September 2010
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# Finland: 2010 Article IV Consultation—Staff Report; Staff Statement; Public Information Notice on the Executive Board Discussion; and Statement by the Executive Director for Finland

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2010 Article IV consultation with Finland, the following documents have been released and are included in this package:

- The staff report for the 2010 Article IV consultation, prepared by a staff team of the IMF, following discussions that ended on June 7, 2010, with the officials of Finland on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on July 29, 2010. The views expressed in the staff report are those of the staff team and do not necessarily reflect the views of the Executive Board of the IMF.
- A staff statement of August 25, 2010 updating information on recent developments.
- A Public Information Notice (PIN) summarizing the views of the Executive Board as expressed during its August 25, 2010 discussion of the staff report that concluded the Article IV consultation.
- A statement by the Executive Director for Finland.

The policy of publication of staff reports and other documents allows for the deletion of market-sensitive information.

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INTERNATIONAL MONETARY FUND

FINLAND

# Staff Report for the 2010 Article IV Consultation

Prepared by the Staff Representatives for the 2010 Consultation with Finland

Approved by Ajai Chopra and Jan Kees Martijn

July 29, 2010


## EXECUTIVE SUMMARY

**Despite strong fundamentals, Finland has been dealt a severe blow by the global crisis**. GDP fell almost 8 percent in 2009—the worst in the euro area—reflecting adverse trade and financial international spillovers. Generous pay raises have supported consumption, but also led to an erosion of external competitiveness, which however remains adequate. A subdued resumption of activity is projected for 2010–11, with growth remaining well below potential.

**There was agreement that the financial sector weathered well the global turmoil, but continued prudence and improvements to supervision are needed**. Stress tests of the banking system are benign, but do identify credit, liquidity, and concentration as the sources of risk. Banks should be cautious in engaging in higher risk activities—like unexpectedly strong mortgage lending amid recently surging home prices. Officials agreed that it is crucial to boost the effectiveness of supervision and crisis management for large cross-border institutions as well as mitigate too-big-to-fail risks. The authorities broadly endorsed EU and Basel initiatives to reform supervision and regulation, but are concerned about burden sharing arrangements and the impact on bank funding and credit.

**The consensus was that the fiscal position has weakened considerably and early credible adjustment is required**. The large increase of the budget deficit in 2009–10 reflects substantial discretionary stimulus as well as the cyclical downturn. Staff views the relaxation as appropriate, but the fiscal sustainability gap has risen substantially. The authorities contemplate ambitious fiscal tightening in 2011—1½ percent of GDP. With negative output gaps forecast through 2014, staff advised a more measured pace of consolidation unless clear evidence emerges of more robust growth. Beyond 2011, the authorities broadly supported staff's recommended aim to close the sustainability gap by 2020, with focus on expenditure containment and tax base broadening.

**Further structural reforms would alleviate the adverse impacts of the crisis and population aging on growth, and facilitate fiscal consolidation**. Nevertheless, no major actions are envisaged before the 2011 general election.

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## I. Economic Situation and Outlook

1. **Finland entered the crisis with robust fundamentals, a legacy of strong policies**. Growth was well above the euro area average and the external current account exhibited sizable surpluses. Banks were generally sound, with no major bubbles in financial or real estate markets, while the government consistently ran fiscal surpluses over the last decade and public debt was low (negative in net terms, given large pension funds assets).

2. **Nevertheless, Finland has been hit hard by the global crisis because of international spillovers and signs of recovery are still hazy**. Exports fell dramatically in 2009 owing to their concentration in telecommunications (TLC) and capital goods, both heavily hurt by the worldwide slump, as well as sharper-than-average output declines in major trading partners. Domestic demand contracted much less, as still substantial wage rises cushioned private consumption, although dropping capacity usage led to severe investment cutbacks and massive destocking. Thus, having expanded by 1¼ percent in 2008, GDP collapsed nearly 8 percent in 2009, the largest plunge in the euro area, turning the output gap from 4¼ percent above potential in 2008 to 4¼ percent below capacity last year (Figure 1). Though private consumption and exports rebounded in the second half of 2009, growth was mildly negative in both 2009Q4 and 2010Q1, technically putting Finland in a double dip recession.

GDP and Demand
(Percent change)

| | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| | | | | proj. | proj. |
| Real GDP | 4.9 | 1.2 | -7.8 | 1.2 | 2.0 |
| Consumption | 2.7 | 2.0 | -1.3 | 1.5 | 1.6 |
| Private | 3.4 | 1.7 | -2.1 | 1.6 | 2.0 |
| Gross fixed capital formation | 10.6 | -0.2 | -13.4 | -2.5 | 3.5 |
| Net exports 1/ | 1.2 | 0.3 | -1.8 | 1.1 | 0.2 |

Sources: Statistics Finland; and IMF staff projections.
1/ Contribution to growth.

3. **The impact on employment and inflation was dampened**. The unemployment rate rose notably from 6½ to 8¼ percent during 2008–09, but well below Okun's law predictions (Figure 2). Inflation turned down markedly in 2009 (Table 1). However, it has outpaced the EU average since late 2008, in part the result of generous multi-year collective wage agreements in 2007 that were generally in excess of productivity gains.

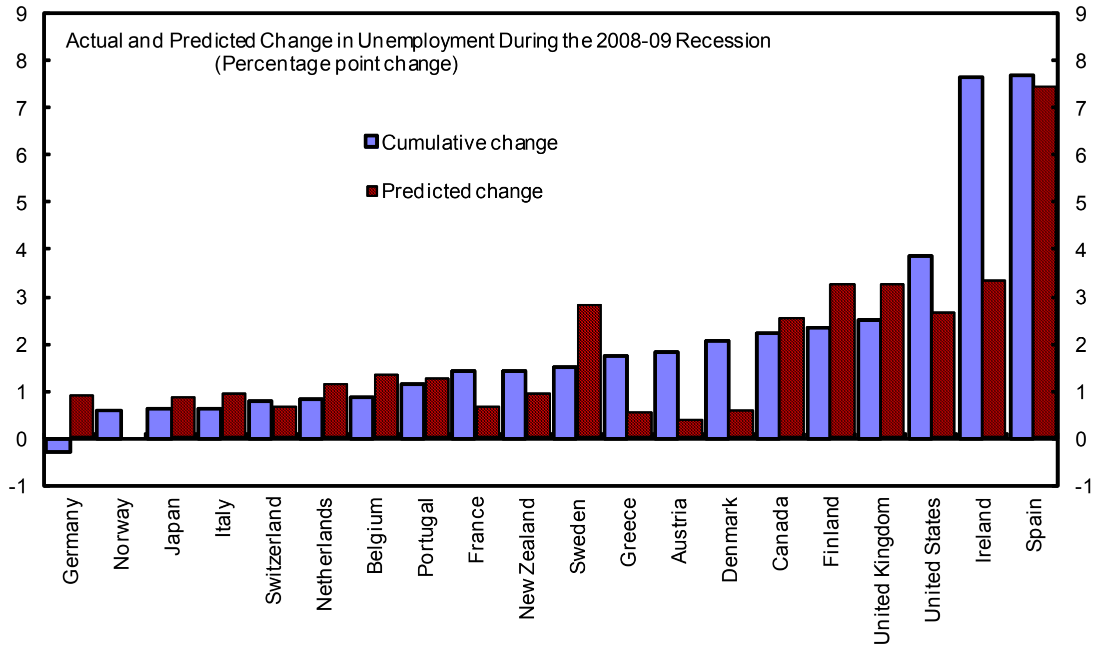
Inflation, Labor Market, and Output Gap Indicators
(Percent change)

| | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| | | proj. | proj. | proj. | proj. |
| Harmonized CPI | 1.6 | 3.9 | 1.6 | 1.4 | 1.8 |
| GDP deflator | 3.3 | 1.4 | 0.6 | 1.7 | 2.0 |
| Employment | 2.0 | 1.6 | -2.9 | -1.7 | 0.4 |
| Unemployment rate 1/ | 6.8 | 6.4 | 8.3 | 8.8 | 8.7 |
| Labor compensation 2/ | 4.7 | 5.2 | 2.4 | 2.7 | 2.8 |
| Unit labor costs 2/ | 1.0 | 5.4 | 6.8 | -0.3 | 1.2 |
| Output gap | 5.4 | 4.3 | -4.3 | -3.7 | -2.9 |

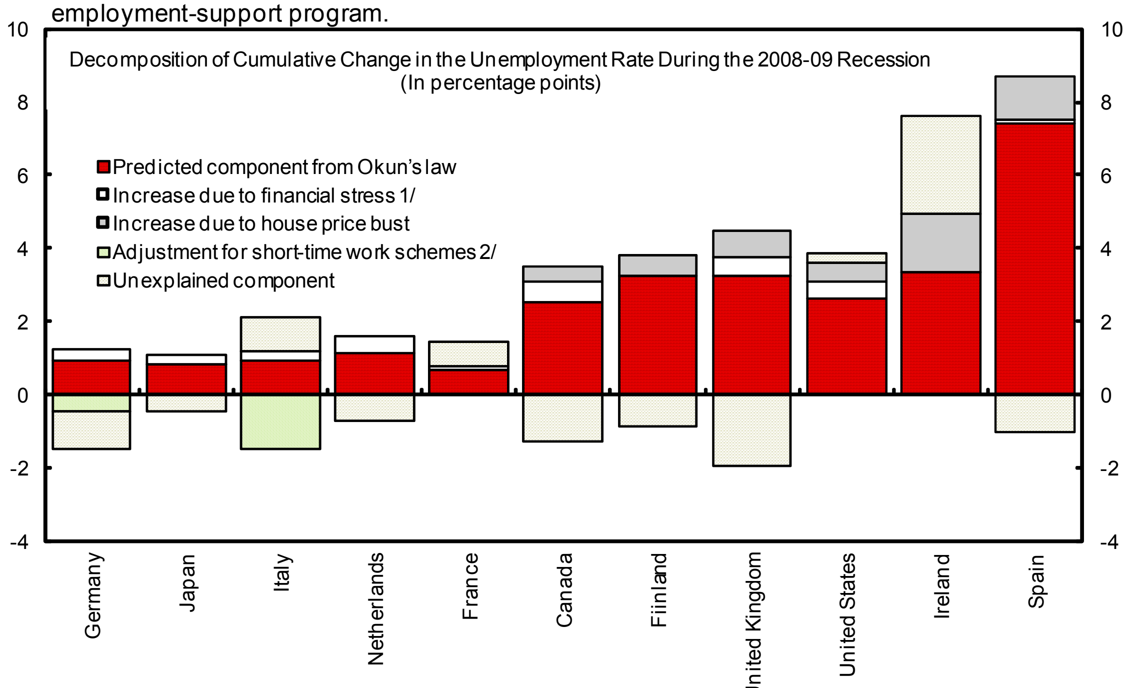
Sources: Statistics Finland and IMF staff projections.
1/ Percent of labor force.
2/ Economy-wide.

Finland: Unemployment Developments

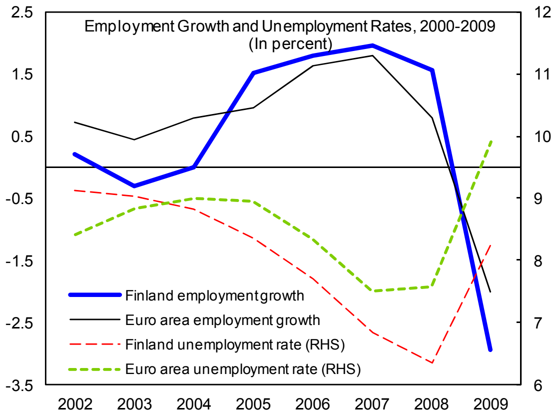
Finland's unemployment rate increased by less than predicted...



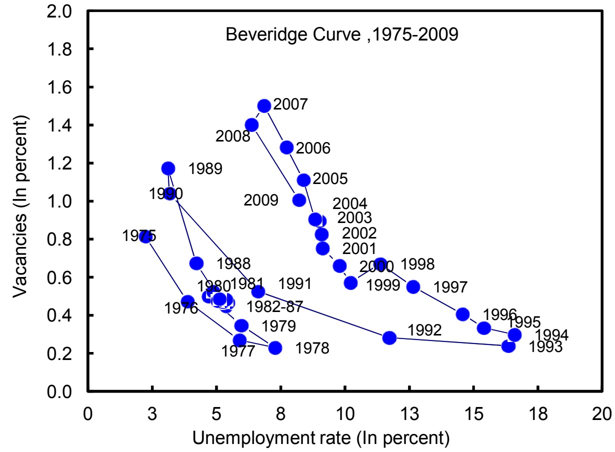

...reflecting the absence of domestic bubbles, voluntary job hoarding given expected future labor shortages owing to early population aging, and a government-susidized temporary employment-support program.




Source: IMF staff calculations.
1/ The financial stress index is not available for Ireland.
2/ Detailed data on short-time work schemes that allowed for the computation of full-time equivalent employees were only obtainable for Germany and Italy.



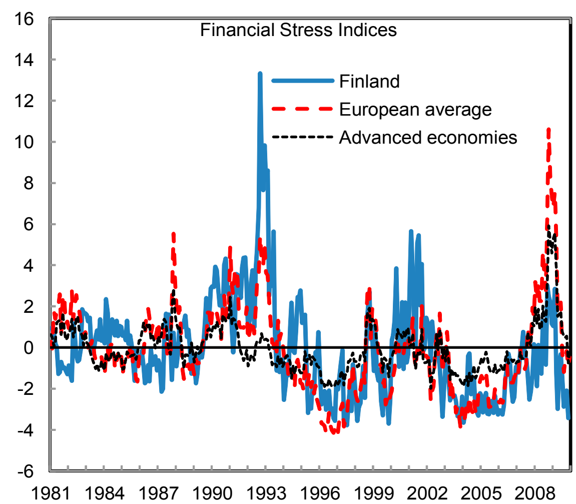

Source: WEO.




Source: Finnish authorities.

4. **The banking system has weathered the global turbulence well thanks to healthy capital buffers and prudent management**. Finnish banks, in majority foreign-owned and highly concentrated, follow a conservative business model and have limited exposure to opaque structured products or risky regions (exposure to vulnerable European countries in particular is minimal). Their capital ratios compare favorably with those of their peers (Table 2 and Figure 3). The country's stern regulatory and supervisory environment has helped shield the financial sector from the worst of the crisis. The turbulence was nevertheless felt in Finland too, mainly due to the real and financial international linkages of its economy (Boxes 1 and 2, Analytical Notes (AN) 1 and 2).

**The financial system has showed its resilience during the crisis and there is no evidence that it is currently suffering any distress**. An index measuring the stress in the system has decreased rapidly after the crisis, reflecting an important and accelerated improvement in financial conditions.

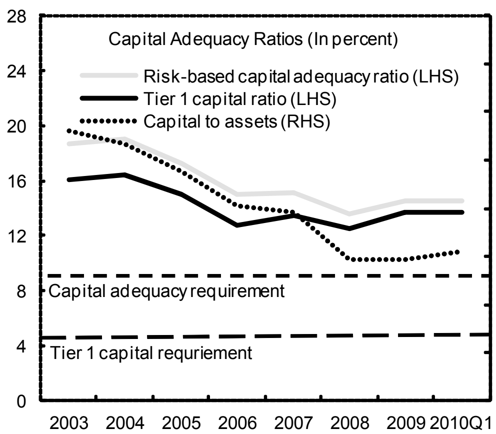



Sources: Bank of Finland ; and IMF staff calculations.

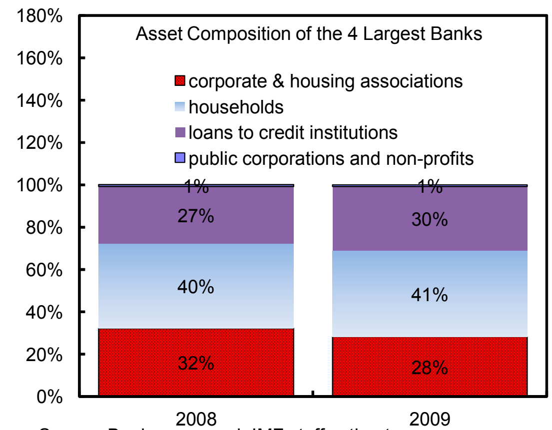
5. **Profitability and asset quality have deteriorated in the turmoil, while capital coverage has dropped but remained well above regulatory minima**.

- Bank profits, though remaining positive, plunged in 2008–09, reflecting mainly rising loan losses and declining net interest income, amid rapidly falling loan rates. The nonperforming loan rate increased in 2009 to 0.7 percent from a comparatively low 0.5 percent in 2008 (Figure 3).

- After declining slightly in 2008, the Tier 1 capital adequacy ratio (CAR) improved in 2009, thanks to a partial portfolio reallocation toward less risky assets and expiration of some transitional additional capital requirements, with equity and near-equity funds accounting for 92 percent of regulatory capital.



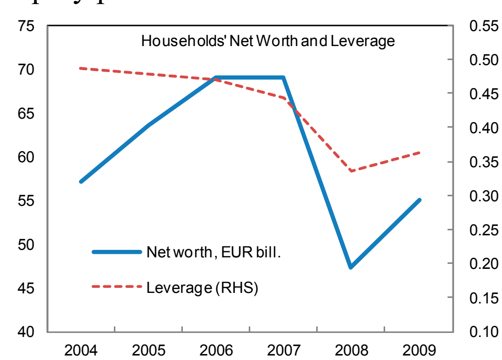

Source: Bank of Finland.




Source: Bankscope; and IMF staff estimates.

- Wholesale liquidity tightened somewhat, but interbank markets were not frozen at the crisis' peak, and banks benefited from a shift from mutual funds into bank deposits. Nonetheless, liquidity buffers[1] are relatively low.

6. **The financial condition of insurance companies and pension funds recovered in 2009 after sharply weakening in 2008**. Steep drops in equity prices and interest rates (together with a stark slowdown in new insurance origination) led to sharply lower solvency ratios in 2008 and early 2009 (Figure 4). Since then, ratios have improved considerably, because equity prices have recuperated and the slide in interest rates has halted, although recent renewed turbulence in financial markets is likely to have taken a toll. The authorities amended the solvency regulations for employee pension institutions, boosting their long-term investments until end-2010, thereby avoiding the forced sale of shareholdings. Under pre-existing rules, risky assets, such as equity, would have had to be sold when the equity market collapsed.

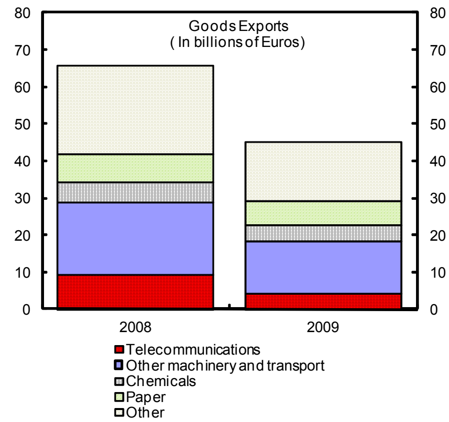



Source: Bank of Finland.

[1] Finland ranks fourth lowest out of 26 for the cash and trading assets ratio (EU Banking Stability report p. 52).

## Box 1. Finland: Cross-Border Spillovers[1]

**Extensive trade linkages have deepened the severity of the global crisis in Finland**. During 2009, Finnish merchandise trade decreased approximately by one third in relation to the previous year (Table 6). Direction and composition of exports have been sources of special vulnerability to the recession, with trade heavily concentrated in a few European partners. At least two-thirds of its exports are highly sensitive to the world investment collapse (like TLC and other machinery) or in trend decline (paper).




Source: National Board of Customs.

**International financial exposures are also important, but pose manageable risks for Finland**. The Finnish banking system has a relatively high share of foreign claims, especially in Western Europe, which makes it susceptible to deteriorating conditions abroad. However, considerable diversification diminishes risks stemming from a localized financial shock. Simulating the direct and indirect impact of a default in one (or more) of the partner countries and the associated domino effects suggests that gross losses for Finnish banks would be generally contained. A more pessimistic scenario of 10 percent default rate across Europe, US, or Japan could reduce credit availability by approximately one third and produce considerable losses for banks, up to 5 percent of GDP**.**

Finnish Banks' Foreign Claims
(September 2009)

| | USD Billion | Share (%) |
|---|---|---|
| Total foreign claims (Immediate Borrower Basis) | 216.8 | 100 |
| Total international claims | 100 | 46.1 |
| By maturity | | |
| Up to and including one year | 31.6 | 38.6 |
| Over one year up to two years | 7.3 | 8.9 |
| By sectors | | |
| Bank | 27.2 | 27.4 |
| Public sector | 22.8 | 23.0 |
| Non-bank private sector | 49.2 | 49.6 |
| Local currency positions of reporting banks' foreign offices with local residents | 116.8 | 53.9 |
| Net risk transfers | -0.5 | |
| Total foreign claims (Ultimate Risk Basis) | 216.3 | |

Note: International claims includes "cross border claims in all currencies and local claims in non-local currencies"

Source: BIS.

Finnish Banks' Claims Abroad
(June 2009)

| | USD Billion | Share (%) |
|---|---|---|
| All countries | 125.3 | 100 |
| Western Europe | 91.1 | 72.7 |
| Germany | 2.6 | 2.0 |
| France | 1.6 | 1.3 |
| Netherlands | 1.4 | 1.1 |
| Eastern Europe | 17.2 | 13.7 |
| Japan | 0.1 | 0.1 |

Source: BIS.

[1] See Analytical Note 2 (AN2)

## Box 1. Finland: Cross-Border Spillovers (concluded)

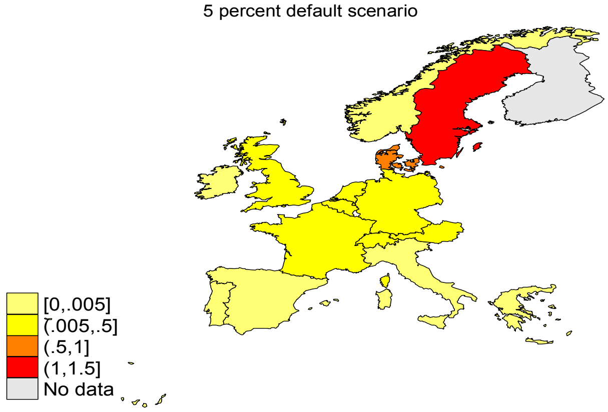
Spillovers to Finland from International Banking Exposures

| Shock Originating From | Magnitude 1/ | Deleveraging Need 2/ (%) | Finnish Lenders' Losses (% GDP) | Impact on Credit Availability (%) |
|---|---|---|---|---|
| Europe 3/ | 10 | 35.4 | 3.8 | -28.7 |
| Europe and US | 10 | 57.7 | 5.0 | -37.6 |
| Europe, US and Japan | 10 | 58.6 | 5.0 | -37.9 |
| | | | | |
| Germany | 10 | 0.0 | 0.1 | 0.0 |
| | 25 | 0.0 | 0.3 | -1.2 |
| France | 10 | 0.0 | 0.1 | 0.0 |
| | 25 | 0.0 | 0.3 | -0.7 |
| UK | 10 | 0.0 | 0.2 | -1.2 |
| | 25 | 0.0 | 1.1 | -7.4 |
| Netherlands | 10 | 0.0 | 0.1 | 0.0 |
| | 25 | 0.0 | 0.2 | -0.6 |
| US | 10 | 0.0 | 0.8 | -3.2 |
| | 25 | 35.0 | 3.8 | -20.4 |
| Japan | 10 | 0.0 | 0.0 | 0.0 |
| | 25 | 0.0 | 0.0 | 0.0 |

Source: Staff calculations based on BIS and IFS data.
1/ Magnitude denotes the percent of claims that default.
2/ Deleveraging need is the amount that needs to be raised through assets sales in response to the shock in order to meet the minimum capital requirement, expressed in percent of total assets.
3/ Europe includes Austria, Belgium, Denmark, France, Germany, Greece, Italy, Netherlands, Portugal, Spain, Sweden, Switzerland, Turkey, and United Kingdom.

**Foreign claims on Finnish banks are equally significant, but risks are more concentrated**. Foreign banks' share of the Finnish banking system accounts for about two-thirds of its assets and they originate in just a few European countries. To illustrate the intensity of the linkage, given a 5 percent default in Finnish private claims, Sweden suffers the worst (1 percent of GDP), followed by Denmark.

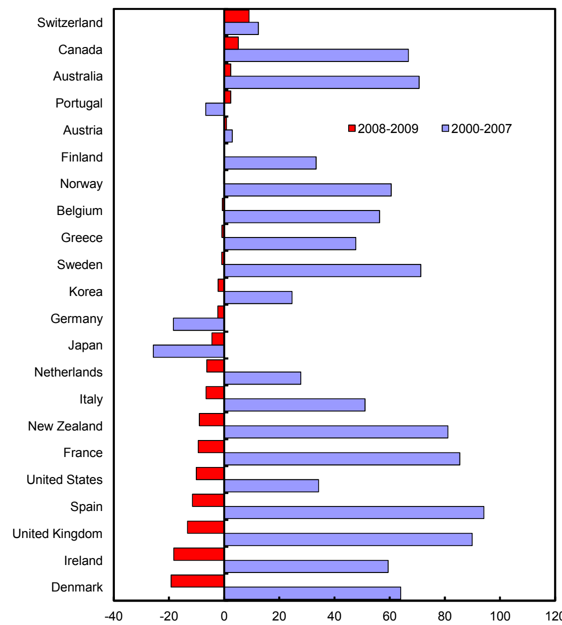
Lenders' Losses due to Finnish Default, in percent of GDP
5 percent default scenario




Spillover estimates include all indirect and multiple-round effects of the shock through the banking systems of "third-party" countries.

7. **Household balance sheets are rallying, but risks have increased, in particular related to the current low interest rate environment**. Financial assets of households have almost returned to pre-crisis level. However, debt, especially mortgages, has grown stimulated by low rates, the proportion of loans with floating interest rates is very high, and repricing maturities have shortened—all factors that have shifted significant interest rate risk from banks to households. Household loan servicing capacity has declined, leading to increasing problem loans.

Residential Real Estate Markets
(In real terms, percentage change)

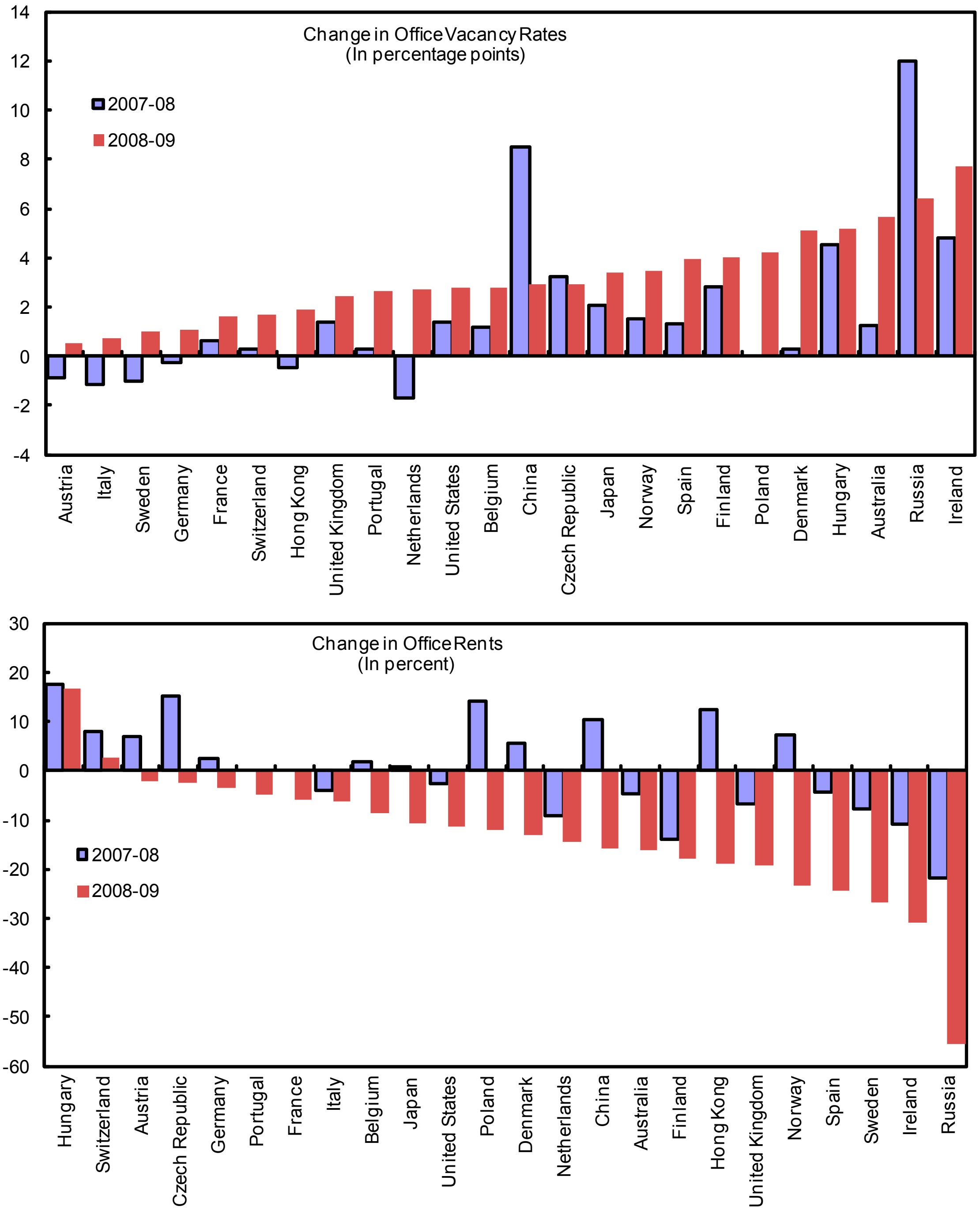



Sources: OECD, Global Property Guide, and national sources.

8. **The real estate market appears generally steady, albeit with some concerns**. Real home prices remained stagnant in 2008–09, having appreciated by over 30 percent in 2000–07, but started to ascend fast again at the end of last year. Analyses by staff and others show that they are broadly in line with fundamentals, but the sudden acceleration in the last six months points to increasing hazards if the trend were to continue. As for commercial real estate (CRE), with office rents falling by more than 10 percent in 2009, Finland's vulnerability is high compared to Nordic peers.

9. **Firms entered the crisis with solid balance sheets, but vulnerabilities have risen**. During the capital market turmoil of 2008, short-term loans to nonfinancial companies have increased significantly as firms turned to banks for funding. With improving global financial conditions in 2009, corporations were able to tap the international bond and syndicated loan markets, and the stock of bank loans slightly decreased (Figures 5 and 6). Medium and large firms, facing higher loan margins and shorter maturity terms, have stepped up borrowing from employee pension funds, at relatively high cost. Small enterprises suffered most from tighter collateral requirements, increasingly tapping public funding sources like Finnvera. The sharp activity slowdown resulted in a steep rise of payment defaults and bankruptcies. However, these are now decelerating and expected default frequency indicators have also been improving lately.

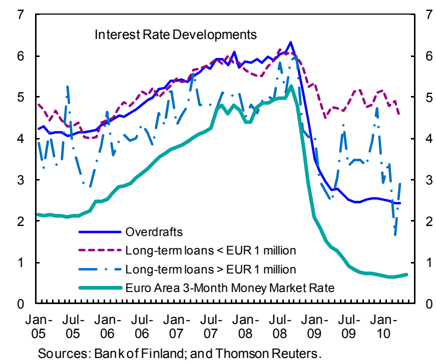
Commercial Real Estate Markets




Source: Knight Frank LLP.
Note: Data are available at a bi-annual basis with an average lag of four months.

## Box 2. Finland: Macro-Financial Linkages

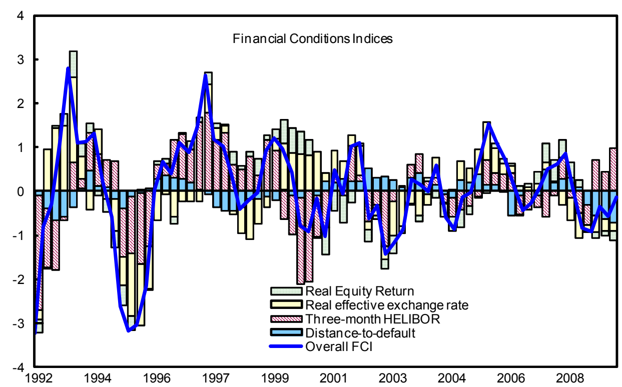
**Financial conditions have tightened substantially, reducing significantly economic growth**. Banks reported tougher lending standards for corporations, residential mortgages, and consumer lending in 2008–09. Using a Financial Conditions Index (FCI) approach, staff estimates the cumulative negative direct contribution to 2008–09 growth of prevailing financial conditions at 1½–2 percentage points (AN1).



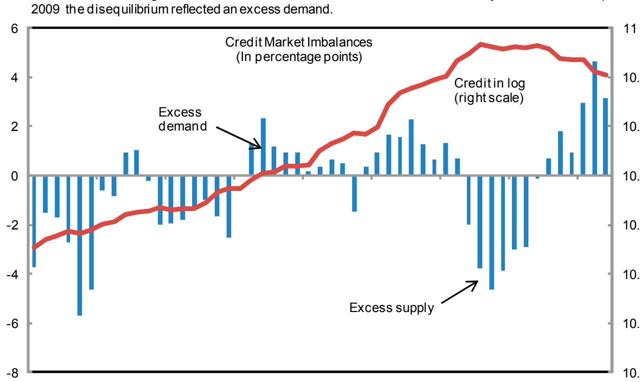

**However, lower interest rates are increasingly compensating for the adverse impact of other financial variables**. The substantial lowering of short-term interbank and corporate loan interest rates since late 2008, albeit with only small declines in longer-term rates, is gradually offsetting the negative contribution to growth of real exchange rate appreciation, slumping equity prices earlier in the crisis, and banking sector conditions (distance-to-default indicator—AN1). Notably**,** the influence of the latter, while relatively small, is approaching levels comparable to the crisis of the early 90's.

Finland: Financial Conditions Indices and Credit Market Imbalances

**The FCI index, which captures the interrelations between economic activity and financial variables, shows a noticeable recovery since the peak of the crisis.** During 2009, the main contribution to growth has come from the positive monetary policy impulse.

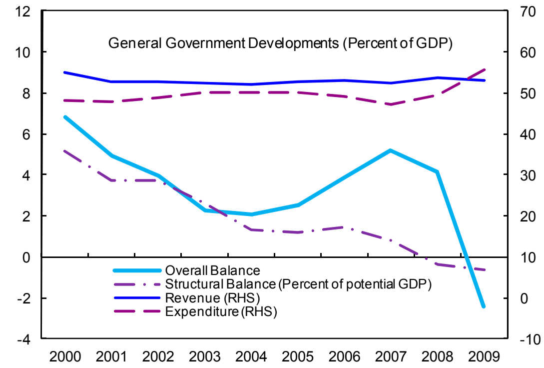



**The crisis had an important effect in the disequilibrium in the credit market.** After peaking in Q3 2008, the stock of credit began to decrease amidst a noticeable credit contraction. Finally, since the second part of 2009 the disequilibrium reflected an excess demand.



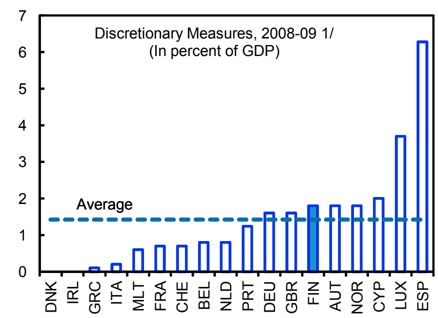

Sources: Bank of Finland; and IMF staff calculations.

10. **With fiscal policy turning to support growth, the budget position worsened sharply in 2009, reversing years of impressive performance (Table 3 and Figure 7)**. The general government (GG) headline balance went abruptly from a surplus of 4 percent of GDP in 2008 to a deficit of 2½ percent of GDP in 2009. The deterioration was due to substantial structural loosening as well as the free operation of automatic stabilizers. Spending surged as a share of GDP, mainly because the nominal expenditure ceilings were maintained despite the output collapse (¶2). Overall, the structural primary surplus declined by 1¾ percent, to 1½ percent of GDP in 2009. Population aging remains a millstone on long-term fiscal sustainability (¶31).



Sources: IMF, WEO and staff estimates.

11. **Discretionary stimulus extends beyond the impact on the fiscal balance**. The 2009 budget made available substantial funds (about ½ percent of GDP) to inject loans and capital into distressed nonfinancial companies, and these operations have been classified as below-the-line transactions, on the assumption that the disbursements will be recouped once the economy recovers.



Sources: IMF REO, 2009 ; and IMF staff estimates.
1/ Excluding one-off and temporary measures.

12. **Sustained current account (CA) surpluses and other indicators suggest adequate but reduced competitiveness (Box 3 and Figure 8)**. The surplus, having hovered around 4 percent of GDP during 2000–08, plunged to 1¼ percent of GDP last year amid collapsing exports. It is projected to recover to the 2 percent of GDP range during 2010–11, as accelerating exports more than offset recovering imports. In the medium term, the CA is expected to stabilize around this level, with old-age pre-funding boosting the savings rate and despite continuing terms-of-trade erosion.

## Macro Outlook

13. **Economic activity is projected to rebound in 2010, but growth is likely to be subdued, before consolidating in 2011**. The external sector is to provide a positive, yet restrained, contribution to growth in both years.

- In 2010, growth is expected to attain 1¼ percent. Domestic demand should expand moderately with private consumption and investment remaining frail in the near term, as households face rising unemployment and tight credit, while firms suffer large excess capacity, stern lending conditions, and a CRE overhang. Continuing fiscal stimulus measures and large automatic stabilizers will reduce the downside for consumption and investment. Inflation is likely to decline as a sizable output gap strengthens resistance to price and salary increases. The labor market is anticipated to lag the pick-up in activity, with unemployment hitting 8¾ percent.

- In 2011, amid improving global conditions, firming consumer and investor confidence, and deepening normalization of financial markets, growth is projected to speed up to 2 percent, despite sizable fiscal tightening. The authorities' projections are more optimistic with real GDP expanding by 2½ percent, implying a stronger growth momentum fueled by private demand.

14. **The supply potential of the economy has probably been severely curtailed by the crisis**. Potential growth may run considerably lower than before the downturn in the near to medium term, owing to the large contraction in investment, likely decline in the participation rate, and a deceleration in total factor productivity (if financing constraints and increased risk aversion curb research and development). Potential growth is expected to stay at around 1½ percent over the medium term, somewhat below its pre-crisis trend, leaving a permanent decline in the level of potential output—7 percent by 2015 (AN3), when the output gap is anticipated to close.

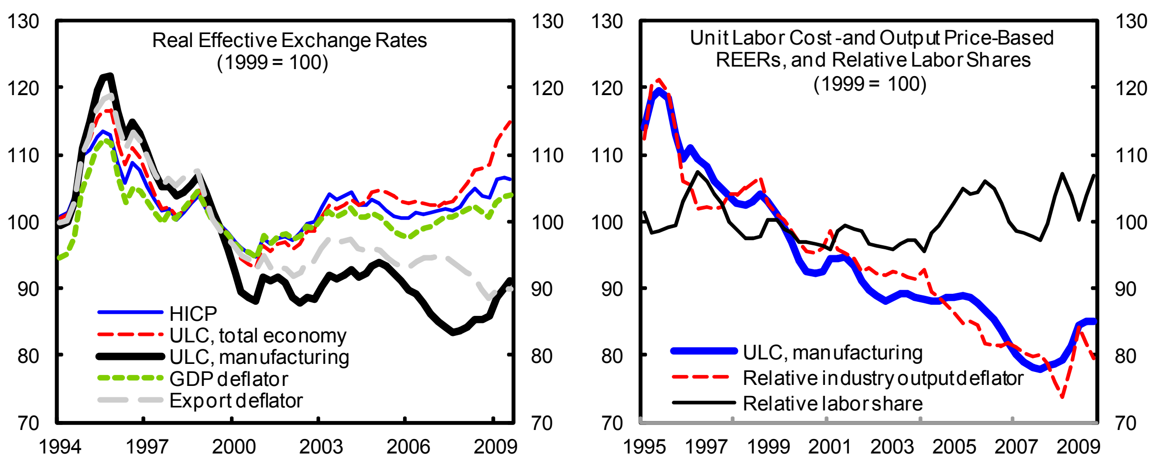
Medium-Term Macroeconomic Framework

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|---|
| Real GDP growth | -7.8 | 1.2 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 |
| Output gap (percent of potential GDP) | -4.3 | -3.7 | -2.9 | -2.2 | -1.4 | -0.7 | 0.0 |
| Consumer price inflation (annual average) | 1.6 | 1.4 | 1.8 | 1.7 | 1.7 | 1.7 | 1.7 |
| Employment growth | -2.9 | -1.7 | 0.4 | 0.4 | 0.4 | 0.2 | 0.1 |
| Unemployment rate | 8.3 | 8.8 | 8.7 | 8.4 | 8.1 | 7.9 | 7.8 |
| Current account balance (percent of GDP) | 1.3 | 1.8 | 1.8 | 1.7 | 1.7 | 1.8 | 1.8 |
| General government balance (percent of GDP) | -2.4 | -4.1 | -2.2 | -2.6 | -3.0 | -3.1 | -3.0 |
| Primary balance (percent of GDP) | -1.0 | -2.8 | -0.8 | -0.9 | -1.1 | -0.9 | -0.8 |
| General government debt (percent of GDP) | 44.0 | 49.9 | 52.0 | 55.5 | 59.1 | 62.5 | 65.8 |

Sources: Finnish authorities; and IMF staff estiimates.

## Box 3. Finland: External Competitiveness

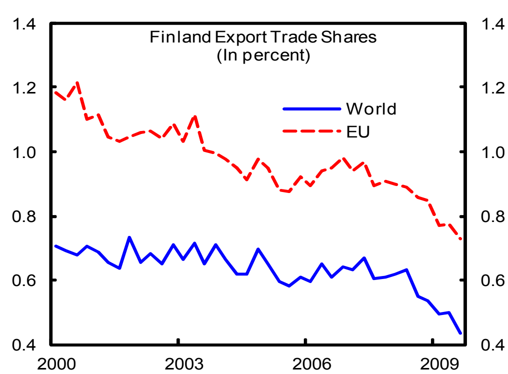
***Standard REER measures of external competitiveness—using different cost or price indices—are mixed, but generally point to some modest recent deterioration***. From the early 2000s, on average indicators have moved broadly sideways. Compared to 2007, though, when Finland had a large CA surplus, economy-wide REER indicators suggest some decline in competitiveness.




Source: Eurostat.

***Exporter profitability has also worsened***. The ratio of ULC-based to price-based-REERs estimates changes in labor shares compared to trading partners as a profitability proxy. Both economy-wide and tradable relative labor shares have increased over the last five years.

***Merchandise export market shares in both total world trade and in the EU have been trending downward over the last twenty years***. This reflects a secular decline in export prices, especially for communications equipment and forestry/paper products, as well as outsourcing of production.




Sources: IFS.

**Box 3. Finland: External Competitiveness** (concluded)

***The multilaterally-consistent CGER methodology[1] shows sizable and rising competitiveness margins, but specificities of the Finnish economy point to over-estimation***. The margin is estimated to lie in the range of 16 to 4 percent depending on the CGER method used. In particular, the CA norm based on the macroeconomic balance approach is estimated at -1 percent of GDP and is mainly influenced by the dependency ratios, relative incomes, and past values of the current account.

- However, the large real undervaluation implied by the equilibrium real exchange approach is mainly driven by a relative increase in Finland's government consumption/GDP ratio, itself largely determined by the massive nominal GDP decline in 2009. This factor causes the CGER equilibrium REER to appreciate markedly, while the measured REER only appreciates marginally as noted above, thereby boosting "artificially" the competitiveness margin.

Estimates of Competitiveness Margin Using CGER Methodologies 1/
(Level relative to equilibrium in percent; minus indicates undervalutation)

| Methodology | |
|---|---|
| Macroeconomic balance approach | -12.4 |
| External sustainability approach | -4.3 |
| Equilibrium real exchange rate approach | -15.8 |
| | |
| Memorandum items: | |
| Current account balance (percent of GDP) | |
| 2009 | 1.4 |
| 2015 | 1.9 |
| CA Norm 2/ | -1.0 |

Source: IMF staff estimates.
1/ CGER (Consultative Group on Exchange Rate Issues). Values between -10 and +10 mean the real exchange rate (RER) is close to balance. International Monetary Fund, 2008, "Exchange Rate Assessments: CGER Methodologies" (available at www.imf.org). CGER estimates based on data available in April 2010.
2/ Macroeconomic balance approach.

- Moreover, two adjustments which reflect specific features of the Finnish economy reduce the "real undervaluation" significantly. First, including the expected evolution of the Finnish population in the CGER panel data approach increases the CA norm to a positive ¼ percent of GDP, limiting the undervaluation to 7½ percent. Second, estimating the macroeconomic balance approach using only time series data for Finland increases further the CA norm to ½ percent of GDP and lowers the undervaluation even more, to about 6 percent.

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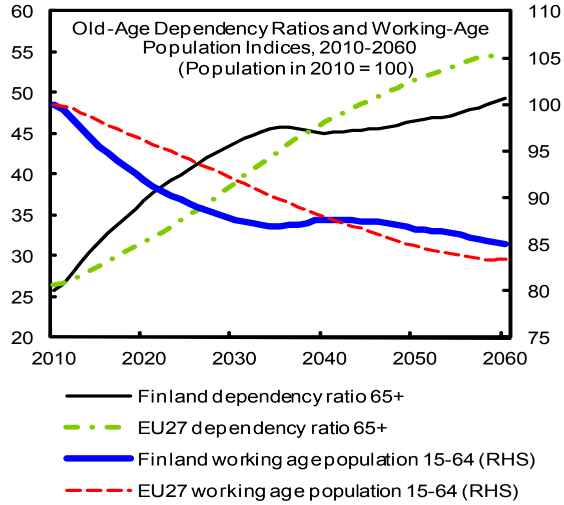
[1] See also AN4

15. **In the longer run, a rapidly aging population could lower potential growth further**. Imminent population aging will squeeze working-age cohorts, while slowing down trend productivity. Maintaining potential growth will therefore require boosting labor force participation and reforms to enhance productivity (¶35).



Source: Eurostat.

Long-Term Scenario

Prospects for labor force participation/employment and productivity growth imply a significant drop in per capita income growth.

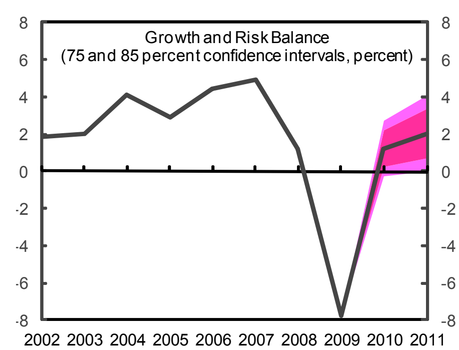
| | 1995-2000 | 2000-05 | 2005-10 | 2010-20 | 2020-30 | 2030-40 |
|---|---|---|---|---|---|---|
| | | | (In percent) | | | |
| Productivity growth 1/ | 2.6 | 2.1 | 0.8 | 2.1 | 1.8 | 1.6 |
| Demographic contribution 2/ | 0.0 | -0.1 | -0.1 | -0.8 | -0.5 | 0.0 |
| Employment rate contribution 3/ | 1.8 | 0.4 | -0.4 | 0.4 | 0.0 | 0.0 |
| GDP per capita growth | 4.5 | 2.4 | 0.3 | 1.7 | 1.4 | 1.6 |

Sources: ECFIN: The 2009 Ageing Report; ECFIN: Sustainability Report 2009; and Staff calculations.
1/ GDP per employed.
2/ Change in the share of population 15-64 years.
3/ Employed as a share of population 15-64 years.

## Risks

16. **In light of the magnitude of the downturn the outlook is unusually uncertain, but the risks are roughly balanced**. The main risks around the central projection include deviations from the baseline in: (i) lending and financial conditions, including asset prices; (ii) domestic and external demand; and (iii) size/effect of monetary and fiscal policy measures. Upside/downside risks stemming from these factors are deemed equally probable, but with uncommonly pronounced dispersion.

Real GDP Growth: Risks to the Forecast



The chart includes the risks to the projections of growth (1.2 percent in 2010 and 2.0 percent in 2011) based on historical forecast errors increased by a factor of 25 percent to reflect increased uncertainty.

Source: IMF staff estimates.

## II. Policy Discussions

17. **Against this background, Finland needs to secure the recovery, mitigating lingering risks, and also start addressing long-term sustainability issues**.

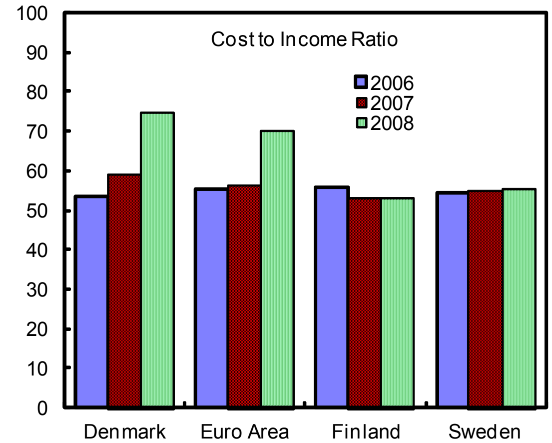
- In the near term, actions should focus on consolidating restoration of financial sector health and economic growth. There are signs that banks may be prompted by competition and the difficult operating environment to engage in higher risk activities in a quest for better returns (¶25), while bank profitability and credit quality have declined (¶s19, 20). Liquidity buffers are low, particularly in consideration of relatively high reliance on wholesale funding (¶s20, 23). In the fiscal area, a balance must be struck between support of economic activity and prevention of continuous budget worsening (¶s26–30).

- Longer term policies should strengthen financial stability, ensure fiscal sustainability, and advance structural reforms to boost potential output. With most of the banking system made of large entities in foreign hands, supervision and crisis management for systemic cross-border institutions as well as mitigation of too-big-to-fail risks and prompt intervention in distressed institutions are critical issues (¶s22–24). The EU and Basel initiatives to reform supervision and regulation may have profound implications for Finnish banks (¶23). The fiscal position having considerably weakened, gradual and credible adjustment is required with the aim to restore sustainability (¶s31–34). Structural reforms would alleviate the adverse impacts of the crisis and population aging on growth, and facilitate fiscal consolidation (¶s33–35).

### A. Maintaining Financial Stability

18. **In line with the FSAP update, staff observed that bank support actions have been broadly appropriate and consistent with those of other industrialized countries (Tables 7–8)**. The enlargement of deposit insurance was in accordance with EU-wide measures. ECB liquidity extension on full allocation basis was also supportive of financial stability. Guarantees for bank liabilities and capitalization facilities, although in practice not used, envisaged respectively sunset provisions and consistency with a sound “fix-it-and-exit” approach aimed at avoiding the persistence of distortions to the level playing field. These facilities have now expired.

19. **Officials and the FSSA Update report[2] established credit quality as a key challenge which may hurt banks' profits**. NPLs, still lower than in most EU economies, could increase, particularly if higher interest rates and unemployment complicate debt service of households. In this regard, though, the authorities considered more important the growth risk of reduced consumption owing to the need to raise household savings to service mortgages. Expanding loan-loss provisioning together with low interest margins and sluggish lending to corporations, reflecting a slow recovery, would put pressure on banks' profitability. The authorities agreed that improvements in cost efficiency will be crucial to sustain profits, though Finnish banks compare well with peers. It was also recognized that heightened risk aversion in the wake of the Greek crisis could push up funding costs and complicate access to bank financing.



Source: EU Banking Sector Stability Reports; and IMF staff calculations.

**Capital Adequacy and Stress Tests**

20. **There was agreement that banks' capital buffers are sufficient to withstand fairly adverse shocks**. Stress tests indicate that the banking system is resilient to a variety of blows covering credit, exchange rate, and market risk. The tests determined that credit is the main source of risk, especially for small banks, together with contagion, owing to the high degree of concentration of the sector. Officials argued that, although the increase in commercial property value has been one of the highest in the euro area during 2004–07, the small proportion of lending to that sector reduces the impact on banks. On the other hand, low liquidity buffers and reliance on wholesale funding expose banks to significant risk. Regulatory capital adequacy of the four largest banking groups,[3] however, would not be impaired, even in a combination of severe downturns in the domestic and global economy.

21. **The FSSA Update report identified possible improvements in stress testing[4] and financial stability analysis although both are already adequate**. These include enhanced monitoring of mortgage practices and household debt service as well as compiling

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[2] Please see the FSSA Update report on Finland for further details on the financial sector assessment and policy recommendations.

[3] The four largest banking groups account for 94 percent of total banking assets.

[4] Updated Committee of European Banking Supervisors (CEBS) stress tests will be published in July. FSA stress tests were published in English for the first time in June following the FSAP update recommendation.

information and reporting on properties' mortgage portfolio and loan-to-value ratios. Top-down stress testing could be strengthened by modeling the impact of macro-financial variables on a bank-by-bank basis and fostering synergies between the BoF research and financial stability divisions and the FSA. Finally, systemic risk assessment can be ameliorated by using more granular information and including all non-bank elements of the financial sector and cross-border linkages.

**Regulation and Supervision**

22. **The authorities concurred that supervision and the crisis management framework for systemic cross-border institutions are the key issues for Finland**. With a banking system characterized by large subsidiaries of big foreign banks, supervisors are fully aware of the need to share responsibility for large international groups operating in Finland with foreign counterparts, in the related dimensions of regular supervision and crisis management.

- The authorities intend to increase the effectiveness of supervision vis-à-vis foreign banks' branches and pursue clear agreements on specific information to be distributed by home supervisors through efficient communication channels.

- There was agreement that, with several institutions of systemic importance, it was important to mitigate potential contagion with measures to contain the too-big-to-fail risk—including at the regional level, should EU-wide agreements be delayed.

- Also shared was the view that safety net and crisis management arrangements face important challenges, both cross-border and domestic. Operational aspects of the deposit insurance fund need to be enhanced.

23. **The authorities broadly endorsed EU and Basel initiatives to reform supervision and regulation, but are concerned about the impact on burden sharing and banks**.

- They strongly support a model in which the European System of Financial Supervision would be granted incisive supervisory powers, clear responsibilities, and appropriate resources, in the context of a broader framework clarifying also the fiscal responsibilities of member states. The authorities however are worried that, under current EU proposals, burden-sharing may cover only very large banks (EU-systemic institutions) based in the major member countries, and not be extended to the smaller, but locally-systemic, Nordic institutions that are active in Finland. Thus, prior understandings are required that burden-sharing will apply to large Nordic banks.

- The authorities stressed that—because of the funding structure of Finnish banks, which relies markedly on wholesale funding and corporate deposits—new capital, liquidity, and leverage requirements could hit the system hard and excessively constrain credit, as shown in a FSA study. Thus, they may seek to moderate the tightening of regulatory ratios, possibly with some differentiation depending on the funding structure of banks. In this regard, staff argued that the authorities should step up their vigilance of liquidity risk.

24. **Improvements to domestic aspects of bank resolution were also discussed**. The FSSA Update report argued that introduction of a special resolution regime for banks and financial groups would facilitate prompt intervention in case of rapidly deteriorating conditions that threaten financial stability or depositors. The procedure should entail appointment by the FSA of official administrators and be designed to allow timely adoption of debt restructuring measures; alternatively, it could envisage the commencement of compulsory liquidation in order to reduce the cost of the crisis and reduce possible contagion effects. The authorities are exploring these options.

25. **Supervisors' recent guidance to banks for dealing with possible higher interest rate conditions is appropriate and could be strengthened**. Stiff competition and a difficult investment environment may encourage higher risk activities. For example, variable interest rate mortgages and mortgage insurance have been unexpectedly buoyant at a time when residential real estate prices are accelerating. Thus, banks have been invited to: (i) abstain from granting mortgages with LTV ratios higher than 90 percent; and (ii) undertake systematic assessments of borrower's capacity to repay with an interest rate of at least 6 percent. Staff welcomed these steps, while indicating that the authorities could consider further tightening of LTV ceilings, possibly making them mandatory, or introducing limits on the mortgage share that can be borrowed at variable interest rates, particularly should the pick-up in housing prices continue. Staff also noted that borrowing capacity might be overestimated by tests which omit macro feedback loops through income or employment.

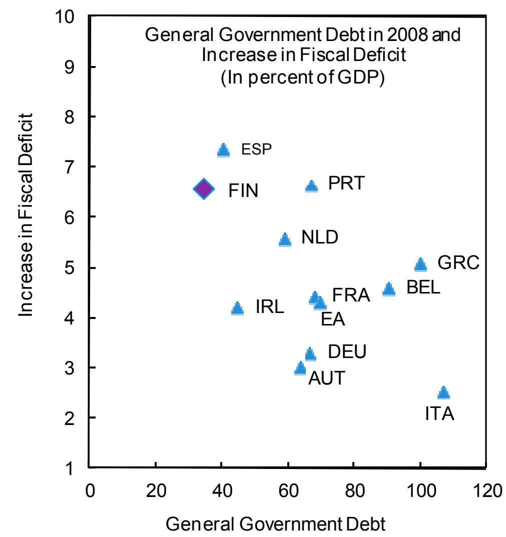
## B. Fiscal Policy

### Short-Term Fiscal Policy

26. **Amid a massive economic downturn, fiscal policy will continue to be stimulative in 2010**. The headline fiscal balance is expected to drop by 2 percentage points to a deficit of 4½ percent of GDP, breaching the SGP limits. This deterioration primarily reflects further structural loosening of around 1¾ percent of GDP, leading to a cyclically-adjusted primary fiscal deficit in 2010 of ½ percent of GDP. Discretionary measures envisage: (i) cuts in labor income taxes; (ii) expansion of social benefits; (iii) investment; and (iv) transfers, subsidies, and tax allowances for businesses. The ratio of expenditures to GDP will rise also because of the increases allowed under spending ceilings originally calibrated for a markedly higher nominal GDP.

27. **The authorities' cushioning of the impact of the global crisis is appropriate**. In addition to free operation of large automatic stabilizers, the expansionary package

implemented in 2009–10 is one of the largest in the euro area. Staff remarked that it was broadly adequate because a stimulative fiscal policy is both indicated from a cyclical perspective—given negative output gaps envisaged for 2009–14 as well as the uncertainty still surrounding the economic recovery in 2010—and feasible given the comparatively favorable initial public debt burden. Rollover risks are limited by the relatively long average maturity of public debt.




Source: WEO.

28. **Nonetheless, concerns arise about the composition of fiscal loosening**. Fiscal loosening should rely on actions that can be implemented swiftly and clawed back quickly once growth prospects improve. However, the authorities recognized that only about one-third of the total discretionary expansion for 2009–10 of about 3½ percent of GDP is temporary, implying that it will add about 2 percent of GDP to the structural fiscal deficit—though partly consistent with long standing policy goals, such as reducing labor taxation.

29. **There was agreement that budget consolidation should begin in 2011**. Since front-loaded fiscal retrenchment is desirable for intergenerational equity and to contain the size of the required tightening, while output remains below potential through 2014, the objectives of reducing the output gap and making progress towards fiscal sustainability have to be balanced. Staff supported a gradual structural adjustment, ¾ percent of GDP, because it would bring the headline deficit below the SGP ceiling and not jeopardize the recovery. In addition, absence of market pressure associated with financing requirements renders unnecessary larger front-loading.

Evolution of Fiscal Position
(In percent of GDP)

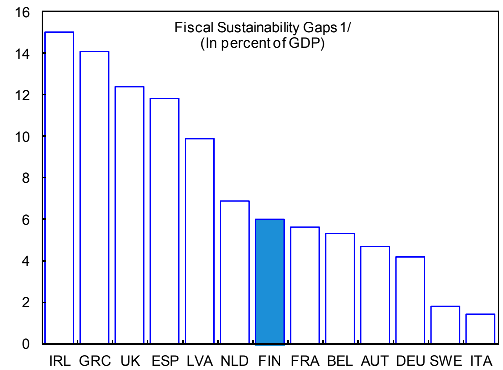
| | 2008 | 2009 | Staff 1/ 2010 | Auth. 2010 | Staff 1/ 2011 | Auth. 2011 |
|---|---|---|---|---|---|---|
| Total revenue | 53.6 | 53.2 | 52.6 | 52.6 | 54.0 | 54.0 |
| Total expenditure | 49.5 | 55.6 | 56.7 | 56.7 | 56.3 | 56.1 |
| Fiscal balance | 4.1 | -2.4 | -4.1 | -4.1 | -2.2 | -2.1 |
| | | | | | | |
| Primary balance | 5.6 | -1.0 | -2.8 | -2.8 | -0.8 | -0.7 |
| Structural balance (percent of potential GDP) | 1.7 | 0.1 | -1.5 | … | -0.1 | … |
| Structural primary balance (percent of potential GDP) | 3.2 | 1.4 | -0.2 | … | 1.2 | … |
| | | | | | | |
| *Memo items* | | | | | | |
| Nominal GDP growth (in percent) | 2.6 | -7.2 | 2.9 | 3.0 | 4.1 | 4.3 |
| Authorities' structural balance (percent of potential GDP) | 2.2 | 0.2 | … | -1.7 | … | -0.1 |

Sources: Ministry of Finance; and IMF staff estimates.
1/ Incorporating the authorities' planned measures, but staff's growth forecast. Under staff's recommended structural adjustment the headline deficit for 2011 would be 2.9 percent of GDP.

30. **However, the authorities target a more ambitious deficit reduction than recommended by staff**. In 2011, the government intends to enact corrective measures of about 1½ percent of GDP, which would reduce the GG deficit to about 2 percent of GDP, well below the SGP limit. To this end, the authorities have signaled that energy taxes and pension contributions will be raised in 2011. Expenditure ceilings have also been tightened implying a moderation of current spending. The mission argued that such a budgetary contraction might be excessive in light of the uncertainties still surrounding the recovery, as evidenced by the disappointing growth outcome in 2010Q1, and the persistence of a sizable output gap. It could however be appropriate, should the momentum of growth turn out to be significantly stronger than anticipated by staff.

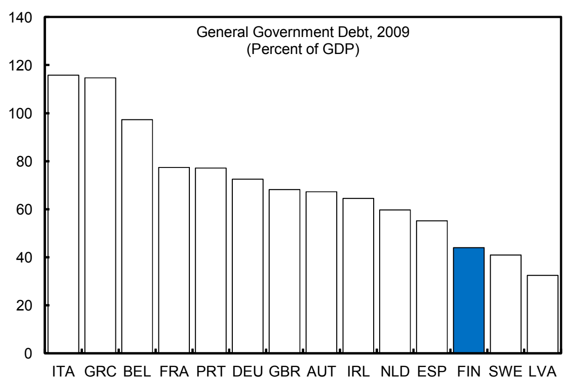
## Medium-Term Fiscal Policy and Sustainability

31. **Officials concurred that the long-term GG position has worsened considerably (AN5), reflecting the impact of the crisis**. Besides the sizable structural fiscal relaxation in 2009–10, the global crisis has led to operations in support of corporations, which have not increased the deficit but added to public debt, and weaker potential output. Given also expected increases in aging-related spending (5½ percent of GDP over 2011–60, on account of pensions, health- and old-age care), staff estimates that—notwithstanding comparatively low debt and large public assets— the GG structural primary balance after 2011 consistent with long-term sustainability will need to be permanently higher than in the no-measures path by 5½–6 percent of GDP—the fiscal sustainability gap—in line with the authorities' own latest estimates.[5] [6] While immediate full adjustment on this scale is implausible, delaying it requires a higher long-run primary surplus to ensure sustainability.




Sources: ECFIN Sustainability Report 2009, and IMF staff estimates.

1/ ECFIN's estimate of the Finnish gap is 4 percent of GDP, but with a higher structural primary balance and lower debt stock in 2010 compared to staff. No specific debt level is targeted in calculating the estimates. ECFIN estimates are as of Sept 2009, and estimates for some countries may have changed significantly since then.

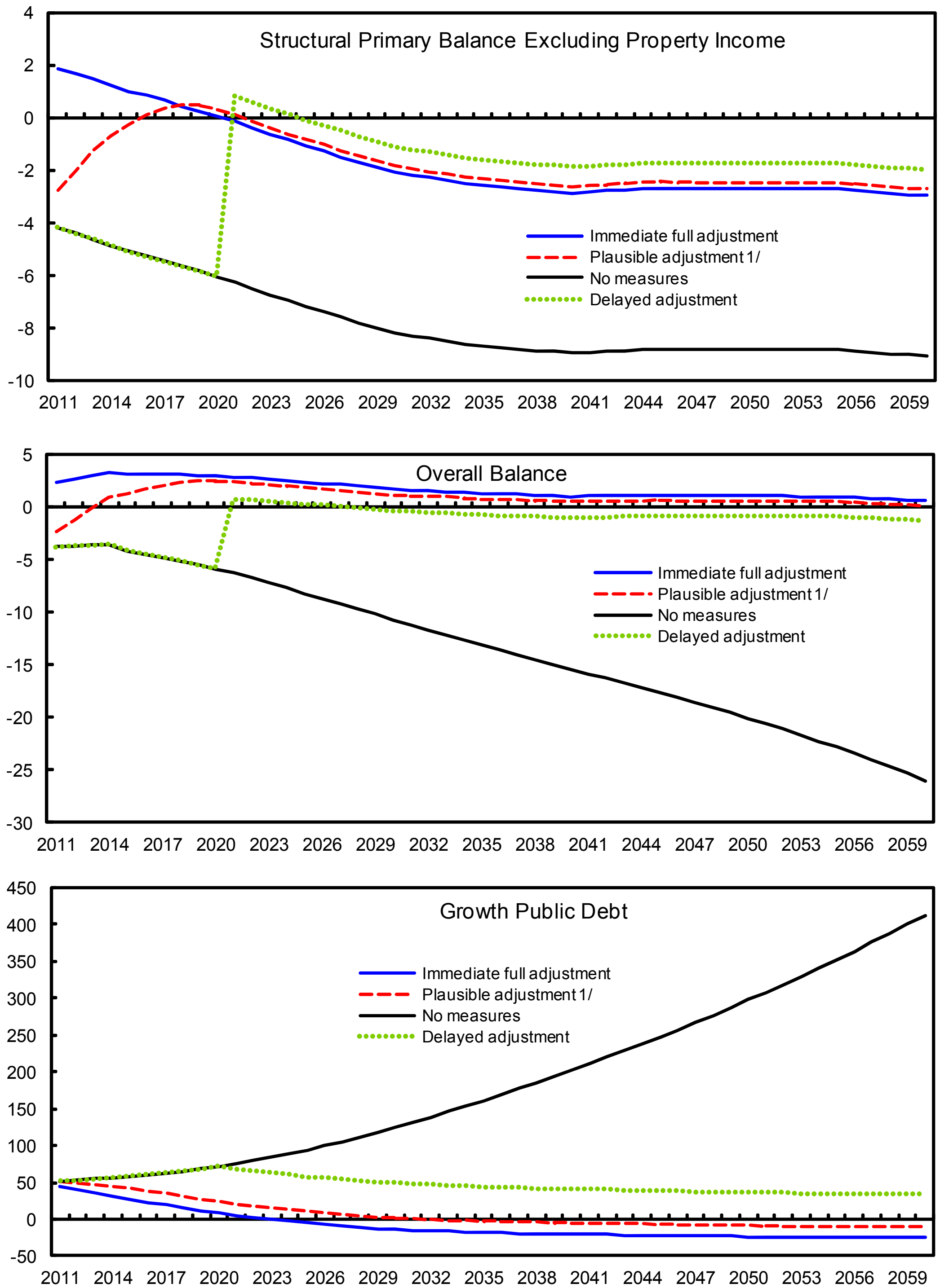



Source: WEO.

[5] The sustainability indicator used is based on the intertemporal budget constraint (see AN5), and is consistent with the S2 measure of the EC (Sustainability Report 2009, pp148–149).

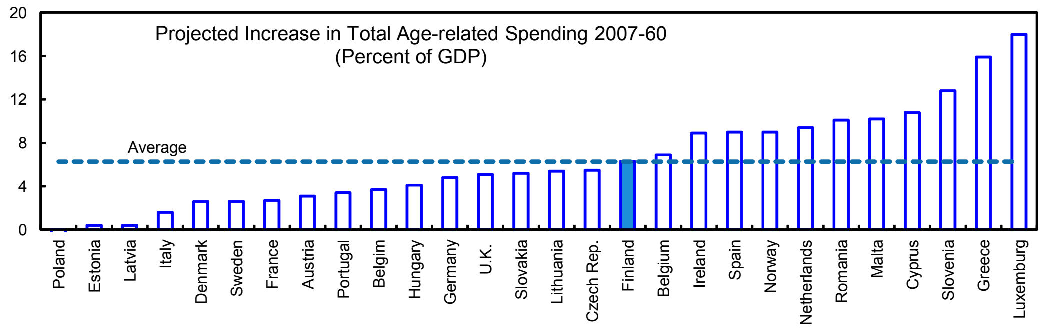
[6] The sustainability gap—evaluated as of 2011—has increased from 1½–2½ in SR2008 to 6 percent of GDP now, primarily reflecting a 4 percent of GDP decline in the projected structural primary balance.

Finland: Fiscal Sustainability, 2011-60
(In percent of GDP)




Sources: ECFIN: The 2009 Ageing Report, and Staff calculations

1/ The no measures scenario assumes that the structural position in 2011 is unchanged from 2010, and thereafter deteriorates with aging. The plausible adjustment scenario corresponds to the variable weights scenario in the text table on illustrative optimal annual fiscal adjustment under a quadratic loss function, and envisages the sustainability gap being closed by 2020.




Source: European Commission "The 2009 Ageing Report".

32. **Thus, the authorities viewed a strong and credible commitment to fiscal consolidation as crucial**. Staff emphasized that, with parliamentary elections in 2011, clear identification of time-bound fiscal adjustment targets for 2012–15 and supporting measures to be enshrined in the program of the new government is essential. Based on reasonable calibration of the tradeoff between output stabilization and fiscal sustainability, staff indicated that an adjustment slightly higher than ½ percent of GDP per annum could be desirable and it would close the sustainability gap by 2020. The authorities broadly endorsed this approach, which is also consistent with their medium-term objective under the SGP of ½ percent of GDP structural surplus. It was also agreed that these fiscal objectives should be pursued flexibly, with the option to delay somewhat the headline adjustment in exchange for structural measures (such as increasing the retirement age), which improve significantly fiscal sustainability, but have only a modest short-run impact on the government balance.

Illustrative Optimal Annual Fiscal Adjustment Paths Under a Quadratic Loss Function 1/ 2/

| Loss function weights | | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Alpha 3/ | Beta 4/ | | | | | | | | | | |
| | | Structural primary balance (percent of GDP) | | | | | | | | | |
| 1.0 | 1.0 | 3.5 | 4.3 | 4.9 | 5.3 | 5.5 | 5.7 | 5.9 | 6.0 | 6.0 | 6.1 |
| 0.0 | 1.0 | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 |
| 1.0 | 0.0 | -3.8 | -3.8 | -3.8 | -3.8 | -3.8 | -3.8 | -3.8 | -3.8 | -3.8 | -3.8 |
| 3.5 | 1.3 | 1.2 | 2.2 | 3.0 | 3.7 | 4.2 | 4.6 | 4.9 | 5.2 | 5.4 | 5.5 |
| 1.3 | 3.5 | 4.8 | 5.3 | 5.5 | 5.7 | 5.8 | 5.9 | 5.9 | 5.9 | 6.0 | 6.0 |
| Memo item | | | | | | | | | | | |
| Variable weights 5/ | | 1.2 | 2.2 | 3.2 | 4.0 | 4.7 | 5.2 | 5.7 | 6.0 | 6.2 | 6.2 |

1/ The plausible adjustment path in the fiscal sustainability panel figure corresponds to the variable weights fiscal adjustment path in this table.

2/ Structural primary balance in 2010 = -0.2 percent of GDP; Structural primary balance target to close sustainability gap after 10 years = 6.2 percent of GDP; Structural primary balance target to immediately close sustainability gap = 5.9 percent of GDP; Fiscal multiplier is taken to be 0.6; Output gap in 2010 = -3.7 percent of GDP.

3/ Weight on output gap

4/ Weight on sustainability gap

5/ Alpha is assumed to decline over time from an initial value of 3.5, while Beta rises at the same pace from an initial value of 1.3.

**Measures to Achieve Sustainability**

33. **The consensus was that, with an already high revenue ratio, there is only limited scope for increases in the tax burden (Figure 9)**. Prevailing tax rates leave little upward room, especially for direct taxes. Indeed, pressures from international tax competition may even lead to cuts in corporate taxation, while labor market reform may entail a reduction of marginal tax rates, since relatively large tax wedges on earned income discourage work. The focus on the revenue side should therefore be on base broadening and a shift from labor to consumption and property-based taxation, since the latter are generally less distortionary. In this regard, recent reductions in income tax rates, the increase in VAT rates by one percentage point in mid-2010 (the standard rate was 22 percent before the adjustment), and plans to raise energy taxes are steps in the right direction. The authorities are also considering the possibility of further increases in the VAT rates, partly offset by cuts in payroll or income taxes. Staff agreed, but indicated that more should be done, including by reducing the number of items on reduced VAT rates. In addition, property taxation is currently relatively low, and could be increased, while the generosity of mortgage interest deductibility could be gradually curtailed.

34. **Therefore, the authorities acknowledged that expenditure retrenchment would need to take the brunt of adjustment**. This reflects both the relatively elevated government footprint and international evidence generally indicating that expenditure-based consolidations have been more successful. In this context, officials concurred that the focus should be on reducing the impact of aging on fiscal expenditures and local government (LG) reform, including through an increase in effective retirement age and measures to restrain growth in demand for health- and long-term care (Table 9). Higher tuition fees and a reduction of student grants in favor of loans for tertiary education would also be helpful in generating expenditure savings, while creating incentives for reducing time to graduation. Efficiency enhancements could reduce government expenditure without jeopardizing public service provision.

## C. Structural Reforms

35. **The authorities confirmed that efforts underway to boost labor participation, increase competition in services, and foster innovation should be strengthened**. The authorities are rightly focusing on these areas, as reflected in their latest Lisbon strategy implementation report. The government has undertaken to expand labor participation through tax incentives and intensified training. Reforms of tertiary educational financing could also promote earlier employment among the youth. At the other end of the age spectrum, the unemployment pipelines ought to be further restricted or eliminated. Staff noted that steps to boost competition, especially in services (for example, liberalizing shop operating hours) should be pursued, as should ongoing programs to improve public productivity through mergers of municipalities and greater use of outsourcing. Actions to enhance

research/business cooperation, entrepreneurship, and venture capital could further strengthen innovation from Finland's sizable R&D investment. Renewed reform momentum is however unlikely before the 2011 elections.

### D. Exit Strategy

36. **The mission found that crisis-related measures to support the economy have been adequately designed to facilitate exit**. In the financial area, most initiatives are set to terminate at a predefined date, with some having already expired (¶18). Furthermore, guarantees for bank borrowing have not been issued or called so far and the likelihood of any outflow of public funds in the future appears very low. Importantly, the exit strategy appropriately encompasses the broader fiscal measures taken to support the economy (¶s33–34), including the repayment of the resources received by distressed nonfinancial companies (¶11) in line with the respective contractual agreements, while the program itself should be wound down with the revival of financial markets. It also envisages gradual downsizing of temporary employment support programs as economic activity strengthens.

## III. Staff Appraisal

37. **Finland's economy has been dealt a severe blow by the global crisis and the recovery is slow**. Owing to the high dependence of its exports on countries and commodities severely impacted by the downturn, Finland experienced the worst recession the euro area in 2009. Generous pay raises have supported consumption, but also put pressure on unit labor costs and led to an erosion of external competitiveness, which however remains adequate. A subdued resumption of activity is projected for 2010–11, though output is anticipated to remain well below potential and inflation to decline, while remaining at the euro area average. Risks appear balanced, although the outlook is unusually uncertain. The crisis has also led to a permanent loss of potential output, aggravating the problems posed by the fast aging population, not least to longer-term fiscal sustainability.

38. **The financial sector has withstood the world economic crisis owing to a solid capital base and vigilant supervision, but some risks linger**. The FSSA Update report found that exposure to opaque structured products or highly vulnerable countries is limited or negligible. More generally, spillover risks are manageable, with only rather extreme scenarios inducing sizable losses in Finland. Stress test outcomes for the Finnish banking system are benign, identifying credit, liquidity, contagion and concentration as the largest sources of risk. This reflects in particular adverse cyclical conditions and the associated rise in nonperforming loans, while reliance on wholesale funding requires greater liquidity buffers.

39. **Actions in support of the financial system have been apt, but bank cost efficiency must be strengthened, while excessive risk-taking should be avoided**. In particular, guarantees for bank liabilities and capitalization facilities have been designed to be phased

out, which has occurred at end-June 2010, and minimize distortions to competition. However, intense competition has reduced drastically banks' net interest margins. With prospects of higher funding costs, possibly associated with ongoing nervousness in sovereign borrowing markets, cost reductions will be important. Banks and insurers should be cautious in engaging in higher risk activities—like the unexpectedly sustained pace of low-interest mortgage lending amid surging home prices—in a quest for better returns.

40. **It is crucial to boost further the effectiveness of supervisory and crisis management frameworks for large cross-border institutions**. With most of the banking system controlled by foreign banks, detailed understandings on information to be distributed by home supervisors, especially for branches, are needed to strengthen supervision. Also, if implementation of an EU-wide appropriate resolution framework is postponed, mitigation of too-big-to-fail risk should be pursued through regional agreements at the Nordic level.

41. **Other enhancements to regulation and supervision should be considered too**. A bank-specific resolution regime, including by broadening options to allocate losses to the private sector, would render the process faster and more cost-effective. Vigilance on liquidity risk and banks' funding profiles and the (consolidated) risk profile of complex financial groups active in Finland should be stepped up. There is also scope to further strengthen the analytical frameworks for stress testing and systemic risk assessment.

42. **The large fiscal impulse in 2009–10 is adequate, but the composition of fiscal measures raises concerns**. The relaxation is both affordable, given favorable initial fiscal position, and necessary, given the depressed economic conditions and the still quite fragile prospects for economic recovery, particularly in light of ongoing market gyrations related to euro area peripheral countries. However, the sizable contribution of recurrent spending and permanent tax cuts to structural loosening will not be automatically reversed when growth picks up, thereby worsening the medium-term deficit.

43. **At the same time, the budgetary position has weakened considerably, requiring a strong and credible commitment to fiscal consolidation starting in 2011**. The fiscal sustainability gap is much larger than estimated in recent years owing mainly to the crisis-induced deterioration in government deficit and debt and potential output. With output projected to remain below potential through 2014, the twin objectives of reducing the output and fiscal sustainability gaps must be balanced. Thus, a measured budget consolidation of ¾ percent of GDP, consistent with bringing the headline deficit below the SGP ceiling should start in 2011. Stronger consolidation, as envisaged by the authorities, could be considered if there is clear evidence of growth resuming more robustly than envisioned by staff. Beyond, 2011, an adjustment of about ½ percent of GDP per annum on average would be desirable and close the sustainability gap by 2020. Accordingly, fiscal adjustment targets for 2012–15 and supporting measures should be a key plank in the program of the government formed after the 2011 elections. Nevertheless, these fiscal objectives should be

pursued flexibly, with the option to delay somewhat the headline adjustment in exchange for structural measures.

44. **Fiscal adjustment efforts should focus on expenditure retrenchment and tax base broadening**. Aging will push up public spending, and there is only limited room to raise tax rates given associated deadweight losses and international tax competition, with the partial exception of the VAT and property taxation. Moreover, expenditure-based consolidations have proven generally more durable. In this light, pension, health-and old-age care reforms, as well as an overhaul of local government, are key to containing expenditures.

45. **Renewed momentum with structural reforms would alleviate the adverse impacts of the crisis and population aging on growth, and facilitate fiscal consolidation**. Further efforts to limit excessive time spent in tertiary education and to restrict the unemployment or disability pipelines to early retirement would be welcome. Steps to boost competition, especially in services, should be pursued, along with continued programs to raise efficiency in the public administration and local government. Overall productivity growth could also be spurred through facilitation of closer research/business cooperation.

46. **It is proposed that the next Article IV consultation be held on the 24-month cycle**.

Table 1. Finland: Main Economic Indicators, 2007–15

| | | | | Proj. | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| | (Percentage change, unless otherwise indicated) | | | | | | | | |
| **Output and demand (volumes)** | | | | | | | | | |
| GDP | 4.9 | 1.2 | -7.8 | 1.2 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 |
| Consumption | 2.7 | 2.0 | -1.3 | 1.5 | 1.6 | 1.5 | 1.5 | 1.5 | 1.5 |
| Gross fixed capital formation | 10.6 | -0.2 | -13.4 | -2.5 | 3.5 | 3.2 | 3.7 | 4.2 | 4.2 |
| Change in stocks and statistical discrepancy contribution to growth (in percent of GDP) | -0.4 | -0.5 | -2.1 | -0.4 | 0.0 | 0.1 | 0.0 | -0.1 | -0.1 |
| Exports of goods and services | 7.9 | 6.5 | -24.3 | 0.1 | 4.5 | 4.0 | 4.2 | 4.2 | 4.2 |
| Imports of goods and services | 6.0 | 6.6 | -22.3 | -2.3 | 4.2 | 3.4 | 3.3 | 3.3 | 3.3 |
| Foreign contribution to growth (in percent of GDP) | 1.2 | 0.3 | -1.8 | 1.1 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 |
| **Prices, costs, and income** | | | | | | | | | |
| Consumer price inflation (harmonized) | 1.6 | 3.9 | 1.6 | 1.4 | 1.8 | 1.7 | 1.7 | 1.7 | 1.7 |
| GDP deflator | 3.3 | 1.4 | 0.6 | 1.7 | 2.0 | 1.8 | 1.9 | 2.0 | 1.9 |
| Unit labor cost, economy-wide | 1.0 | 5.4 | 6.8 | -0.3 | 1.2 | 1.2 | 1.1 | 0.9 | 0.8 |
| **Labor market** | | | | | | | | | |
| Labor force | 1.0 | 1.0 | -0.9 | -1.1 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 |
| Employment | 2.0 | 1.6 | -2.9 | -1.7 | 0.4 | 0.4 | 0.4 | 0.2 | 0.1 |
| Unemployment rate (in percent) | 6.8 | 6.4 | 8.3 | 8.8 | 8.7 | 8.4 | 8.1 | 7.9 | 7.8 |
| **Potential output and NAIRU** | | | | | | | | | |
| Output gap (in percent of potential output) 1/ | 5.4 | 4.3 | -4.3 | -3.7 | -2.9 | -2.2 | -1.4 | -0.7 | 0.0 |
| Growth in potential output | 2.6 | 2.3 | 0.5 | 0.6 | 1.2 | 1.3 | 1.3 | 1.3 | 1.4 |
| NAIRU (in percent) | 8.1 | 8.0 | 7.9 | 7.9 | 7.9 | 7.8 | 7.8 | 7.8 | 7.8 |
| | (In percent of GDP) | | | | | | | | |
| **General gvernment finances** | | | | | | | | | |
| Overall balance | 5.2 | 4.1 | -2.4 | -4.1 | -2.2 | -2.6 | -3.0 | -3.1 | -3.0 |
| Primary balance | 6.7 | 5.6 | -1.0 | -2.8 | -0.8 | -0.9 | -1.1 | -0.9 | -0.8 |
| Structural balance (in percent of potential GDP) | 2.4 | 1.7 | 0.1 | -1.5 | -0.1 | -1.0 | -2.2 | -2.7 | -3.0 |
| Structural primary balance | 3.9 | 3.2 | 1.4 | -0.2 | 1.2 | 0.6 | -0.3 | -0.6 | -0.8 |
| Gross debt | 35.2 | 34.2 | 44.0 | 49.9 | 52.0 | 55.5 | 59.1 | 62.5 | 65.8 |
| | (In percent) | | | | | | | | |
| **Money and interest rates** | | | | | | | | | |
| M3 (Finnish contribution to euro area , growth rate, e.o.p.) 2/ | 19.7 | 5.0 | -1.6 | -2.1 | ... | ... | ... | ... | ... |
| Finnish MFI euro area loans (growth rate, e.o.p.) 2/ | 11.7 | 11.6 | 1.7 | 3.0 | ... | ... | ... | ... | ... |
| 3-month money market rate 2/ | 4.3 | 4.6 | 1.2 | 0.7 | ... | ... | ... | ... | ... |
| 10-year government bonds yield 2/ | 4.3 | 4.3 | 3.7 | 3.4 | ... | ... | ... | ... | ... |
| | (In percent of GDP) | | | | | | | | |
| **National saving and investment** | | | | | | | | | |
| Gross national saving | 27.0 | 24.7 | 18.2 | 18.8 | 19.4 | 20.0 | 20.6 | 21.4 | 22.1 |
| Gross domestic investment | 22.8 | 21.6 | 16.9 | 17.0 | 17.7 | 18.3 | 18.9 | 19.6 | 20.3 |
| | (In percent of GDP) | | | | | | | | |
| **Balance of payments** | | | | | | | | | |
| Current account balance | 4.3 | 3.1 | 1.3 | 1.8 | 1.8 | 1.7 | 1.7 | 1.8 | 1.8 |
| Trade balance | 5.1 | 3.7 | 2.3 | 1.9 | 1.8 | 1.7 | 1.7 | 1.6 | 1.6 |
| Net international investment position | -29.6 | -8.1 | -10.6 | -7.3 | -3.9 | -0.7 | 2.5 | 5.8 | 9.0 |
| **Exchange rates (period average)** | | | | | | | | | |
| Euro per US$ | 0.73 | 0.68 | 0.72 | ... | ... | ... | ... | ... | ... |
| Nominal effective rate (increase in percent) | 2.2 | 2.6 | 1.3 | ... | ... | ... | ... | ... | ... |
| Real effective rate (increase in percent) 3/4/ | 1.4 | 4.1 | 5.5 | ... | ... | ... | ... | ... | ... |

Sources: Ministry of Finance, Bank of Finland; and staff projections.

1/ A negative value indicates a level of potential output that is larger than actual GDP.
2/ For 2010, annual change is for April.
3/ For 2009, data are for first ten months.
4/ Based on relative normalized unit labor costs.

Table 2. Finland: Indicators of Financial Vulnerability, 2005–10

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|---|---|
| **Households** | | | | | | |
| Total household debt (in percent of GDP) | 44.0 | 47.1 | 48.2 | 50.6 | 56.7 | ... |
| Debt-to-income ratio | 89.1 | 96.5 | 101.0 | 103.1 | 105.1 | ... |
| Financial assets/GDP | 84.4 | 88.7 | 86.6 | 76.3 | 88.9 | ... |
| **Non-financial corporations** | | | | | | |
| Gross debt (in percent of GDP) | 55.6 | 57.6 | 58 | 62.6 | 67.8 | ... |
| **Government** | | | | | | |
| General government debt (EMU definition, in percent of GDP) | 41.7 | 39.7 | 35.2 | 34.8 | 44.0 | ... |
| Central government debt (in percent of GDP) | 39.5 | 36.7 | 32.4 | 31.2 | 39.6 | ... |
| **Banking sector** | | | | | | |
| Outstanding credit to nonfinancial corporations (annual percent change, e.o.p.) | 7.8 | 8.4 | 12.9 | 18.8 | -4.8 | -2.2 1/ |
| Credit to households (percent change, e.o.p.) | 15.1 | 13.0 | 11.2 | 8.0 | 5.5 | 5.5 1/ |
| Housing loans in percent of total lending | 42.7 | 43.7 | 43.9 | 42.8 | 44.7 | 44.6 1/ |
| *Asset quality* | | | | | | |
| Non-performing loans/total loans (in percent) 3/ | 0.27 | 0.26 | 0.28 | 0.50 | 0.70 | 0.76 2/ |
| *Capital adequacy* | | | | | | |
| Regulatory capital as percent of risk-weighted assets | 17.2 | 15.1 | 15.1 | 13.6 | 14.5 | 14.5 2/ |
| Regulatory tier 1 capital to risk-weighted assets | 15.0 | 12.8 | 13.5 | 12.5 | 13.7 | 13.7 2/ |
| Equity/total assets (in percent) | 9.9 | 9.8 | 8.3 | 7.4 | 6.4 | 6.2 2/ |
| *Profitability* | | | | | | |
| Interest rate spread 4/ | 2.3 | 2.6 | 2.6 | 2.5 | 1.6 | 1.5 2/ |
| Net interest income (in percent of total income) | 53.7 | 53.1 | 47.9 | 62.1 | 49.4 | 42.8 2/ |
| Return on equity (in percent) | 11.8 | 14.4 | 19.1 | 13.4 | 10.7 | 13.4 2/ |
| Return on assets (in percent) | 0.9 | 1.2 | 1.4 | 0.8 | 0.6 | 0.7 2/ |
| Liquid assets/total assets (in percent) 5/ | 6.3 | 6.4 | 4.8 | 5.0 | 7.7 | 5.9 2/ |
| Deposits as percent of assets | 40.7 | 39.8 | 37.8 | 34.1 | 34.1 | 33.3 2/ |
| Off-balance sheet liabilities/total assets (in percent) | 17.5 | 19.2 | 19.4 | 15.3 | 16.5 | 16.2 2/ |
| **Stock market** | | | | | | |
| Change in stock market index (in percent, e.o.p.) | 31.1 | 17.9 | 20.5 | -53.4 | 19.5 | 0.5 6/ |
| Change in housing price index, Helsinki region (in percent, e.o.p.) | 5.7 | 8.3 | 6.9 | 0.5 | 0.0 | ... |
| Change in housing price index, rest of Finland (in percent, e.o.p.) | 6.3 | 6.7 | 4.4 | 0.6 | -0.5 | ... |

Sources: Bank of Finland; The Finnish Bankers' Association; Financial Supervision Authority; Statistics Finland; and Fund staff estimates.

1/ As of April 2010

2/ As of March 2010.

3/ Loans are defined as the sum of claims on credit institutions, the public, and public sector entities.

4/ Average lending rate minus average deposit rate.

5/ Liquid assets are defined as the sum of bills discounted by the central bank, debt securities, and the balance sheet item "liquid assets."

6/ As of May 31, 2010, change since end 2009.

Table 3. Finland: General Government Accounts, 2007–11
(In percent of GDP)

| | 2007 | 2008 | 2009<br>Est. | 2010<br>Proj. | 2011<br>Proj. |
|---|---|---|---|---|---|
| Total Revenue | 52.5 | 53.6 | 53.2 | 52.6 | 54.0 |
| Tax revenues and social security contributions | 42.9 | 43.1 | 42.9 | 42.4 | 43.6 |
| Tax revenues | 30.9 | 30.9 | 29.9 | 29.5 | 30.5 |
| Indirect taxes | 13.0 | 13.0 | 13.4 | 13.4 | 14.0 |
| Direct taxes | 17.6 | 17.5 | 16.3 | 15.9 | 16.3 |
| Capital taxes | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 |
| Social security contributions | 12.0 | 12.2 | 13.0 | 12.9 | 13.1 |
| Nontax revenues | 9.6 | 10.5 | 10.2 | 10.2 | 10.4 |
| Total Expenditure | 47.3 | 49.5 | 55.6 | 56.7 | 56.3 |
| Intermediate consumption | 9.1 | 9.8 | 11.0 | 11.2 | 11.2 |
| Compensation of employees | 12.9 | 13.4 | 14.9 | 14.7 | 14.4 |
| Interest | 1.5 | 1.5 | 1.4 | 1.4 | 1.4 |
| Subsidies | 1.3 | 1.3 | 1.5 | 1.5 | 1.6 |
| Social benefits | 17.3 | 17.8 | 20.5 | 21.5 | 21.4 |
| Other current expenditure | 2.5 | 2.7 | 3.1 | 3.1 | 3.1 |
| Capital transfers, payable | 0.3 | 0.4 | 0.4 | 0.7 | 0.7 |
| Gross capital formation | 2.4 | 2.5 | 2.8 | 2.8 | 2.6 |
| Fiscal balance | 5.2 | 4.1 | -2.4 | -4.1 | -2.2 |
| Memorandum items: | | | | | |
| Primary balance | 6.7 | 5.6 | -1.0 | -2.8 | -0.8 |
| Structural balance (in percent of potential GDP) | 2.4 | 1.7 | 0.1 | -1.5 | -0.1 |
| Structural primary balance (in percent of potential GDP) | 3.9 | 3.2 | 1.4 | -0.2 | 1.2 |
| Gross Debt | 35.2 | 34.2 | 44.0 | 49.9 | 52.0 |
| Output gap (percent) | 5.4 | 4.3 | -4.3 | -3.7 | -2.9 |

Sources: Eurostat; Ministry of Finance; and Fund staff calculations and estimates.

Table 4. Finland: Balance of Payments, 2005-11
(In billions of euros)

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|
| | | | | | | Proj. | |
| Current account | 5.3 | 7.0 | 7.6 | 5.8 | 2.3 | 3.2 | 3.2 |
| As a percentage of GDP | 3.4 | 4.2 | 4.3 | 3.1 | 1.3 | 1.8 | 1.8 |
| Goods and services | 6.4 | 7.8 | 9.3 | 7.4 | 4.7 | 4.4 | 4.3 |
| Exports of goods and services | 65.7 | 75.4 | 82.3 | 86.7 | 61.9 | 61.9 | 65.2 |
| Goods | 52.6 | 61.4 | 65.7 | 65.6 | 44.8 | 44.3 | 46.6 |
| Services | 13.2 | 14.0 | 16.6 | 21.1 | 17.1 | 17.6 | 18.6 |
| Imports of goods and services | -59.3 | -67.6 | -73.0 | -79.3 | -57.2 | -57.5 | -60.9 |
| Goods | -45.2 | -52.8 | -56.6 | -58.8 | -40.9 | -40.9 | -43.3 |
| Services | -14.1 | -14.8 | -16.4 | -20.6 | -16.2 | -16.6 | -17.6 |
| Income | -0.2 | 0.6 | -0.5 | -0.6 | -1.1 | -0.2 | -0.1 |
| Compensation of employees | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 |
| Investment income | -0.6 | 0.3 | -0.8 | -0.8 | -0.5 | -0.5 | -0.3 |
| Current transfers | -0.9 | -1.5 | -1.2 | -1.1 | -2.2 | -1.0 | -1.1 |
| Official | -1.2 | -1.7 | -1.4 | -1.3 | -2.4 | -1.2 | -1.3 |
| Capital and financial account | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 |
| Capital account | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Financial account | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 |
| Direct investment | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| In Finland | -2.8 | -4.0 | 0.1 | 9.2 | 13.5 | -3.3 | -3.4 |
| Abroad | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Portfolio investment excl. fin. derivatives | 2.0 | 4.1 | 10.9 | -0.8 | -5.7 | 3.4 | 2.7 |
| Other investment | 0.4 | 2.3 | 3.9 | -7.1 | -0.2 | -1.1 | -1.0 |
| Assets | 3.8 | 6.1 | 9.0 | -1.3 | 1.8 | 7.6 | 8.5 |
| Liabilities | -3.4 | -3.8 | -5.2 | -5.8 | -2.1 | -8.7 | -9.6 |
| Official | 2.1 | 9.7 | 8.7 | 17.6 | 16.6 | 4.6 | 3.7 |
| Private | -1.7 | -7.4 | -4.9 | -24.8 | -16.9 | -5.7 | -4.7 |
| Reserve assets | 1.8 | 0.1 | -0.6 | 1.6 | 2.8 | 0.0 | 0.0 |
| Net errors and omissions | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 |
| Memorandum item: | | | | | | | |
| GDP at current prices | 157.3 | 165.6 | 179.5 | 184.2 | 171.0 | 176.0 | 183.2 |

Sources: Bank of Finland; and staff projections.

## Table 5. Finland: Net International Investment Position, 2001-09
(In percent of GDP)

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|---|---|---|---|---|---|---|---|---|
| Assets | 131.3 | 133.4 | 156.3 | 178.2 | 194.5 | 209.3 | 212.1 | 220.9 | 257.4 |
| Direct investment abroad | 42.6 | 42.5 | 41.4 | 41.0 | 44.1 | 44.1 | 44.5 | 45.3 | 51.1 |
| Portfolio investment abroad | 45.6 | 50.5 | 58.2 | 70.6 | 83.2 | 98.1 | 96.9 | 70.2 | 97.6 |
| Other investment abroad (incl. financial derivatives) | 36.3 | 33.9 | 50.6 | 60.4 | 61.2 | 63.7 | 67.5 | 102.1 | 104.1 |
| Reserve assets | 6.9 | 6.5 | 6.1 | 6.2 | 6.1 | 3.4 | 3.2 | 3.3 | 4.6 |
| Liabilities | 213.5 | 170.1 | 182.8 | 188.2 | 209.8 | 223.1 | 239.6 | 229.4 | 264.1 |
| Direct investment into Finland | 19.6 | 22.6 | 27.4 | 27.7 | 29.5 | 32.3 | 34.7 | 32.4 | 35.9 |
| Portfolio investment into Finland | 145.2 | 106.0 | 108.3 | 107.0 | 124.1 | 132.7 | 143.6 | 96.4 | 119.0 |
| Other investment into Finland (incl. financial derivatives) | 48.7 | 41.5 | 47.1 | 53.5 | 56.2 | 58.1 | 61.3 | 100.6 | 109.2 |
| Net investment position | -82.2 | -36.7 | -26.5 | -10.0 | -15.3 | -13.8 | -27.5 | -8.5 | -6.7 |
| Direct investment | 23.0 | 19.9 | 14.0 | 13.3 | 14.6 | 11.8 | 9.8 | 12.9 | 15.2 |
| Portfolio investment | -99.6 | -55.5 | -50.0 | -36.4 | -40.9 | -34.6 | -46.8 | -26.2 | -21.4 |
| Other investment (incl. financial derivatives) | -12.4 | -7.6 | 3.4 | 6.8 | 5.0 | 5.6 | 6.3 | 1.5 | -5.1 |
| Reserve assets | 6.9 | 6.5 | 6.1 | 6.2 | 6.1 | 3.4 | 3.2 | 3.3 | 4.6 |

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

Table 6. Finland: Trade by Regions and Countries, 2009

| | Balance | Imports | | | Exports | | |
|---|---|---|---|---|---|---|---|
| | | value | share | change | value | share | change |
| Origin/destination* | mm EUR | mm EUR | % | % | mm EUR | % | % |
| Total | +1,646 | 43,250 | 100.0 | -31 | 44,897 | 100.0 | -32 |
| Europe | -1,400 | 33,283 | 77.0 | -30 | 31,883 | 71.0 | -34 |
| Germany | -1,688 | 6,313 | 14.6 | -28 | 4,625 | 10.3 | -30 |
| France | -292 | 1,945 | 4.5 | -8 | 1,653 | 3.7 | -28 |
| United Kingdom | +900 | 1,449 | 3.4 | -44 | 2,349 | 5.2 | -35 |
| Netherlands | +648 | 1,977 | 4.6 | -24 | 2,625 | 5.8 | -22 |
| Russia | -2,982 | 7,026 | 16.2 | -31 | 4,044 | 9.0 | -47 |
| Sweden | +99 | 4,306 | 10.0 | -32 | 4,405 | 9.8 | -33 |
| Americas | +2,393 | 2,809 | 6.4 | -33 | 5,202 | 11.7 | -16 |
| United States of America | +1,996 | 1,486 | 3.4 | -20 | 3,482 | 7.8 | -16 |
| Asia | -1,374 | 6,518 | 15.1 | -32 | 5,143 | 11.5 | -19 |
| China | -1,580 | 3,434 | 7.9 | -21 | 1,854 | 4.1 | -10 |
| Middle East, Africa and Oceani | +2,028 | 641 | 1.5 | -53.0 | 2,669 | 5.9 | -42 |

* Imports by countries of origin, exports by countries of destination

Source: National Board of Customs, Finland.

Table 7. Finland: Headline Support for Financial and Other Sectors and Upfront Financing Need
(As of July 2010; in percent of 2009 GDP) 1/

| | Capital Injection | Purchase of Assets and Lending by Treasury 2/ | Guarantees 3/ | Liquidity Provision and Other Support by Central Bank | Upfront Government Financing 4/ |
|---|---|---|---|---|---|
| | (A) | (B) | (C) | (D) | (E) |
| Advanced North America | | | | | |
| Canada | 0.0 | 11.4 | 13.5 | 1.5 | 11.4 |
| United States | 3.8 | 2.0 | 3.7 | 15.7 | 5.9 |
| Advanced Europe | | | | | |
| Austria | 5.3 | 0.0 | 30.1 | … | 8.9 |
| Belgium | 4.8 | 0.0 | 26.4 | … | 4.8 |
| Finland | 1.9 | 0.0 | 24.1 | … | … |
| France 5/ | 1.4 | 1.3 | 16.4 | … | 0.7 |
| Germany | 3.3 | 0.0 | 16.6 | … | 3.8 |
| Greece | 2.1 | 3.3 | 6.2 | … | 5.4 |
| Ireland | 5.9 | 0.0 | 198.1 | … | 5.9 |
| Italy 6/ | 0.6 | 0.0 | 0.0 | … | 0.6 |
| Netherlands | 3.4 | 11.2 | 33.6 | … | 14.6 |
| Norway 7/ | 2.0 | 15.8 | 0.0 | 21.0 | 15.8 |
| Portugal 8/ | 2.4 | 0.0 | 12.0 | … | 2.4 |
| Spain 9/ | 9.4 | 4.8 | 19.0 | … | 5.4 |
| Sweden 10/ | 1.6 | 0.0 | 48.3 | 14.5 | 3.6 |
| Switzerland 11/ | 1.1 | 0.0 | 0.0 | 34.2 | 7.6 |
| United Kingdom 12/ | 5.7 | 14.4 | 39.2 | 12.3 | 21.6 |
| European Central Bank | … | … | … | 9.4 | … |

Sources: FAD-MCM database; Monetary Authorities; International Financial Statistics; and World Economic Outlook, April 2009.

1/ Amounts in columns A, B, C and E indicate announced or pledged amounts, and not actual uptake. Column D shows the actual changes in central bank's balance sheet from June 2007 to June 2010. While the expansion of central bank balance sheet is mostly related to measures aimed at enhancing market liquidity as well as financial sector support, it may occasionally have other causes. It may also not fully capture some other types of support, including that arising from changes in regulatory policies. For the euro zone countries, see the ECB line.

2/ Column B does not include Treasury funds provided in support of central bank operations. These amount to 0.5 percent of GDP in the U.S., and 12.8 percent in the U.K.

3/ Excludes deposit insurance provided by deposit insurance agencies.

4/ This includes support measures that require upfront government outlays. It does not include recoveries from the sale of assets acquired through interventions.

5/ Support to the country's strategic companies is recorded under (B); of which €20 bn will be financed by a state-owned bank, Caisse des Depots and Consignations, not requiring upfront Treasury financing.

6/ It does not include the temporary swap of government securities for assets held by Italian banks undertaken by the Bank of Italy.

7/ Excluding asset accumulation in Sovereign Wealth Fund, the balance sheet expansion during the period was only 4.5 percent of GDP.

8/ A maximum amount of €22.8 bn (13.7% of GDP) is allocated to the guarantee scheme, the reinforcement of core capital (with the latter not exceeding €4 bn), as well as Portugal's contribution to the European Financial Stability Facility.

9/ Cabinet approved guarantees for bank debt up to €100 bn. Another €100 bn can be extended, if needed. Bank Restructuring Fund, for which the current legislative framework provided €9 billion (of which €6.75 bn funded by the state), could potentially be increased to up to €99 billion through debt issuance. A €30-50 bn fund was created to purchase high-quality securities issued by financial institutions (FAAF).

10/ Some capital injection (SEK50 billion) will be undertaken by the Stabilization Fund.

11/ Upfront government financing reflects SNB creation on SPV to purchase of USB's bad assets.

12/ Estimated upfront financing need is £301 bn (21.6 percent of GDP), consisting of Bank Recapitalization Fund (£68 bn), Special Liquidity Scheme (£185 bn) and financing for the nationalization of Northern Rock and Bradford & Bingley (£48 bn).

Table 8. Finland: Summary of State Interventions in Major Financial Institutions

| Institution | Type of State Intervention | Conditions imposed | Restructuring | Background |
|---|---|---|---|---|
| Nordea Bank Finland plc<br><br>OP-Pohjola Group Central Cooperative<br><br>Sampo Bank plc | State guarantee provided to the three banks in connection with a private sector initiative to fully indemnify the depositors of the Finnish branch of the insolvent Icelandic Kaupthing Bank as of October 31 2008. The Finnish authorities have not set an upper limit of the indemnity, since they deemed not possible to estimate the amount of possible claims, if any. | The Banks would carry the commercial and credit risks in the arrangement, while the State would carry the legal risks by accepting to indemnify the banks (as well as the SPV and Finnish depositors) for all losses suffered from any recovery claim or any other equivalent insolvency claim relating to the arrangement. | None | The failure of the Icelandic Kaupthing Bank h.f. triggered also the failure of its Finnish branch. Fearing a broader loss of confidence among Finnish depositors in general, the main Finnish banks offered to compensate depositors in full. The three commercial banks involved and a SPV took over the credit claims and other assets of Kaupthing Bank h.f. and settled all the deposit claims in Finland. The state measure aimed to help in implementing a private arrangement to restore the confidence in the Finnish banking sector and more generally in the Finnish economy. In the light of planned co-operation between the Finnish and Icelandic authorities, the EU Commission stated that risk of recovery claims materialising appears low. This, in turn, minimises the legal risk of claims and thus the amount of potential indemnity payments by the state. |

## Table 9. Finland: Proposed Fiscal Measures

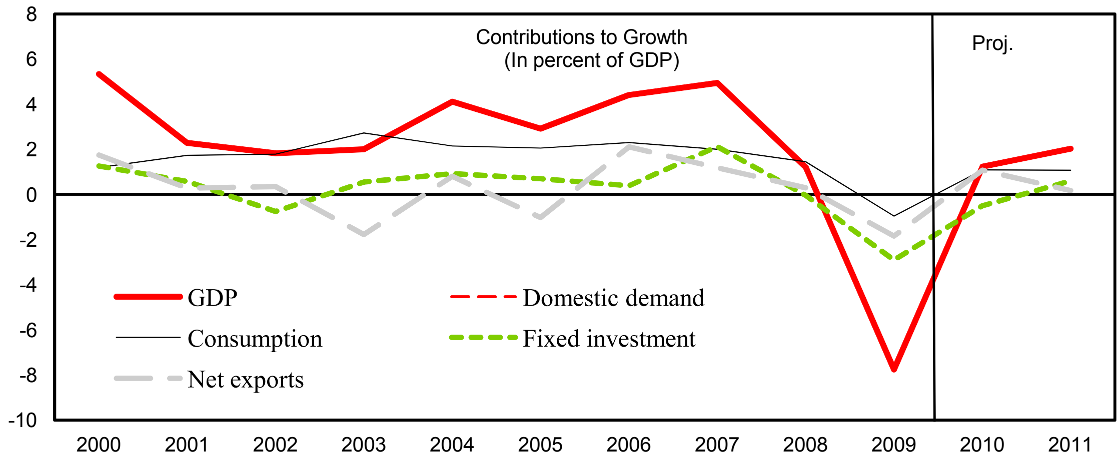
| Measure | Rationale | Authorities' view |
|---|---|---|
| Further pension reform:<br>• Raising retirement age.<br>• Lowering accrual rate for pension benefits.<br>• Tightening early retirement. | The average effective retirement age is about 60, and raising it to 67 would suffice to close the sustainability gap. Even partial movement would greatly facilitate adjustment efforts. Sizable savings could be accrued by lowering the accrual rate for pension benefits—particularly for periods of parental leave, unemployment, and education—and tightening early retirement via disability or unemployment (disability pension recipients total about 9 percent of the labor force). | The authorities do not dispute the need for such measures. Steps already taken are expected to raise the effective retirement age by 1½ years by 2025, and working groups have been tasked with formulating proposals to generate a further 1½ years increase by the same date. Also, from 2010 new pensions will be adjusted downward if life expectancy rises. |
| Savings in health and long-term care:<br>• Increase in user fees.<br>• Tightening entitlements to long term care.<br>• Productivity increases<br>• Benchmarking. | Health-care and long-term care expenditure is projected to rise about 3¼ percent of GDP by 2060 with population aging, due to expensive advances in medical technology and real income growth, given high income elasticity of health-services demand. Thus, an increase in user fees could moderate demand growth, although care should be taken to prevent overburdening the chronically ill. Tightening entitlements in long-term care could spawn savings in an area where aging pressures will be strong. Productivity increases in health- and long-term care of ½ percent a year (which has been achieved in some OECD countries) would lower significantly projected rises in spending. Domestic and international benchmarking to identify best practices would also be beneficial. | The authorities are actively seeking to increase productivity in this area, including through domestic and international benchmarking. They are also considering increases in user fees and tighter entitlements in long term care, but emphasize the need to keep extensive availability of social services given societal preferences. |

Table 9. Finland: Proposed Fiscal Measures (concluded)

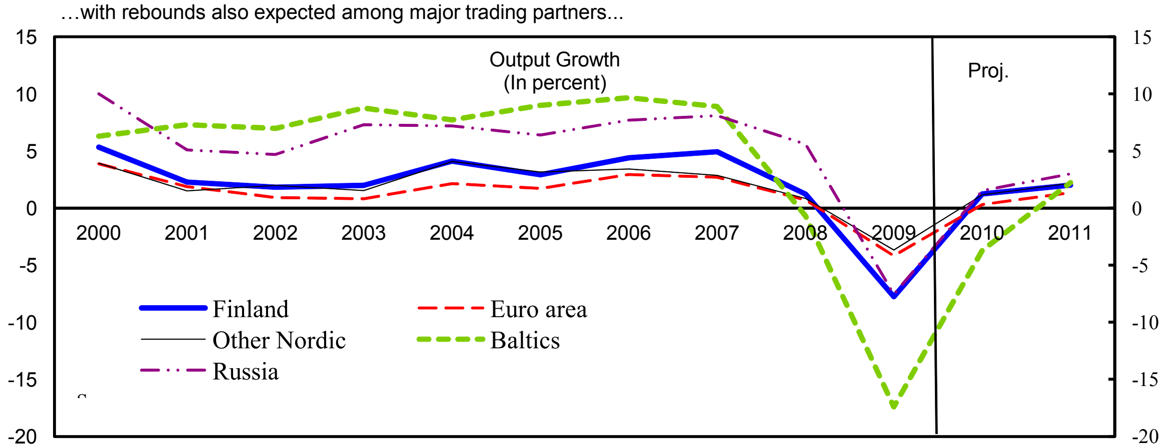
| Measure | Rationale | Authorities' view |
|---|---|---|
| Reform of local government:<br>• Reduce reliance on corporate taxes and enhance reliance on property taxes.<br>• Ceiling on municipal income tax rates.<br>• Broader competitive bidding.<br>• Merger of municipalities. | Spending at the municipal level has grown faster than in the rest of the GG and municipality productivity has declined by about 10 percent over 2000-08. Reliance on corporate taxes at municipal level—which due to their high cyclicality have funded strong expenditure increases in good times—ought to be reduced, offset by higher property taxation or, possibly, central government (CG) transfers. A ceiling on municipal income tax rates, and restraint in the growth of CG transfers, would strengthen incentives for LG spending consolidation. Also, competitive bidding in the provision of services to LGs should be broadened to generate cost savings. Finally, there is scope for efficiency gains through mergers of municipalities, as their median population is less than 5,000. | The authorities support the measures in principle, but stress that the Finnish constitution gives the local authorities broad autonomy, and thus the consensus of the local governments must be sought prior to introducing the reforms, which is not easy. |
| Improved rate of return on government financial assets. | Gross financial assets totaled about 90 percent of GDP in 2008, and substantial portions of these assets are low-yielding, reflecting a cautious investment approach. Given the large stock, an asset management strategy that generates a modest increase in returns could make a significant contribution to close the sustainability gap. | The authorities are considering options to do so while limiting any significant increase in risks. |

# Figure 1. Finland: Growth and Inflation, 2000-11

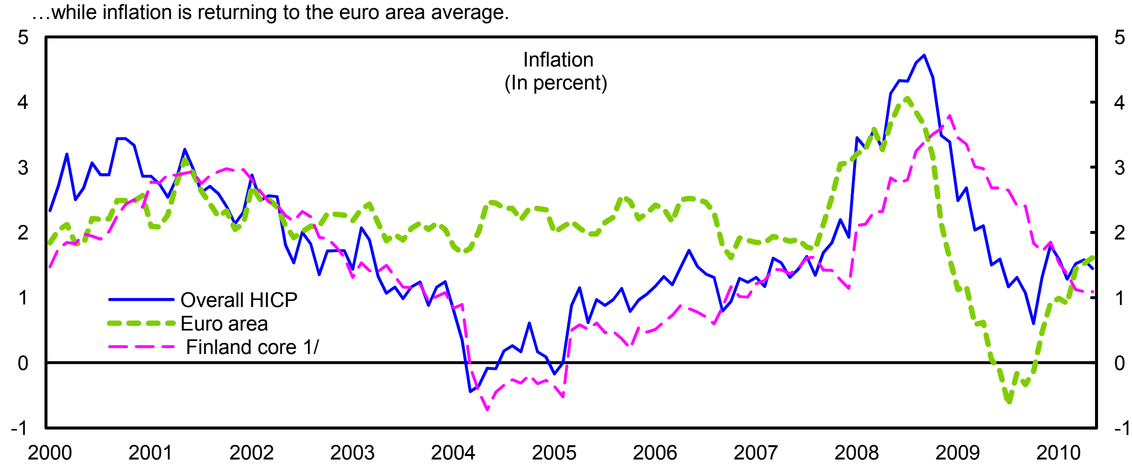
After 2009 's deep recession , growth is expected to rebound this year...




…with rebounds also expected among major trading partners...



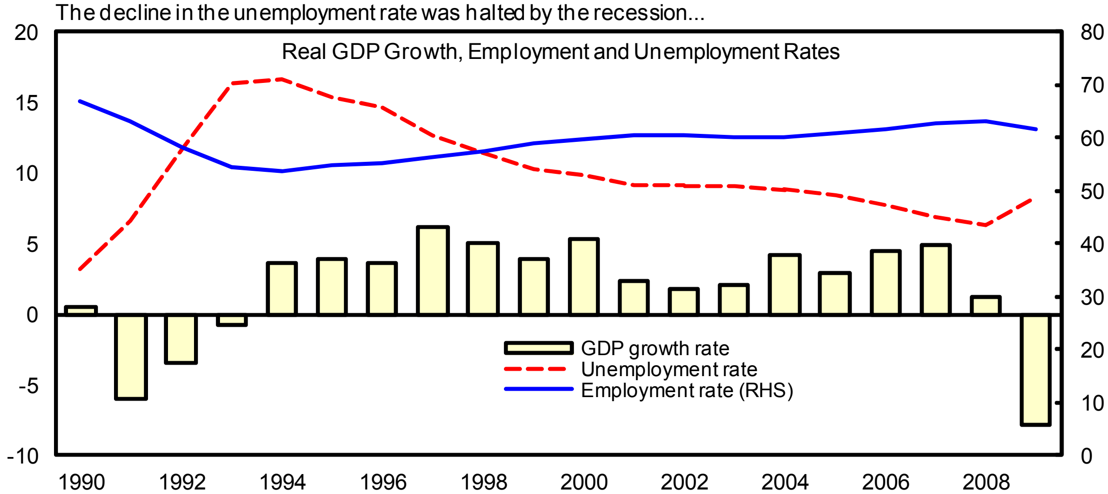

…while inflation is returning to the euro area average.



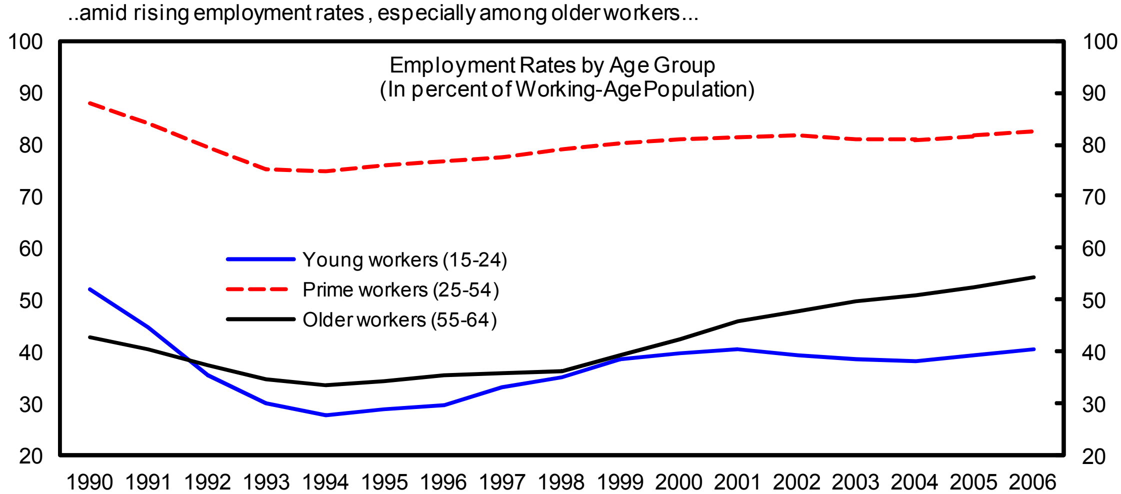

Sources: Statistics Finland Eurostat; and IMF staff estimates.
1/ Overall excluding energy and unprocessed food.

Figure 2. Finland: Labor Market Developments, 1990-2009 1/

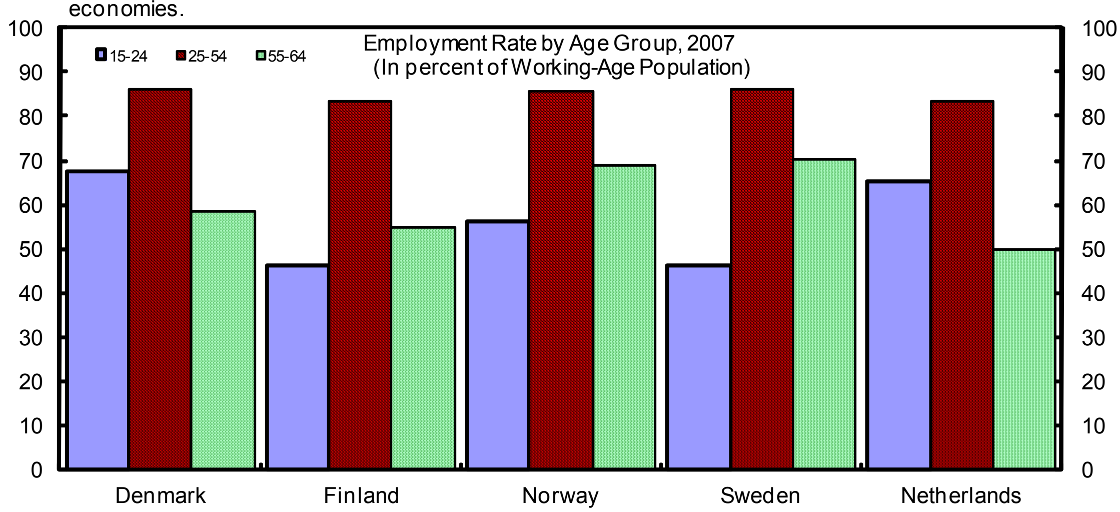
The decline in the unemployment rate was halted by the recession...




..amid rising employment rates, especially among older workers...



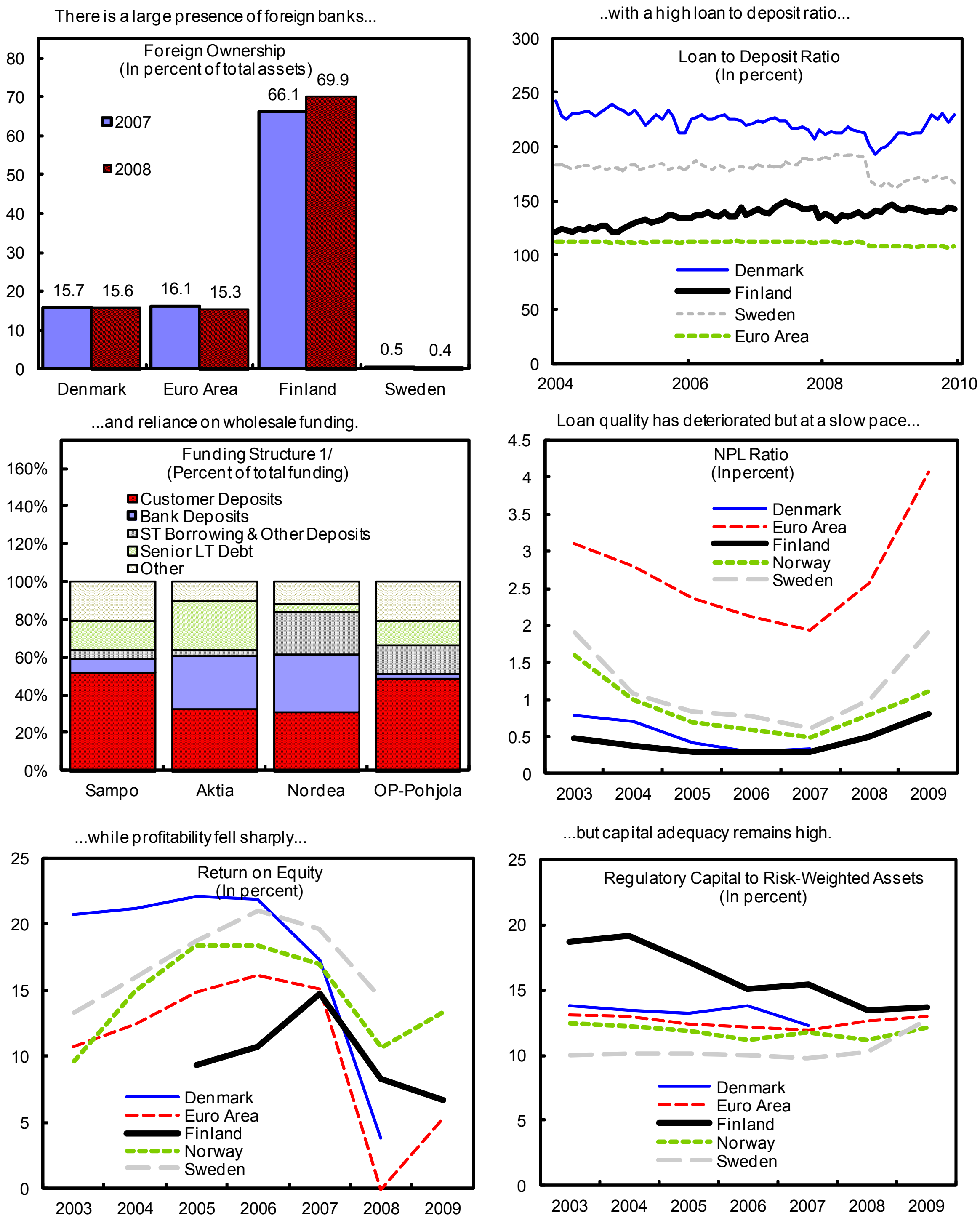

... although elderly, and especially youth, employment rates continued to lag behind those in other Nordic economies.




Sources: Statistics Finland; OECD.

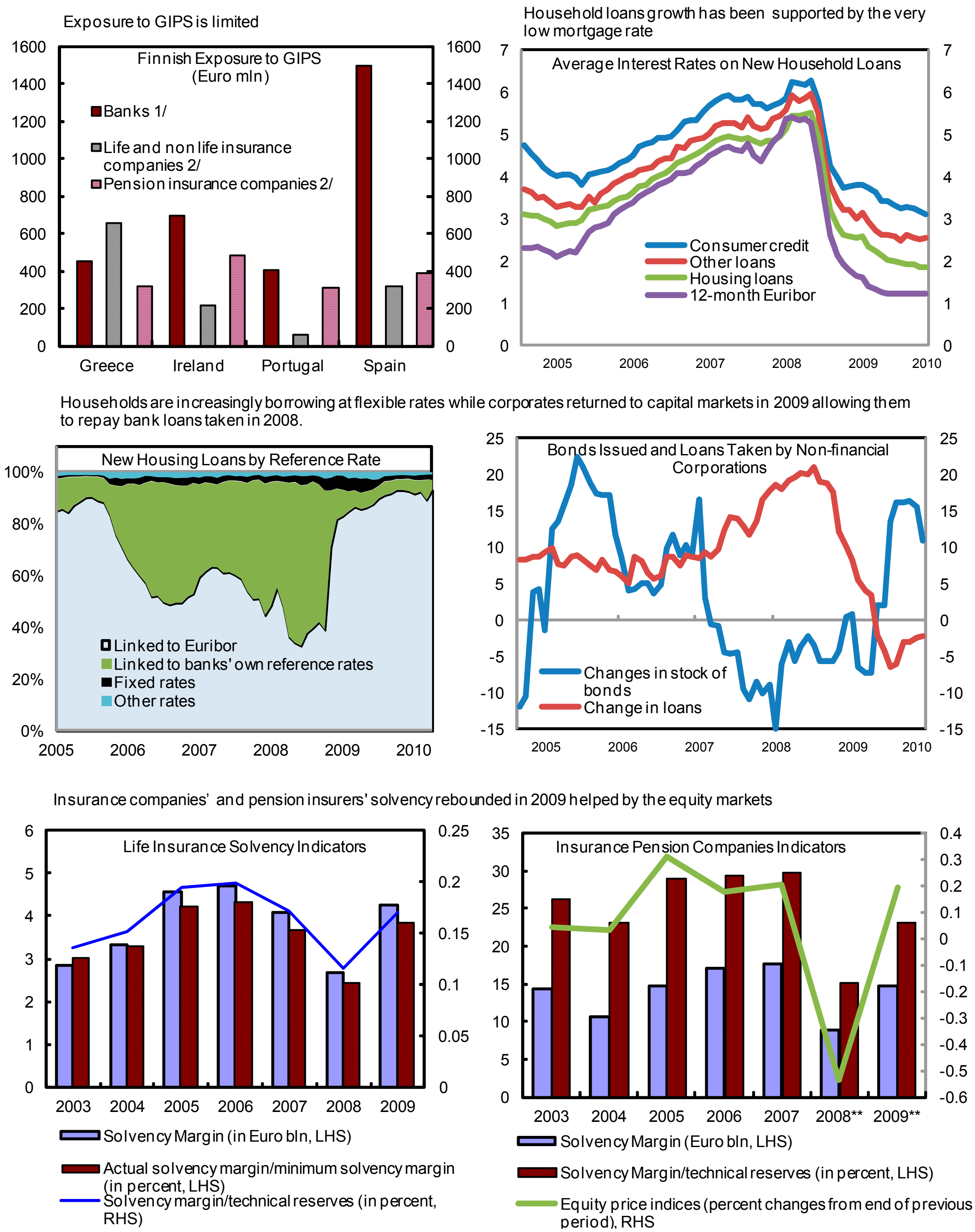
1/ Data for 2009 refer to the first three quarters.

Figure 3. Finland: Banking Sector, 2003-09




Source: ECB, GFSR, BankScope, staff calculations.
1/ Excludes Nordea's derivatives.

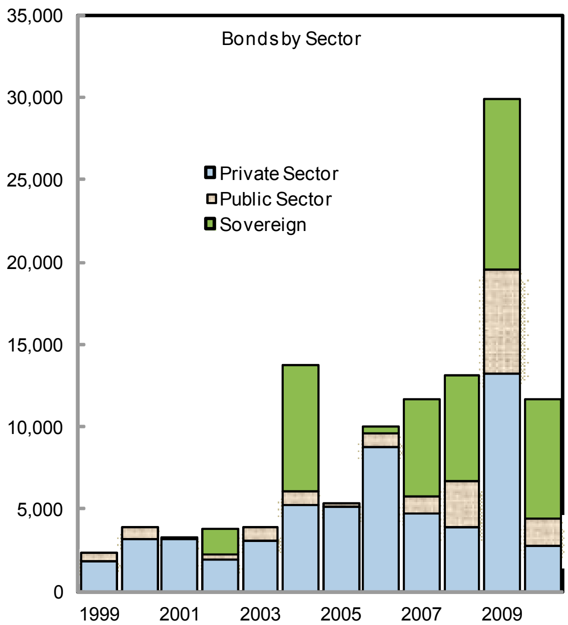
Figure 4. Finland: Financial Sector, 2005-10



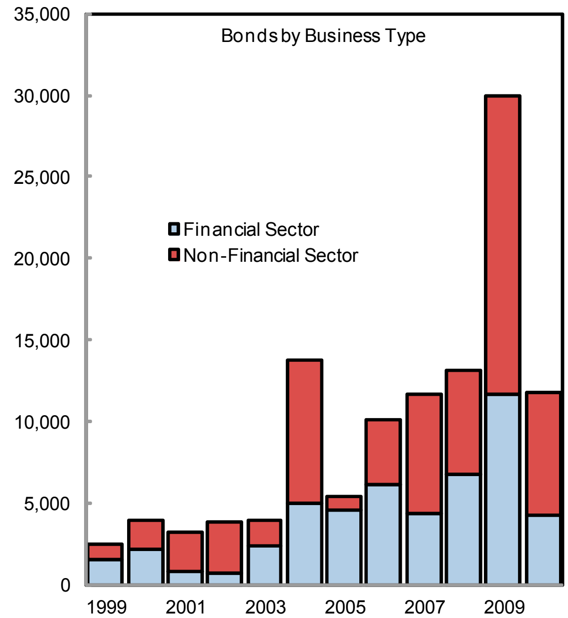

Source: Bank of Finland and staff estimates.
1/ As of March 2010.
2/ As of May 2010.

Figure 5. Finland: International Bond Market Developments, 1999–2010Q1
(In millions of US dollars)

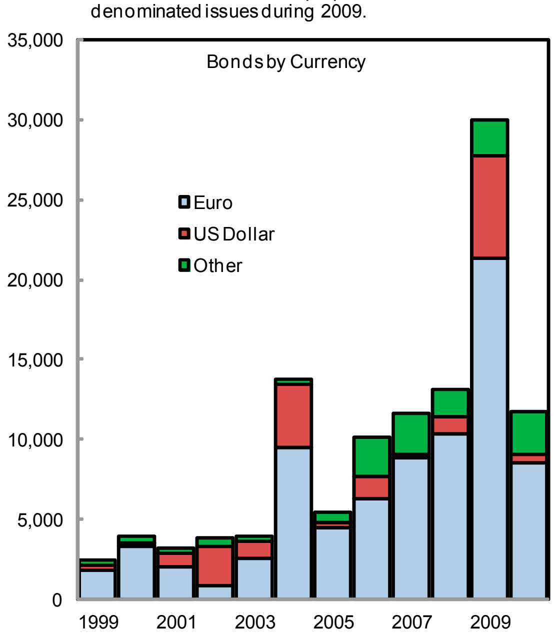
The bond market experienced a noticeable spike during 2009, when the amount of issuance doubled. The private sector accounts for less than half of the issuances.



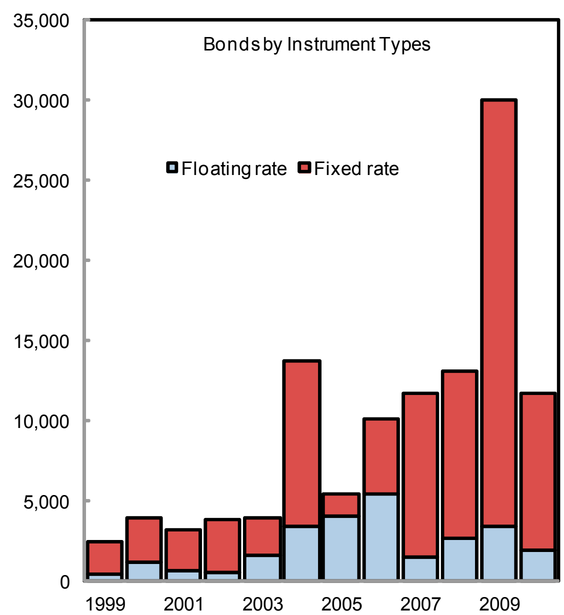

While the majority of issuances are related to the non-financial sector, the issuances of the latter represent an important part of the total.




Most of the issuances are Euro-denominated, reducing currency risks. However, there was a noticeable increase in the proportion of USD denominated issues during 2009.



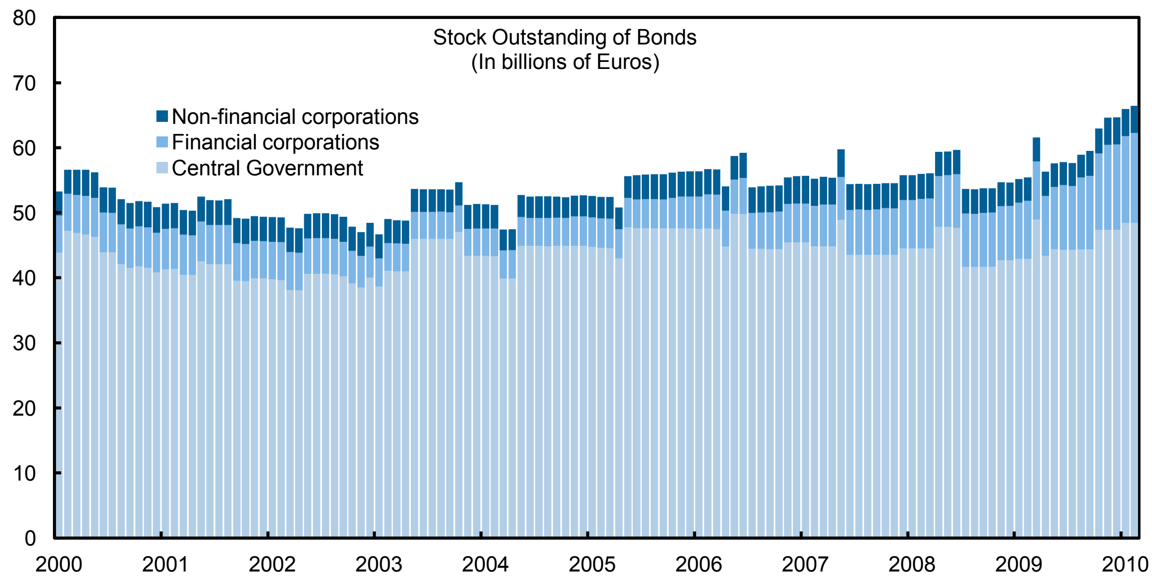

The proportion of floating rate bonds is very small, reducing the debt profile's interest rate risk.



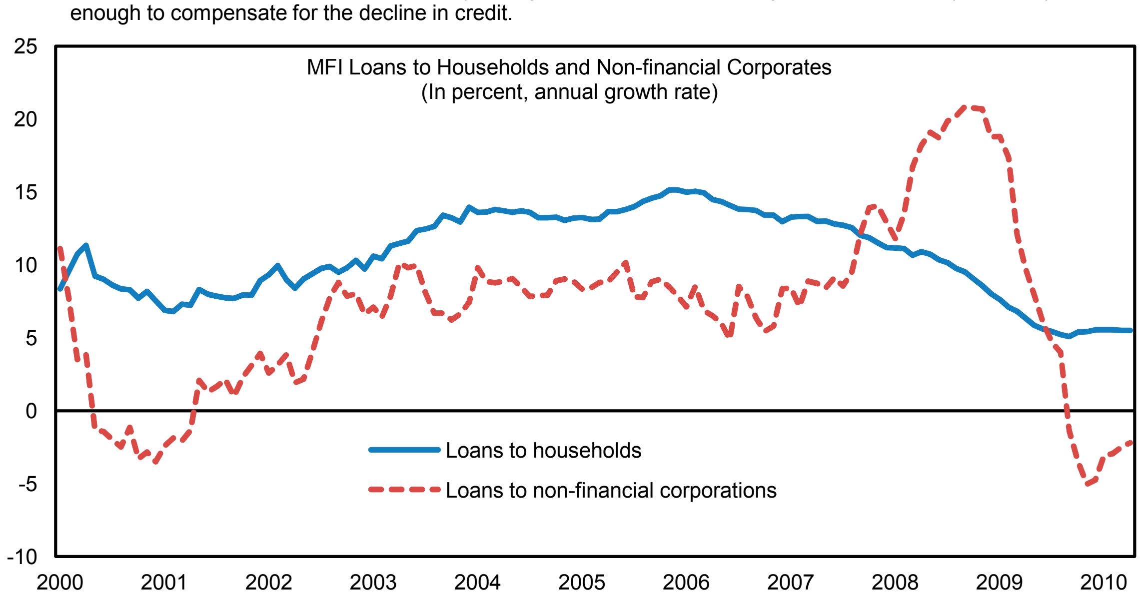

Source: Dealogic.

# Figure 6. Finland: Bonds Outstanding by Sector of Issuance and Growth in Loans to Households and Nonfinancial Corporations

The total stock of bonds has been growing since mid 2008, driven mostly by central government and the financial sector issuances . Meanwhile , the stock of bonds issued by the non-financial sector has been practically constant during the last decade.The spike in gross issuance during 2009 increased the total stock, although half of the issuance was for refinancing of older debt.

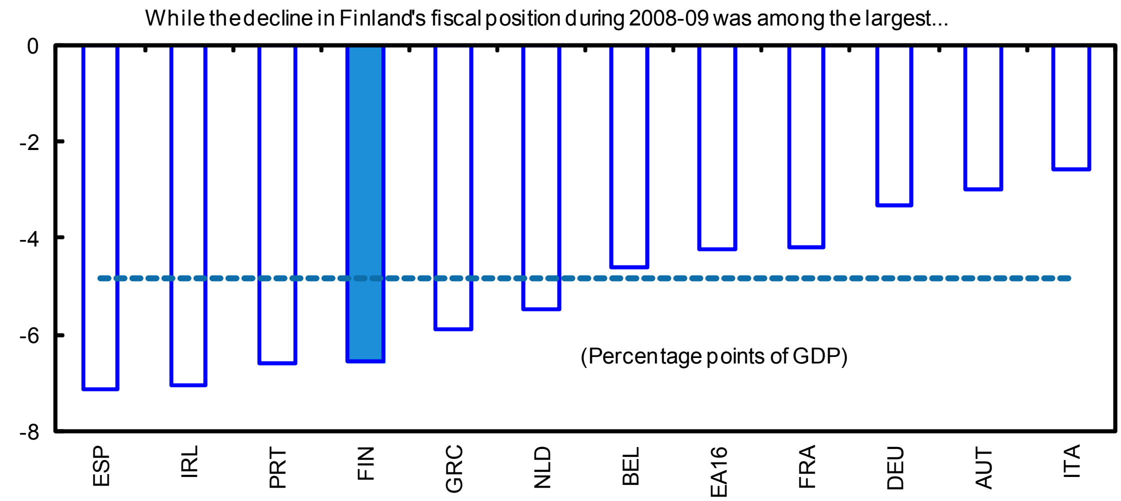


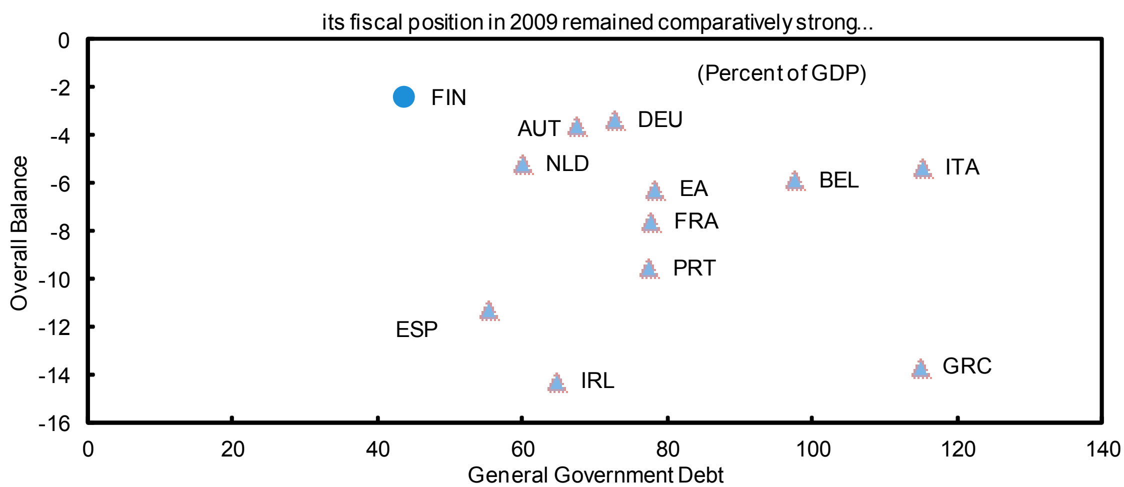

Bond financing represents approximately 7% of the credit financing for non-financial corporations. While loans to this sector have decreased considerably during the crisis, bond financing has increased only modestly, not enough to compensate for the decline in credit.

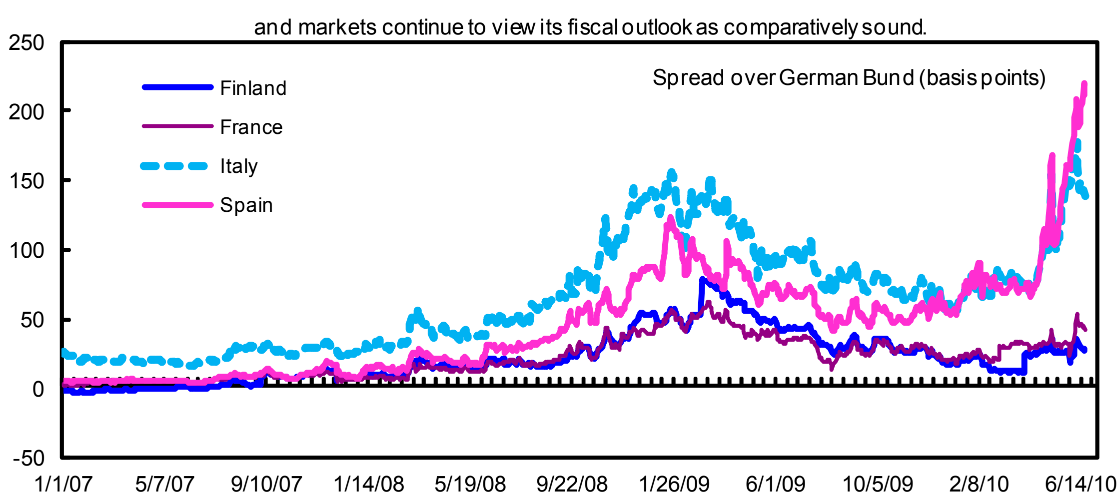



Source: Statistics Finland, and Bank of Finland.

Figure 7. Finland: Fiscal Developments and International Comparison



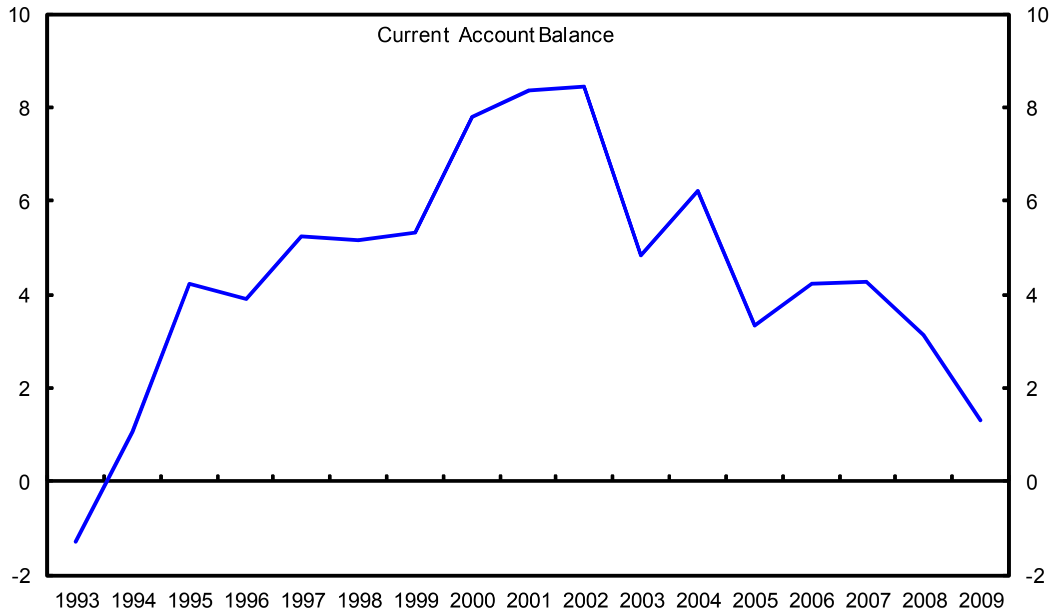



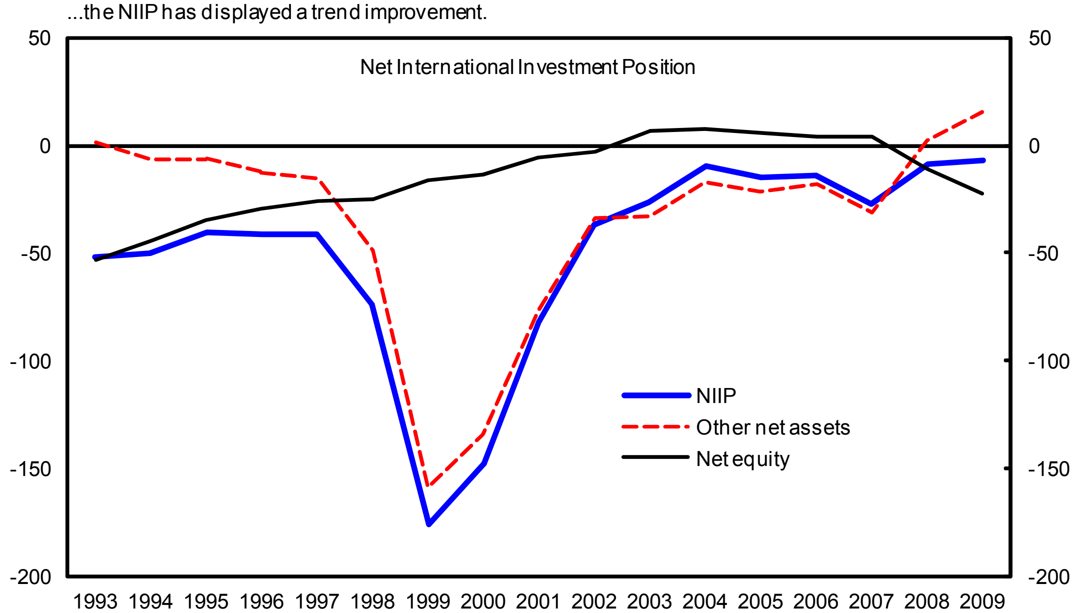

Sources: Thomson Financial/DataStream and WEO.

Figure 8. Finland: Current Account and Net International Investment Position, 1999–2009
(In percent of GDP)

While the current account surplus has declined from its ITC-boom peak...

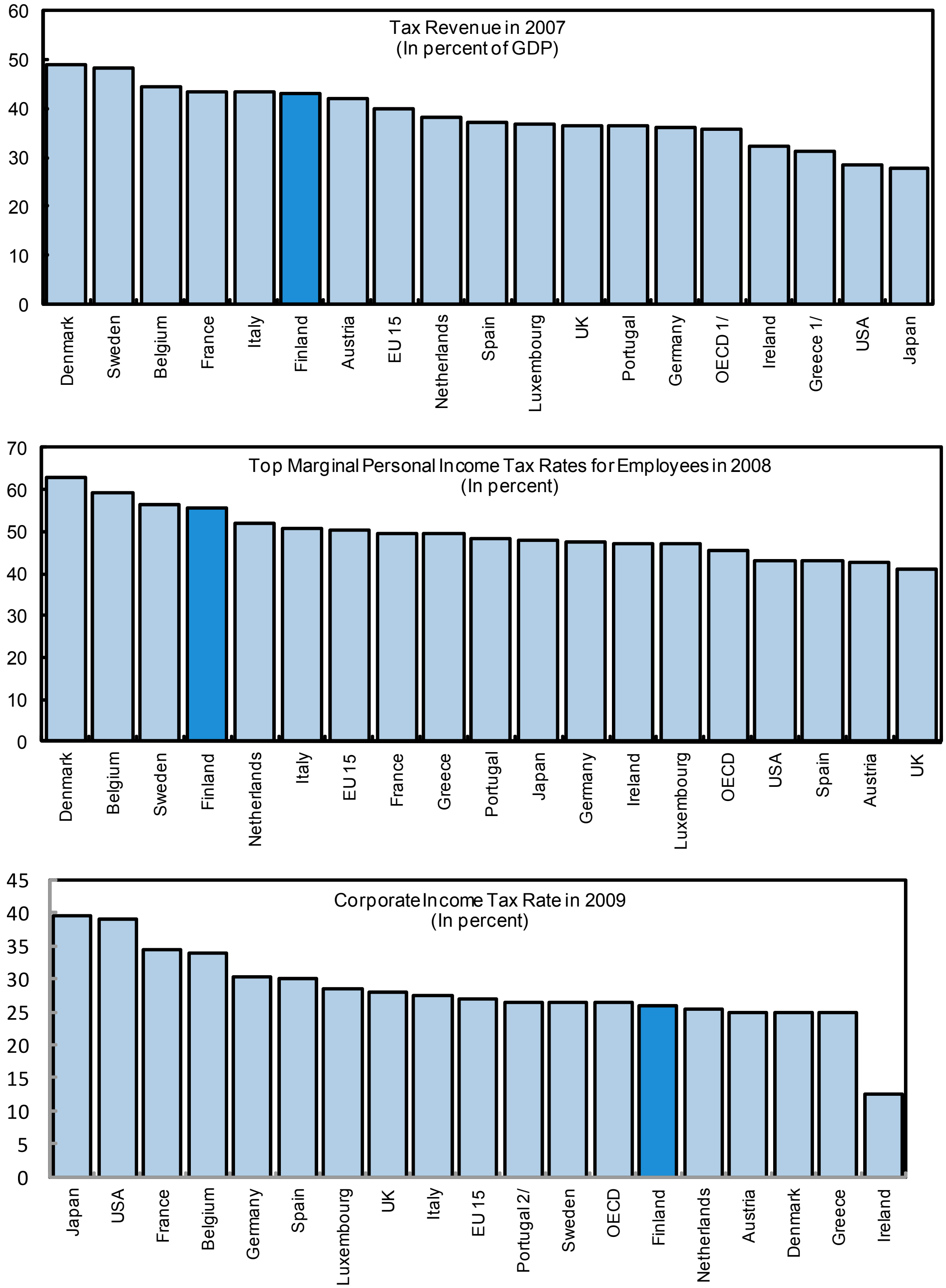



...the NIIP has displayed a trend improvement.




Sources: Bank of Finland; Statistics Finland.

Figure 9. Finland: Tax Comparisons



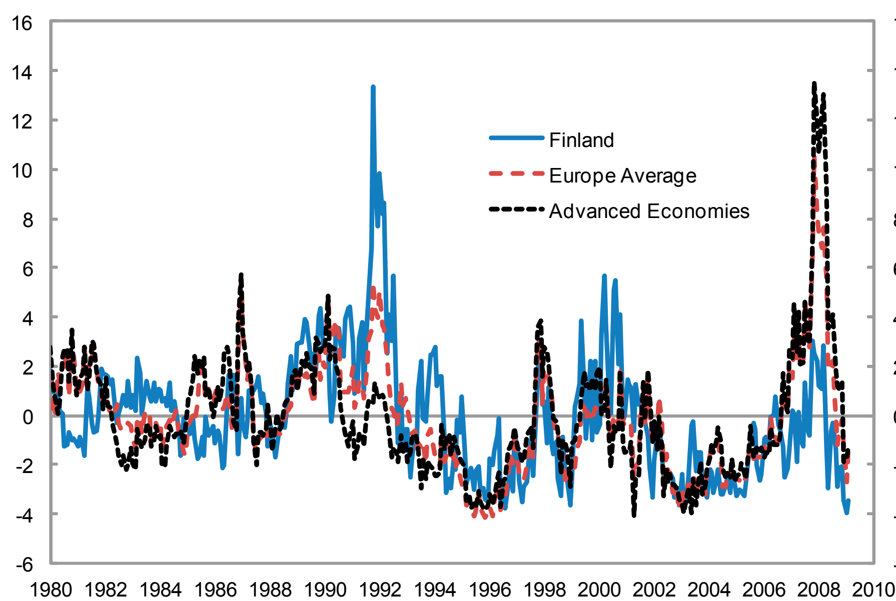

Source: OECD.
1/ 2006 data.
2/ 2008 data.

## ANALYTICAL NOTE 1: MACRO-FINANCIAL LINKAGES[1]

1. **As the worst of the global crisis unwinds, there is mounting evidence that the Finnish financial sector has acceptably weathered the turmoil**. Moreover, the data are already showing an incipient improvement in the health of that sector.

2. **The financial system has showed its resilience during the crisis and there is no evidence that is currently suffering major distress**. We analyze the evolution of an index of financial distress constructed using several variables related to the banking, financial and exchange rate markets (Figure 1-1).[2] After peaking during the crisis, the index decreased rapidly, reflecting an important improvement in financial conditions. Furthermore, not only the peak has been much lower than observed in previous crises, but the recovery has also been much faster. Currently the index exhibits values last observed during the calmer period of 2004–05. Additionally, the Finnish financial system has suffered less distress than the group of advanced economies, and particularly European countries.

Figure 1-1. Financial Stress Index (FSI)




Source: IMF staff calculations.

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[1] Prepared by Mauro Roca.

[2] More specifically, the Financial Stress Index (FSI) is a composite of the spread between commercial paper and sovereign bonds, the beta of the banking sector, the term structure of interest rates, and volatilities in stock returns and the exchange rate. Larger values of this index indicate increasing distress, while a value of zero implies neutral financial conditions. For more information about its construction and interpretation please see Cardarelli et al. (2009) and Balakrishnan et al. (2009).

3. **In contrast with other advanced countries, the financial sector has not been the cause of the slowdown but rather it has suffered from the adverse business cycle**. Nevertheless, to evaluate properly the role of the financial sector in shock transmission, and identify the major risks to which it is exposed, it is crucial to analyze the macro-financial linkages. We evaluate them with the help of different econometric techniques. First, we construct a financial conditions index using a vector autoregression approach (VAR). This analysis allows identifying the responses of economic activity to different variables related to the financial sector. Second, we analyze the existence of potential disequilibrium in the credit market. Finally, we test the importance of the credit channel for economic growth.[3]

## A. Financial Conditions

4. **We rely on VAR analysis to construct and index of financial conditions (FCI) that captures the interrelations between economic activity and some financial variables**. Among the latter we use equity returns, the short-term interest rate (HELIBOR), the real exchange rate, and banks' distance to default[4]. The index is a composite of the cumulative impulse responses of real GDP to each of the financial variables. A positive value of the index implies that the aggregate effect of all variables is an increment in economic growth. Additionally, the individual impulse responses are standardized so that a change of one unit in the index can be interpreted as an (annualized) change of 1 percent in growth.

5. **The evolution of the FCI shows a strong recovery in financial conditions since the peak of the crisis**. After reaching a negative value of -0.91 during Q4 2008, the index has raised rapidly to reach a neutral value close to 0 during Q3 2009 (Figure 1-2). However, the index must stay into positive territory for some periods before the negative cumulative effects stemming from the crisis are completely compensated.

6. **During 2009, the main contribution to growth has come from the positive impulse of monetary policy**. The low level of interest rates have more than compensated the considerable negative effects coming from the banking and external sectors, and to lesser degree, from the stock market. It is important to notice the increase of the negative contribution to growth coming from the banking sector during 2009. It has now approached levels comparable to those observed in the early 90's. This could constitute a relevant source of downside risk for the on-going recovery as the slowdown in economic activity and low levels of interest rates continue to adversely affect the profitability of the banking sector.

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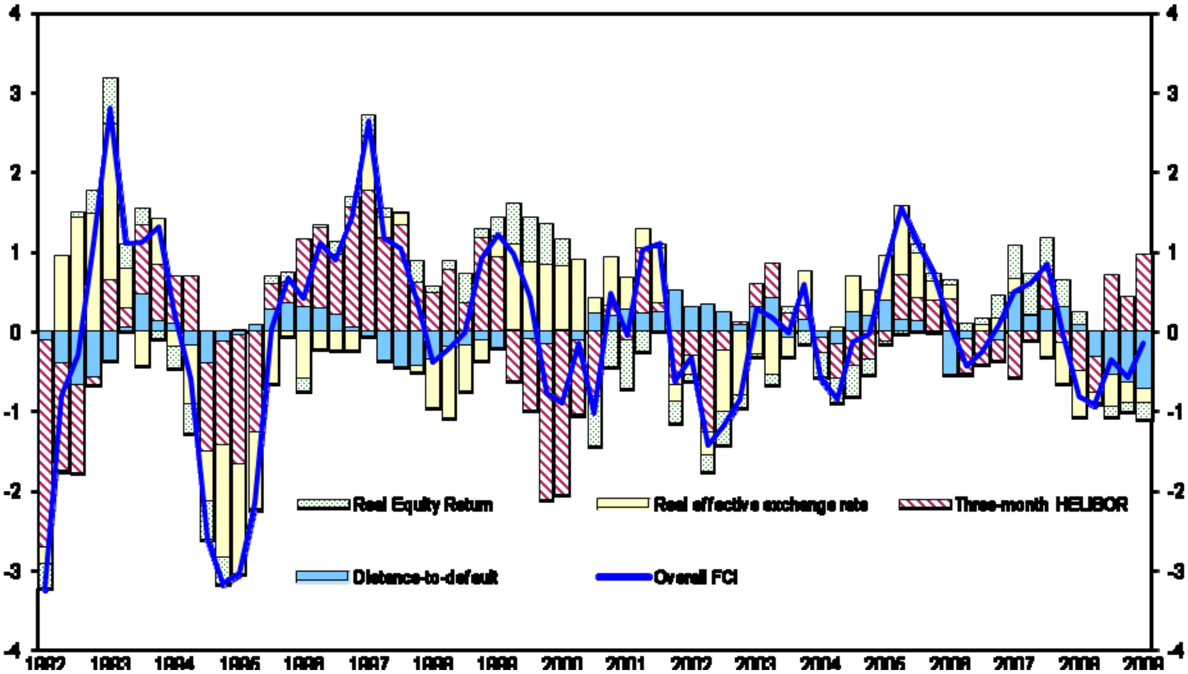
[3] Similar analyses have previously been conducted by Jafarov (2008) for Finland, and Igan (2009) for The Netherlands.

[4] This measure is computed by the Bank of Finland based on share market and balance sheet data.

Figure 1-2: Financial Conditions Index (FCI)




Source: Bank of Finland, IMF staff calculations.

## B. Imbalances in the Credit Market

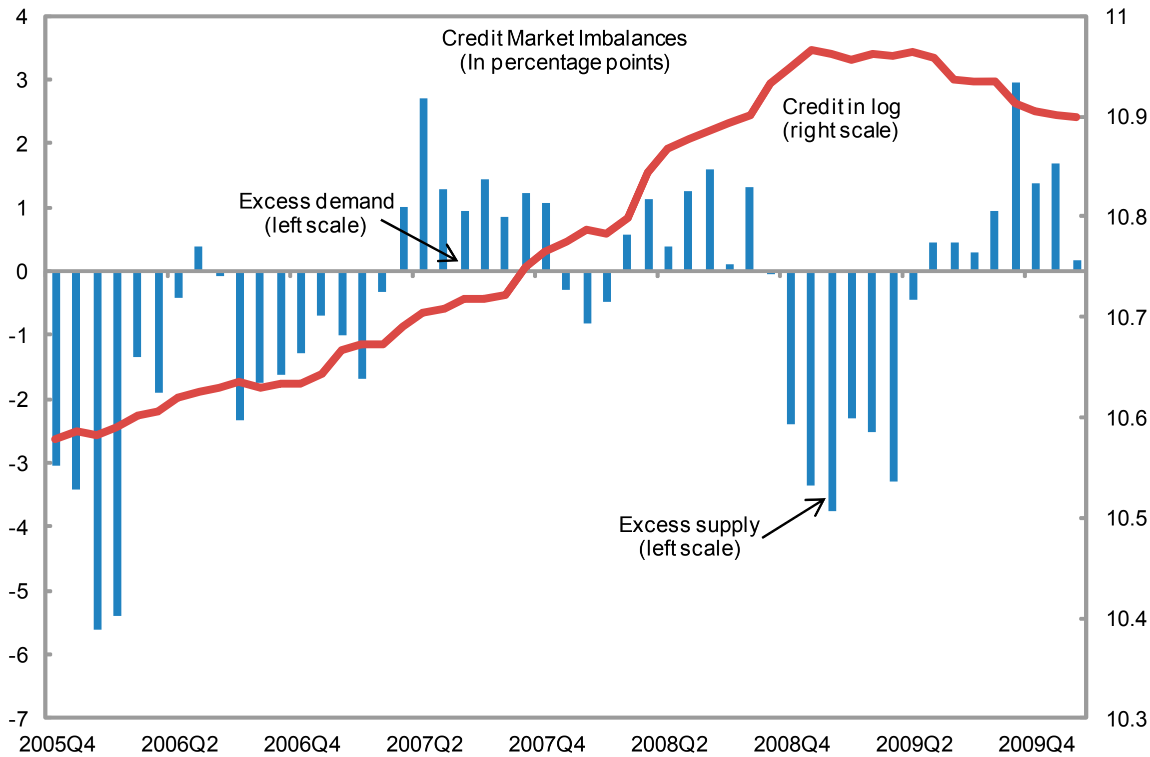
7. **To have a better assessment of the situation faced by the banking sector, the functioning of the credit market should be analyzed**. Particularly, it is important to evaluate if there is some disequilibrium in that market, determined by rationing either on the supply side (credit crunch) or the demand side (credit contraction). The origin of the rationing is relevant to guide policy. A credit crunch would indicate a bottleneck in the origination of credit, either because or deleveraging or insufficient capital, and would require a direct support to financial intermediaries. A credit contraction reflects insufficient appetite for credit, possibly depending on bleak economic prospects, and as consequence policies should be directed to improve those prospects.

8. **We estimate a system of equations for the supply of and the demand for credit to the private sector using monthly data spanning through the last five years**.[5] The demand for credit is explained by the (average) lending rate, inflation, industrial production (as a proxy for economic activity) and (an index of) economic confidence. The supply of credit is determined by total deposits (reflecting available resources), the lending rate (which reflects the profitability of the banking sector), the spread between the lending rate and the short-term funding rate (to account for cyclical risk premium), the banking sector share price relative to the market average (as a proxy for the market assessment of the expected profitability of the

[5] Our analysis is based on Pazarbasioglu (1997).

banking sector) and the volatility of this latter variable (to account for idiosyncratic risks affecting the banking sector), inflation, and industrial production.

Figure 1-3. Excess Demand and Supply in the Credit Market




Source: IMF staff calculations.

9. **The results show that the crisis had an important effect in the imbalances of the credit market (Figure 1-3)**. In the two-year period that preceded the global financial crisis, the stock of credit was growing continuously on the back of a strong demand, and the market imbalances were relatively small (generally there was a credit crunch of less than 2 percent of total credit). However, the financial crisis changed this dynamic. After peaking in Q3 2008, the stock of credit entered a decreasing path that was only reverted in Q1 2010. The change in trend was associated with a noticeable credit contraction, which confirms that the banking sector was indirectly affected by the global financial crisis and the economic contraction instead of being a cause of it. Finally, during the second part of 2009 the market returned to a credit crunch situation that peaked on September 2009 but practically disappeared by the end of last year. This could have been driven in part by the policies adopted as a reaction to the crisis that were aimed to help the real sector economy and it is also consistent with our findings in Section 2 about the positive effects of expansive monetary policy on financial conditions. In fact, the excess demand could have been explained by the contraction in credit amidst the improvement in economic confidence and the tightening in credit standards.

## C. Credit Channel

10. **It is important to assess the strength of the relationship between credit to the private sector and economic growth**. We perform two type of analysis to analyze this relationship. First, we estimate a simple VAR model to account for the short run or relatively immediate effects of credit, and second, we perform a Vector Error Correction analysis to identify a long run relationship between economic activity and credit.

11. **The VAR estimation does not point to a significant credit channel operating in the short run**. In the VAR analysis, GDP, investment or private consumption growth are explained by changes in credit growth and lags of those variables (all variables in real terms). We use employment and foreign demand as controls for different effects. Using quarterly data spanning from Q4 1998 to Q3 2009, we find that the estimated coefficients on credit are not significant in all specifications (Table 1-1).

12. **The VEC analysis does not show an important long term relationship either**. Using the same variables, we do not identify a long-run stable relationship between investment or GDP growth and credit. Moreover, we find that these variables are mainly associated with the evolution of employment and foreign demand. We do detect a positive relationship between private consumption and credit but it could be argued that it is relatively weak (Table 1-2).[6]

13. **Therefore, the empirical evidence does not support a significant relationship between credit to the private sector and economic growth**. These results are consistent with our previous analysis in which we find that the banking sector is suffering from the indirect effects of the economic slowdown instead of being an important cause of the economic contraction. Moreover, taking the results at face value, we can infer that the mild credit crunch observed in the last couple of quarters should have only small effects on economic growth.

14. **However, these econometric results should not be interpreted as ruling out every potential credit channel effect**. In fact, Freystatter (2010) estimates a theoretical general equilibrium model of the Finnish economy and find a positive relationship between external credit and GDP.[7] Their model assumes a financial friction in terms of an external finance

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[6] While the estimated individual coefficient is significant and shows an elasticity close to 0.25, the cointegration relationship is not significant at 5 percent.

[7] The difference with our pure econometric analysis is that the later imposes more restrictions on the estimated coefficients. These restrictions come from the assumed relationship between the variables of the theoretical model. This approach increases the risk of misspecification (that the model does not depict appropriately the economy that is trying to explain), but it could help with identification (the restrictions may help to estimate the relevant coefficients). In other words, the restrictions could help to identify the coefficients but at the risk of

(continued)

premium that entrepreneurs must paid in order to fund their investments. Additionally, this premium is determined by the amount of leverage of these entrepreneurs. As in many other studies using this kind of assumption, they find that changes in financial asset valuation affect entrepreneurs' net worth, causing sizable and protracted declines in investment and output via endogenous increases in the external premium paid by firms.

## D. Conclusions

15. **The Finland financial sector has successfully endured the indirect effects emerging from the recent global financial crisis and the decline in economic growth**. The sector does not show major signs of distress. Moreover, financial conditions overall are now contributing to the economy recovery.

16. **The global financial crisis had important effects in the private credit market**. The contraction in economic activity resulted in an important credit contraction. But policy measures taken to counteract the effects of the crisis and more attractive prospects had stabilized the credit to the private sector. Moreover, the imbalances in the credit market created by the global financial crisis have also disappeared.

17. **The credit market does not seem to constitute an important threat to the incipient economic recovery**. Not only because the announcement of policy actions affecting the banking sector may already be helping its recovery but also because the credit channel does not appear to be very significant. Nevertheless the health of the banking sector should be carefully monitored given an environment of weak economic growth with high unemployment and low interest margins.

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increasing the bias in the estimation if the assumptions of the model are not completely suitable for the Finnish economy.

Table 1-1. Impact of Credit on Economic Activity–VAR

| | Investment | Consumption | GDP |
|---|---|---|---|
| Credit, lag | -0.0423 | 0.0799 | -0.0836 |
| | -0.072 | -0.0757 | -0.07 |
| | [-0.5873] | [1.0558] | [-1.1929] |
| Credit, lag twice | 0.0325 | -0.1003 | -0.0504 |
| | -0.0714 | -0.083 | -0.0848 |
| | [ 0.4545] | [-1.2080] | [-0.5939] |
| Investment, lag | -0.1004 | | |
| | -0.1832 | | |
| | [-0.5478] | | |
| Investment, lag twice | -0.1102 | | |
| | -0.1904 | | |
| | [-0.5791] | | |
| Consumption, lag | | 0.0797 | |
| | | -0.1917 | |
| | | [ 0.4158] | |
| Consumption, lag twice | | 1.0695 | |
| | | -0.1634 | |
| | | [ 6.5441] | |
| GDP, lag | | | 1.4403 |
| | | | -0.1706 |
| | | | [ 8.4444] |
| GDP, lag twice | | | 0.206 |
| | | | -0.2922 |
| | | | [ 0.7051] |
| Employment, lag | 10.2435 | 9.2369 | -1.2677 |
| | -2.2263 | -1.7213 | -1.4427 |
| | [ 4.6011] | [ 5.3664] | [-0.8787] |
| Employment, lag twice | -6.1533 | -6.7266 | 0.2218 |
| | -2.2604 | -1.3823 | -1.4993 |
| | [-2.7222] | [-4.8664] | [ 0.1479] |
| Foreign demand, lag | 0.0088 | -0.0739 | -0.2637 |
| | -0.0678 | -0.0994 | -0.1061 |
| | [ 0.1294] | [-0.7440] | [-2.4860] |
| Foreign demand, lag twice | 0.341 | -0.0969 | -0.2178 |
| | -0.0913 | -0.1131 | -0.1039 |
| | [ 3.7357] | [-0.8568] | [-2.0965] |
| Adj. R-squared | 0.845 | 0.9597 | 0.9828 |

Note: Standard errors are in ( ), t-statistics are in [ ].
Source: IMF staff calculations.

Table 1-2. Impact of Credit on Economic Activity - VEC

| | Coefficient | Standard Error | T statistics | |
|---|---|---|---|---|
| **Cointegrating Equation Investment** | | | | |
| Investment | 1.000 | | | |
| Credit | -0.121 | -0.147 | -0.825 | |
| Foreign demand | 4.53 | -0.822 | 5.51 | |
| Employment | -131.332 | -36.192 | -3.629 | |
| Constant | 242950 | | | |
| *Johansen tests* | | | | |
| | Max rank | Trace | 5% critical | |
| | 0 | 84.168** | 47.856 | |
| | 1 | 32.195** | 29.797 | |
| | 2 | 9.876 | 15.495 | |
| | 3 | 0.904 | 3.841 | |
| *Unit Root test on cointegrating equation residual* | | | | |
| | Test statistics | 1% critical | 5% critical | 10% critical |
| *Augmented Dickey-Fuller* | | | | |
| | -7.904 | -3.606 | -2.937 | -2.607 |
| *Phillips-Perron* | | | | |
| | -7.95 | -3.606 | -2.937 | -2.607 |
| **Cointegrating Equation Private Consumption** | | | | |
| Private consumption | 1.000 | | | |
| Credit | -0.244 | -0.028 | -8.774 | |
| Foreign demand | -1.263 | -0.164 | -7.719 | |
| Employment | 40.272 | -6.92 | 5.82 | |
| Constant | -87515 | | | |
| *Johansen tests* | | | | |
| | Max rank | Trace | 5% critical | |
| | 0 | 55.978** | 47.856 | |
| | 1 | 26.828* | 29.797 | |
| | 2 | 8.793 | 15.495 | |
| | 3 | 0.118 | 3.841 | |
| *Unit Root test on cointegrating equation residual* | | | | |
| | Test statistics | 1% critical | 5% critical | 10% critical |
| *Augmented Dickey-Fuller* | | | | |
| | -5.873 | -3.606 | -2.937 | -2.607 |
| *Phillips-Perron* | | | | |
| | -5.895 | -3.606 | -2.937 | -2.607 |
| **Cointegrating Equation Real GDP** | | | | |
| GDP | 1 | | | |
| Credit | -0.241 | -0.163 | -1.479 | |
| Foreign demand | 4.618 | -0.938 | 4.921 | |
| Employment | -165.085 | -40.533 | -4.073 | |
| Constant | 297298 | | | |
| *Johansen tests* | | | | |
| | Max rank | Trace | 5% critical | |
| | 0 | 63.223** | 47.856 | |
| | 1 | 32.657** | 29.797 | |
| | 2 | 10.74 | 15.495 | |
| | 3 | 1.627 | 3.841 | |
| *Unit Root test on cointegrating equation residual* | | | | |
| | Test statistics | 1% critical | 5% critical | 10% critical |
| *Augmented Dickey-Fuller* | | | | |
| | -6.511 | -3.606 | -2.937 | -2.607 |
| *Phillips-Perron* | | | | |
| | -6.565 | -3.606 | -2.937 | -2.607 |

*Estimated rank at the 10 percent critical value.
** Estimated rank at the 5 percent critical value.
Note: The p-value of the trace statistics at rank 1 is 0.1059.
Source: IMF staff calculations.

## References

Balakrishnan, Ravi, Selim Elekdag, Stephan Danninger, & Irina Tytell, 2009, "The Transmission of Financial Stress from Advanced to Emerging Economies," IMF Working Paper 09/133, (Washington: International Monetary Fund).

Cardarelli, Roberto, Selim Elekdag & Subir Lall, 2009, "Financial Stress, Downturns, and Recoveries," IMF Working Paper 09/100, (Washington: International Monetary Fund).

Freystatter, 2010, "Financial Market Disturbances as Sources of Business Cycle Fluctuations in Finland," Bank of Finland Research, Discussion Papers No. 5/2010.

Jafarov, Etibar, 2009, "Financial-Real Sector Linkages in Finland," in Finland: 2008 Article IV Consultation IMF Country Report No. 09/39, (Washington: International Monetary Fund).

Igan, Deniz, 2009, "Macro-Financial Linkages in the Netherlands," in Netherland: 2009 Article IV Consultation IMF Country Report No. 10/34, (Washington: International Monetary Fund).

Pazarbasiouglu, Ceyla, 1997, "A Credit Crunch? Finland in the Aftermath of the Banking Crisis," IMF Staff Papers No. 44, pp. 315–327, (Washington: International Monetary Fund).

## ANALYTICAL NOTE 2: INTERNATIONAL TRADE AND FINANCIAL SPILLOVERS[1]

1. **The trade linkages have constituted one of the main channels of contagion through which the global financial crisis has impacted the Finnish economy**. During 2009, total trade has decreased approximately by one third in comparison with the previous year (Table 2-1). The relative openness of the Finish economy and the concentration of trade in a few European partners make the external sector a source of vulnerability. The halving of exports to Russia, one of the principal trading partners, is an example of these risks. Moreover, the relatively small exposure to the main emerging market economies could imply that the Finnish economy will benefit little from their already observed recovery.

Table 2-1. Trade by regions and countries - 2009

| | Balance | Imports | | | Exports | | |
|---|---|---|---|---|---|---|---|
| Origin/Destination* | mm EUR | Value mm EUR | Share % | Change % | Value mm EUR | Share % | Change % |
| Total | 1,646 | 43,250 | 100 | -31 | 44,897 | 100 | -32 |
| Europe | -1,400 | 33,283 | 77 | -30 | 31,883 | 71 | -34 |
| Germany | -1,688 | 6,313 | 14.6 | -28 | 4,625 | 10.3 | -30 |
| France | -292 | 1,945 | 4.5 | -8 | 1,653 | 3.7 | -28 |
| United Kingdom | 900 | 1,449 | 3.4 | -44 | 2,349 | 5.2 | -35 |
| Netherlands | 648 | 1,977 | 4.6 | -24 | 2,625 | 5.8 | -22 |
| Russia | -2,982 | 7,026 | 16.2 | -31 | 4,044 | 9 | -47 |
| Sweden | 99 | 4,306 | 10 | -32 | 4,405 | 9.8 | -33 |
| America | 2,393 | 2,809 | 6.4 | -33 | 5,202 | 11.7 | -16 |
| United States of America | 1,996 | 1,486 | 3.4 | -20 | 3,482 | 7.8 | -16 |
| Asia | -1,374 | 6,518 | 15.1 | -32 | 5,143 | 11.5 | -19 |
| China | -1,580 | 3,434 | 7.9 | -21 | 1,854 | 4.1 | -10 |
| Middle East, Africa and Oceania | 2,028 | 641 | 1.5 | -53 | 2,669 | 5.9 | -42 |

Source: National Board of Customs, Finland.
*Imports by countries of origin, exports by countries of destination

2. **International financial exposures are also important with respect to some European countries but they pose negligible risks for the Finnish economy**. Most of the claims of Finnish bank are concentrated in the main Western European countries (Table 2). However, the claims are considerably diversified, diminishing the risks stemming from a localized financial event. In fact, the US constitutes the highest individual exposure with less than 5 percent of total claims abroad. We conduct a network analysis to simulate the direct and indirect effects of a financial event (default) abroad on the Finnish banking sector. In general, we find small effects owing to defaults in any of the relevant individual countries with the exception of the US (Table 2-3). However, even in this case the effects are not sizable unless we assume a rather extreme scenario of a 25 percent average default rate in all

[1] Prepared by Mauro Roca.

private claims. A more pessimistic, and less probable, scenario of a 10 percent default rate across Europe, US and Japan could reduce credit availability by approximately one third and produce losses of up to 5 percent of GDP.

Table 2-2. Finnish Banks Claims Abroad
(As of end June 2009)

| | USD Billion | Share (%) |
|---|---|---|
| All countries | 125.3 | 100 |
| Western Europe | 91.1 | 72.7 |
| Eastern Europe | 17.2 | 13.7 |
| Germany | 2.6 | 2 |
| France | 1.6 | 1.3 |
| Netherlands | 1.4 | 1.1 |
| United States | 4.6 | 3.7 |
| Japan | 0.1 | 0.1 |

Source: BIS.

Table 2-3. Spillovers to Finland from International Banking Exposures

| Shock Originating From | Magnitude 1/ | Deleveraging Need 2/ (%) | Finnish Lenders' Losses (%/GDP) | Impact on Credit Availability (%) |
|---|---|---|---|---|
| Europe 3/ | 10 | 35.4 | 3.8 | -28.7 |
| Europe and US | 10 | 57.7 | 5 | -37.6 |
| Europe, US and Japan | 10 | 58.6 | 5 | -37.9 |
| Germany | 10 | 0 | 0.1 | 0 |
| | 25 | 0 | 0.3 | -1.2 |
| France | 10 | 0 | 0.1 | 0 |
| | 25 | 0 | 0.3 | -0.7 |
| UK | 10 | 0 | 0.2 | -1.2 |
| | 25 | 0 | 1.1 | -7.4 |
| Netherlands | 10 | 0 | 0.1 | 0 |
| | 25 | 0 | 0.2 | -0.6 |
| US | 10 | 0 | 0.8 | -3.2 |
| | 25 | 35 | 3.8 | -20.4 |
| Japan | 10 | 0 | 0 | 0 |
| | 25 | 0 | 0 | 0 |

Source: Staff calculations based on BIS and IFS data.
1/ Magnitude denotes the percent of claims that default.
2/ Deleveraging need is the amount that needs to be raised through assets sales in response to the shock in order to meet the minimum capital requirement, expressed in percent of total assets.
3/ Europe includes Austria, Belgium, Denmark, France, Germany, Greece, Italy, Netherlands, Portugal, Spain, Sweden, Switzerland, Turkey, and United Kingdom.

3. **We reach similar conclusions analyzing the foreign claims in Finnish banks. However, in this case the risks are more concentrate in some financial partners**. Total foreign claims in Finnish banks are almost equally divided between purely international claims and local currency positions of reporting banks' foreign offices (Table 2-4). Both the diversification and the profile of the claims do not flag to any serious vulnerability for the Finnish banks. Half of international claims have long term maturities (greater than one year). However, the claims originate in a few European countries (for instance, Sweden is associated with almost 50 percent of these claims). Hence, these countries are greatly exposed to financial events originating in Finland. Conducting a network analysis, we simulate the direct and indirect effects in these economies of a 5 percent default in private claims in Finland. Not surprisingly, Sweden appears as the country suffering the biggest effects (up to 1.5 percent of GDP), followed by Denmark (with approximately 0.5 percent of GDP), and then by United Kingdom, Netherlands, Germany and Switzerland (with less than 0.5 percent of GDP) (Figure 2-1).

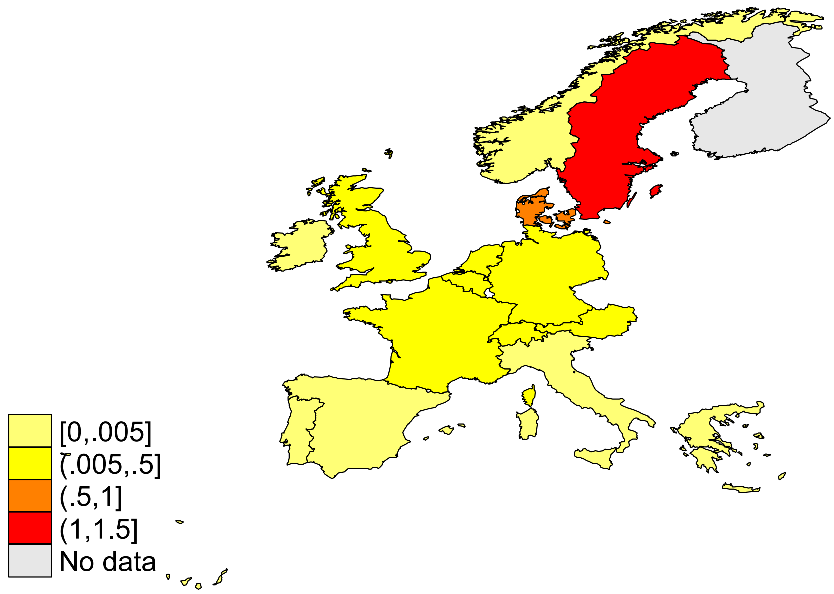
Table 2-4. Finnish Banks Claims Abroad - Immediate Borrower Basis
(As of end December 2009)

| | US$ Billion | Share |
|---|---|---|
| Total foreign claims | 217.60 | 100.00% |
| Total international claims | 96.11 | 44.17% |
| By maturity | | |
| Up to and including one year | 35.60 | 16.36% |
| Over one year up to two years | 7.00 | 3.22% |
| Over two years | 36.30 | 16.68% |
| By sectors | | |
| Bank | 23.93 | 11.00% |
| Public sector | 23.19 | 10.66% |
| Non-bank private sector | 48.26 | 22.18% |
| Local currency positions of reporting banks' foreign offices with local residents | | |
| Claims | 121.49 | 55.83% |
| Liabilities | 87.15 | 40.05% |
| Net risk transfers | -0.25 | |
| Total foreign claims on an ultimate risk basis | 217.35 | |

Source: BIS.

Note: International claims are also "cross border claims in all currencies and local claims in non-local currencies".

Figure 2-1. Lenders' Losses due to Finnish Default, in percent of GDP
5 percent default scenario



## ANALYTICAL NOTE 3: THE CRISIS AND POTENTIAL OUTPUT IN FINLAND[1]

1. **An accurate assessment of potential output is particularly important (and particularly difficult) under the current circumstances**. In the near term it is fundamental for monetary and fiscal policy formulation; and in the long run it is key to assessing the sustainability of public finances and asset prices. The usual challenges to measuring unobservable potential output are exacerbated under the current circumstances of global recession, large output declines and higher-than-usual uncertainty about the outlook, but mis-measurement, resulting in policy mistakes, could prove very costly.

2. **The crisis could impact supply potential through declines in labor, capital and total factor productivity (TFP)**.

- Rising unemployment could lead to a pause or even reversal of recent trend declines in the NAIRU, and participation rates may decline with discouraged worker effects or use of early retirement options.

- Capital accumulation will slow with the fall in investment and a higher rate of obsolescence amid economic restructuring and firm closures. Higher uncertainty and risk aversion in the aftermath of the global crisis could increase borrowing costs and credit constraints for an extended period, which would also dampen investment. In addition, higher public debt could put upward pressure on interest rates, and higher tax burdens in the future may reduce incentives to work and invest, which would both be a drag on growth.

- TFP growth had been declining prior to the crisis, possibly reflecting declining competitiveness as wages grew robustly in recent years. Reduced investment (including in intangibles and R&D), possible greater obsolescence of capital, and greater regulation following the crisis may also reduce the pace of innovation. On the other hand, firms also have stronger incentives to restructure and enhance efficiency.

3. **There may, however, be some offsetting effects on potential output**. As a response to the crisis, fiscal stimulus will cushion the slowdown and raise expenditure on infrastructure. Also, reduced wealth might induce greater labor market participation. In addition, the financial crisis might facilitate political consensus for potential-output-enhancing structural reforms—as happened following the last banking crisis in Finland

[1] Prepared by Daniel Kanda.

in 1990–93, where deep structural reforms stimulated strong potential growth that allowed some recovery of the loss in the level of potential output.[2]

4. **Recent studies point to a range of estimates of medium term potential output losses from the crisis**. An OECD study finds that the crisis is likely to reduce potential output by around 2–3 percent in the OECD. Studies by the European Commission and the IMF suggest potential output level losses of 2¼–6 percent for the euro area over the medium term.[3] In general, banking crises and crises with a global dimension and are found to have a severe impact on output.

Cumulative Reduction in Potential Output

| | By 2010 | Medium-Term |
|---|---|---|
| OECD (OECD, 2009) | 2 | 2.75 (by 2017) |
| Euro area (EC, 2009) | 2.6 | 3.7 (by 2013) |
| Euro area (IMF, 2009) | 2.2 | >6 (by 2015) |
| Finland | 4 | 7 (by 2015) |

Sources: OECD, EC, IMF Staff Estimates.

5. **In our baseline for Finland, potential growth in the medium term is lower than pre-crisis levels, but largely reflecting the unfolding adverse demographic change**. Investment and TFP growth are projected to return to close to pre-crisis levels, as restructuring ends and risk aversion declines. However, adverse demographics are projected to significantly constrain growth. The contribution of labor to potential growth is projected to rise from -¾ percent in 2010 to only to just above zero over the medium term—well below the average of ¾ percent for 2000–07—as the working age population is projected to shrink from 2010 onwards. However, the negative impact of shrinking working age population is assumed to be partly offset by higher participation rates as labor supply conditions tighten.

6. **Various staff estimates for Finland suggest that the level of potential output is falling considerably, somewhat more than the euro area**.

- We primarily employ the standard production function approach (PF) to estimate potential output (as favored by the US CBO, EC, and OECD), but also utilize the HP filter—probably the most commonly used smoothing method—for comparison. To address the well understood end-point problems associated with smoothing using the HP filter, we extend the series using our baseline forecast through 2015. The HP filter is sensitive to the smoothing parameter (λ) chosen, so we settle on the standard parameter for annual data (HP-100) and an alternative suggested by Ravn and Uhlig (HP-RU).

- The PF approach—which is the baseline projection—yields estimates of pre-crisis potential growth that are generally higher than those from the HP filter, which could

[2] See European Commission (2009): "Impact of the current economic and financial crisis on potential output," European Economy, Occasional Papers 49, June 2009

[3] See "Beyond the crisis: medium-term challenges relating to potential output, unemployment and fiscal position," chapter 4 of *OECD Economic Outlook*, OECD, 2009; and *World Economic Outlook,* IMF, October 2009.

be because the crisis (and low medium term growth forecast) is causing some backward revision in the HP filter estimates. Compared to staff's baseline, OECD pre-crisis estimates are higher, while, on the other hand, EC and Ministry of Finance pre-crisis estimates are lower. Estimates from the various methods and sources diverge for the forecast period 2009–11, and notably, OECD output gaps for 2009–11 are much larger than for the other methods, reflecting the sensitivity to assumptions on labor, capital and TFP; and differences in growth forecasts.

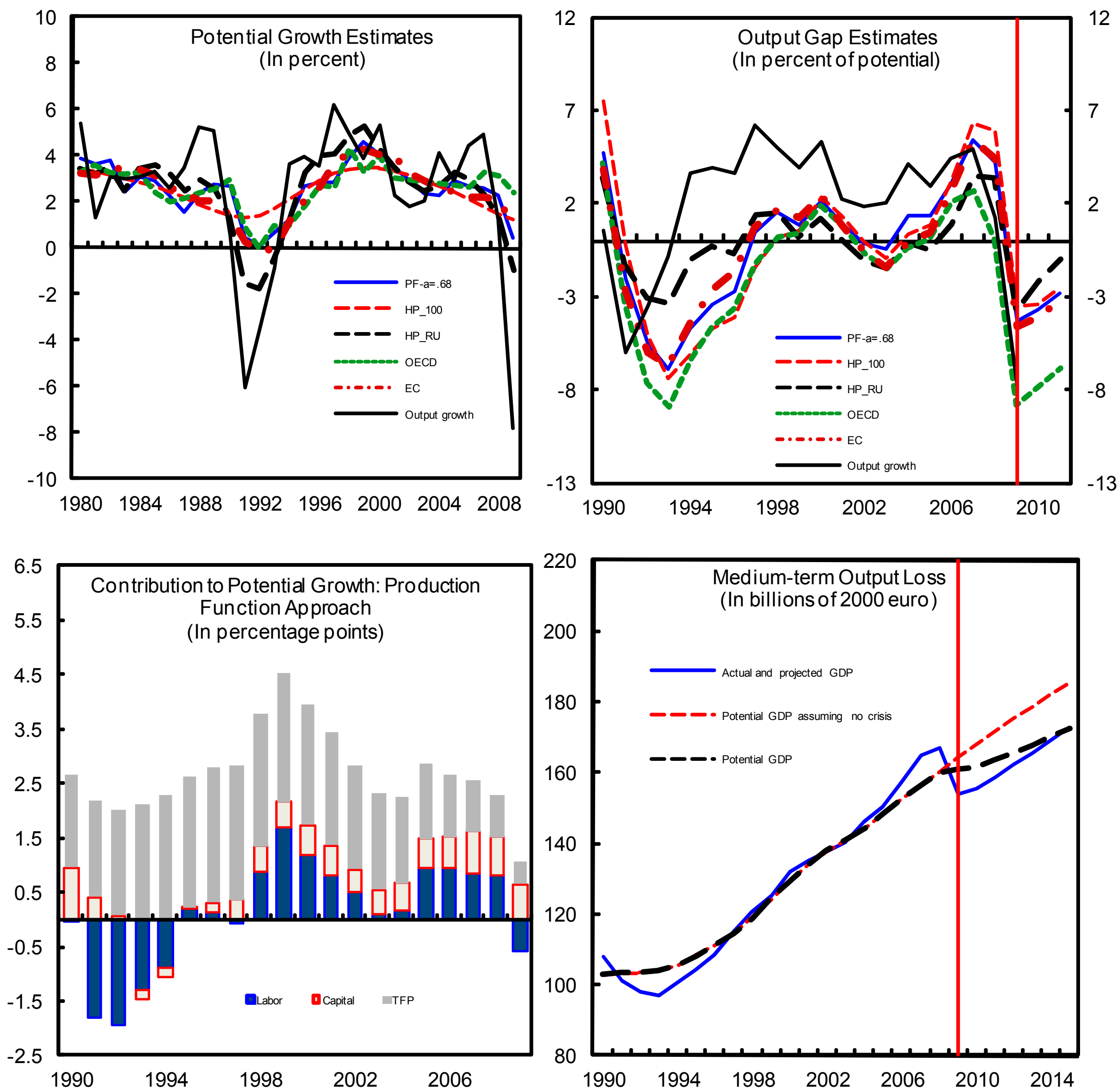
- Recent potential growth, pre-crisis, seems to be around 2½ percent. This is down from previous estimates of 3¼ percent (2008 Staff Report). Looking forward, our baseline forecast is that the crisis will reduce the overall level of potential output by around 7 percentage points (relative to what it would have been without a crisis) by 2015, and potential growth in 2015 is projected to be about ½ percentage point lower as a result of the crisis—though the gap is expected to close further beyond the medium term as TFP and investment further recover. These projections however depend critically on the assumptions about the future path of labor and capital inputs and TFP—all particularly uncertain—and thus are only indicative. There are both upside and downside risks to these projections. Structural unemployment could end up being higher than assumed here if future consolidation measures result in higher tax wedges. Deeper structural reforms could, on the other hand, stimulate more-rapid potential growth than in our forecast.

Table 3-1. Finland Potential Output and Output Gap Estimates
Growth (percent)

| | 1990-1995 | 1996-2001 | 2002-2007 | 2008-2011 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|
| Real GDP (actual/proj) | -0.4 | 4.4 | 3.4 | -0.8 | 4.4 | 4.9 | 1.2 | -7.8 | 1.2 | 2.0 |
| | | | | | Potential Growth (percent) | | | | | |
| Production Function | 1.3 | 3.6 | 2.6 | 1.1 | 2.7 | 2.6 | 2.3 | 0.5 | 0.6 | 1.2 |
| HP-100 | 2.6 | 3.3 | 2.5 | 1.3 | 2.1 | 1.8 | 1.5 | 1.3 | 1.1 | 1.1 |
| HP-RU | 0.4 | 4.2 | 2.8 | 0.3 | 2.6 | 1.8 | 0.7 | -0.2 | 0.0 | 0.6 |
| OECD (2009) | | | 2.9 | 1.8 | 2.7 | 3.2 | 3.1 | 2.4 | 0.6 | 1.2 |
| EC (2009) | 0.8 | 3.8 | 2.6 | 1.2 | 2.2 | 2.2 | 2.1 | 1.0 | 0.7 | 1.1 |
| Ministry of Finance | | | | 1.3 | 2.3 | 2.2 | 2.1 | 1.0 | 0.8 | 1.3 |
| | | | | | Output Gaps (percent of potential GDP) | | | | | |
| Production Function | | | | | 3.0 | 5.4 | 4.3 | -4.3 | -3.7 | -2.9 |
| HP-100 | | | | | 3.1 | 6.3 | 5.9 | -3.5 | -3.4 | -2.5 |
| HP-RU | | | | | 0.7 | 3.8 | 4.4 | -3.5 | -2.3 | -0.9 |
| OECD (2009) | | | | | 2.1 | 2.7 | 0.2 | -8.8 | -9.1 | -7.6 |
| EC (2009) | | | | | 2.6 | 5.4 | 4.5 | -4.6 | -4.4 | -3.1 |
| Ministry of Finance | | | | | 2.1 | 4.8 | 3.9 | -5.1 | -4.8 | -4.1 |

Sources: OECD, EC, and IMF staff calculations.

Figure 3-1. Finland: Potential Output, Output Gaps, and Output Losses



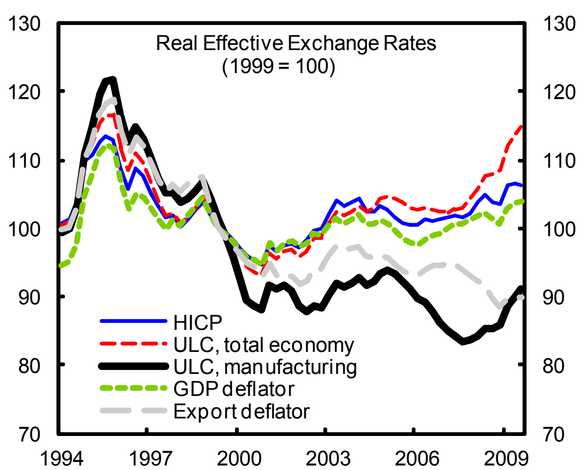

Sources: WEO, AMECO, and IMF staff estimates.

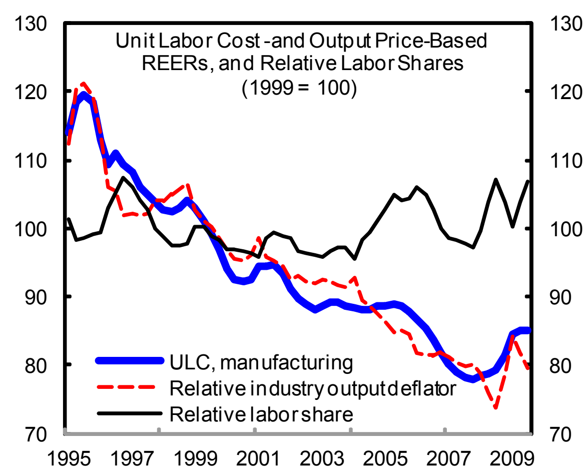
## Analytical Note 4: External Competitiveness [1]

1. **The large shock to international trade imparted by the global recession renders assessments of external competitive positions unusually problematic**. This problem is particularly acute for Finland, a small open economy that has greatly benefitted from globalization in recent decades and experienced one of the worst GDP declines in the EU last year. Moreover, the multi-year wage negotiations for 2007–10 were concluded at an economic peak. Although they appeared to raise wage/productivity differentials disproportionately in the nontradable sector, increased costs may have since spilled to tradables too, an effect compounded by the subsequent collapse of external commerce, which is likely to have reduced profitability.

2. **Various indicators suggest that a reduced competitiveness margin has been maintained, but faces challenges going forward**.

- ***Standard REER measures of external competitiveness are mixed, but generally point to some modest recent deterioration***. From the early 2000s, on average indicators have moved broadly sideways. Compared to 2007, though, economy-wide REER indicators suggest some decline in competitiveness, albeit "tradable-based" indices have deteriorated only marginally. Notably, ULC-based measures, both general and for tradables, have increased more than price-based ones, suggesting that profit margins may be under pressure.




Source: Eurostat.

- ***Exporter profitability has also worsened***. The ratio of ULC-based to price-based-REERs estimates changes in labor shares compared to trading partners as a profitability proxy. Both economy-wide and tradable relative labor shares have increased somewhat over the last five years. These measures should be interpreted

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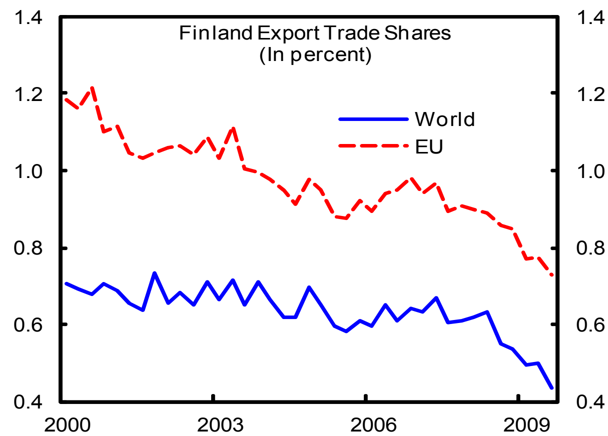
[1] Prepared by Mark Lutz and Mauro Roca.

with caution, though, owing to the generally lagged response in the labor bill (particularly with multi-year wage agreements) to the sharp fall in activity.

- ***Merchandise export market shares in both total world trade and in the EU have been trending downward over the last twenty years.*** This reflects in part a secular decline in export prices, especially for communications equipment and forestry/paper products, as well as increasing outsourcing of production to foreign markets. In contrast, a rising share to GDP from services exports points to a shift in Finland's comparative advantage to higher value-added activities. These trends have continued during the crisis.




Sources: IFS.

3. **The multilaterally-consistent CGER methodology[2], based on a panel sample of countries, show a sizable and increasing competitiveness margin for Finland, though it raises some methodological concerns**. The margin is estimated to lie in the range of 4.3 to 15.8 percent depending on which one of the three CGER methods is used. Notably, the large real undervaluation implied by the equilibrium real exchange approach is mainly driven by a relative increase in Finland's government consumption/GDP ratio, itself largely determined by the massive decline in nominal GDP in 2009. This factor causes the equilibrium REER to appreciate markedly in the CGER model, while the measured REER only appreciates marginally as noted above, thereby boosting the competitiveness margin. However, such a result is rather counterintuitive and conflicts with the prevailing trend detected by simpler indicators as noted above.

[2] For a thorough explanation of this methodology see Lee, Jaewoo et al., "Exchange Rate Assessments: CGER Methodologies," Occasional Paper No. 261, International Monetary Fund, April 2008.

Estimates of Competitiveness Margin Using CGER Methodologies 1/
(Level relative to equilibrium in percent; minus indicates undervalutation)

| Methodology | |
|---|---|
| Macroeconomic balance approach | -12.4 |
| External sustainability approach | -4.3 |
| Equilibrium real exchange rate approach | -15.8 |
| | |
| Memorandum items: | |
| Current account balance (percent of GDP) | |
| 2009 | 1.4 |
| 2015 | 1.9 |
| CA Norm 2/ | -1.0 |

Source: IMF staff estimates.
1/ CGER (Consultative Group on Exchange Rate Issues). Values between -10 and +10 mean the real exchange rate (RER) is close to balance. International Monetary Fund, 2008, "Exchange Rate Assessments: CGER Methodologies" (available at www.imf.org). CGER estimates based on data available in April 2010.
2/ Macroeconomic balance approach.

4. **The sustainable or structural CA ("norm") is estimated at -1 percent of GDP by the macroeconomic balance approach**. This is the current account level which can be sustained in the long run without affecting the domestic equilibrium. The result for Finland is mainly influenced by the dependency ratios (i.e. demographics), relative income, and past values of the CA. In contrast, the medium term CA is in surplus, exceeding somewhat the CA norm, but is expected to fall over the long run, reflecting the aging of the population, the associated unwinding of pension fund savings and the trend decline in the terms of trade. The competitiveness margin (15.8 percent) is given by the necessary adjustment in the real exchange rate to close this gap

5. **However, panel data results can be refined by including characteristics specific to the Finnish economy which reduce the undervaluation**. The panel data approach followed in the CGER methodology tries to identify structural characteristics that are common to the countries in the sample, giving consistency to the analysis. However, the panel results could understate some idiosyncratic characteristics of any individual country. In the case of Finland, the demographic aspect is an important factor affecting the CA norm and it differs with respect to most countries in the sample. When the panel results are re-estimated incorporating the demographic trends of all countries projected for additional 20 years (long-horizon dependency ratios), the CA Norm for Finland increases to a positive 0.25 percent of GDP, reducing the undervaluation to 7.5 percent.

6. **As a final robustness check, we re-estimate the CA norm consistent with the macroeconomic balance approach but following a time series analysis**. In this case, the CA norm increases to 0.6 percent of GDP, which implies an undervaluation of 6.2 percent. Note that this exercise, in discarding information about other countries, could be biased by the recent history of the Finnish economy, even when controlling for easily identifiable extraordinary events (financial crisis of early 90's). In other words, it does not take into account structural common characteristics which could help to better quantify the structural adjustment needed to close the external gap on the Finnish CA. However, it provides additional support to the conclusion that the undervaluation is smaller than envisioned by the standard macroeconomic balance approach.

## ANALYTICAL NOTE 5: LONG RUN FISCAL SUSTAINABILITY IN FINLAND[1]

1. **This note provides an updated assessment of fiscal sustainability in Finland**. The latest estimates of aging pressures from ECFIN are incorporated in the analysis, as well as the implications of the recent weakening in the fiscal position. We conclude that there has been a marked deterioration in fiscal sustainability, and the sustainability gap is much larger than previously estimated. Measures to help erase the sustainability gap are briefly discussed, as well as optimal fiscal consolidation paths.

### A. Recent Fiscal Developments and Outlook

2. **The fiscal position deteriorated sharply in 2009, reversing years of impressive performance**. The headline balance declined from a surplus of 4 percent of GDP in 2008 to a deficit of 2½ percent of GDP in 2009. The deterioration reflected both structural loosening and the free operation of automatic stabilizers. Expenditure rose by 6 percent of GDP, with broad-based increases but led by social benefits, which rose 2¾ percent of GDP. Revenues declined modestly by ½ percent of GDP, as a decline of 1 percent of GDP in tax revenue was mostly offset by increases in social contributions. Alongside, the structural balance is estimated to have declined from a surplus of 1¾ percent of GDP in 2008 to near zero in 2009. Public debt rose by 9¾ percentage points to 44 percent of GDP in 2009, after declining continuously since 2003.

3. **Further fiscal deterioration is expected in 2010**. The headline fiscal balance is expected to decline by 1¾ percentage points to a deficit slightly above 4 percent of GDP, breaching the SGP limits, primarily reflecting substantial discretionary stimulus. Expenditure is expected to increase by 1¼ percent of GDP, while revenues are expected to decline by ½ percent of GDP, led by further declines in direct taxes, reflecting a modest reduction in the income tax burden. Overall, discretionary stimulus is estimated at 1½ percent of GDP for 2010. Together with the measures for 2009, this is one of the largest stimulus packages in the euro area, and the estimated decline in the structural primary balance in 2010 (1½ percentage points to a deficit of ¼ percent of GDP) reflects the stimulus measures.

4. **The authorities plan to begin consolidation in the 2011 budget, as the global recession abates**. The authorities have signaled that energy taxes and employee and employer contributions to the employment pension will be raised starting in 2011. Moreover, the full-year effect of a one percentage point increase in VAT rates from July 1, 2010, will also help improve revenues for 2011. Expenditure moderation is also envisaged. On this basis, revenues are expected to rise by 1½ percent of GDP, while expenditures decline by ½ percent of GDP. Overall, the fiscal balance is expected to improve by two percentage

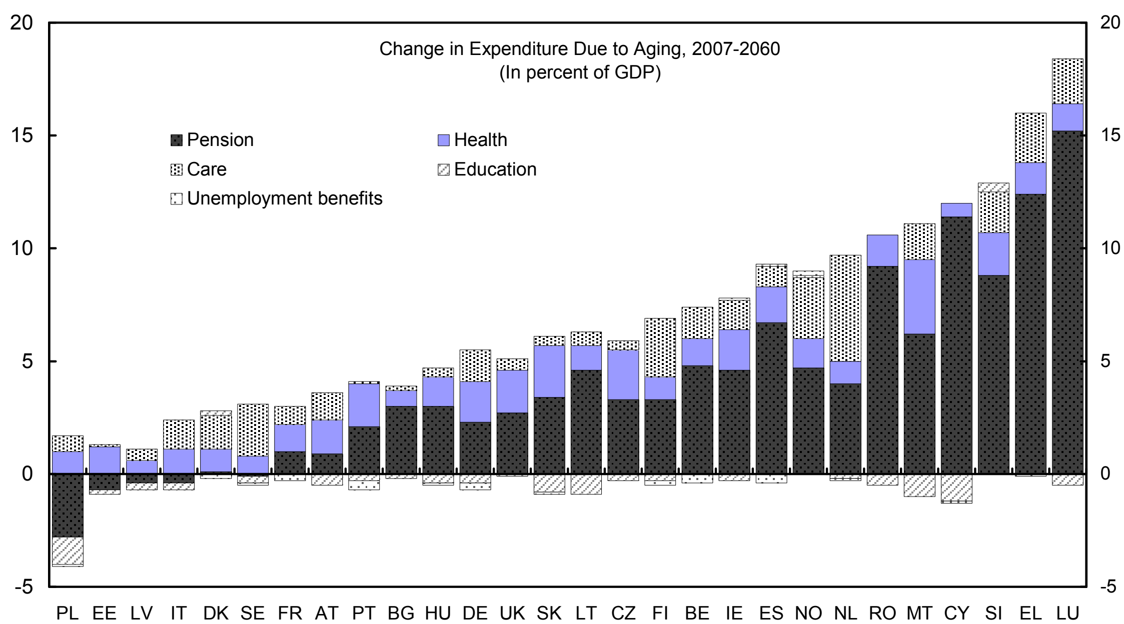
[1] Prepared by Daniel Kanda

points to 2¼ percent of GDP, alongside a structural improvement of about 1¼ percent of GDP.

5. **As a result, the starting point to assess sustainability is markedly worse than staff and authorities had previously envisaged**. In the 2008 Stability Program, the authorities had projected a structural surplus of 2 percent of GDP in 2010, 3½ percentage points of GDP better than staff's latest projection.

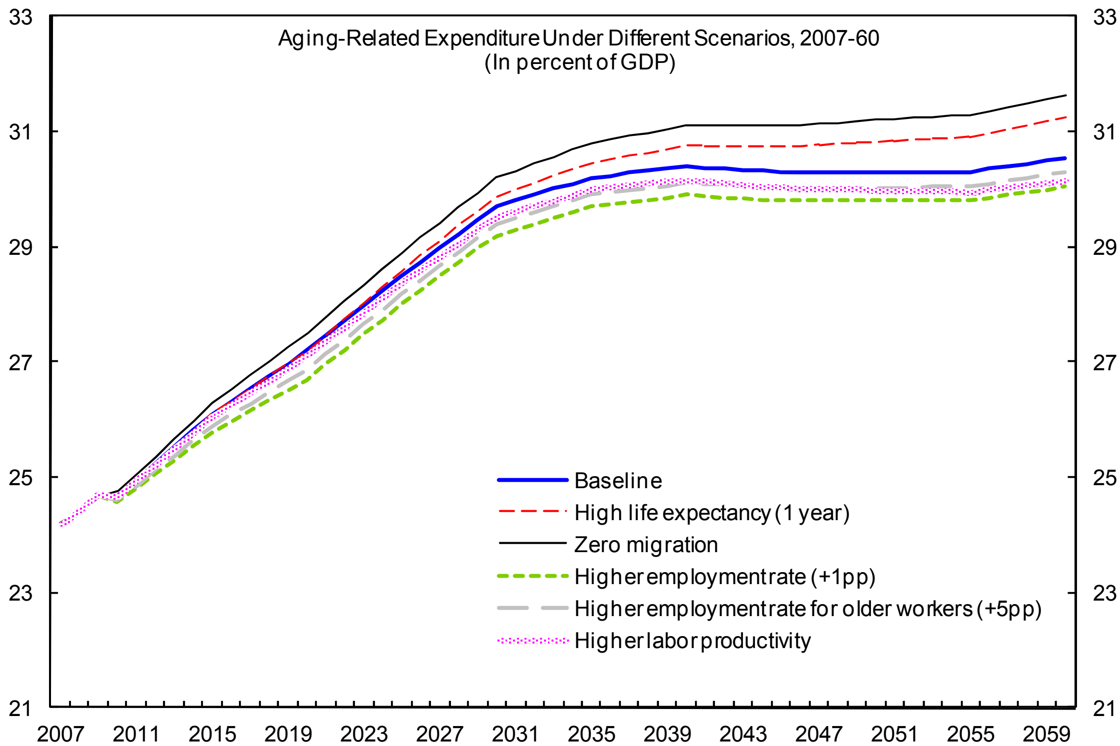
## B. Fiscal Sustainability has Deteriorated

6. **Recent ECFIN baseline estimates of aging pressures for Finland are in the mid-range in comparison with other European countries**. From 2007–60, aging pressures are estimated to add 6.4 percent of GDP to fiscal expenditures in Finland, moderately above the median of 5.3 percent of GDP across the European Union. The increase for Finland is composed of increased pension expenditure of 3.3 percent of GDP, higher long-term care expenditure of 2.6 percent of GDP, higher health-care expenditure of one percent of GDP, and reduced education and unemployment-benefit expenditures of 0.3 and 0.2 percent of GDP, respectively.




Source: DG ECFIN, The 2009 Aging Report, and IMF staff calculations.

7. **These baseline estimates are somewhat sensitive to the underlying assumptions used**. A variety of alternative scenarios run by ECFIN suggest that the increase in aging related expenditures could vary between 5.8 and 7.4 percentage points of GDP, with the worst case being one of zero immigration, while a scenario with higher employment rate is the best case.




Source: DG ECFIN, The 2009 Ageing Report, and IMF staff estimates.

8. **The sustainability indicator used is based on the general government intertemporal budget constraint**. This is the same approach as the S2 sustainability indicator used in the EC's sustainability reports.[2] The sustainability gap is the defined as the constant change to the primary balance (in percent of GDP), over an infinite horizon, such that the intertemporal budget constraint is satisfied. In turn, the intertemporal budget constraint is satisfied if the discounted sum of future primary surpluses is sufficient to offset the initial debt stock. Assuming that GDP grows at a constant rate and given a constant discount rate, some algebraic manipulation yields the following formula for the sustainability gap, as calculated in period 0:

$$S_0 = (r - g)\left[ D_0 - \sum_{t=0}^{\infty} \left( \frac{1+g}{1+r} \right)^t P_t \right]$$

Where $S_0$, $r$, $g$, $D_0$, and $P_t$, represent the sustainability gap in percent of GDP in period 0, discount rate, GDP growth rate, initial debt stock in percent of GDP in period 0, and primary

[2] See European Commission, 2009, "Sustainability Report 2009."

surplus in percent of GDP in period $t$, respectively. In staff's analysis the starting year (period 0) is taken to be 2011.

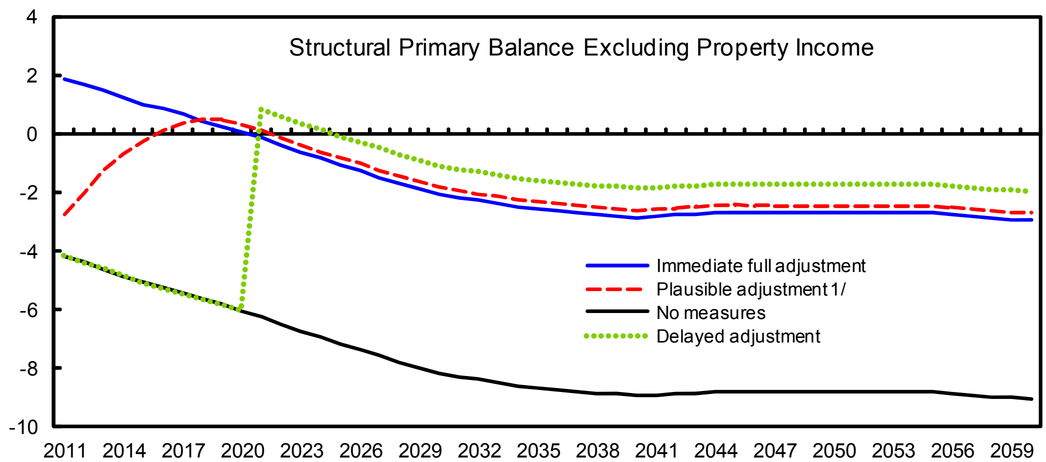
9. **Staff's estimate of the sustainability gap has increased substantially, primarily reflecting the ongoing deterioration in the fiscal position**. Given that deterioration, the estimate of the sustainability gap has increased substantially, from 1½–2½ percent of GDP in the 2008 Article IV consultation to about 6 percent of GDP. While higher pension payments would also increase tax receipts on pension income, this offers only a small offset to the increase in the sustainability gap. However, the sustainability gap could turn out to be somewhat smaller if the external current account surplus unwinds as a rising number of retirees draw down their accumulated pensions, raising consumption-based tax revenues over the long run as share of output. But the size of this effect is quite uncertain however.

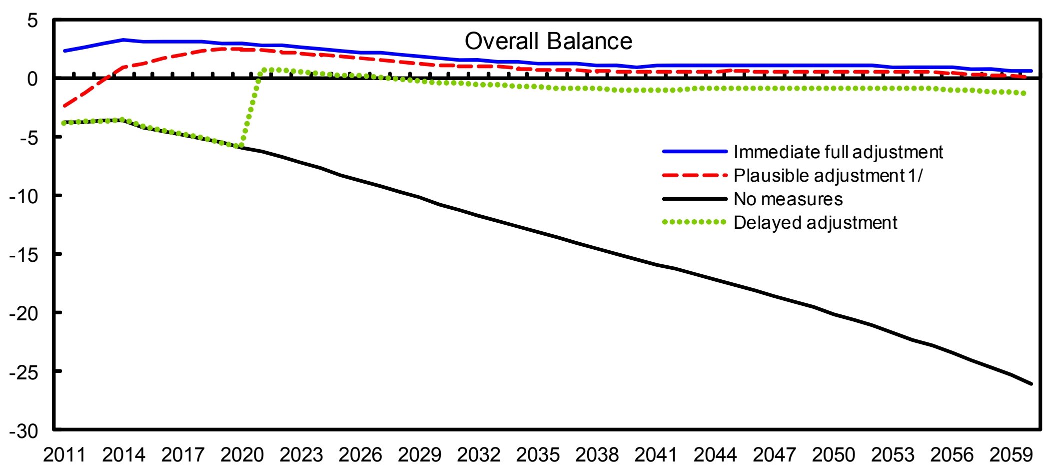
10. **Staff's estimate is somewhat higher than the authorities and ECFIN, but significantly below that of the OECD**. Staff's estimate is ½ percentage point higher than the authorities' latest estimate, and about 2 percentage points higher than the European Commission's estimates produced in 2009. The authorities' smaller estimate reflects in part the fact that the starting date for their analysis is 2015, and therefore includes the impact of some consolidation measures envisaged to take place by then. The difference with the EC estimates arises from the fact that they assume a structural primary balance for 2010 that is 1¼ percent of GDP higher than in staff's projections, and a debt stock in 2010 (the initial debt stock in our projection) that is about 4¼ percent of GDP lower than in staff's projections. In contrast, the OECD estimates a sustainability gap of 8 percent of GDP, significantly higher than staff, largely reflecting a much lower structural primary balance.

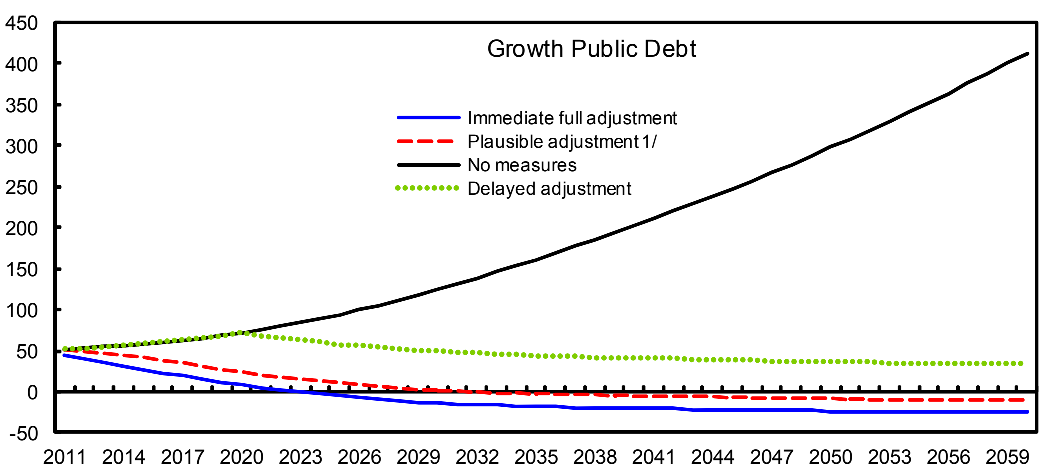
11. **Absent corrective measures, public debt would be projected to rise to over 400 percent of GDP by 2060 in view of the large sustainability gap**. Alongside, the structural primary deficit excluding property income is projected to increase by 5 percentage points to 9 percent of GDP, while the overall fiscal deficit deteriorates by 22 percentage points to 26 percent of GDP as interest payments consume an ever-increasing share of fiscal expenditure. In contrast, immediate full adjustment implies that gross debt is driven to zero by 2024, with a notable buildup of government assets thereafter to help defray the long-run costs of aging.

12. **While immediate full adjustment on the scale required is implausible, delaying adjustment requires a somewhat higher long-run primary surplus target to ensure sustainability**. Staff estimate that phasing in the adjustment over a 10 year period, with some front-loading to entrench credibility, requires structural measures totaling 6½ percent of GDP for sustainability. In comparison, delaying the onset of adjustment for 10 years would require structural measures totaling 7 percent of GDP for sustainability. In general, slower adjustment is associated with a higher path for public debt.

Finland: Fiscal Sustainability, 2011-60
(In percent of GDP)




Sources: ECFIN: The 2009 Ageing Report, and Staff calculations

1/ The no measures scenario assumes that the structural position in 2011 is unchanged from 2010, and thereafter deteriorates with aging. The plausible adjustment scenario corresponds to the variable weights scenario in the text table on illustrative optimal annual fiscal adjustment under a quadratic loss function, and envisages the sustainability gap being closed by 2020.

## C. Measures to Achieve Sustainability

13. **The bulk of the fiscal stimulus measures are of a permanent nature, and explicit measures will be needed to exit once recovery firms**. Of the total stimulus for 2009–10 of about 3¼ percent of GDP, only about one-third are temporary, implying that without explicit corrective measures, the stimulus will add about 2 percent of GDP permanently to the structural fiscal deficit. Thus, once the recovery has firmed measures will be needed to offset this relaxation in a time-bound fashion.

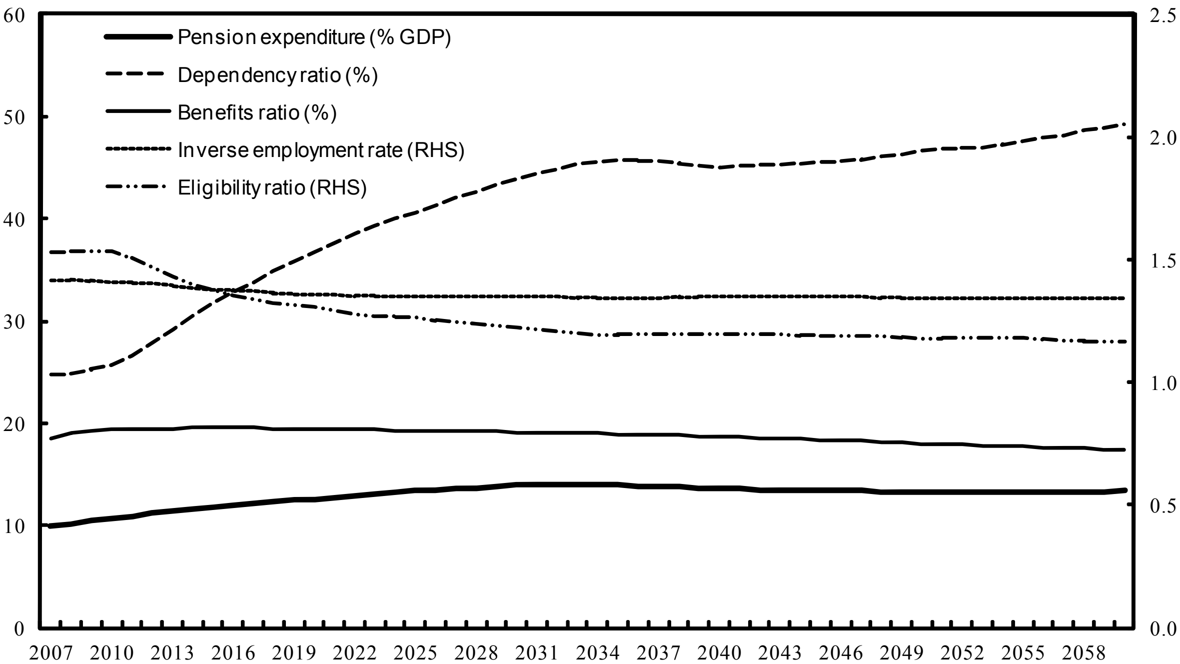
14. **With the revenue ratio already high, there is little scope for further increases in the tax burden**. The focus on the revenue side should therefore be on base broadening and a shift from labor taxation to consumption and property based taxation. Reduced labor taxation would help stimulate employment and output, while consumption and property based taxes are generally less distortionary. In this regard, recent reductions in income tax rates, the planned increase in VAT rates by one percentage point in mid-2010, and plans to raise energy taxes are steps in the right direction, and more should be done, including by reducing the number of items on reduced VAT rates. In addition, property taxation is currently relatively low, and could be increased, creating scope for reducing the reliance of municipalities on highly cyclical corporate taxes.

15. **Expenditure measures will need to take the brunt of adjustment**. This reflects both the already high revenue ratio and the fact that international evidence generally indicates that expenditure-based consolidations have been more successful. In this regard, the focus will need to be on reducing the impact of aging on fiscal expenditures, and an overhaul of local government—where expenditures have been rising fastest in recent years. Some reduction of the generosity of the social and unemployment benefits system is likely to be needed as part of the fiscal consolidation package. Tuition fees and a reduction of student grants in favor of loans at the tertiary education level would also be helpful in generating expenditure savings.

16. **Measures to directly contain the impact of aging on the public finances should be a key plank of efforts to secure sustainability**. In this regard, further pension reform is needed. The decomposition of the projected buildup in pension pressures indicates that the increase arises from a pronounced increase in the old-age dependency ratio, which is projected to be partly offset by tightening of eligibility rules. However, more could be done. The OECD notes that the average effective retirement age is about 60, and estimates that raising it to 67 would be sufficient to close the sustainability gap. Such a large increase would be very challenging to achieve, but clearly, movement in this direction should be a major focus of adjustment efforts. Other areas where there is scope for savings include the lowering the accrual rate for pension benefits—particularly for periods of parental leave, unemployment and education—and tightening access to early retirement via disability or unemployment. For example, the number of persons on disability pension is estimated at

about 9 percent of the labor force, which appears excessive. The authorities do not dispute need for such measures. Indeed, measures already taken are expected to raise the average effective retirement age by 1½ years by 2025, and working groups have been tasked with formulating reforms to generate a further 1½ years increase by 2025. Also, from 2010 onward new pensions will be adjusted downward by a life expectancy coefficient, helping to reduce the impact of aging on pension expenditure.

Finland: Decomposition of Pension Expenditure Projections, 2007-2060




Sources: DG ECFIN, The 2009 Ageing Report, and IMF staff estimates.

17. **Eligibility, entitlements, and arrangements for old-age care could also be revisited, as this is an area where aging pressures will be significant**. The projected increase in long-term care spending for Finland is well above the median for the EU, which suggests that reforms drawing on lessons from other EU countries could yield substantial savings.

18. **An overhaul of local government is also needed**. Spending at the municipal level has grown faster than in other parts of general government. While some of these spending pressures may have been inevitable given that municipalities are responsible for education, social services, and health care, the OECD estimates that municipality productivity has declined by about 10 percent over 2000–08. Productivity declines have been most marked in social work and health. Alongside, municipal tax rates have increased—and several municipalities implemented additional significant tax hikes in 2010—partially offsetting reductions in central government taxation in recent years. Soft budget constraints have

helped encourage fiscal slippages, with buoyant (and highly cyclical) corporate taxation enabling strong expenditure growth in good times.

19. **There is need to harden municipal budget constraints and reduce the cyclicality of their revenues, thus strengthening incentives to generate expenditure savings**. The reliance on corporate taxes at municipal level should be reduced, with this offset by higher property taxation or central government transfers. At the same time, a ceiling on municipality income tax rates, and restraint in the growth of central government transfers would strengthen incentives for expenditure consolidation at municipal level. Also, the scope for competitive bidding for the provision of services to municipalities should be broadened to generate cost savings. Finally, there is also scope for efficiency gains through mergers of municipalities, as the median population of municipalities is less than 5,000.

20. **Improving the rate of return on public financial assets would also help in reducing the sustainability gap**. Gross financial assets totaled about 90 percent of GDP in 2008, and substantial portions of these assets are low-yielding, reflecting a cautious investment approach. Given the large stock of assets, an asset management strategy that generates a modest increase in returns could make a significant contribution to closing the sustainability gap.

21. **The pace of consolidation will reflect the balancing of the government's twin stated objectives of reducing both the output and the fiscal sustainability gaps**. Given the large negative output gaps projected in 2009–10, the intention to delay consolidation until 2011 implies essentially that a zero weight is placed on the sustainability gap over the short run. Beyond that horizon, however, different government preferences will lead to different consolidation paths. Text Table A1 illustrates various consolidation paths assuming the authorities' preferences are governed by a quadratic loss function, with the different paths reflecting different weights on the output and sustainability gaps.

Table 5-1. Illustrative Optimal Annual Fiscal Adjustment Paths Under a Quadratic Loss Function 1/

| Loss function weights | | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Alpha 2/ | Beta 3/ | | | | | | | | | | |
| | | Structural primary balance (percent of GDP) | | | | | | | | | |
| 1.0 | 1.0 | 3.5 | 4.3 | 4.9 | 5.3 | 5.5 | 5.7 | 5.9 | 6.0 | 6.0 | 6.1 |
| 0.0 | 1.0 | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 |
| 1.0 | 0.0 | -3.8 | -3.8 | -3.8 | -3.8 | -3.8 | -3.8 | -3.8 | -3.8 | -3.8 | -3.8 |
| 3.5 | 1.3 | 1.2 | 2.2 | 3.0 | 3.7 | 4.2 | 4.6 | 4.9 | 5.2 | 5.4 | 5.5 |
| 1.3 | 3.5 | 4.8 | 5.3 | 5.5 | 5.7 | 5.8 | 5.9 | 5.9 | 5.9 | 6.0 | 6.0 |
| *Memo item* | | | | | | | | | | | |
| Variable weights 4/ | | 1.2 | 2.2 | 3.2 | 4.0 | 4.7 | 5.2 | 5.7 | 6.0 | 6.2 | 6.2 |

1/ Structural primary balance in 2010 = -0.2 percent of GDP; Structural primary balance target to close sustainability gap after 10 years = 6.2 percent of GDP; Structural primary balance target to immediately close sustainability gap = 5.9 percent of GDP; Fiscal multiplier is taken to be 0.6; Output gap in 2010 = -3.7 percent of GDP.

2/ Weight on output gap

3/ Weight on sustainability gap

4/ Alpha is assumed to decline over time from an initial value of 3.5, while Beta rises at the same pace from an initial value of 1.3.

22. **A plausible adjustment path could be one where the weight placed on the sustainability gap rises over time**. This would be consistent with a pace of consolidation where the sustainability gap is erased over a 10-year horizon, with some front loading to strengthen credibility. The “plausible adjustment” path shown in the panel chart on fiscal sustainability corresponds to variable weights on the sustainability and output gaps, respectively increasing and decreasing over the 2011–20 period (see Footnote 4 of Table 5-1).

INTERNATIONAL MONETARY FUND

FINLAND

**Staff Report for the 2010 Article IV Consultation—Informational Annex**

Prepared by the European Department

July 29, 2010

Contents Page

## ANNEX I. FINLAND: FUND RELATIONS
(As of May 31, 2010)

***Mission:*** May 27 to July 8, 2010 in Helsinki. The concluding statement of the mission is available at http://www.imf.org/external/np/ms/2010/060710.htm. The mission's concluding statement and press conference received wide coverage in the Finnish media. The authorities intend to publish the staff report.

***Staff team:*** Messrs. Figliuoli (Head), Kanda, Lutz, Ms. Zoli (all EUR), and Mr. Roca (RES). Mr. Korhonen (OED) participated in the discussions.

***Country interlocutors:*** Mr. Liikanen, Governor of the Bank of Finland; Mr. Katainen, Minister of Finance; other senior officials of the central bank, economic ministries, the Financial Supervisory Authorities; Parliamentary authorities; social partners; and members of the business, financial sector and research communities.

***Fund relations:*** The previous Article IV consultation discussions took place during October 23 to November 3, 2008. The Executive Board's assessment and staff report are available at: http://www.imf.org/external/pubs/cat/longres.cfm?sk=22667.0

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

| | | | |
|---|---|---|---|
| II. | **General Resources Account:** | **SDR Million** | **Percent of Quota** |
| | Quota | 1,263.80 | 100.00 |
| | Fund holdings of currency | 976.59 | 77.27 |
| | Reserve Position | 287.22 | 22.73 |
| | Lending to the Fund | 61.00 | |
| III. | **SDR Department:** | **SDR Million** | **Percent of Allocation** |
| | Net cumulative allocation | 1,189.51 | 100.00 |
| | Holdings | 1,201.84 | 101.05 |
| IV. | **Outstanding Purchases and Loans:** | None | |
| V. | **Latest Financial Arrangements:** | None | |

VI. **Projected Payments to Fund:**
(SDR million; based on existing use of resources and present holdings of SDRs)

| | Forthcoming | | | | |
|---|---|---|---|---|---|
| | **2010** | **2011** | **2012** | **2013** | **2014** |
| Principal | | | | | |
| Charges/Interest | | 0.01 | 0.01 | 0.01 | 0.01 |
| Total | | 0.01 | 0.01 | 0.01 | 0.01 |

VII. **Exchange Arrangements:**

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

Finland has accepted the obligations under Article VIII, Sections 2(a), 3 and 4 of the Fund's Articles of Agreement, and maintains an exchange system free of restrictions on the making of payments and transfers for current international transactions, except for those measures imposed for security reasons in accordance with Regulations of the Council of the European Union, as notified to the Executive Board in accordance with Decision No. 144-(52/51). An updated and comprehensive list of all EU restrictions can be found at: http://ec.europa.eu/external_relations/cfsp/sanctions/measures.htm

VIII. **Article IV Consultation:**

Discussions for the 2008 Article IV consultation were held in Helsinki during October 23–November 3, 2008 and the Executive Board concluded the consultation on January 30, 2008. Country Report No. 09/39, summarizing the views of the Executive Board, was published.

IX. **FSAP**

An update of the Financial Sector Assessment Program (FSAP) was completed at the time of the 2010 Article IV Consultation.

## Annex II. Finland: Recent Fund Staff Recommendations and Implementation 1/

| Past Staff Recommendations | Implementation |
|---|---|
| **Fiscal policy** | |
| Although the general government surplus had been sizable until recently, and the debt ratio comparatively low, the overall fiscal position under current policies remains unsustainable. While the expansionary fiscal policy was warranted from a cyclical perspective, measures should be taken once the recovery is firmly underway to attain sustainability. Efforts should focus on expenditure restraint, especially at the local level, in light of high tax rates, although broadening the tax base and hiking indirect and property taxes are possible. The efficiency of public services needs to be raised. It may be necessary to further revisit the pension system's parameters. | The economic downturn has resulted in a large fiscal deficit, reflecting both cyclical effects as well as discretionary policy measures, which has worsened sizably the "sustainability gap." Signicant reforms in the pension system were adopted in 2005, with a life expectancy adjustment applied from the beginning of this year. While no specific measures to change pension system parameters have been proposed, a working group is underway to explore steps to extend the average working life by 3 years by 2025. Reform implementation is in any case delayed until after the 2011 elections. Efforts to improve expenditure efficiency are being introduced, with greater success to date at the central government level. Intergovernmental financing rules are being revised and measures to encourage municipal mergers have been adopted. |
| **Labor Market Policy** | |
| The wage bargaining system needs to allow for greater flexibility in wage setting. Measures are needed to ease labor market mismatches, reduce structural unemployment, and induce earlier entry into the labor force. Various "pipelines" to early labor force departure need to be further curtailed. | Centralized wage bargaining has not been used for the last two wage rounds, and while in general wage increases exceeded productivity growth in 2007-09, recent agreements are much more moderate and flexible (including wage agreements that are only for one year in some cases). Labor market mismatches persist, especially in light of the recent downturn.These are being addressed through expanded training opportunities, mobility subsidies, and developing vocational education. Labor tax rates have been cut generally, with additional specific reductions targeted for older, less productive workers. These cuts have been extended notably to young labor market entrants. Tax incentives and subsidies have been created for labor-intensive services, home care and service work. Labor force service centers have been established for the hard-to-employ. |
| **Competition Policy** | |
| Strengthen competition in product markets, especially in "sheltered" sectors, to boost productivity growth. | Competition Authority's powers have been enhanced to more directly address anti-competitive behavior, with special focus paid to the retail and construction sectors. Efforts to ensure equal conditions for private and public service provision are underway. Companies and Auditing Acts amended to make it easier to set up new companies and reduce administrative burdens, and a national action plan is to be introduced for better regulation. Government goal adopted to increase R&D to 4 percent of GDP and make better use of ICT, and promote innovation. Implementation of the EU services directive continues. Regulations on shop opening hours have been liberalized. |
| **Financial Sector Policy** | |
| Strengthen financial sector stability, especially regarding cross-country supervision, and improve stress testing techniques. | Deposit insurance levels were increased in accordance with EU-wide measures, and are implementing measures to to reduce the timeframe for repaying depositors. Guarantees for bank liabilities and capitalization facilities were provided, but have not been used. The merger of Financial Supervisory Authority and Insurance Supervisory Authority took effect from 2009. Supervisors are also working closely with market participants and foreign supervisors to improve supervision of an increasingly cross-border "infrastructure." |

1/ See the Country Reports for 2007 and 2008 (http://www.imf.org/external/pubs/cat/longres.cfm?sk=21258.0, and http://www.imf.org/external/pubs/cat/longres.cfm?sk=22667.0).

## ANNEX III. FINLAND: STATISTICAL ISSUES
(As of June 28, 2010)

### D. Assessment of Data Adequacy for Surveillance

**General:** Data provision is adequate for surveillance.

### E. Data Standards and Quality

Subscriber to the Fund's Special Data Dissemination Standard (SDDS) since June 3, 1996. Uses SDDS flexibility option on the timeliness of data for central government operations.

A data ROSC was electronically published on October 31, 2005 (http://www.imf.org/external/pubs/cat/longres.cfm?sk=18675.0).

# Finland: Table of Common Indicators Required for Surveillance

(As of June 28, 2010)

| | Date of latest observation | Date received | Frequency of Data[7] | Frequency of Reporting[7] | Frequency of publication[7] | Memo Items: Data Quality – Methodological soundness[8] | Memo Items: Data Quality – Accuracy and reliability[9] |
|---|---|---|---|---|---|---|---|
| Exchange Rates | 06/28/10 | 06/28/10 | D | D | D | | |
| International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1] | 03/10 | 05/08 | M | M | M | | |
| Reserve/Base Money | 05/10 | 06/10 | M | M | M | | |
| Broad Money | 04/10 | 06/10 | M | M | M | | |
| Central Bank Balance Sheet | 05/10 | 06/10 | M | M | M | | |
| Consolidated Balance Sheet of the Banking System | 05/10 | 06/10 | M | M | M | | |
| Interest Rates[2] | 06/28/10 | 06/28/10 | D | D | D | | |
| Consumer Price Index | 05/10 | 06/10 | M | M | M | O, O, O, O | LO, O, LO, O, O |
| Revenue, Expenditure, Balance and Composition of Financing[3] – General Government[4] | 2009 | 03/10 | A | A | A | LO, LO, LNO, O | LO, O, O, O, O |
| Revenue, Expenditure, Balance and Composition of Financing[3]– Central Government | 2009 | 03/10 | A | A | A | | |
| Stocks of Central Government and Central Government-Guaranteed Debt[5] | 05/10 | 06/10 | M | M | M | | |
| External Current Account Balance | 04/10 | 06/10 | M | M | M | O, O, O, LO | LO, O, LO, O, O |
| Exports and Imports of Goods and Services | 04/10 | 06/08 | M | M | M | | |
| GDP/GNP | Q1 2010 | 06/10 | Q | Q | Q | O, O, O, O | LO, O, LO, O, O |
| Gross External Debt | 04/08 | 06/08 | M | M | M | | |
| International Investment Position[6] | 04/08 | 06/08 | M | M | M | | |

[1] Includes reserve assets pledged or otherwise encumbered as well as net derivative positions.
[2] Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.
[3] Foreign, domestic bank, and domestic nonbank financing.
[4] The general government consists of the central government, including National Insurance Scheme, and local governments.
[5] Including currency and instrument composition.
[6] Includes external gross financial asset and liability positions vis-à-vis nonresidents.
[7] Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A), Irregular (I); Not Available (NA).
[8] Reflects the assessment provided in the data ROSC published in October 2005, and based on the findings of the mission that took place during May 10–25, 2005 for the dataset corresponding to the variable in each row. The assessment indicates whether international standards concerning concepts and definitions, scope, classification/sectorization, and basis for recording are fully observed (O), largely observed (LO), largely not observed (LNO), or not observed (NO).
[9] Same as footnote 8, except referring to international standards concerning source data, statistical techniques, assessment and validation of source data, assessment and validation of intermediate data and statistical outputs, and revision studies

**Statement by the IMF Staff Representative on Finland**
**August 25, 2010**

1. **This statement summarizes developments in Finland since the issuance of the staff report.** The additional information does not change the thrust of the staff appraisal.

2. **The authorities have revised national accounts estimates for 2007–09.** Real GDP is now reported to have declined by 8 percent last year, compared to the 7.8 percent estimated previously. Revisions for 2007–08 envisage higher growth in 2007 largely offsetting lower expansion in 2008.

3. **The authorities and staff have lowered fiscal deficit projections for 2010–12, given the better-than-expected outturn in the first half of 2010.**

- Corporate tax receipts thus far in 2010 have been significantly higher than anticipated. Social contributions have also overperformed. In addition, unemployment-related expenditures have been lower than planned. As a result, staff now projects the deficit for 2010 at 3.4 percent of GDP (instead of the previous 4.1 percent of GDP).

- In light of the stronger 2010 position, general government deficit projections for 2011 and 2012 have been lowered by about ½ percent of GDP, to 1.8 percent of GDP and 2 percent of GDP, respectively. Accordingly, the fiscal sustainability gap should be reduced to 5–5 ½ percent of GDP.

- On July 13, ECOFIN opened an excessive deficit procedure for Finland. However, with the revisions to fiscal prospects noted above, the headline deficit can be brought within the 3 percent of GDP threshold of the SGP in 2011 even without additional measures owing to more favorable cyclical conditions. This improved fiscal outlook lends additional support to staff's advice that the pace of budgetary consolidation in 2011 should be moderate.

INTERNATIONAL MONETARY FUND

**Public Information Notice**

EXTERNAL RELATIONS DEPARTMENT

Public Information Notice (PIN) No. 10/122
FOR IMMEDIATE RELEASE
September 2, 2010

International Monetary Fund
700 19th Street, NW
Washington, D. C. 20431 USA

## IMF Executive Board Concludes 2010 Article IV Consultation with Finland

On August, 25, 2010, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with Finland.[1]

### Background

Finland's economy has been dealt a severe blow by the global crisis and the recovery is slow. Owing to the high dependence of its exports on countries and commodities severely impacted by the downturn, Finland experienced the worst recession in the euro area in 2009, with gross domestic product (GDP) collapsing by 8 percent in 2009. Growth was mildly negative in both the final quarter of 2009 and the first quarter of 2010, technically putting Finland in a double-dip recession. A moderate resumption of growth is projected, with output expanding by 1¼ percent in 2010 and around 2 percent in 2011, although the outlook is unusually uncertain.

The impact of the crisis on employment and inflation was contained. The unemployment rate rose relatively little from 6½ to 8¼ percent during 2008–09 reflecting the absence of evident domestic bubbles, voluntary job hoarding given early population aging, and the government-subsidized temporary employment-support program. The labor market is anticipated to lag the pick-up in activity, with unemployment hitting 8¾ percent in 2010. Inflation turned down markedly in 2009. However, it has outpaced the EU average since late 2008, in part as the result of generous multi-year collective wage agreements in 2007 that were generally in excess of productivity gains. As a result, external competitiveness has deteriorated but remains adequate.

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

With fiscal policy turning to support growth, the budget position worsened sharply in 2009, reversing years of impressive performance. The general government headline balance went abruptly from a surplus of 4 percent of GDP in 2008 to a deficit of 2½ percent of GDP in 2009. In 2010 the headline fiscal balance is expected to drop to a deficit of 3½ percent of GDP, breaching the Stability and Growth Pact limits. This deterioration primarily reflects further structural relaxation of around 1 percent of GDP implying only a small structural primary fiscal surplus in 2010.

The banking system has weathered the global turmoil well thanks to healthy capital buffers and prudent management. Finnish banks have limited exposure to opaque structured products or vulnerable countries, including those within Europe. The country's stern regulatory and supervisory environment has helped shield the financial sector from the worst of the crisis. Profitability and asset quality have deteriorated in the turmoil, while capital coverage has dropped, but remained well above regulatory minima. The financial condition of insurance companies and pension funds recovered in 2009 after sharply weakening in 2008.

**Executive Board Assessment**

Executive Directors commended the authorities for their continued strong policies, which helped mitigate the impact of the global crisis. Because of their geographic distribution and product composition, Finland's exports have been particularly hard hit by the global downturn in 2009, and the economy experienced a severe recession. Looking ahead, while a gradual recovery is anticipated for 2010–11, the outlook remains highly uncertain. Directors underscored that a possible permanent loss of output, along with rapid population aging, would heighten challenges to growth and fiscal sustainability.

Directors agreed that the financial system had weathered the global turbulence well, thanks to healthy capital buffers, prudent management, and vigilant supervision. They noted staff's assessment that direct exposure to opaque structured products or highly vulnerable countries is limited and spillover risks are manageable. Nevertheless, they encouraged the authorities to remain vigilant and focus their efforts on improving bank cost efficiency, preventing excessive risk taking, and limiting liquidity and funding risks. In light of the high degree of foreign ownership of banks, Directors agreed that it is crucial to further strengthen the effectiveness of cross-border supervision and crisis management arrangements, and welcomed the recent establishment of the Nordic-Baltic Stability Group.

Directors supported the ongoing stimulatory fiscal stance to confront the economic downturn, but noted that strong and credible consolidation would be called for starting in 2011. In this context, many Directors concurred with the authorities' plans for a relatively large fiscal adjustment already in 2011. Considering the large uncertainties still surrounding the extent of the economic recovery, many other Directors, however, supported a more moderate pace of fiscal consolidation in 2011 which, in their view, would better achieve the balance between the twin objectives of restoring fiscal sustainability and allowing the recovery to continue.

Over the medium term, Directors endorsed a gradual closing of the sustainability gap by 2020. They concurred that fiscal adjustment efforts should focus on expenditure restraint, while efforts could also be made to broaden the tax base, including through higher property and indirect taxes and by reducing the number of items on reduced VAT rates and other special treatments. Directors stressed that, with growing pressures from an aging population, it is important that the authorities take the necessary measures to increase the effective retirement age, enhance efficiency in the provision of public services, and contain demand for these services to secure fiscal sustainability.

Directors concurred that Finland maintains an adequate margin of external competitiveness. They noted, however, that competitiveness has been eroded recently by large wage increases, which would have to be commensurate with productivity growth going forward.

Directors welcomed the authorities' continued commitment to structural reforms, particularly in the labor market, in view of Finland's aging population. They underscored the importance of increasing labor utilization and productivity growth to enhance potential output and improve the long-tem fiscal position. Directors encouraged the authorities to consider measures to further limit the transition to early retirement via unemployment and disability, and boost employment among the young. They also supported actions to increase competition and foster research and entrepreneurship.

Finland: Selected Economic Indicators

| | 2008 | 2009 | 2010 1/ | 2011 1/ |
|---|---|---|---|---|
| Real economy | | | | |
| GDP (change in percent) | 0.9 | -8.0 | 1.2 | 2.0 |
| Harmonized CPI (change in percent) 2/ | 3.9 | 1.6 | 1.4 | 1.8 |
| Unemployment rate (in percent) 2/ | 6.4 | 8.3 | 8.8 | 8.7 |
| Gross national saving (in percent of GDP) | 24.9 | 18.9 | 19.3 | 19.1 |
| Gross domestic investment (in percent of GDP) | 21.8 | 17.5 | 17.8 | 17.6 |
| Public finances (general government, in percent of GDP) | | | | |
| Overall balance | 4.1 | -2.4 | -3.4 | -1.8 |
| Primary balance | 5.6 | -1.0 | -2.1 | -0.4 |
| Gross debt (Maastricht definition) | 34.2 | 44.0 | 50.0 | 52.2 |
| Money and credit (end of year, percentage change) | | | | |
| M3 (Finnish contribution to euro area 3/ | 5.0 | -1.7 | -0.8 | … |
| Finnish MFI euro area loans 3/ | 11.6 | 1.7 | 4.5 | … |
| Interest rates (year average) | | | | |
| Three-month money market 4/ | 4.6 | 1.2 | 0.8 | … |
| Ten-year government bonds 4/ | 4.3 | 3.7 | 2.9 | … |
| Balance of payments (in percent of GDP) | | | | |
| Trade balance | 3.7 | 2.3 | 1.9 | 1.8 |
| Current account | 3.1 | 1.3 | 1.5 | 1.4 |
| Fund position (as of end-June 2010) | | | | |
| Fund holding of currency (in percent of quota) | | 77.3 | | |
| Holdings of SDR (in percent of allocation) | | 101.1 | | |
| Quota (in millions of SDRs) | | 1263.8 | | |
| Exchange rate | | | | |
| Exchange rate regime | | Euro | | |
| Present rate (August 5, 2010) | | US$1.32 per euro | | |
| Nominal effective exchange rate (increase in percent) 5/ | 2.6 | 1.3 | … | … |
| Real effective exchange rate (increase in percent) 5/ 6/ | 4.1 | 5.5 | … | … |

Sources: Finnish authorities; International Financial Statistics; and IMF staff estimates.
1/ IMF staff estimates and projections, unless otherwise indicated.
2/ Consistent with Eurostat methodology.
3/ For 2010, annual change through April.
4/ For 2010, data are for April.
5/ For 2009, data are for first 10 months.
6/ Based on unit labor costs.

**Statement by Per Callesen, Executive Director for Finland**
**and Kari Jukka Korhonen, Senior Advisor to the Executive Director**
**August 25, 2010**

1. The Finnish authorities welcome the candid dialogue with staff during this year's Article IV Consultation and the FSAP Update mission and wish to thank staff for the comprehensive analysis and pertinent recommendations.

2. The collapse of world trade following the global financial crisis hit Finland very hard in 2009. Driven by the rapid decline of external demand, Finland's economy plummeted by 8 percent in 2009. The worst is, however, over and gradual recovery is under way. Significant stimulus measures to counter the crisis were made possible by preceding fiscal surpluses. The measures contributed to a better than projected employment situation in spite of the deep recession. Companies opted for temporary lay-offs rather than permanent dismissals in order to hold on to skilled labor in anticipation of future labor shortages based on the age profile of the population.

3. The long-run potential output growth may have been lowered due to the deep recession and consequently the trend level of output has most likely been reduced. The authorities share staff's concern about fiscal sustainability in view of the rapidly aging population and pressures on health care, pension and old age care funding.

4. Finland's financial system was naturally affected by the global turmoil, but financial conditions remained stable even during the worst of the crisis. The financial sector is well regulated and supervised and the banking sector is resilient to common adverse shocks. There are, nevertheless, areas‑as pointed out by staff‑that should be further strengthened. The authorities, by and large, agree with the FSSA Update assessments.

**Recent Economic Developments and Outlook**

5. The latest indicators on economic activity point to a return to growth during the second quarter, fuelled mainly by recovery of exports and private consumption. According to the authorities' latest forecast - that is slightly more optimistic than staff's view - real GDP is expected to grow by 1.5 percent in 2010 and by 2.5 percent in both 2011 and 2012. However, in the light of the recent data, there are mounting upside risks to the authorities' GDP forecast for 2010 and 2011. Stronger than expected recovery of world trade and economic activity has started to feed in to the Finnish economy. The volume of industrial output is now about 15 percent higher than a year ago and new orders have increased rapidly during the past few months. Consequently, the value of exports has skyrocketed in the last few months leading to a quarterly growth of 13 percent in Q2.

6. Also consumer confidence and employment has improved during the summer, which points to a pick-up in private consumption. The employment situation remained better than anticipated during the deep downturn partly because temporary lay-offs did not

turn into dismissals. The number of unemployed has continued to decline during the summer. The seasonally adjusted unemployment rate stood at 8.2 percent in June compared with the turn of the year level of 8.9 percent. There are signs that housing construction is recovering rapidly and the sector's outlook is encouraging, based on a pick-up in housing permits, but commercial real estate is yet to show robust signs of improvement. In line with improving housing construction and low interest rates, real house prices have rebounded on a strong note and are at record high levels that call for monitoring. The authorities share staff's concern that possible continuation of the accelerated trend would point to increasing hazards.

7. Despite the recent pick-up in industrial production and exports, external competitiveness remains on the watch list. The authorities agree that Finland's external competitiveness position has deteriorated since the last Article IV discussions, and as noted in Analytical Note 4, merchandise export market shares have trended downwards. In 2008 and 2009, unit labor costs increased faster than in any other Euro area country, at twice the pace of the Euro area average. This was due both to increases in labor costs and a deterioration in productivity. The increase in labor costs was driven by high pay rises negotiated in 2007 for a three-year period, which were not adjusted downwards when the business cycle dramatically turned.

8. In 2011, as the global economic activity continues to recover, the outlook for Finland also looks brighter. Both exports and imports are forecast to grow steadily while both trade and current accounts will remain in surplus, as also noted in the staff report. Along with the recovery, the national consumer price inflation is forecast to accelerate to 2.5 percent next year partly due to the rise in indirect taxes and past hikes in import price levels.

**Fiscal Policy**

9. Finland entered the recession from a strong position of public finances in 2008 (the general government surplus was 4.2 percent of GDP), but the deterioration in public finances at around 7 percentage points relative to GDP was exceptionally large in 2009. The deterioration in economic activity has been particularly apparent in central government accounts, which comprise tax items that are the most sensitive to cyclical fluctuations. In addition, automatic stabilizers have been allowed to operate freely, and discretionary stimulus measures by bringing forward public investment, cutting taxation and facilitating funding opportunities for businesses have adversely affected the financial position of general government.

10. While economic growth improves this year, according to the latest official forecast, the authorities expect the general government deficit to deepen further to 3.2 percent of GDP. Given the resumption of economic growth, the tightening of taxation and the increase of social security contributions, the general government's fiscal position will

start improving in 2011 though still remaining in deficit and amounting to 1.3 percent of GDP.

11. First steps towards consolidation of public finances are being taken. Both the general and reduced value-added tax rates were raised by one percentage point at the beginning of July 2010. In addition, according to the government's 2011 budget proposal, an excise duty on sweets will be introduced and the excise duty on soft drinks will be expanded as of 1 January 2011. Further, energy taxes will be increased from the beginning of 2011. The government has also respected the expenditure ceilings for the central government set in the beginning of the government term. Despite these measures, the budget proposal ends up with a borrowing requirement of around 8.5 billion euro.

12. The authorities note that due to the measures included in the budget proposal, the fiscal stance is turning from expansionary to restrictive next year. Given the improving cyclical situation and sizable sustainability gap, the authorities see a slightly tighter fiscal stance warranted for 2011 than what is recommended by staff.

13. The authorities take note of staff's recommendations on broadening the tax base and reducing the number of items on lower VAT. The government has set lower VAT rates on selected items or services for particular reasons such as employment promotion.

14. The authorities agree with staff’s assessment, according to which the sustainability gap is estimated to have increased substantially to over 5 percent of GDP. Accordingly, the authorities share staff's concern about the long-term fiscal sustainability and are committed to fiscal consolidation, which is reflected in the newly published 2011 budget proposal. The authorities stress that several measures as suggested by staff have been introduced during recent years. These include reforms aimed at increasing effective retirement age, implementing further mergers of municipalities, increasing the upper and lower real estate tax rates, measures aimed at raising productivity of public services, and raising user fees on public services.

15. The authorities concur that the continuation of consolidation measures is a challenge for the economic policy during the next few years. In addition to policy measures aimed at strengthening the position of general government finances, structural reforms supporting growth and the sustainability of general government finances should form an integral part of the consolidation strategy. The Government has set as a target the implementation of measures aimed at extending working careers by three years by 2025. Moreover, projects initiated earlier can be used to support the productivity of the public administration and public service provision, which is important in terms of sustainability. Through the structural reform of municipalities and public services, the production practices and organisation of services offered by municipalities will be developed, and an effort made to strengthen the financial basis

of the arrangement and provision of services. A productivity project will enhance public sector activity and reallocate labour. In the future, particular attention will be paid to developing the productivity of municipal services.

**Labor and Product Market Reforms**

16. The authorities share staff's views on the need to continue reforming labor and product markets. As for lengthening working careers, some measures have already been taken to speed up the entry into tertiary education and to shorten the time spent in studies. Further reforms in the field of education are in preparation in the Ministry of Education and Culture, including reforming the financial support system so that it gives more incentives for both the organizers of education and students to graduate. Also, the introduction of tuition fees as well as user fees for public services have been widely discussed but face opposition in society, and are hence unlikely to be imposed in the near future.

17. The increasing need to raise the effective retirement age is widely acknowledged. The financing of the earnings-related pension system needs to be secured by an increase in pension contributions, which is not too high so as to hamper employment and economic growth. Working careers need to be extended sufficiently to this end. The authorities share staff's concern relating to the unemployment and disability pipelines.

18. Some of the measures suggested by staff, such as liberalization of shop opening hours and municipal mergers, have already been implemented. The number of municipalities has been reduced from over 400 to some 300 over the past decade and additional mergers are expected in the future. It is widely accepted that we need to increase competition in services, public administration, and local governments; but building the consensus necessary for change in these areas takes time and is an ongoing process.

**Financial Sector and Financial System Stability Assessment Update**

19. The authorities appreciate the detailed assessment and advice presented in the FSSA Update report based on the findings of staff's FSAP Update mission in the spring. The benefits of an independent evaluation cannot be exaggerated. The extensive discussions and exchange of views during the staff visit were most welcome. The authorities value and see merit in staff's recommendations and will give them careful consideration.

20. As the financial sector assessment findings suggest, the overall picture of the Finnish financial sector is reassuring. The banks endured the financial crisis well in international comparison mainly due to adequate capital reserves and conservative management practices which resulted in very limited exposure to vulnerable European countries and high-risk products. The reports raised two main concerns on

banks, namely profitability and liquidity and funding risks. The authorities share staff's concern about exceptionally low net interest margins and as a consequence a squeeze on banks' profitability. In fact, the authorities have repeatedly voiced their concern to the financial community and the mortgage borrowers, and the FIN-FSA has urged stress testing with interest rates at 6 percent on new mortgages at variable short rates as well as limits on the LTVs used in new mortgages. Insurance companies and pension funds suffered due to a large drop in equity prices during the financial crisis, but the situation has improved along with the recovery of equity markets.

21. The financial sector supervision is assessed as robust, but because the banking system is significantly foreign-owned and concentrated, effective cross-border supervision is of utmost importance. The authorities are in agreement with staff that there is room for strengthening both the regulatory and supervisory frameworks. In particular, cross-border supervision at the Nordic and EU level would benefit from closer cooperation. In this context, supervisory colleges have been established for financial groups operating in Nordic countries, and home and host supervisors participate in the work of the colleges, with the focus on joint monitoring of risks, building on systems for improved information sharing and reporting. In view of the ongoing reform agenda at the European Union and international levels, the authorities support harmonization of regulation, supervision, and bank resolution frameworks both at the European and global level.

22. In August, the Nordic and Baltic authorities concluded a MoU to further strengthen cross-border cooperation pertaining to financial groups and the relevant infrastructure. The region has made almost unprecedented progress in this respect. The MoU included in addition to conventional cooperation arrangements, a preliminary framework for discussing eventual burden sharing agreements that could be struck in the event of jointly agreed and implemented crisis management actions related to a financial group with significant activities in the region.