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EXECUTIVE BOARD MEETING

SM/18/287

December 18, 2018

To: Members of the Executive Board

From: The Secretary

Subject: **Finland—Staff Report for the 2018 Article IV Consultation**

Board Action:	Executive Directors' **consideration** (Formal)
Tentative Board Date:	**Friday, January 11, 2019**
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Questions:	Mr. Scott, EUR (ext. 38169) Mr. Pillonca, EUR (ext. 38474) Mr. Poghosyan, EUR (ext. 39684) Mr. Wingender, EUR (ext. 39831)
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***Unless an objection from the authorities is received prior to the conclusion of the Board's consideration, the document will be published.**

INTERNATIONAL MONETARY FUND

FINLAND

STAFF REPORT FOR THE 2018 ARTICLE IV CONSULTATION

December 17, 2018

KEY ISSUES

Context: Recent growth has been healthy, and the unemployment rate has fallen to its lowest level since 2011. However, some underlying weaknesses remain. The rate in which new jobs are created and the "churn" of workers relocating across jobs has not picked up with the recovery, labor productivity growth remains weak, and the outlook for potential growth is constrained by a shrinking workforce. Household debt has been increasing as the economy has recovered, and some borrowers appear vulnerable to interest rate increases.

- **Structural policies:** While recognizing the importance of maintaining social cohesion, staff recommends further steps to increase labor market dynamism. These could include more flexibility to set wages differently among firms in a given sector and to increase incentives for job-to-job transitions, facilitating transfer of skills across the economy. There is room for further progress to improve incentives from social benefits.

- **Fiscal policy:** Staff supports the authorities' plans for moderate tightening to build fiscal buffers, given looming spending pressures from age-related costs, a relatively high level of contingent liabilities, and the typical volatility of the Finnish economy that can put large demands on the public finances.

- **Macroprudential policies:** The toolkit should be expanded to include debt-to-income and debt-service-to-income caps, supported by a comprehensive credit register. More data are needed to adequately monitor lending by non-banks, whose lending practices might also require changes to consumer protection laws.

- **Financial policies:** The Finnish financial system is sound, but it is also concentrated and highly interconnected with Nordic economies. The responsible authorities have responded to the challenges posed by Nordea's redomicile, which has increased the size of the Finnish banking sector to about 3¾ times GDP by increasing supervisory resources and setting new capital requirements.

Approved By
Mahmood Pradhan (EUR) and Martin Sommer (SPR)

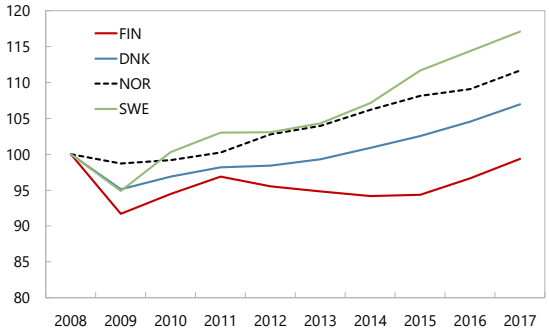
Discussions took place in Helsinki during October 25–November 6, 2018. The staff team was comprised of Messrs. Scott (head), Poghosyan, Pillonca, Wingender and Ms. Garcia (all EUR), supported by Ms. Gornicka (MCM), Ms. Tenali and Mr. Yang at headquarters (both EUR). Mr. Virolainen (OED) joined the discussions. The mission met with Mr. Rehn, 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.

CONTENTS

CONTEXT AND BACKGROUND

1. In the past three years, Finland has emerged from a severe downturn. Since 2008, the economy has weathered two recessions; commendably, income inequality remained low through this period, but the prolonged downturn increased unemployment, stressed the public finances, and likely damaged potential growth. Recovery began in 2015, but only this year has the level of real GDP surpassed that seen in 2007.

Real GDP in Nordic Countries
(Index, 2008=100)



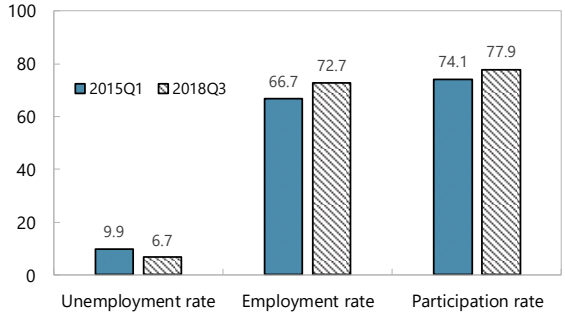
Sources: Haver Analytics; and IMF staff calculations.

2. Political parties are vying for support ahead of elections next April. Support for left-of-center parties opposing the current right-of-center coalition has increased. However, policy continuity is likely to be preserved following the elections, as there is a broad consensus across the political spectrum on the importance of reforms to boost productivity and maintain fiscal sustainability.

RECENT DEVELOPMENTS

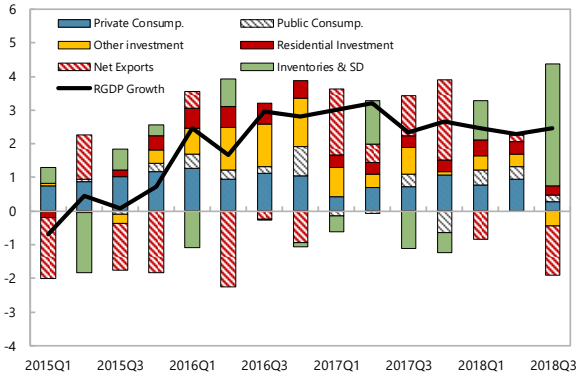
3. The recovery continues, but is in its late stages. Recent growth has been healthy and wide-spread across sectors, boosted by private consumption and residential investment, supported by fiscal and monetary policies. Labor market outcomes have improved significantly over the past year—participation rates and employment have picked up sharply, while the unemployment rate has fallen to its lowest level since 2011. Consumer and business confidence are at their highest levels in many years, but have both fallen during the year.

Finland: Employment and Unemployment Rates
(Percent)



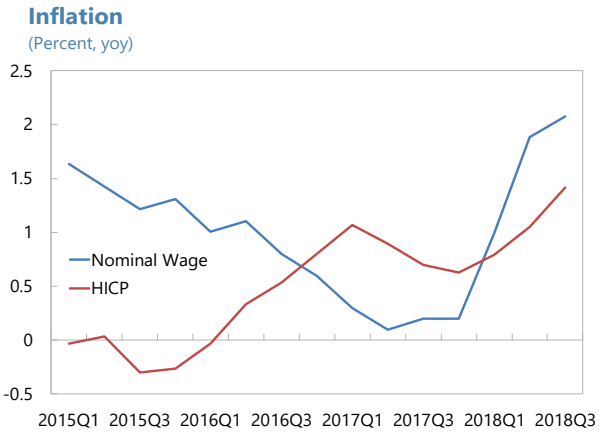
Source: Statistics Finland; and IMF staff calculations.
Note: Unemployment rate is measured as a share of labor force. Employment and participation rates are measures as a share of working age population.

Real GDP Growth Contributions
(Percentage points, yoy)



Sources: Statistics Finland; and IMF staff calculations.

4. There are few signs currently of macroeconomic imbalances. The recent growth—between 2½ to 3 percent y/y for the past 9 quarters—has seen the output gap almost close (Figure 1). Yet costs have been kept in check: after a wage freeze under the Competitiveness Pact, wages (excluding bonuses) have increased over the past year, but nonetheless modestly in most sectors and only 2 percent overall. Inflation pressures remain subdued; headline CPI inflation is currently 1½ percent y/y, despite increases in fuel costs. Credit growth overall is moderate, and the housing market does not show rapid price growth or signs of excessive exuberance (Figure 2).

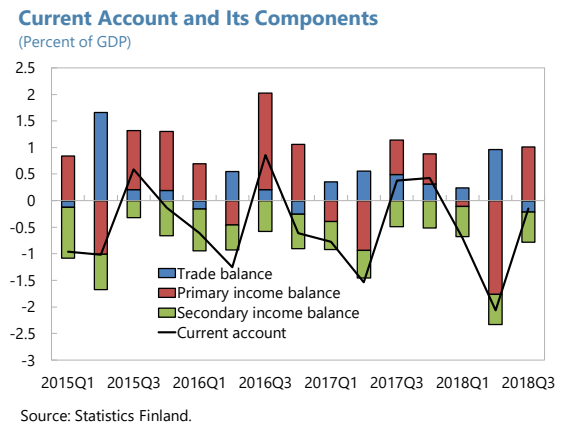


Sources: Haver Analytics and IMF staff calculations.

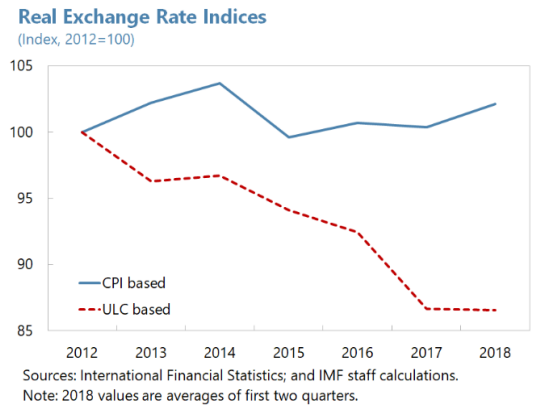
5. The public finances have improved with the recovery. The overall balance in 2017 was better than staff expected (-0.7 instead of -1.4 percent of GDP), reflecting both improved revenues from higher growth and employment (offsetting lower taxes and social security contributions) and lower spending and expenditures on unemployment benefits. General government gross debt fell slightly, to 61 percent of GDP.

6. The most recent data suggest that the external position is moderately weaker than would be implied by fundamentals and desirable policy settings.

- The most recent data show substantial downward revisions to the current account balances (especially income balances) in 2016 and 2017, to -0.7 percent of GDP for both years. Through 2018, export market shares have improved slightly, across markets and products, reversing the steady decline since the onset of the crisis. This is consistent with wage moderation that accelerated the depreciation of the ULC-based real exchange rate in 2017 and a recovery in investment by export-oriented firms during the past three years. However, net income flows are negative for the year, as previously, owing to large dividend payments. The net international investment position remained modestly positive in 2017.



Source: Statistics Finland.



Sources: International Financial Statistics; and IMF staff calculations.
Note: 2018 values are averages of first two quarters.

- Staff assess that the external position is moderately weaker than would be implied by fundamentals and desirable policy settings. The current account models indicate that the current account value in 2017 was below its "norm", implying a real exchange rate overvaluation in the order of 5 to 10 percent. Real exchange rate models give similar results. Preliminary results from those models applied to the *projections* of current account balances for 2018 indicate that, on the assumption that the trade balance remains modestly in surplus and the income deficit is similar to that in 2017, the external position would also be moderately weaker than implied by fundamentals and desirable policy settings (Annex I: External Sector Assessment). Going forward, demographic pressures (¶8) and future demands on the public finances (¶29) suggest a need to maintain a modestly positive net national savings rate.

7. Two underlying weaknesses remain.

- *Labor market dynamism:* Vacancies remain high relative to employment. This might simply reflect limits on how quickly vacancies can be filled, or increased confidence of workers to enter the labor market and hold out for attractive jobs. But job market dynamism—the rate at which new jobs are created and the "churn" of workers relocating across jobs—has not picked up with the recovery (¶34–36 and Figure 4). Consistent with this, value added per employed worker has been slow to recover and is only now at the level seen in 2008.

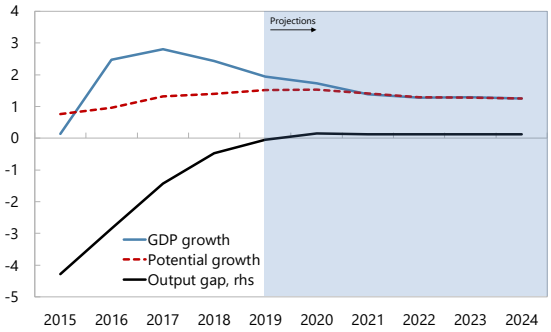
- *Household finances:* Household debt has been increasing steadily (¶12–13). Debt levels (based on lending from banks) remain comparable to the euro area average, and well below those of other Nordic households, but the increase is notable given deleveraging by other sectors while the economy has recovered. When non-bank lending and loans to housing corporations are included, household debt is notably higher. The distribution of household debt has been broadly stable in recent years, but unofficial data indicate new borrowers are taking on more leverage than the average.

OUTLOOK AND RISKS

8. The current cyclical upswing is expected to moderate. GDP growth is projected to be 2.4 percent in 2018 and 1.9 percent in 2019, before reverting to a long-run growth rate of 1¼ percent.

- Net exports' contribution to growth would remain slightly positive, albeit tempered by gradually tightening financial conditions, increases in costs, and a gradual slowdown in global growth. Private investment growth is therefore assumed to ease off, after three years of above-trend growth. Nonetheless, private consumption growth is expected to be supported by increases in real wages, the improvement in employment, and easy access to credit, and therefore is assumed to ease only slightly in 2019.

GDP Growth, Potential Growth and Output Gap
(Percent of GDP)



Sources: IMF staff calculations.

- Long-run growth is mainly determined by labor productivity growth, which is expected to be around 1½ percentage points, offset slightly by a net employment contribution of -0.2 percentage points, reflecting the assumption of increasing participation rates that only partly compensate for a declining working age population.

- Inflation is expected to remain low in 2018 and only gradually increase thereafter. The output gap would remain slightly positive for some time, and costs are expected to increase, due mainly to a gradual pickup in wages going forward with modest productivity growth. After the recovery in mark-ups seen over the past two years, firms are expected to absorb much of this pressure by not raising mark-ups further.

- As was anticipated, the overall fiscal balance is projected to remain in deficit in 2018.[1] Revenue measures (including personal income tax cuts and reductions in unemployment contributions) are expected to increase the deficit by about 0.4 percent of GDP, while an almost neutral expenditure budget and favorable cyclical conditions will help contain the deficit expansion to close to 0.3 percent of GDP. Given Finland's position in the business cycle, this implies a fiscal stimulus of 0.7 percent of GDP.[2] However, the fiscal policy stance is contractionary thereafter, on the assumption that the government expenditure ratio declines in line with the government's consolidation plan, and debt continues to fall.[3]

- The current account is projected to improve gradually over the forecast horizon, from a half percentage point deficit in 2018 to a surplus of around one percent of GDP after five years. This projection assumes that Finnish firms' export market shares—which had seen large declines over the past two decades with, inter alia, the downturns in IT and pulp and paper industries—will be maintained at recent slightly-higher levels, and that the income balance of the current account improves to about zero.[4]

9. Risks are mainly external and tilted to the downside (Annex IV: Risk Assessment Matrix):

- *Weaker global growth and trade disruption:* The main downward risk is the international trading environment. In addition to the risks from increased protectionism, the economic cycles of important trading partners—notably Germany—show some signs of slowing. Finland's exports are predominantly directed to Europe, although in terms of value added, the United States is the most important export partner, followed by Russia, Sweden, Germany, China, and the UK. Staff analysis indicates that the direct effects on Finland from additional tariffs on imports on cars and

[1] Finland—Staff Report for the 2017 Article IV Consultation, ¶18.

[2] The magnitude of the fiscal stimulus was also affected by the larger than effected one-off windfall revenues from corporate and inheritance taxes in 2017 as well as large unexpected tax rebates, to be paid in 2018.

[3] In 2015, as part of reforms aimed at closing the fiscal sustainability gap, the government initiated a multi-year consolidation plan worth 2 percentage points of GDP during 2016–19 of which almost 1.5 percentage points has already been achieved. Details of measures can be found in the Government's Strategic Programme.

[4] See "Understanding Finland's Export Performance," Finland—Selected Issues, 2017 Article IV Consultation,

car parts would be small relative to other European countries, but Finnish exports in general would likely suffer to the extent that European demand falters.

- *Financial system exposures:* The Finnish banking system is systemically exposed to Nordic economies, especially their housing markets, both directly through asset holdings of its large international banks. Reliance on wholesale funding, including through covered bonds, is also a risk. Sharper-than expected increases in global interest rates, prompted for example by higher-than-expected inflation or the materialization of other risks, could curb domestic consumption and investment.

Domestic Risks Include:

- *Reforms:* Labor productivity and employment growth could slow if reforms to work incentives were to deliver weaker gains than expected. Health and social services reforms (¶30) might stall or fail to deliver the targeted savings, putting the government's objective of closing the fiscal sustainability gap in doubt.

Authorities' Views

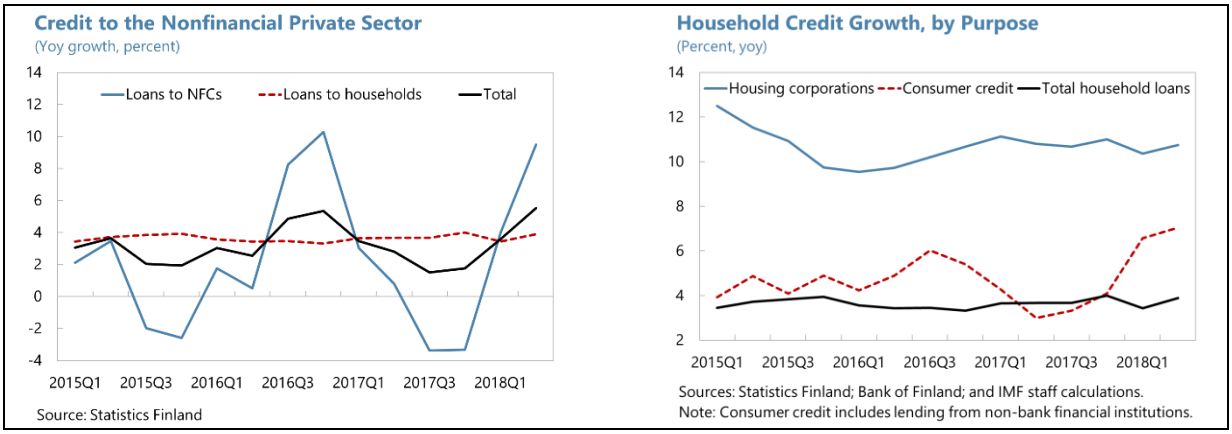
10. The authorities shared the staff's assessment of the outlook and risks. The continued strength of Finland's growth had been encouraging. The output gap has at least closed, and the labor market is tight in some sectors. However, the authorities concurred the cyclical upswing has reached a mature stage and has likely peaked. Recent weak labor productivity growth was a concern. Growth is expected to slow from 2019; views on long-run potential growth ranged from 1 to 1½ percent, but all parties agreed that further increases in participation would likely not be sufficient to offset declining working age population. Aggregate unit labor costs were anticipated to remain in check, limiting cost pressures, leading authorities to expect inflation to rise gently. Risks to the outlook were perceived as stemming predominantly from a further escalation of trade tensions, which could undermine exports and disrupt production and investment, given Finland's deep integration in global supply chains. The authorities noted that Finland's overall external position had improved since last year. Based on the data at the time of the Article IV consultation that showed an external trade surplus in 2017, they felt that the real exchange rate was no longer overvalued, partly reflecting the benefits of wage moderation, which had lowered labor costs markedly, particularly in 2017.

POLICY DISCUSSIONS

11. The discussions focused on policies to mitigate risks and to increase growth. The mix of policies affecting aggregate demand going forward is balanced and appropriate. The bigger challenges are to manage risks arising from household finances and a concentrated and interconnected banking system (sections A and B), address long-run demands on the public finances (section C), and improve the efficiency of the labor market (section D).

A. Credit Markets, Real Estate, Borrower Risks, and Macroprudential Policies

12. Credit has expanded moderately overall, but housing corporation loans and consumer credit have been rising more rapidly. Total loan growth to the private nonfinancial sector has remained broadly constant at around 3½ percent for the past five years. Most lending to households has been in the form of secured lending for housing, which has grown around 4 percent. Corporate loan growth has rebounded strongly in the second quarter of the year after a sharp contraction in the second half of 2017. Two lending categories stand out:



- Loans to housing corporations have been expanding rapidly—above 10 percent—for many years. The drivers—expansion of the housing stock and renovation of rental properties—are healthy. But as the shareholders of housing corporations are homeowners, these are de facto indirect loans to households, and households might thereby be tempted to take on more debt than can easily be repaid.[5]

- Consumer credit has been increasing steadily—above 7 percent y/y in the second quarter of 2018—and now accounts for 12 percent of aggregate household debt, driven by credit institutions easing lending standards and a rapid increase in non-bank lending. The expansion has been associated with an increase in payment defaults.

13. Household debt has been increasing steadily, despite the increase in real disposable incomes.[6] Saving rates are lower than peers, although some of the difference is attributable to Finland's public pension system.[7] Household debt remains lower than Nordic peers, but is expected to increase further. Highly-indebted households (i.e. those with debt greater than four times their

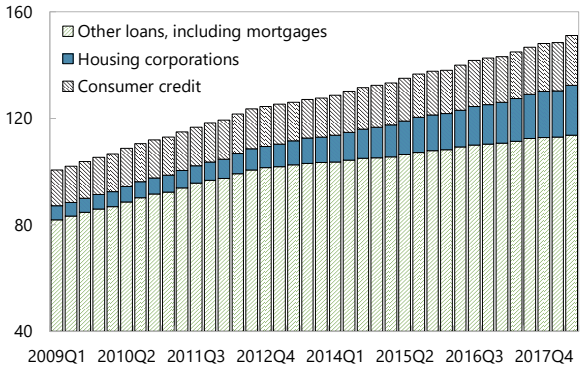
[5] Housing corporations effectively borrow on behalf of households. However, the terms and conditions of the loans and the pooling of credit risk among shareholders might not always be fully understood by households, who are ultimately liable for the debt.

[6] Saving from corporates and the government has increased, accounting for the increase in *national* saving (¶7).

[7] In PAYG-based pension systems, pension fund assets are considered part of general government savings, as opposed to household savings for funded pension systems. Adjusting gross saving rates for this reduces the difference between Finland's saving rate in 2017 and that of other Nordic countries by 60 percent. See also Rocher, S. and M.H. Stierle 2015, "Household saving rates in the EU—Why do they differ so much?", EC Discussion Paper 005.

income) accounted for over a quarter of borrowing in 2016; preliminary survey data for 2017 indicate that the typical new borrower for housing purchases is taking on leverage of 4½ times income. The share of floating rate loans in household lending is high, exacerbating households' vulnerabilities to interest rate and/or income shocks, although this is mitigated by the prevalence of mortgages with annuity repayments.

Household Debt by Purpose
(EUR billion)



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

14. Residential real estate markets do not seem overheated overall, but demand still exceeds supply in major metropolitan areas, and commercial real estate may expose the economy to shocks. Housing starts and completions have been elevated, but price increases in greater Helsinki suggest demand still outstrips supply. Across the whole country, house price increases have been modest, especially in comparison to Nordic peers (Figure 2), with house price deflation in regions outside greater Helsinki. Price-to-income and price-to-rent ratios have not risen much during the recent economic recovery. Low and declining yields in commercial real estate suggest relatively high valuations.

15. The authorities have tightened credit policies. A floor of 15 percent on the average risk weight for housing loans took effect in January for institutions using internal risk-based (IRB) models. Effective July, the maximum loan-to-collateral (LTC) ratio for housing loans (excluding loans on first homes) was cut from 90 to 85 percent.

16. The recent tightening is appropriate, but policy could be more effective if the toolkit were modified. Although overall household debt and leverage are not high in comparison with other Nordic countries, there are some cohorts that are increasingly vulnerable to income and/or interest rate shocks—which, in view of the concentration of total lending in real estate (¶20), opens the financial system to risks.

- The current cap on mortgage loans relative to collateral could usefully be replaced with a cap relative to the value of the property, as is common in other countries.[8] And because the underlying problem is more the level of debt than housing valuations, it would be useful for the authorities to have debt-based macroprudential tools (such as debt-to-income or debt-service-to-income caps) at their disposal should leverage become more stretched. Applying such tools well depends on accurate information. Staff supports the recent Justice Ministry recommendation for the establishment of a "positive credit register"—i.e. a database that credit firms and the FIN-FSA could use to obtain real-time information about customers' debt and income levels. A new

[8] To meet the cap, loan applicants are able to pledge collateral aside from the residence itself, meaning that loans could exceed values.

challenge arises from non-bank lending, including online platforms such as peer-to-peer lending, which is not being recorded in credit statistics and registers (section B and Box 1).

- The growing reliance on consumer credit, especially that provided by non-banks and via digital platforms, raises additional concerns. Some of these outlets are not regulated and provide cross-border financing. Attempts were made to circumvent legally-binding interest rate caps, raising the question of whether borrowers—especially those dealing with non-bank lenders—are sufficiently informed about the conditions of their loans. The authorities are amending the legislation on interest rate caps to close loopholes. Additional consumer protection measures are needed and require more data collection, especially on consumer lending provided through digital platforms. Tighter prudential requirements to demonstrate creditworthiness could also be considered.

17. Macroprudential authority tools should not be expected to solve underlying supply problems. The authorities have already implemented measures to expand housing supply in urban areas, including Helsinki. The government provides considerable support for social housing, which should make it easier to move across regions.[9] But property taxation could be deterring mobility: recurrent property taxes collected by municipalities tend to be low, with some exceptions, while transaction tax rates are steeper at 4 percent.[10]

Authorities' Views

18. The authorities assessed borrower risks to be increasing. Household debt was thought to be already high, with particular risks associated with consumer lending and housing corporation loans. Unsecured consumer lending, especially by non-banks, could be associated with onerous terms and conditions. Similarly, the authorities noted that shareholders in housing corporations might not appreciate the debt that they had in effect taken on. They also expressed concern over the leverage taken on by new borrowers for house purchases. The authorities would prefer the existing lending cap to be expressed as a ratio to value instead of collateral, and argued for the need to expand macroprudential tools to debt-and-income-based measures to better contain the growth in household debt. They emphasized the need for such caps to cover all lenders, not only banks, and include all debt, not only secured lending. They argued for more data, especially on non-bank and foreign lenders (which are not fully captured by credit statistics), and sought a positive credit registry to support monitoring of financial health.

B. Financial System Policies

19. The Finnish financial system is sound. System-wide capital ratios exceed minimum requirements by a clear margin, and leverage ratios have improved to levels above European averages (Table 6). Returns to equity and cost ratios are healthy; profitability has dipped recently, but mainly

[9] The guarantee portfolio for government housing financing has increased by around 8 percent each year from 2010 to 2017, with higher increases for subsidized loans. The government now guarantees the construction of 8,000 social apartments each year.

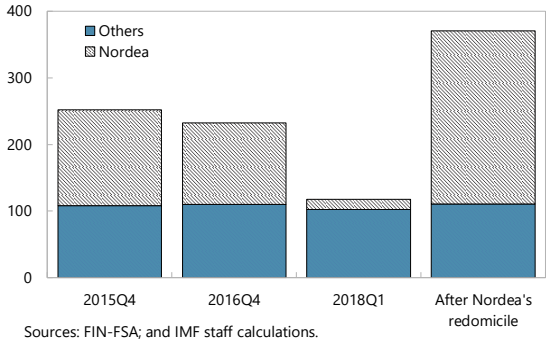
[10] They are 2 percent for shares in housing companies, with an exemption for first time buyers, which could explain the increased share of lending to housing corporations.

because of investment (e.g. IT systems). The quality of the loan stock is very good overall, with low levels of NPLs.

20. However, some distinctive features of the Finnish financial system indicate challenges for supervision:

- *Financial sector size:* With the relocation of the headquarters of Nordea from Sweden to Finland in October 2018, the size of the Finnish banking sector has increased[11] to about 3¾ times GDP once total assets of foreign subsidiaries are accounted for, one of the largest in Europe (relative to GDP). With the redomicile, the amount of covered deposits within the Finnish deposit guarantee scheme grows from around €51 billion to around €127 billion (Selected Issues Paper: Nordea).[12]

Size of Finnish Financial Sector
(Percent of GDP)



Sources: FIN-FSA; and IMF staff calculations.
Note: Estimates of size after Nordea's redomicile based on 2017Q4 data.

- *Concentration:* Over half of bank lending is directed to real estate (including construction and housing corporations). The Finnish real estate investment market is estimated to be worth over a quarter of GDP in 2017, one of the largest in Europe.[13]

- *Interconnectedness:* The domestic financial system is exposed to foreign conditions; in particular, covered bonds continue to play a major role in bank funding, increasing exposure to Nordic real estate markets; many Nordic banks are also significant market makers in the covered bond market.[14] The exposure of the Finnish banking system to other Nordic economies increases with Nordea's redomicile, as the economic fluctuations will affect Nordea's assets (Selected Issues Paper: Nordea).

- *Systemic branches:* Danske Bank is a significant lender in Finland, but its branch activities in Finland are supervised by the Danish competent authority.[15]

[11] Note that the increase over the 2018:Q1 value is inflated by the conversion by Nordea and Danske bank of their subsidiaries to branches in 2017. When measured against the size of the financial system in 2016, the redomicile of Nordea roughly doubles the size of the Finnish financial system (Selected Issues Paper).

[12] The maximum amount guaranteed remains €100,000. Depositors in other Nordic economies are protected up to similar amounts in euro terms.

[13] See Bank of Finland Bulletin, May 2018.

[14] See Finland: Staff Report for the 2017 Article IV Consultation, IMF Country Report No. 17/370.

[15] This issue was previously noted in Finland: Financial System Stability Assessment, IMF Country Report No. 16/370, p.32. The problem is somewhat ameliorated in this case, as Danske has a Finnish subsidiary, which gives the Finnish competent authority representation in the supervisory college overseeing Danske Group.

- *Digitalization:* Finland is at the forefront of digitalization of financial sector services. Digitalization can bring benefits of new and more tailored services and efficiency gains. But it also presents risks to security of payments systems, and to borrowers that are vulnerable to misleading offers of loans, especially by entities that are not supervised or regulated (Box: Fintech and Consumer Credit).

21. The authorities have responded to many of the challenges posed to the system. The mission team's assessment is that the responsible authorities have responded to the challenges posed by Nordea's redomicile within the bounds of their remits.

- In particular, capital requirements for Nordea have not been weakened, as some had feared when the proposal for moving headquarters was announced.[16] The FIN-FSA now has in its toolkit a new capital buffer—the bank-specific systemic risk buffer—in addition to G-SII and O- SII buffers. These were set for financial institutions in June 2018 and become effective in January 2019; for Nordea, the binding buffer is the 3 percent set for its systemic risk buffer.[17]

- The supervisory authority will increase headcount and reorganize to better supervise Nordea. The ECB and Nordic authorities have reaffirmed their commitments to information exchange and cooperation, mitigating the risks of cross-border discrepancies.

- Nordea will contribute to the Finnish deposit guarantee fund with annual deposit guarantee fees, as with all banks in Finland. (The target for the Finnish fund is 0.8 percent of covered deposits by 2024.) Nordea is also obliged to contribute to the Single Resolution Fund, like other euro area banks. No changes are expected to the single point of entry resolution strategy previously established for Nordea by the Swedish-led Supervisory College; the SRB has made decisions on MREL at the consolidated level, but decisions over e.g. subordination and intragroup MREL will be made in 2019.

22. But some issues will require more attention, including from European authorities.

- The banking union is not yet complete: banking supervision in the euro area has improved significantly following the creation of the Single Supervisory Mechanism, but bank crisis preparedness and management still face significant transitional challenges. The confirmation of a backstop for the Single Resolution Fund in June is a significant step to boosting market confidence in the resources available to support resolution, especially in systemic cases, but

[16] Nordea will maintain nominal capital levels roughly constant until the ECB issues its decision in 2019. Capital ratios will fall somewhat as a result of different approaches to the use of Pilar 1 and Pilar 2 requirements under the SSM to those employed by Swedish authorities in 2017. Nonetheless, the Swedish and Finnish authorities assess that Nordea would face equivalent regulatory capital requirements. See the opinion from Sweden's Finansinspektionen dated 23 August 2018.

[17] Levels for other institutions are: OP Group, 2.0 percent; Municipality Finance Plc, 1.5 percent; Aktia Bank Plc, Danske Mortgage Bank Plc, Evli Bank Plc, Handelsbanken Finance Plc, Oma Savings Bank Plc, POP Bank Group, S-Bank Ltd, Mortgage Society of Finland Group, Savings Banks Group, and Bank of Åland Plc, 1.0 percent.

important details still need to be finalized. Establishing a common European deposit insurance scheme would increase the confidence of retail depositors, and is important for cases where liquidation would be required.

- Third-country bank branches, such as Danske's in Finland, are outside the perimeter of ECB banking supervision, creating scope for arbitrage and inconsistent supervisory treatment. The SSM should have supervisory powers over significant third-country branches operating in the euro area.[18]

23. Digitalization is a growing challenge for supervision and regulation, owing to the rapid changes in services and platforms and the lack of data on activities of non-bank service providers. Because products are morphing quickly and across lines of supervision, approaches that stress regulation of activities might be more successful at managing prudential risks than those that regulate entities.[19] Consumer protection—such as transparency about lending terms and conditions—is an important issue.

24. Sustained efforts are needed to ensure effective supervision and enforcement of AML/CFT.

- Recent developments have raised questions about the adequacy of AML/CFT supervision across the European Union. Most prominently, the activities of Danske's Estonian branch over the period 2007 to 2013 have prompted investigations by Danish and Estonian supervisors and the US Department of Justice. At the time of writing, there is no specifically Finnish investigation into the Danske affair, but Finland's National Bureau of Investigation has received a complaint about Nordea's Finnish operation (then a branch) over the same period; there is no decision as yet whether to open an investigation.

- Responsibility over AML issues in Finland relies on several institutions. The Ministry of Finance and the Ministry of the Interior are mainly responsible for legislation, and the FIN-FSA supervises financial institutions' compliance, including Know Your Customer requirements. The Regional State Administrative Agency for Southern Finland (RSAA), the Finnish Patent and Register Office, the National Police Board and the Finnish Bar Association are tasked with AML/CFT supervision for other entities such as real estate agencies, external accounting services, tax advisors, and gambling operators. The Financial Intelligence Unit is responsible for receiving and analyzing suspicious transaction reports.

- Following publication of the 2013 9th Follow-Up Report of Finland's Mutual Evaluation Report by the Financial Action Task Force (FATF), the government amended the AML Act in 2017 by adding requirements for national, and supervisory-specific risk assessments and risk assessments by obliged entities; creating a register for beneficial owners; and adding new obligations for businesses to maintain information concerning their beneficial owners. FATF is currently

[18] See Euro Area: Financial System Stability Assessment, IMF Country Report No. 18/226, p.20.

[19] See IMF Staff Discussion Note SDN/17/05 and "Financial Stability Implications from FinTech," Financial Stability Board, June 2017.

conducting an AML/CFT assessment of Finland under the revised FATF standards focusing on effective implementation of AML/CFT measures, and the report will be published in 2019.

Authorities' Views

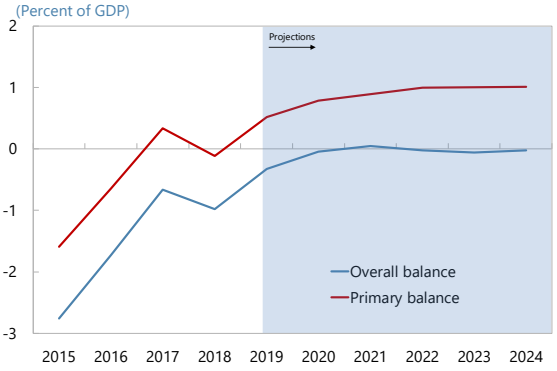
25. The authorities assess the financial system to be sound and stable. The main risks to the banking system arise from the exposure to Nordic real estate markets and rollover risks from covered bond funding, which could escalate were there to be an increase in risk premia in global financial markets. Hiring of new supervisory staff had been successful, although demands on staff would likely remain high, especially in complicated areas such as internal models and money laundering. The SSM provides additional expertise, and cooperation among Nordic supervisory authorities continues to work well. Capital standards applying to Nordea had not been diluted with its redomicile, and system-wide capital was comfortably above regulatory minima. Owing to previous funds carrying over and Nordea contributing towards the target level, only a small amount of funds outside the current system would be necessary to collect from other banks for the Finnish deposit guarantee fund to reach its target, even with the increase in depositors covered by the Finnish scheme with Nordea's redomicile. The Finnish authorities would like a mechanism for the cases of systemically-important branches (such as the authority to set liquidity requirements).

C. Fiscal Policies

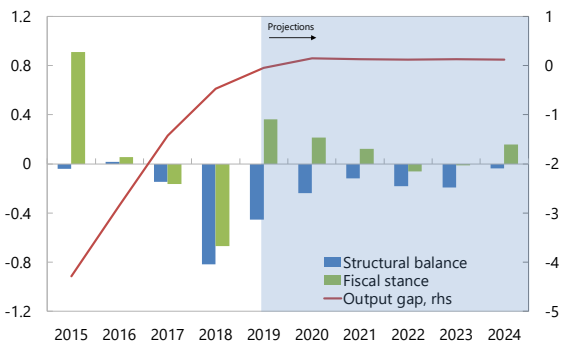
26. The 2019 Budget continues the government's policies. There are some new growth-enhancing expenditure measures, worth about 0.1 percent of GDP, which aim to promote, inter alia, employment growth, R&D and education and public safety. New revenue measures (reducing taxation of earned income and an increase in excise duties) would contribute to a net decline in the revenue ratio.

27. Fiscal policy in 2019 is expected to become contractionary. Notwithstanding the new measures, the continuation of previous measures in the 2019 Budget implies a reduction in the deficit of about 0.7 percentage points of GDP. This is mostly accounted for by saving measures under the government's consolidation plan (estimated at about 0.3 percent of GDP), expected reductions in unemployment benefits (about 0.1 percent of GDP), and the expiration of public investment projects. With a closed output gap, the budget proposal implies a structural contraction of almost 0.4 percent of GDP, reversing the 2018 fiscal stimulus.

28. Over the medium term, fiscal policy is projected to remain contractionary. A tighter fiscal stance is expected to take hold as expenditure consolidation continues beyond 2019, albeit at a slower pace (Figure 3). With a positive output gap over the medium term, the Budget implies a reduction in the structural primary balance of about 0.3 percent of GDP in 2019 and 0.1 percent of GDP thereafter. With deficits receding and output gradually converging to potential, public debt is projected to remain on a downward path (Annex 3: Debt Sustainability Analysis).



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



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

29. A moderate tightening of the fiscal stance is justified for both cyclical and structural reasons. With output projected to expand above its potential growth rate and no independent monetary policy, a continuation of 2018's procyclical fiscal stance should be avoided. Long-term sustainability considerations underscore the need to build fiscal buffers in light of looming spending pressures from age-related costs, a relatively high level of contingent liabilities,[20] and the typical volatility of the economy witnessed over the past 25 years that can rapidly increase demands on the public finances. With an already-high revenue ratio, there is little scope for further increases in the tax burden (although additional efforts to improve VAT collection would help). Continuing to uphold the consolidation commitments under the Competitiveness Pact is therefore important. Unexpected savings should be allocated to either reduce the debt or to growth-enhancing expenditures, such as on of infrastructure that might aid labor mobility (e.g. transportation) and measures to partially reverse recent cuts in R&D spending.

30. Progress on social services and health care reform has been slow, but should be pursued. The proposed reform to social services and health care is important to address the age-related challenges and is a crucial component of the fiscal consolidation plan. Currently, public health and social care is provided by 190 local agencies, making it difficult to exploit economies of scale. The plan is to make provision of services more cost effective by transferring responsibility for provision of services from almost 300 municipalities to 18 newly-formed counties, with an emphasis on competition and modernization. As yet, political consensus on the reform has not been achieved. Savings will largely depend on implementation—which has been delayed again to 2021. The project is ambitious, proposing major changes to regional administration and significant commitments to complex IT systems, but is susceptible to downside risks, including cost overruns. Nonetheless, if successfully implemented, the reform could make a major contribution to fiscal sustainability, potentially increasing public sector net worth by about 65 percent of GDP.[21]

[20] Government guarantees are above 20 percent of GDP.

[21] The authorities target fiscal savings of around 1.3 percentage points of GDP by 2030 through successful implementation of the reform. Given the current level of health and old-age expenditures of 11.4 percent of GDP and a projected increase from population aging of around 1.3 percent, the target would imply savings of approximately 10 percent of total health and old-age expenditures once the reform is completed. (See also Finland: Staff Report for the 2017 Article IV Consultation, IMF Country Report No. 17/370, Annex III; and Brede, Maren. and Christian Henn 2018, IMF Working Paper 18/78).

Authorities' Views

31. The authorities considered that a tighter fiscal stance is warranted to build fiscal buffers as age-related fiscal pressures loom closer. They felt that, from a "bottom-up" perspective that evaluates specific new measures, the fiscal stance in 2017 and 2018 was approximately neutral. They reiterated their commitment to closing the fiscal sustainability gap by, inter-alia, continuing the implementation of the fiscal consolidation plan and pushing forward the reform of health and social services. The potential savings from this reform are uncertain; the authorities would consider other adjustments to ensure savings are realized.

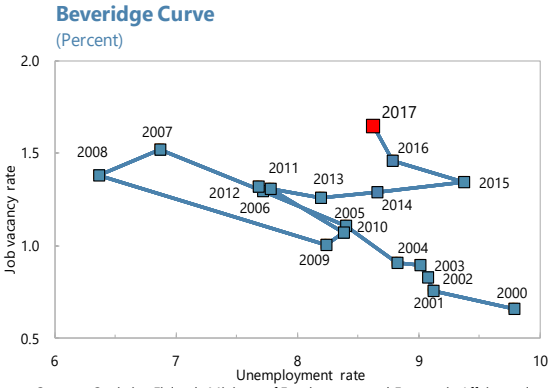
D. Structural Policies

32. The sustainability of the social model puts emphasis on structural policies. The model depends on high levels of employment and growth, implying a need for vibrant markets and efficient use of resources. Finland's product markets are comparatively liberalized; discussions focused mainly on areas in which labor market performance could be improved.

33. The labor market has had to face considerable adjustment over the past decade. Recessions have weakened employment and caused physical and human capital investment to be deferred. Major economic shocks and the financial crisis have seen substantial job losses in high-productivity manufacturing.[22] These compositional effects substantially weakened productivity. Some regions were more affected than others, contributing to regional labor market disparities.

34. Notwithstanding recent growth, signs of underlying weaknesses remain…

- **… with respect to labor mobility.** Most obviously, even with the recent substantial increase in employment, the unemployment rate remains notably above Nordic peers (Figure 4). The Beveridge curve, relating unemployment rates to vacancies, has shifted out during the past three years of recovery, indicating difficulties in matching workers to job opportunities; in some sectors—notably construction and services—labor shortages have continued despite overall unemployment remaining comparatively high. Staff analysis shows that regional labor mobility is relative low relative to other advanced economies (Figure 6; Annex III).

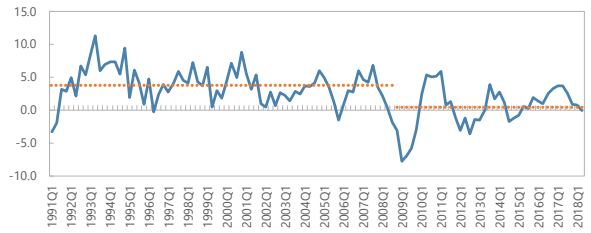


Sources: Statistics Finland, Ministry of Employment and Economic Affairs and Fund staff calculations.

[22] Bank of Finland economists estimate that approximately 110,000 jobs were lost in manufacturing and trade since 2008. ICT's share of total output declined from 8 percent at the turn of the millennium to 3 percent currently. See Bank of Finland Bulletin 3/2018.

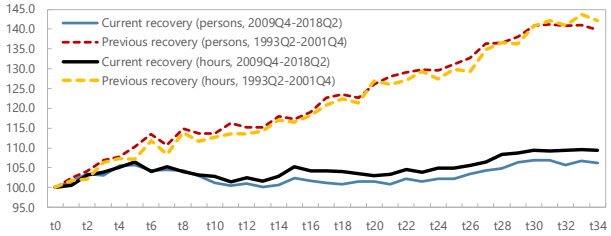
- **… and with respect to productivity.** Labor productivity of the economy has taken until now to recover to levels reached before the onset of the global financial crisis. Productivity growth during this recovery has been slower than during the previous recovery in the 1990s. Deep structural changes in the economy associated with the impact of the crisis and Nokia's demise resulted in compositional changes across sectors, making the comparison of recoveries difficult. Nevertheless, analysis indicates that, within the same sector, some firms have high productivity growth, while others lag behind—and that the gap between best and worst performing firms is increasing over time.

Labor productivity growth in the private sector
(hours worked, y-o-y growth in percent)



Source: Statistics Finland and IMF staff calculations.
Note: Labor productivity is measured using seasonally adjusted gross value added amd employment excluding public administration, defence, education, human health and social work activities. Dotted lines are means.

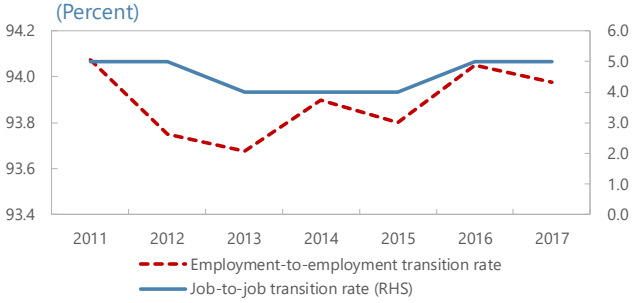
Labor productivity in the private sector
(persons employed, hours worked)



Source: Statistics Finland and IMF staff calculations.
Note: t0 refers to the first quarter preceding the recovery (indexed at 100). Labor productivity is measured using seasonally adjusted gross value added, employment and hours excluding public administration, defence, education, human health and social work activities.

35. These observations are consistent with weak job market dynamism, despite the recovery. Many other advanced economies have higher job-to-job mobility, which is thought to be a key mechanism by which skills are diffused within an economy.[23] This appears to have been associated with low rates of regional labor migration within Finland.[24] Employment-to-employment transition rates have remained flat, job creation rates across sectors from 2008 to 2016 have been flat or declined slightly, while creation of new firms has declined over the same period (Figure 5).

Finland: Labor market dynamism
(Percent)



36. Some structural features could be holding back dynamism. Finland's Employment Protection Legislation is not noticeably restrictive overall, but dismissal procedures are more restrictive.[25] Easing dismissal procedures is often found to have no significant effect on

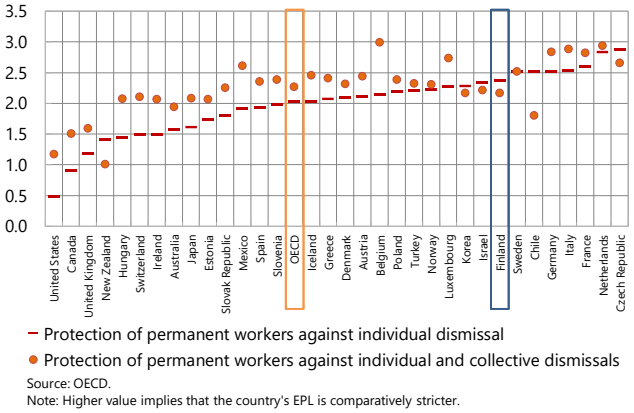
[23] See Davis, Steven J. and John Haltiwanger (2014), "Labor Market Fluidity and Economic Performance," NBER Working Paper 20479.

[24] See Tigran Poghosyan (2018), "Regional Labor Mobility in Finland," IMF Working Paper WP/18/252.

[25] Although protection of permanent workers against collective dismissals (justified on economic grounds) is comparable to an average OECD country, individual dismissal (such as because of misbehavior or poor performance) is more stringent.

employment—hiring is easier, but so too is firing.[26] However, it has been found to increase productivity and incomes.[27] SMEs incur proportionally larger dismissal costs compared to other firms and clauses that specify a minimum employment period on re-employment are considered a deterrent by employers.

OECD Indicators of Employment Protection Legislation
(2013)



Source: OECD.
Note: Higher value implies that the country's EPL is comparatively stricter.

37. The authorities have pursued several reforms in recent years to improve the functioning of the labor market.

- A key ambition of the 2016 Competitiveness Pact was a move away from tripartite centralized bargaining toward coordinated sectoral bargaining with greater wage flexibility at the level of firms. However, social parties were not able to reach agreement on a formal model, and the 2017 wage negotiations were bilateral, with no formal role for the government, and not formally coordinated across sectors.[28]

- Reforms of social benefits have aimed to decrease inactivity: tighter conditions for receiving unemployment benefits and a shortening of their duration became effective in January 2017[29]; penalties were introduced to incentivize active job search; funds for active labor market policies were increased; as was the mobility allowance, to better cover part-time work; the trial period for new hires was extended allowing firms to better test the capabilities of new hires; conditions for hiring on temporary contracts were eased.

- Recently, the governing coalition and the social partners agreed on a legislative proposal allowing courts take into account the size of the firm when considering dismissal cases and reducing the period during which individually dismissed workers would not receive unemployment insurance from 90 to 60 days.

38. While recognizing the importance of maintaining social cohesion, staff recommends further steps to increase job market dynamism.

- Enhancing the ability to differentiate wages at the firm level is important to increase incentives for job-to-job transitions and foster regional labor mobility, clearing the job market more rapidly

[26] See, for example, the survey in OECD (2016), "Enhancing economic flexibility: what is in it for workers?" OECD Economic Policy Paper No. 19.

[27] See Autor, David, William Kerr and Adriana Kugler (2007), "Does employment protection reduce productivity? Evidence from US states," *The Economic Journal* 117(521), pp.F189–217.

[28] In practice, export-oriented sectors settled first, influencing the negotiations that followed for other sectors.

[29] This has been estimated to have resulted in a decrease of unemployment duration by 10 percent and fiscal savings of more than € 100 million—see "OECD Economic Surveys: Finland 2018," OECD: Paris.

and facilitating the transfer of skills. Experience from other countries indicates that this is compatible with formal representation of labor and employers.[30] As it stands, about 25 percent of employees work for non-organized employers, mostly SMEs, cannot bargain locally but are instead bound by sectoral agreements.

- There is room for further progress to improve incentives from social benefits. Job search intensity tends to increase sharply toward the end of benefit time limits; tapering benefits to gradually fall with duration could improve job search (Figure 4). A tripartite working group was setup to assess the effectiveness of recently introduced measures to incentivize job search of unemployed by Spring 2019.

- Other policies may need to be addressed to improve regional job mobility. Staff analysis finds a significant role for housing market variables. The authorities have already implemented measures to expand housing supply in urban areas, and the government provides mobility allowances to compensate for housing cost differentials across regions. But there is scope to improve transport infrastructure around growth regions to incentivize commuting and reduce demand pressures from centrally located properties. The gradual decline in mortgage interest deductibility to 25 percent in 2019 would mitigate debt-financed ownership incentives.

Authorities' Views

39. The authorities agreed on the need to continue structural reforms, but highlighted challenges associated with enhancing labor market dynamism. Past reforms have been bearing fruit: competitiveness has been restored and the labor market recovery has exceeded expectations. Nevertheless, labor productivity growth remains subdued and has not recovered as fast as in previous upswings. Modest labor mobility across regions can be explained by, inter alia, the geographical dispersion of the population, high home ownership rates, and less liquid real estate markets in rural areas. There is scope to reform social benefits to enhance labor incentives and labor market dynamism further, but social safety nets should be maintained. Regional governance reforms and greater reliance on outsourcing are expected to improve the effectiveness of active labor market policies.

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40. Good economic performance continues, but growth is likely to slow. Finland is enjoying its third consecutive year of economic recovery, and the unemployment rate has declined to its lowest level since 2011. Growth in 2018 is expected to be 2.4 percent. But it is likely to slow next year as global demand slows and financial conditions tighten. There are downside risks to this outlook, such as from an increase in trade protectionism. And over the long term, growth is likely to be lower than what has been seen recently, unless productivity growth permanently increases.

[30] Framing the alternatives for the labor market as simply between organized and unorganized labor misses important distinctions. In a recent study, the OECD found that centralized bargaining systems are associated with lower productivity growth. "Organized decentralization"—in which sector-level agreements set broad targets while firm-level negotiations set detailed terms—are associated with higher employment, productivity, and wages. See "The role of collective bargaining systems for good labour market performance" in OECD Employment Outlook 2018.

41. Hence, the challenge is to make the economy more dynamic. Recent reforms have made Finnish exports more cost competitive and helped to boost employment. But the job is not yet done: unemployment rates remain persistently high in some regions despite ample vacancies in others, productivity growth is still below what was seen before the crisis, despite the strength of the recovery, and external balances remain moderately weaker than would be desirable for an economy with an aging population.

42. The focus of reforms should be on increasing labor market dynamism while maintaining a strong safety net. This means more flexibility about setting wages at the firm level and changing unemployment benefits to increase job search soon after losing employment. Other policies may be needed to aid regional labor mobility.

43. Because growth is likely to slow, there is a need to continue to rebuild fiscal buffers. The 2019 budget implies a moderate tightening; going forward, fiscal policy should concentrate on raising the effectiveness of public spending, alongside policies to boost potential growth.

44. The financial system is sound. The authorities should continue to keep a close eye on banks' exposures to real estate. The size of the banking sector has increased substantially with the recent redomicile of Nordea to Finland, which increases demands on supervision and heightens the importance of continued close regional cooperation and preparedness for crises.

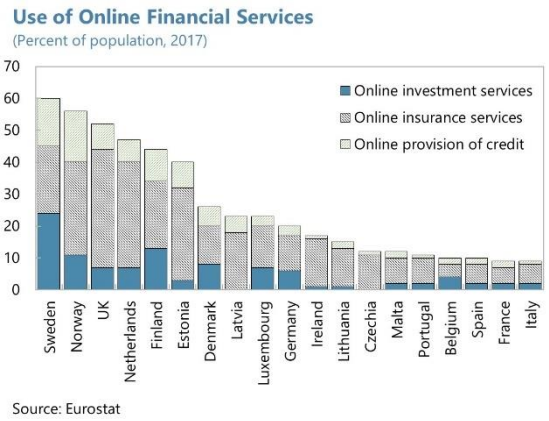
45. Extra measures to protect borrowers are needed. The authorities should be given more macroprudential tools and access to better data, such as from a comprehensive positive credit registry. The growth in consumer credit raises the question of whether some borrowers are sufficiently informed about the conditions of their loans—extra consumer protection measures should be considered.

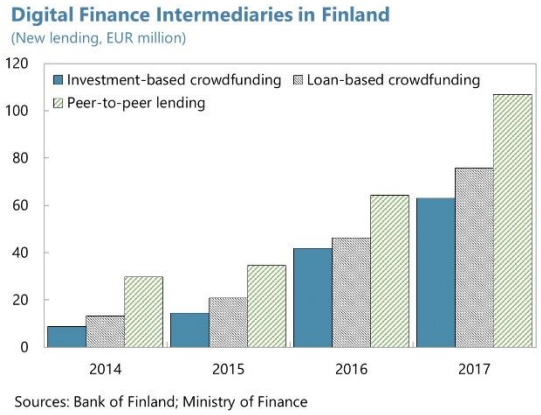
46. It is proposed that the next Article IV consultation with Finland be held on the standard 12-month cycle.

Box 1. Fintech and Consumer Credit

"Fintech" is an appellation for a broad and fluid set of technology-enabled innovations in finance. These advances are creating new opportunities for consumers and service providers while also setting new challenges for regulators. While much attention has been given recently to the implications for regulation of increased operational risks (e.g. from changes to payments systems and from cyber risks),[1] there are important implications from new developments in consumer lending.

Whereas credit has usually been intermediated by banks, electronic platforms now enable borrowers to be matched directly with investors. Finland, one of the most digitized economies in the world, is a natural environment for such developments. Data are sparse, but suggest that "peer-to-peer" (P2P) lending and related practices are expanding very rapidly. According to survey data, the online market has almost quintupled in size between 2014 and 2017 and is now the fifth largest market for digital finance in Europe after the UK, France, Germany and the Netherlands in terms of lending volumes.[2]





In principle, P2P lending can improve the market for consumer credit: it can increase competition and financial inclusion, and create tailored products that better match borrowers' needs. An increase in the share of P2P lending could reduce risks arising from concentration in bank intermediation and possibly make credit creation more resilient and less susceptible to business cycles, to the extent that P2P lending has lower maturity mismatches. However, credit risk could be increased, as there is no regulatory capital to back such lending, no access to central bank liquidity, and credit risk models are untested.[3]

A pressing challenge is monitoring: P2P lending is not captured in official credit statistics nor conventional credit registries, meaning that central banks and regulators cannot accurately measure the impact of P2P lending on the real economy, evaluate its role in the transmission of monetary policy, or assess risks to lenders and borrowers. Monitoring cross-border payments is especially difficult. A second challenge is regulation—because the field is changing so quickly, regulation of activities is likely to prove more successful than regulation of entities. Emerging issues include consumer protection and risk assessment and disclosure, as well as enforcement of KYC regulations to prevent money laundering. Regulatory arbitrage across jurisdictions is likely to exacerbate these issues without enhanced regional cooperation.

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[1]See "Fintech and Financial Services: Initial Considerations," IMF Staff Discussion Note SDN/17/05.

[2]See "3rd European Alternative Finance Industry Report," Cambridge Centre for Alternative Finance 2018.

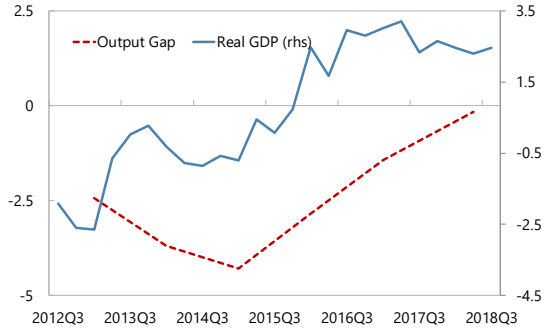
[3]See "Financial Stability Implications from FinTech," Financial Stability Board June 2017.

Figure 1. Finland: Economic Developments

The economy is growing, eroding spare capacity….

Real GDP and Output Gap

(Percent, yoy)

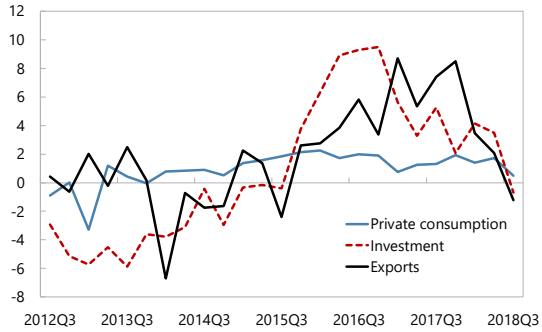


Sources: Haver Analytics; and IMF staff calculations.

Investment and exports provided a strong impulse

Private Consumption, Investment and Exports

(Percent, yoy)

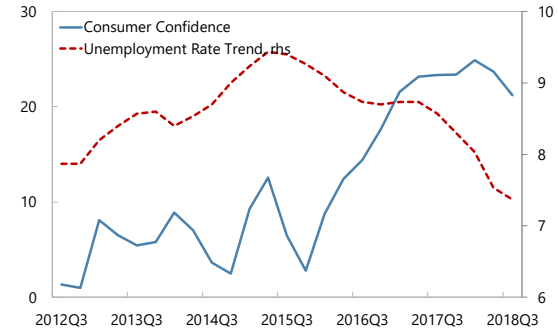


Sources: Haver Analytics; and IMF staff calculations.

Declining unemployment and elevated consumer confidence should support consumption…

Consumer Confidence Indicator and Unemployment Rates

(Percent)

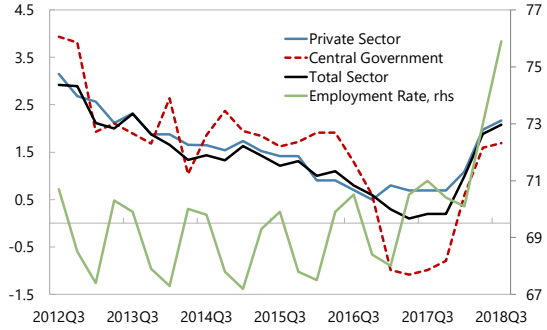


Sources: Haver Analytics.

…as earnings and employment are growing again

Earnings Growth and Employment Rates

(Percent, yoy)

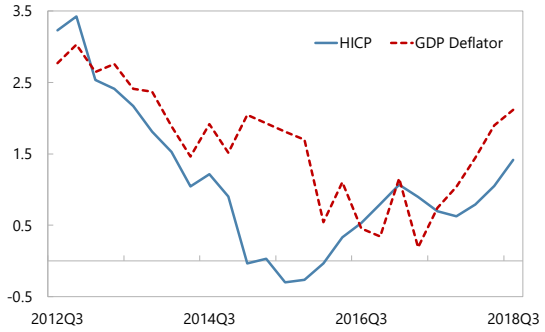


Sources: Haver Analytics, Eurostat, and IMF staff calculations.

Measures of domestic inflation have edged up somewhat…

HICP index and GDP Deflator

(Percent, yoy)

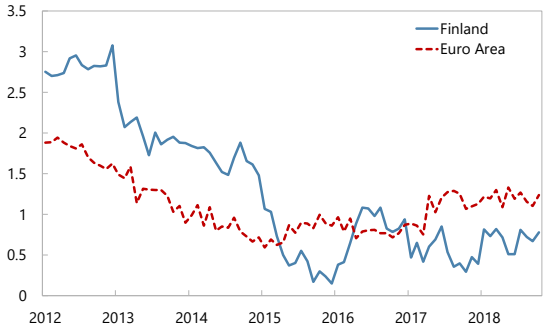


Sources: Haver Analytics; and IMF staff calculations.

…but core inflation remains below the euro area's

HICP Excl. Energy and Unprocessed Food

(Percent, yoy)

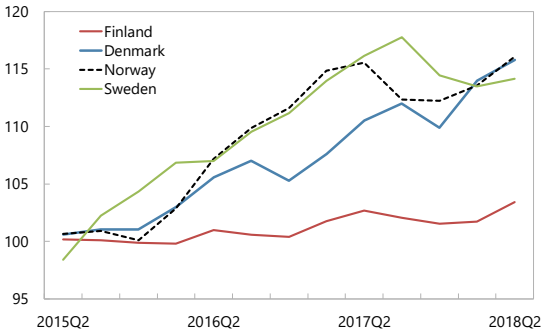


Sources: Haver Analytics; and IMF staff calculations.

Figure 2. Finland: House Prices

House prices in Finland have increased modestly, especially in comparison to Nordic peers.

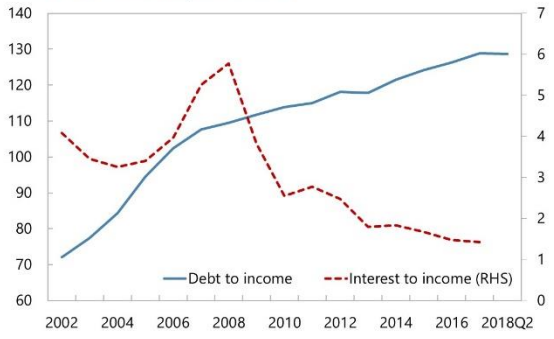
House Prices in Nordic Countries
(Index, 2015=100)



Source: Eurostat.

Debt to income has increased while affordability has been maintained with lower rates…

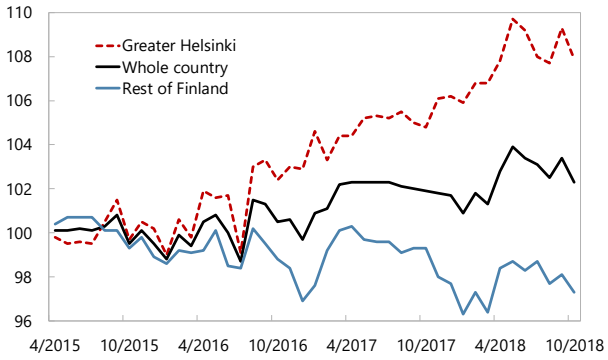
Household Debt in Finland
(Percent of household disposable income)



Source: Statistics Finland; IMF staff calculations

Price increases have been driven by those in metropolitan Helsinki.

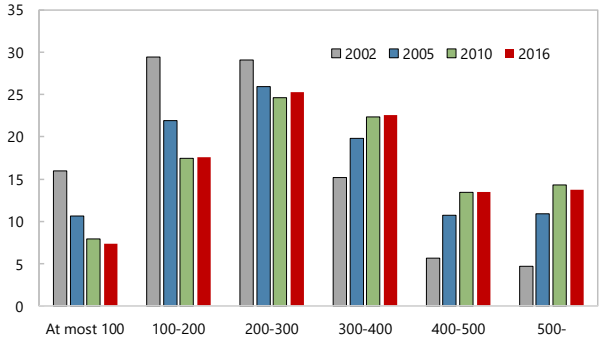
Finland: Regional House Prices
(Index, 2015=100)



Source: Statitics Finland.

…with the share of highly leveraged households remaining roughly the same.

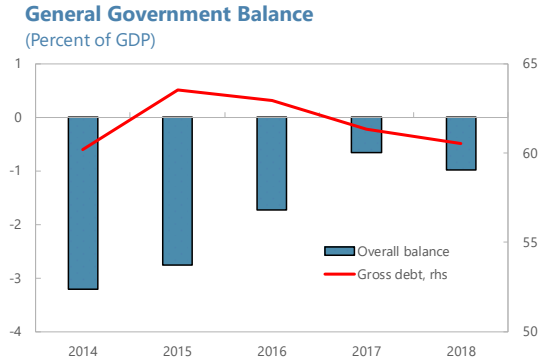
Share of Mortgage Debt by Household DTI Ratio
(Percent of total housing loans)



Source: Statistics Finland.

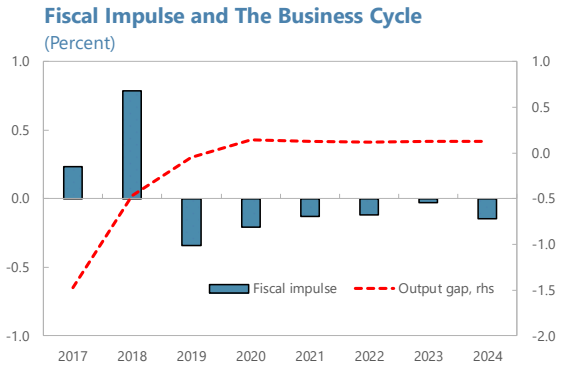
Figure 3. Finland: Fiscal Developments

Fiscal balances have improved along with the recovery, putting debt on a downward path …



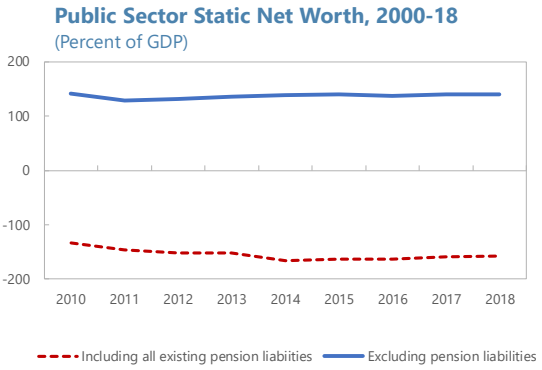
Sources: Finish authorities and IMF staff estimates.

While fiscal policy has turned expansionary, it is expected to be swiftly reversed …



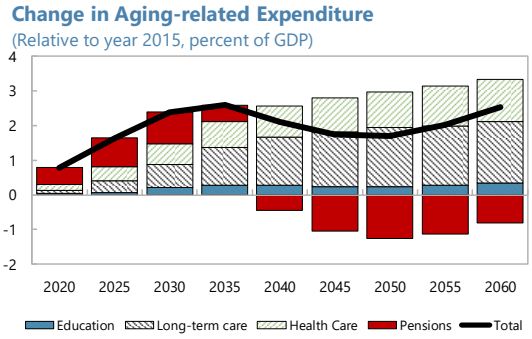
Sources: Finish authorities and IMF staff estimates.

However, public sector net worth is increasingly negative…



Sources: Finish authorities and IMF staff

… as large old-age expenses loom in the future

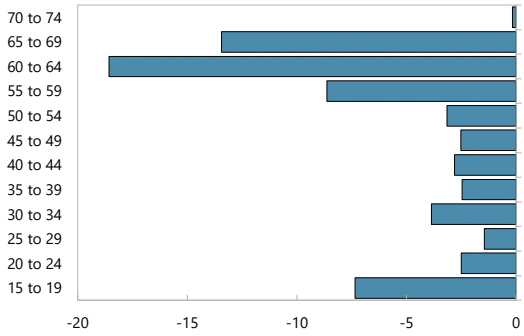


Sources: Finnish Ministry of Finance (2017).
Note: Estimates account for the 2017 pension reform, but exclude the prospective health and social services reform.

Figure 4. Finland: Labor Force Participation and Unemployment

Labor force participation in Finland lags that of Nordic peers for both men …

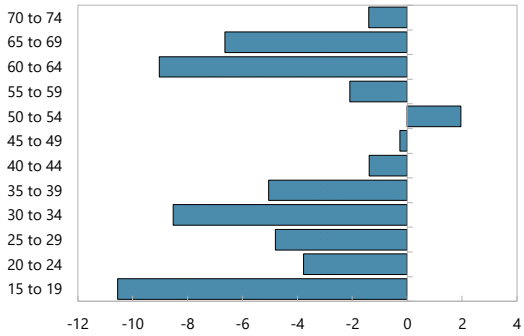
Finland: Labor Participation Rates, Men, 2017
(Percent deffierence against ND average)



Sources: OECD; and IMF staff calculations.

… and women (except 50–54 years old).

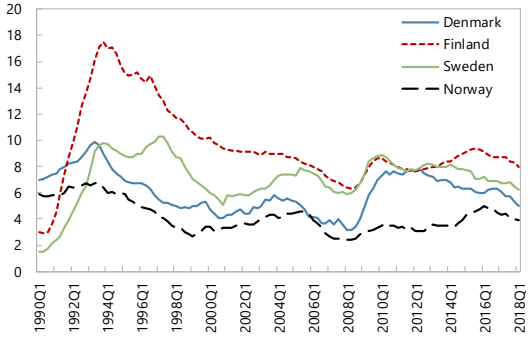
Finland: Labor Participation Rates, Women, 2017
(Percent difference against ND average)



Sources: OECD; and IMF staff calculations.

The unemployment rate is higher than that of Nordic peers …

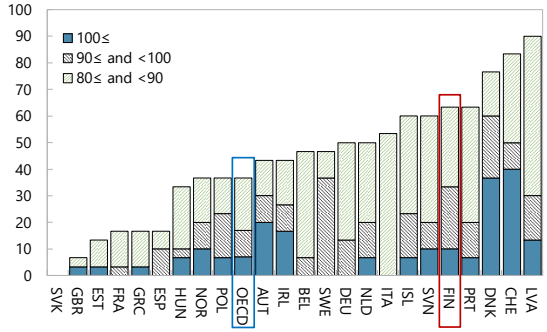
Unemployment Rate in Nordic Countries
(In percent of active population)



Source: Eurostat.

… supported by relatively high incidence of unemployment traps …

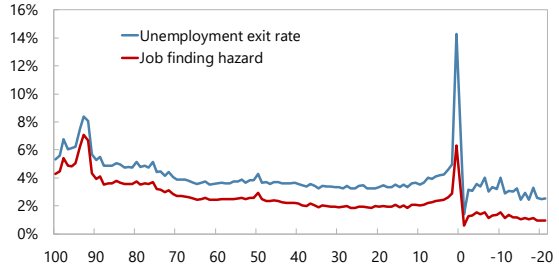
Work Does Not Always Pay
(Incidence of unemployment traps)



Source: OECD.

… still generous unemployment insurance …

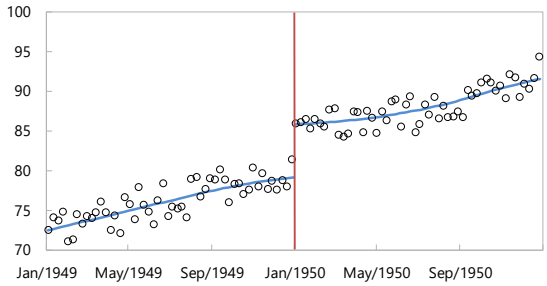
Exit Rates Spike Immediately Before Unemployment Benefit Expiry
(Percent)



Sources: OECD; and Kyyrä, K. et al. (2017a), "The spike at benefit exhaustion in the Finnish labor market", *VATT Working Papers,* No. 86, Helsinki.
Note: Unemployment and job finding rates as a function of time-to-exhaustion for all those entitled to unemployment insurance.

… and the "unemployment tunnel."

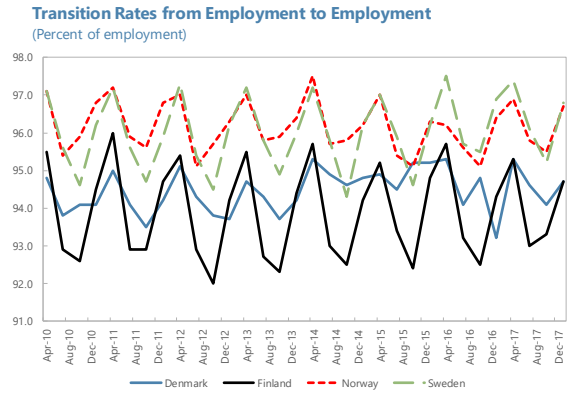
Employment by Birth Week
(Months employed in 2004-13)



Sources: Kyyrä, K. and H. Pesola (2017), "Long-term effects of extended unemployment benefits for older workers", *VATTWorking Papers,* No. 89, Helsinki.
Note: The unemployment tunnel age threshold was increased from 55 to 57 years in 2005, only applicable to individuals born after 1949.

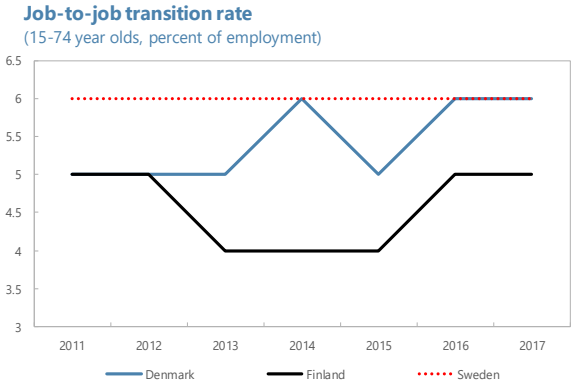
Figure 5. Finland: Labor Market Dynamism

Employment-to-employment transition rates did not increase despite the recovery …



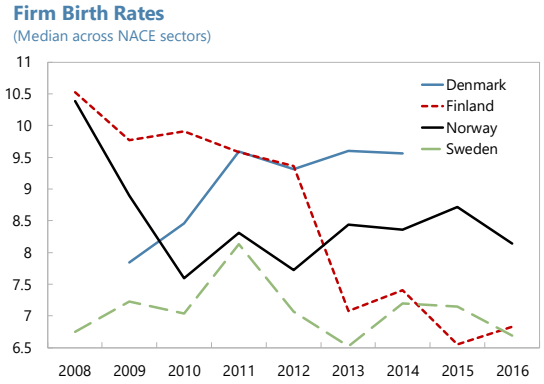
Source: Eurostat.

… while job-to-job transition rate remains below that of Nordic peers.



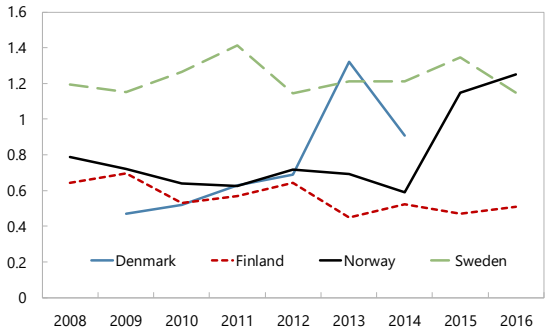
Source: Eurostat.

Firm birth rates have been declining …



Source: Eurostat.

… and job creation rate lags that of Nordic peers

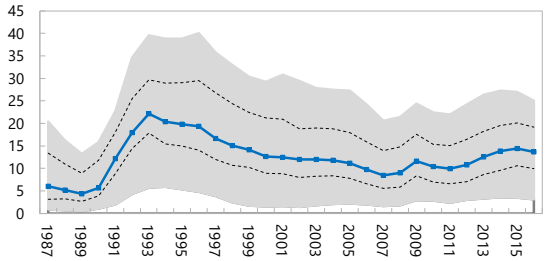


Source: Eurostat.

Figure 6. Finland: Regional Labor Mobility

Unemployment rate varies widely across regions ...

Finland: Unemployment Rates

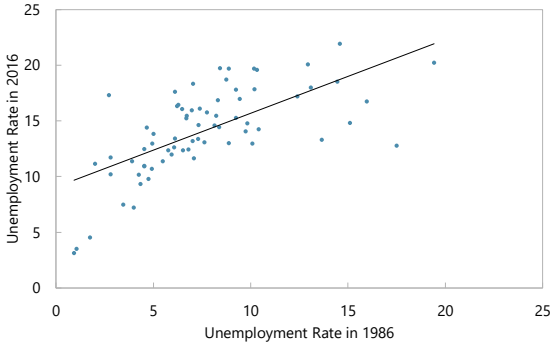


Sources: Statistics Finland; and IMF staff calculations.
Note: The sample includes 70 NUTS 2 regions over the period 1987-2016. The blue line represents Finland as a whole. Unemployment rate is calculated using data on unemployed job seekers registered at the employment services (link). The shadow range represents minimum and maximum across regions. The dotted lines represent 10–90 percentile intervals.

... and is highly persistent ...

Unemployment Rates in 1986 vs 2016

(Percent)

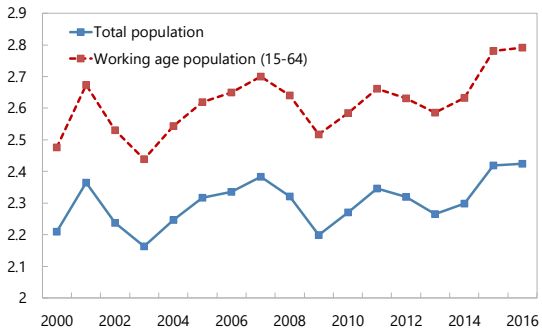


Sources: Statistics Finland; and IMF staff calculations.

driven by modest out-migration ...

Gross Labor Mobility

(Percent of respective population group)

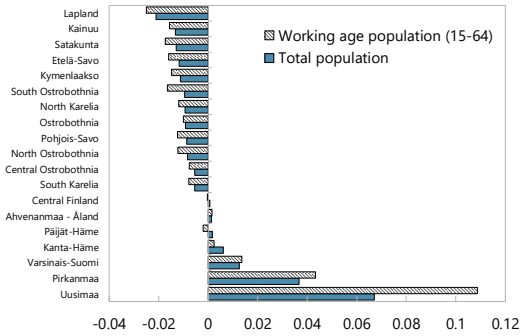


Sources: Statistics Finland; and IMF staff calculations.

... mostly from rural north to urban south.

Net Labor Mobility

(Percent of respective population group)

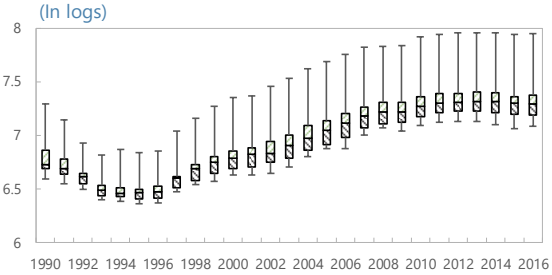


Sources: Statistics Finland; and IMF staff calculations.

Regional house price dispersion has widened, hampering regional labor mobility ...

Finland: House Prices

(In logs)

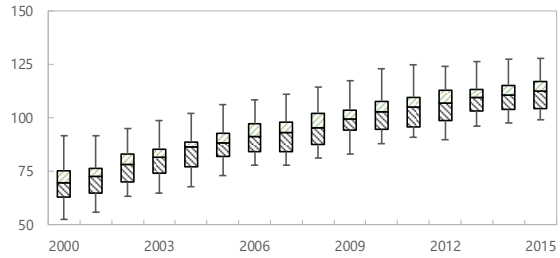


Source: Statistics Finland; and IMF staff calculations.

... while regional wage dispersion remained stable, providing little incentive for mobility.

Finland: Real Wages

(In logs)



Source: Statistics Finland; and IMF staff calculations.

Table 1. Finland: Selected Economic Indicators, 2016–2024

	2016	2017	2018	2019	2020	2021	2022	2023	2024
						Proj.			
				(Percentage change, unless otherwise indicated)					
Output and demand (volumes)									
GDP	2.5	2.8	2.4	1.9	1.7	1.4	1.3	1.3	1.3
Domestic demand	3.1	2.1	2.3	1.8	1.7	1.3	1.2	1.2	1.2
Private consumption	2.0	1.3	2.1	1.8	1.3	1.1	1.1	1.1	1.1
Public consumption	1.8	-0.5	1.5	1.0	1.8	1.0	0.7	0.7	0.7
Gross fixed capital formation	8.5	4.0	3.7	3.0	2.4	2.0	2.0	2.0	2.0
Change in stocks (contribution to growth in percent of GDP)	-0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exports of goods and services	3.9	7.5	3.2	3.3	3.1	3.1	3.0	3.0	3.0
Imports of goods and services	5.6	3.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Net exports (contribution to growth in percent of GDP)	-0.6	1.4	0.2	0.1	0.1	0.1	0.0	0.0	0.1
Prices, costs, and income									
Consumer price inflation (harmonized, average)	0.4	0.8	1.2	1.4	1.6	1.8	1.9	2.0	2.0
Consumer price inflation (harmonized, end-year)	1.1	0.5	1.5	1.5	1.6	1.8	1.9	2.0	2.0
GDP deflator	0.6	0.8	1.6	1.6	1.8	1.8	1.9	2.0	2.0
Unit labor cost, manufacturing	-2.7	-6.9	-0.8	0.0	0.4	0.4	0.5	0.6	0.6
Labor market									
Labor force	-0.2	0.8	0.3	0.6	0.5	0.3	0.1	0.1	0.1
Employment	0.5	1.0	1.4	0.9	0.6	0.4	0.2	0.1	0.1
Unemployment rate (in percent)	8.8	8.6	7.6	7.3	7.1	7.0	6.9	6.9	6.9
Potential output and NAIRU									
Output gap (in percent of potential output)[1]	-2.8	-1.5	-0.5	0.0	0.2	0.1	0.1	0.1	0.1
Growth in potential output	1.0	1.4	1.4	1.5	1.5	1.4	1.3	1.3	1.3
				(Percent of GDP)					
General government finances[2]									
Overall balance	-1.7	-0.7	-1.0	-0.3	0.0	0.1	0.0	-0.1	0.0
Primary balance[3]	-0.6	0.3	-0.1	0.5	0.8	0.9	1.0	1.0	1.0
Structural balance (in percent of potential GDP)	0.0	-0.1	-0.8	-0.5	-0.2	-0.1	-0.2	-0.2	0.0
Structural primary balance (in percent of potential GDP)[3]	1.1	0.8	0.0	0.4	0.6	0.7	0.8	0.9	1.0
Gross debt	63.0	61.3	60.5	59.8	58.8	58.4	56.6	54.9	53.2
Net debt[4]	-53.3	-58.6	-55.3	-53.1	-51.2	-49.6	-48.1	-46.5	-45.0
				(Percent)					
Money and interest rates									
M3 (Finnish contribution to euro area , growth rate, e.o.p.)	1.8	6.1	...	...	...	...	...	...	...
Finnish MFI euro area loans (growth rate, e.o.p.)	1.4	2.6	...	...	...	...	...	...	...
Domestic nonfinancial private sector credit growth (e.o.p.)	-2.6	2.4	4.8	4.6	4.6	4.5	4.3	4.0	3.9
3-month Euribor rate (percent)	-0.3	-0.3	...	...	...	...	...	...	...
10-year government bonds yield	0.4	0.5	...	...	...	...	...	...	...
				(Percent of GDP)					
National saving and investment									
Gross national saving	21.3	22.1	22.5	23.2	23.6	23.8	24.1	24.2	24.4
Gross domestic investment	22.0	22.8	23.0	23.1	23.1	23.2	23.2	23.3	23.5
Balance of payments									
Current account balance	-0.7	-0.7	-0.5	0.1	0.5	0.6	0.8	0.9	1.0
Goods and services balance	-1.0	0.3	0.4	0.7	0.8	0.9	0.9	1.0	1.0
Net international investment position	8.6	2.4	2.6	2.7	3.1	4.7	5.5	6.4	7.9
Gross external debt	195.0	182.2	185.6	188.9	191.9	194.9	198.0	200.4	202.0
Exchange rates (period average)									
Euro per US$	0.90	0.89	...	...	...	...	...	...	...
Nominal effective rate (appreciation in percent)	2.0	0.9	...	...	...	...	...	...	...
Real effective rate (appreciation in percent)[5]	1.2	-0.4	...	...	...	...	...	...	...
Memorandum items									
Nominal GDP (in Euro billions)	216.1	223.9	...	...	...	...	...	...	...
Nominal GDP (in U.S. dollar billions at market exch. rates)	239.2	252.8	...	...	...	...	...	...	...

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

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

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

[3] Adjusted for interest expenditure.

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

[5] CPI-based real effective exchange rate.

Table 2. Finland: Balance of Payments, 2016–2024

	2016	2017	2018	2019	2020	2021	2022	2023	2024
						Proj.			
				Billions of euros					
Current account	-1.6	-1.5	-1.2	0.3	1.2	1.5	2.3	2.6	2.8
Goods and services	-2.2	0.7	1.0	1.6	2.0	2.2	2.5	2.6	2.7
Exports of goods and services	77.5	86.2	89.3	92.8	96.1	99.1	102.5	105.9	108.5
Goods	53.2	59.7	61.8	64.2	66.5	68.6	71.0	73.3	75.1
Services	24.3	26.5	27.5	28.6	29.6	30.5	31.6	32.6	33.4
Imports of goods and services	79.7	85.6	88.4	91.2	94.1	96.9	100.0	103.3	105.7
Goods	52.9	58.0	60.0	62.0	63.9	65.8	67.9	70.1	71.8
Services	26.9	27.6	28.4	29.2	30.2	31.1	32.1	33.2	33.9
Income	0.6	-2.2	-2.1	-1.3	-0.8	-0.7	-0.3	-0.1	0.1
o/w Investment income	0.6	-2.2	-2.1	-1.3	-0.8	-0.7	-0.3	-0.1	0.1
Capital and financial account	-12.4	-4.5	-0.8	0.7	1.6	2.0	2.7	3.0	3.3
Capital account	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Financial account	-12.5	-4.7	-1.0	0.5	1.4	1.8	2.5	2.8	3.1
Direct investment[1]	12.4	-1.8	12.5	11.5	11.6	11.6	11.6	10.6	9.6
In Finland	4.4	13.0	0.0	0.7	0.7	0.7	0.7	1.7	2.7
Abroad	16.8	11.1	12.5	12.2	12.3	12.3	12.3	12.3	12.3
Portfolio investment	-0.8	4.8	-1.7	-0.4	0.2	-0.3	0.3	0.5	-0.2
Financial derivatives	-1.0	-8.1	-4.1	-2.0	-1.0	-0.5	-0.3	-0.1	-0.1
Other investment	-23.7	0.8	-7.8	-8.5	-9.4	-9.0	-9.1	-8.1	-6.2
Assets	-24.5	11.1	10.8	10.5	10.2	9.9	9.6	9.3	9.1
Liabilities	-0.8	10.2	18.6	19.0	19.5	18.8	18.7	17.4	15.3
Reserve assets	0.6	-0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net errors and omissions	-11.0	-3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				Percent of GDP					
Current account	-0.7	-0.7	-0.5	0.1	0.5	0.6	0.8	0.9	1.0
Goods and services	-1.0	0.3	0.4	0.7	0.8	0.9	0.9	1.0	1.0
Exports of goods and services	35.9	38.5	38.3	38.4	38.4	38.4	38.5	38.5	38.1
Goods	24.6	26.7	26.5	26.6	26.6	26.6	26.6	26.6	26.4
Services	11.2	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.7
Imports of goods and services	36.9	38.2	37.9	37.8	37.6	37.5	37.5	37.5	37.2
Goods	24.5	25.9	25.7	25.7	25.6	25.5	25.5	25.5	25.3
Services	12.4	12.3	12.2	12.1	12.1	12.1	12.1	12.0	11.9
Income	0.3	-1.0	-0.9	-0.5	-0.3	-0.3	-0.1	0.0	0.0
o/w Investment income	0.3	-1.0	-0.9	-0.5	-0.3	-0.3	-0.1	0.0	0.0
Capital and financial account	-5.7	-2.0	-0.3	0.3	0.6	0.8	1.0	1.1	1.2
Capital account	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Financial account	-5.8	-2.1	-0.4	0.2	0.5	0.7	0.9	1.0	1.1
Direct investment[1]	5.7	-0.8	5.4	4.7	4.6	4.5	4.3	3.8	3.4
Portfolio investment	-0.4	2.1	-0.7	-0.2	0.1	-0.1	0.1	0.2	-0.1
Financial derivatives	-0.4	-3.6	-1.7	-0.8	-0.4	-0.2	-0.1	0.0	0.0
Other investment	-11.0	0.4	-3.3	-3.5	-3.7	-3.5	-3.4	-2.9	-2.2
Reserve assets	0.3	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net errors and omissions	-5.1	-1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GDP at current prices (bln euros)	216.1	223.9	233.0	241.4	250.1	258.2	266.4	275.2	284.3

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

[1] Large 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: International Investment Position, 2008–2017

(Percent of GDP)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Assets	235.1	275.9	326.5	371.8	363.5	319.1	347.2	338.5	327.4	278.1
Direct investment	62.4	68.0	75.1	68.1	72.8	67.0	61.8	63.5	68.0	68.4
Portfolio investment	67.6	97.5	114.8	106.9	120.1	123.8	139.0	146.1	148.1	142.5
Equity & investment fund shares	23.5	39.5	52.7	44.6	53.0	58.8	68.1	73.5	78.6	84.1
Debt securities	44.1	58.0	62.1	62.4	67.1	65.0	71.0	72.6	69.5	58.4
Fin. deriv. (other than reserves)	48.1	44.8	57.9	93.7	67.9	41.9	60.8	46.2	41.4	9.2
Other investment	53.9	61.2	74.9	99.0	98.6	82.4	81.3	78.3	65.3	54.2
Reserve assets	3.1	4.4	3.8	4.1	4.2	4.0	4.3	4.4	4.6	3.9
Liabilities	239.7	272.7	310.0	356.7	351.8	315.3	350.4	337.1	318.8	275.8
Direct investment	50.9	50.7	54.7	50.6	52.0	46.8	52.4	57.8	54.1	55.0
Portfolio investment	85.7	106.8	110.9	103.2	120.7	129.8	142.0	148.5	141.7	137.4
Equity & investment fund shares	36.0	39.9	39.0	26.3	31.7	40.4	44.4	49.2	52.6	55.6
Debt securities	49.7	66.9	71.9	77.0	89.0	89.3	97.6	99.4	89.1	81.8
Fin. deriv. (other than reserves)	48.0	43.6	55.2	89.8	63.6	39.5	57.3	44.9	40.0	8.8
Other investment	55.1	71.6	89.2	113.1	115.5	99.2	98.6	85.9	83.0	74.6
Net International Investment Position	-4.6	3.2	16.5	15.1	11.7	3.9	-3.2	1.5	8.6	2.4
Direct Investment	11.5	17.3	20.4	17.4	20.8	20.2	9.4	5.7	13.8	13.4
Portfolio Investment	-18.1	-9.3	3.9	3.7	-0.6	-6.0	-3.0	-2.4	6.4	5.1
Fin. deriv. (other than reserves)	0.1	1.2	2.7	4.0	4.2	2.5	3.4	1.3	1.4	0.4
Other Investment	-1.2	-10.5	-14.2	-14.1	-16.9	-16.8	-17.3	-7.5	-17.7	-20.4

Sources: Statistics Finland and Fund staff calculations.

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

Table 4. Finland: General Government Statement of Operations, 2015–2024

(Percent of GDP, unless otherwise indicated)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
						Proj.				
Revenue	54.4	54.2	53.3	51.9	51.8	51.6	51.7	51.7	51.7	51.7
Tax revenues	31.1	31.1	31.1	30.2	30.4	30.1	30.0	30.0	30.0	30.0
Taxes on production and imports	14.2	14.4	14.1	13.9	13.8	13.6	13.4	13.4	13.4	13.4
Current taxes on income, wealth, etc.	16.6	16.5	16.6	16.0	16.3	16.2	16.3	16.3	16.3	16.3
Capital taxes	0.3	0.2	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Social contributions	12.9	12.9	12.2	12.0	11.7	11.9	11.8	11.8	11.8	11.8
Grants	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Other revenue										
Expenditure	57.1	55.9	54.0	52.8	52.1	51.6	51.7	51.7	51.8	51.7
Expense	56.8	55.5	53.4	52.2	51.7	51.4	51.6	51.7	51.8	51.7
Compensation of employees	13.9	13.3	12.5	12.2	12.0	11.8	11.7	11.7	11.7	11.7
Use of goods and services	11.0	11.0	10.7	10.6	10.5	10.6	11.0	11.0	11.0	11.0
Consumption of fixed capital (CFC)	3.5	3.5	3.4	3.4	3.4	3.4	3.5	3.5	3.5	3.5
Interest	1.2	1.1	1.0	0.9	0.8	0.8	0.8	1.0	1.1	1.0
Subsidies	1.4	1.2	1.2	1.2	1.1	1.1	1.0	1.0	1.0	1.0
Grants	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.2
Social benefits	22.6	22.4	21.9	21.4	21.2	21.1	21.0	21.0	21.0	21.0
Other expense	2.0	1.8	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3
Net acquisition of nonfinancial assets	0.3	0.4	0.5	0.6	0.4	0.3	0.1	0.0	0.0	0.0
Net operating balance	-2.4	-1.3	-0.1	-0.4	0.0	0.2	0.1	0.0	0.0	0.0
Net lending/borrowing	-2.8	-1.7	-0.7	-1.0	-0.3	0.0	0.1	0.0	-0.1	0.0
Net acquisition of financial assets	0.8	-0.5	4.1							
Currency and deposits	2.6	-0.6	1.3							
Securities other than shares	-0.5	-1.4	-0.4							
Loans	-0.2	-0.6	-1.1							
Shares and other equity	-1.2	2.4	2.3							
Financial derivatives	0.0	0.0	0.0							
Other accounts receivable	0.1	-0.3	2.0							
Net incurrence of liabilities	3.6	1.2	4.9							
Special Drawing Rights (SDRs)	0.0	0.0	0.0							
Currency and deposits	0.0	0.0	0.0							
Securities other than shares	2.0	0.8	1.2							
Loans	1.4	0.1	-0.4							
Shares and other equity	0.0	0.0	0.0							
Financial derivatives	-0.4	-0.2	2.4							
Other accounts payable	0.6	0.6	1.7							
Memorandum items:										
Primary balance[1]	-1.6	-0.6	0.3	-0.1	0.5	0.8	0.9	1.0	1.0	1.0
Structural balance (in percent of potential GDP)	0.0	0.0	-0.1	-0.8	-0.5	-0.2	-0.1	-0.2	-0.2	0.0
Structural primary balance (in percent of potentia	1.1	1.1	0.8	0.0	0.4	0.6	0.7	0.8	0.9	1.0
Central government net lending/borrowing	-3.0	-2.7	-1.8	-1.8	-1.0	-0.9	-0.7	-0.8	-0.9	-0.8
General government gross debt	63.5	63.0	61.3	60.5	59.8	58.8	58.4	56.6	54.9	53.2
General government net debt[2]	-53.3	-53.3	-58.6	-55.3	-53.1	-51.2	-49.6	-48.1	-46.5	-45.0
Central government gross debt	54.1	53.6	52.3	51.7	51.0	50.2	50.0	48.3	46.8	45.4
Output gap (percent of potential GDP)	-4.3	-2.8	-1.5	-0.5	0.0	0.1	0.1	0.1	0.1	0.1
Nominal GDP (billions of euros)	209.6	216.1	223.9	233.0	241.3	250.0	258.0	266.3	275.1	283.7

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

[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, 2010–2017

(Percent of GDP)

	2010	2011	2012	2013	2014	2015	2016	2017
Assets	247.4	261.5	269.3	255.1	258.3	278.0	278.5	278.3
Nonfinancial	86.5	85.8	88.5	88.6	87.3	84.9	84.6	83.6
General Government	73.1	72.5	74.8	75.9	76.7	76.0	74.9	73.9
Public Corporations and Central Bank	13.5	13.3	13.7	12.7	10.5	9.0	9.7	9.7
Financial	160.9	175.8	180.9	166.4	171.0	193.0	193.9	194.7
General Government	117.7	105.9	113.3	117.5	125.3	128.0	128.5	129.6
Currency and Deposits	8.3	9.1	8.2	7.3	6.4	9.0	8.2	8.1
Debt Securities	21.0	20.8	21.1	20.9	21.2	21.1	19.6	18.3
Loans	14.7	13.4	15.2	15.4	15.3	14.7	13.8	12.8
Equity and investment fund shares	67.8	56.9	63.0	69.6	76.3	77.3	82.1	85.4
Insurance, pension and standardized guarantees	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1
Financial derivatives and stock options	1.2	0.9	1.2	1.1	1.1	1.0	0.9	1.0
Other accounts receivable	4.7	4.6	4.7	3.3	4.5	4.3	4.1	3.7
Public Corporations and Central Bank	43.2	69.9	67.6	48.9	45.8	65.1	65.3	65.1
Liabilities	105.7	133.2	137.8	118.7	119.8	138.4	140.4	138.0
General Government	55.9	57.1	63.8	64.5	71.4	74.1	75.0	73.6
Currency and Deposits	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4
Debt Securities	41.3	42.5	46.3	46.2	52.5	54.0	54.2	51.5
Loans	7.8	9.3	12.1	12.6	13.4	14.5	14.2	13.3
Equity and investment fund shares	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
Insurance pension and standardized guarantee schemes	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Financial Derivatives	0.6	-0.7	-0.8	0.1	-0.5	-0.9	-0.3	0.3
Other accounts payable	5.6	5.3	5.6	5.6	5.4	6.2	6.7	8.2
Public Corporations and Central Bank	49.8	76.1	74.0	54.2	48.4	64.4	65.4	64.4
Existing pension liabilities 1/	274.9	274.8	283.1	288.5	304.6	303.2	301.1	298.9
To public sector employees	94.7	93.9	96.4	97.7	105.1	104.1	103.3	102.6
To private employees	180.2	180.9	186.7	190.8	199.5	199.1	197.8	196.3
Public Sector Net Financial Worth								
Excluding pension liabilities	55.2	42.6	43.0	47.7	51.2	54.6	53.4	56.7
Including existing pension liabilities to public employees	-39.6	-51.3	-53.3	-50.0	-53.9	-49.4	-49.9	-45.9
Including existing pension liabilities to all employees	-219.8	-232.2	-240.0	-240.7	-253.4	-248.5	-247.7	-242.2
Public Sector Net Worth								
Excluding pension liabilities	141.7	128.4	131.5	136.4	138.5	139.6	138.0	140.3
Including existing pension liabilities to public employees	47.0	34.4	35.1	38.7	33.4	35.5	34.7	37.7
Including existing pension liabilities to all employees	-133.2	-146.4	-151.6	-152.1	-166.1	-163.6	-163.1	-158.6

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, 2012–2018

	2012	2013	2014	2015	2016	2017	2018	Latest Obs.
Households								
Total household debt (in percent of GDP)	62.3	62.8	64.4	65.7	66.0	66.3	65.9	March 2018
Total household debt (in percent of disposable income)	118.1	117.8	121.5	124.2	126.2	128.4	127.2	March 2018
Household interest expenses (in percent of disposable income)	2.5	1.9	2.0	1.8	1.6	1.7	1.7	March 2018
Financial assets/GDP	117.4	125.4	130.9	134.2	135.9	137.1	135.3	March 2018
Non-financial corporations								
Gross debt (in percent of GDP)[1]	77.7	76.5	77.2	81.1	76.6	71.6	72.3	March 2018
Government								
General government debt (EMU definition, in percent of GDP)	53.9	57.5	61.9	66.6	68.1	68.7	67.6	March 2018
Central government debt (in percent of GDP)	48.1	49.8	52.3	54.1	53.6	52.3	51.0	March 2018
Banking sector								
Total assets (in billions of euro)	496.2	455.3	508.6	475.8	419.0	185.1	162.8	June 2018
in percent of GDP	248.3	223.9	247.5	227.0	193.9	82.7	72.1	June 2018
Total deposits (in billions of euro)	135.7	139.4	135.4	141.7	140.2	98.1	84.4	June 2018
in percent of GDP	67.9	68.6	65.9	67.6	64.9	43.8	37.4	June 2018
Credit to nonfinancial and housing corporations (annual percent change, e.o.p.)	4.8	6.1	5.1	5.2	4.7	4.6	4.6	July 2018
Credit to nonfinancial corporations (annual percent change, e.o.p.)	2.5	3.9	2.0	3.2	2.0	1.3	3.9	July 2018
Credit to households (percent change, e.o.p.)	4.9	2.2	1.9	2.6	2.4	2.7	1.2	July 2018
Housing loans in percent of total lending	38.5	36.3	35.2	36.5	38.4	42.1	41.5	July 2018
Asset quality[2]								
Non-performing loans (in billions of euro)	1.3	1.4	4.0	4.1	4.0	2.5	1.9	July 2018
Non-performing loans/total loans (in percent)	0.5	0.6	1.3	1.3	1.5	1.7	1.5	June 2018
Provisions to non-performing loans (in percent)	N.A.	N.A.	37.8	35.3	35.9	31.7	33.8	June 2018
Household non-performing loans/total household loans (in percent)	0.6	0.7	1.5	1.6	2.1	2.2	2.00	March 2018
Household non-performing loans/total non-performing loans (in percent)	51.9	54.5	41.3	43.3	48.8	53.9	49.1	March 2018
Capital adequacy								
Regulatory capital as percent of risk-weighted assets	17.0	16.0	17.3	22.9	23.3	21.4	21.0	June 2018
Regulatory tier 1 capital to risk-weighted assets	16.1	15.2	16.4	21.5	21.9	19.6	19.1	June 2018
Regulatory tier 1 capital to total assets	3.8	4.3	4.0	5.2	5.9	8.1	8.0	June 2018
Equity/total assets (in percent)	4.4	5.0	4.3	5.6	6.5	9.0	8.8	June 2018
Profitability						1.3		
Interest rate margin (percentage points, e.o.p.)[3]	1.4	1.5	1.5	1.4	1.4	1.4	1.4	August 2018
Net interest income (in percent of total income)	43.8	40.8	41.7	38.9	36.8	40.9	48.2	June 2018
Return on equity (in percent)	11.1	9.6	11.3	11.5	10.6	7.5	5.2	June 2018
Return on assets (in percent)	0.5	0.5	0.5	0.6	0.6	0.5	0.5	March 2018
Liquid assets/total assets (in percent)[4]	14.7	14.9	14.3	16.7	19.0	27.1	16	June 2018
Liquid assets/short-term liabilities	19.2	19.7	18.9	22.4	25.1	30.9	31	June 2018
Deposits as percent of assets	27.5	30.6	26.6	29.8	33.5	53	51.9	June 2018
Loan-to-deposit (LTD) Ratio	134.5	133.1	129.3	124.6	111.8	121.5	129.5	June 2018
Off-balance sheet liabilities/total assets (in percent)	11.1	11.6	12.9	13.1	18.9	20.4	-	June 2017
Use of ECB refinancing (billions of euro)[5]	3.7	2.5	0.7	0.7	6.7	10.1	8.6	July 2018
in percent of banks total assets	0.7	0.6	0.1	0.1	1.6	5.5	5.3	July 2018
in percent of total ECB refinancing operations	0.3	0.3	0.1	0.1	1.1	1.3	1.2	July 2018
Asset prices								
Change in stock market index (in percent, e.o.p.)	8.3	26.5	5.7	10.8	3.6	6.6	8.6	August 2018
Change in housing price index (in percent, year average)	1.7	1.6	-0.5	-0.8	0.5	1.4	0.8	June 2018
						-8.0		
Memorandum items:								
Credit-to-GDP gap	9.0	8.0	9.7	10.6	-7.4	-7.4		December 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

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

5 Sum of main and long-term refinancing operations and marginal facility.

	Finland	
Foreign asset and liability position and trajectory	**Background.** Finland's net international investment position (NIIP) was 2½ percent of GDP as of end-2017, after 8.6 percent in 2016. Gross assets and liabilities have both declined in recent years, and now stand at 278 and 276 percent of GDP in 2017, respectively. The financial sector accounts for just over half of both external assets and liabilities, while the remainder is largely held by nonfinancial corporations and government social security funds. **Assessment.** The NIIP is expected to remain positive over the medium term, consistent with improvement in current account balances. 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 2017 was assessed to be moderately weaker than medium-term fundamentals and desirable policies.* Unit labor costs have declined and market shares have increased, but the improvement in the trade balance has as yet been modest and offset by persistent negative net income balances. **Potential policy responses:** Wage restraint has resulted in some gains to competitiveness, but it will also be important to increase wage flexiblity at the 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.
Current account	**Background.** Finland's current account balance turned to deficit in 2011 amid the sharp export decline of the wood and paper and electronics industries (Nokia). The deficit has averaged around 1.2 percent of GDP during the past five years. Exports recovered strongly across different sectors in 2017 and into early 2018, reflecting brisk external growth and the recent moderation of unit labor costs, which underpinned Finnish competitiveness. The current account balance is expected to be negative in 2018 and improve thereafter to a small surplus over the medium term, reflecting improved market shares and still-supportive, even though moderating, external demand conditions. **Assessment.** The EBA current account model estimates a gap of -2.1 percent of GDP in 2017, resulting from a cyclically-adjusted current account balance of -1.3 percent of GDP and an EBA current account norm of 0.8 percent of GDP. Taking into account the normal uncertainties around the estimates, staff assess the CA gap to be between -1 and -3¼ percent.[1/] The same model estimates a largely unchanged norm for 2018; when applied to projected current account balances for 2018, the gap would be -1.3 percent of GDP. These estimates of current account gaps are consistent with real exchange rate overvaluation in the range of 5 to 10 percent.	
Real exchange rate	**Background.** After the depreciation in 2010–11, the CPI-based REER has been relatively stable for the last 6 years. It depreciated by about 0.4 percent in 2017 and by a further 0.4 percent the first half of 2018. 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 and a recovery in output: The ULC-based REER depreciated by some 6 percent in 2017 and a by a further one percentage point in the first half of 2018. **Assessment.** The EBA level and index REER models suggest that the REER was overvalued by 5 and 7 percent, respectively. The EBA external sustainability model suggests a REER undervaluation of 4 percent. Staff assess the REER to be between 5 and 10 percent above the level consistent with fundamentals, reflecting a small cost competitiveness gap, which is expected to be gradually closed going forward.	
Capital and financial accounts: flows and policy measures	**Background.** Net total financial inflows moderated to 2 percent of GDP in 2017, mostly reflecting developments in the Financial account. Portfolio flows into equities and fixed income instruments posted a small outflow of around 2 percent of GDP in 2017. This outflow was offset by an inflow into financial derivatives of about 3.6 percent of GDP. Finally, FDI outflows and other investment inflows were both of the order of ¼ percent of GDP, broadly offsetting each other. **Assessment.** Finland has a fully open capital account. It remains exposed to financial market risks against the background of interconnected regional financial markets.	
FX intervention and reserves level	**Background.** The euro has the status of global reserve currency. **Assessment.** Reserves held by Euro area countries are typically low relative to standard metrics. The currency is freely floating.	
Technical Background Notes	[1/] A standard deviation of 1.2 percent of GDP around the cyclically-adjusted current account norm is applied to obtain the current account gap range. Note that data for the trade and income balances and net international investment position in 2016 and 2017 were substantially revised in November 2018, indicating a 0.7 percent of GDP current account deficit in 2017 instead of a 0.7 percent surplus.	

Annex II. Debt Sustainability Analysis

With the recovery projected to continue, and given expected future fiscal consolidation, debt is projected to decline further. In the baseline scenario, debt would return to levels below 60 percent of GDP by 2019. 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 75 percent of GDP in 2020.

A. Baseline Scenario

1. Macroeconomic assumptions. With the economy strongly recovering, real GDP growth is expected to peak at 2.4 percent in 2018 and decelerate to 1.9 percent in 2019, gradually reverting to potential growth—estimated at 1¼ percent—over the medium term. GDP deflator inflation is expected to rise from 1.6 percent in 2018 to 1.8percent in 2019; thereafter it is expected to converge toward 2 percent. Interest rates are expected to remain subdued in the near term and increase gradually when monetary policy eventually begins to normalize.

2. Notwithstanding that debt is projected to continue to decline, this DSA uses the higher scrutiny framework, given that Finland's debt level remained just above 60 percent of GDP in 2017. Given the current 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 2019 and continue to decline thereafter. Given the relatively long average maturity of Finnish public debt (7 years), the gross financing needs remain below 13 percent of GDP every year in the baseline scenario. However, net financial worth is estimated to be negative when pension liabilities are taken into account (Finland: Staff Report for the 2017 Article IV Consultation). This highlights the need for closely monitoring long-term sustainability of the fiscal position.

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 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).

4. The forecast fiscal adjustment is not large in either absolute terms or in comparison to other countries' experiences. The maximum 3-year change in the cyclically-adjusted primary balance (CAPB) places Finland in the 45th percentile of the distribution of CAPB adjustments cross countries.

B. Stress Testing

5. Finland's debt ratio would remain under 75 percent of GDP even in the worst shock scenario examined. For the standard macro-fiscal stress scenarios, the debt ratio stays below 60 percent of GDP, except in the real GDP shock scenario, in which it would peak at almost

[1] The growth impact of fiscal measures is already incorporated in the baseline projections.

70 percent of GDP. The contingent liability shock scenario causes the largest debt ratio increase, to a peak of 75 percent of GDP in 2020.

6. The shock scenarios include:

- Real GDP growth shock: Under this scenario, growth is one standard deviation lower than the baseline in both 2019 and 2020 (i.e. 3.4 percentage points lower). This also causes inflation to be around 84 basis points lower in these years. In 2020, the debt ratio peaks at almost 70 percent of GDP and the gross financing need peaks at 19 percent of GDP.

- Primary balance shock: In this scenario, the primary balance is 1½ percentage points of GDP lower than in the baseline in both 2019 and 2020. This causes the debt path to slightly increase in those years, but the debt ratio remains below 60 percent of GDP throughout the forecast horizon (ending up at 53 percent in 2023). Gross financing needs increase by about 3 percentage points of GDP during the years of the shock and remain above the baseline thereafter.

- Real interest rate and real exchange rate shocks: Under the real interest rate shock scenario, the effective interest rate gradually rises from 2020 to exceed the baseline by 1¼ percentage points by 2022. Debt will remain on a declining path, albeit at a slightly slower pace than in the baseline.[2] 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 exchange rate depreciates, and interest rates rise relative to the baseline. The debt ratio peaks at 69 percent of GDP in 2020, while the gross financing need rises to 19 percent of GDP in 2020.

- Contingent liability shock: This scenario 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 13 percent of GDP. Additionally, growth falls as in the real GDP shock scenario and the effective interest rate rises by 0.1 percentage point by 2019. As a result, the debt ratio increases by 15 percent points of GDP above the baseline and gross financing needs peak at 23 percent of GDP in 2019. The debt ratio peaks at 75 percent of GDP in 2020.[3]

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

[3] The scenario assumes a one-time increase in non-interest expenditures equivalent to 10 percent 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/]

	Actual			Projections					
	2007-2015 [2/]	2016	2017	2018	2019	2020	2021	2022	2023
Nominal gross public debt	48.7	63.0	61.3	60.6	59.0	57.3	55.6	54.0	52.1
Public gross financing needs	9.3	8.5	8.3	8.1	10.1	12.6	9.0	11.1	11.3
Real GDP growth (in percent)	0.1	2.5	2.8	2.4	1.9	1.7	1.4	1.3	1.3
Inflation (GDP deflator, in percent)	2.2	0.6	0.8	1.6	1.6	1.8	1.8	1.9	2.0
Nominal GDP growth (in percent)	2.3	3.1	3.6	4.1	3.6	3.6	3.2	3.2	3.3
Effective interest rate (in percent) [4/]	3.1	1.8	1.6	1.5	1.4	1.4	1.5	1.5	1.6

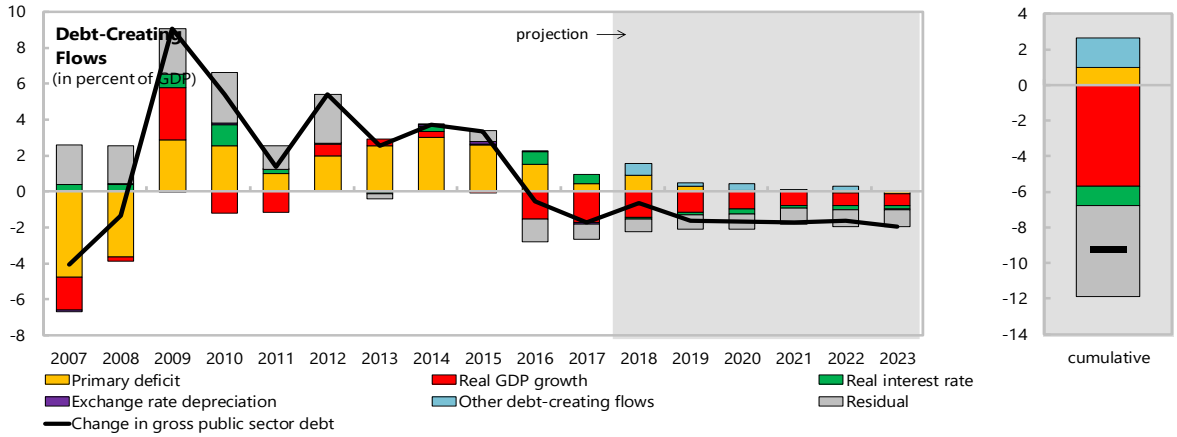
As of August 29, 2018

Sovereign Spreads	
EMBIG (bp) 3/	12
5Y CDS (bp)	18

Ratings	Foreign	Local
Moody's	Aa1	Aa1
S&Ps	AA+	AA+
Fitch	AA+	AA+

Contribution to Changes in Public Debt

	Actual			Projections							
	2007-2015	2016	2017	2018	2019	2020	2021	2022	2023	cumulative	debt-stabilizing primary balance [9/]
Change in gross public sector debt	2.8	-0.5	-1.7	-0.7	-1.6	-1.7	-1.7	-1.6	-1.9	-9.2	
Identified debt-creating flows	1.3	0.7	-0.9	0.0	-0.8	-0.8	-0.8	-0.7	-1.0	-4.1	
Primary deficit	0.9	1.5	0.4	0.9	0.3	0.1	0.0	-0.1	-0.1	1.0	-0.9
Primary (noninterest) revenue and grants	52.0	53.3	52.5	51.1	51.0	50.8	50.8	50.8	50.8	305.3	
Primary (noninterest) expenditure	52.9	54.8	53.0	52.0	51.2	50.8	50.8	50.7	50.7	306.3	
Automatic debt dynamics [5/]	0.4	-0.8	-1.3	-1.5	-1.3	-1.2	-0.9	-0.9	-0.9	-6.8	
Interest rate/growth differential [6/]	0.3	-0.8	-1.2	-1.5	-1.3	-1.2	-0.9	-0.9	-0.9	-6.8	
Of which: real interest rate	0.4	0.7	0.5	-0.1	-0.1	-0.3	-0.2	-0.2	-0.2	-1.1	
Of which: real GDP growth	0.0	-1.5	-1.7	-1.4	-1.1	-1.0	-0.8	-0.7	-0.7	-5.7	
Exchange rate depreciation [7/]	0.0	0.0	-0.1	...	...	...	...	...	...	...	
Other identified debt-creating flows	0.0	0.0	0.0	0.7	0.2	0.4	0.1	0.3	0.0	1.6	
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 security funds	0.0	0.0	0.0	0.7	0.2	0.4	0.1	0.3	0.0	1.6	
Residual, including asset changes [8/]	1.6	-1.3	-0.8	-0.7	-0.8	-0.9	-0.9	-0.9	-0.9	-5.1	



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 - π(1+g) - g + ae(1+r))/(1+g+π+gπ)) times previous period debt ratio, with r = interest rate; π = 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 - π (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).

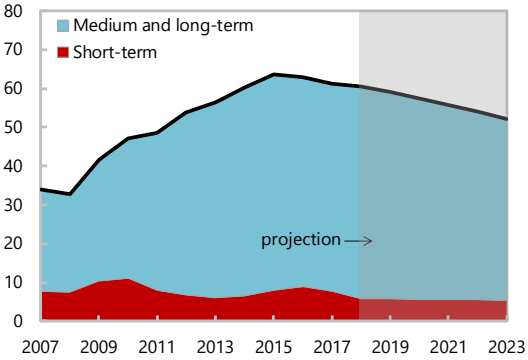
8/ Includes asset changes and interest revenues (if any). For projections, includes exchange rate changes during the projection period.

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.

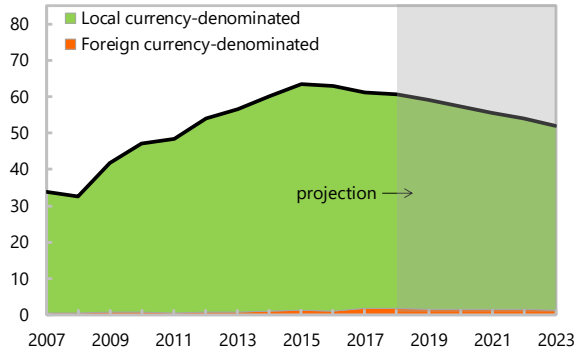
Finland Public DSA—Composition of Public Debt and Alternative Scenarios

Composition of Public Debt

By Maturity
(in percent of GDP)



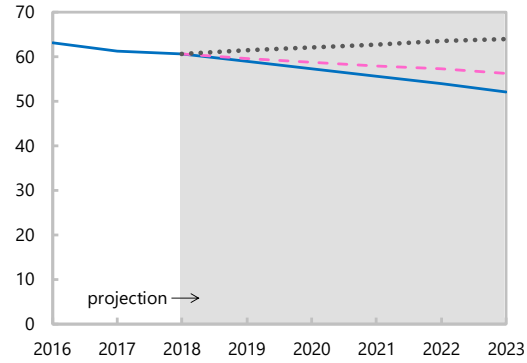
By Currency
(in percent of GDP)



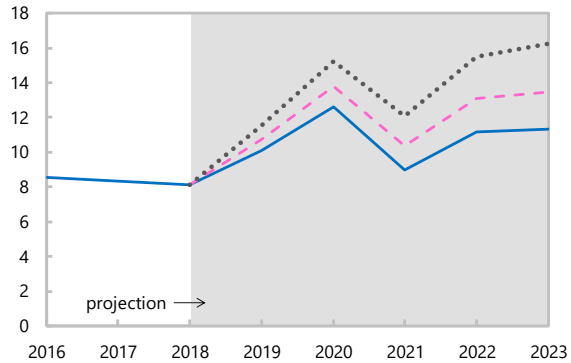
Alternative Scenarios

Baseline Historical Constant Primary Balance

Gross Nominal Public Debt
(in percent of GDP)



Public Gross Financing Needs
(in percent of GDP)



Underlying Assumptions

(in percent)

Baseline Scenario	2018	2019	2020	2021	2022	2023
Real GDP growth	2.4	1.9	1.7	1.4	1.3	1.3
Inflation	1.6	1.6	1.8	1.8	1.9	2.0
Primary Balance	-0.9	-0.3	-0.1	0.0	0.1	0.1
Effective interest rate	1.5	1.4	1.4	1.5	1.5	1.6
Constant Primary Balance Scenario						
Real GDP growth	2.4	1.9	1.7	1.4	1.3	1.3
Inflation	1.6	1.6	1.8	1.8	1.9	2.0
Primary Balance	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9
Effective interest rate	1.5	1.4	1.4	1.5	1.5	1.6

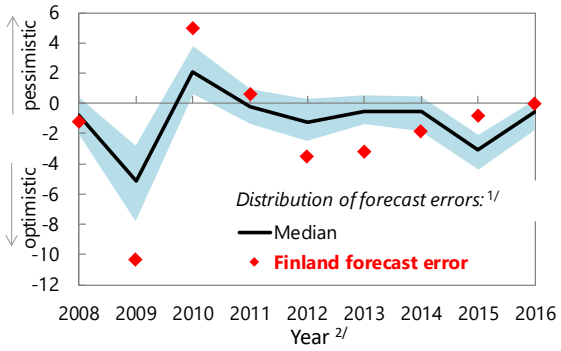
Historical Scenario	2018	2019	2020	2021	2022	2023
Real GDP growth	2.4	0.1	0.1	0.1	0.1	0.1
Inflation	1.6	1.6	1.8	1.8	1.9	2.0
Primary Balance	-0.9	-1.5	-1.5	-1.5	-1.5	-1.5
Effective interest rate	1.5	1.4	1.5	1.8	1.9	2.1

Source: IMF staff.

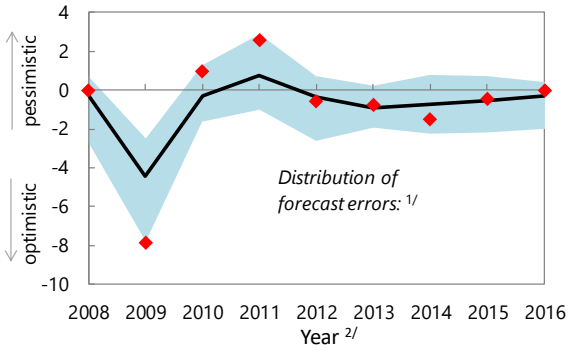
Finland Public DSA—Realism of Baseline Assumptions

Forecast Track Record, versus surveillance countries

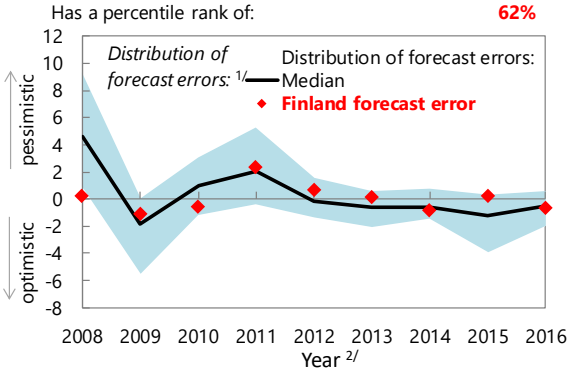
Real GDP Growth
(in percent, actual-projection)
Finland median forecast error, 2008-2016: **-1.22**
Has a percentile rank of: **25%**



Primary Balance
(in percent of GDP, actual-projection)
Finland median forecast error, 2008-2016: **-0.47**
Has a percentile rank of: **45%**



Inflation (Deflator)
(in percent, actual-projection)
Finland median forecast error, 2008-2016: **0.18**
Has a percentile rank of: **62%**



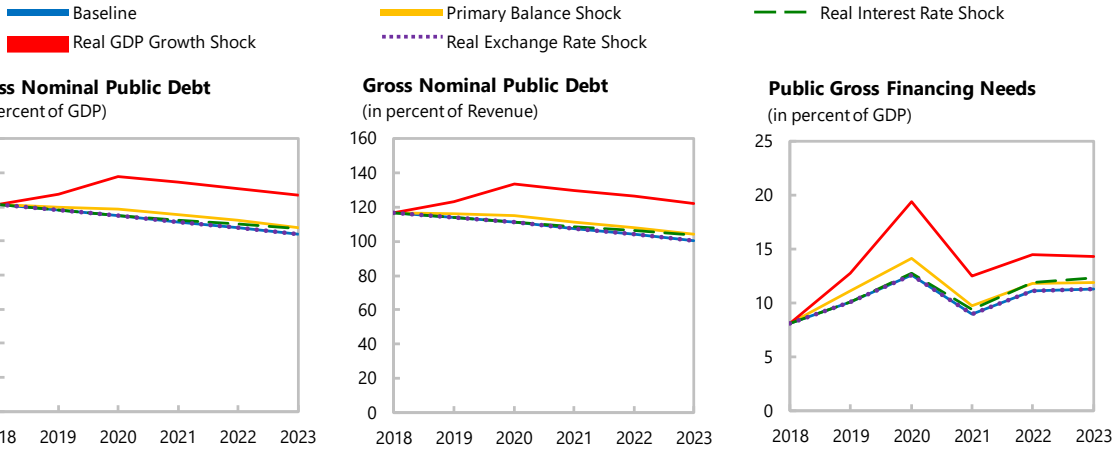
Boom-Bust Analysis 3/

Real GDP growth
(in percent)

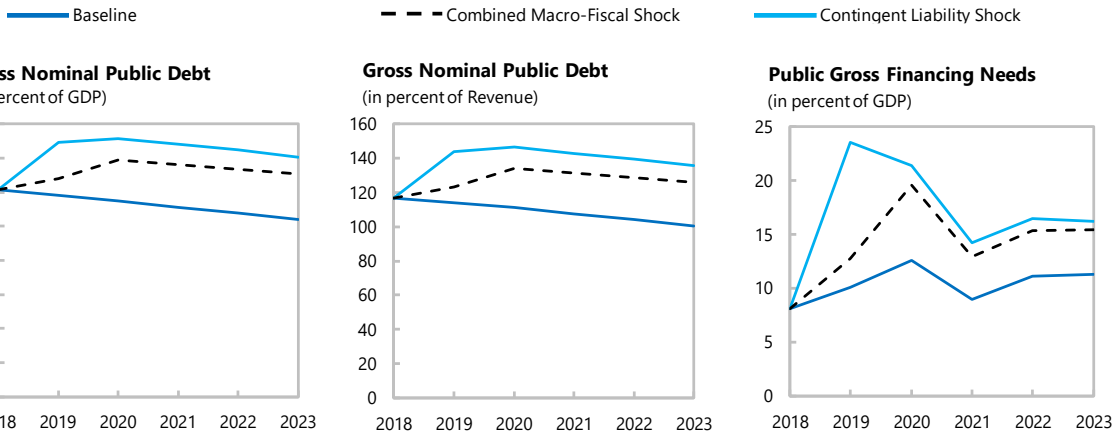
Source : IMF staff.
1/ Plotted distribution includes surveillance countries, percentile rank refers to all countries
2/ Projections made in the spring WEO vintage of the preceding year
3/ Not applicable for Finland, as it meets neither the positive output gap criterion nor the private credit growth criterion.

Finland Public DSA—Stress Tests

Macro-Fiscal Stress Tests



Additional Stress Tests



Underlying Assumptions

(in percent)

Primary Balance Shock	2018	2019	2020	2021	2022	2023
Real GDP growth	2.4	1.9	1.7	1.4	1.3	1.3
Inflation	1.6	1.6	1.8	1.8	1.9	2.0
Primary balance	-0.9	-1.3	-1.1	0.0	0.1	0.1
Effective interest rate	1.5	1.4	1.4	1.6	1.6	1.6
Real Interest Rate Shock						
Real GDP growth	2.4	1.9	1.7	1.4	1.3	1.3
Inflation	1.6	1.6	1.8	1.8	1.9	2.0
Primary balance	-0.9	-0.3	-0.1	0.0	0.1	0.1
Effective interest rate	1.5	1.4	1.7	2.2	2.4	2.8
Combined Shock						
Real GDP growth	2.4	-1.4	-1.6	1.4	1.3	1.3
Inflation	1.6	0.8	1.0	1.8	1.9	2.0
Primary balance	-0.9	-2.5	-4.5	0.0	0.1	0.1
Effective interest rate	1.5	1.4	1.7	2.3	2.5	2.9

Real GDP Growth Shock	2018	2019	2020	2021	2022	2023
Real GDP growth	2.4	-1.4	-1.6	1.4	1.3	1.3
Inflation	1.6	0.8	1.0	1.8	1.9	2.0
Primary balance	-0.9	-2.5	-4.5	0.0	0.1	0.1
Effective interest rate	1.5	1.4	1.4	1.7	1.7	1.8
Real Exchange Rate Shock						
Real GDP growth	2.4	1.9	1.7	1.4	1.3	1.3
Inflation	1.6	2.0	1.8	1.8	1.9	2.0
Primary balance	-0.9	-0.3	-0.1	0.0	0.1	0.1
Effective interest rate	1.5	1.4	1.4	1.5	1.5	1.6
Contingent Liability Shock						
Real GDP growth	2.4	-1.4	-1.6	1.4	1.3	1.3
Inflation	1.6	0.8	1.0	1.8	1.9	2.0
Primary balance	-0.9	-13.2	-0.1	0.0	0.1	0.1
Effective interest rate	1.5	1.5	1.8	1.9	1.9	1.9

Source: IMF staff.

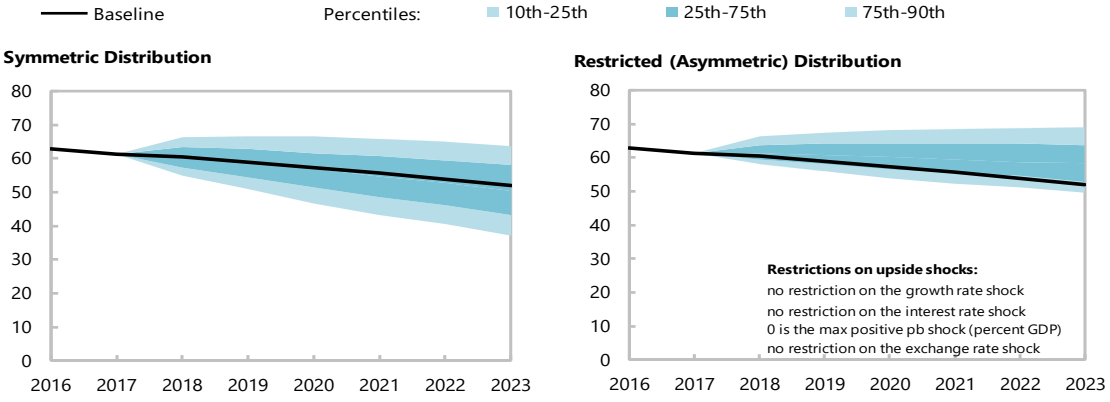
Finland Public DSA Risk Assessment

Heat Map

Debt level [1/]	Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability shock
Gross financing needs [2/]	Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability Shock
Debt profile [3/]	Market Perception	External Financing Requirements	Change in the Share of Short-Term Debt	Public Debt Held by Non-Residents	Foreign Currency Debt

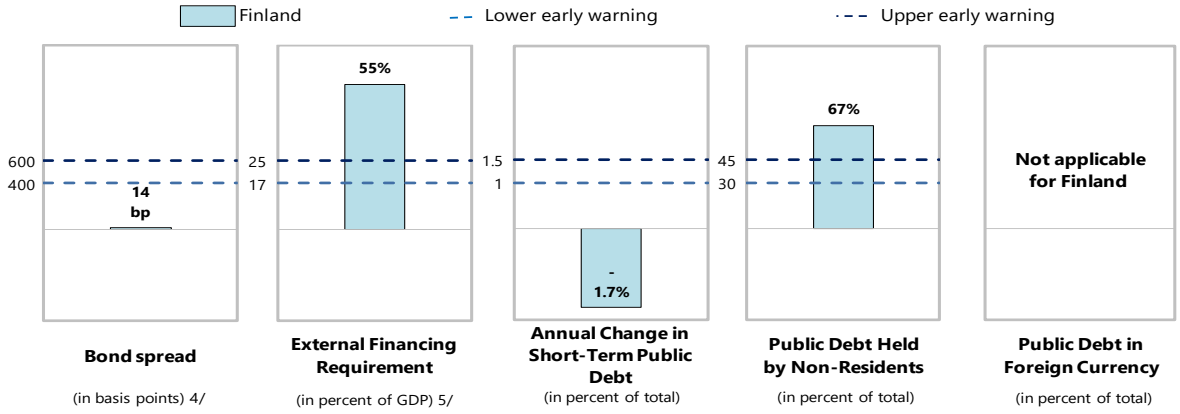
Evolution of Predictive Densities of Gross Nominal Public Debt

(in percent of GDP)



Debt Profile Vulnerabilities

(Indicators vis-à-vis risk assessment benchmarks, in 2017)



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, 29-May-18 through 29-Aug-18.

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.

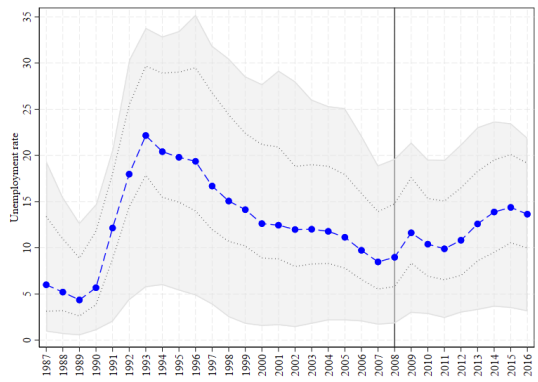
Annex III. Regional Labor Mobility in Finland[1]

1. Regional labor mobility is important to cushion regional shocks in Finland. Other shock absorption mechanisms, such as wage adjustments, have been constrained in Finland due to the centralized wage bargaining process prevailing until 2016. In the absence of labor mobility, labor shortages in some regions could coexist with persistently high unemployment in others. This could unduly inflate the national unemployment and lead to increased demands on fiscal redistribution from low-unemployment to high-unemployment regions.

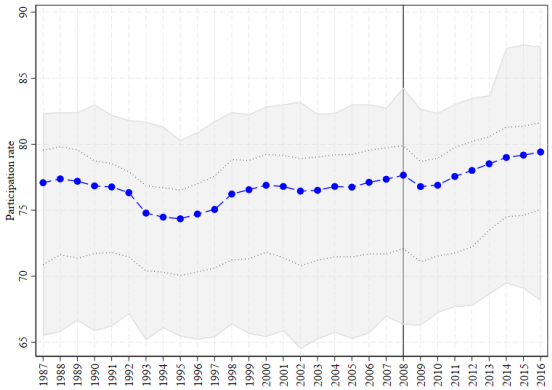
2. Unemployment and labor force participation rates are persistent and vary widely across Finnish regions. In low-unemployment regions, the unemployment rate fluctuated around from 1 to 6 percent during 1987–2016, while in high-unemployment regions it was consistently high, reaching 35 percent in 1996. Similarly, labor force participation rates ranged from around 65 to 82 percent before the crisis, with the range widening further in 2016. Moreover, there is high persistence over time: regions with high unemployment in 1987 tend to have high unemployment in 2016. The presence of large regional discrepancies in unemployment and labor force participation rates and their persistence are indirect signs of limited labor mobility.

Figure III.1. Unemployment and Labor Force Participation Rates: Variation Across Regions

Unemployment rate



Labor force participation rate



Source: Statistics Finland and IMF Staff calculations.

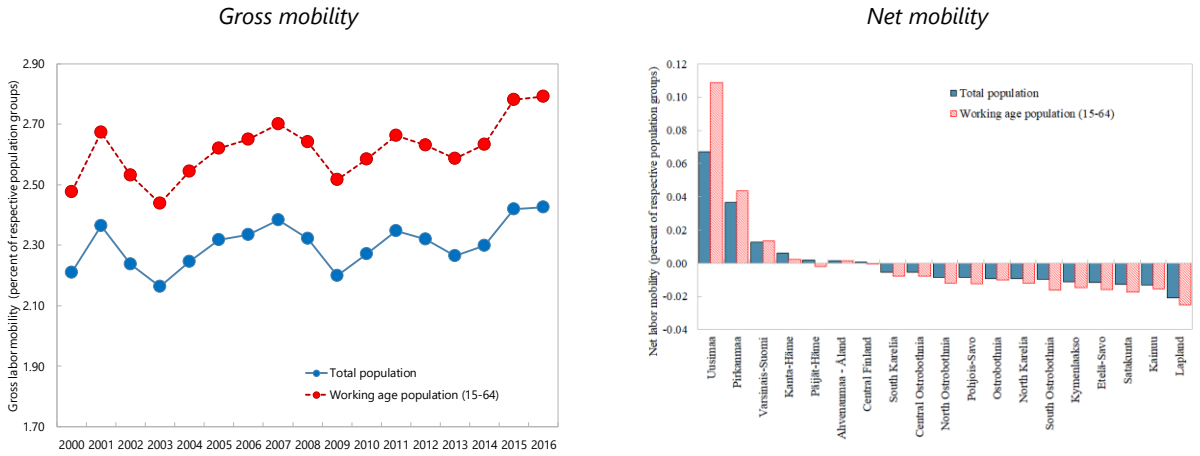
Note: The sample includes 70 NUTS 4 regions over the period 1987–2016. The blue line represents Finland as a whole. The shadow range represents minimum and maximum across regions. The dotted lines represent 10–90 percentile intervals. The unemployment rate is calculated using data on unemployed job seekers registered at the employment services (link).

3. Regional labor mobility is not high. On average, about 2.3 (2.6) percent of total (working age) population in Finland moves across regions every year. While comparison with other countries is difficult in the absence of standardized cross-country datasets, the mobility is low when comparing to the U.S., where about 9 percent of the population moved between states and 18.6

[1] The Annex draws on Tigran Poghosyan (2018), "Regional Labor Mobility in Finland," IMF Working Paper WP/18/252.

percent of population moved between counties in 2000s.[2] Gross mobility exhibits some cyclicality and has picked up following the global financial crisis. Net mobility (the difference between in- and out-migration) varies across regions. Some Southern regions, especially urban areas, serve as net recipients of labor flows, while some Northern regions, especially rural ones, serve as net donors.

Figure III.2. Gross and Net Labor Mobility



Source: Statistics Finland and IMF Staff calculations.

Note: The sample includes 19 NUTS 3 regions. In the right panel, reported is the average net labor mobility over 2000–16.

4. Comparison of Finland with the U.S. and EU peers shows relatively modest responses of regional labor mobility to shocks. Following the Blanchard and Katz (1992) methodology, we draw on an identity describing the evolution of regional labor markets following a shock to regional labor demand. In the short-run, a temporary adverse shock to labor demand can lead to an increase in unemployment rate, a reduction in the labor force participation rate, and/or a decrease in working age population due to out-migration (labor mobility). In the long-run, the impact of a temporary shock on the unemployment and labor participation rates is assumed to dissipate and hence the change in the level of employment is fully explained by labor mobility. Using NUTS 3 level regional data,[3] our analysis suggests that a 1 percent decrease in a regional labor demand is associated with a 0.35 percent increase in labor moves to other regions in Finland. This is a smaller response than estimated for the US (0.52 percent). Comparisons across European economies show close to 0 percent labor mobility in Finland, which is the second lowest among EU peers.[4]

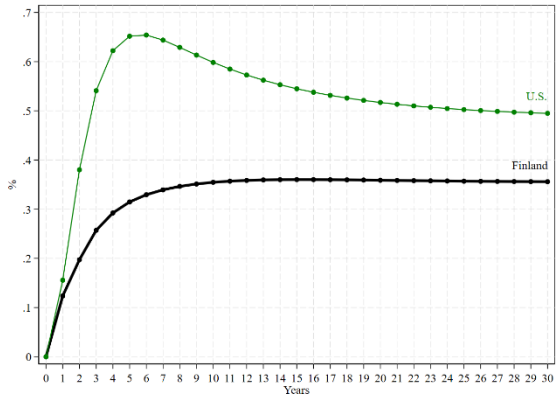
[2] See Molloy, R., C. Smith, and A. Wozniak (2011), "Internal Migration in the United States," *Journal of Economic Perspectives*, 3: pp. 173–96.

[3] NUTS refers to the Nomenclature of Territorial Units for Statistics.

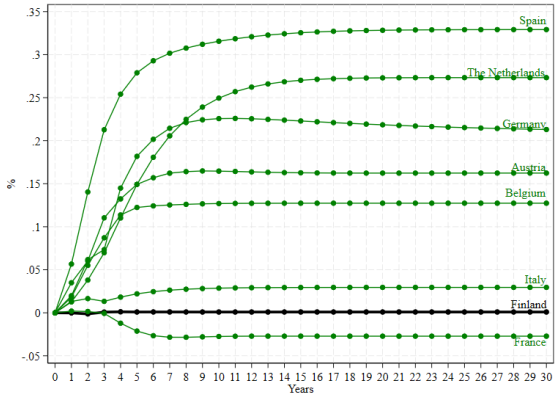
[4] To facilitate this comparison, the less granular NUTS 2 level regional data were used.

Figure III.3. Response of Labor Mobility to a Regional Labor Demand Shock

Finland vs the U.S. (NUTS 3 regions)



Finland vs EU peers (NUTS 2 regions)



Source: Eurostat, Greenaway-McGrevy and Hood (2016),[1] and IMF Staff calculations.

Note: *Left panel*. Estimations are performed using the Blanchard and Katz (1992)[2] VAR model with 2 lags. The sample includes 325 Metropolitan Statistical Areas (MSAs) in the U.S. for the period 1990–2012.
Right panel. Estimations are performed using the Blanchard and Katz (1992) VAR model with 2 lags. The sample includes NUTS 2 regions for the period 2000–16.

[1] Greenaway-McGrevy, R. and K. Hood, 2016, "Worker Migration or Job Creation? Persistent Shocks and Regional Recoveries," *Journal of Urban Economics*, 96: pp. 1–16.

[2] Blanchard, O., and L. Katz, 1992, "Regional Evolutions," *Brookings Papers of Economic Activity*, 23(1): pp. 1–76.

5. Several impediments appear to constrain regional labor mobility in Finland. Gravity analysis on a sample of regional labor flows across pairs of 19 NUTS 3 regions suggests that regional labor mobility is adversely affected by the geographical distance across regions, and positively affected by the size of the population in the origin and destination regions. Also, there is evidence that labor moves out from regions with relatively low GDP per capita, high unemployment and house prices toward regions with relatively high GDP per capita, low unemployment, and low house prices. By contrast, real wages in the origin and destination regions do not have a significant impact on regional labor mobility. This could be because relatively low variation of wages across regions due to centralized wage bargaining does not provide sufficient incentives for mobility.

6. Targeted policies could help incentivize more regional labor mobility to contribute to the efficiency of job matching and reduce the fiscal redistribution burden. Some of the impediments to labor mobility are exogenous and are driven by relatively large geographical distances across regions, as well as relatively sparse population density. Other impediments can be influenced by policies. For instance, more regional wage flexibility could provide further incentives for regional labor mobility. The decentralization effort as part of the Competitiveness Pact in 2016 is a step in the right direction, but there is scope for enhancing decentralization further at the local and firm level. In addition, the generosity of the unemployment insurance system and social benefits could be revisited further, which in combination with strengthening of active labor market policies would encourage job search and reduce unemployment differentials across regions. Finally, improving infrastructure and transportation, especially around vibrant urban areas, could encourage commuting and reduce pressures on urban housing demand. Reduction of the mortgage interest deductibility could reduce the home ownership bias and make rental market more vibrant.

Annex IV. Risk Assessment Matrix [1]

(Potential Deviations from Baseline)

Source of Risks and Relative Likelihood	Expected Impact if Risk is Realized
Downside Risks	
High Rising protectionism and retreat from multilateralism. Global imbalances and fraying consensus about the benefit of globalization lead to escalating and sustained trade actions and spreading isolationism.	**Medium/High** Escalating trade tensions would not only undermine Finnish exports, but could stall the current upswing via lower investment, employment and thereby overall output growth. Disruptions to global value chains could disrupt the production and supply of goods and harm productivity. Policy response: Allow automatic stabilizers to operate.
Medium Weaker-than-expected global growth: Weak growth in key advanced economies including Euro area and US Medium Significant China slowdown Low/Medium	**Medium/High** Weaker growth globally or in Europe would undermine Finnish exports, stall the ongoing expansion in equipment investment and lead to lower output and employment growth. Policy response: Allow automatic stabilizers to operate.
High Sharp tightening of global financial conditions. Tighter financial conditions could be triggered by sharper-than expected increases in US interest rates prompted by higher-than-expected inflation or the materialization of other risks	**Low/Medium** Adjustments to tighter financial conditions could prove disruptive, leading to higher uncertainty, reduced availability of credit and higher financing costs for households and firms. High corporate savings and Finland's high sovereign credit rating may help to buffer the impact on the broader economy. However, despite Finnish banks' strong capital buffers, if the shock were large and protracted, it could potentially disrupt their operations, given the reliance on wholesale funding. Policy response: Take preemptive prudential measures to reduce financial sector vulnerabilities, monitor risks at individual institutions. If market stresses materialize, the central bank should supply liquidity promptly.
Medium Adverse shock in a neighboring Nordic country, leading to a correction in the housing market, and distress in the financial sector.	**Medium** Lower demand of key trading partners would reduce domestic output and employment. Finnish financial sector would see declining asset quality and funding difficulties. Policy response: Full implementation of macroprudential policy tools, including liquidity measures. Allow automatic stabilizers to operate.
Low Postponement or abandonment of planned reforms, including the health and social services reform; and labor market reforms	**Medium** Abandoning health and social services reforms would impair full restoration of fiscal buffers. Failure to increase labor market flexibility would constrain potential growth. Policy response: Seek support for the reform agenda using the window of opportunity afforded by the economic recovery.
Upside Risks	
Medium Stronger than expected private domestic demand.	**Medium** High household and corporate confidence and still-accommodative financial conditions could support greater momentum in domestic demand into 2019, especially through a continuation of the investment cycle. Policy Response: Push forward with productivity-enhancing structural reforms and consider fiscal measures to accelerate rebuilding of buffers.

[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.

Annex V. Past Fund Staff Recommendations and Implementation

Past Staff Recommendations	Implementation
Fiscal Policy	
The fiscal adjustment should remain focused on restoring long-term fiscal sustainability while minimizing negative short-term effects on output.	The 2019 Budget implies a moderate tightening of fiscal policy in 2019, partly reflecting measures carried over from previous budgets, including expenditure savings measures from the government's consolidation plan.
Resources not destined to deficit reduction should be reallocated toward productive public spending, while reducing poorly-targeted transfers and tax expenditures.	Recent structural reforms encompassed both growth-enhancing and revenue-control measures, including the reductions in the duration of unemployment benefits, R&D and education spending. The authorities continue to implement their medium-term consolidation programs to ensure fiscal sustainability. A report on the basic income experiment (UBI) is set to expire at the end of 2018 and a report from the authorities is expected by December 2018.
Ensure that health and social services reforms (SOTE) moves forward and generates the ambitious targeted revenue savings and productivity gains. Clear and timely communication about the key elements of the new system and potential implementation hurdles should be maintained with stakeholders.	The SOTE proposal is currently under consideration by Parliament, with voting expected before the end of 2018. The transition to the new health and social reforms regime has been postponed by one year to January 2021.
Labor Market Policy	
The Competitiveness Pact and other targeted measures, including provisions to improve incentives to re-enter the labor market and increasing the flexibility of firm-level wage bargaining, should be implemented in full.	The Competitiveness Pact has been fully implemented, and the wage freeze in 2017, resulted in a material decline in ULCs and a notable improvement in Finland's cost-competitiveness.
Strengthen ALMPs further to facilitate labor mobility, as job-to-job transition remains comparatively modest.	Funding for active labor market policies was augmented to the increase the frequency of interviews with unemployment insurance recipients and step-up job-matching efforts. Measures were implemented to address the inactivity trap: childcare fees were reduced for low- and middle-income families, vocational educational programs were broadened with a focus on life-long learning, duration of unemployment benefits was shortened, conditions for granting unemployment benefits were tightened, a tapering scheme for unemployment benefits was introduced to incentivize job search efforts.

Past Staff Recommendations	Implementation
Product Market Policy	
Reforms to the retail and state-dominated sectors, such as rail and postal services, should be furthered to increase competition and yield productivity gains.	The Postal Act and Decree was amended in 2017 to diminish regulatory obstacles and boost job creation. The Land Use and Building Act and building regulations have been modernized in May 2017, relaxing size restrictions for large stores and allowing stores to develop their concepts more freely without limitations on their location. The revised provisions of the Alcohol Act entered into force from 2018, modernizing the rules and reforming the outdated, cumbersome and unnecessary regulation. In August 2018, the authorities announced that railways will also be liberalized, and work is starting to this effect. Finally, the authorities are considering to further privatize other public corporations.
Financial Sector Policy	
The relocation of Nordea to Finland implies a significant increase of the scale and depth of FIN-FSA supervision and cross-border coordination; despite the good progress so far, additional resources may be needed for this task.	Nordea is now supervised by the Single Supervisory Mechanism (SSM) in collaboration with Finnish authorities. FIN-FSA's staffing increases to oversee Nordea's relocation to Finland have been accomplished successfully.
Bank supervision should be strengthened further by ensuring effective monitoring of banks' internal risk models and intensifying oversight of their liquidity positions.	Targeted review of internal models (TRIM) was conducted in coordination with the SSM to harmonize practices and ensure compliance with regulatory requirements. A 15 percent minimum risk weight on residential mortgage loans was introduced.
Macroprudential tools should be enhanced, including through introduction of instruments based on borrower and loan characteristics.	Legislation for a Systemic Risk Buffer has been approved by parliament and is now effective. The authorities are exploring options to expand the macroprudential toolkit to include more instruments based on borrower and loan characteristics. There is a continued effort to introduce a comprehensive positive credit register and more comprehensive data collection among non-bank providers of credit.
AML issues require continued effort to improve effectiveness, including by making sure that appropriate resources are devoted.	The AML Act was revised in 2017. Among the changes are increased written documentation of the risk assessments process.
Strengthen regional supervisory cooperation, including through data sharing, supervisory cooperation provisions, conduct of joint stress tests to capture regional linkages between banks, and enhancing joint crisis planning.	To this effect, an updated comprehensive MOU on cooperation on financial stability between Nordic and Baltic countries was signed in January 2018.

INTERNATIONAL MONETARY FUND

COMMUNICATIONS DEPARTMENT

Appendix I. Draft Press Release

Press Release No. 19/XX
FOR IMMEDIATE RELEASE
January [XX], 2019

International Monetary Fund
Washington, D.C. 20431 USA

IMF Executive Board Concludes 2018 Article IV Consultation with Finland

On January 11, 2019, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with Finland.[1]

Finland is enjoying its third consecutive year of economic recovery. The employment rate has picked up sharply and the unemployment rate has declined to its lowest level since 2011. Wages have started to recover, but inflation remains low. Export market shares have improved slightly leading to a pickup in exports, while stronger tax revenues and lower spending, including on unemployment benefits, have improved fiscal balances. Growth in 2018 is expected to be 2.4 percent, then 1.9 percent in 2019 as global demand slows and financial conditions tighten. There are downside risks to this outlook, particularly from the global environment: an increase in protectionism could weaken demand for Finnish exports and damage confidence, and higher bank funding costs could mean tighter credit.

Recent reforms have boosted trade and employment. The 2016 Competitiveness Pact helped make Finnish exports more cost competitive. Changes to social benefits enhanced incentives to look for jobs, and new rules for temporary hires have the potential to boost employment and labor flexibility. Nevertheless, problems remain with productivity and the labor market. Firms are facing difficulties matching workers to job opportunities. Unemployment rates remain persistently high in some regions despite ample vacancies in others. Job mobility is low and has not picked up. Meanwhile, productivity growth is still below pre-crisis rates, despite the strength of the recovery.

[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 focus of reforms should be on increasing labor market dynamism while maintaining a strong safety net. Enhancing the ability to differentiate wages at the firm level should help motivate job moves and better match workers to jobs in which their skills can be used more efficiently. Tapering benefits to gradually fall with their duration could increase job search soon after losing employment. Other policies may be needed to foster regional labor mobility, such as alleviating housing bottlenecks and improving transport infrastructure in and around fast-growing regions to facilitate commuting.

The 2019 budget implies a moderate tightening of fiscal policy. Continued steady deficit reduction is appropriate to boost fiscal buffers. In conjunction with policies to boost potential growth, more effort should now be directed toward raising the effectiveness of public spending. The planned health and social services reform targets substantial savings from efficiency gains which, if realized, would make a substantial contribution toward closing the fiscal sustainability gap and restoring fiscal buffers. That said, savings from the proposed reform are uncertain and will depend crucially on implementation.

The banking sector is sound but has distinctive features that pose challenges for supervision. Immediate financial stability risks appear limited, but the system is highly concentrated, interconnected with financial sectors of other Nordic countries, and reliant on wholesale funding. In addition, the size of the banking sector has increased substantially with the recent redomicile of Nordea to Finland. This has increased demands on supervision and heightens the importance of continued close regional cooperation and preparedness for crises.

Household financial vulnerabilities remain a concern. The growth in consumer credit raises the question of whether some borrowers are sufficiently informed about the conditions of their loans. Expanding the macroprudential toolkit to debt-based instruments would be useful to limit household leverage. To properly assess vulnerabilities and set these tools well, the authorities need more data, such as from a positive credit registry. The authorities should also consider extra consumer protection measures.

Executive Board Assessment[2]

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[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.

Table 1. Finland: Selected Economic Indicators, 2016–24

	2016	2017	2018	2019	2020	2021	2022	2023	2024
						Proj.			
				(Percentage change, unless otherwise indicated)					
Output and demand (volumes)									
GDP	2.5	2.8	2.4	1.9	1.7	1.4	1.3	1.3	1.3
Domestic demand	3.1	2.1	2.3	1.8	1.7	1.3	1.2	1.2	1.2
Private consumption	2.0	1.3	2.1	1.8	1.3	1.1	1.1	1.1	1.1
Public consumption	1.8	-0.5	1.5	1.0	1.8	1.0	0.7	0.7	0.7
Gross fixed capital formation	8.5	4.0	3.7	3.0	2.4	2.0	2.0	2.0	2.0
Change in stocks (contribution to growth in percent of GDP)	-0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exports of goods and services	3.9	7.5	3.2	3.3	3.1	3.1	3.0	3.0	3.0
Imports of goods and services	5.6	3.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Net exports (contribution to growth in percent of GDP)	-0.6	1.4	0.2	0.1	0.1	0.1	0.0	0.0	0.1
Prices, costs, and income									
Consumer price inflation (harmonized, average)	0.4	0.8	1.2	1.4	1.6	1.8	1.9	2.0	2.0
Consumer price inflation (harmonized, end-year)	1.1	0.5	1.5	1.5	1.6	1.8	1.9	2.0	2.0
GDP deflator	0.6	0.8	1.6	1.6	1.8	1.8	1.9	2.0	2.0
Unit labor cost, manufacturing	-2.7	-6.9	-0.8	0.0	0.4	0.4	0.5	0.6	0.6
Labor market									
Labor force	-0.2	0.8	0.3	0.6	0.5	0.3	0.1	0.1	0.1
Employment	0.5	1.0	1.4	0.9	0.6	0.4	0.2	0.1	0.1
Unemployment rate (in percent)	8.8	8.6	7.6	7.3	7.1	7.0	6.9	6.9	6.9
Potential output and NAIRU									
Output gap (in percent of potential output)[1]	-2.8	-1.5	-0.5	0.0	0.2	0.1	0.1	0.1	0.1
Growth in potential output	1.0	1.4	1.4	1.5	1.5	1.4	1.3	1.3	1.3
				(Percent of GDP)					
General government finances[2]									
Overall balance	-1.7	-0.7	-1.0	-0.3	0.0	0.1	0.0	-0.1	0.0
Primary balance[3]	-0.6	0.3	-0.1	0.5	0.8	0.9	1.0	1.0	1.0
Structural balance (in percent of potential GDP)	0.0	-0.1	-0.8	-0.5	-0.2	-0.1	-0.2	-0.2	0.0
Structural primary balance (in percent of potential GDP)[3]	1.1	0.8	0.0	0.4	0.6	0.7	0.8	0.9	1.0
Gross debt	63.0	61.3	60.5	59.8	58.8	58.4	56.6	54.9	53.2
Net debt[4]	-53.3	-58.6	-55.3	-53.1	-51.2	-49.6	-48.1	-46.5	-45.0
					(Percent)				
Money and interest rates									
M3 (Finnish contribution to euro area, growth rate, e.o.p.)	1.8	6.1	...	...	...	...	...	...	...
Finnish MFI euro area loans (growth rate, e.o.p.)	1.4	2.6	...	...	...	...	...	...	...
Domestic nonfinancial private sector credit growth (e.o.p.)	-2.6	2.4	4.8	4.6	4.6	4.5	4.3	4.0	3.9
3-month Euribor rate (percent)	-0.3	-0.3	...	...	...	...	...	...	...
10-year government bonds yield	0.4	0.5	...	...	...	...	...	...	...
					(Percent of GDP)				
National saving and investment									
Gross national saving	21.3	22.1	22.5	23.2	23.6	23.8	24.1	24.2	24.4
Gross domestic investment	22.0	22.8	23.0	23.1	23.1	23.2	23.2	23.3	23.5
Balance of payments									
Current account balance	-0.7	-0.7	-0.5	0.1	0.5	0.6	0.8	0.9	1.0
Goods and services balance	-1.0	0.3	0.4	0.7	0.8	0.9	0.9	1.0	1.0
Net international investment position	8.6	2.4	2.6	2.7	3.1	4.7	5.5	6.4	7.9
Gross external debt	195.0	182.2	185.6	188.9	191.9	194.9	198.0	200.4	202.0
Exchange rates (period average)									
Euro per US$	0.90	0.89	...	...	...	...	...	...	...
Nominal effective rate (appreciation in percent)	2.0	0.9	...	...	...	...	...	...	...
Real effective rate (appreciation in percent)[5]	1.2	-0.4	...	...	...	...	...	...	...
Memorandum items									
Nominal GDP (in Euro billions)	216.1	223.9	...	...	...	...	...	...	...
Nominal GDP (in U.S. dollar billions at market exch. rates)	239.2	252.8	...	...	...	...	...	...	...

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

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

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

[3] Adjusted for interest expenditure.

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

[5] CPI-based real effective exchange rate.