

INTERNATIONAL MONETARY FUND

IMF Country Report No. 17/370

FINLAND

December 2017

2017 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 2017 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 December 8, 2017 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 December 8, 2017, following discussions that ended on November 1, 2017, 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 November 20, 2017.
- An Informational Annex prepared by the IMF staff.
- A **Debt Sustainability Analysis** prepared by the staff of the IMF.
- A Statement by the Executive Director for Finland.

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

Selected Issues

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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International Monetary Fund Washington, D.C. 20431 USA

IMF Executive Board Concludes 2017 Article IV Consultation with Finland

On December 8, 2017, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with Finland.¹

Economic growth has picked up considerably, broadening to exports and equipment investment, and the current account is back to surplus. The economic recovery is expected to remain strong in the near term, but potential growth is constrained by labor market rigidities and aging. The mission projects growth of 2.8 percent in 2017 and 2.3 percent in 2018. But, even assuming higher productivity growth than over the past ten years and increased participation in the labor market, a shrinking working age population constrains longer-term growth to about 1½ percent. Further increases in employment and productivity would be needed to raise this rate.

This outlook is subject to external and domestic risks. The economy is particularly sensitive to growth fluctuations in key trading partners. Financial shocks remain a risk due to banks' reliance on wholesale funding and close connections to other Nordic economies. Both labor productivity and employment growth could fall short of projections, especially if reforms to enhance work incentives stall and if real wage increases were not to match productivity changes.

Better-than-expected fiscal outcomes in 2016 are projected to continue in 2017, but the public finances face long-term challenges from a declining working age population and escalating agerelated spending. Avoiding a procyclical fiscal stance would help rebuild buffers over the medium term.

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. 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 summing up can be found here: http://www.imf.org/external/np/sec/misc/qualifiers.htm.

The government has made notable progress on structural reforms. However, some labor market outcomes—notably inefficient matching and low participation rates of some cohorts—indicate a need for further progress. The authorities are implementing a series of policies to contain costs and reshape employment incentives, but more is needed to ensure wages grow in line with productivity, at the sector and firm levels.

The banking system is adequately capitalized and profitable, and progress has been made to reduce some key vulnerabilities. However, Nordea's plan to relocate its headquarters to Finland increases importance of adequate supervisory resources, discretion to increase capital requirements if needed, close regional cooperation, and completion of the banking union in the EU.

Executive Board Assessment²

Executive Directors agreed with the thrust of the staff appraisal. They welcomed the strengthening and broadening of the economic recovery. Strong growth is expected to continue in the near term. However, downside risks remain and employment and productivity need to increase to raise potential growth and support Finland's social model. Directors underscored the need for structural reforms, especially in the labor market, to achieve these objectives. Ongoing government initiatives to realize fiscal savings and raise public sector productivity are important to ensure long-term fiscal sustainability.

Directors were encouraged by recent progress on structural reforms. Product market reforms have increased competition. The agreement on the Competitiveness Pact has promoted wage restraint and improved competitiveness. Directors underlined the need for collective bargaining to be more flexible at the firm level to better align wages with productivity and reduce unemployment. Further labor market reforms should aim to enhance work incentives, lengthen working lives and increase labor mobility.

Directors welcomed lower-than-expected budget deficits and emphasized that the current upturn presented an opportunity to rebuild fiscal buffers. This would require limiting procyclicality of the fiscal stance. Revenue surprises should be either saved or invested in growth-enhancing measures.

Complete implementation of the structural reform agenda remains critical for long-term fiscal sustainability. Health and social services reform is especially important to boost public sector productivity and contain age-related pressures on public finances. Directors highlighted the need to monitor reform outcomes closely and make adjustments, as needed, to realize planned saving.

² At the conclusion of the discussion, the Managing Director, as a 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.

Directors recommended that the macroprudential authority have more tools to guard against risks even as the financial sector is judged to be sound. Additional borrower-oriented macroprudential measures would help limit household vulnerabilities. The Systemic Risk Buffer legislation, to be implemented in 2018, would help to better safeguard financial stability.

Directors noted the challenges from the upcoming relocation of Nordea's headquarters to Finland. The authorities should have the flexibility to set the Systemic Risk Buffer at an adequately high level that reflects the significant systemic risks posed by Nordea's large size relative to Finland's economy. In addition, Directors supported increased resource allocation to supervision to reflect higher regulatory complexity and supervision intensity, and stressed the importance of further deepening regional cooperation. More progress on completing banking union in the EU will also be important.

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

				Est.			Projections				
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
		(Percentag	ge change, u	nless othe	rwise ind	icated)				
Output and demand (volumes)											
GDP	-0.8	-0.6	0.0	1.9	2.8	2.3	1.8	1.4	1.2	1.	
Domestic demand	-1.1	-0.1	1.2	2.5	2.3	2.2	1.6	1.5	1.2	1.3	
Private consumption	-0.5	0.8	1.7	1.8	2.1	1.7	1.5	1.0	1.0	1.0	
Public Consumption ¹	1.1	-0.5	0.0	1.2	0.3	0.4	0.8	2.0	0.8	0.	
Gross fixed capital formation	-4.9	-2.6	0.7	7.2	8.1	2.9	3.1	2.2	2.0	2.	
Change in stocks (contrib. to growth in percent of GDP)	0.0	0.2	0.2	-0.2	-0.7	0.5	-0.1	0.0	0.0	0.	
Exports of Goods and Services ²	1.1	-2.7	0.8	1.3	7.7	2.1	3.6	3.0	3.0	3.	
mports of Goods and Services ²	0.5	-1.3	3.2	4.4	3.7	2.3	3.0	3.2	3.0	3	
Net exports (contribution to growth in percent of GDP)	0.3	-0.5	-0.9	-1.1	1.4	-0.1	0.2	-0.1	0.0	0	
Prices, costs, and income											
Consumer price inflation (harmonized, average)	2.2	1.2	-0.2	0.4	0.8	1.2	1.7	1.9	2.0	2	
Consumer price inflation (harmonized, end-year)	1.9	0.6	-0.2	1.1	0.5	1.6	1.7	1.9	2.0	2	
GDP deflator	2.6	1.7	2.0	0.9	0.6	1.3	1.7	1.9	2.0	2	
Jnit labor cost, manufacturing	-3.9	-0.3	2.2	-1.5	-4.8	-0.9	0.1	0.3	0.4	0	
Jnit labor cost, whole economy	1.6	0.9	1.1	-0.3	-1.6	-0.9	0.7	0.9	1.0	1	
Labor market											
abor force	-0.5	0.1	0.4	-0.2	0.6	0.6	0.4	0.4	0.1	0	
Employment	-1.1	-0.4	-0.4	0.5	0.7	1.3	0.8	0.6	0.3	0	
Employment rate (Percent of 15-64 WA population)	68.5	68.3	68.1	68.7	69.4	70.5	71.3	71.9	72.2	72	
Jnemployment rate (in percent)	8.2	8.7	9.4	8.8	8.7	8.1	7.8	7.6	7.4	7	
Potential output	0.2	0.7	<i>7</i> .1	0.0	0.7	0.1	7.0	7.0	,	,	
Output gap (in percent of potential output) ³	-2.4	-3.7	-4.4	-3.5	-2.0	-0.9	-0.2	0.0	0.0	(
Growth in potential output	0.7	0.7	0.8	1.0	1.2	1.2	1.2	1.2	1.2	1	
1				(Perce	nt of GDP	')					
General government finances											
Overall balance	-2.6	-3.2	-2.7	-1.8	-1.4	-1.7	-1.3	-1.0	-1.1	-1	
Primary balance ⁴	-1.4	-2.0	-1.6	-0.7	-0.4	-0.8	-0.5	-0.1	-0.2	-0	
structural balance (in percent of potential GDP)	-1.2	-0.9	0.1	0.4	-0.6	-1.2	-1.2	-1.0	-1.1	-1	
structural primary balance (in percent of potential GDP) ⁴	0.0	0.2	1.2	1.4	0.4	-0.3	-0.4	-0.1	-0.2	-0	
Gross debt	56.5	60.2	63.6	63.1	63.0	62.7	62.3	61.3	60.8	59	
Net debt (negative of net financial worth)	-53.1	-53.5	-53.5	-50.3	-47.2	-43.9	-41.0	-38.7	-36.4	-34	
Noney and interest nates				(P)	ercent)						
Money and interest rates M3 (Finnish contribution to euro area, growth rate, e.o.p.)	4.1	1.3	5.0	2.0							
Finnish MFI euro area loans (growth rate, e.o.p.)	7.7	3.8	0.9	1.3	•••	•••			•••		
	4.4	3.8 2.6		0.7	3.3	4.7	4.7	4.6	4.5	4	
Domestic nonfinancial private sector credit growth (e.o.p.)			3.1							4	
-month money market rate	0.2	0.2	0.0	-0.3					•••		
0-year government bonds yield	1.9	1.4	0.7	0.4	 nt of GDP				•••		
National saving and investment				(1 erce	ni oj GDI	,					
Gross national saving	19.8	19.7	20.3	20.8	22.7	23.3	23.8	23.9	24.2	24	
Gross domestic investment	21.4	20.9	20.8	22.0	21.8	22.7	22.9	23.0	23.2	23	
Balance of payments	21.4	20.7	20.0	22.0	21.0	22.7	22.)	23.0	23.2	23	
Current account balance	-1.6	-1.3	-1.0	-1.4	0.2	0.2	0.5	0.5	0.5	0	
Goods and Services balance	-0.5		-0.5	-1.4	-0.1	-0.2	0.0	0.0	0.0	(
	-0.5 3.9	-0.6 -3.2		-1.2 -2.5	-0.1	-0.2	-1.4	-0.8	-0.2	(
Vet international investment position Gross external debt			-6.1								
	207.7	218.7	218.8	203.5	201.4	198.9	195.2	191.5	187.6	183	
Exchange rates (period average)	0.75	0.75	0.00	0.00							
Euro per US\$	0.75	0.75	0.90	0.90		•••			•••		
Nominal effective rate (appreciation in percent)	2.6	1.9	-2.4	2.0		•••			•••		
Real effective rate (appreciation in percent) ⁵	2.2	1.3	-4.0	1.1							
Memorandum items Nominal GDP (in Euro billions)	202.2	207.7	200 -	217 -							
	203.3	205.5	209.6	215.6							

Sources: Bank of Finland, International Financial Statistics, Information Notice System, Ministry of Finance, Statistics Finland, and Fund staff calculations.

Stronger increase in 2019 is reflective of the 2018 budget proposal's medium-term fiscal estimates.
 The lower annual growth in 2018 is due to negative carryover from 2017, given high growth in 2017Q1.

³ A negative value indicates a level of actual GDP that is below potential output.

⁴ Adjusted for interest expenditure. ⁵ CPI-based real effective exchange rate.



INTERNATIONAL MONETARY FUND

FINLAND

November 20, 2017

STAFF REPORT FOR THE 2017 ARTICLE IV CONSULTATION

KEY ISSUES

Context: A recovery that began in 2015 continues to gather momentum. But the prolonged downturn revealed structural weaknesses, and the economy will face further pressures, including from adverse demographics and technological change. The focus of this report is therefore on policies to increase resilience, employment, and growth.

Structural policies: High employment is crucial for the sustainability of the Finnish model of generous social insurance. The labor market has many desirable features, not least that social cohesion and low levels of income inequality were preserved during the prolonged downturn. However, some labor market outcomes—notably inefficient matching and low participation rates of some cohorts—indicate a need for reform. The authorities are implementing a series of policies to contain costs and reshape employment incentives, but more is needed to ensure wages grow in line with productivity, at the sector and firm levels.

Fiscal policy: The authorities are implementing a multi-year consolidation plan to address long-term sustainability concerns. Staff recommends using the current upturn to rebuild buffers, including by saving any further revenue surprises or investing them in growth-enhancing measures.

Financial supervision: Financial intermediaries are well capitalized and profitable, but reliance on market funding and high regional interconnectedness make Finland highly exposed to regional spillover risks. Nordea's plan to relocate its headquarters to Finland increases importance of adequate supervisory resources, discretion to increase capital requirements if needed, close regional cooperation, and completion of the banking union in the EU.

Household finances, the housing market, and macroprudential policies: The housing market does not appear overvalued. However, household saving rates are negative and a large share of mortgage loans is held by highly indebted borrowers. The Systemic Risk Buffer legislation, to be implemented next year, and additional borrower-oriented macroprudential measures would enable the supervisor to better safeguard financial stability and limit household vulnerabilities.

Approved By
Mahmood Pradhan
and Kevin Fletcher

Discussions took place in Helsinki during October 23–November 1, 2017. The staff team was comprised of Messrs. Scott (head), Henn, Pillonca, Poghosyan and Ms. Gornicka, supported by Mses. Shabunina, Tenali, and Turk and Messrs. Scutaru and Yi at headquarters (all EUR). Mr. Virolainen (OED) joined the discussions. The mission met with Mr. Liikanen, Governor of the Bank of Finland; Mr. Orpo, Minister of Finance; Ms. Tuominen, head of the FIN-FSA; other senior officials; the ECB; social partners; and representatives of the financial sector and academic communities.

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CONTEXT AND BACKGROUND

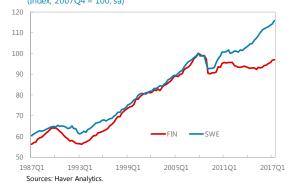
- 1. Finland's economic model combines openness and relatively limited state intervention with extensive social insurance mechanisms. A comprehensive welfare state provides social services and transfers and generous unemployment and other benefits, supported by relatively high taxation. The model has been associated with low levels of inequality and a high degree of social trust.
- 2. To be sustainable, such a model relies on high employment and incomes. But the economy had been buffeted by severe shocks (Figure 1). Even before the global financial crisis, Finland was hit by a decline of the forestry industry, and a severe domestic banking crisis in the early 1990s. Over the past decade, it has also faced sharp downturns in the euro area and Russia (its two largest trading partners) and the restructuring of Nokia, resulting in a double-dip recession from 2008 to 2014. Commendably, income inequality has remained low, but—until recently—weak investment, slumping labor productivity, escalating labor costs, and a relatively fast deterioration in export market share had held back recovery.
- 3. A recovery that began in 2015 has gathered considerable strength, but the economy will face further pressures. Ongoing demographic changes will shrink the working age population and put further demands on the public finances. Achieving high employment will be challenged by skill-biased technological change and routinization.
- 4. Recent wage moderation has helped to offset significant losses in competitiveness incurred after the crisis, but misalignments at the firm level persist. Significant increases in unit labor costs from 2008 to 2013 opened up a sizeable competitiveness gap against peers. Recent wage restraint and the 2017 Competitiveness Pact have largely restored *national* competitiveness.¹ But at the sectoral and firm levels, wage increases have often not matched productivity changes.
- **5.** The focus of this report is therefore on policies to increase resilience, employment, and growth. To assess the challenges to the public finances, a Selected Issues Paper evaluates pension and aging costs not reflected in standard net debt figures, leading to recommendations for fiscal stance (¶19–20). Two further SIPs look at exports and the labor market, to see whether recent experiences reveal structural weaknesses; the findings are reflected in recommendations to keep wages in line with productivity (¶24–26) and to boost labor supply and productivity in the face of an aging population (¶28–31). A durable recovery requires a well-functioning financial system with sufficient safeguards to avoid booms and busts (¶34–36, ¶39–40); special attention is given to the implications of the move of the headquarters of the globally-systemic bank Nordea to Finland.
- **6.** The center-right coalition government remains in power. After a fissure in the *Finns* party in June, the coalition of the Centre and National Coalition parties continues with the breakaway Blue Reform party, which has ensured policy continuity. The next general election is in April 2019.

¹ The Competitiveness Pact, *inter alia*, implemented a wage freeze in 2017, lowered the labor tax wedge, and decreased public sector holiday bonuses from 2017 to 2019. See IMF Country Report 16/368.

Figure 1. Finland: Shocks and Stresses

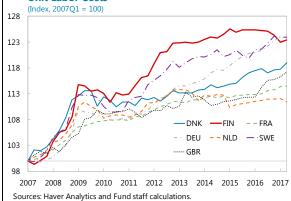
Finland has experienced severe shocks in the past three decades, with the long stagnation after the global crisis ...

Real Gross Domestic Product: Finland vs. Sweden (Index, 2007Q4 = 100, sa)



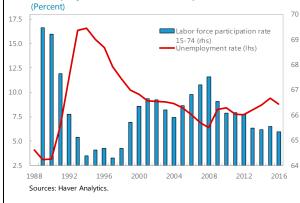
...and a sizeable loss in competitiveness.

Unit Labor Costs



Participation remains below levels seen 30 years ago, and unemployment has been persistent

Unemployment and Labor Participation Rates



... notable for weak exports and slumping investment...

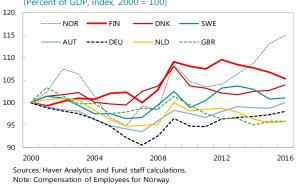
Real Investment and Real Exports



In contrast to many other advanced economies, the wage share has not decreased during the last 15 years.

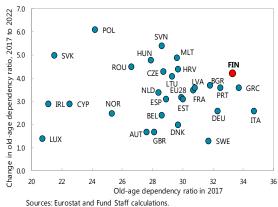
Wages and Salaries





Meanwhile, the economy supports a large state, challenged by worsening demographics.

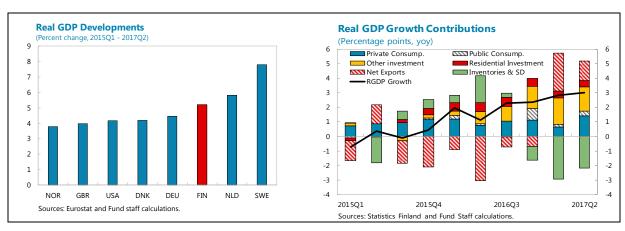
Old-age Dependency Ratios

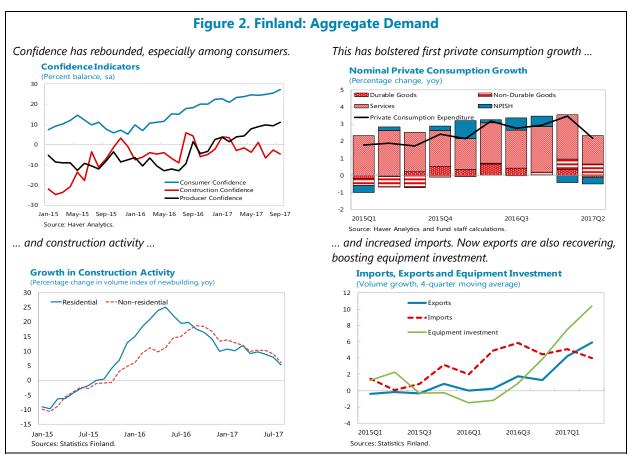


Sources: Eurostat and Fund Staff calculations.

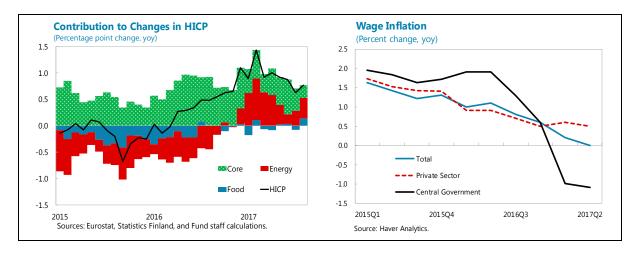
RECENT DEVELOPMENTS

7. The recovery is strengthening and broadening. The economy started to pick up in 2015; growth has accelerated to 2.9 percent year-on-year in the first half of 2017, compared with GDP growth of 1.9 percent in 2016. The recovery—initially driven by private consumption and housing investment and supported by the ECB's accommodative policy, among other factors—has recently broadened to exports and equipment investment, improving prospects that momentum will be sustained (Figure 2).

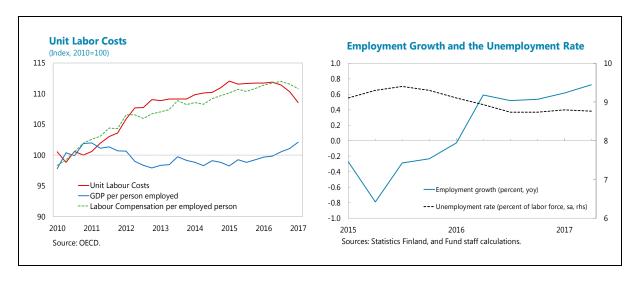




8. Inflation pressures remain weak. Inflation in 2016 averaged only 0.4 percent. It currently remains below 1 percent on account of declining wage growth, reinforced by the recent Competitiveness Pact, and low trade partner inflation.



9. The labor market has been slower to recover (Figure 3). Recent wage moderation and increasing labor productivity have reduced unit labor costs, which increased substantially after the crisis. Despite continued employment growth, the headline unemployment rate has stalled at just below 9 percent. But encouragingly, this is associated with people re-entering the labor force, including from disguised unemployment.²

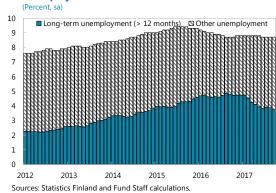


² Disguised unemployment is defined by Statistics Finland as those outside of the labor force who would be available for work within a fortnight, but have not looked for work in the past four weeks.

Figure 3. Finland: Labor Market Indicators

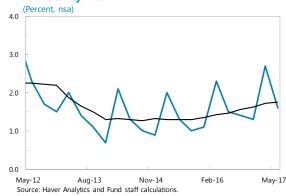
The composition of unemployment is shifting favorably, but the headline rate has stalled at just below 9 percent.

Unemployment Rate



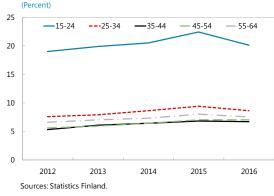
Recent increases in job vacancies signal a recovery in demand for labor...

Job Vacancy Rate



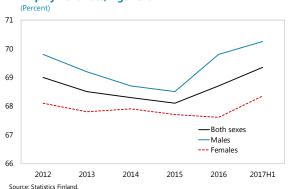
Challenges also remain in addressing the high youth unemployment.

Unemployment Rate by Age Group



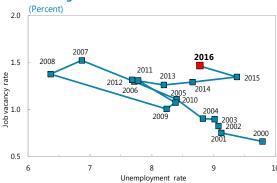
Employment rates are recovering.

Employment Rate, Age 15-64



...but the Beveridge curve has shifted outwards, suggesting increasing labor market mismatch.

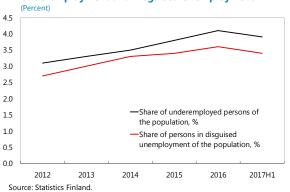
Beveridge Curve



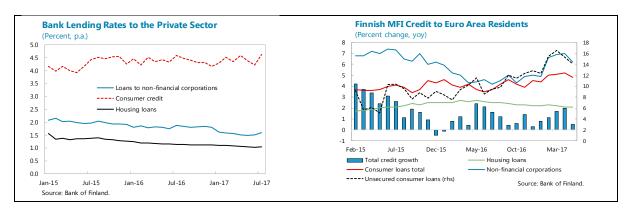
Sources: Statistics Finland, Ministry of Employment and Economic Affairs, and Fund staff calculations.

...as well as underemployment and disguised unemployment.

Underemployment and Disguised Unemployment

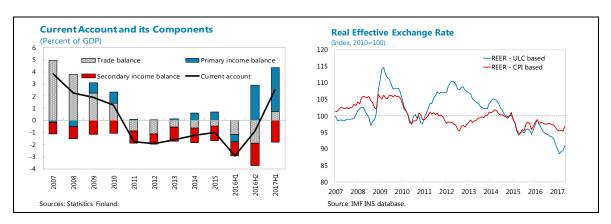


10. Total credit is growing in line with nominal GDP, but unsecured credit has expanded rapidly since 2016. Notwithstanding falling interest rates on mortgage and corporate loans, household loan growth is well below pre-crisis levels (2.4 percent yoy in June). But unsecured consumer credit has accelerated, albeit from low levels. Credit to non-financial corporates has also picked up (6.2 percent yoy growth rate in June), although recent corporate surveys indicate that some SMEs have had difficulties accessing finance.³



11. The current account is back in surplus (Figure 4).

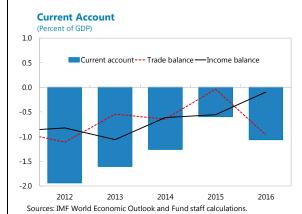
- The current account deteriorated by ½ percent of GDP in 2016, to -1.4 percent of GDP, owing to strong import volumes, higher commodity prices, and weak exports. (Nonetheless, the net international investment position improved because of positive valuation effects.) During the first half of 2017, exports have outpaced imports, following the recovery in global demand and improved cost competitiveness. In addition, primary income has yielded a larger surplus, driven by higher equity investment returns and lower interest payments (Table 2).
- Staff assesses that the external position in 2016 was broadly consistent with medium-term fundamentals and desirable policies—i.e., only a small competitiveness gap remained (Annex I). Recent wage moderation has seen the ULC-based real effective exchange rate (REER) depreciate by more than the CPI-based REER. Both the EBA external sustainability and current account models estimate a current account gap of -¾ percent of GDP in 2016—taking into account uncertainties, staff assesses the gap to be between -1.6 to 0 percent of GDP.



³ Bank of Finland Bulletin 2/2017.

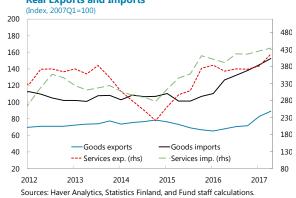
Figure 4. Finland: External Sector Indicators

Current account and trade deficits increased in 2016...



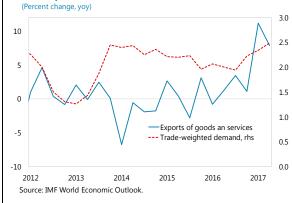
After a long period of stagnation, goods exports volumes have picked up in recent quarters...

Real Exports and Imports



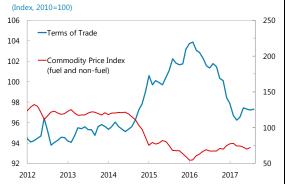
The recovery in exports can be attributed to stronger demand from trading partners...

Real Exports and External Demand



...owing to higher commodity prices that deteriorated the terms of trade.

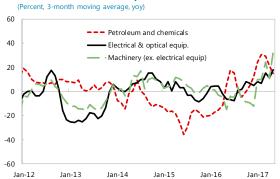
Terms of Trade



Sources: Statistics Finland, IMF WEO, and Fund staff calculations.

...driven by petroleum products, chemicals, electrical equipment and machinery.

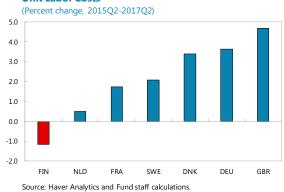
Value of Merchandise Exports



... and reductions in ULCs, which are reversing previous increases.

Sources: Haver Analytics and Fund staff calculations

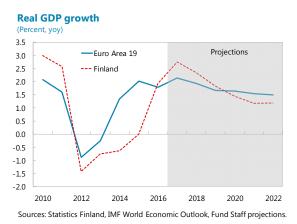
Unit Labor Costs



OUTLOOK AND RISKS

12. Growth is expected to remain strong in the near term.

• GDP growth is projected at 2.8 percent in 2017 and 2.3 percent in 2018, before gradually returning to potential (estimated at 1½ percent) by the early 2020s. Improved competitiveness helps further rebalancing toward exports and investment. Consumption growth is expected to level off, constrained by moderate increases in purchasing power, increased indebtedness, and a low household savings rate, notwithstanding increasing employment. Together with continued



corporate deleveraging, this would keep credit growth relatively subdued. Inflation should gradually increase as the recovery continues, rising to 0.8 percent in 2017, 1.2 percent in 2018, and 2 percent by 2021.

 This projection crucially assumes that (i) cost competitiveness continues to improve, with labor productivity growth expected to remain around 1 percent and assuming continued wage moderation; (ii) the employment rate increases to above 72 percent by 2021, partly driven by higher participation rates as the working age population continues to shrink.

13. These projections are subject to a number of mainly downside risks (Box 1).

- Domestically, there is a risk that necessary reforms might slow or fail, including on health and
 social services and expanding firm-level wage bargaining. Both labor productivity and
 employment growth could fall short of projections, especially if reforms to enhance work
 incentives, including to pensions and unemployment insurance, were to deliver lower gains than
 expected (Figure 6). Growth would also be held back if there were a return to widespread
 imbalances between real wage increases and productivity.
- Risks to external demand are balanced around the assumption of 4 percent annual growth over the projection period. Finland's capital goods exports are especially sensitive to investment demand in key European trade partners and China.
- Finland is also vulnerable to financial shocks, due to banks' reliance on wholesale funding and close trade and financial linkages in the Nordic region, such as faster-than-anticipated monetary policy normalization by the Federal Reserve and the ECB; European bank distress; or contagion

⁴ Production from a new pulp mill boosts growth in 2018 by 0.2 percentage points. Ship deliveries are strong in 2019.

• from a neighboring Nordic country (Risk Assessment Matrix, p.32). Increases in interest rates could dampen consumption growth, especially among those households that are highly leveraged.

Authorities' Views

14. The authorities shared staff's assessment of the outlook and risks. The pick-up in investment and exports has been encouraging. They agreed that the external position was now broadly in line with fundamentals; however, competitiveness is still vulnerable. Negative surprises to global investment were also viewed as a key risk. In addition, a sharp fall in house prices in Nordic neighbors could threaten the recovery.

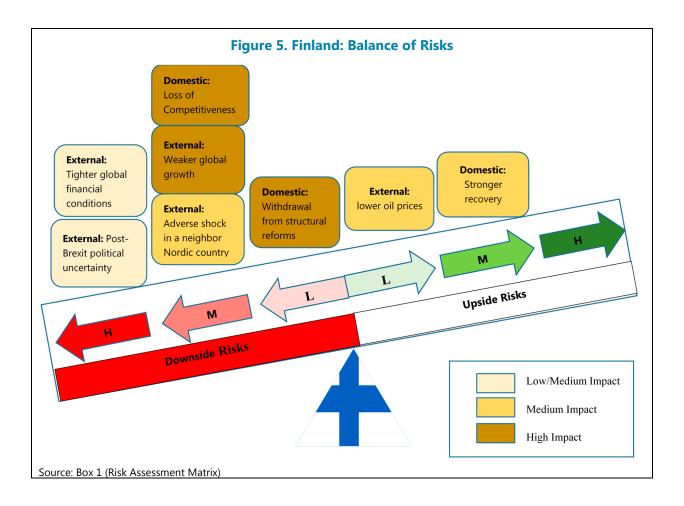
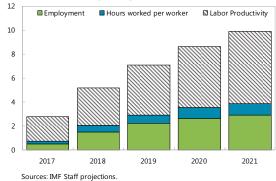


Figure 6. Finland: Productivity and Employment Assumptions in the Baseline Projection

Staff project that real GDP would increase by 10 percent between 2016 and 2021.

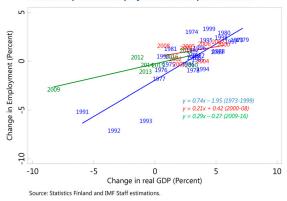
Projection of Real GDP

(Cumulative percentage change from 2016 level)



... as employment is only estimated to rise 3 percent over these years, given its recent weak response to GDP growth.

Relationship Betwen Employment and Output in Finland



... and activation of 60,000 inactive persons, half of which could come through lower disguised unemployment.

Disguised Unemployment



This requires labor productivity growth to average 1 percent and converge to 1¼ percent longer term ...

Labor Productivity Growth

(Percent; based on hours worked)



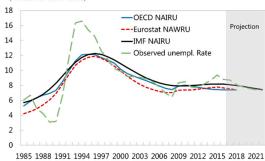
1991 1994 1997 2000 2003 2006 2009 2012 2015 2018 2021

Sources: Statistics Finland and IMF Staff calculations.

Employment growth would be driven by declines in unemployment to a NAIRU of about 7½ percent, ...

NAIRU estimate and observed unemployment rate

nt of labor force)

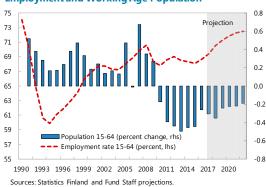


Sources: OECD, Eurostat, IMF Staff estimates, Statistics Finland,

Note: NAWRU refers to Non-Accelerating Wage Rate of Unemployment.

The employment rate would rise closer to Nordic averages, helping offset a declining working-age population.

Employment and Working Age Population



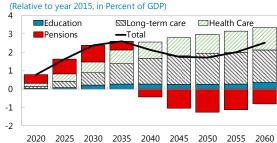
POLICY DISCUSSIONS

A. Fiscal Policy

15. Better-than-expected fiscal outcomes in 2016 are projected to continue in 2017.

- The fiscal deficit in 2016 was 1.8 percent of GDP, compared with a budget forecast of 2.8 percent, partly because of higher tax revenues but mainly driven by higher discretionary expenditure savings. Gross general government debt had doubled after the financial crisis, but has now started to gradually decrease, to 63 percent at end 2016 (Figure 7).⁵
- Staff expects a deficit in 2017 of around 1½ percent of GDP, whereas the original budget had projected the deficit to increase because of lower income taxes and social security contributions following the Competitiveness Pact. The improvement is driven by higher revenues, mainly due to higher growth, but also 0.4 percent of GDP in one-off capital gains tax revenues from a corporate M&A transaction.
- 16. However, the public finances face long-term challenges from declining working age population and escalating age-related spending. The working age population is expected to shrink by ½ percent annually over the next several years. Aging expenses have been increasing at an annual pace of 0.2 percentage points of GDP for the past decade, largely driven by higher pensions. They will continue to increase rapidly until the early 2030s, due to escalating health and long-term care spending as demands for and the relative prices of social and health services increase.⁶





Sources: Finnish Ministry of Finance (2017).

Note: Estimates account for the 2017 pension reform, but exclude the prospective health and social services reform.

17. The authorities' strategy is to address long-term sustainability concerns while safeguarding growth. The authorities estimate that reforms aimed at saving 5 percent of GDP over the long run would ensure long-term fiscal sustainability. From 2016 to 2019, expenditure cuts are estimated to yield 2 percentage points, of which slightly more than 1 percentage point has already been achieved. Employment measures, including the Competitiveness Pact and reforms to unemployment benefits, are envisaged to save 1 percentage point. Over the longer term, health and

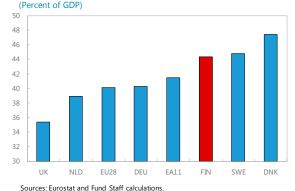
⁵ There is no legislated fiscal anchor, aside from meeting the requirements of the Stability and Growth Pact (SGP). In May, the European Commission judged Finland as having made sufficient progress during 2016 toward its medium-term objective of a 0.5 percent structural fiscal deficit by 2019.

⁶ The former is represented as Wagner's Law; the latter as Baumol's Law. For discussion in the context of Finland, see Andersen, Torben M., Bengt Holmström, Seppo Honkapohja, Sixten Korkman, Hans Tson Söderström, and Juhana Vartiainen (2007), *The Nordic Model: Embracing Globalization and Sharing Risks*.

Figure 7. Finland: Fiscal Developments

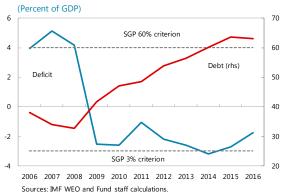
The size of the state is large, supporting extensive social insurance

Tax and Social Security Contribution Revenue, 2016



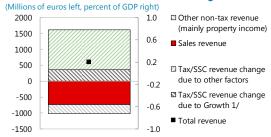
Higher benefits payments throughout the prolonged postcrisis downturn increased debt, but it has now peaked.

Fiscal Deficit and Debt



Relative to 2016 budget forecasts, tax revenue was higher, more than offsetting shortfalls in non-tax revenue.

Fiscal Revenue 2016 Outturn Versus Budget Forecast

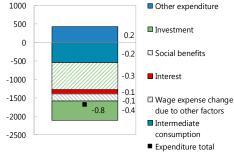


Sources: Ministry of Finance and Fund staff calculations. 1/ Amount by which tax/SSC revenue should have been higher assuming it overperformed in line with the growth surprise between the 2016 outturn and the growth projection in the budget's forecast made in Sep. 2015. Remainder of revenue overperformance is attributed to other factors.

But additional expenditure savings were the most prominent driver of the better 2016 fiscal outturn.

Fiscal Expenditure 2016 Outturn Versus Budget Forecast

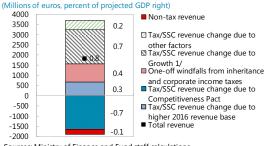




Sources: Ministry of Finance and Fund Staff calculations.

In 2017, strong growth should more than compensate for tax and SSC concessions under the Competitiveness Pact

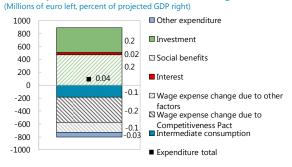
Fiscal Revenue 2017 Projection Versus Budget Forecast



Sources: Ministry of Finance and Fund staff calculations. 1/ Amount by which tax/SSC revenue should have been higher assuming it overperformed in line with the growth surprise between current MoF projections and the budget's forecast made in Sep. 2016. Remainder of revenue overperformance is attributed to other factors.

With expenditures in line with budget targets, fiscal overperformance would be driven by revenues.

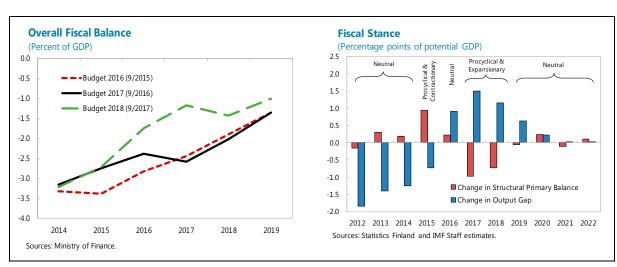
Fiscal Expenditure 2017 Outturn Versus Budget Forecast



Sources: Ministry of Finance and Fund Staff calculations.

social services reform (¶30) targets annual savings of around $1\frac{1}{2}$ percentage points by 2030, and streamlining provision of other public services should save $\frac{1}{2}$ percentage point of GDP.

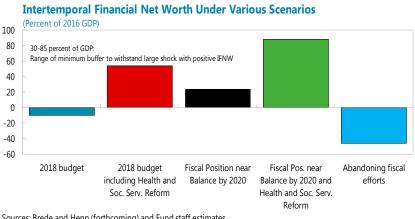
- 18. The 2018 budget proposal includes welcome growth-enhancing measures, but also implies a procyclical fiscal stance in 2018 and slower consolidation in the medium term. The fiscal stance in 2017 is already procyclical, given much stronger growth and the Competitiveness Pact's tax concessions (Text figure: Fiscal Stance). The 2018 budget proposal, submitted to parliament in September, also implies a procyclical fiscal stance, with a deficit ¼ percent of GDP higher than in 2017 and continued growth above potential. Further deficit reduction is gradual, implying that debt would only fall below 60 percent of GDP by the 2022 (Annex II: DSA).⁷
- **Expenditures.** Expenditure measures decided in 2017 include increased spending on security, skills and employment (0.1 percent of GDP), reductions to child care fees, increased resources for the employment service, and partial reversal of past R&D funding decreases (together 0.1 percent of GDP).⁸ These measures are growth enhancing, despite partly offsetting cuts from the expenditure-based consolidation program. Other upward revisions to expenditures in the medium-term fiscal framework result from (i) startup costs for health and social services reform (about 0.1 percent of GDP annually) and (ii) higher expenditure pressures from pensions, oldage care and nursing services.
- Revenues. Revenue measures raise the deficit by 0.1 percent of GDP: reductions in
 unemployment insurance contributions and discretionary personal income tax cuts are only
 partly offset by increases in excise taxes on alcohol and fuel. In addition, revenue projections
 were revised down, as wages and salaries and private consumption are expected to grow more
 slowly than GDP.



⁷ Debt reduction in Finland is relatively gradual given the reduction in the deficit, because social security funds (which are a part of general government) are also accumulating assets.

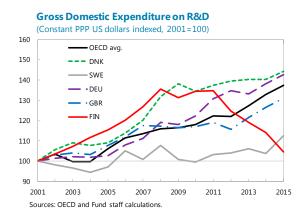
⁸ The funding for the science foundation and innovation agency was increased in spring 2017, and the latter will be integrated with the agency supporting internationalization of SMEs.

19. Staff analysis underscores the importance of building fiscal buffers (Annex III). Staff analysis of Finland's public sector balance sheet suggests that a prudent level of intertemporal financial net worth would be between 30 and 85 percent of GDP. The health and social security reform, with its annual savings of about $1\frac{1}{2}$ percent of GDP, is particularly valuable, boosting the net worth of the public sector to around 54 percent of GDP. In addition, if the deficit were to almost close by 2020, net worth would improve by another 34 percent of GDP.9 Building buffers is important given high exposure to trade and financial shocks and a high stock of government guarantees. The latter now exceeds 20 percent of GDP, with much of recent increases accounted for by guarantees to the shipbuilding sector. Continued close monitoring, including of concentration risks, is needed, although provisioning seems adequate.¹⁰



Sources: Brede and Henn (forthcoming) and Fund staff estimates.

- 20. To help rebuild buffers over the medium term, the mission recommends avoiding procyclical policy. A cyclically-neutral approach (i.e. a broadly unchanged structural primary balance from 2017 to 2019) would help reach fiscal balance earlier than projected, increasing fiscal resilience.
- 21. Although it will be hard to avoid a procyclical fiscal stance in 2018, any fiscal yield from additional positive growth surprises should be directed to deficit reduction.
- New measures could be considered to the extent that they would durably boost employment and growth; these could include additional R&D spending, well-targeted active labor market policies (ALMPs), or public investment to fix maintenance gaps. Further



structural measures to enhance labor market performance should be considered (129). Total

⁹ In light of improved growth, this would have been within reach if the pace of consolidation during 2018–20 that had been set out in the General Government Fiscal Plan 2018-21 (released in April 2017) were maintained.

¹⁰ In addition, the export credit agency Finnvera uses reinsurance to limit its credit risks.

- subsidies are moderate—about 1½ percent of GDP—but could usefully be reoriented or streamlined; a recent government report found only a small fraction to be growth enhancing.¹¹
- Continued monitoring is also needed to ensure that consolidation programs deliver the
 expected results—local governments have already had to substitute measures to reach savings
 targets for the 2016–19 expenditure cuts. The program to streamline provision of government
 services will also require close monitoring to achieve the targeted savings.

Authorities' Views

22. The authorities remain focused on achieving long-term fiscal sustainability. They will continue with the 2016–19 fiscal consolidation program and health and social services reform. They nonetheless recognize that potential savings are uncertain, including from largely autonomous local governments. They would consider adjustments to the reform program to realize planned savings, and agreed that saving unexpected revenues would be prudent. They also emphasized that near-term fiscal procyclicality is partly a result of the sudden increase in economic growth and that structural increases in age-related expenditures automatically loosen the structural fiscal deficit. Bottom-up measures give a different picture of the fiscal stance.

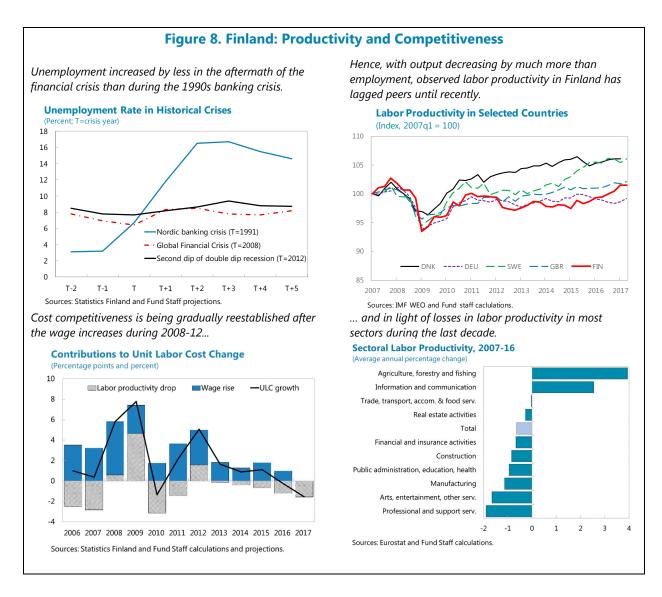
B. Structural Policies

23. Structural policies are crucial for ensuring sustainability of the social model. Finland's product markets are comparatively liberalized and efficient. Recently, retail hours have been made more flexible, postal services have been liberalized, and taxi and rail transport are being opened to competition. However, continued reforms are needed to ensure better labor market outcomes, address challenges of an aging population, foster skills and training, and maintain external competitiveness (Figure 8).

Labor Market

- **24. The labor market has many desirable features.** Finland's labor force is well educated, including in science, technology, engineering, and mathematics. Government-sponsored life-long learning is well developed, with the government co-financing three days of job-related training for each worker every year. Active labor market policies have achieved relatively high unemployment-employment transition rates. And income inequality remains low, despite the shocks the economy has faced.
- **25. However, labor market outcomes indicate a need for reform** to increase wage flexibility at sector and firm levels and boost labor supply from some cohorts (Selected Issues Paper: Labor Markets).

¹¹ See Finnish Ministry of Economic Affairs and Employment (2017), "Virkamiesselvitys yritystuista ja niiden vaikutuksista", TEM raportteja 22/2017.



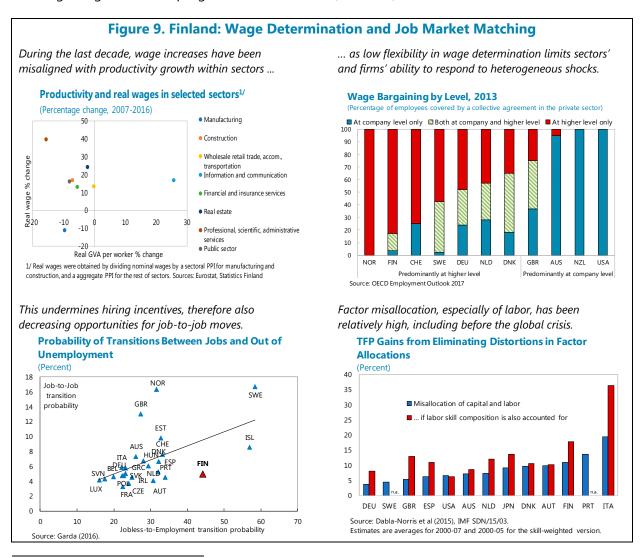
26. Misalignments in wages and productivity at the sector and firm levels hinder job matching and macroeconomic adjustment (Figure 9). Recent wage moderation and the Competitiveness Pact have helped to regain *national* competitiveness, which had deteriorated post crisis. However, changes in real wages in individual *sectors and firms* have in many cases not matched productivity growth.

• Individual firms are increasingly facing different pressures. Wage misalignments are also consistent with lower productivity, by undermining hiring incentives and hindering job-to-job transitions, which are relatively low, especially in comparison to Sweden. Difficulties in matching the unemployed to job vacancies are increasing, as evidenced by an outward shift in the Beveridge curve. Arguments persist over whether this reveals structural mismatches or

¹² See Garda, Paula (2016), "The Ins and Outs of Employment in 25 OECD Countries," OECD Working Papers No. 1350.

insufficient demand.¹³ However, there is evidence of relatively low efficiency in Finnish labor matches even before the crisis hit.¹⁴ Job opportunities for those with lower skills are diminished by a very compressed distribution of wages at the lower end and overlaps in social benefits often resulting in high reservation wages.¹⁵ In addition to wage rigidity, limited labor mobility also constrains matching.

• Efforts under the Competitiveness Pact to formalize a bargaining system incorporating firm-level flexibility have been elusive; it remains to be seen if this year's uncoordinated sector-by-sector bargaining can deliver progress in this direction (Annex IV).

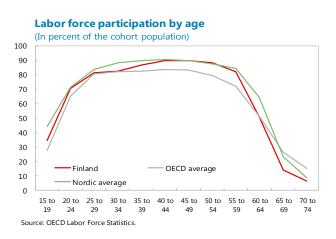


¹³ See Ball, Lawrence, Daniel Leigh, and Prakash Loungani (2013), "Okun's Law: Fit at 50?" IMF Working Paper WP/13/10.

¹⁴ See Dabla-Norris, Era, Si Guo, Vikram Haksar, Minsuk Kim, Kalpana Kochhar, Kevin Wiseman, and Aleksandra Zdzienicka (2015), "The New Normal: A Sector-Level Perspective on Productivity Trends in Advanced Economies," IMF Staff Discussion Note SDN/15/03.

¹⁵ Finland does not have a legal minimum wage. The observed bunching appears to reflect that firms conventionally only pay above the nationally-agreed level.

- 27. Collective bargaining should aim to match wage increases to productivity, not only at the national but also the firm level. Integrating increased wage variation across sectors and firms into the bargaining process, as in Sweden and Denmark, would help Finland adjust in the face of forces that will reshape labor markets, such as increasing skill requirements and routinization. Increased flexibility could also be helpful to alleviate the very high wage compression at the lower end of the pay scale. External competitiveness should be a factor during bargaining; however, staff does not recommend that wage increases in other sectors mechanically follow those in exportoriented industries.
- **28. Finland's employment rate is lower than in other Nordic countries** (Figure 10). Although employment among those aged from 40 to 54 years is relatively high, it is notably lower among the young, women of child-bearing age, and older workers. Unemployment rates have been persistently high, even through the pre-crisis boom years. Total male participation is lower than the EU average, dragged down by employment of the low skilled.
- **29.** Further steps to improve work incentives for these groups are important to offset adverse demographics. The expected reduction in the working age population (¶16) means increased employment rates are needed, even to merely keep employment constant.
- Youth: Compared with other EU countries, Finns' working careers start later on average, largely due to longer study times. The authorities are adjusting higher education to encourage faster completion of studies, and plan to reduce the importance of entrance exams for university admission to speed transition from secondary to tertiary education. Ongoing reforms should make vocational education more adaptable and relevant to employers' needs.



- Women of child-bearing age: Participation rates are low among this group compared to Nordic peers, especially for low-skilled women. This is largely driven by a high effective out-of-pocket cost of child care, because using day care implies giving up a generous home care allowance. Reductions in early childhood education fees for lower-income households as part of the 2018 budget proposal are a welcome first step to address these disincentives. However, the ongoing evaluation of family leave should consider shortening home care allowances in favor of more resources for child care.
- Older workers: The 2017 pension reform comprehensively addresses aging pressures on pension spending (¶29). However, it is also expected to increase the attractiveness of using extended

unemployment as a path to early retirement for those older than 58 years. ¹⁶ Closing this early retirement possibility would prolong working lives and reap the full benefits of the pension reform. More intensive targeting of activation policies to older benefit claimants could also hold potential.

offers have been tightened and the duration of earnings-related unemployment benefits has been shortened. Tapering benefits to gradually decline with the duration of unemployment, as in many other countries, could also incentivize job search and should be considered. Previous cuts to the employment service agency's budget have been partly reversed, allowing interviews to now be conducted with a quarterly frequency, but resources for employment

Expenditure on employment services per unemployed (Thousand euro per unemployed, 2015)

7
6
5
4
3
2
1
0
DNK DEU NOR SWE NLD AUT FRA FIN
Source: OECD.

services remain much lower than in Nordic peers and could be increased. More progress on zoning issues to alleviate housing bottlenecks near job-rich cities would likely enhance labor mobility and job matching for the entire labor force.¹⁸

• Low-skilled: More attention is needed to expand work opportunities and incentives for the low skilled. These are reduced through high wage compression, high marginal tax rates, and—for some— potential loss of several social benefits. The authorities are currently reviewing social benefits with a view to reduce their overlap and foster work incentives. They are also conducting an experiment to gauge the impact of a universal basic income scheme on work incentives (Annex V).

Aging

30. The authorities are appropriately responding to the prospect of increased age-related spending (¶16) with pension and ambitious health and social services reforms.

¹⁶ See OECD (2016), Economic Surveys Finland, Paris: OECD Publishing.

¹⁷ A bill currently before parliament takes first step in this direction, by cutting unemployment benefits by 5 percent for recipients not active in training or having worked at least 18 hours during the previous three months. The bill would also modify unemployment benefits to provide more incentives for entrepreneurship and geographic mobility.

¹⁸ A Parliamentary Audit Committee study recently concluded that housing construction in urban areas has outpaced demand for some time, partly as not sufficient land had been made available.

Figure 10. Finland: Labor Force Participation and Work Incentives

Finland's labor force participation rate is persistently lower than in Nordic peers...

Participation Rates in Nordic Countries

(Labor force in percent of the total working-age population^{1/}) 86 84 82 80 78 76 74 72 70 Norway - Finland Denmark 68 ---- OECD average Sweden 66

1994 Source: OECD Labor Force Statistics. 1/ OECD measures working-age population as those aged 15 to 64.

1988

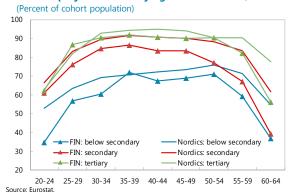
1991

Male employment falls off steeply after 50 years of age and lags other Nordics particularly among the lower

1997

2000 2003 2006 2009 2012 2015

skilled. Male Employment Rates by Age and Education, 2014

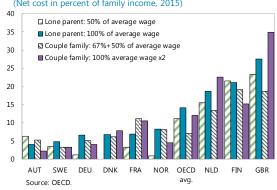


Note: Employment status during parental/child care leave differs somewhat across the Nordics.

Out-of-pocket child care costs are relatively high, disincentivizing parental employment.

Out-of-pocket Full-time Childcare Costs

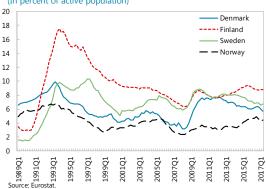
(Net cost in percent of family income, 2015)



... and unemployment structurally higher.

Unemployment rate in Nordic countries

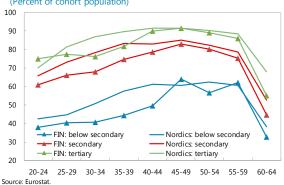
(In percent of active population)



Women's employment rates are much lower than in other Nordics during child-bearing age.

Female Employment Rates by Age and Education, 2014

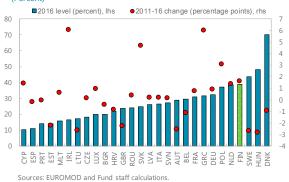
(Percent of cohort population)



Note: Employment status during parental/child care leave differs somewhat across the Nordics.

A high marginal effective tax rate, partly on account of overlapping social benefits, saps work incentives for the lower skilled.

Marginal Effective Tax Rate at the Bottom Quartile, 2016 (Percent)

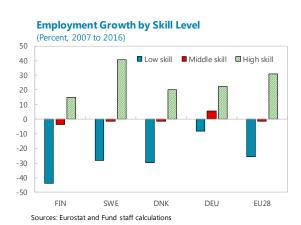


- The 2017 pension reform increases the retirement age from 63 to 65 over the next decade and
 in line with life expectancy thereafter, ensuring complete coverage of future pension liabilities by
 contributions.
- Health and social services reform aims to increase efficiency and competition by reassigning provision from municipalities to newly-defined counties. Implementation has been pushed back by one year, to 2020, to allow further discussion with stakeholders about individuals' choice of health care provider.¹⁹ It will be important that the bill provide sufficient scope to realize savings while ensuring adequate care. Achieving planned annual savings of about 1½ percent of GDP by 2030 will require continuous close monitoring and preparedness to make adjustments, if needed.²⁰

Skills

31. Healthy long-term growth requires continued focus on skills (Figure 11). Finland faces

challenges of skill-biased technological change, automation, and routinization.²¹ Like many advanced countries, Finland has experienced job polarization, with high-skill employment continuing to increase while middle skill jobs have been declining; among lower-skill jobs, services have been gaining in contrast to occupations characterized by manual and routine tasks. However, in contrast to other countries, Finland has retained fewer low-skill jobs. Sectors with the fastest increases in value added, such as IT, have not been job rich.

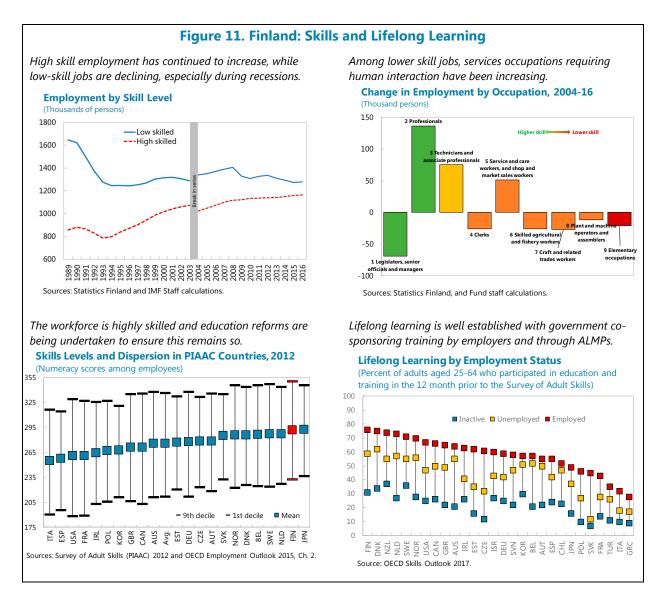


32. The authorities have responded to these challenges with far-reaching education reforms. These aim to broaden vocational education programs to make them more relevant and responsive to the workplace and create research- and internationally-oriented higher education institutions. Debates on the future of work, in which the authorities are involved, will likely not be settled soon; nonetheless, the authorities appropriately focus on lifelong learning to enable workers to adapt to changes and incorporate private sector input in the design of training.

¹⁹ Assuming the bill progresses as planned, 18 counties will be established in June 2018 and new county councils will assume their roles by January 2019. Transfer of responsibility for health and social services will occur in January 2020.

²⁰ The central government will wield substantial power over county finances and could ultimately even revoke autonomy of a county if balanced budgets are not achieved.

²¹ The authorities are also exploring these challenges in the first part of their <u>Report on the Future</u>. Its second part, which will discuss policy implications, will be released in summer 2018.



Authorities' Views

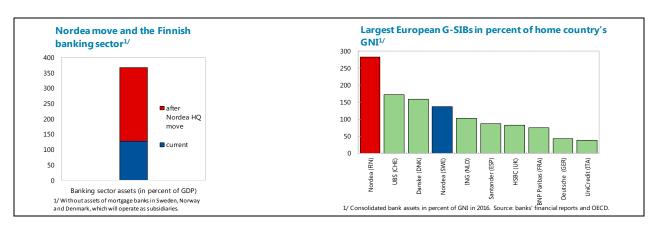
33. The authorities agreed that continued structural reforms—especially to the labor market—are vital to generate durable growth. The Competitiveness Pact was seen as successful in restoring competitiveness. But if a new wage bargaining model is not formalized, greater firm-level flexibility seems unlikely. Increasing labor supply would require additional reforms to those currently in train, given substantial reductions in the working-age population over the next 15 years. Localized labor shortages were seen as symptoms of limited labor mobility and skill mismatches, which the government is working to address. Determination to finalize ongoing reforms—especially on health and social services—is high, but scope for introducing new reforms during the present government's term could narrow soon.

C. Supervision of Financial Institutions

34. The financial system is sound overall. Banks are profitable and well capitalized (Figure 12). Solvency levels of insurance companies are well above requirements: recent EU-wide stress tests indicate that they would withstand adverse scenarios.²² Greater diversification of investments into equities has boosted pension funds' earnings, albeit with increased income volatility.

35. However, structural vulnerabilities in the banking system require continued close monitoring. The 2016 FSAP identified two major issues:²³

- Reliance on market funding and high regional interconnectedness: Around 50 percent of bank liabilities in Finland were foreign owned in 2016, and foreign banks accounted for 70 percent of the sector's assets. Finland is therefore highly exposed to regional spillover risks, such as reversals in neighboring countries' housing markets.
- *Risk weights:* Low risk weights used in banks' internal risk models exaggerate capital adequacy. While the sector's aggregate leverage ratio has improved since 2016,²⁴ low risk weights on mortgage loans remain a concern. The Finnish authorities have appropriately introduced a minimum risk weight of 15 percent on residential mortgage loans, taking effect in January 2018 (Annex VI).
- **36.** The relocation of Nordea's headquarters to Finland will considerably increase the size of the Finnish banking sector under supervision. Nordea, a global systemically-important institution plans to move its headquarters from Stockholm to Helsinki by October 2018, a move that will place the Nordea *Group* under the purview of euro area institutions. ²⁵ Correspondingly, the Finnish banking sector under supervision will expand from its current level around 120 to over 350 percent of GDP. Nordea's presence will be one of the largest in Europe in terms of home country gross national income.



²² See European Insurance and Occupational Pension Authority (2016), *2016 EIOPA Insurance Stress Test Report*, published on December 15, 2016.

²³ See Finland: Financial System Stability Assessment, IMF Country Report No. 16/370.

²⁴ The increase from 6.5 percent at end 2016 to 8.8 percent in June 2017 was a result of Nordea's branchification, removing the relatively low values for Nordea's subsidiary from the aggregate calculation.

²⁵ Nordea operated its Finnish activities through a subsidiary until end 2016, and through a branch since January 2017. Nordea's Finnish operation was previously supervised by the ECB when it was a subsidiary, as it was systemic with respect to the Finnish banking sector.

- 37. Nordea's relocation increases the importance of adequate supervisory resources, close regional cooperation, and completion of the banking union. Although many regulatory requirements follow from EU-level legislation and will not change for Nordea, the move poses some challenges. In particular:
- Capital and liquidity requirements. Introducing a Systemic Risk Buffer (SRB) is important to mitigate long-term risks not addressed by capital requirements common to all banks. Legislation for the SRB has been approved by the parliament; the law should give the macroprudential authority flexibility to use its judgement, and not tie the setting of the SRB to mechanical criteria. For its part, the macroprudential authority should make the application of the SRB transparent and as predictable as possible, and set it at an adequately high level that reflects the significant systemic risks posed by Nordea's large size relative to Finland's economy. Once Finland introduces the SRB—expected in 2018—it will have the same prudential tools to set capital levels as does Sweden. Note, however, that the Swedish supervisor has used Pillar 2 capital requirements for macroprudential objectives, which makes comparison with application by the Single Supervisory Mechanism difficult.
- **Resources.** Although the ECB would be the direct supervisor of Nordea after the move, increasing the Finnish Supervisory Authority's (FIN-FSA) financial and human resources in line with the 2016 FSAP recommendations (Annex VII: FSAP Update) would be even more important, as the ECB will rely strongly on FIN-FSA support.
- Regional cooperation. The Memorandums of Understanding on prudential supervision of significant branches—signed between the ECB and Nordic supervisors in December 2016 should secure full reciprocation of macroprudential tools applied in different Nordic countries by the FIN-FSA, following Nordea's move. It will be also important to maintain the current level of information-sharing between the Nordic supervisors when the ECB takes over supervision.
- European financial architecture. In the absence of EU-level deposit insurance scheme, the Finnish Deposit Guarantee Fund will assume responsibility for insuring not only domestic deposits but also deposits at Nordea's foreign branches. Thus, much will fall to European authorities to apply appropriately strict standards on bail-inable liabilities and complete the banking union by introducing pan-European deposit insurance, with due regard to reducing risk in euro area banks.

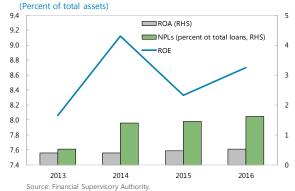
Authorities' Views

38. The authorities recognize the challenges presented by Nordea's move. The authorities are committed to introducing the SRB in early 2018. They aim to provide the macroprudential authority considerable discretion to apply the SRB, while maintaining the high transparency and predictability of the regulatory environment. They expressed strong support for completing the banking union, while acknowledging the need to first address weaknesses in some European banks. In light of Nordea's move, the FIN-FSA's resources would be increased; the FIN-FSA and ECB are committed to continuing close supervisory collaboration with other Nordic authorities.

Figure 12. Finland: Banking Sector Developments

Banks remain profitable ...

Bank Profitability, Capital and Asset Quality



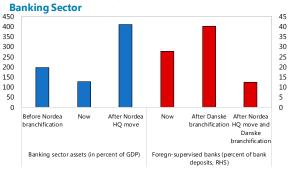
Leverage has improved following Nordea's branchification

Regulatory Tier 1 Capital to Assets



Planned changes in Nordea and Danske increase the importance of cross-border supervisory cooperation ...

Nordea and Danske Organizational Plans and the Finnish Banking Sector

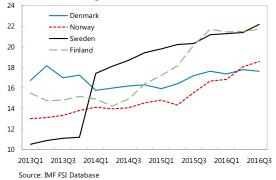


Source: Financial Supervisory Authority and Fund staff caclulations

... and well capitalized.

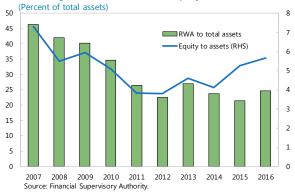
Tier 1 Capital in Nordic Countries





... but risk weights are fairly low, given the use of internalrating-based models.

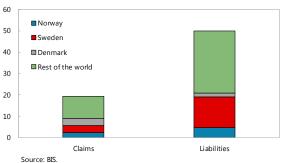
Risk-weighted Assets and Bank Equity



... as funding of the Finnish banking sector remains vulnerable to developments in the region.

Foreign Claims and Liabilities of Finnish Financial Institutions

(Percent of Finnish MFIs' balance sheet, Q2 2017)



D. Household Finances, the Housing Market, and Macroprudential Policies

- **39. House prices do not show signs of overvaluation.**²⁶ House prices relative to rent and incomes are close to their long run averages. Real house prices in the Helsinki metropolitan area have increased gradually since 2012, reflecting greater demand, whereas they have declined for the rest of Finland.
- **40. Some households are vulnerable** (Figure 13). Household saving rates are negative, unsecured consumer credit is growing strongly, and a large share of mortgage loans is held by highly indebted borrowers: over a quarter of mortgage debt is to mortgagees with debt to income ratios higher than 400 percent. Some households would therefore be vulnerable to interest rate increases, as most mortgages are variable rate loans (although about 40 percent of mortgages have contracts that lengthening loan maturity instead of increasing payments).

41. Increasing imbalances in the household sector make it important to give the FIN-FSA additional tools:

- Additional macroprudential measures for borrowers should be introduced to allow the macroprudential authority to better target household vulnerabilities that are not well covered by existing Loan-To-Collateral limits.²⁷ These could include caps on loans in relation to values of houses and personal incomes, and debt servicing to income. The Bank of Finland and FIN-FSA are currently working together to analyze appropriateness of different tools, and plans to propose legislation for additional measures once the SRB is introduced.
- A comprehensive credit registry would be particularly helpful to monitor and assess household credit. The Ministry of Justice has ordered a study on its implementation in Finland.

Authorities' Views

42. The authorities agreed with the characterization of risks to household finances and recommendations for extra tools. The authorities closely monitor developments in the housing market and see merit in adding borrower-based measures to the macroprudential toolkit, particularly a debt-servicing to income limit. They place particular emphasis on more complete data.

²⁶ Some studies suggest house prices in Finland are *under*valued: see Geng, Nan (2017), "Fundamental Drivers of House Prices in Advanced Economies," IMF Working Paper, forthcoming.

²⁷ The loan-to-collateral limit allows a broader range of collateral to be included than only the value of the house, as in a loan-to-value limit. Acceptable collateral includes deposits, equity shares, investment fund units, and third-party pledged collateral.

Figure 13. Finland: Household Debt and House Prices

House price metrics do not show signs of overvaluation.

House Price Indices

(2010=100, sa)

110

100

Nominal house prices: national

Nominal house prices: Greater Helsinki

Real house prices: national

Real house prices: Greater Helsinki

Price to income ratio

Price to rent ratio

Q2-10 Q1-11 Q4-11 Q3-12 Q2-13 Q1-14 Q4-14 Q3-15 Q2-16 Q1-17 Source: Haver Analytics.

But while debt servicing costs have been declining, household debt to income has been increasing...

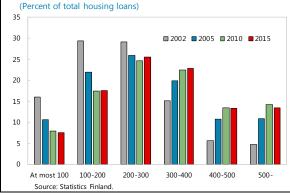
Household Debt in Finland

Source: Statistics Finland.

(Percent of household disposable income) 125 3.0 2.5 120 2.0 1.5 115 1.0 Debt to income Interest to income (RHS) 0.5 110 0.0 2010 2011 2014 2015 2012 2013

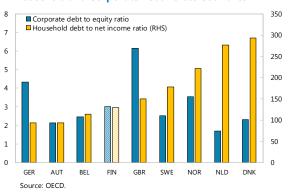
Households with high debt to income ratios hold a high and increasing share of housing loans...

Share of Mortgage Debt by Household DTI Ratio



Overall, household debt remains lower than in Nordic peers.

Household and Corporate Debt Across Countries



...for the those at the lowest and highest incomes.

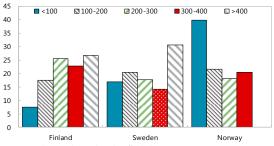
DTI Ratios by Household Income Decile



...and the share is comparable to countries with high household debt.

Share of Households by Debt-to-Income Ratio¹

(Percent of indebted households)



Sources: Authorities data and Fund staff calculations.

1/ Finland - percent of mortgage debt stock by DTI; Norway - last bar reflects share of households with DTI above 300. Data for Norway is for 2015, rest - 2016.

STAFF APPRAISAL

- **43. Growth is expected to remain strong in the near term, albeit with downside risks.** Higher exports and equipment investment should increase the durability of the recovery. However, Finland remains sensitive to growth fluctuations in and financial shocks from neighboring countries. Domestically, there is some risk that necessary reforms may stall. Job growth could be undermined if imbalances between real wage increases and productivity growth persist.
- **44. Notable progress has been achieved on structural reforms, but more is needed to boost potential growth.** Recent product market reforms have expanded competition and important reforms to pensions and unemployment benefits are underway. Wage restraint at the national level, including under the Competitiveness Pact, has restored competitiveness. But a shrinking working age population constrains expected medium-term growth to about 1¼ percent, unless more reforms are implemented that increase employment and productivity.
- **45. Reforms to expand firm-level flexibility in collective bargaining and boost labor supply would be particularly beneficial.** Because individual firms are facing very different pressures, bargaining outcomes should allow more differentiation between firms to ensure that real wage increases are aligned with productivity growth and boost hiring incentives. In addition, there is substantial scope to increase labor utilization, given relatively low participation of many groups and relatively high unemployment. Reforms, some of which are being explored, should aim to enhance work incentives, lengthen working lives, and increase labor mobility.
- **46. The recovery presents an opportunity to rebuild fiscal buffers.** Budget deficits have been lower than expected. But debt remains above the SGP benchmark, and high exposure to shocks implies a need for robust fiscal resources in times of stress. Health and social services reform is vital to boost public sector productivity and contain age-related pressures on public finances, but savings from the reform are uncertain. Hence, any further revenue surprises should be saved or invested in growth-enhancing measures.
- **47. Financial sector policies should focus on broadening the macroprudential toolkit and preparing for the relocation of Nordea's headquarters.** The financial sector is sound overall, but the macroprudential authority should have more tools. Implementing the Systemic Risk Buffer is an important step, but the FIN-FSA board should also have more macroprudential tools to contain risks to borrowers. The relocation of Nordea's headquarters to Finland raises the importance of increasing the supervisor's resources, discretion to set additional capital requirements if needed, close cooperation among Nordic authorities, and further progress in completing banking union in the EU.
- 48. It is proposed that the next Article IV consultation with Finland be held on the standard 12-month cycle.

	Box 1. Risk Assessment Matrix ¹
	Potential Deviations from Baseline
Source of Risks and Relative Likelihood	Expected Impact if Risk is Realized
Source of Risks and Relative Likelinood	Downside Risks
High	Low/Medium
Tighter global financial conditions. Fed normalization and tapering by ECB increase global	Adjustments to tighter financial conditions, if there are policy surprises, could be disruptive, leading to impaired asset values and worsening of banks' liquidity in light of their reliance on
rates and term premia, strengthen the U.S. dollar and the euro vis-à-vis the other currencies, and correct market valuations.	wholesale funding. High corporate savings may help buffer the impact on the ongoing recovery. Policy response: Take preemptive prudential measures to reduce financial sector vulnerabilities, monitor risks at individual institutions. If market stress materializes, ECB should supply liquidity.
Medium Weaker-than-expected global growth: Significant China slowdown Low/Medium	High Weaker growth globally or in Europe would inhibit recovery of Finnish exports, could stall the current expansion in equipment investment and lead to lower output and employment growth.
Structurally weak growth in key advanced economies High/Medium	Policy response: Allow automatic stabilizers to operate while making progress on productivity-enhancing structural reforms.
Medium European bank distress. Financial distress in one or more major banks with possible knock-on effects on the broader financial sector and for	Medium Finnish banks' capital buffers are strong, but they would be affected by bank distress through their heavy on wholesale funding, and their high cross-border integration with other Nordics. Policy response: Increase efforts to strengthen regulatory cooperation and fully apply
sovereign yields in vulnerable economies.	macroprudential policy tools. If market stress materializes, the ECB should provide liquidity.
High	Low/Medium
Policy and geopolitical uncertainties associated with negotiating post-Brexit arrangements.	Only 5 percent of Finland's goods exports going directly to the U.K., but higher trade barriers could disrupt supply chains. Higher uncertainty could negatively impact investment.
	Policy response: Allow automatic stabilizers to operate if growth decelerates.
Medium Adverse shock in a neighboring Nordic country, leading to a correction in the housing	Medium Lower demand of key trading partners would reduce domestic output and employment. Finnish financial sector would see declining asset quality and funding difficulties.
market, and distress in the financial sector.	Policy response: Enhance regional regulatory cooperation, and ensure full implementation of macroprudential policy tools, including liquidity measures. Monitor risks at individual institutions, supply liquidity in case of market distress. Allow automatic stabilizers to operate.
Medium Loss of competitiveness, from real wages increasing ahead of productivity.	High Uncoordinated sectoral bargaining could lead to wages becoming misaligned from productivity, as occurred after the GFC, weakening competitiveness and economic growth. Policy response: Encourage social partners to factor productivity into settlements and make
	progress on inducing firm-level flexibility into collective bargaining.
Low Postponement or withdrawal from planned reforms, including the health and social services	High Abandoning health and social services reforms could jeopardize long-term fiscal sustainability. Policy response: Take actions to guarantee the necessary support for the reform agenda using
reform.	the window of opportunity afforded by the economic recovery. Upside Risks
Low	Medium
Lower energy prices, driven by stronger-than- expected U.S. shale and/or recovery of oil	Lower energy prices would reduce costs of imports, while supporting domestic consumption and production, thus enhancing growth.
production in the African continent.	Policy Response: Continue efforts to implement structural reforms and consider more fiscal tightening in the short term.
Medium Stronger than expected recovery of the Finnish	Medium Agents' high confidence and robust external demand could support a stronger/longer recovery
Stronger than expected recovery of the Finnish economy.	Agents' high confidence and robust external demand could support a stronger/longer recovery. Policy Response: Push forward with productivity-enhancing structural reforms and consider fiscal measures to accelerate rebuilding of buffers or to further lower the labor tax wedge.
¹ The Risk Assessment Matrix (RAM) shows events that cou	ald materially alter the baseline path (the scenario most likely to materialize in the view of IMF staff). The relative

¹ The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path (the scenario most likely to materialize in the view of IMF staff). The relative likelihood of risks listed 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 of 30 percent or more). 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.

Table 1. Finland: Selected Economic Indicators, 2013–2022

				Est.			Projec	tions		
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
			(Percento	age change	, unless ot	herwise in	dicated)			
Output and demand (volumes)										
GDP	-0.8	-0.6	0.0	1.9	2.8	2.3	1.8	1.4	1.2	1
Domestic demand	-1.1	-0.1	1.2	2.5	2.3	2.2	1.6	1.5	1.2	1
Private consumption	-0.5	0.8	1.7	1.8	2.1	1.7	1.5	1.0	1.0	1.0
Public Consumption ¹	1.1	-0.5	0.0	1.2	0.3	0.4	0.8	2.0	8.0	0.
Gross fixed capital formation	-4.9	-2.6	0.7	7.2	8.1	2.9	3.1	2.2	2.0	2.
Change in stocks (contrib. to growth in percent of GDP)	0.0	0.2	0.2	-0.2	-0.7	0.5	-0.1	0.0	0.0	0.
Exports of Goods and Services ²	1.1	-2.7	0.8	1.3	7.7	2.1	3.6	3.0	3.0	3.
Imports of Goods and Services ²	0.5	-1.3	3.2	4.4	3.7	2.3	3.0	3.2	3.0	3.
Net exports (contribution to growth in percent of GDP)	0.3	-0.5	-0.9	-1.1	1.4	-0.1	0.2	-0.1	0.0	0.
Prices, costs, and income										
Consumer price inflation (harmonized, average)	2.2	1.2	-0.2	0.4	0.8	1.2	1.7	1.9	2.0	2.
Consumer price inflation (harmonized, end-year)	1.9	0.6	-0.2	1.1	0.5	1.6	1.7	1.9	2.0	2.
GDP deflator	2.6	1.7	2.0	0.9	0.6	1.3	1.7	1.9	2.0	2.
Unit labor cost, manufacturing	-3.9	-0.3	2.2	-1.5	-4.8	-0.9	0.1	0.3	0.4	0.
Unit labor cost, whole economy	1.6	0.9	1.1	-0.3	-1.6	-0.9	0.7	0.9	1.0	1.
Labor market										
Labor force	-0.5	0.1	0.4	-0.2	0.6	0.6	0.4	0.4	0.1	0.
Employment	-1.1	-0.4	-0.4	0.5	0.7	1.3	0.8	0.6	0.3	0.
Employment rate (Percent of 15-64 WA population)	68.5	68.3	68.1	68.7	69.4	70.5	71.3	71.9	72.2	72.
Unemployment rate (in percent)	8.2	8.7	9.4	8.8	8.7	8.1	7.8	7.6	7.4	7.
Potential output										
Output gap (in percent of potential output) ³	-2.4	-3.7	-4.4	-3.5	-2.0	-0.9	-0.2	0.0	0.0	0.
Growth in potential output	0.7	0.7	0.8	1.0	1.2	1.2	1.2	1.2	1.2	1.
				(Per	cent of GD	P)				
General government finances										
Overall balance	-2.6	-3.2	-2.7	-1.8	-1.4	-1.7	-1.3	-1.0	-1.1	-1.
Primary balance ⁴	-1.4	-2.0	-1.6	-0.7	-0.4	-0.8	-0.5	-0.1	-0.2	-0.
Structural balance (in percent of potential GDP)	-1.2	-0.9	0.1	0.4	-0.6	-1.2	-1.2	-1.0	-1.1	-1.
Structural primary balance (in percent of potential GDP) ⁴	0.0	0.2	1.2	1.4	0.4	-0.3	-0.4	-0.1	-0.2	-0.
Gross debt	56.5	60.2	63.6	63.1	63.0	62.7	62.3	61.3	60.8	59.
Net debt (negative of net financial worth)	-53.1	-53.5	-53.5	-50.3	-47.2	-43.9	-41.0	-38.7	-36.4	-34.
					(Percent)					
Money and interest rates										
M3 (Finnish contribution to euro area , growth rate, e.o.p.)	4.1	1.3	5.0	2.0						
Finnish MFI euro area loans (growth rate, e.o.p.)	7.7	3.8	0.9	1.3						
Domestic nonfinancial private sector credit growth (e.o.p.)	4.4	2.6	3.1	0.7	3.3	4.7	4.7	4.6	4.5	4.
3-month money market rate	0.2	0.2	0.0	-0.3		•••				
10-year government bonds yield	1.9	1.4	0.7	0.4				•••		
Neticed and and investors :				(Per	cent of GD)P)				
National saving and investment	10.0	10.7	10.0	20.4	22.5	22.1	22.0	22.7	24.0	24
Gross national saving Gross domestic investment	19.8 21.4	19.7 20.9	19.9 20.8	20.4 22.0	22.5 21.8	23.1 22.7	23.6 22.9	23.7 23.0	24.0 23.2	24. 23.
	21.4	20.9	20.6	22.0	21.0	22.1	22.9	23.0	23.2	23.
Balance of payments	1.0	1.3	1.0	1 4	0.3	0.3	0.5	0.5	0.5	^
Current account balance	-1.6	-1.3	-1.0	-1.4	0.2	0.2	0.5	0.5	0.5	0.
Goods and Services balance	-0.5	-0.6	-0.5 6.1	-1.2	-0.1	-0.2	0.0	0.0	0.0	0.
Net international investment position Gross external debt	3.9 207.7	-3.2 218.7	-6.1 218.8	-2.5 203.5	-2.3 201.4	-2.0 198.9	-1.4 195.2	-0.8 191.5	-0.2 187.6	0. 183.
	207.7	210./	210.0	د.د02	201.4	130.3	133.2	131.3	107.0	103.
Exchange rates (period average)	0.75	0.75	0.00	0.90						
Euro per US\$ Nominal effective rate (appreciation in percent)		0.75	0.90					•••		
Nominal effective rate (appreciation in percent) Real effective rate (appreciation in percent) ⁵	2.6 2.2	1.9	-2.4	2.0				•••		
real effective rate (appreciation in percent)	2.2	1.3	-4.0	1.1	•••				•••	
Memorandum items Nominal GDP (in Euro billions)	203.3	205.5	209.6	215.6						

Sources: Bank of Finland, International Financial Statistics, Information Notice System, Ministry of Finance, Statistics Finland, and Fund staff calculations.

 $^{^1}$ Stronger increase in 2019 is reflective of the 2018 budget proposal's medium-term fiscal estimates. 2 The lower annual growth in 2018 is due to negative carryover from 2017, given high growth in 2017Q1.

 $^{^{\}rm 3}$ A negative value indicates a level of actual GDP that is below potential output.

⁴ Adjusted for interest expenditure. ⁵ CPI-based real effective exchange rate.

Table 2. Finland: Balance of Payments, 2013–2022

(In billions of euros, unless otherwise indicated)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
					Proj.					
			In bi	Illions of e	uros					
Current account	-3.3	-2.6	-2.1	-3.0	0.4	0.4	1.1	1.1	1.3	1.4
Goods and services	-1.1	-1.3	-1.0	-2.5	-0.3	-0.4	0.1	0.0	0.0	-0.3
Exports of goods and services	79.2	76.8	76.7	76.8	84.9	83.9	87.4	90.8	95.1	99.0
Goods	56.8	56.5	53.4	53.0	59.2	58.5	61.1	63.4	66.5	69.2
Services	22.4	20.3	23.2	23.9	25.7	25.4	26.3	27.3	28.6	29.
Imports of goods and services	80.3	78.1	77.6	79.4	85.2	84.3	87.3	90.8	95.1	99.
Goods	56.5	55.3	51.6	52.7	57.4	56.6	58.6	61.0	63.9	66.
Services	23.7	22.8	26.0	26.6	27.8	27.7	28.7	29.8	31.2	32.
Income	-2.2	-1.3	-1.1	-0.5	0.6	0.8	1.0	1.2	1.3	1.
o/w Investment income	-2.2	-1.3	-1.1	-0.5	0.6	0.8	1.0	1.2	1.3	1.
Capital and financial account	-7.0	-7.8	-3.3	-15.9	0.5	0.6	1.3	1.4	1.6	1.
Capital account	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.
Financial account	-7.2	-8.0	-3.4	-16.0	0.5	0.5	1.2	1.3	1.4	1.
Direct investment ¹	-1.7	-12.9	-17.4	19.9	9.9	11.3	11.3	11.4	11.3	11.
In Finland	-3.8	13.0	13.4	-3.8	1.2	1.0	0.7	0.7	0.7	0.
Abroad	-5.5	0.1	-4.1	16.1	11.0	12.3	12.0	12.1	12.0	12.
Portfolio investment	-3.8	3.3	0.3	-12.7	-3.0	-3.0	-3.1	-3.0	-4.1	-4.
Financial derivatives	-2.0	-0.6	-6.3	-0.8	-0.8	-0.4	-0.2	-0.1	0.0	0.
Other investment	-0.5	2.4	20.1	-23.2	-5.7	-7.4	-6.7	-7.0	-5.8	-5.
Assets	-28.4	-2.4	-3.7	-24.1	-4.2	-4.5	-4.8	-5.1	-5.4	-5.
Liabilities	-28.0	-4.8	-23.9	-0.8	1.5	2.9	1.9	1.9	0.4	-0.
Reserve assets	0.8	-0.2	-0.1	0.8	0.0	0.0	0.0	0.0	0.0	0.
Net errors and omissions	-4.2	-5.6	-1.4	-13.1	0.0	0.0	0.0	0.0	0.0	0.
			In pe	ercent of C	GDP					
Current account	-1.6	-1.3	-1.0	-1.4	0.2	0.2	0.5	0.5	0.5	0.
Goods and services	-0.5	-0.6	-0.5	-1.2	-0.1	-0.2	0.0	0.0	0.0	0.
Exports of goods and services	38.9	37.4	36.6	35.6	38.1	36.3	36.5	36.7	37.2	37.
Goods	27.9	27.5	25.5	24.6	26.6	25.3	25.5	25.6	26.0	26.
Services	11.0	9.9	11.1	11.1	11.5	11.0	11.0	11.0	11.2	11.
Imports of goods and services	39.5	38.0	37.0	36.8	38.2	36.5	36.5	36.7	37.2	37.
Goods	27.8	26.9	24.6	24.4	25.7	24.5	24.5	24.6	25.0	25.
Services	11.7	11.1	12.4	12.4	12.5	12.0	12.0	12.0	12.2	12.
Income	-1.1	-0.6	-0.5	-0.2	0.3	0.4	0.4	0.5	0.5	0.
o/w Investment income	-1.1	-0.6	-0.5	-0.2	0.3	0.4	0.4	0.5	0.5	0.
Capital and financial account	-3.4	-3.8	-1.6	-7.4	0.2	0.3	0.6	0.6	0.6	0.
Capital account	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
Financial account	-3.5	-3.9	-1.6	-7.4	0.2	0.2	0.5	0.5	0.6	0.
Direct investment ¹	-0.8	-6.3	-8.3	9.2	4.4	4.9	4.7	4.6	4.4	4.
Portfolio investment	-1.9	1.6	0.2	-5.9	-1.3	-1.3	-1.3	-1.2	-1.6	-1.
Financial derivatives	-1.0	-0.3	-3.0	-0.4	-0.3	-0.2	-0.1	0.0	0.0	0.
Other investment	-0.2	1.1	9.6	-10.8	-2.6	-3.2	-2.8	-2.8	-2.3	-1.
Reserve assets	0.4	-0.1	-0.1	0.4	0.0	0.0	0.0	0.0	0.0	0.
Net errors and omissions	-2.1	-2.7	-0.6	-6.1	0.0	0.0	0.0	0.0	0.0	0.
GDP at current prices (bln euros)	203.3	205.5	209.6	215.6	223.0	231.1	239.3	247.4	255.4	263.

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

¹Large inward FDI flows in 2014 and 2015 are mainly due to large mergers and acquisitions (M&A) in those years such as Microsoft's purchase of Nokia's handset business (worth 2.6 percent of GDP) and various M&A deals in the energy, manufacturing and shipbuilding sectors worth more than 0.5 percentage points of GDP each.

Table 3. Finland: Net International Investment Position, 2007–2016 (Percent of GDP)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
	207.2	2540	262.2	207.7	202.6	256.2	200.2	2742	242.0	227.6
Assets	207.3	254.0	263.2	327.7	392.6	356.2	309.3	374.2	342.0	337.6
Direct investment	52.4	67.4	64.9	75.4	71.9	71.3	64.9	66.6	64.7	69.7
Portfolio investment	87.6	73.0	93.0	115.2	112.9	117.7	119.9	149.8	145.5	150.2
Equity & investment fund shares	41.9	25.4	37.7	52.9	47.0	51.9	57.0	73.3	72.2	77.9
Debt securities	45.8	47.6	55.3	62.4	65.9	65.7	63.0	76.5	73.3	72.2
Fin. deriv. (other than reserves)	18.3	52.0	42.7	58.1	99.0	66.5	40.7	65.5	47.1	43.6
Other investment	46.2	58.3	58.4	75.2	104.6	96.6	79.9	87.6	80.1	69.0
Reserve assets	2.9	3.3	4.2	3.8	4.3	4.1	3.9	4.6	4.6	5.1
Liabilities	233.5	259.0	260.2	311.1	376.6	344.8	305.5	377.6	348.2	340.0
Direct investment	43.6	55.0	48.4	54.9	53.5	50.9	45.4	56.5	58.5	52.3
Portfolio investment	129.3	92.6	101.9	111.3	109.0	118.3	125.8	153.0	156.2	158.1
Equity & investment fund shares	78.7	38.9	38.1	39.1	27.7	31.0	39.2	47.8	50.2	55.4
Debt securities	50.6	53.7	63.8	72.2	81.3	87.2	86.6	105.2	106.0	102.7
Fin. deriv. (other than reserves)	17.5	51.9	41.6	55.4	94.8	62.4	38.3	61.8	45.8	42.1
Other investment	43.1	59.5	68.3	89.5	119.4	113.2	96.1	106.3	87.8	87.5
Net International Investment Position	-26.2	-5.0	3.0	16.6	15.9	11.5	3.7	-3.4	-6.2	-2.5
Direct Investment	8.7	12.4	16.5	20.4	18.4	20.4	19.5	10.2	6.3	17.4
Portfolio Investment	-41.6	-19.6	-8.8	3.9	3.9	-0.6	-5.8	-3.2	-10.7	-7.9
Fin. deriv. (other than reserves)	0.8	0.1	1.2	2.7	4.2	4.1	2.4	3.7	1.4	1.5
Other Investment	3.1	-1.3	-10.0	-14.3	-14.8	-16.6	-16.3	-18.7	-7.7	-18.5

Sources: Statistics Finland and Fund staff calculations.

Note: Changes to the N $\overline{\text{IIP}}$ since the 2014 Article IV are mainly due to the switch to the BPM6 statistical standard.

Table 4. Finland: General Government Statement of Operations, 2013–2022 (In percent of GDP, unless otherwise indicated)

	2012	2014	2015	2016	2017	2010	2010	2020	2021	2022
	2013	2014	2015	2016	2017	2018	2019 Proj.	2020	2021	2022
Revenue	54.9	54.9	54.2	54.0	52.9	51.7	51.2	51.4	51.2	51.2
Tax revenues	30.9	31.1	31.1	31.2	31.0	30.3	30.0	29.8	29.6	29.6
Taxes on production and imports	14.4	14.4	14.2	14.4	14.0	13.8	13.6	13.4	13.3	13.3
Current taxes on income, wealth, etc.	16.2	16.4	16.6	16.5	16.6	16.2	16.1	16.0	16.0	16.0
Capital taxes	0.3	0.2	0.3	0.2	0.4	0.3	0.3	0.3	0.3	0.3
Social contributions	12.7	12.8	12.9	13.0	12.2	11.9	11.8	11.8	11.8	11.8
Grants	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2
Other revenue										
Expenditure	57.5	58.1	56.9	55.8	54.3	53.4	52.5	52.4	52.3	52.3
Expense	56.9	57.4	56.6	55.4	53.8	52.9	52.1	52.0	51.6	51.6
Compensation of employees	14.3	14.2	13.9	13.3	12.5	12.1	11.9	11.7	11.6	11.6
Use of goods and services	11.5	11.5	10.8	10.8	10.6	10.6	10.4	10.8	10.8	10.8
Consumption of fixed capital (CFC)	3.5	3.5	3.5	3.4	3.5	3.5	3.5	3.5	3.5	3.6
Interest	1.3	1.2	1.1	1.1	1.0	0.9	0.9	0.8	0.9	0.9
Subsidies	1.3	1.3	1.4	1.2	1.2	1.2	1.1	1.1	1.1	1.1
Grants	1.5	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Social benefits	21.6	22.3	22.6	22.5	22.2	21.9	21.7	21.4	21.3	21.4
Other expense	1.9	1.9	2.0	1.7	1.6	1.4	1.3	1.3	1.2	0.9
Net acquisition of nonfinancial assets	0.6	0.7	0.3	0.3	0.5	0.5	0.5	0.4	0.7	0.7
Net operating balance	-2.0	-2.5	-2.4	-1.4	-0.9	-1.2	-0.9	-0.6	-0.4	-0.4
Net lending/borrowing	-2.6	-3.2	-2.7	-1.8	-1.4	-1.7	-1.3	-1.0	-1.1	-1.0
Net acquisition of financial assets	2.2	-0.3	0.7	-0.5						
Currency and deposits	-0.8	-0.8	2.6	-0.4						
Securities other than shares	1.5	-1.1	-0.5	-1.4						
Loans	0.3	-0.6	-0.2	-0.6						
Shares and other equity	2.4	0.8	-1.1	2.2						
Financial derivatives	0.0	0.0	0.0	0.0						
Other accounts receivable	-1.3	1.3	0.0	-0.2						
Net incurrence of liabilities	4.5	3.1	3.5	1.6						
Special Drawing Rights (SDRs)	0.0	0.0	0.0	0.0						
Currency and deposits	0.0	0.1	0.0	0.0						
Securities other than shares	3.1	3.1	1.9	0.9						
Loans	0.5	0.9	1.4	-0.1						
Shares and other equity	0.0	0.0	0.0	0.0						
Financial derivatives	0.8	-0.7	-0.4	-0.2						
Other accounts payable	0.1	-0.2	0.6	1.0						
Memorandum items:										
Primary balance ¹	-1.4	-2.0	-1.6	-0.7	-0.4	-0.8	-0.5	-0.1	-0.2	-0.1
Structural balance (in percent of potential GDP)	-1.2	-0.9	0.1	0.4	-0.6	-1.2	-1.2	-1.0	-1.1	-1.1
Structural primary balance (in percent of potentia	0.0	0.2	1.2	1.4	0.4	-0.3	-0.4	-0.1	-0.2	-0.1
Central government net lending/borrowing	-3.7	-3.8	-3.0	-2.7	-2.5	-2.3	-1.7	-1.4	-1.5	-1.5
General government gross debt	56.5	60.2	63.6	63.1	63.0	62.7	62.3	61.3	60.8	59.9
General government net debt ²	-53.1	-53.5	-53.5	-50.3	-47.2	-43.9	-41.0	-38.7	-36.4	-34.2
Central government gross debt	49.8	52.3	54.1	53.7	54.0	53.6	52.8	51.7	51.0	50.0
Output gap (percent of potential GDP)	-2.4	-3.7	-4.4	-3.5	-2.0	-0.9	-0.2	0.0	0.0	0.0
Nominal GDP (billions of euros)	203.3	205.5	209.6	215.6	223.0	231.1	239.3	247.4	255.4	263.5

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

 $^{^{\}rm 1}$ Adjusted for interest expenditure.

² Defined as the negative of net financial worth (i.e., debt minus assets; excludes all pension liabilities).

Table 5. Finland: Public Sector Balance Sheet, 2007–2016 (Percent of GDP)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Assets	211.5	196.6	228.2	247.4	261.5	269.3	255.1	258.3	278.0	278.5
Nonfinancial	77.2	79.8	86.7	86.5	85.8	88.5	88.6	87.3	84.9	84.6
General Government	66.9	68.9	74.1	73.1	72.5	74.8	75.9	76.7	76.0	74.9
Public Corporations and Central Bank	10.3	10.9	12.6	13.5	13.3	13.7	12.7	10.5	9.0	9.7
Financial	134.3	116.7	141.5	160.9	175.8	180.9	166.4	171.0	193.0	193.9
General Government	109.8	88.8	109.2	117.7	105.9	113.3	117.5	125.3	128.0	128.5
Currency and Deposits	6.0	6.2	5.8	8.3	9.1	8.2	7.3	6.4	8.9	8.2
Debt Securities	22.3	21.9	26.0	21.0	20.8	21.1	20.9	21.2	21.1	19.5
Loans	10.9	12.3	14.7	14.7	13.4	15.2	15.4	15.3	14.7	13.8
Equity and investment fund shares	64.4	42.9	58.0	67.8	56.9	63.0	69.6	76.4	77.4	81.8
Insurance, pension and standardized guarantees	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1
Financial derivatives and stock options	1.7	1.0	0.6	1.2	0.9	1.2	1.1	1.1	1.0	0.9
Other accounts receivable	4.5	4.4	4.1	4.7	4.6	4.7	3.3	4.6	4.4	4.1
Public Corporations and Central Bank	24.5	28.0	32.3	43.2	69.9	67.6	48.9	45.8	65.1	65.3
Liabilities	68.8	72.4	87.9	105.7	133.2	137.8	118.7	119.8	138.4	140.4
General Government	40.1	38.8	49.5	55.9	57.1	63.8	64.5	71.4	74.1	75.0
Currency and Deposits	0.2	0.2	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4
Debt Securities	28.3	27.4	35.6	41.3	42.5	46.3	46.2	52.5	54.0	54.3
Loans	6.0	6.4	7.4	7.8	9.3	12.1	12.6	13.4	14.6	14.1
Equity and investment fund shares	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.2	0.2
Insurance pension and standardized guarantee scheme	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Financial Derivatives	1.0	0.5	0.3	0.6	-0.7	-0.8	-0.5	-0.5	-0.9	-0.3
Other accounts payable	4.5	4.2	5.8	5.6	5.3	5.6	5.6	5.4	5.8	6.7
Public Corporations and Central Bank	28.7	33.6	38.4	49.8	76.1	74.0	54.2	48.4	64.4	65.4
Existing pension liabilities 1/	225.0	238.5	279.0	274.9	274.8	283.1	288.5	304.6	303.2	301.1
To public sector employees	80.0	84.8	98.3	94.7	93.9	96.4	97.7	105.1	104.1	103.3
To private employees	145.0	153.7	180.7	180.2	180.9	186.7	190.8	199.5	199.1	197.8
Public Sector Net Financial Worth										
Excluding pension liabilities	65.6	44.3	53.6	55.2	42.6	43.0	47.7	51.2	54.6	53.4
Including existing pension liabilities to public employees	-14.5	-40.5	-44.7	-39.6	-51.3	-53.3	-50.0	-53.9	-49.4	-49.9
Including existing pension liabilities to all employees	-159.5	-194.2	-225.4	-219.8	-232.2	-240.0	-240.7	-253.4	-248.5	-247.7
Public Sector Net Worth										
Excluding pension liabilities	142.8	124.2	140.2	141.7	128.4	131.5	136.4	138.5	139.6	138.0
Including existing pension liabilities to public employees	62.7	39.3	42.0	47.0	34.4	35.1	38.7	33.4	35.5	34.7
Including existing pension liabilities to all employees	-82.3	-114.3	-138.7	-133.2	-146.4	-151.6	-152.1	-166.1	-163.6	-163.1

Source: Brede and Henn, forthcoming. "Finland's Public Sector Balance Sheet: A Novel Approach to the Analysis of Public Finance," IMF Working Paper. 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/ 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 for the Banking Sector, 2011–2017

	2011	2012	2013	2014	2015	2016	2017	Latest Obs.
Households								
Total household debt (in percent of GDP)	60.1	62.3	62.8	64.4	65.7	66.6	65.7	March 2017
Total household debt (in percent of disposable income)	115.0	118.1	117.8	121.5	124.5	126.9	127.1	March 2017
Household interest expenses (in percent of disposable income)	2.7	2.5	1.9	2.0	1.9	1.6	1.6	March 2017
Financial assets/GDP	110.5	117.4	125.4	130.8	133.6	137.1	136.2	March 2017
Non-financial corporations								
Gross debt (in percent of GDP) ¹	76.6	77.7	76.5	77.0	80.9	74.7	74.8	March 2017
Government								
General government debt (EMU definition, in percent of GDP)	48.5	53.9	56.5	60.2	63.7	63.6	62.7	March 2017
Central government debt (in percent of GDP)	44.7	48.1	49.8	52.3	54.1	54.1	53.5	March 2017
Financial sector								
Total MFI assets (in billions of euro)	644.4	600.3	525.3	579.3	556.0	547.3	455.5	June 2017
in percent of GDP	327.3	300.5	258.3	281.9	265.3	253.8	207.6	June 2017
Total deposits (in billions of euro)	130.3	135.7	139.4	135.4	141.8	140.2	94.6	June 2017
in percent of GDP	66.2	67.9	68.6	65.9	67.7	65.5	43.0	June 2017
Credit to nonfinancial and housing corporations (annual percent change, e.o.p.)	9.1	4.8	6.1	5.1	5.2	4.6	5.2	July 2017
Credit to nonfinancial corporations (annual percent change, e.o.p.)	8.3	2.5	3.9	2.0	3.2	1.9	2.7	July 2017
Credit to households (percent change, e.o.p.)	5.6	4.9	2.2	1.9	2.7	2.5	2.2	July 2017
Housing loans in percent of total lending	42.1	42.7	40.3	39.3	41.0	43.8	53.5	July 2017
Bank asset quality ²								
Non-performing loans (in billions of euro)	1.3	1.3	1.4	4.0	4.1	4.0	2.7	June 2017
Non-performing loans/total loans (in percent)	0.6	0.5	0.6	1.3	1.3	1.5	1.8	June 2017
Provisions to non-performing loans (in percent)	N.A.	N.A.	N.A.	37.8	35.3	35.9	30.7	June 2017
Household non-performing loans/total household loans (in percent)	0.6	0.6	0.7	1.5	1.6	2.1	2.1	March 2016
Household non-performing loans/total non-performing loans (in percent)	47.5	51.9	54.5	41.3	43.3	48.8	50.6	March 2016
Bank capital adequacy								
Regulatory capital as percent of risk-weighted assets	14.2	17.0	16.0	17.3	23.1	23.3	21.1	June 2017
Regulatory tier 1 capital to risk-weighted assets	13.6	16.1	15.2	16.4	21.7	21.9	19.2	June 2017
Equity/total assets (in percent)	4.4	4.4	5.0	4.3	5.6	6.5	8.8	June 2017
Bank profitability								
Interest rate margin (percentage points, e.o.p.) ³	1.9	1.4	1.5	1.5	1.4	1.4	1.3	August 2017
Net interest income (in percent of total income)	48.1	43.8	40.8	41.7	38.9	36.8	40.4	June 2017
Return on equity (in percent)	10.0	11.1	9.6	11.3	11.5	10.6	7.8	June 2017
Return on assets (in percent)	0.5	0.5	0.5	0.5	0.6	0.6	0.6	March 2017
Liquid assets/total assets (in percent) ⁴	7.0	14.7	14.9	14.3	16.7	19.0	18.1	June 2017
Liquid assets/short-term liabilities	8.4	19.2	19.7	18.9	22.4	25.1	27.1	June 2017
Deposits as percent of assets	24.1	27.5	30.6	26.6	29.8	33.5	51.7	June 2017
Loan-to-deposit (LTD) Ratio	135.7	134.5	133.1	129.3	124.6	111.8		Dec. 2016
Off-balance sheet liabilities/total assets (in percent)	10.8	11.1	11.6	12.9	13.1	18.9	18.2	June 2017
Use of ECB refinancing (billions of euro) ⁵	2.3	3.7	2.5	0.7	0.7	6.7	10.1	July 2017
in percent of banks total assets	0.4	0.7	0.6	0.1	0.1	1.2	2.2	July 2017
in percent of total ECB refinancing operations	0.3	0.3	0.3	0.1	0.1	1.1	1.3	August 2017
Asset prices								5
Change in stock market index (in percent, e.o.p.)	-30.1	8.3	26.5	5.7	10.8	3.6	6.5	August 2017
Change in housing price index (in percent, year average)	2.7	1.7	1.6	-0.5	-0.8	0.9	1.3	July 2017
Memorandum items:								,
Credit-to-GDP gap	10.6	9.0	8.0	9.7	10.6	-7.4	-8.0	March 2017

Sources: Bank of Finland, Financial Supervision Authority, Finnish Bankers' Association, Haver Analytics, Statistics Finland, and Fund staff calculations.

¹ Debt between domestic non-financial corporations is eliminated

² Change in definition of NPLs in 2014. Other receivables, undrawn credit facilities and guarantees and other commitments are excluded from the denominator

 $^{^{\}rm 3}$ Average of margins (average lending rate minus average deposit rate) on loans to non-MFIs.

⁴ Cash and debt securities eligible for central bank funding

 $^{^{\}rm S}$ Sum of main and long-term refinancing operations and marginal facility.

Foreign asset B		
and liability position and trajectory a fi A	Background. Finland has a small negative net international investment position (NIIP) of 2½ percent of GDP as of end-2016. Since 2010, the NIIP has declined from a peak of 17 percent of GDP, largely owing to the reversal of the current account balance from surplus to deficit. Gross assets and liabilities have declined in recent years, but remain large at 338 and 340 percent of GDP, respectively, as of end-2016. The financial sector accounts for slightly more than half of both external assets and liabilities, while the rest are largely held by nonfinancial corporations and government social security funds. Assessment. The NIIP is expected to gradually improve over the medium term, consistent with small current account surpluses. Vulnerabilities mainly stem from the large cross-border exposures of the financial sector, including liquidity risk related to foreign-financed wholesale funding.	Overall Assessment: The external position of Finland in 2016 was assessed to be broadly consistent with mediumterm fundamentals and desirable policies. The NIIP has stabilized from its declining trend. The strengthening of external demand and decline in unit
Current account a in c c s A	Background. Finland's current account turned into deficit in 2011 amid the sharp export decline of the wood and paper and electronics industries (Nokia). The CA deficit averaged 1.4 percent in the last five years, and also stood at 1.4 percent in 2016. Exports recovered strongly in the first half of 2017 across different sectors, including metal, petroleum, chemicals and machinery and equipment. The CA deficit is expected to narrow significantly in 2017 and to reach balance over the medium term, owing to continued improvement in exports as external demand and competitiveness strengthen. Assessment. Both the EBA external sustainability and EBA CA models estimate a CA gap of -34 percent of GDP in 2016, n case of the latter resulting from a cyclically adjusted CA balance at -1.5 percent of GDP versus a -34 percent of GDP current account norm. Taking into account normal uncertainties around the estimates, staff assesses the CA gap to be between -1.6 to 0 percent of GDP. 1/	labor cost should help further strengthen the external position. Potential policy responses: Wage restraint is bearing fruit in underpinning competitiveness, but it will also be important to increase wage flexiblity at the
rate a e b R A A S s a	Background. After the depreciation in 2010-11, the CPI-based REER has been relatively stable for the last 5 years. It appreciated by about 1 percent in 2016 and depreciated by 1 percent the first half of 2017. Growth in unit labor costs exceeded that in Euro area trade partners notably during 2011 and 2012. The resulting cost competitiveness gap is now being closed on the back of wage restraint—including a 2017 wage freeze—and a recovery in output: The ULC-based REER depreciated by some 7 percent from 2016Q1 through October 2017. **Assessment**. The EBA regression-based level and index models provide opposing estimates, suggesting that the average REER in 2016 was overvalued by 2.9 percent and undervalued by 1.6 percent, respectively. However, the EBA external sustainability model suggests a REER overvaluation (of 2.4 percent). Consistent with these EBA model results, staff assesses the REER to be between 0 and 5 percent above the level consistent with fundamentals, reflecting a remaining cost competitiveness gap, which is expected to be further closed going forward.	firm level, including to enhance the economy's ability to adjust to future shocks. Structural reforms should continue to increase productivity and support the ongoing recovery. Ongoing gradual fiscal consolidation is also expected to buttress the external balance.
Capital and financial accounts: flows and policy measures	Background. Net total financial inflows amounted to 7.4 percent of GDP in 2016, driven by portfolio inflows across equities and fixed income instruments of 6 percent of GDP, underpinned by Finland's safe haven status. FDI outflows and other investment inflows were both on the order of 10 percent of GDP, offsetting each other and reflecting investments by large domestic and foreign firms. Assessment. Finland has a fully open capital account. It remains exposed to financial market risks against the background of an interlinked regional financial market.	
FX intervention and reserves level fl	Assessment. Reserves held by Euro area countries are typically low relative to standard metrics. The currency is freely floating. 1/ A standard deviation of 0.8 percent of GDP around the cyclically adjusted CA norm is applied to obtain the CA gap range.	

Annex II. Debt Sustainability Analysis

Public debt recorded its first decline since the global financial crisis in 2016 to 63.1 percent of GDP. In light of the present economic recovery, even the envisaged slower pace of future fiscal consolidation is sufficient to maintain debt on a downward path. Under this baseline, debt would return to levels below 60 percent of GDP by 2022. A contingent liability shock is the stress scenario with the greatest impact on the public debt-to-GDP ratio. Under the assumptions of this scenario, the debt ratio would peak to around 89 percent of GDP in 2019.

A. Baseline Scenario

- **1. Macroeconomic assumptions.** With the economy strongly recovering at the moment, real GDP growth is expected to reach 2.8 percent in 2017 and 2.3 percent in 2018, before gradually reverting to potential growth—estimated at 1.2 percent—over the medium term. With labor force growth projected at zero over the medium term, latter will require labor productivity growth to not fall considerably below 1 percent in any year going forward. GDP deflator inflation is expected to rise from 0.6 percent in 2017 to 1.3 and 1.7 percent in 2018 and 2019, respectively; thereafter it is expected to converge toward 2 percent. Interest rates are expected to remain subdued in the near-term due to QE and the pace of rates rises is likely to be gradual when monetary policy eventually begins to normalize.
- 2. Although debt is projected to continue to decline, this DSA uses the higher scrutiny framework, given that Finland's debt level remained above 60 percent of GDP in 2016. Given the current vigorous economic recovery, debt will maintain a downward path, although the pace of future consolidation has been slowed.¹ It is also notable that social security funds, a part of general government, are accumulating assets; thereby government net worth improves faster than debt declines. Debt is expected to return to just below 60 percent of GDP by 2022 and continue to decline thereafter. Given the relatively long average maturity of Finnish public debt, the gross financing needs remain below 13 percent of GDP every year in the baseline scenario. With government pension funds holding a large stock of pension assets and accounting for public corporations, public sector financial assets exceeded 190 percent of GDP in 2016. However, static net financial worth is -50 percent of GDP when accounting for already-accrued pension liabilities to public sector employees and -248 percent of GDP if also accounting for such liabilities owed to private sector employees (Selected issues paper: Fiscal Sustainability). This highlights the need for closely monitoring long-term sustainability of the fiscal position.²
- **3. Realism of baseline assumptions.** Median forecast errors for the primary balance (-0.47 percent of GDP, 54th percentile) and inflation (0.18 percent, 62nd percentile) have been

¹ The negative growth impact of the fiscal consolidation measures is already incorporated in the baseline projections.

² To this effect, static and intertemporal balance sheets for Finland were constructed. See Selected Issues Paper on Fiscal Sustainability and Brede and Henn (forthcoming), "Finland's Public Sector Balance Sheet: A Novel Approach to Analysis of Public Finance", IMF Working Paper.

relatively moderate. With growth over the last decade especially volatile in Finland, the median forecast error for real GDP growth has been relatively high at -1.2 percent (25th percentile). This was driven by the large negative shock Finland suffered in 2009, the initial rapid rebound from the crisis, as well as the initially unexpected and prolonged recession during 2012–14.

4. The forecast fiscal adjustment is not large in either absolute terms or by comparison to other countries' experiences. The maximum 3-year change in the cyclically-adjusted primary balance (CAPB) is 0.3 percent of potential output. This places it firmly in the middle of the distribution of CAPB adjustments across countries.

B. Stress Testing

5. Finland's debt ratio would remain under 90 percent of GDP even in the worst shock scenario examined. For the standard macro-fiscal stress scenarios, the debt ratio stays below 65 percent of GDP, except in the real GDP shock scenario. The contingent liability shock scenario causes the largest debt ratio increase, to a peak of 89 percent of GDP in 2019.

6. The shock scenarios include:

- Real GDP growth shock: Under this scenario, growth is one-standard deviation lower than the baseline in both 2018 and 2019 (i.e. 3.6 percentage points lower). This also causes inflation to be around 90 basis points (bps) lower in these years. In 2019, the debt ratio peaks at 75 percent of GDP in 2019 and the gross financing need (GFN) peaks at 16½ percent of GDP.
- Primary balance shock: In this scenario, the primary balance (PB) is 1½ percentage points of GDP lower than in the baseline in both 2018 and 2019. This causes the debt path to increase in those years and the debt ratio to remain above 60 percent of GDP throughout the forecast horizon (ending up at 62¾ percent in 2022). Gross financing needs increase by about 3 percentage points of GDP during the years of the shock and remain about 2 percentage point of GDP above baseline thereafter.
- Real interest rate and real exchange rate shocks: Under the real interest rate shock scenario, the effective interest rate gradually rises from 2019 to exceed the baseline by 1¼ percentage points by 2022. This would be sufficient for debt to effectively stop declining toward the end of the projection period; it would stand 2 percentage points of GDP above the baseline in 2022.³ A real exchange rate shock does not have any direct impact on debt sustainability, as the vast majority of debt issuance is in euros and all foreign currency issuance is completely hedged by the Finnish State Treasury.
- Combined macro-fiscal shock: This scenario is a combination of the effects of the macro-fiscal scenarios above. In this scenario, growth and inflation fall, the primary balance deteriorates, the

³ If assets of social security funds were included in the analysis, increases in interest rates would actually increase the net financial worth of the public sector.

exchange rate depreciates, and interest rates rise relative to the baseline. The debt ratio peaks at $75\frac{1}{2}$ percent of GDP in 2019, while the GFN rises to $16\frac{1}{2}$ percent of GDP in 2019 and 2020.

• Contingent liability shock:⁴ Such a contingent liability shock could emerge in the event of a financial crisis (e.g., as a result of spillovers from a housing market correction in another Nordic country impacting Finland through financial, trade, and confidence channels). In this scenario, the contingent liability shock in 2018 equals about 22 percent of GDP. Additionally, growth falls as in the real GDP shock scenario and the effective interest rate rises by 1 percentage point by 2019. As a result, the debt ratio increases 27 percent of GDP above the baseline and the GFN peaks at 27½ percent of GDP in 2018. The debt ratio peaks at 89 percent of GDP in 2019.

⁴ The scenario assumes a one-time increase in non-interest expenditures equivalent to 10percent of banking sector assets, which, given the strong capital position of Finnish banks, is a very large shock. (Note that the 2016 FSAP found that impacts of a severe shock of the magnitude of the 1990s financial crisis on bank solvency would actually be relatively small.) The shock is assumed to trigger a real GDP growth shock (as above), with growth reduced by 1 standard deviation for 2 consecutive years, leading also to a decline in inflation. While the revenue-to-GDP ratio remains the same as in the baseline, deterioration in the primary balance lead to higher interest rates.

Finland Public Sector Debt Sustainability Analysis (DSA) - Baseline Scenario

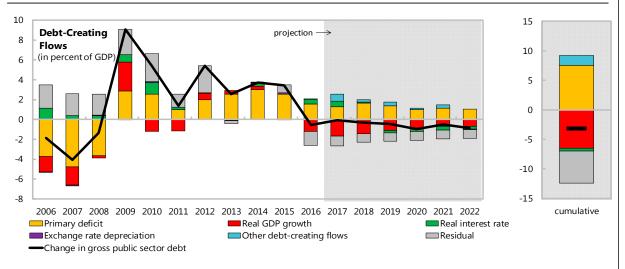
(in percent of GDP unless otherwise indicated)

Debt, Economic and Market Indicators 1/

	Ac	tual			Projections						tember 0	08, 2017
	2006-2014 2/	2015	2016	2017	2018	2019	2020	2021	2022	Sovereign	Spreads	
Nominal gross public debt	45.8	63.6	63.1	63.0	62.7	62.2	61.3	60.8	59.9	EMBIG (b	p) 3/	-2
Public gross financing needs	8.8	9.3	8.6	9.1	7.6	9.9	12.6	10.2	11.5	5Y CDS (b	p)	18
Net public debt	45.8	63.6	63.1	63.0	62.7	62.2	61.3	60.8	59.9			
Real GDP growth (in percent)	0.5	0.0	1.9	2.8	2.3	1.8	1.4	1.2	1.2	Ratings	Foreign	Local
Inflation (GDP deflator, in percent)	2.1	2.0	0.9	0.6	1.3	1.7	1.9	2.0	2.0	Moody's	Aa1	Aa1
Nominal GDP growth (in percent)	2.6	2.0	2.9	3.4	3.6	3.6	3.4	3.2	3.2	S&Ps	AA+	AA+
Effective interest rate (in percent) 4/	3.3	1.9	1.7	1.6	1.4	1.4	1.4	1.5	1.6	Fitch	AA+	AA+

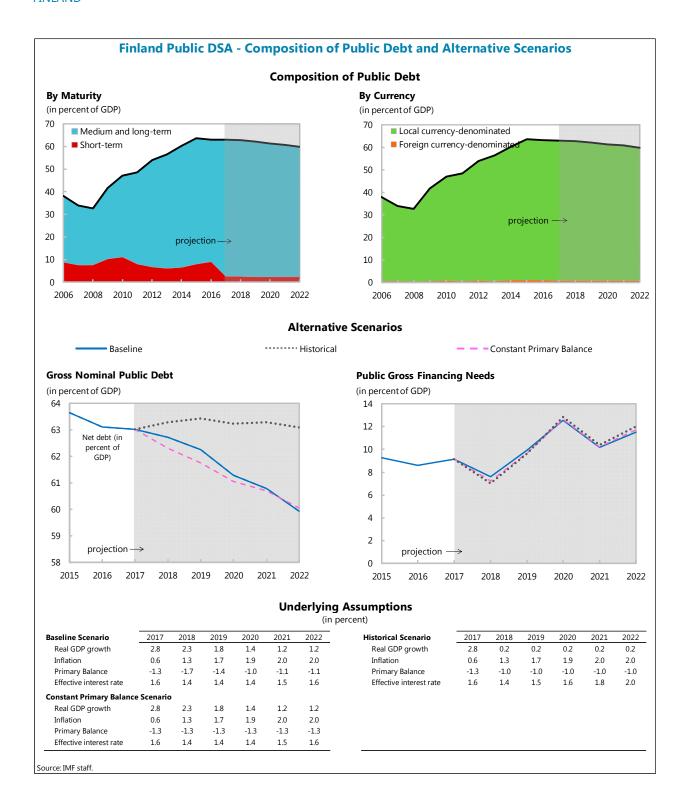
Contribution to Changes in Public Debt

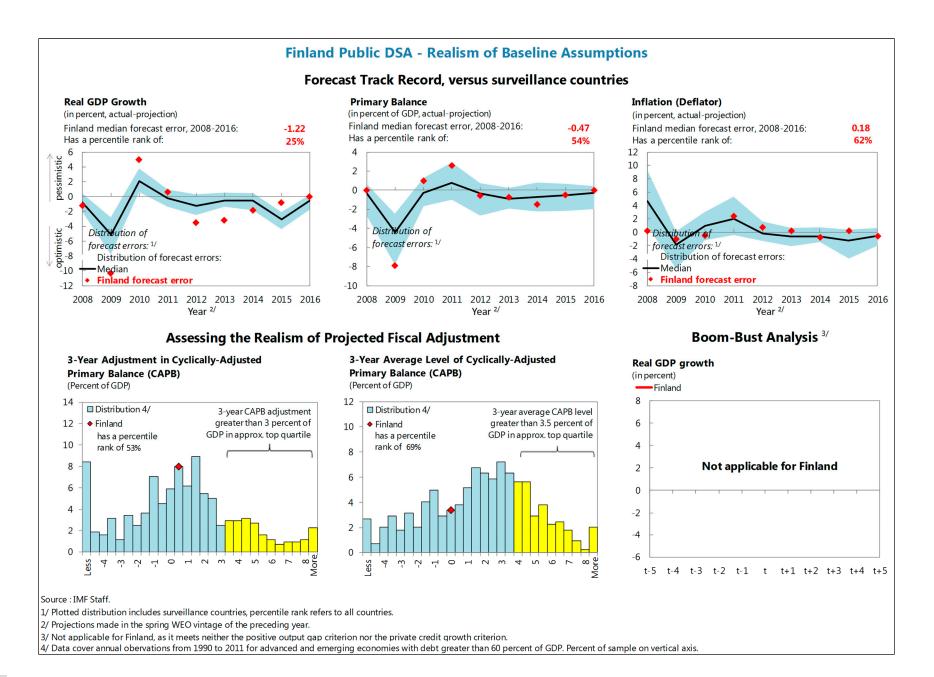
	A	ctual							Projec	tions		
	2006-2014	2015	2016	20	17	2018	2019	2020	2021	2022	cumulative	debt-stabilizing
Change in gross public sector debt	2.3	3.4	-0.5	-	0.1	-0.3	-0.5	-1.0	-0.5	-0.9	-3.2	primary
Identified debt-creating flows	0.5	2.6	0.9		0.9	0.6	0.4	-0.1	0.4	0.1	2.2	balance ^{9/}
Primary deficit	0.2	2.5	1.6		1.3	1.7	1.4	1.0	1.1	1.1	7.5	-1.0
Primary (noninterest) revenue and	d gra 51.7	53.3	53.2	5.	2.0	50.8	50.3	50.5	50.3	50.3	304.3	
Primary (noninterest) expenditure	51.9	55.8	54.7	5.	3.3	52.5	51.7	51.5	51.4	51.4	311.8	
Automatic debt dynamics 5/	0.3	0.1	-0.7	-	1.1	-1.3	-1.3	-1.2	-1.0	-1.0	-7.0	
Interest rate/growth differential 6/	0.3	0.0	-0.7	-	1.1	-1.3	-1.3	-1.2	-1.0	-1.0	-7.0	
Of which: real interest rate	0.5	0.0	0.5		0.6	0.1	-0.2	-0.3	-0.3	-0.3	-0.5	
Of which: real GDP growth	-0.2	0.0	-1.2	-	1.7	-1.4	-1.1	-0.9	-0.7	-0.7	-6.5	
Exchange rate depreciation 7/	0.0	0.1	0.0									
Other identified debt-creating flows	0.0	0.0	0.0		0.7	0.2	0.4	0.1	0.3	0.0	1.7	
0 (negative)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Contingent liabilities	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Acquisition of assets by social se	curit 0.0	0.0	0.0		0.7	0.2	0.4	0.1	0.3	0.0	1.7	
Residual, including asset changes 8/	1.8	0.8	-1.4	-	1.0	-0.9	-0.9	-0.9	-0.9	-0.9	-5.4	

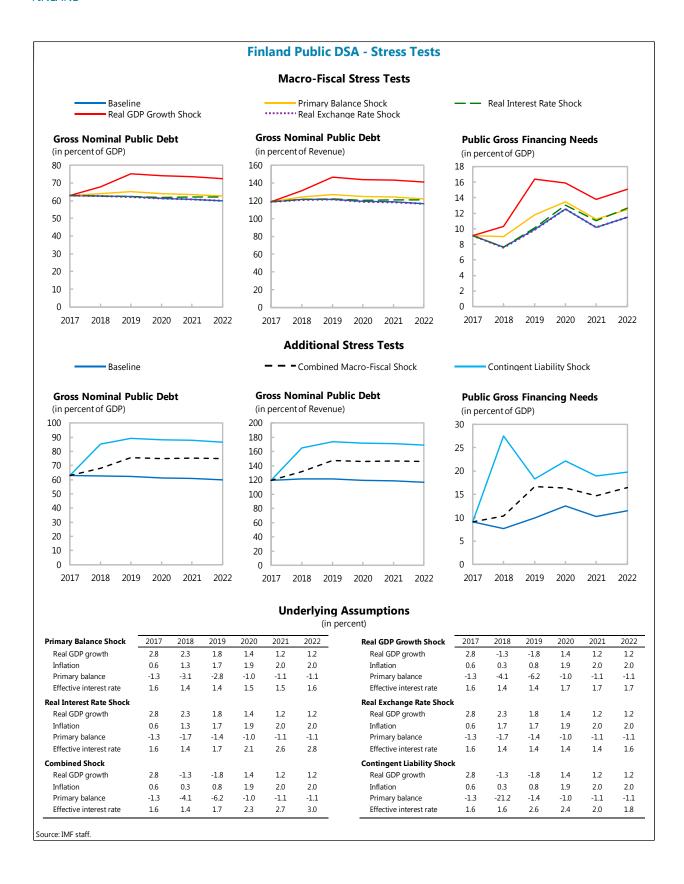


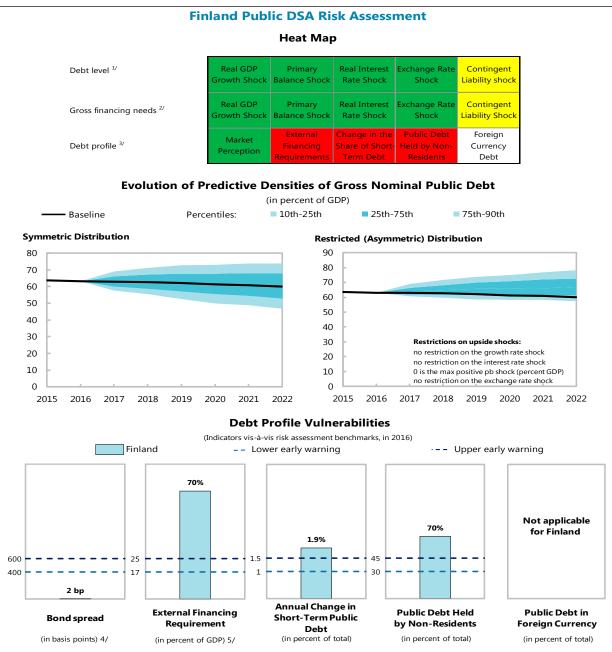
Source: IMF staff.

- 1/ Public sector is defined as general government.
- 2/ Based on available data.
- 3/ Long-term bond spread over German bonds.
- 4/ Defined as interest payments divided by debt stock (excluding guarantees) at the end of previous year.
- 5/ Derived as $[(r \pi(1+g) g + ae(1+r)]/(1+g+\pi+g\pi))$ times previous period debt ratio, with r = interest rate; $\pi = growth$ rate of GDP deflator; g = real GDP growth rate;
- a = share of foreign-currency denominated debt; and e = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).
- $6/\ The\ real\ interest\ rate\ contribution\ is\ derived\ from\ the\ numerator\ in\ footnote\ 5\ as\ r\ -\ \pi\ (1+g)\ and\ the\ real\ growth\ contribution\ as\ -g.$
- 7/ The exchange rate contribution is derived from the numerator in footnote 5 as ae(1+r).
- 8/ Includes asset changes and interest revenues (if any). For projections, includes exchange rate changes during the projection period.
- 9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.









Source: IMF staff

1/The cell is highlighted in green if debt burden benchmark of 85% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

2/ The cell is highlighted in green if gross financing needs benchmark of 20% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

3/ The cell is highlighted in green if country value is less than the lower risk-assessment benchmark, red if country value exceeds the upper risk-assessment benchmark, yellow if country value is between the lower and upper risk-assessment benchmarks. If data are unavailable or indicator is not relevant, cell is white.

Lower and upper risk-assessment benchmarks are:

400 and 600 basis points for bond spreads; 17 and 25 percent of GDP for external financing requirement; 1 and 1.5 percent for change in the share of short-term debt; 30 and 45 percent for the public debt held by non-residents.

4/ Long-term bond spread over German bonds, an average over the last 3 months, 8-Jun-17 through 08-Sep-17.

5/ External financing requirement is defined as the sum of current account deficit, amortization of medium and long-term total external debt, and short-term total external debt at the end of previous period.

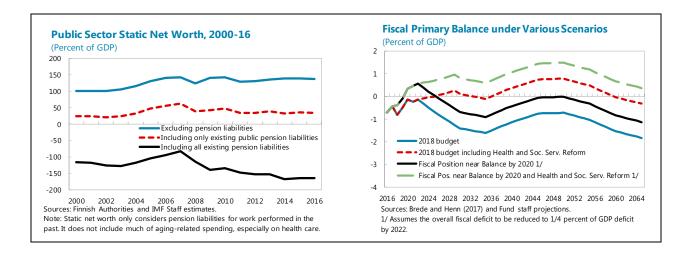
Annex III. Calculating Public Sector Net Worth

- **1.** Staff constructed a historical time series and projection of Finland's fiscal balance sheet to comprehensively assess the viability of the fiscal path (Selected Issues Paper: Fiscal Sustainability).
- 2. The static fiscal balance sheet. The first step consists of a static version of the balance sheet. This broadens analysis beyond government debt by accounting for assets, public corporations, and those pension liabilities relating to work performed in the past. It shows that the broadest measure of Finland's static net worth was negative at around -160 percent of GDP at end 2016. Negative static net worth can lead to heightened sustainability and rollover risks, unless future fiscal positions are expected to be sufficiently strong to offset. Finland's future fiscal positions would need to be even stronger to address, in addition, increases in health and care expenditures. (In contrast, accrual of future pension liabilities are projected to be completely covered by contributions under the 2017 pension reform.¹)

Α	Assets	278.
В	Nonfinancial	84.
	Financial	193.
С	Liabilities	441.
	Financial Liabilities other than Pensions 1/	140.
	o/w General Government Maastricht Debt	63.
	Existing Pension Liabilities	301.
D=A-C	Static Net Worth	-163.
E	Present Value of Future Primary Balances 2/	
	Baseline (based on 2018 budget proposal)	237.
	Baseline including Health and Soc. Serv. Reform	301.
	Fiscal Position near Balance by 2020	271.
	Fiscal Position near Balance by 2020 plus Health and Soc. Serv. Reform	335.
	Abandoning fiscal efforts	201.
F=D+E-B	Intertemporal Net Financial Worth (IFNW)	
	Baseline (based on 2018 budget proposal)	-9.
	Baseline including Health and Soc. Serv. Reform	53.
	Fiscal Position near Balance by 2020	23.
	Fiscal Position near Balance by 2020 plus Health and Soc. Serv. Reform	87.
	Abandoning fiscal efforts	-46.
	Memorandum item:	
	Fiscal buffer required to withstand large macro shock with positive IFNW	30 to 8

¹ Therefore, the present value of pension liabilities in the table above relate only to work performed until 2016 and are expected to remain broadly constant.

3. The intertemporal fiscal balance sheet. This adds the present value of future primary balances, thereby capturing all future fiscal positions and age-related spending. Results show that under the baseline, which reflects the 2018 budget proposal's medium-term framework, intertemporal financial net worth (IFNW) would be -10 percent of GDP.² In contrast to be able to withstand a severe macroeconomic shock (of the magnitude of the GFC) with positive IFNW, Finland should target an IFNW of 30–85 percent of GDP.³



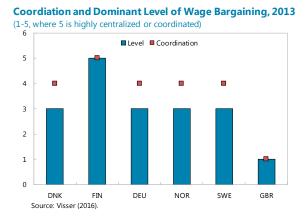
² When analyzing intertemporal balance sheets focusing on net financial worth is more useful to judge sustainability, because arguably most of public sector real assets are needed to generate revenue streams (and therefore net worth would suffer from double counting).

³ The lower end of this range would allow it to withstand the immediate effects of such a shock with positive IFNW, but would require fiscal consolidation after the crisis has passed to bring fiscal balances back in line with the baseline path. The upper end of the range would be a sufficiently large buffer to allow Finland to weather such a shock without post-crisis fiscal consolidation.

Annex IV. Collective Bargaining in Finland

1. Finland's traditional centralized bargaining system succeeded in reflecting well

national macroeconomic conditions but hardly allowed any firm-level flexibility.¹ Resulting from informal tradition, the centralized system involved—apart from the head employer associations and labor unions—also the government, which could influence outcomes by adjusting economic policy. Centralized agreements covered virtually all wage earners and a wide range of labor market conditions: salaries, taxation, pensions, unemployment benefits. Subsequent sectoral negotiations generally only introduced small adaptations.



- 2. Finland did not follow its Nordic peers in increasing the flexibility of labor agreements. However, between 2007–2010 centralized bargaining broke down and were replaced by uncoordinated sector-level negotiations. This resulted in wage growth rates outpacing productivity and deteriorating competitiveness. In 2011, parties returned to a centralized system.
- **3.** Efforts to create a more formalized "Finnish model" for coordinated sectoral bargaining featuring firm-level flexibility, have been inconclusive. Such a Finnish model—which would in certain ways resemble the Swedish model—was a key ambition of the 2016 Competitiveness Pact. Government was not envisaged to play a role in the new framework. Bargaining would be on a sectoral basis, with coordination achieved through limits on wage rises set by sectors sensitive to international competition. In addition, companies would have greater flexibility to negotiate local contracts. However, social partners in the Finnish model working group could not reach agreement.
- **4.** The 2017–18 bargaining round will be characterized by uncoordinated sectoral bargaining, with outcomes and future prospects uncertain. The export-oriented metals, forestry, and IT sectors happen to be negotiating first. However, it is unclear if other sectors will recognize them as having a lead role because their lead has traditionally been less pronounced in Finland than in Sweden. On the one hand, there is a risk that this may result in overly high wage increases—now and in future years—if coordination issues cannot be resolved. On the other hand, an overly

¹ The OECD Employment Outlook 2017 (Box 2.3) finds that centralized systems also reflected macroeconomic conditions well during the global crisis: countries with high centralization had *higher* employment growth while wages declined by *more* during the crisis. But centralized system also typically lack flexibility between sectors with adverse consequences as pointed out by Blanchard, Olivier, Florence Jaumotte, and Prakash Loungani (2013), "Labor Market Policies and IMF Advice in Advanced Economies During the Great Recession," IMF Staff Discussion Note SDN/13/02, and references within.

dominant lead of export sectors could make domestic wages excessively dependent on developments in key trading partners.

5. It is unclear if much higher firm-level flexibility can result from the present sectoral bargaining. Sector-level agreements in Finland have typically mandated both minimum wages and wage increases, imposing high wage rigidity onto firms. Regarding other work conditions, firms' flexibility has increased in some sectors in recent years. However, an important impediment to furthering firm-level flexibility could be that it would require involvement of local labor representatives. These are non-existent in non-unionized (and small) firms, but extension clauses ensure that sector agreements also apply to those. Developing local negotiating structures may take time in absence of a higher-level consensus among social partners.

Annex V. Finland's Universal Basic Income Experiment

- 1. Finland's pilot study testing a universal basic income (UBI) has received considerable attention. It runs from January 2017 through December 2018 and is being conducted on 2000 randomly-selected persons aged 25 to 58, who previously received a basic unemployment benefit. It instead provides them the same monthly tax-free amount, but without a means test or any activity requirements.
- **2.** Results, expected in 2019, will allow to gauge whether UBI recipients take full-time jobs more readily or become entrepreneurs because, unlike unemployment insurance, doing so would not imply losing the benefit.
- 3. The experiment has been criticized as being too limited, as it will only allow to judge how UBI affects behavior of those unemployed persons on a basic unemployment benefit. However, there is potential that the pilot be followed up with an experiment with a larger study population, also including employed persons. An incomes registry, planned to be introduced by 2020, would also make it possible to test a negative income tax.¹

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¹ The Finnish personal income tax already features a tax credit for work income. It is not paid out in cash, but any excess of the credit over the federal tax liability is applied to the individuals' municipal taxes and health insurance contribution, thereby nonetheless increasing disposable income.

Annex VI. Current Macroprudential Tools

Existing macroprudential tools in Finland include the standard capital conservation buffers and buffers for systemically-important financial institutions under the EU's Capital Requirements Regulations. The countercyclical capital buffer is set at zero. The sole instrument directed specifically at household financial health is a recommendation on the maximum mortgage loan to value.

Instrument	Status
Capital conservation buffer	2.5 percent from January 2015
Buffer requirement for global systemically-important	Not currently applicable ¹
institutions (G-SII)	
Buffer requirement for other systemically-important	0.5 to 2.0 percent from January 2016
institutions (O-SII)	
Systemic risk buffer	Effective from January 2018
Countercyclical capital buffer (CCB)	0 percent
Additional risk weights for mortgage loans	15 percent floor from January 2018
Maximum loan-to-value ratio for housing loans	90 percent from July 2016
Liquidity Coverage Ratio (LCR)	Being phased in
Net Stable Funding Ratio (NSFR)	Planned for 2018

¹ Nordea's change in headquarters will introduce a G-SII to Finland.

Annex VII. FSAP Update: Status of Main Recommendations

Recommendations and Responsible Authorities	Time*	Status
General		
Increase the FIN FSA and FFSA's financial and human resources in accordance with the increase in regulatory complexity and supervision intensity in (i) prudential supervision of banks (including systemic branches), (ii) prudential supervision of insurers, (iii) contingency planning/crisis management, (iv) macroprudential policy analysis, and (v) investment funds and their managers. (Box 1, 130, 136, 143, 144, 148, 151)	I,C	In progress. The FIN-FSA plans to increase its resources, also given the planned relocation of Nordea Group's headquarters to Finland. In 2017 the resources for the supervision of pension insurers and pension funds have been strengthened with one lawyer and one risk expert. Also, the resources in the prudential supervision of insurers are under revision.
Expand cooperation arrangements with other Nordic supervisors to include (i) formal region- wide sharing of supervisory data and coordinated inspections, including foreign branches and cross-border management of investment funds, (ii) conduct Nordic stress tests, (iii) strengthen collaboration with macroprudential authorities, and (iv) enhanced CPCM cooperation on systemically important branches and regular crisis simulation exercises. (¶13, ¶47, ¶44, ¶52)		In progress. The Memorandum of Understanding (MOU) between Nordic financial regulatory authorities, covering i) supervision of significant foreign branches, ii) crisis management in respect of cross-border groups containing such branches, was signed on 2 December 2016. A Nordic crisis simulation exercise will take place in 2018.
Strengthen legal protection for staff of all financial oversight agencies (150)	I, C	Pending. The Ministry of Finance's tentative conclusion is that no legal changes are needed given that the state is subject to legal risks, not the staff of its various sectoral agencies.
Risk Analysis		
Ensure banks' Internal Ratings Based models are calibrated to reflect severe stress. (¶19)	NT	Implemented. PD-levels given by IRB models have been analyzed in macroprudential preparations for the FIN-FSA board decisions. The outcome was an increase minimum risk weights for mortgages using article 458 in the CRR.
Intensify monitoring of banks' liquidity positions in foreign currencies and crossholdings of covered bonds used as collateral. Perform liquidity stress tests for various time horizons and stand ready to take supervisory action if imbalances emerge. (¶23, ¶41)	NT	Limited progress. Current regulatory reporting enables the FIN-FSA to monitor banks' liquidity metrics also in significant foreign currencies. It is also possible to obtain information about banks' crossholdings of covered bonds from Bank of Finland. However, this information is available to the FIN-FSA only upon request.
Banking Supervision		
Amend law to grant the FSA full Pillar 2 powers for decisions on capital and liquidity requirements and other supervisory measures (138)	NT	In progress. At the beginning of 2018, the Ministry of Finance will review and complement the Credit Institutions Act. On this occasion, the FIN-FSA will propose an amendment regarding Pillar 2 requirement.
Ensure effective ongoing monitoring of banks' internal risk models following the upcoming SSM comprehensive review (TRIM project). (¶40)	MT	Implemented. Based on TRIM, supervisory practices and monitoring of banks' internal risk models have been developed in the SSM.
Macroprudential Policy Framework		
Clearly define a macroprudential policy mandate of the FIN-FSA beyond the measures approved in laws. (¶48)	NT	Not implemented.
Create a household loan registry. (¶48)	NT	In progress. The Ministry of Justice has commissioned a study on the scope and main features of a possible loan registry.
Introduce a systemic risk buffer and a loan-to-income limit. (148)	I, NT	In progress. Legislation introducing the Systemic Risk Buffer has been prepared. Government's proposal to the Parliament was published 12 October.
Finalize the plan to introduce floors for the risk-weights used in internal models. (¶48)	I	Implemented. The requirement is 15 percent, binding from 1 January 2018.

Recommendations and Responsible Authorities	Time*	Status
Contingency Planning and Crisis Management		
Formalize inter-agency cooperation on crisis preparedness and management at the national level, possibly through an expanded mandate for the FFSA Advisory Council (¶51)	I	In progress. Preparation of a MOU (specifying e.g. the roles and exchange of information) between the FIN-FSA and the FFSA is currently in the pipeline and the aim is to finalize it before year end. The intention of the FFSA is to prepare a similar type of agreement with the Bank of Finland in the coming months. Mandate for the FFSA Advisory Council in the legislation has not been changed.
Under the oversight of the FFSA Advisory Council, ensure agency-specific and national financial crisis planning. (¶51–52)	I, C	In progress. Crisis simulation exercise to be conducted in H1 2018.
Expedite resolution planning for systemic financial institutions. (¶52)	I	In progress. Resolution planning for SIs (home country of parent company in Banking Union) is under the remit of the ESRB. Planning for almost all these SIs are pending and depending of the phases some SIs already have third version of the plan under preparation. For Nordic resolution colleges (home country of the parent company outside Banking Union) where the FFSA is a member, the second versions of the plans will be finalized by the end of this year. During 2018 the ESRB has increased its work on crisis preparedness and the FFSA is participating in all on-going preparatory networks. The resolution plans for some LSIs have been finalized by the FFSA.
Define strategies for liquidity assistance to banks in resolution and introduce an indemnification arrangement for ELA losses if incurred by the BoF. (¶51)	NT	Not implemented.
Non-banks		
Upgrade legislation to cover the supervisory actions and any other measures required in the event of pension insurer or fund distress and if resolution becomes necessary. (¶42)	I	Limited progress. The FIN-FSA has informed the Ministry of Social Affairs and Health about the need to assess the resolution legislation concerning pension entities. The exact timetable of the reform is yet to be decided.
Ensure adequacy of action plans for life insurers to meet Solvency II requirements, including by conducting regular stress testing under adverse scenarios. (¶30)	NT	In progress. Insurers' ORSA (Own Risk and Solvency Assessments) are being assessed currently and the results will be communicated to the industry, and if relevant to the individual insurers. ORSA includes also plans to ensure the compliance of the solvency requirements. The stress testing will be carried out during 2018 in conjunction with EIOPA stress testing.
Monitor fund managers' risk management processes, increase the use of supervisorydata to analyze risks, and improve FIN-FSA's capability to conduct market surveillance. (¶32)	NT, C	In progress. The FIN-FSA has conducted and will continue to conduct on-site inspections on the risk management processes of UCITS and AIFM managers. As expressed in the annual working plan 2017 of the FIN-FSA, the aim is to focus on new products, services and market actors taking into account alternative finance and its impact to market structures. Also, analysis of product and services will be developed based on regulation.

^{*}C = continuous; I (immediate) = within one year; NT (near term) = 1–3 years; MT (medium term) = 3–5 years.

Annex VIII. Past Fund Staff Recommendations and Implementation

Past Staff Recommendations	Implementation				
Fiscal Policy					
Fiscal adjustment should be well-calibrated to restore long-term fiscal sustainability while minimizing negative short-term effects on output.	While the 2018 budget is procyclical, the authorities are continuing to implement their medium-term consolidation programs to ensure fiscal sustainability. Much stronger-than-expected growth and near-term outlook has substantially reduced concerns related to adverse short-term effects of fiscal adjustment on output.				
Improve growth-friendliness of fiscal adjustment by reallocating resources toward productive public spending, while reducing poorly-targeted transfers and tax expenditures. Reverse cuts to public R&D spending and create stronger incentives to private R&D to promote innovation.	Recent initiatives, including the 2018 budget proposal, include growth-enhancing measures: (i) increased spending on skills and employment, reductions to child care fees, and partial reversal of past R&D funding decreases; and (ii) reductions in unemployment insurance contributions and discretionary personal tax cuts, partly offset by increases in excise taxes on alcohol and fuel.				
Ensure that health and social services reforms generate the intended improvements in public sector productivity by clear and timely communication with stakeholders about the key elements of the new system.	Transition to the new health and social services system was postponed by a year to 2020 to allow more time for consultations with stakeholders on a key outstanding legislative bill and ensure smooth transition.				
Labor Marke	et Policy				
The implementation of the Competitiveness Pact, including provisions on improving the flexibility of the wage bargaining system at the firm-level, should be monitored closely.	All parts of the Competitiveness Pact have been implemented, including reductions in the labor tax wedge and a wage freeze in 2017. In addition, public sector working hours have been extended; firm-level surveys, conducted by the authorities, show that about half of private sector firms also extended working hours. The authorities convened a working group between social partners to devise a bargaining model incorporating more firm-level flexibility, but discussions were inconclusive. The authorities are now closely monitoring whether the ongoing bargaining round will nonetheless succeed in expanding firm-level flexibility.				
Strengthen ALMPs to facilitate labor mobility.	The authorities increased the frequency of interviews with unemployment insurance recipients with the aim of facilitating outcomes				

	of the job search. They are also continuously evaluating effectiveness of ALMPs.		
Implement measures to increase affordable housing	The authorities have been working with local		
in urban areas to facilitate labor mobility.	governments to streamline zoning regulations		
,	to foster housing construction in urban areas.		
Product Mar	ket Policy		
Reforms to the retail and state-dominated sectors,	Postal services have been opened to		
such as rail and postal services, should be	competition as of 2017. In August, the		
considered to increase competition and yield	authorities announced that railways will also be		
productivity gains.	liberalized and work is starting to this effect.		
	Finally, the authorities are considering to further		
	privatize other public corporations.		
Financial Sec	I		
Bank supervision should be strengthened by	Targeted review of internal models (TRIM) was		
ensuring effective monitoring of banks' internal risk	conducted in coordination with the SSM to		
models and intensifying oversight of their liquidity	harmonize practices and ensure compliance		
positions.	with regulatory requirements. The authorities		
	have introduced a 15 percent minimum risk		
	weight on residential mortgage loans.		
Resources allocated to supervision should be	The authorities are planning to increase FIN-FSA		
bolstered to reflect growth in regulatory complexity	resources, including to ensure adequate		
and supervisory intensity.	capacity after Nordea Group's forthcoming		
	relocation.		
Macroprudential tools should be enhanced,	Legislation for a Systemic Risk Buffer has been		
including through introduction of instruments based	approved by the parliament and will take effect		
on borrower and loan characteristics.	in early 2018. The authorities are exploring		
	options to expand the macroprudential toolkit		
	to include more instruments based on borrower		
	and loan characteristics.		
Inter-agency cooperation on national crisis	Preparation of a MOU between FIN-FSA and		
preparedness and management should be	FFSA is in progress and is expected to be		
formalized.	finalized by end-2017. The FFSA is planning to		
Torritanized.	prepare a similar agreement with the Bank of		
	Finland.		
Strengthen regional supervisory cooperation,	To this effect, comprehensive MOUs on		
including through data sharing, supervisory	prudential supervision of significant branches		
cooperation provisions, conduct of joint stress tests	were signed between Nordic authorities and the		
	ECB in December 2016.		
to capture regional linkages between banks, and	ECD III December 2010.		
enhancing joint crisis planning.			



INTERNATIONAL MONETARY FUND

FINLAND

November 20, 2017

STAFF REPORT FOR THE 2017 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

Prepared By

European Department

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FUND RELATIONS

(As of October 31, 2017)

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

General Resources Account:	SDR Million	Percent of Quota
Quota	2,410.60	100.00
Fund holdings of currency	2,174.58	90.21
Reserve Tranche Position	236.02	9.79
Lending to the Fund		
New Arrangements to Borrow	156.43	

SDR Department:	SDR Million	Percent of Quota	
Net cumulative allocation	1,189.51	100.00	
Holdings	1,120.75	94.22	

Outstanding Purchases and Loans: None

Latest Financial Arrangements: None

Projected Payments to Fund:

(SDR million; based on existing use of resources and present holdings of SDRs):

	-	Forthcoming				
	2017	2018	2019	2020	2021	
Principal						
Charges/Interest	0.10	0.47	0.47	0.47	0.47	
Total	0.10	0.47	0.47	0.47	0.47	

Exchange Rate Arrangements:

Finland's currency is the euro, which floats freely and independently against other currencies.

Finland has accepted the obligations under Article VIII, Sections 2(a), 3, and 4 of the Fund's Articles of Agreement. It maintains an exchange system free of 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:

Finland is on the 12-month consultation cycle.

FSAP Participation:

Finland had a review under the Financial Sector Assessment Program (FSAP) in 2016.

STATISTICAL ISSUES

(As of October 31, 2017)

I. Assessment of Data Adequacy for Surveillance				
General: 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 tim	neliness of the economic			
database are generally very good.				
II. Data Standards and Quality				
Subscriber to the Fund's Special Data Dissemination Standard	A data ROSC was			
(SDDS) since June 3, 1996. Uses SDDS flexibility option for	electronically published on			
timeliness on data for central government operations.	October 31, 2005.			
The authorities have expressed initial interest to adhere to the				
Special Data Dissemination Standard Plus.				

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 Sector 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.

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: Table of Common Indicators Required for Surveillance							
(As of October 31, 2017) Date of Date Frequency Frequency Memo Items:							
	Date of latest observation	Date received	Frequency of Data ⁷	Frequency of Reporting ⁷	Frequency of Publication ⁷	Data Quality– Methodological soundness ⁸	Data Quality— Accuracy and reliability ⁹
Exchange Rates	10/31/17	10/31/17	D	D	D		
International Reserve Assets and Reserve Liabilities of the Monetary Authorities ¹	09/2017	10/2017	М	М	М		
Reserve/Base Money	09/2017	10/2017	М	М	М		
Broad Money	09/2017	10/2017	М	М	М		
Central Bank Balance Sheet	09/2017	10/2017	М	М	М		
Consolidated Balance Sheet of the Banking System	09/2017	10/2017	М	М	М		
Interest Rates ²	10/31/17	10/31/17	D	D	D		
Consumer Price Index	09/2017	10/2017	М	М	М	O, O, O, O	LO, O, LO, O, O
Revenue, Expenditure, Balance and Composition of Financing ³ – General Government ⁴	2016	09/2017	А	А	А	LO, LO, LNO, O	LO, O, O, O, O
Revenue, Expenditure, Balance and Composition of Financing ³ – Central Government	2016	09/2017	А	А	А		
Stocks of Central Government and Central Government-Guaranteed Debt ⁵	09/2017	10/2017	М	М	М		
External Current Account Balance	09/2017	10/2017	М	М	М	O, O, O, LO	LO, O, LO, O,
Exports and Imports of Goods and Services	09/2017	10/2017	М	М	М	3, 3, 3, 2,	0
GDP/GNP	Q2 2017	09/2017	Q	Q	Q	O, O, O, O	LO, O, LO, O, O
Gross External Debt	Q2 2017	09/2017	Q	Q	Q		
International Investment Position ⁶	Q2 2017	09/2017	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 instrument composition.

 $^{^{\}rm 6}$ Includes external gross financial asset and liability positions vis-a-vis nonresidents.

⁷ Daily (D); weekly (W); monthly (M); quarterly (Q); annually (A); irregular (I); and not available (NA).

⁸ Reflects the assessment provided in the data ROSC (published in October 2005, and based on the findings of the mission that took place during May 10–25, 2005) for the dataset corresponding to the variable in each row. The assessment indicates whether international standards concerning concepts and definitions, scope, classification/sectorization, and basis for recording are fully observed (O); largely observed (LO); largely not observed (LNO); or not observed (NO).

⁹ Same as footnote 8, except referring to international standards concerning source data, statistical techniques, assessment and validation of source data, assessment and validation of intermediate data and statistical outputs, and revision studies.

Statement by Mr. Kimmo Tapani Virolainen, Alternate Executive Director December 8, 2017

On behalf of the Finnish authorities would like to thank the mission teams for the reports as well as for the open and constructive policy discussions during the FASP mission and Article IV consultation with Finland. The authorities broadly agree with the conclusions and recommendations of the staff reports.

Recent Economic Developments, Outlook and Risks

After a prolonged downturn, the Finnish economy has finally gathered momentum. Growth strengthened in the first half of the year and is expected to be close to 3 percent in 2017. Indicators point to a continuation of robust growth in the short term. While private consumption and investment remain strong, the pick-up in net exports is especially boosting growth. After many years of lackluster productivity growth, companies are now more willing to engage in productive investments and hiring. Inflation is gradually accelerating, but is expected to remain slower than the euro area average in 2017–18.

Despite the strengthening of growth and improved cost competitiveness, employment growth has remained modest. On one hand, companies' need to restore profitability after several weak years might be one factor postponing stronger employment growth. On the other hand, population aging is structurally slowing down employment growth, and mismatch problems are increasingly more apparent in the Finnish labor market.

In the ongoing sectoral wage negotiation round, key manufacturing sectors (incl. technology, chemical, and paper industry) have agreed on wage increases for the next two years. The increases in contract wages will be around 1.6 percent in both years. Real wages are expected to rise at a lower rate than productivity as inflation moderately picks up, hence continuing to improve cost competitiveness. Latest data show that household indebtedness has continued to increase and households continue to support their consumption by dissaving.

Growth is expected to slow down towards its potential in 2020 as structural weaknesses increasingly weigh on. There are signs that labor supply is constraining employment growth already at this phase of the cycle. Without further measures to improve work incentives, it is possible that labor markets become a bottleneck for growth.

Overall, the near-term growth prospects for the Finnish economy have improved significantly and the balance of risks is now slightly dominated by positive factors. The very near-term risks stem from international developments, especially regarding global investments, and domestic residential markets. In the medium term, domestic risks are related to higher than expected labor cost increases, overall functioning of the labor markets, and household debt. As the share of heavily indebted households grows, the household sector becomes more vulnerable to economic shocks.

Fiscal Policy

The economic upswing strengthens public finances. With the stronger than expected economic recovery and some one-off factors, the central government tax revenue forecast for 2017 has been raised by some EUR 1.5 billion (3.4 percent y-o-y growth). Revenue growth is expected to slow down to about 2 percent in 2018. Due to the unexpectedly strong growth rebound, the fiscal stance for 2017–18 is slightly expansionary or broadly neutral. The authorities are nevertheless highly committed to the medium-term fiscal consolidation plan and concur with staff's recommendation that the recovery presents an opportunity to rebuild fiscal buffers.

The debt-to-GDP ratio turned to a downward path in 2016, and the robust growth will keep reducing the ratio until 2021. However, general government net lending remains in deficit, and the economic rebound does not eliminate the structural weaknesses in the public finances. Population aging forms a major risk to the stability of the public finances in the long term. The deficit will remain under the EU Stability and Growth Pact's 3 percent of GDP reference value limit throughout the forecast horizon.

The Government program outlines measures to ensure sustainable growth and public finances. The sustainability gap, estimated at EUR 10 billion at the start of the Government's term in spring 2015, will be covered by consolidation measures (EUR 4 billion), structural reforms (EUR 4 billion), and measures boosting growth and employment (EUR 2 billion).

The fiscal consolidation measures include spending cuts, index freezes, and higher fees and charges. The Government program includes some EUR 4 billion of total targeted savings by 2019. The measures are specified and broadly confirmed, with some risks remaining to the implementation of the measures by the autonomous municipalities. The Government is committed to follow-up and find alternative savings for any planned measures that fail to be implemented.

The social, healthcare, and county reform is expected to contain the cost of public services by some EUR 3 billion in the longer term. Further reforms to strengthen public finances in the longer term include measures aiming to reduce municipalities' statutory duties and obligations, promoting digitalization, and enhancing productivity in the public sector.

Growth and employment will be boosted by supporting competitiveness, productivity growth, and the better functioning of the labor markets, as well as by shifting taxation from

Structural Issues

labor to indirect taxation.

A number of significant structural reforms have already been implemented in recent years. Policy measures to allow more room for competition in regulated sectors and reduce labor costs have been adopted. Going forward, key reform areas are the social and healthcare services and the labor market.

Social and healthcare reform

The most significant reform concerns the social and healthcare services (SOTE). It is estimated to bring cost savings of EUR 3 billion by 2030 (relative to what the costs would be without the reform) through more efficient operations and higher productivity owing to increased competition. The cost and efficiency gains are expected to be realized via better integration of (i) health and social services and (ii) primary and specialized care, as well as by increased competition from allowing more freedom of choice for customers. Once completed, all of the services covered in the reform can be provided by public, private, and the "third sector" service providers. The reform also aims to safeguard equal access to services.

The Government extended the deadline for the implementation of the SOTE reform by one year to address constitutional concerns. A Government proposal for the first part of the SOTE reform, concerning the establishment of new regional governance structures of 18 counties that are responsible for organizing and managing the services, was submitted to the Parliament in the spring 2017. The second piece of legislation, a Government proposal for the Freedom of Choice Act, will be amended to meet the requirements of the Constitutional Law Committee, and it is expected to be submitted to the Parliament in March 2018. The reform is expected to enter into force and the new counties will begin operating on January 1, 2020.

Labor market reforms and competitiveness

The 2016 Competitiveness Pact between the social partners lowered employers' social security contributions, extended working time, cut public sector holiday pay, and also included wage freezes in 2017. At the same time, the Government implemented tax concessions to compensate for purchasing power losses. The impact of the Competitiveness Pact is already visible in the decline of unit labor costs and regained national competitiveness. Its short-run effects on public finances are negative but, in the longer term, with increasing employment, the net effect on public finances is estimated to be broadly neutral. As agreed in the Competitiveness Pact, social partners have held discussions to reform the highly-centralized wage bargaining process. Some progress has been achieved in this year's sectoral level wage bargaining round, but further progress is needed going forward.

Completed labor market reforms include the pension reform, reduction in the duration of earnings-related unemployment benefit by 100 days, mandatory job search plans and regular interviews for all unemployed jobseekers, and reforms to the unemployment insurance system increasing incentives for active job search and making short-term/part-time work more tempting.

Since demographics are increasingly limiting labor supply, one of the Government's key goals is to raise the employment rate from 68 percent in 2015 to 72 percent by 2019. While some progress has already been made, the goal remains challenging. The pension reform has raised the effective retirement age and the latest changes in 2017 continue to push it higher.

Adjustments to the maternity and child care benefits are geared towards raising the labor supply of women of childbearing age. Measures have also been taken to promote faster graduation from tertiary education.

The authorities continue to work on mitigating the incentive trap by preparing changes to the benefit system such that a combination of tighter unemployment benefits and transfer payments would make it more attractive to accept employment rather than remain unemployed.

A key project in the Government's program is the reform of the employment services to support employability. In connection with the SOTE reform, public employment services will be reorganized into the 18 new regional governance structures effective in 2020.

Reforms include strengthened cooperation with employers and private employment services. A

host of new job mediation pilots were initiated in 2017 emphasizing sectoral and cross- regional aspects with the aim to address matching problems, entrepreneurship challenges and new forms of work. There is also a strong emphasis on better utilizing digitalization and intelligent matching.

The authorities will finalize an evaluation study of ALMPs by the end of 2017. Past evidence of the efficiency of ALMPs, particularly in securing longer-term or permanent employment for low skilled and older unemployed, has been weak. Recently agreed changes include new activation measures and changes in the unemployment benefits of self-employed persons to better take into account new forms of work. Funding for the activation policies will be increased in 2018–19.

Measures to enhance labor mobility need to be stepped up. A major obstacle is the lack of affordable housing in growth centers. While housing construction in the Helsinki Metropolitan area has increased, it will take time to meet the demand for affordable housing. The Government and local authorities continue to take measures to deal with the housing situation in growth centers by adjusting zoning rules and building regulations.

Financial Sector Stability

The Finnish financial system is overall sound, and the banking system is well capitalized and profitable. The authorities broadly concur with staff's conclusions that structural vulnerabilities, such as a highly concentrated banking sector relying heavily on wholesale and external funding, strong regional interconnections, and low risk weights, require continued close monitoring. Moreover, the continued low interest rate environment poses challenges for both the banking and insurance sectors.

Household indebtedness stands at an all-time record at approximately 128 percent of disposable income. Banks' mortgage lending has grown moderately, but loans to housing corporations have increased relatively strongly. Consumer loans have also increased rapidly, albeit from a low base. High indebtedness and increased rates of consumer payment defaults have prompted a public debate about establishing a positive credit registry in Finland. This is being reviewed by the Ministry of Justice.

House price developments are moderate at the aggregate. Large regional and housing type differences are driven by urbanization and investor demand. The positive economic outlook, combined with robust consumer confidence, imply that household indebtedness may continue to increase adding to the elevated structural vulnerability.

To safeguard against the build-up of risks and increase banks' resilience, the national macroprudential authority — the FIN-FSA — decided to set an average risk weight floor of 15 percent on mortgage loans for IRB banks. This will come into force in January 2018. The macroprudential measures already taken, particularly a loan-to-collateral cap on mortgage loans, are also aimed at mitigating excessive rise in household debt.

The authorities broadly agree with staff's assessment on the need to broaden the macroprudential toolkit. The Parliament recently adopted the systemic risk buffer legislation and the law will enter into force in January 2018. The authorities are currently working on the calibration of the buffer. The decision on whether to apply the buffer, and at which level, will rest with the FIN-FSA. The authorities are also analyzing whether to include additional, borrower-based tools into the macroprudential toolkit. An important consideration in this respect relates to the possible scope of such tools, namely whether they would also apply to non-bank lenders.

The authorities share staff's concerns about the spillover risks from other Nordic countries to Finland. Contagion channels include direct exposures in the banking sector, real sector links through exports, and the banks' dependence on wholesale funding.

Nordea's plan to relocate its headquarters to Finland increases the importance of adequate supervisory resources. The Nordic-Baltic regional supervisory and regulatory cooperation is already at a good level in international comparison but, given the many transmission channels of risks between the financial systems, the close cooperation needs to be further enhanced. The authorities are committed to continue the joint monitoring of financial stability risks and reciprocation of macroprudential measures. The important work in supervisory colleges, i.e. the exchange of information and joint supervisory activities, will also continue.

Finland is the only Nordic country participating in the EU's Banking Union. The Single Supervisory Mechanism (SSM) plays an important role in ensuring a consistent application of EU regulations and common supervisory practices across the euro area, while the Single Resolution Mechanism (SRM) works to ensure a consistent approach to banking resolutions. These are important elements in safeguarding the safety and soundness of the Finnish banking system.

The authorities share staff's desire to have further progress in completing the Banking Union. However, this is possible only if substantial progress is made in cutting the vicious loop between banks and sovereigns, and risks in the European banking sector are lowered substantially, including addressing the crisis legacies in the banks' balance sheets.

Many of the recommendations from the 2016 FSAP have been implemented and several of them are being processed by the authorities. All of these measures have contributed to strengthening the supervisory and regulatory framework.