience of the financial sector. They shared staff's assessment of vulnerabilities arising from the banks' funding structure even though there are no immediate plans to tighten liquidity regulations. They also agreed with the recommendation to re-instate systemic buffer requirements but noted that the timing of such a decision should avoid procyclicality and is complicated by the uncertainty regarding the outlook. Moreover, they concurred that introducing a positive neutral Counter-Cyclical Capital Buffer (CCyB) would add flexibility in response to shocks, while caps on Debt-to-Income and Debt-Service-to-Income ratios would help address borrower-side vulnerabilities. But they reiterated that both changes would require a political consensus and legislative processes. The authorities were also committed to continuing to enhance their systemic risk monitoring framework, while reckoning legal and coordination challenges with conducting Nordic-wide stress tests. On the AML/CFT framework, they highlighted their past and ongoing efforts strengthening the supervisory regime.

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34. The government has successfully steered Finland through the pandemic. The policies adopted have limited the adverse impact of the pandemic on the economy, contributing to a swift recovery. The adoption of structural reforms to boost employment and productivity is welcome and can over time contribute to strengthen the sustainability of the welfare state.

35. The fallout from the war has, however, halted the recovery and deteriorated the outlook. Elevated inflation, spurred by rapid increase in energy prices and requiring tighter monetary policy, is impacting households' purchasing power, reducing confidence and demand. The energy crisis and the uncertainty it creates weaken the external economic environment. Economic growth will thus stall in 2023, while war-related risks remain high. The external position is preliminarily assessed to be weaker than implied by fundamentals and desirable policy settings.

36. War-related spending pressures have worsened the fiscal outlook. The measures to strengthen security and to partly shield households from higher inflation, have resulted in higher spending needs. In 2023, fiscal policy will be mildly expansionary, contributing to inflationary pressures. Over the medium term, the worsened fiscal outlook puts public debt on a riskier path.

37. In 2023, fiscal policy should be supportive of monetary policy while prioritizing support to the vulnerable and security spending. A slightly tighter fiscal stance—by about ¼ percent of GDP relative to the fiscal position in 2022—would strike a balance between containing aggregate demand and inflation pressures and taking a step toward placing public financing on a more sustainable footing, while still accommodating support to the vulnerable and war-related spending.

38. Over the medium term, fiscal consolidation needs to put the debt ratio on a declining path and make room for aging-related spending. Improving the structural primary deficit annually by around ½ percentage point of GDP per year over the medium term will help safeguarding sustainability. Such fiscal adjustment should be gradual, but sustained and based on a well-communicated medium-term plan, based on measures identified in the comprehensive spending and tax reviews.

39. Boosting employment and productivity remains key for sustainability. Reforms to in-work and out-of-work benefits can reduce work disincentives, including for women with care responsibilities. The government's proposal to increase R&D spending to 4 percent of GDP can boost productivity, but needs to be targeted. More flexibility within the coordinated wage bargaining framework would improve resilience to shocks and support labor market outcomes.

40. Further measures are needed to achieve the ambitious and commendable carbon emissions objectives. Policies could include higher and better harmonized carbon prices (when energy prices subside from the current high levels) while addressing competitiveness and distributional concerns, and increased taxation of carbon-intensive peat production.

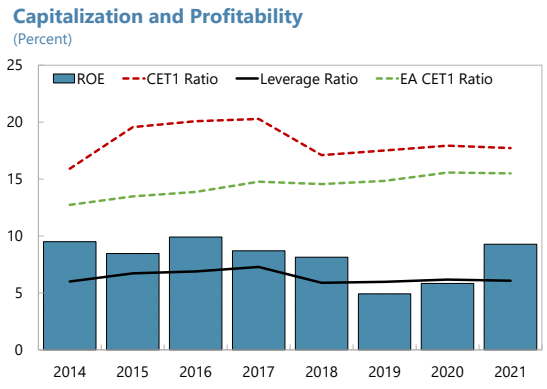
41. The banking system is resilient, but vulnerable to liquidity shocks and cross-border exposures. Banks are well capitalized, profitable, and resilient to adverse macroeconomic shocks. However, the tightening of global financial conditions may exert pressures on banks' liquidity given their over-reliance on short-term wholesale funding. Enhancing liquidity buffers, therefore, remains a priority. Furthermore, banks are exposed to risks emanating from high household indebtedness and systemic events in the Nordic region.

42. The authorities should strengthen capital requirements as circumstances allow and expand the macroprudential toolkit. Staff recommend that the authorities reinstate systemic capital buffer requirements as circumstances allow. And in due time, legislating a positive neutral rate for the CCyB would increase resilience in the banking system, while legislating caps on DTI and DSTI ratios would help address borrower-side vulnerabilities from high household indebtedness. Furthermore, the systemic risk monitoring framework should be enhanced.

43. It is proposed that the next Article IV consultation with Finland take place on the standard 12-month cycle.

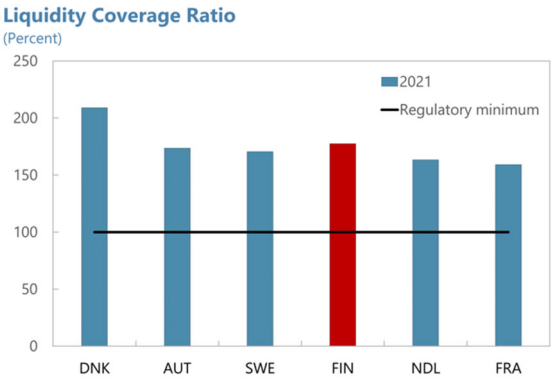
Figure 1. Banking Sector

The Finnish banking system is well capitalized.



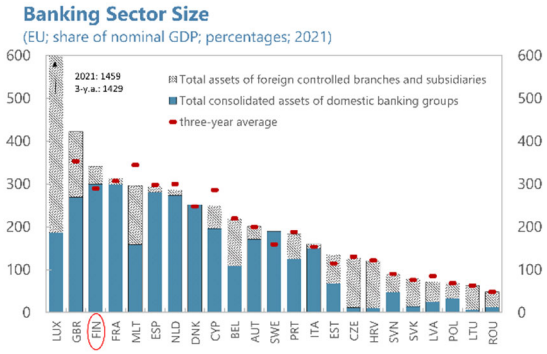
Source: European Central Bank.

Banks are highly liquid, as in peer countries.



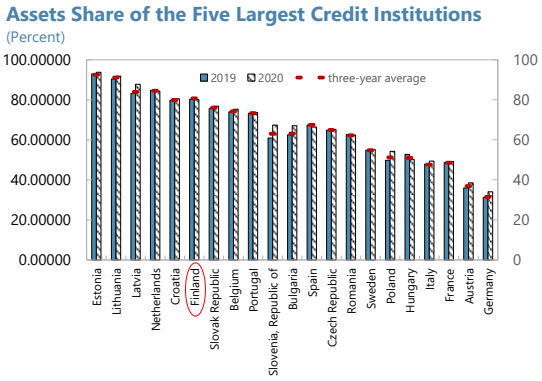
Source: European Central Bank.

But the banking system is relatively large…



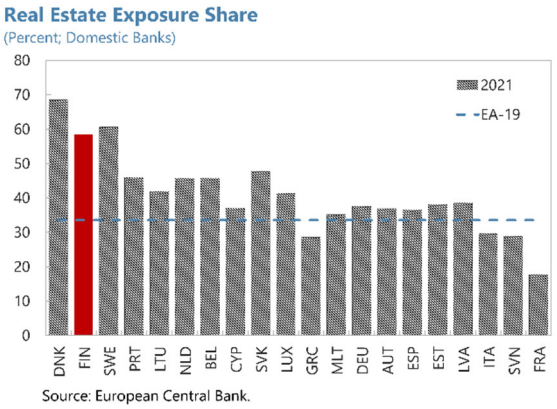
Sources: ECB and Eurostat.
Notes: Based on Consolidated Banking Data.

…and highly concentrated…



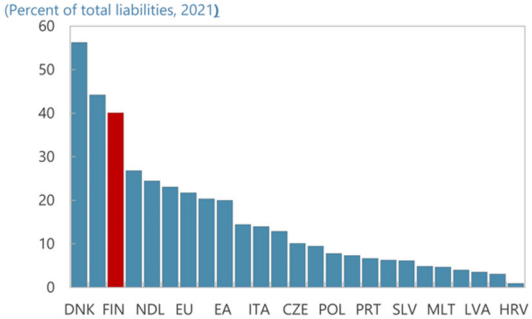
Sources: European Central Bank; and Haver Analytics.

…with large real estate exposures…



Source: European Central Bank.

…and a heavy reliance on wholesale funding.

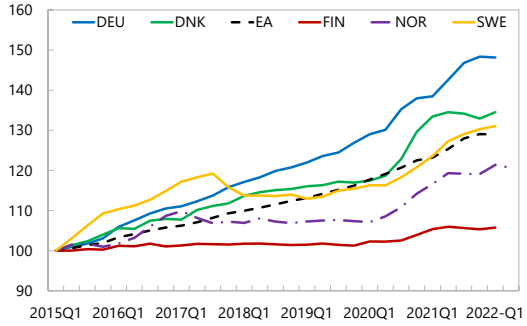


Source: European Central Bank.
1/ Ratio of credit institutions' deposits and debt securities to total liabilities

Figure 2. Real Estate Market Developments

House prices in Finland increased in real term, but less than that in other European countries.

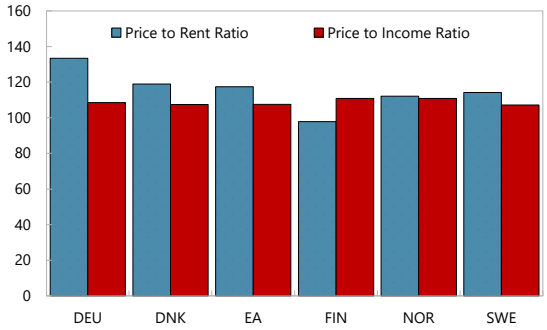
Real House Prices
(Index 2015=100)



Sources: OECD and IMF staff calculations.

Valuation measures are more benign compared with the region.

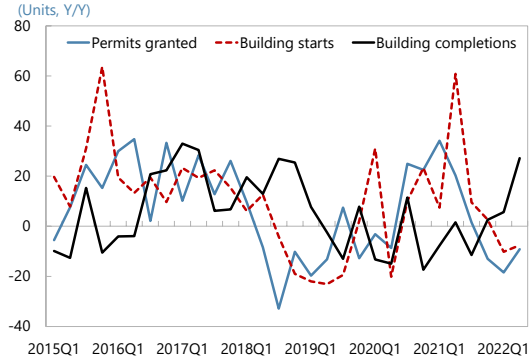
Price-to-Rent and Price-to-Income, 2021
(Ratio)



Source: OECD.

Housing construction increased markedly during the recovery, but new constructions slowed down in 2022.

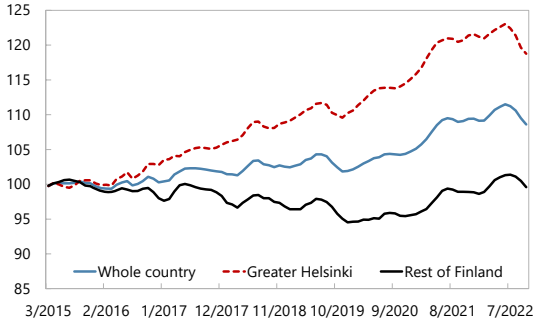
Housing Construction
(Units, Y/Y)



Sources: Haver Analytics; and IMF staff calculations.

House prices are showing signs of cooling down while price increase in greater Helsinki outpaced the rest of the country during the pandemic.

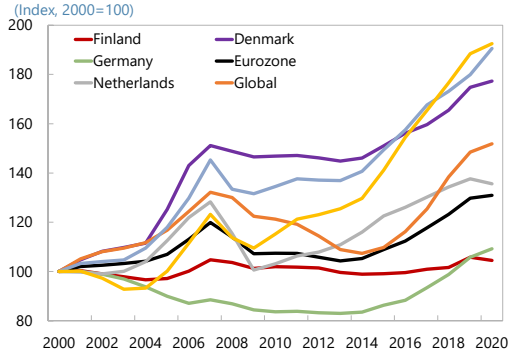
House Prices
(Index, 3M average, 2015=100, All building types)



Sources: Haver Analytics; and IMF staff calculations.

Value growth in the CRE market has been relatively benign…

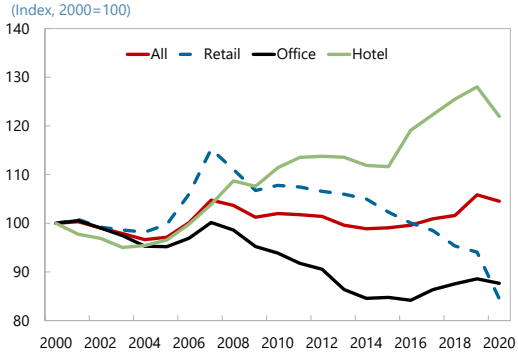
Commercial Real Estate Capital Growth Index
(Index, 2000=100)



Sources: MSCI; and IMF staff calculations.

…though retail and office segments faced strong headwinds.

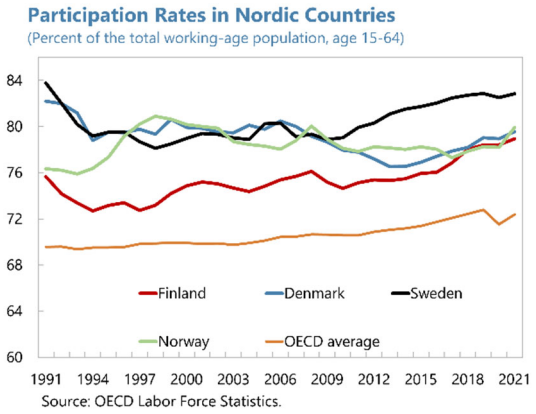
Capital Growth Rates Across Segments in Finland
(Index, 2000=100)



Sources: MSCI; and IMF staff calculations.

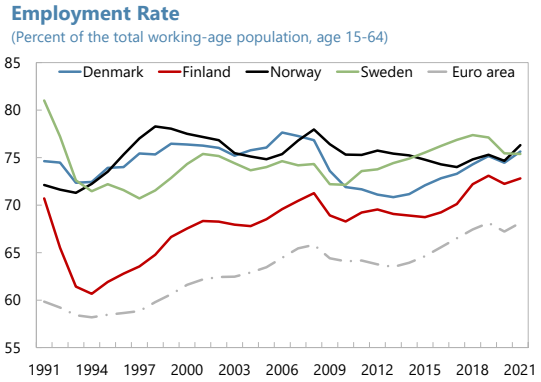
Figure 3. Labor Market Developments

Labor market participation continued to improve in 2021…



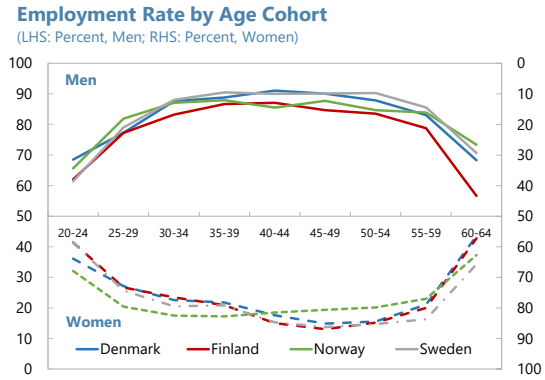
Source: OECD Labor Force Statistics.

…and the employment rate increased after dipping during 2020.



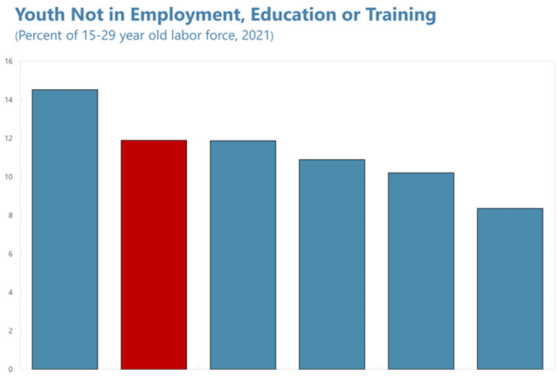
Source: OECD.

Employment rates of the elderly and women with care responsibilities in Finland remain behind peers…



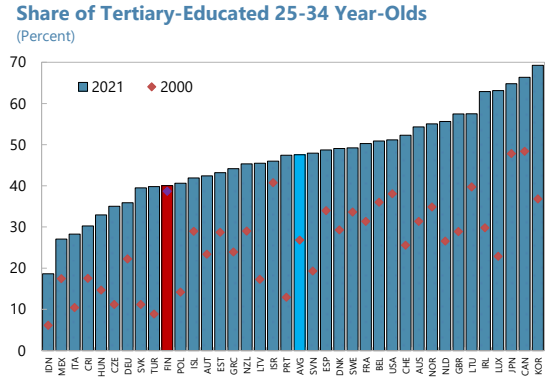
Source: OECD.

…the share of youth not in employment, education, and training is larger than some of the Nordic peers…



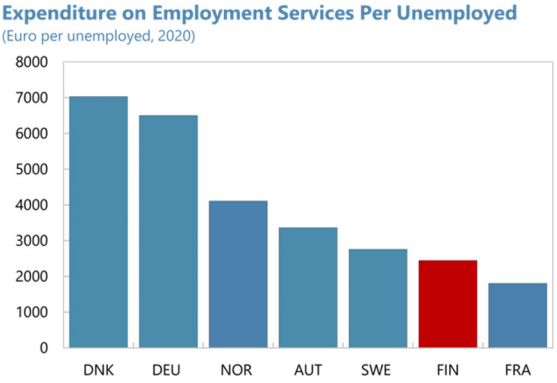
Source: OECD.

…and tertiary educational attainment among young adults is relatively low and saw little improvement.



Source: OECD's Education at a Glance (2022).

Increased spending on PES would help narrow the gap with peers.



Sources: OECD, IMF staff calculations.

Table 1. Finland: Selected Economic Indicators, 2020–28

	2020	2021	2022	2023	2024	2025	2026	2027	2028
						Proj.			
				(Percentage change, unless otherwise indicated)					
Output and Demand (Volumes)									
GDP	-2.2	3.0	2.0	0.0	1.3	1.3	1.3	1.3	1.2
Domestic demand	-2.0	2.8	3.5	0.1	0.8	1.6	1.3	1.3	1.3
Private consumption	-4.0	3.7	2.5	-0.1	0.6	0.7	0.9	0.8	0.8
Public consumption	0.3	2.9	1.9	0.9	0.1	0.9	0.9	1.0	1.0
Gross fixed capital formation	-0.9	1.5	4.3	-0.3	1.0	3.5	2.0	2.1	2.1
Net exports (contribution to growth in percent of GDP)	-0.7	-0.2	-1.5	-0.1	0.5	-0.3	0.0	0.0	0.0
Prices, Costs, and Income									
Consumer price inflation (harmonized, average)	0.4	2.1	7.2	4.4	2.5	2.2	1.8	1.8	1.8
Labor Market									
Labor force	-0.4	2.2	1.9	0.5	0.1	0.0	0.2	0.0	0.0
Employment	-1.5	2.4	2.8	0.0	0.4	0.2	0.2	0.2	0.0
Unemployment rate (in percent)	7.8	7.6	6.8	7.3	7.0	6.9	6.9	6.8	6.8
Potential Output									
Output gap (in percent of potential output)[1]	-2.7	-0.9	0.1	-0.8	-0.5	-0.3	-0.1	0.0	0.0
Growth in potential output	0.9	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.2
				(Percent of GDP)					
General Government Finances[2]									
Overall balance	-5.5	-2.7	-1.5	-2.6	-2.2	-2.5	-2.5	-2.7	-2.8
Primary balance[3]	-5.4	-2.8	-1.6	-2.6	-2.2	-2.4	-2.4	-2.6	-2.8
Structural balance (in percent of potential GDP)[4]	-3.4	-2.2	-1.8	-2.0	-1.9	-2.3	-2.4	-2.6	-2.7
Structural primary balance (in percent of potential GDP)[5]	-3.3	-2.2	-1.9	-2.0	-1.9	-2.2	-2.2	-2.5	-2.7
Gross debt	74.8	72.3	72.1	73.6	74.7	75.9	77.1	78.7	80.3
Net debt[6]	-64.1	-72.1	-66.5	-61.3	-56.8	-52.3	-48.2	-44.1	-40.0
Balance of Payments									
Current account balance	0.7	0.6	-2.9	-2.9	-1.7	-0.9	-0.6	-0.5	-0.3
Goods and services balance	0.2	0.2	-3.0	-3.1	-2.1	-1.6	-1.3	-1.2	-1.1
Net international investment position	-4.5	-1.4	-4.1	-6.8	-8.2	-8.7	-8.9	-9.1	-9.0
Gross external debt	222.7	208.1	211.9	215.1	216.3	216.1	216.5	217.4	217.4

Sources: Bank of Finland, BIS, International Financial Statistics, IMF Institute, Ministry of Finance, Statistics Finland, and IMF staff calculations.

[1] A negative value indicates a level of actual GDP that is below potential output.

[2] Fiscal projections include measures as specified in the General Government Fiscal Plan.

[3] Adjusted for interest expenditures and receipts.

[4] Not adjusted for COVID-related one-off measures.

[5] Adjusted for interest expenditures and receipts. Not adjusted for COVID-related one-off measures.

[6] Defined as the negative of net financial worth (i.e., debt minus assets).

Table 2. Finland: Balance of Payments, 2020–28

	2020	2021	2022	2023	2024	2025	2026	2027	2028
						Proj.			
				Billions of euros					
Current Account	1.6	1.6	-7.6	-8.1	-4.8	-2.5	-1.8	-1.5	-1.0
Goods and services	0.5	0.6	-8.0	-8.5	-6.2	-4.9	-4.1	-3.7	-3.4
Exports of goods and services	85.5	99.1	126.1	131.6	138.5	147.1	156.3	166.9	178.3
Goods	59.3	70.8	89.3	93.2	97.9	104.0	110.5	118.0	126.0
Services	26.2	28.2	36.8	38.4	40.5	43.1	45.8	48.9	52.2
Imports of goods and services	85.0	98.5	134.1	140.1	144.6	152.0	160.4	170.6	181.7
Goods	56.2	68.0	90.2	94.2	97.6	104.2	110.2	117.2	124.8
Services	28.8	30.5	43.9	45.9	47.0	47.8	50.2	53.4	56.9
Income	1.1	1.0	0.4	0.4	1.4	2.3	2.4	2.3	2.4
o/w Investment income	1.1	1.0	0.4	0.4	1.4	2.3	2.4	2.3	2.4
Capital and Financial Account	-0.4	-1.9	-7.3	-7.8	-4.4	-2.1	-1.4	-1.0	-0.5
Capital account	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Financial account	-0.6	-2.1	-7.4	-8.0	-4.6	-2.3	-1.6	-1.3	-0.8
Direct investment	6.5	-3.7	8.1	2.0	7.3	2.1	3.7	3.2	4.4
In Finland	-2.0	20.2	7.2	7.6	6.3	8.9	8.0	9.7	7.9
Abroad	4.5	16.5	15.2	9.6	13.6	10.9	11.7	12.9	12.3
Portfolio investment	-0.7	20.1	6.3	5.2	4.1	4.5	8.4	8.5	5.4
Financial derivatives	-1.5	1.9	-1.8	2.4	2.4	1.2	0.0	0.0	0.0
Other investment	-5.7	-23.3	-20.0	-17.5	-18.5	-10.2	-13.7	-13.0	-10.6
Assets	-4.4	-28.4	19.6	9.6	4.6	4.6	4.6	4.6	4.6
Liabilities	1.4	-5.0	39.7	27.2	23.1	14.8	18.3	17.6	15.2
Reserve assets	0.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net errors and omissions	-2.4	-3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				Percent of GDP					
Current Account	0.7	0.6	-2.9	-2.9	-1.7	-0.9	-0.6	-0.5	-0.3
Goods and services	0.2	0.2	-3.0	-3.1	-2.1	-1.6	-1.3	-1.2	-1.1
Exports of goods and services	35.9	39.4	47.3	47.5	48.1	49.3	50.8	52.7	54.6
Goods	24.9	28.2	33.5	33.6	34.0	34.9	35.9	37.2	38.6
Services	11.0	11.2	13.8	13.8	14.1	14.4	14.9	15.4	16.0
Imports of goods and services	35.7	39.2	50.3	50.5	50.2	51.0	52.1	53.8	55.7
Goods	23.6	27.0	33.8	34.0	33.9	34.9	35.8	37.0	38.3
Services	12.1	12.2	16.5	16.5	16.3	16.0	16.3	16.9	17.4
Income	0.5	0.4	0.2	0.1	0.5	0.8	0.8	0.7	0.7
Capital and Financial Account	-0.2	-0.8	-2.7	-2.8	-1.5	-0.7	-0.4	-0.3	-0.2
Capital account	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Financial account	-0.2	-0.8	-2.8	-2.9	-1.6	-0.8	-0.5	-0.4	-0.2
Direct investment	2.7	-1.5	3.0	0.7	2.5	0.7	1.2	1.0	1.3
Portfolio investment	-0.3	8.0	2.4	1.9	1.4	1.5	2.7	2.7	1.7
Financial derivatives	-0.6	0.8	-0.7	0.9	0.8	0.4	0.0	0.0	0.0
Other investment	-2.4	-9.3	-7.5	-6.3	-6.4	-3.4	-4.4	-4.1	-3.2
Reserve assets	0.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net errors and omissions	-1.0	-1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GDP at current prices (bln euros)	238.0	251.4	266.6	277.2	288.0	298.3	307.8	316.9	326.3

Sources: Bank of Finland, Statistics Finland, and IMF staff calculations.

Table 3. Finland: International Investment Position, 2013–22

(Percent of GDP)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Assets	317.6	344.9	336.8	323.8	276.9	334.5	344.9	321.5	355.5	345.7
Direct investment	66.7	61.5	63.0	67.1	69.6	70.4	74.1	64.2	74.4	75.1
Portfolio investment	123.2	138.1	145.6	145.7	139.4	141.9	146.1	140.6	173.6	163.6
Equity & investment fund shares	58.5	67.6	73.7	76.8	81.9	80.8	90.6	90.1	118.0	112.8
Debt securities	64.7	70.5	71.9	68.9	57.5	61.1	55.5	50.5	55.6	50.7
Fin. deriv. (other than reserves)	41.7	60.3	45.7	41.1	9.0	24.9	25.7	26.5	20.6	18.5
Other investment	82.0	80.7	78.1	65.3	54.9	93.4	94.8	86.4	80.7	82.7
Reserve assets	4.0	4.2	4.4	4.6	3.9	4.0	4.3	3.9	6.2	5.7
Liabilities	314.6	348.0	332.3	318.4	275.6	340.3	340.8	325.7	357.0	349.9
Direct investment	46.6	52.0	57.3	54.5	56.8	48.3	51.4	46.8	54.0	53.1
Portfolio investment	129.2	141.0	146.1	141.4	135.2	170.0	176.1	170.3	196.8	182.7
Equity & investment fund shares	40.3	44.1	48.7	52.1	54.5	62.2	62.7	65.4	90.9	84.0
Debt securities	88.9	97.0	97.5	89.3	80.8	107.8	113.4	104.9	105.9	98.7
Fin. deriv. (other than reserves)	39.3	56.9	44.3	39.6	8.7	26.2	25.9	26.8	21.4	19.9
Other investment	99.6	98.0	84.5	82.9	74.9	95.9	87.4	81.8	84.7	94.2
Net International Investment Position	3.0	-3.1	4.5	5.4	1.2	-5.8	4.1	-4.2	-1.5	-4.3
Direct Investment	20.1	9.4	5.6	12.7	12.9	22.0	22.7	17.4	20.3	22.1
Portfolio Investment	-6.0	-3.0	-0.5	4.3	4.2	-28.1	-30.0	-29.7	-23.2	-19.1
Fin. deriv. (other than reserves)	2.5	3.4	1.4	1.5	0.3	-1.3	-0.2	-0.4	-0.8	-1.4
Other Investment	-17.5	-17.3	-6.4	-17.7	-20.0	-2.5	7.4	4.6	-4.0	-11.5

Sources: Statistics Finland and IMF staff calculations.

Note: Changes to the NIIP since the 2014 Article IV are mainly due to the switch to the BPM6 statistical standard.

Table 4. Finland: General Government Statement of Operations, 2020–28

(Percent of GDP, Unless Otherwise Indicated)

	2020	2021	2022	2023	2024	2025	2026	2027	2028
						Proj.			
Revenue	51.6	52.8	52.9	52.6	52.1	51.9	51.8	51.8	51.8
Tax Revenues	30.2	30.9	30.9	30.0	29.6	29.5	29.4	29.4	29.4
Taxes on production and imports	13.9	13.8	13.5	13.4	13.1	12.9	12.8	12.8	12.7
Current taxes on income, wealth, etc.	15.9	16.7	17.2	16.3	16.3	16.3	16.3	16.3	16.3
Capital taxes	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Social Contributions	11.6	12.1	11.8	12.0	11.9	11.9	11.9	11.8	11.7
Grants	0.2	0.3	0.5	0.5	0.3	0.3	0.2	0.2	0.2
Other Revenue									
Expenditure	57.2	55.5	54.4	55.2	54.3	54.5	54.3	54.5	54.6
Expense	56.0	55.0	53.6	54.1	53.5	53.3	53.2	53.4	53.5
Compensation of employees	12.8	12.7	12.6	12.6	12.6	12.6	12.6	12.6	12.6
Use of goods and services	11.3	11.4	11.4	11.8	11.4	11.2	11.1	11.1	11.1
Consumption of fixed capital (CFC)	3.6	3.6	3.5	3.5	3.5	3.6	3.6	3.6	3.6
Interest	0.7	0.5	0.6	0.7	0.8	0.9	1.1	1.3	1.4
Subsidies	1.8	1.6	1.2	0.9	1.0	0.9	0.9	0.9	0.9
Grants	1.1	1.1	1.0	1.0	0.9	0.9	0.9	0.9	0.8
Social benefits	22.6	21.9	21.0	21.6	21.4	21.3	21.2	21.2	21.2
Other expense	2.0	2.3	2.2	1.9	1.9	1.8	1.8	1.8	1.8
Net Acquisition of Nonfinancial Assets	1.2	0.5	0.8	1.1	0.8	1.2	1.2	1.1	1.1
Net Operating Balance	-4.4	-2.2	-0.7	-1.6	-1.4	-1.3	-1.3	-1.6	-1.7
Net Lending/Borrowing	-5.5	-2.7	-1.5	-2.6	-2.2	-2.5	-2.5	-2.7	-2.8
Net Acquisition of Financial Assets	5.1	-0.6	...	...	...	...	...	...	...
Currency and deposits	5.3	-2.1	...	...	...	...	...	...	...
Securities other than shares	-2.5	0.5	...	...	...	...	...	...	...
Loans	0.2	0.5	...	...	...	...	...	...	...
Shares and other equity	2.1	0.0	...	...	...	...	...	...	...
Financial derivatives	-1.2	0.6	...	...	...	...	...	...	...
Other accounts receivable	1.2	-0.1	...	...	...	...	...	...	...
Net Incurrence of Liabilities	10.0	1.4	...	...	...	...	...	...	...
Special Drawing Rights (SDRs)	0.0	0.0	...	...	...	...	...	...	...
Currency and deposits	0.0	0.0	...	...	...	...	...	...	...
Securities other than shares	8.1	1.4	...	...	...	...	...	...	...
Loans	1.0	-0.5	...	...	...	...	...	...	...
Shares and other equity	0.0	0.0	...	...	...	...	...	...	...
Financial derivatives	0.0	0.0	...	...	...	...	...	...	...
Other accounts payable	0.9	0.5	...	...	...	...	...	...	...
Memorandum Items:									
Primary Balance[1]	-5.4	-2.8	-1.6	-2.6	-2.2	-2.4	-2.4	-2.6	-2.8
Structural Balance (in percent of potential GDP)[2]	-3.4	-2.2	-1.8	-2.0	-1.9	-2.3	-2.4	-2.6	-2.7
Structural primary balance (in Percent of Potential GDP)[3]	-3.3	-2.2	-1.9	-2.0	-1.9	-2.2	-2.2	-2.5	-2.7
Central Government Net Lending/Borrowing	-5.5	-3.3	-2.4	-3.7	-3.2	-3.6	-3.5	-3.7	-3.9
General Government Gross Debt	74.8	72.3	72.1	73.6	74.7	75.9	77.1	78.7	80.3
General Government Net Debt[4]	-64.1	-72.1	-66.5	-61.3	-56.8	-52.3	-48.2	-44.1	-40.0
Central Government Gross Debt	60.5	57.9	58.1	59.7	61.0	62.4	63.9	65.6	67.5
Output Gap (Percent of Potential GDP)	-2.7	-0.9	0.1	-0.8	-0.5	-0.3	-0.1	0.0	0.0
Nominal GDP (Billions of Euros)	238.0	251.4	266.6	277.2	288.0	298.3	307.8	316.9	326.3

Sources: Eurostat, Government Finance Statistics, International Financial Statistics, Ministry of Finance, and IMF staff calculations.

[1] Adjusted for interest expenditures and receipts.

[2] Not adjusted for COVID-related one-off measures.

[3] Adjusted for interest expenditures and receipts. Not adjusted for COVID-related one-off measures.

[4] Defined as the negative of net financial worth (i.e., debt minus assets; excludes all pension liabilities).

Table 5. Finland: Public Sector Balance Sheet, 2014–21[1]

(Percent of GDP)

	2014	2015	2016	2017	2018	2019	2020	2021
Assets	263.2	282.2	283.5	287.4	275.7	284.3	311.7	308.5
Nonfinancial	86.7	84.1	84.2	82.3	81.3	82.1	90.3	87.2
General Government	76.2	75.2	74.6	72.7	71.7	72.3	79.5	76.7
Public Corporations and Central Bank	10.5	8.9	9.6	9.6	9.6	9.8	10.8	10.5
Financial	176.6	198.2	199.2	205.1	194.4	202.2	221.4	221.3
General Government	131.1	133.7	134.5	136.8	129.4	137.8	151.2	153.9
Currency and Deposits	6.4	9.0	8.2	9.1	7.8	6.7	12.0	9.2
Debt Securities	22.5	21.6	19.9	18.4	17.0	15.7	13.2	13.0
Loans	15.6	15.7	14.6	12.9	11.1	10.9	11.2	11.1
Equity and Investment Fund Shares	80.3	81.2	86.1	88.8	85.0	96.4	105.1	112.7
Insurance, Pension and Standardized Guarantees	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Financial Derivatives and Stock Options	1.1	1.0	0.9	1.1	3.3	3.5	3.8	2.3
Other Accounts Receivable	5.1	5.0	4.6	6.4	5.0	4.6	5.8	5.4
Public Corporations and Central Bank	45.5	64.5	64.8	68.3	65.0	64.4	70.2	67.4
Liabilities	122.7	141.2	142.9	143.8	138.4	137.2	153.9	145.1
General Government	74.6	77.4	78.0	76.2	74.9	75.1	87.2	81.8
Currency and Deposits	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.4
Debt Securities	53.5	54.2	54.2	51.5	49.4	49.5	59.1	55.7
Loans	13.8	15.5	15.1	14.0	14.1	14.5	15.6	14.3
Equity and Investment Fund Shares	1.4	1.3	1.3	1.2	1.2	1.1	1.1	1.1
Insurance Pension and Standardized Guarantee Schemes	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Financial Derivatives	-0.5	-0.9	-0.3	0.3	2.7	2.9	3.4	2.7
Other Accounts Payable	6.0	6.8	7.3	8.7	7.1	6.6	7.5	7.6
Public Corporations and Central Bank	48.1	63.8	64.9	67.6	63.5	62.0	66.8	63.3
Existing Pension Liabilities 2/	302.5	300.6	298.5	295.2	296.1	298.4	324.2	312.4
To Public Sector Employees	104.4	103.2	102.5	101.3	99.7	102.4	111.3	107.2
To Private Employees	198.1	197.4	196.1	193.9	196.4	196.0	212.9	205.2
Public Sector Net Financial Worth								
Excluding Pension Liabilities	53.9	56.9	56.4	61.3	56.0	65.0	67.5	76.2
Including Existing Pension Liabilities to Public Employees	-50.5	-46.2	-46.1	-40.0	-43.7	-37.4	-43.8	-31.0
Including Existing Pension Liabilities to All Employees	-248.6	-243.6	-242.2	-233.9	-240.1	-233.4	-256.7	-236.2
Public Sector Net Worth								
Excluding Pension Liabilities	140.6	141.0	140.6	143.6	137.3	147.1	157.8	163.4
Including Existing Pension Liabilities to Public Employees	36.2	37.9	38.1	42.2	37.6	44.7	46.5	56.2
Including Existing Pension Liabilities to All Employees	-161.9	-159.6	-158.0	-151.6	-158.8	-151.3	-166.5	-149.0

Sources: Finnish Centre for Pensions; Statistics Finland; Eurostat; Brede and Henn (2018); and IMF staff calculations.

Note: Public sector corporations include the largest 9 enterprises controlled by the Central Government. These account for over 90 percent of assets of Central Government controlled corporations. However, local government controlled corporations are not covered due to data limitations.

1/ Public sector balance sheet presents all of the accumulated assets and liabilities under the control of government, including central and local governments, public corporations and pension liabilities. The intertemporal net worth presented in the text adds the net present value of future expenditures and revenues.

2/ This is the net present value of already-accrued liabilities for work performed in the past, based on data (and discount rates) of the Finnish Centre for Pensions (ETK), except for 2016, which are Fund Staff estimates. These pension liabilities represent a contractual obligation to public sector employees. For private sector employees, rules governing the pension system could potentially be altered to change the present value of payouts.

Table 6. Finland: Financial Soundness Indicators, 2014–21

(Ratios, unless otherwise indicated)

	2014	2015	2016	2017	2018	2019	2020	2021
Capital Adequacy								
Regulatory Capital to Risk-Weighted Assets	17.3	22.9	23.3	21.4	21.5	20.5	20.4	20.6
Regulatory Tier 1 Capital to Risk-Weighted Assets	16.4	21.5	21.9	19.6	19.7	18.5	18.1	18.6
Total Capital to Total Assets	4.2	5.4	5.9	5.4	5.4	7.0	6.6	6.5
Asset Quality and Exposure								
Non-performing Loans to Total Gross Loans	1.3	1.3	1.5	1.7	1.4	1.4	1.5	1.5
Non-performing Loans Net of Provisions to Capital	11.2	9.9	9.5	10.4	8.2	9.5	9.7	9.2
Earnings and Profitability								
Return on Assets	0.5	0.6	0.6	0.5	0.7	0.7	0.6	0.8
Return on Equity	11.3	11.5	10.6	7.5	7.7	9.4	8.2	9.3
Non-interest Expenses to Gross Income, percent	61.3	67.0	54.7	57.3	37.6	62.4	58.1	57.1
Personnel Expenses as Percent of Noninterest Expenses	35.4	37.0	35.4	36.9	-5.3	42.9	47.5	45.4
Liquidity								
Liquid Assets to Total Assets (Liquid Asset Ratio)	14.3	16.7	19.0	20.9	16.4	18.0	20.6	18.2
Liquid Assets to Short Term Liabilities	18.9	22.4	25.1	20.9	28.9	35.2	41.8	22.2
Customer Deposits as Percent of Total (non-interbank) Loans	77.4	80.2	89.4	82.3	71.6	61.0	59.1	59.6
Memorandum Items								
Change in Housing Price Index (in percent, year average)	-0.4	0.0	0.8	1.6	1.0	1.0	1.8	2.8
Total Household Debt (in percent of GDP)	61.5	62.3	63.6	63.6	64.1	64.9	68.8	66.6
Total Household Debt (in percent of disposable income)	122.1	125.4	131.7	137.5	144.2	147.3	154.2	...
Household Interest Expenses (in percent of disposable income)	2.0	1.9	1.7	1.6	1.6	1.6	1.6	1.6
Gross Debt of Non-financial Corporations (in percent of GDP)	135.1	141.5	131.2	137.7	136.8	134.6	140.1	133.4

Sources: Bank of Finland, ECB, FIN-FSA, Financial Soundness Indicators, and OECD.

Annex I. External Sector Assessment

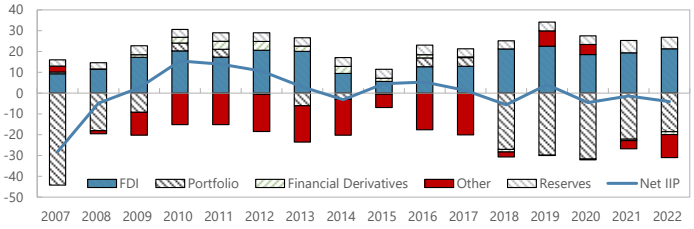
Overall Assessment: *Based on preliminary estimates of the current account, the external position of Finland in 2022 is weaker than the level implied by fundamentals and desirable policies.*

Potential Policy Responses: *Fiscal consolidation, both in the short-term and over the medium-term, will help support the strengthening of the external balance. Finland's cost competitiveness has improved over the past decade, thanks also to moderate growth in labor costs. However, coordination in wage bargaining and higher wage flexibility at the firm level should be pursued to enhance the economy's ability to adjust to shocks. Further structural reforms should continue to focus on increasing productivity.*

Foreign Assets and Liabilities: Position and Trajectory

Background. The Net International Investment Position (NIIP) improved in 2021 from -4.5 to -1.5 percent of GDP, driven by a decline in net portfolio liabilities. The gross external debt improved from 223 percent of GDP in 2020 to 208 percent in 2021, largely reflecting a decline in long-term liabilities (short-term debt liabilities remains broadly stable as a share of GDP). The NIIP has improved in 2022Q2 to about 1.5 percent of GDP due to an improvement in non-financial sector net liability position.

Finland: Net International Investment Position
(Percent of GDP)



Source: Statistics Finland; and IMF staff estimates.

Assessment. Over the near term, the NIIP will deteriorate due to higher private and public indebtedness, but the NIIP will then stabilize over the medium term. Vulnerabilities for Finland stem from the large cross-border exposures of the financial sector, including liquidity risk related to foreign-financed wholesale funding.

2022 (est., percent GDP):	NIIP: -4.1	Gross Assets: 334	Debt Assets: 49	Gross Liab.: 338	Debt Liab.: 95

Current Account (CA)

Background. Finland's current account balance remained broadly stable in 2021, around 0.7 percent of GDP, driven by a slightly higher trade and service balance and primary income balance compared to 2020. In the first half of the year, the current account balance has however deteriorated due to the increase in energy prices, the strength of domestic demand driving imports of goods and especially services, and the decline in exports related to the impact of sanctions. The current account is projected to be negative in the near-term due a less favorable external environment, and then improve to a small deficit over the medium term, supported by a higher external growth and measures aimed at preserving cost competitiveness but countered by adverse demographic and labor productivity trends.

Assessment. Preliminary results from the EBA estimate a cyclically-adjusted CA of -2.3 percent of GDP and a CA norm of 0.7 percent of GDP. Staff estimates the gap for 2022 to be -3 percent (with a range -2.5 and -3.5), of which 0.4 percent are policy gap and -3.4 percent are unidentified residual, reflecting structural factors not accounted for in the model. According to this preliminary result, the external position in 2022 is weaker than the level implied by medium-term fundamentals and desirable policies. The results are subject however to uncertainties and data revisions.

Finland: Model Estimates for 2022
(In percent of GDP)

	CA model	REER model
CA-Estimate	**-2.9**	
Cyclical contributions (from model) (-)	-0.6	
Adjusted CA	**-2.3**	
CA Norm (from model) 1/	**0.7**	
Adjustments to the norm (+)	0.0	
Adjusted CA Norm	**0.7**	
CA Gap	**-3.0**	**-0.5**
o/w Relative policy gap	0.4	
Elasticity	-0.4	
REER Gap (in percent)	**8.3**	**1.5**

1/ Cyclically adjusted, including multilateral consistency adjustments.

Real Effective Exchange Rate (REER)

Background. After an average depreciation of 0.6 percent over 2016-2021—reflecting moderate wage growth relative to trading partners—the ULC-based REER depreciated on average by 1.9 percent in January-September 2022. The ULC-based REER is projected to continue a slight depreciation trend, barring an intensification of wage pressures. The CPI-based real exchange rate remained broadly constant over 2016-2021 and depreciated on average by 3.6 percent in January-September 2022, reflecting the depreciation of NEER.

Assessment. The staff CA gap implies a REER gap of 8.3 percent (after applying an estimated elasticity of 0.36) and a range of 5.6–11. According to the estimated REER-gap index model, the REER gap is 1.5 percent.

Capital and Financial Accounts: Flows and Policy Measures

Background. The financial account deteriorated slightly to -0.8 percent of GDP in 2021 on the back of higher net other investment liabilities and foreign direct investment outflows outpacing inflows, while net portfolio inflows improved, reflecting higher net flows into fixed income. The financial account deteriorated further during the first three quarters of 2022 compared to 2021, again on the back of higher net other investment liabilities but also higher net portfolio liabilities. The level of gross external debt was 208 percent of GDP in 2021, reflecting the reliance of the relatively large financial sector on foreign wholesale funding.

Assessment. Finland has a fully open capital account. It remains exposed to financial market risks against the background of interconnected regional financial markets.

FX Intervention and Reserves Level

Background. The euro has the status of global reserve currency.

Assessment. The currency is freely floating.

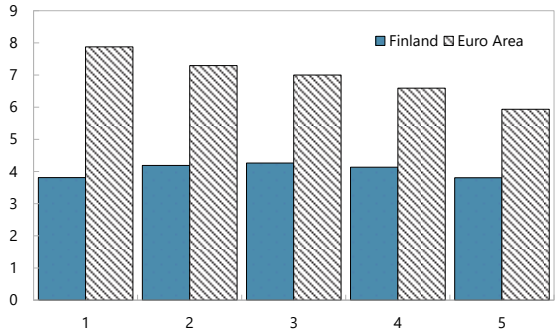
Annex II. Macroeconomic Implications of Higher Energy Prices

Higher energy prices have eroded households' real incomes. While Finland's companies, on average, appear to have room to absorb higher energy prices in profits, the burden is higher and capacity to absorb is lower for energy-intensive export-oriented sectors.

Households

1. Rising energy costs are weighing on households' real incomes. The estimated burden of higher energy prices ranges from 3.8 to 4.2 percent of household consumption during 2022–23, slightly peaking for the middle-income households (Cost of Living Crisis, Forthcoming EUR Paper).[1] Relative to the euro area average, the burden on Finnish household is smaller, reflecting the energy mix. Fully compensating vulnerable household—the lowest quintile with negative saving rates and low net wealth—would cost around ½ percent of GDP cumulatively during 2022–23. Expanding the coverage to include the 2nd quintile would double the fiscal cost to around 1 percent of GDP.

Total Burden: by Household Income Quintiles
(Percent of Household Consumption)



Source: IMF staff estimates.

Firms

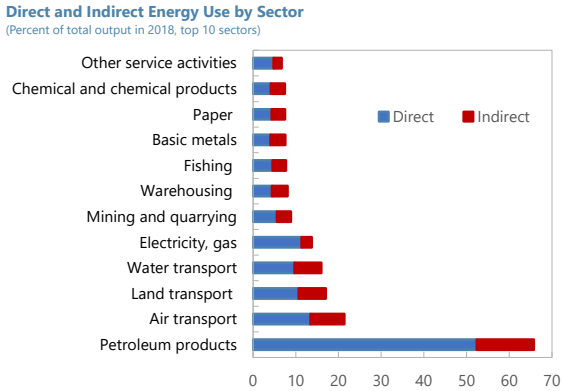
2. A sectoral analysis of the impact of high energy prices indicates a moderate decline in profitability. The analysis is conducted in two steps: i) first, an input-output table is used to quantify the energy intensity of each sector; and then ii) to quantify impact on profitability, the increase in energy prices is multiplied by the share of energy intensity of the sector and the share of material costs in operating income. The resulting figure provides a very rough and stylized estimate of the potential decline in the profitability of the sector, assuming all else equal, based on the 2021 sectoral financial statements data. On average, an increase in energy costs of about 45 percent (calculated as the latest year-on-year increase in coal, gas, crude oil and electricity prices weighted by the share of each source of energy in total energy consumption) could translate into a decline in profit margins on average of 1 percentage point.

[1] The paper models the impact of various types of energy inputs the affect household consumption, both directly and indirectly via input/output tables. The pricing assumptions used include for 2022 and 2023 respectively: natural gas prices are 63.8 percent and 89.5 percent higher compared to 2021Q1; electricity prices are 83.7 percent and 141 percent higher; liquid fuels are 46.2 and 39.3 percent higher; coal prices are 29.6 and 25.3 percent higher.

3. In some export-oriented sectors (metal, paper, chemicals), however, given the higher energy intensity, the decline in profitability is projected to be larger. The capacity to pass on these costs increase to prices could be more limited to maintain cost competitiveness.

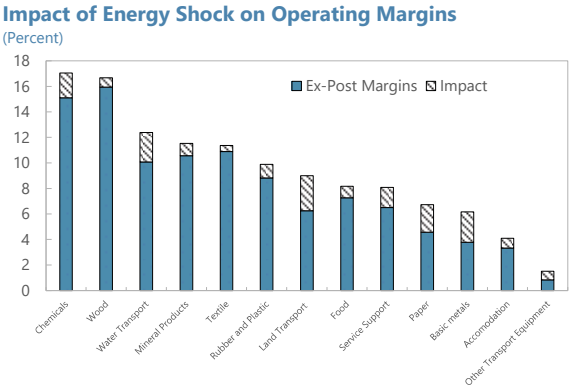
Impact of Higher Energy Prices on Finnish Sectors

Energy and transport industry are more intensive energy consumers



Sources: OECD and IMF Staff calculations

The operating margins are high, but for some sectors the impact of higher energy prices is significant



Sources: Statistics Finland and IMF staff calculations

Annex III. Risk Assessment Matrix[1]

Source of Risks and Relative Likelihood (High, medium, or low)	Impact if Risk is Realized (High, medium, or low)	Policy Response
High **Abrupt global slowdown or recession.** Global and idiosyncratic risk factors combine to cause a synchronized sharp growth slowdown, with outright recessions in some countries, spillovers through trade and financial channels, and downward pressures on some commodity prices. **Europe:** The fallout from the war in Ukraine is exacerbated by a gas shutoff by Russia, resulting in acute gas shortages and further supply disruptions, which triggers an EU recession.	**High** The shock negatively affects net exports through slowdown in trading partners' growth, hence weakening external demand and deterring investment. Further weakening of confidence weighs on consumption and investment.	Allow automatic stabilizers to operate. Fiscal policy space should be used to support the vulnerable but offset by other measures to avoid stimulating the economy if wage and inflation pressures persist. A severe recession may warrant additional support, but only if the rise in slack is more sizeable than anticipated and wage pressures are absent.
High **Intensifying spillovers from Russia's war in Ukraine.** Further sanctions resulting from the war and related uncertainties exacerbate trade and financial disruptions and commodity price volatility, with Europe, LICs, and commodity-importing EMs among the worst hit.	**Medium** Finland's exports to Russia have collapsed at the outset of the war, but further sanctions may affect firms' expectations regarding their future trade relations and operations in Russia, triggering restructurings and defaults (possibly with a strong regional impact in Finland).	Step up the envisaged structural reforms—including by enhancing wage flexibility—to facilitate reallocation from sectors exposed to shocks and regional labor mobility.
Medium **De-anchoring of inflation expectations and stagflation.** Supply shocks to food and energy prices sharply increase headline inflation and pass through to core inflation, de-anchoring inflation expectations and triggering a wage-price spiral in tight labor markets. Central banks tighten monetary policy more than envisaged leading to weaker global demand, currency depreciations in EMDEs, and sovereign defaults. Together, this could lead to the onset of stagflation.	**High** De-anchoring of inflation expectations could start a wage-price spiral, requiring more aggressive monetary tightening, ultimately reducing domestic demand and slowing growth. Higher borrowing costs for corporates and household could trigger a correction in asset prices and liquidity shortfalls.	Coordinate fiscal and monetary policy actions, and enhance wage bargaining coordination and flexibility, to prevent risks of a wage-price spiral. If a wage-price spiral develops, fiscal policy should be more contractionary to reign in demand pressures, while protecting the vulnerable.

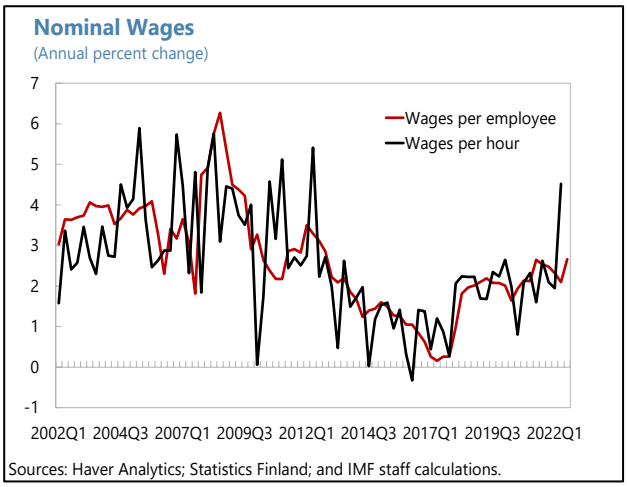
[1] The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path. The relative likelihood is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly. The conjunctural shocks and scenario highlight risks that may materialize over a shorter horizon (between 12 to 18 months) given the current baseline. Structural risks are those that are likely to remain salient over a longer horizon.

Source of Risks and Relative Likelihood (High, medium, or low)	Impact if Risk is Realized (High, medium, or low)	Policy Response
High **Deepening geo-economic fragmentation and geopolitical tensions.** Broadening of conflicts and reduced international cooperation accelerate deglobalization, resulting in a reconfiguration of trade, supply disruptions, technological and payments systems fragmentation, rising input costs, financial instability, a fracturing of international monetary and financial system, and lower potential growth.	**High** Higher input costs, supply disruptions and changed trade patterns generate transition costs and ultimately may result in lower real incomes and lower firm profitability.	In collaboration with partners, continue to support global cooperation and multilateralism. Step up the envisaged structural reforms to enhance flexibility and help sectors cope with shocks to demand and supply patterns.
Medium **Cyberthreats.** Cyberattacks on critical physical or digital infrastructure (including digital currency platforms) trigger financial instability and disrupt economic activities.	**Medium** Economic activity is disrupted, leading to weaker confidence, and capital outflows.	Continue to promote awareness and preparedness campaigns to inform the public. Continue to invest in cyber defense.
Domestic Risks		
Medium **Adverse shock in a neighboring Nordic country,** leading to a correction in the housing market and/or CRE markets, and distress in the financial sector.	**High** Financial sector sees declining asset quality and funding difficulties. Lower demand from trading partners reduces domestic output and employment.	Conduct regular and coordinated Nordic-wide financial stress tests. Improve and centralize cross-authority coordination, preparation, and management of crises. Enhance efforts in improving the resolvability of Finnish banks at the national and international levels including with respect to their compliance with minimum requirements for own funds and eligible liabilities. Reactivate SyRB and introduce a positive rate of CCyB once macroeconomic uncertainties abate.

Annex IV. Wage-Inflation Dynamics and Competitiveness

Given that wage formation has historically been partly backward-looking, there could be risks of wage pressures if social partners no longer 'see through' the adverse energy price shock. Such pressures could then pass through to inflation and weigh on Finland's competitiveness. These risks appear low for now but would be further minimized by changes to the collective bargaining system that would facilitate adjustment to shocks while strengthening coordination.

1. Nominal wage increases in Finland have been modest despite surging inflation and still-tight labor market. Collective agreements in the private sector concluded earlier in 2022 called for moderate annual wage increases of around 2 percent. Later agreements in the municipal and health sectors have not followed but added a premium over private sector wages for the next 5 years, with annual increases of around 3 percent, weakening an informal export-led coordination ("pattern bargaining") in collective bargaining. Actual annual wages growth (defined in terms of employee) was around 3 percent in 2022:Q3; hourly wages rose somewhat higher. But still, wage growth remained well below headline inflation (around 8 percent in 2022:Q3), putting real wage growth into negative territory.

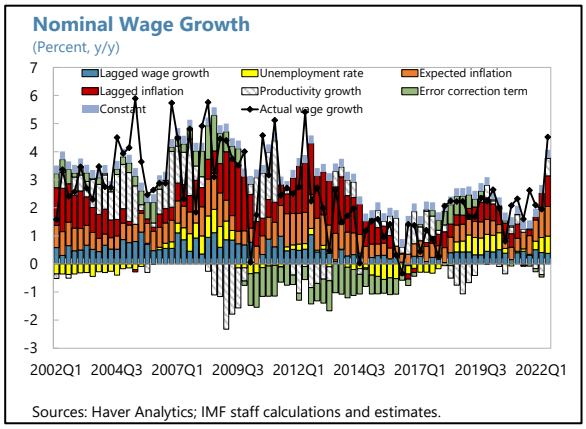


2. But wage pressures will likely arise from demands to compensate the erosion of real incomes, potentially starting a 'wage-price spiral'. Blanchard (1986) defines the wage-price spiral as a mechanism prolonging an adjustment to demand or supply shocks—and in the process sustaining inflation—as workers wish to preserve or increase real wages; firms wish to preserve or increase markups over their costs (wages); and nominal wages and prices take time to adjust. Blanchard (2022) and IMF (2022) focus on higher wage demands (to preserve real wages) constituting a new cost-push shock to firms.

3. A wage Phillips curve framework is deployed to shed light on wage pressures. The quarterly wage Phillips curve is estimated for the period 2000:Q1–2022:Q2: nominal hourly wage growth is regressed on lagged headline inflation (proxy for adaptive expectations), inflation expectations (survey-based) and other determinants such as slack (a gap between unemployment and natural unemployment rates) and hourly productivity growth. Furthermore, an error-correction term captures the extent to which real wages (in levels) deviate from productivity, using an estimated long-run relationship (IMF, 2018). Estimates are consistent with priors. The slope of the Phillips curve (coefficient of the unemployment gap) is negative; inflation—both lagged and expected—and productivity growth correlate positively with wage growth (Annex IV. Table 1). The coefficient of the error-correction term is negative—it puts downward pressures on nominal wage

growth if real wages are above its estimated long-run relationship with productivity, and upward pressures if they are below (Annex IV. Table 2). All estimated coefficients are statistically significant. The model is robust to alternative specifications.

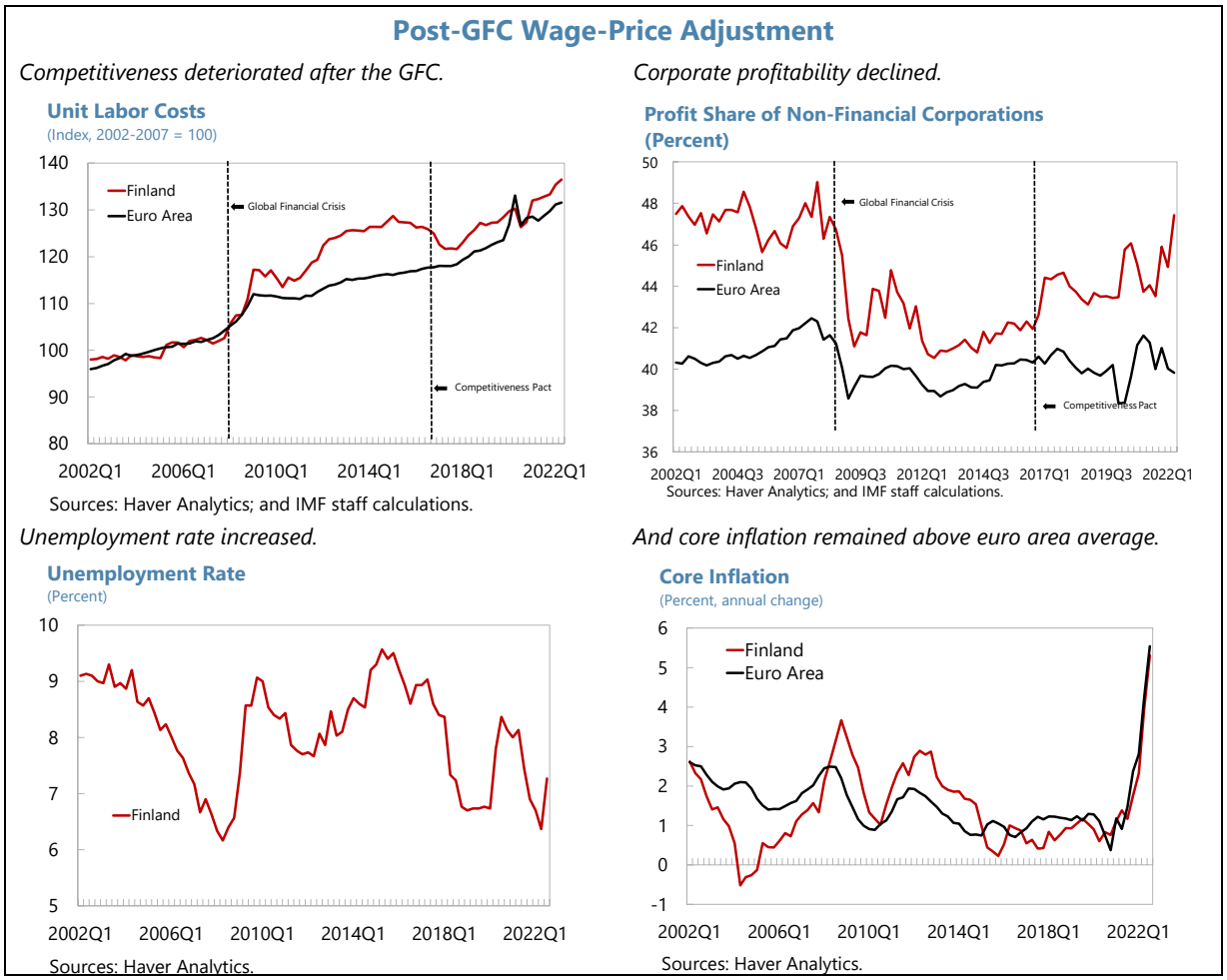
4. Historically, wage-price dynamics appear to have inhibited adjustment to shocks:



- **Wage responses to inflation contributed to wage-productivity misalignment in the aftermath of the global financial crisis (GFC).** Pre-GFC, wage growth was largely driven by strong productivity growth, underpinned by the rise in Finland's high-value-added IT manufacturing. But productivity declined after the crisis, and its growth remained tepid thereafter, reflecting the shrinking of the IT manufacturing. Meanwhile, wages continued growing, largely reflecting the impact of inflation expectations and—notably—lagged inflation. This led to persistent positive deviations of real wages from its estimated long-run relationship with productivity, putting downward pressures on wages but not strong enough to offset the impact of inflation. Competitiveness (measured by relative unit labor costs) deteriorated, corporate profitability declined, and unemployment increased, while inflation stayed higher than in the rest of the euro area.

- **The misalignment disappeared around the time of the 2016 Competitiveness Pact agreement.** Among others, the Pact froze wages, including in the public sector (IMF, 2017). This—together with downward pressures from the rising unemployment and a concurrent acceleration in productivity growth—has brought a realignment of real wages and productivity: the error correction term first disappeared and then for a short period asserted a small positive impact. Relative unit labor cost declined, improving competitiveness. Corporate profitability rose as well—placing Finland above peer countries—and unemployment rate declined.

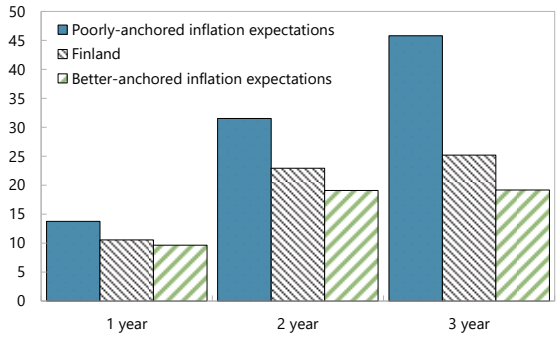
- **Most recently, inflation has strongly underpinned nominal wage dynamics, but real wages and productivity appear broadly aligned.** Lagged inflation and inflation expectations taken together explain as much as half of the nominal wage growth since 2021. Tightness in the labor market and productivity growth have also contributed to wage increases. The error-correction term is mostly irrelevant as the misalignment of real wages with respect to productivity has been small. Corporate profitability has improved, helped by the real wage dynamics and the despite higher energy costs, as firms appear to have been able pass them on to output prices amid strong demand conditions.



5. The risk of a wage-price spiral appears low but nonnegligible given that the historical pattern of a strong response of wages to lagged inflation. With high profitability, firms appear to have room to absorb some wage increases in profits, while the softening of demand conditions will likely reduce their ability to pass on higher wage costs to prices. Estimates on a panel of European countries suggest that (conditional on demand) the wage to inflation passthrough tends to be lower when profitability is high (Boranova and others, 2021); at this juncture reducing the expected passthrough for Finland. Still, given that wage formation has historically been partly backward-looking, there is a risk of higher wage pressures (than in the baseline). The current tight labor market, strong profitability, and high inflation are reminiscent of the pre-GFC conditions. At that time, the ensuing strong wage increases (relative to productivity) continued even as the economy entered a period of subdued growth. This points to the importance of anticipating the impact of the adverse war-related shocks on economic conditions in wage negotiations, while ensuring a fair burden-sharing between firms and workers. Guiding inflation expectations is also important given their importance in the wage formation process and for the passthrough (it tends to be smaller when expectations are better anchored, which for now appears to be the case given that they are receding from the peaks in early 2022—¶12 in the main text).

Wage passthrough to core inflation is smaller when inflation expectations are better anchored...

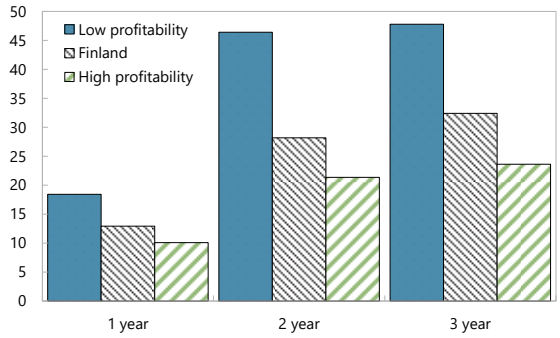
Wage Passthrough to Core Inflation: Anchoring
(Percent)



Sources: Boranova and others (2021); IMF staff estimates.

...and when corporate profitability is high.

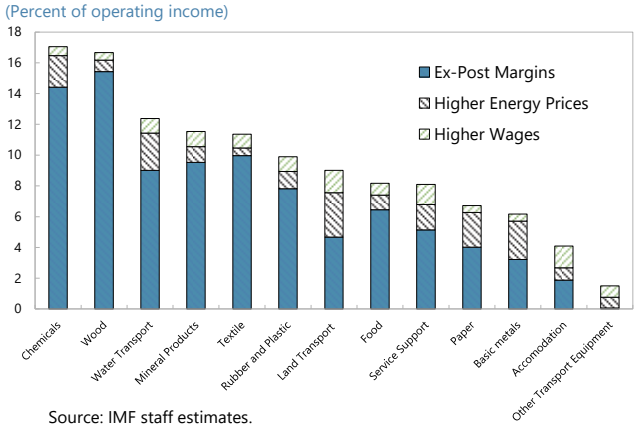
Wage Passthrough to Core Inflation: Profitability
(Percent)



Sources: Boranova and others (2021); IMF staff estimates.

6. Wage increases may have a stronger sectoral impact. The capacity to accommodate higher wage costs is heterogenous across sectors and firms. A uniform wage increases to catch up with inflation (raising wages by about 5 percent) would—together with the impact of higher energy prices—nearly wipe out profits in some sectors. Firms' responses would vary, depending on competitors' pricing behavior and the level of demand (Amity and others, 2022). Those with pricing power—typically associated with higher profit margins—may be able to increase prices, even though it will likely be more difficult as demand conditions soften. Those with less pricing power will likely see a bigger impact on their usually thinner profit margins. This points to the importance of maintaining wage discipline and ensuring sufficient flexibility to minimize adjustment costs across sectors.

Impact on Profit Margins of Higher Energy Prices and Wages
(Percent of operating income)

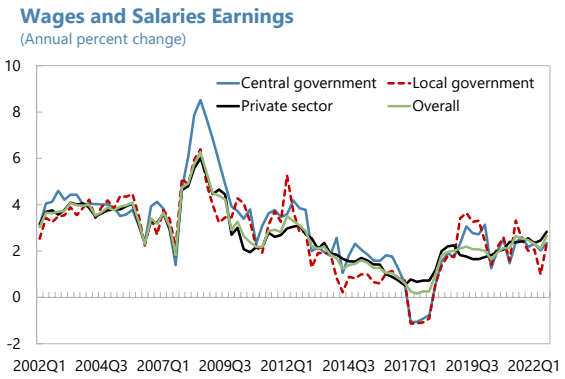


Source: IMF staff estimates.

7. Wage pressures in the public sector could also spill over to the private sector. Though wage in the public sector—for now—has grown at a similar rate relative to the private sector, unit labor costs in the public sector—reflecting its lower productivity—have outpaced those in the private sector since pre-GFC. Agreements in the municipal and health sectors have added a premium over private sector wage increases (the "general line") for the next 5 years, with additional annual increases of around 3 percent. Furthermore, due to a wage harmonization program in the well-being service counties, wage growth for employees would be on average 1½ percentage points higher during 2023–26. In addition to the impact on fiscal position, Fernàndez-de-Córdoba, Pérez and Torres (2009) show in the theoretical model with public sector unions that an increase in public sector wages (even if financed by taxes) can increase private wages and reduce private (and total) employment. Afonso and Gomes (2014) similarly suggests that higher public sector wages and employment can have a positive impact on private wages by increasing the value or probability of

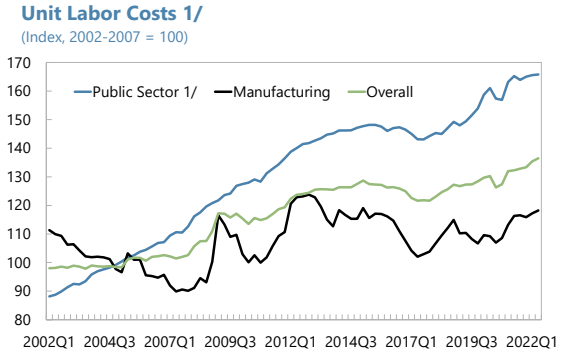
being employed in the public sector. Such pressures may be particularly relevant for local labor markets in the context of the unification of wages in the well-being service counties.

Wage growth in the public sector, for now, is broadly similar as in the private sector…



Sources: Statisitcs Finland; and IMF staff calculations.

…but public sector unit labor costs (given its lower productivity) are at a higher level.



Sources: Haver Analytics; and IMF staff calculations.
1/ Public administration, defense, education, heath and social work.

8. Strengthened coordination and more flexibility in wage bargaining would help reduce the risk of a wage-price spiral, safeguard competitiveness, and facilitate adjustment. Wage bargaining in Finland—centralized in the past—has evolved into a more flexible informal system of pattern bargaining. Even though the 2017 and 2019 rounds were relatively successful in aligning wages to those in export sectors, the level of wage coordination has been lower and wages have remained more compressed than in peer countries (IMF, 2022). A system combining coordinated high-level agreements with more flexibility in firm-level contracts would likely serve Finland better. High-level agreements (setting broad framework conditions) would help internalize broad macro-economic conditions in wage negotiations. More flexibility in firm-level contracts would facilitate adjustment in the conjuncture as energy shocks entail an asymmetric impact across firms and sectors. More broadly, such flexibility could enhance adjustment during downturns, particularly when those are associated with highly heterogenous firm outcomes, thereby enhancing the overall resilience of the economy to shocks.

Annex IV. Table 1. Finland: Short-Run Regression (Wage Philips Curve)

Variables	**Baseline** Nominal wage growth	**Model 1** Nominal wage growth	**Model 2** Nominal wage growth	**Model 3** Nominal wage growth	**Model 4** Nominal wage growth	**Model 5** Nominal wage growth
Lagged nominal wage growth	0.205**	0.238***	0.254***	0.338***	0.227**	0.193**
	(0.089)	(0.089)	(0.091)	(0.093)	(0.092)	(0.091)
Unemployment rate	-0.392**	-0.530***	-0.271*	-0.577***		-0.400**
	(0.157)	(0.141)	(0.154)	(0.168)		(0.158)
Inflation expectations	0.416*		0.735***	0.263	0.604**	0.535*
	(0.220)		(0.215)	(0.242)	(0.229)	(0.276)
Lagged inflation	0.502***	0.583***		0.309**	0.430***	0.437***
	(0.130)	(0.124)		(0.136)	(0.132)	(0.159)
Productivity growth	0.409***	0.422***	0.291***	0.325***	0.366***	0.420***
	(0.064)	(0.065)	(0.059)	(0.069)	(0.065)	(0.066)
Error correction term	-0.221***	-0.206***	-0.163***		-0.241***	-0.230***
	(0.050)	(0.051)	(0.051)		(0.055)	(0.052)
Unemployment gap					-0.143	
					-0.23	
Change in unemployment rate						0.139
						(0.194)
Constant	0.32	0.750***	0.546	0.536	0.142	0.271
	(0.356)	(0.279)	(0.366)	(0.393)	(0.389)	(0.364)
Observations	82	82	85	82	82	82
R-squared	0.572	0.552	0.485	0.462	0.539	0.575

Source: IMF staff estimates.

Note: Standard errors in parentheses. ***p<0.01, **p<0.05, *p<0.1

Annex IV. Table 2. Finland: Long-Run Regression

Variables	Real wage level (log)
Productivity level (log)	1.291***
	(0.056)
Constant	-1.339***
	(0.259)
Observations	90
R-squared	0.857

Source: IMF staff estimates.

Note: Standard errors in parentheses. ***p<0.01, **p<0.05, *p<0.1

Annex V. Model-Based Analysis of an Adverse Scenario

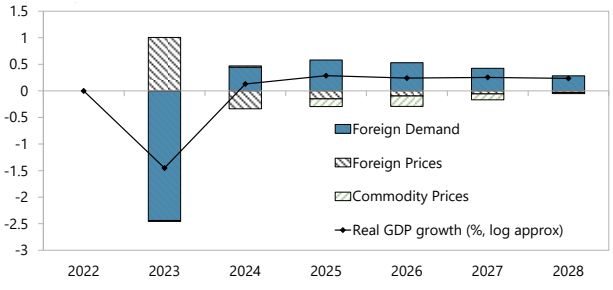
1. Staff used a semi-structural forecasting model to produce simulations of an adverse scenario. The model is based on a new workhorse semi-structural forecasting model developed by the IMF's Institute for Capacity Development (ICD).[1] The model features a breakdown of aggregate demand with numerous transmission channels through which monetary conditions, fiscal policy instruments and external environment affect the domestic economy in the near as well as the long term. The model provides decomposition of variables into long term equilibria (trends) and deviations from them (gaps) thus facilitating insights into main drivers of business cycle movements and drivers of changes in the longer-term trends. The model is calibrated to Finland data while carefully checking its dynamic properties and forecasting performance. The Kalman smoother technique is used to estimate unobserved trends, gaps and their structural drivers, thus offering more comprehensive picture of the state of the economy.

2. The charts below illustrate how—relative to the baseline—macroeconomic shocks contribute to the decline in output and increase in inflation under the adverse scenario. The adverse scenario assumes that economic partners' GDP growth falls by 2.5 percent and oil prices increase by 50 percent compared to baseline. Under such assumptions, inflation is initially driven by high commodity and high import prices, but the adverse shock to foreign demand—driving down growth—along with declining commodity prices, is deflationary in the medium term.

Foreign demand contraction leads to a sharp fall in output….

Real GDP Growth

(Percent)

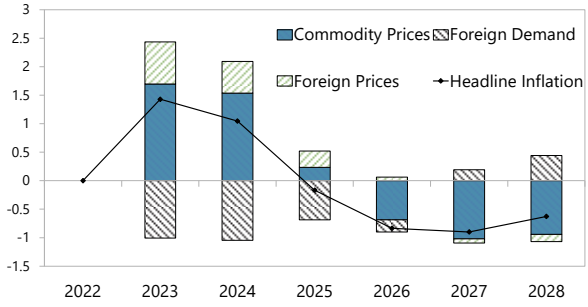


Source: IMF staff calculations.

…while surging commodity prices lead to more persistent inflation.

Headline Inflation

(Percent)



Source: IMF staff calculations.

[1] Berg, A., Hul, Y., Karam, P., Remo, A., Rodriguez Guzman, D. (forthcoming), "A New Workhorse Model for Macroeconomic Forecasting and Policy Analysis in Emerging Market and Developing Economies" IMF Working Paper.

Annex VI. Debt Sustainability Analysis

Annex VI. Figure 1. Finland: Risk of Sovereign Stress

Horizon	Mechanical signal	Final assessment	Comments
Overall	...	Low	Staff's assessment of the overall risk of sovereign stress is low, due to low risk of refinancing, relatively low debt, diversified investors' basis.
Near term 1/			
Medium term	Low	Low	Staff's assessment of the medium-term risk of sovereign stress is low, which is line with the low risk of refinancing. The mechanical medium-term signal for the fan chart indicates a moderate risk, largely driven by an increase in the risk of debt non-stabilizing.
Fanchart	Moderate	...	
GFN	Low	...	
Stress test	...	...	
Long term	...	Moderate	Long-term risks are moderate as aging-related expenditures on health and social security feed into debt dynamics.
Sustainability assessment 2/	Not required for surveillance countries		
Debt stabilization in the baseline			No

DSA Summary Assessment

Commentary: Finland is at a low overall risk of sovereign stress and debt is sustainable. However, debt is expected to rise for several years and the medium-term risk of debt non-stabilizing has increased compared to the last year due to new spending pressures. The liquidity risks as analyzed by the GFN Financeability Module are however low due to highly diversified investors' base. Over the longer run, Finland is affected by population aging wich require a wide-ranging set of fiscal and structural reforms.

Source: IMF staff calculations.

Note: The risk of sovereign stress is a broader concept than debt sustainability. Unsustainable debt can only be resolved through exceptional measures (such as debt restructuring). In contrast, a sovereign can face stress without its debt necessarily being unsustainable, and there can be various measures—that do not involve a debt restructuring—to remedy such a situation, such as fiscal adjustment and new financing.

1/ The near-term assessment is not applicable in cases where there is a disbursing IMF arrangement. In surveillance-only cases or in cases with precautionary IMF arrangements, the near-term assessment is performed but not published.

2/ A debt sustainability assessment is optional for surveillance-only cases and mandatory in cases where there is a Fund arrangement. The mechanical signal of the debt sustainability assessment is deleted before publication. In surveillance-only cases or cases with IMF arrangements with normal access, the qualifier indicating probability of sustainable debt ("with high probability" or "but not with high probability") is deleted before publication.

Annex VI. Figure 2. Finland: Debt Coverage and Disclosures

						Comments
1. Debt coverage in the DSA: 1/	CG	GG	NFPS	CPS	Other	
1a. If central government, are non-central government entities insignificant?					n.a.	

2. Subsectors included in the chosen coverage in (1) above:

	Subsectors captured in the baseline	Inclusion	Comments
1	Budgetary central government	Yes	
2	Extra budgetary funds (EBFs)	No	Not applicable
3	Social security funds (SSFs)	Yes	
4	State governments	Yes	
5	Local governments	Yes	
6	Public nonfinancial corporations	Yes	
7	Central bank	Yes	
8	Other public financial corporations	Yes	

(CPS / NFPS / GG: expected / CG)

3. Instrument coverage:	Currency & deposits	Loans	Debt securities	Oth acct. payable 2/	IPSGSs 3/

4. Accounting principles:	Basis of recording		Valuation of debt stock			
	Non-cash basis 4/	Cash basis	Nominal value 5/	Face value 6/	Market value 7/	

5. Debt consolidation across sectors:	Consolidated	Non-consolidated	

Color code: chosen coverage | Missing from recommended coverage | Not applicable

Reporting on Intra-Government Debt Holdings

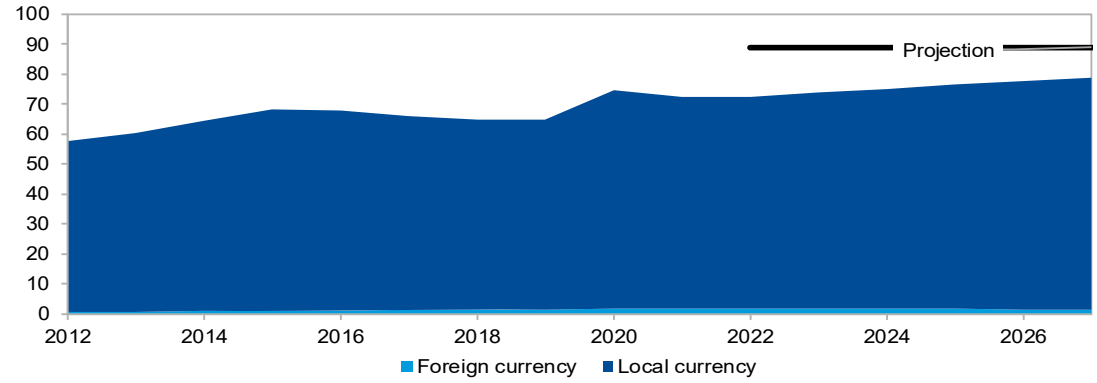
	Issuer \ Holder	Budget. central govt	Extra-budget. funds (EBFs)	Social security funds (SSFs)	State govt.	Local govt.	Nonfin. pub. corp.	Central bank	Oth. pub. fin corp	Total
1	Budget. central govt									0
2	Extra-budget. funds									0
3	Social security funds									0
4	State govt.									0
5	Local govt.									0
6	Nonfin pub. corp.									0
7	Central bank									0
8	Oth. pub. fin. corp									0
	Total	0	0	0	0	0	0	0	0	0

(CPS / NFPS / GG: expected / CG)

1/ CG=Central government; GG=General government; NFPS=Nonfinancial public sector; PS=Public sector.
2/ Stock of arrears could be used as a proxy in the absence of accrual data on other accounts payable.
3/ Insurance, Pension, and Standardized Guarantee Schemes, typically including government employee pension liabilities.
4/ Includes accrual recording, commitment basis, due for payment, etc.
5/ Nominal value at any moment in time is the amount the debtor owes to the creditor. It reflects the value of the instrument at creation and subsequent economic flows (such as transactions, exchange rate, and other valuation changes other than market price changes, and other volume changes).
6/ The face value of a debt instrument is the undiscounted amount of principal to be paid at (or before) maturity.
7/ Market value of debt instruments is the value as if they were acquired in market transactions on the balance sheet reporting date (reference date). Only traded debt securities have observed market values.

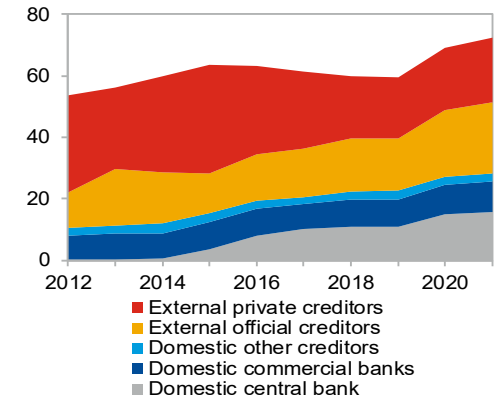
Annex VI. Figure 3. Finland: Public Debt Structure Indicators

Debt by Currency (Percent of GDP)



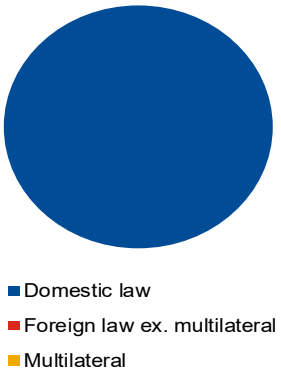
Note: The perimeter shown is general government.

Public Debt by Holder (Percent of GDP)



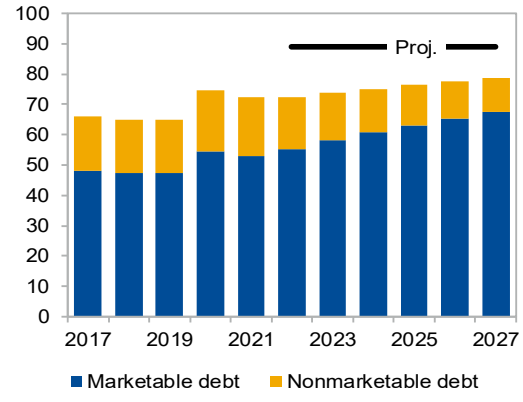
Note: The perimeter shown is general government.

Public Debt by Governing Law, 2021 (Percent)



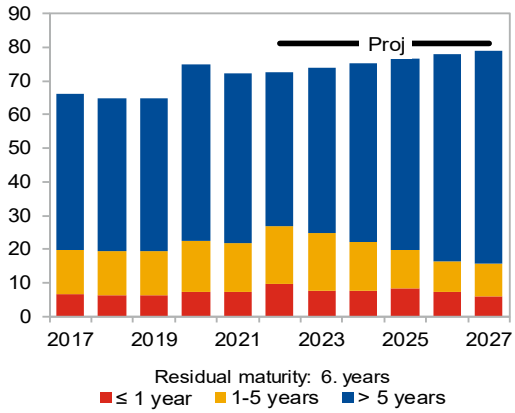
Note: The perimeter shown is general government.

Debt by Instruments



Note: The perimeter shown is general government.

Public Debt by Maturity (Percent of GDP)



Note: The perimeter shown is general government.

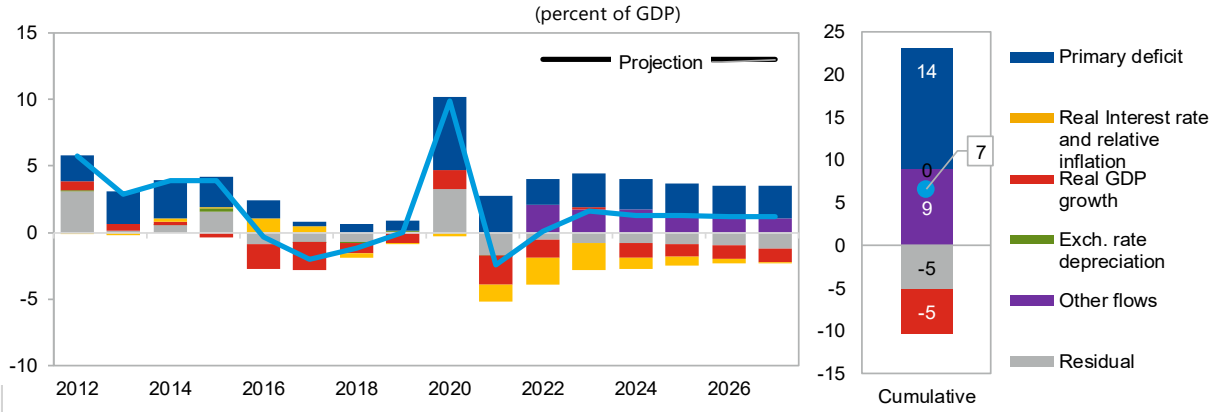
Commentary:

Annex VI. Figure 4. Finland: Baseline Scenario

(percent of GDP unless indicated otherwise)

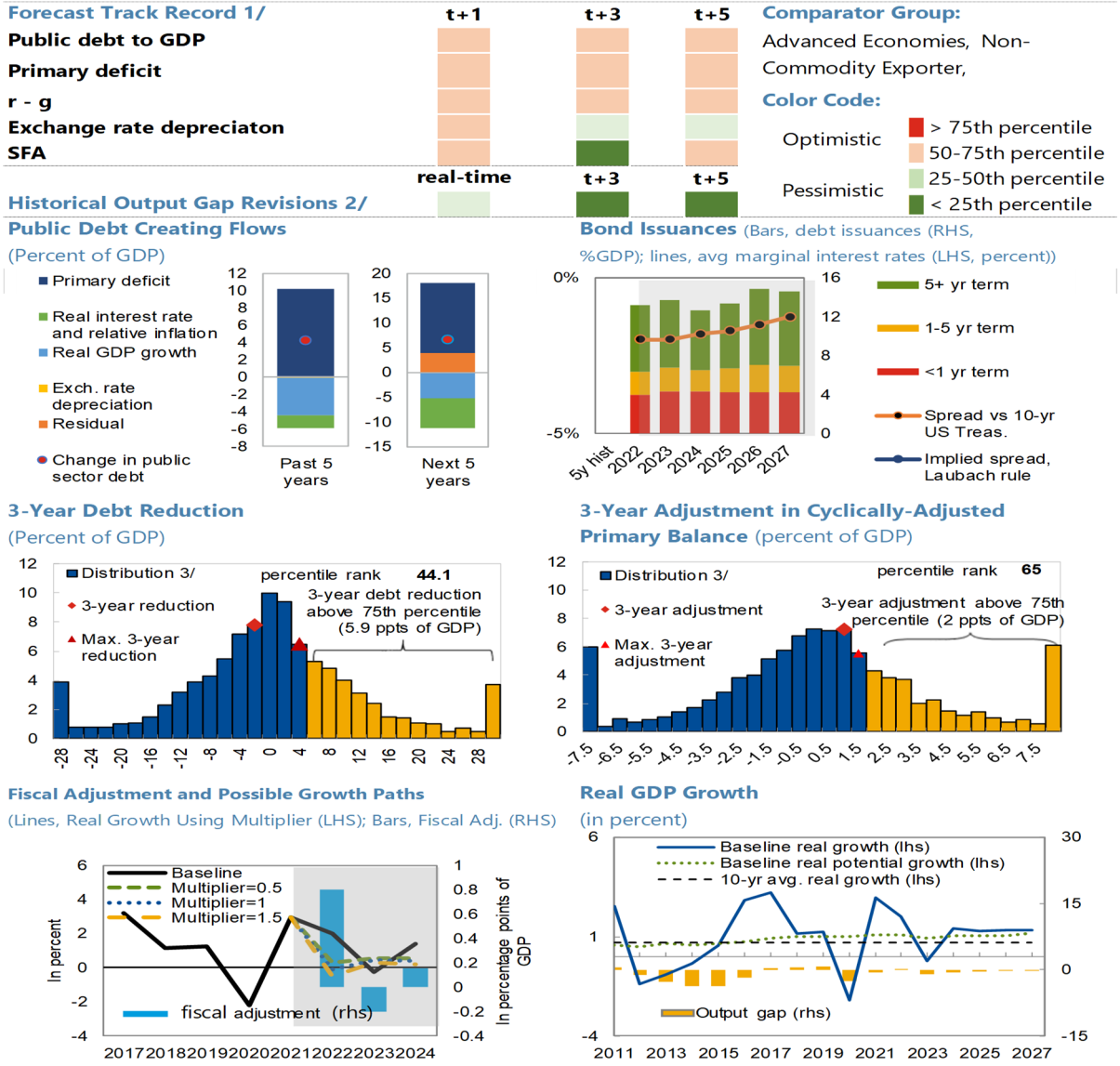
	Actual	Medium-term projection						Extended projection			
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Public debt	72.3	72.4	74.0	75.3	76.5	77.8	79.0	n.a.	n.a.	n.a.	n.a.
Change in public debt	-2.4	0.1	1.6	1.3	1.3	1.2	1.2	n.a.	n.a.	n.a.	n.a.
Contribution of identified flows	-0.7	0.6	2.3	2.1	2.1	2.2	2.4	n.a.	n.a.	n.a.	n.a.
Primary deficit	2.8	2.0	2.5	2.3	2.5	2.4	2.5	n.a.	n.a.	n.a.	n.a.
Noninterest revenues	52.2	51.9	51.8	51.3	51.2	51.0	50.8	n.a.	n.a.	n.a.	n.a.
Noninterest expenditures	55.0	53.8	54.3	53.6	53.6	53.4	53.3	n.a.	n.a.	n.a.	n.a.
Automatic debt dynamics	-3.5	-3.4	-1.9	-1.9	-1.6	-1.3	-1.1	n.a.	n.a.	n.a.	n.a.
Real interest rate and relative inflatior	-1.3	-2.0	-2.1	-0.9	-0.6	-0.3	-0.1	n.a.	n.a.	n.a.	n.a.
Real interest rate	-1.3	-2.0	-2.1	-0.9	-0.6	-0.3	-0.1	n.a.	n.a.	n.a.	n.a.
Relative inflation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.a.	n.a.	n.a.	n.a.
Real growth rate	-2.2	-1.4	0.2	-1.0	-0.9	-1.0	-1.0	n.a.	n.a.	n.a.	n.a.
Real exchange rate	0.0	...	...	...	...	...	...	...	...	...	...
Other identified flows	0.0	2.1	1.7	1.7	1.2	1.1	1.1	n.a.	n.a.	n.a.	n.a.
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.a.	n.a.	n.a.	n.a.
Other transactions	0.0	2.1	1.7	1.7	1.2	1.1	1.1	n.a.	n.a.	n.a.	n.a.
Contribution of residual	-1.7	-0.5	-0.8	-0.8	-0.9	-1.0	-1.2	n.a.	n.a.	n.a.	n.a.
Gross financing needs	12.5	11.1	11.9	10.9	12.1	13.7	13.5	n.a.	n.a.	n.a.	n.a.
of which: debt service	10.3	9.8	10.2	9.4	10.5	12.3	12.2	n.a.	n.a.	n.a.	n.a.
Local currency	n.a.	9.8	10.2	9.4	10.5	12.3	12.2	n.a.	n.a.	n.a.	n.a.
Foreign currency	n.a.	0.0	0.0	0.0	0.0	0.0	0.0	n.a.	n.a.	n.a.	n.a.
Memo:											
Real GDP growth (percent)	3.0	2.0	-0.2	1.4	1.3	1.3	1.3	n.a.	n.a.	n.a.	n.a.
Inflation (GDP deflator; percent)	2.5	3.9	4.1	2.3	2.1	1.9	1.8	n.a.	n.a.	n.a.	n.a.
Nominal GDP growth (percent)	5.6	5.9	3.9	3.8	3.4	3.2	3.2	n.a.	n.a.	n.a.	n.a.
Effective interest rate (percent)	0.7	0.9	1.1	1.1	1.3	1.4	1.7	n.a.	n.a.	n.a.	n.a.

Contribution to Change in Public Debt



Staff commentary: Public debt will rise but then stablize over the medium-term, reflecting expectations of a narrowing of primary deficits.

Annex VI. Figure 5. Finland: Realism of Baseline Scenario



Commentary: Realism analysis does not point to major concerns as the projected fiscal adjustment and debt reduction are well within norms.

Source : IMF staff calculations.

1/ Projections made in the October and April WEO vintage.

2/ Data cover annual obervations from 1990 to 2019 for MAC advanced and emerging economies. Percent of sample on vertical axis.

3/ Starting point reflects the team's assessment of the initial overvaluation from EBA (or EBA-Lite).

4/ The Laubach (2009) rule is a linear rule assuming bond spreads increase by about 4 bps in response to a 1 ppt increase in the projected debt-to-GDP ratio.

5/ Calculated as the percentile rank of the country's output gap revisions (defined as the difference between real time/period ahead estimates and final estimates in the latest October WEO) in the total distribution of revisions across the data sample.

Annex VI. Figure 6. Finland: Medium-Term Risk Analysis

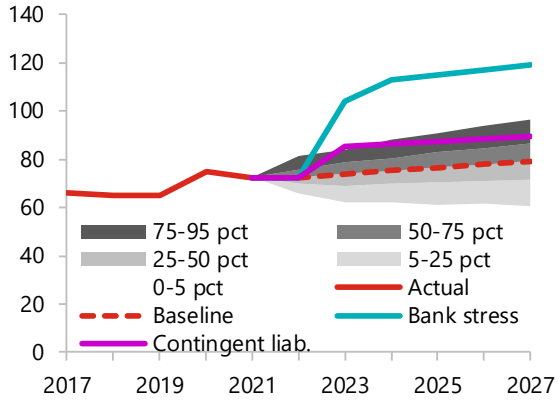
Debt Fanchart and GFN Financeability Indexes

(Percent of GDP, unless otherwise indicated)

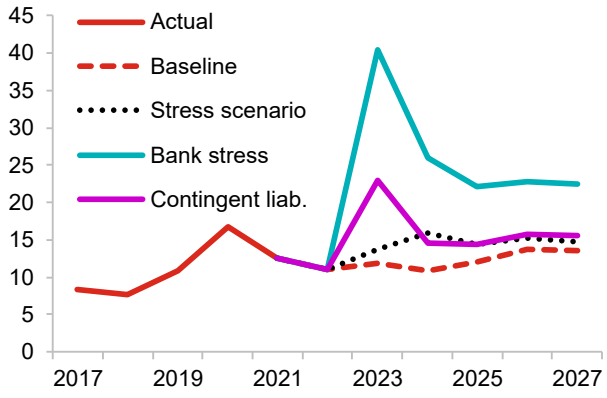
Module	Indicator	Value	Risk index	Risk signal	Adv. Econ., Non-Com. Exp, Program (0 25 50 75 100)
Debt fanchart module	Fanchart width	35.8	0.5	...	
	Probability of debt not stabilizing (pct)	99.6	0.8	...	
	Terminal debt level x institutions index	7.2	0.2	...	
	Debt fanchart index	**...**	**1.5**	**Moderate**	
GFN financeability module	Average GFN in baseline	12.2	4.2	...	
	Bank claims on government (pct bank assets)	2.9	0.9	...	
	Chg. in claims on govt. in stress (pct bank assets)	0.7	0.2	...	
	GFN financeability index	**...**	**5.3**	**Low**	

Legend: Interquartile range; Finland

Final Fanchart (percent of GDP)



Gross Financing Needs (percent of GDP)

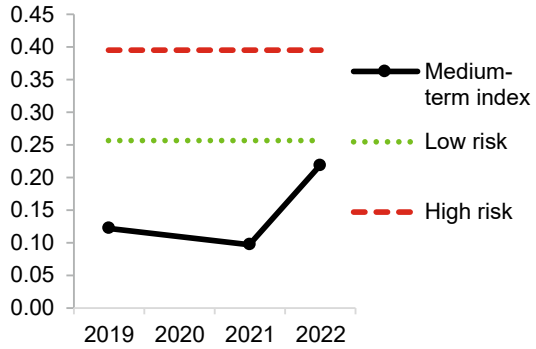


Triggered stress tests (stress tests not activated in gray)

Banking crisis | Commodity prices | Exchange rate | Contingent liab. | Natural disaster

Medium-Term Index

(index number)



Medium-Term Risk Analysis

	Low risk threshold	High risk threhsold	Weight in MTI	Normalized level
Debt fanchart index	1.1	2.1	0.5	0.3
GFN finaceability index	7.6	17.9	0.5	0.1
Medium-term index (MTI)	0.3	0.4	...	0.2, Low

Prob. of missed crisis, 2022-2027 (if stress not predicted): 9.1 pct.

Prob. of false alarm, 2022-2027 (if stress predicted): 48.9 pct.

Commentary: Of the two medium-term tools, the Debt Fanchart Module is pointing to a moderate level of risk given a higher probability of debt non-stabilizing compared to last year, while the GFN Financeability Module suggests low level of risk. The contingent liability is calculated on the stock of bank claims on local governments and 25 percent of the stock of guarantees.

Annex VII. Buffer-Stock Model

A 'buffer stock' model calibrated to Finland recommends a gradual fiscal consolidation over the medium term to put debt on a declining trajectory by the end of the forecast horizon.

1. The 'buffer stock' model (Fournier, 2019) is used to derive an optimal path for structural primary deficits. A forward-looking benevolent government in the model aims to strike a balance between the objectives of economic stabilization and debt sustainability. To this end, it sets the fiscal policy path to smooth the cycle given the initial level of public debt, the cyclical position of the economy, and the distribution of future shocks that may hit the economy. In the model, fiscal policy affects output (via the fiscal multiplier); shocks to output affect the primary balance (via automatic stabilizers); recessions can reduce potential output (via hysteresis effects on the level of physical and human capital); and the stabilizing role of fiscal policy is constrained by implementation lags and high debt (as the interest rate is an increasing function of debt and, at high debt levels, the government faces a stochastic risk of losing market access). The model is solved using global methods to account for non-linearities associated with the debt limit. The model solution also allows assessing the role of initial conditions.

2. The preference and debt parameters are as calibrated in earlier studies. Crucially, this includes debt limit and debt intolerance parameters. The debt limit of 150 percent is calibrated such that the probability of losing market access is 50 percent at that level, which is when historical evidence suggests economies start to lose market access—this would reasonably apply to Finland as well. A key calibration choice is to keep "*r-g*" forward-looking rather than backward-looking. This presents a more reasonable assessment of debt sustainability when interest rates are projected to increase going forward. A long-run nominal interest on government debt is set at 4 percent (estimate for 2040 from the Bank of Finland) and a long-run inflation at 2 percent to derive the real interest rate on government borrowing. Potential growth is set at 0.8 percent—this reflects the impact of adverse demographics on long-term growth. Parameters related to fiscal multipliers, automatic stabilizers, and the persistence and size of shocks are calibrated based on Finland's historical data and existing studies (see Fournier (2019) for details).

3. The model assesses the optimal fiscal path beginning in 2023. For this, the level of government debt and output gap in 2022 are taken as initial conditions and the model is simulated forward. In the baseline, the starting output gap is around 0.2 percent in 2022 (consistent with the baseline projections). Given the uncertainty of output gap estimates in the conjuncture, two alternative starting output gaps are used: an "adverse" and a "favorable" scenario with a gap of -½ and ½ percent respectively. Additional robustness tests cover: (a) lower multiplier (m_1 = 0.5); (b) higher debt intolerance (d_1 = 6); (c) higher potential growth (g = 1¼ percent).

Annex VII. Table 1. Finland: Model Calibration

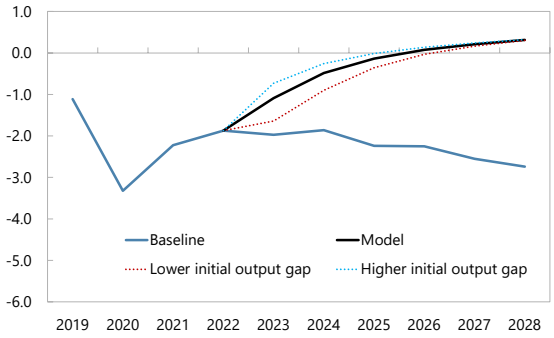
Welfare function	
Discount factor β	0.99
Risk aversion σ	2
Labor elasticity η	1/0.3
Weight of labor ξ	1
Fiscal parameters	
Fiscal multiplier when the gap is closed m_1	0.83
Fiscal multiplier sensitivity to shocks m_2	3
Automatic stabilizers (primary balance semi-elasticity to the gap) a	0.55
Adjustment cost χ	3
Interest rate and debt parameters	
Real effective interest rate (steady state)	2%
Effect of debt level on the risk premium α	1.5%
Effect of debt change on the risk premium α_2	0.5%
Debt level at which the risk to lose market access is 50 percent $\overline{d}$	150%
Debt limit accuracy d_1	3
Effect of debt change on the risk to lose market access d_2	1
Adverse scenario coefficient in case of loss of market access d_3	-1%
Economy Parameters	
Potential real GDP growth (steady state)	0.8%
Shock persistence ρ	0.61
Shock size σ_1	3.8%
Hysteresis	10%
Hysteresis threshold	-1%

Source: Fournier (2019); and IMF staff calculations.

4. The model recommends a path of structural deficits that gradually closes over the medium term. For 2023, the model recommends a small improvement in the structural balance even if the starting output gap is negative. Beyond, the recommended path gradually closes the structural deficit over the medium term, reducing it in 2028 by 2¼ percentage points of GDP relative to 2022. The adjustment would put debt on a declining trajectory at the end of the projection horizon. The recommendation of a medium-term adjustment is generally robust to various model calibrations. That said, the overall size of adjustment is somewhat larger with greater debt intolerance, and smaller with higher potential growth (thus, policies to boost growth would help the consolidation effort).

A consolidation plan that gradually closes structural deficits over the medium term…

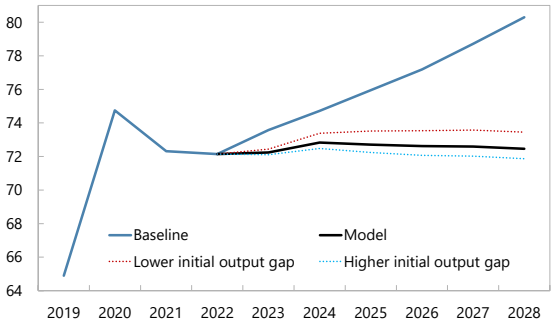
Structural Primary Balance
(Percent of Potential GDP)



Sources: IMF staff estimates.

…will stabilize debt and help build fiscal buffers.

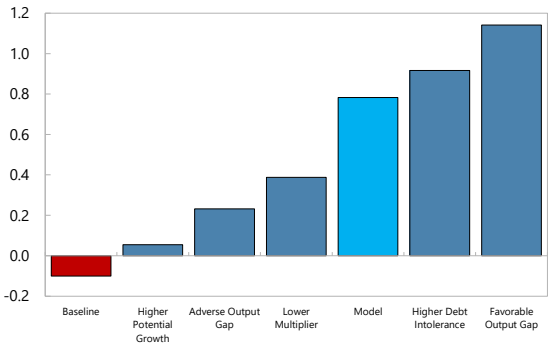
General Government Gross Debt
(Percent of GDP)



Sources: IMF staff estimates.

While the recommended adjustment in the near term is particularly subject to uncertainty about output gaps …

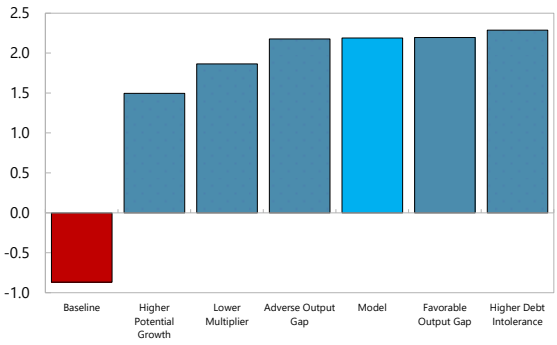
Recommended Fiscal Adjustment in 2023
(Percentage point of Potential GDP)



Sources: IMF staff estimates.

…the recommended medium-term adjustment is robust to various model calibrations.

Recommended Cumulative Fiscal Adjustment by 2028
(Percentage point of Potential GDP)



Sources: IMF staff estimates.

Annex VIII. FSAP Key Recommendations

Financial Sector Assessment Programs (FSAPs) are intended to help countries identify key sources of systemic risk in the financial sector and implement policies to enhance its resilience to shocks and contagion. An assessment under the FSAP was conducted in September 2022. Its main findings were as follows.

1. Risks to financial stability emanate from a concentrated banking sector, household indebtedness, and interconnections in the Nordic-Baltic region. The Finnish banking sector is large, highly concentrated, and is interconnected with other financial systems in the Nordic-Baltic region. Household debt levels have increased in recent years to its highest levels. In the non-bank financial institution (NBFI) sector, the Pension Insurance Companies (PICs) account for a large share of nonbank assets, have highly correlated portfolios and exhibit potential pro-cyclical behavior.

2. Stress tests confirm that the banking system appears resilient to severe macro-financial shocks but remains vulnerable to liquidity shocks. Under a severe, but plausible macro-financial scenario, bank solvency falls, but remains well above regulatory requirements. However, banks remain vulnerable to liquidity shocks due to their reliance on short-term wholesale funding. Cross-border analysis reveals that the Finnish banking sector is vulnerable to a potential systemic event in Nordic counties due to strong linkages and high exposures.

3. The banking supervisory framework is sound and operates in the context of EU regulations and institutions in the euro area. The authorities have made good progress in the implementation of the recommendations of the 2016 Basel Core Principles (BCP) assessment. Being subject to EU regulations and requirements has helped to enhance financial sector oversight in Finland. However, important issues around strengthening operational independence of the FIN-FSA and legal protection of FIN-FSA (as well as Financial Stability Authority (FFSA)) staff are pending.

4. The FSAP recommendations reflect steps to address existing risks and meet new challenges:

- **Cross-cutting** issues include the need to strengthen the legal protection for officials, staff, and agents of all financial oversight agencies and support the independence of the FIN-FSA. Financial resources available across traditional (including NBFIs) and emerging risks like ICT, cyber, and climate need to be increased across prudential and resolution regimes. The resources for the FIN-FSA and FFSA should be commensurate with their responsibilities. This could be achieved through the reallocation of resources, gains in efficiency, or through a larger financial envelope through increased fees and/or a greater contribution from the public sector. The FFSA should also ensure its budget is sufficient to enable the rapid procurement of the full range of external advisory support to carry out its statutory function.
- **Banking supervision could be further improved** by conducting further analysis on banks' IFRS-9 implementation and including rules on the appointment of a sufficient number of independent directors to board of directors and including independency criteria in legislation.

- **Banks reliance on short term wholesale funding should be reduced.** The reliance on wholesale funding is a major vulnerability, creating the risk of a pro-cyclical contraction in credit availability as financial conditions are tightening. Therefore, it is important that regulations encourage improving high-quality-liquid-assets and consider imposing tighter liquidity and reserve requirements for banks not supervised by ECB, or perform more intense stress tests for institutions with greater share of short-term wholesale funding. In the immediate term, liquidity buffers should be enhanced to cover a predetermined threshold of wholesale funding outflows over a five-day horizon.

- **The macroprudential toolkit should be expanded** and the systemic risk monitoring framework strengthened to ensure the effective conduct of macroprudential policy. Macroprudential policy tools, including caps on debt-to-income (DTI) or debt-service-to-income (DSTI) ratios should be included in the toolkit. The authorities should enhance their systemic risk monitoring framework. The authorities should also consider introducing a positive rate for the Counter-Cyclical Capital Buffer (CCyB) in a standard risk environment, which requires a legislative amendment.

- **Solvency rules for PICs should be further changed** to avoid the short-term focus and fully mitigate procyclical behavior, and thus enhance financial stability. The FIN-FSA and the Bank of Finland (BoF) should enhance the public disclosure of analysis and assessment of macroprudential risks in the NBFI sector.

- **Resolution and crisis management** should be supported by greater coordination of authorities' preparation and management of future crises. The Financial Stability Authority (FFSA) should publish a framework for scoring less significant institution (LSI) resolvability (or implement a Single Resolution Board framework for such purposes) and a bail-in mechanic that addresses key policy choices. The BoF should ensure that it has fully operational liquidity facilities for resolution purposes and test these lending arrangements with its counterparties. The Deposit Guarantee Fund (DGF) should have sufficient funds to ensure its financial autonomy and minimize its dependency on borrowing from banks to payout.

- **Anti-Money Laundering/Combating the Financing of Terrorism (AML/CFT) policy.** Efforts are needed to strengthen the effectiveness of AML/CFT supervision by improving the risk-based approach and tools for AML/CFT sectoral and institutional risk assessments, with a focus on risks from cross-border and non-resident transactions.

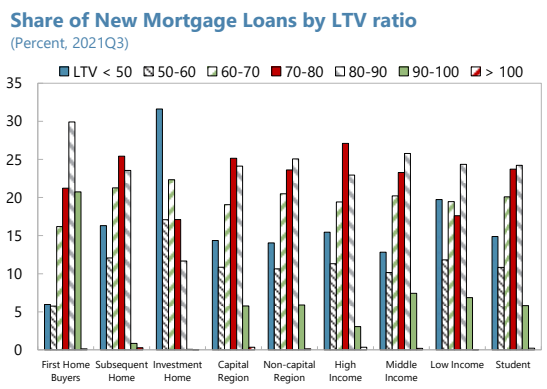
Annex VIII. Table 1. Finland: FSAP Key Recommendations			
Recommendation		**Addressee**	**Timing***
Oversight—Cross cutting			
1	Strengthen the legal and operational framework for legal protection of officials, staff, and agents of all financial oversight agencies.	MOF	NT
2	Secure FIN-FSA's independence by ensuring that: (i) the law is amended to ensure that future Board members are not officials of Ministries; (ii) a statement of the reasons for the dismissal of Director General is clearly laid down in the law and publicly disclosed if a dismissal should ever take place; and (iii) Board members have diverse backgrounds and experience in FIN-FSA's purview.	MOF	NT
3	Increase the resources available to the FIN-FSA, FFSA and other financial oversight agencies so that they are commensurate with their responsibilities and allow them to cover both traditional and emerging risks like ICT, cyber, and climate.	BoF, FFSA and MOF	NT
Macroprudential Policy			
4	Consider providing the FIN-FSA Board with hard powers to issue regulations on macroprudential policy, including the adoption of new instruments; and/or semi-hard powers to issue recommendations on a comply or explain basis.	MOF	MT
5	Add DTI and DSTI limits to the macroprudential policy toolkit; and introduce a positive rate of CCyB in the standard risk environment.	MOF	MT
6	Enhance the systemic risk monitoring by strengthening the disaggregated data analysis, corporate sector vulnerability analysis and addressing existing data gaps.	BoF and FIN-FSA	MT
Systemic Risk Assessment			
7	Enhance liquidity buffers to cover a predetermined threshold of wholesale funding outflows over a five-day horizon.	FIN-FSA	NT
8	Lead an effort to conduct a Nordic-wide stress test coordinated exercise.	FIN-FSA, and BoF	MT
Banking Regulation and Supervision			
9	Conduct further analysis on banks' IFRS-9 implementation, more specifically regarding staging of exposures and functioning of expected credit loss models.	FIN-FSA	NT
10	Include rules on the appointment of a sufficient number of independent directors (supervisory board members) and independency criteria in the legislation.	MOF, FIN-FSA	NT
Nonbank Financial Institutions			
11	Amend PIC solvency regulations to remove remaining procyclical effects and develop new short-term liquidity rules.	MoSAH, FIN-FSA	NT
12	Enhance the public disclosure of analysis and assessment of macroprudential risks in the NBFI sector.	BoF, FIN-FSA	NT

Annex VIII. Table 1. Finland: FSAP Key Recommendations (concluded)			
Recommendation		**Addressee**	**Timing***
Crisis Management			
13	Publish a policy on bail-in and transfer mechanics that addresses policy choices on valuation, issuance of new instruments and change in control requirements.	FFSA	NT
14	Ensure that emergency liquidity assistance processes, procedures and operational capabilities are sufficient to support a rapid provision of temporary collateralized liquidity for FIs in resolution, tested internally and with external counterparties annually.	BoF	NT, C
15	Centralize cross-authority crisis cooperation and coordination in the new The Crisis Management Coordination Management Group.	FFSA, FIN-FSA, BoF, MoF, MoSAH	I, C
Financial Integrity			
16	Enhance AML/CFT supervision by improving the risk-based approach and tools for AML/CFT sectoral and institutional risk assessments, with a focus on risks from cross-border and non-resident transactions.	FIN-FSA	I
* Timing: C = Continuous; I = Immediate (within one year); NT = Near Term (within 1–3 years); MT = Medium Term (within 3–5 years).			

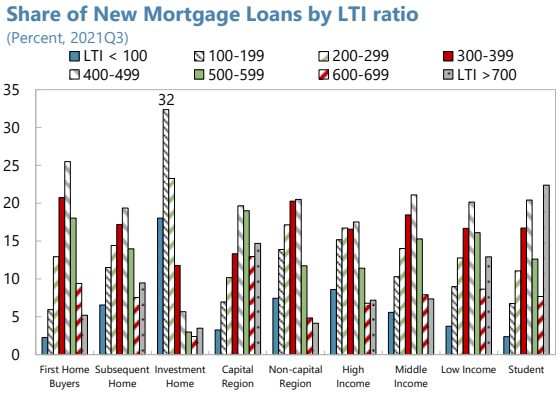
Annex IX. Distributional Aspects of Borrower Based Measures

This annex analyses loan-to-value (LTV) and loan-to-income (LTI) data with granularity in the level of loan purpose (first home, subsequent homes, dwellings for investment purposes), geographical area (capital region vs. rest of Finland), socioeconomic status (student, employee, entrepreneur, retiree, other) and debtor income group (high, middle, low). Students, lower income, and first-time home buyers have higher median levels of LTV and LTI.

Annex IX. Figure 1. Finland: Distributional Aspects of LTV and LTI Ratios



Source: Bank of Finland; FIN-FSA and IMF staff calculations.



Source: Bank of Finland; FIN-FSA and IMF staff calculations.

Annex IX. Table 1. Finland: Median Loan-to-Value and Loan-to-Income by Type of Household

Median LTV	2019Q3	2021Q3
First Home Buyers	83%	81%
Subsequent Home	64%	66%
Investment Home	55%	58%
Capital Region	70%	70%
Non-capital Regior	69%	70%
High Income	65%	67%
Middle Income	69%	70%
Low Income	67%	69%
Student	68%	70%
Total	68%	70%

Median LTI	2019Q3	2021Q3
First Home Buyers	319%	341%
Subsequent Home	194%	208%
Investment Home	132%	130%
Capital Region	318%	357%
Non-capital Region	202%	211%
High Income	152%	169%
Middle Income	220%	235%
Low Income	264%	278%
Student	314%	381%
Total	213%	228%

Source: Bank of Finland, FIN-FSA, and IMF staff calculations.

Annex X. Past Fund Staff Recommendations and Implementation

Past Staff Recommendations	Implementation
Fiscal Policy	
In the near term, fiscal policy should remain flexible, providing support as needed. But policy should gradually refocus on placing public finances on a stronger footing. A moderately faster than currently envisaged consolidation over the medium term would bring debt on a declining path. The adjustment effort should focus on reducing expenditure.	While Covid-related support will unwind, discretionary measures—albeit small—would cushion the impact of higher energy prices. New war-related spending that persists beyond the near term will place debt on a steeper trajectory over the medium term.
Returning to spending limits would enhance fiscal credibility. A spending review could help identify efficiency gains and fiscal savings, including in the context of ongoing health and social services reform.	The government seeks permanent savings of 370 million euros starting 2023, but war-related expenses have been added under an "exception clause" (about 2 billion euros each in 2022 and 2023). Spending and tax reviews are ongoing. On the health and social services reform, there remains sizable uncertainty regarding the fiscal savings, especially given the higher wage demands in the municipalities.
Continuing to close routes to early retirement for older workers and better targeting of in-work and out-work benefits would also help with fiscal savings.	Not much progress on targeting of in-work and out-work benefits.
Labor Market and Structural Policies	
To support employment and productivity, staff recommend a system where high-level agreements set broad framework conditions, but with more flexibility in firm-level contracts.	Recent agreements in the municipal and health sectors have broken the tradition of following the private sector, having negotiated a premium over private sector wages for the next 5 years. This has weakened the wage coordination mechanism. No progress on flexibility in firm-level contracts.
More should be done to encourage employment among women with care responsibilities by better targeting home care allowances and housing benefits. Address skill shortages. Increase university resources to improve tertiary education.	No specific measures on home care benefits. Plans to attract skilled foreign labor are underway. Some progress on tertiary education, but there is need to further increase and fund study places.
Regarding climate targets, additional policies could include strengthening carbon pricing through higher and more harmonized pricing across sectors, reinforced by fiscal incentives across different sectors including the use of feebates.	The updated National Climate and Energy Strategy relies on increasing the share of renewable energy. The authorities are not considering feebates. No concrete plan yet to strengthen and harmonize carbon prices.

Past Staff Recommendations	Implementation
Financial Sector and Macroprudential Policies	
Targeted policies are required to address rising vulnerabilities in household finances, including enhancing the macroprudential toolkit, introducing income-based measures for riskier borrowers, and addressing features of the tax code that creates incentives for housing company loans.	Loan-to-income limit (or any other income-based measure) is not available in the Finnish legislation and not expected to be introduced soon. However, FIN-FSA Board has introduced non-binding recommendation on loan applicants' lending standards in 2022.
Capital requirements aimed at structural risks should be raised to pre-pandemic levels.	The authorities increased O-SII buffers for Nordea and OP Group by 0.5 percent (effective January 1, 2023), as announced on June 28, 2022. The authorities have decided not to reimpose the SyRB under the uncertainties caused by the war in Ukraine. However, given structural issues such as credit institutions' interconnectedness and the growing indebtedness of households, the authorities are planning to reactivate the SyRB once circumstances allow.
A positive neutral countercyclical capital buffer requirement in the medium term would provide some macroprudential policy space.	The FIN-FSA has recently adjusted the set of indicators for calibrating the CCyB to make them more sensitive to a buildup of risks. However, regulatory changes are needed to impose a positive neutral CCyB.
Improve CRE data collection efforts as suggested by the ESRB.	Although Statistics Finland has launched a pilot project to produce CRE prices, the timeframe for publishing data is open due to the heterogeneity in type and size of the property and the data collection issues.
Advance the reform implementation, including by addressing ML/TF risks from non-resident and cross-border financial activity.	FIN-FSA is in the process of developing a banking sector risk assessment, to help further develop the ML/TF supervisors' risk understanding and a risk-based approach to ML/TF supervision.

INTERNATIONAL MONETARY FUND

FINLAND

STAFF REPORT FOR THE 2022 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

December 20, 2022

Prepared By

European Department
(In Consultation with Other Departments)

CONTENTS

FUND RELATIONS

As of October 31, 2022

Membership Status: Joined: January 14, 1948; Article VIII.

General Resources Account:	**SDR Million**	**Percent Quota**
Quota	2,410.60	100.00
Fund holdings of currency (Exchange Rate)	1,788.87	74.21
Reserve Tranche Position	621.73	25.79
Lending to the Fund		
New Arrangements to Borrow	12.42	

SDR Department:	**SDR Million**	**Percent Allocation**
Net cumulative allocation	3,499.96	100.00
Holdings	3,575.86	102.17

Outstanding Purchases and Loans: None

Latest Financial Arrangements: None

Projected Payments to Fund[1]
(SDR Million; based on existing use of resources and present holdings of SDRs):

	Forthcoming				
	2022	2023	2024	2025	2026
Principal		...	...	...	...
Charges/Interest		0.04	0.04	0.04	0.04
Total		0.04	0.04	0.04	0.04

[1] When a member has overdue financial obligations outstanding for more than three months, the amount of such arrears will be shown in this section.

Exchange Arrangements: The currency of Finland is the euro. The exchange rate arrangement of the euro area is free floating. Finland participates in a currency union (EMU) with 18 other members of the EU and has no separate legal tender. The euro, the common currency floats freely and independently against other currencies.

Finland has accepted the obligations under Article VIII, Sections 2(a), 3, and 4, and maintains an exchange system free of multiple currency practices and restrictions on the making of payments and transfers for current international transactions, except for those measures imposed for security reasons in accordance with Regulations of the Council of the European Union, as notified to the Executive Board in accordance with Decision No. 144-(52/51).

Article IV Consultation: The last Article IV consultation was concluded by the Executive Board on January 26, 2022. The staff report (IMF Country Report No. 22/25) was published with Press Release No. 22/19 (January 31, 2022).

Outreach: The team met with representatives of the private sector, academics, labor, and financial institutions.

Press conference: The mission held a press conference on November 17, 2022.

Publication: The staff report will be published.

Technical Assistance: None.

Resident Representative: None.

STATISTICAL ISSUES

Data Provision is adequate for surveillance. The country has a full range of statistical publications, many of which are on the internet. The quality and timeliness of the economic database are generally very good. The country subscribes to the Fund's Special Data Dissemination Standard Plus. The country uses SDDS flexibility option for timeliness on data for central government operations. Metadata are posted on the Dissemination Standards Bulletin Board.

National Accounts: Finland publishes the national accounts according to the European System of Accounts (ESA) 2010 since September 2014.

Government Finance Statistics: Government finance statistics were published based on ESA 2010 methodology since September 2014.

External Statistics: Finland publishes external sector statistics based on the sixth edition of the *Balance of Payments and International Investment Position Manual (BPM6)* format since December 2014. Finland has completed the requirements for adherence to the IMF's Special Data Dissemination Standard (SDDS) Plus in 2018—the highest tier of the Data Standards Initiatives. However, Finland does not yet produce detailed external debt statistics. This means that the external debt sustainability exercise could not be carried out.

Monetary and Financial Statistics: Monetary data reported for *International Financial Statistics* are based on the European Central Bank's (ECB) framework for collecting, compiling, and reporting monetary data.

Finland: Common Indicators Required for Surveillance
(As of November 30, 2022)

	Date of latest observation	Date received	Frequency of Data[7]	Frequency of Reporting[7]	Frequency of publication[7]
Exchange Rates	11/30/2022	11/30/2022	D	D	D
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	10/2022	11/2022	M	M	M
Reserve/Base Money	10/2022	11/22	M	M	M
Broad Money	10/2022	11/22	M	M	M
Central Bank Balance Sheet	11/2022	11/22	M	M	M
Consolidated Balance Sheet of the Banking System	10/2022	11/22	M	M	M
Interest Rates[2]	11/29/2022	11/30/2022	D	D	D
Consumer Price Index	11/2022	11/2022	M	M	M
Revenue, Expenditure, Balance and Composition of Financing[3]––General Government[4]	2021	09/2022	A	A	A
Revenue, Expenditure, Balance, and Composition of Financing[3]––Central Government	2021	09/2022	A	A	A
Stocks of Central Government and Central Government-Guaranteed Debt[5]	12/2021	10/2022	M	M	M
External Current Account Balance	09/2021	11/2022	M	M	M
Exports and Imports of Goods and Services	09/2022	11/2022	M	M	M
GDP/GNP	2022:Q3	11/2022	Q	Q	Q
Gross External Debt	2022:Q2	10/2022	Q	Q	Q
International Investment Position[6]	2022:Q2	10/2022	Q	Q	Q

1/ Includes reserve assets pledged or otherwise encumbered as well as net derivative positions.
2/ Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes, and bonds.
3/ Foreign, domestic bank, and domestic nonbank financing.
4/ The general government consists of the central government, including National Insurance Scheme, and local governments.
5/ Including currency and maturity composition.
6/ Includes external gross financial asset and liability positions vis-à-vis nonresidents.
7/ Daily (D), weekly (W), monthly (M), quarterly (Q), annual (A), irregular (I); and not available (NA).

Statement by Mr. Pösö and Mr. Kraavik on Finland

January 18, 2023

On behalf of the Finnish authorities, we would like to thank staff for the candid and insightful discussions during the Article IV and FSAP missions. The authorities appreciate staff's analytical work and views on economic outlook and risks, the framework for financial sector oversight, and policy priorities, which contribute to the policy debate in Finland. The authorities broadly agree with the thrust of staff's appraisal and agree that further efforts are required to combat medium and long-term challenges.

Economic Developments, Outlook, and Risks

Global headwinds are slowing economic growth in Finland. Last year started with the continuation of a brisk post-Covid recovery but spillovers from Russia's war in Ukraine have stalled it. The war has driven up electricity and fuel prices and the trade flows with Russia have diminished sharply. Gas and electricity imports from Russia have stopped but, in addition to the increased imports from other neighboring countries, the related pressures are mitigated by the new Olkiluoto 3 nuclear power plant and the new floating LNG terminal vessel that are expected to become fully operational in the first quarter of this year. Like elsewhere, the surge in inflation has contributed to the weakening of the Finnish economy. The marked decline in economic growth of major export markets is weakening the demand for Finnish exports.

Consumer confidence fell to record lows after Russia's attack on Ukraine and has remained very weak. The rise in interest rates and heightened economic uncertainty have slowed the growth of both private investment and consumption. Consumers' purchasing power has weakened but households will be able to partly compensate for it in the short term by unwinding the savings accumulated during the acute phase of the pandemic.

The labor market has remained strong and supported consumer spending. The corporate sector has proven resilient, including firms directly exposed to the collapse of Russian trade. The employment situation is expected to deteriorate slightly given that employment expectations have worsened across all main industries and the business cycle is expected to weaken. The labor market will strengthen again in 2024 when economic growth resumes.

Inflationary pressures have started to ease. Higher energy and raw material prices, as well as protracted supply chain disruptions, have led to a widespread increase in consumer prices. Some of the price pressures will spill over to food, consumer goods, and services prices with a lag. High electricity costs are expected to continue to contribute to price pressures through the winter. However, the raw material prices have started to moderate and the bottlenecks in world trade have started to ease. Over the medium term, inflation will decrease as rising interest rates will start having an impact on aggregate demand.

The Finnish economy will likely fall into a mild recession this year but will slowly recover in 2024 as the headwinds to the global economy subside. The long-term growth prospects are muted due to slow productivity growth and an ageing population.

Risks to the economic outlook are predominantly to the downside. The export markets outlook remains uncertain due to Russia's war and the unpredictability of global energy markets. The recession may deepen should the inflationary environment prove more protracted. This could cause a further deterioration in purchasing power that could lead to private consumption falling more. On the upside, an acceleration in green transition may boost private investment more than expected.

Fiscal Policy

Fiscal policy will be slightly supportive in 2023. Households will be compensated for high electricity prices while a windfall tax for the electricity companies will be introduced. The war-related measures as well as the reform of healthcare and social welfare services will increase expenditure compared to 2022. The first supplementary budget for 2023 will be submitted to the Parliament late January to address, for example, new measures to further respond to high energy and electricity prices.

Measures taken in response to Russia's war will put an additional strain on general government finances. While strong economic and employment growth helped decrease the large Covid-related imbalance, the deficit will start to increase again this year and will remain large in the years to come. The debt ratio will start to increase considerably next year from an already elevated level, reaching almost 75 percent by the end of 2025. The upward trajectory in debt ratio is expected to persist due to substantial deficits at both central and local government level as well as rapidly rising debt servicing costs. The longer-term structural imbalance between general government expenditure and revenue is further aggravated by population ageing. Consequently, general government finances are not on a sustainable footing.

Direct and fast-acting measures aimed at public spending and revenue are needed. The authorities agree with staff that the worsened fiscal outlook puts public debt on a riskier path. A technical General Government Fiscal Plan for 2024-2027 will be prepared prior to the Parliamentary elections in April 2023 and will form a basis for the next electoral term fiscal policy planning. Comprehensive tax and spending reviews are being conducted to generate measures for strengthening general government finances and will be published in the coming months.

A more robust fiscal framework could help achieve more sustainable public finances. The current expenditure ceilings framework has been in place since 2004 but a number of exceptions were made during the COVID-19 pandemic. In November 2022, the authorities published recommendations on how to develop the steering of general government finances for the next electoral term, including the expenditure ceilings framework. The recommendations are broadly in line with the European Commission's vision on a reform of the EU fiscal framework. At the same time, it is important to ensure that the national framework is developed based on national conditions and be supported by broad political commitment.

Structural Issues

Measures to boost employment and productivity will remain in the focus. The authorities agree that the decision to increase R&D spending to 4 percent of GDP will lead to robust productivity gains only if the additional R&D funding is allocated effectively. The authorities acknowledge that attracting skilled foreign labor can benefit the economy but note that the public sector has limited possibilities to directly affect immigration and length of stay of foreign skilled labor. Another avenue to pursue would be to improve employment prospects for women with care responsibilities. However, ensuring sufficient access to quality childcare will have to be taken into consideration, especially due to a shortage of qualified staff and wage pressures generated by the regulatory changes and high demand for qualified staff.

Increased flexibility within a strengthened wage coordination mechanism would help safeguard competitiveness. The recent wage agreements in the public sector, while weakening the wage coordination mechanism, are an attempt by the unions to correct a misalignment in wages in the municipal and health sectors. It is therefore expected to be a one-off level shift, although dispersed over 5 years, and not a permanent change away from export-led wage coordination.

Achieving the ambitious green transition goals are important both for climate and energy security, while transition and physical climate risks to the financial sector are low. The authorities agree that further policy measures are required to achieve carbon neutrality by 2035. Achieving this target has become more uncertain due to recent estimates that LULUCF (land use, land use change and forest) sector does not act as a carbon sink anymore. It is estimated that the carbon sink of forests will be significantly below the reference level between 2021–2025 while emissions from land use stay at the current level.

Financial System Stability

The financial sector has remained resilient through the shocks stemming from the pandemic and Russia's war in Ukraine. The authorities acknowledge that the economic outlook turned gloomier during the FSAP process due to the on-going war and ensuing energy crisis. The results of FSAP stress tests are encouraging, given that the financial sector remains solvent in a severe but plausible adverse scenario, though remaining vulnerable to liquidity shocks. The authorities welcome staff's endorsement of Finland's continued progress in strengthening regulation, supervision, and the financial oversight framework since the last FSAP in 2016.

Risks to the financial sector require monitoring. The authorities agree that risks to financial stability emanate from a large and concentrated banking sector, high household indebtedness, and financial interconnectedness in the Nordic-Baltic region. The banks' funding structure gives rise to vulnerabilities and cyber risks to the financial sector remain elevated. Ongoing threats from cyber criminals and state actors pose risks to the financial system, particularly in the context of the war in Ukraine. A legislation was passed last June to establish a backup system to maintain continuity of customers' daily banking payments. The authorities acknowledge that further improvements can be made to the current strong financial oversight framework.

The macroprudential toolkit needs to be enhanced further. Experiences with the current institutional framework for macroprudential policy have been positive, including co-operation and knowledge sharing between relevant authorities. However, the introduction of new borrower-based macroprudential tools – DTI or DSTI caps – would address household vulnerabilities and a positive neutral countercyclical capital buffer could be used as a releasable buffer. While FIN-FSA has issued a recommendation on a maximum debt-servicing burden, implementing these measures in a binding manner would require legislative changes. When it comes to limiting the maximum loan maturity to 30 years for housing loans and housing company loans and introducing an LTV limit to housing company loans, the legislative proposal has been submitted to the parliament. The authorities are committed to continuing to enhance their systemic risk monitoring framework. This includes addressing the existing data gaps and strengthening the analysis of granular data. The positive credit register will become operational in 2024 and is expected to markedly improve the quality of data used for macroprudential analysis and policymaking.

Significant improvements have been achieved in several areas. The regulatory changes since 2017 have reduced the procyclical nature of the pension insurance companies. Robust solvency regulation is essential for pension system stability and in safeguarding earnings-related pension benefits. Regarding crisis management and resolution for the banking sector, the crisis management arrangements have been significantly enhanced since the previous FSAP and rest on sound foundations. The authorities see merit in further enhancing cooperation and collaboration between the relevant authorities responsible for crisis management and resolution, while keeping in mind the responsibilities and mandates of each authority. The need to improve the framework for liquidity in resolution has been recognized, though acknowledging that possible European-level solutions will need to be accounted for.