September 2010
IMF Country Report No. 10/275

Finland: Financial System Stability Assessment Update

This update to the Financial System Stability Assessment on Finland was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on August 5, 2010. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of Finland or the Executive Board of the IMF.

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INTERNATIONAL MONETARY FUND

FINLAND

Financial System Stability Assessment Update

Prepared by the Monetary and Capital Markets and European Departments

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August 5, 2010

This Financial System Stability Assessment (FSSA) Update summarizes the findings of the Financial Sector Assessment Program (FSAP) Update mission to Helsinki during the period April 6–16, 2010. The main author of this report is Karl Driessen (Mission Chief), with contributions from other members of the mission team: Aidyn Bibolov, Pierluigi Bologna, and Sònia Muñoz (all IMF). The principal findings are:

- **Despite a sharp economic downturn in 2009, the Finnish financial sector has weathered the global financial crisis.** The financial sector, which is highly integrated into the Nordic financial system, had negligible exposure to toxic assets. Banks have continued to report positive (albeit lower) profits and loan growth during the crisis, nonperforming loans (NPLs) have risen but remain low, and capital adequacy levels are well above minimum requirements. Insurance companies, to a large extent associated with banks, and pension funds, were relatively more affected, but benefited from a recovery in equity markets and the long-term nature of their liabilities.

- **Bank vulnerabilities that warrant close monitoring include the credit risk embedded in variable rate lending and reliance on wholesale funding.** Although the present low-interest rate environment has eased lending conditions and debt service, strains may emerge when monetary policy is normalized. Wholesale funding costs may also be affected by Euro area sovereign debt stress and upcoming tighter liquidity risk regulations. Over the longer term, pressure on profitability from intensifying competition for deposits and low interest rates on new loans will pose challenges. However, overall, bank capital buffers appear sufficient to withstand a range of stress scenarios, and steps are being taken to maintain underwriting standards.

- **Reform priorities should focus on further strengthening financial sector supervision and broadening the toolbox for bank resolution.** These could usefully build on the international prudential reform agenda, but there is also the need to expand bank resolution toolbox and to consider risk-sensitive stability fees to improve financial stability.

FSAP assessments are designed to assess the stability of the financial system as a whole and not that of individual institutions. They have been developed to help countries identify and remedy weaknesses in their financial sector structure, thereby enhancing their resilience to macroeconomic shocks and cross-border contagion. FSAP assessments do not cover risks that are specific to individual institutions such as asset quality, operational or legal risks, or fraud.

Contents **Page**

Glossary 3

Executive Summary 4

I. Background..8
A. Structure of the Financial System 8
B. Recent Macroeconomic Developments and Outlook.........................10
C. Household and Corporate Balance Sheets 13

II. Banking Sector Vulnerabilities 14
A. Soundness and Resilience 14
B. Stress Testing Results...19

III. Supervisory Challenges 23

IV. Safety Net and Crisis Management 27
A. Bank Resolution Framework 27
B. Deposit Insurance Guarantee 29
C. Emergency Liquidity Assistance...29

Tables
1. Key Recommendations 5
2. Risk Assessment Matrix 6
3. Financial System Structure 11
4. Selected Economic Indicators, 2005–10..12
5. Financial Soundness Indicators of the Banking Sector, 2005–09) 16
6. Summary Results: Stress Tests 22

GLOSSARY

APK	Finnish Central Securities Depository
BCP	Basel Core Principles for Effective Banking Supervision
BOF	Bank of Finland
CCP	Central Counterparty Clearing House
CRE	Commercial real estate
CSD	Central Security Depository
DGF	Deposit Guarantee Fund
ECB	European Central Bank
EFi	Euroclear Finland
ELA	Emergency liquidity assistance
EMCF	European Multilateral Clearing Facility
ESCB	European System of Central Banks
EU	European Union
FIN-FSA	Financial Supervision Authority
FSAP	Financial Sector Assessment Program
FSSA	Financial System Stability Assessment
HEX	Helsinki Stock Exchange
ISA	Insurance Supervisory Authority
LTV	Loan-to-value
MOF	Ministry of Finance
MOU	Memorandum of understanding
NFSR	Net Stable Funding Ratio
NPLs	Nonperforming loans
OM	APK settlement system for equity rated securities
PMJ	PMJ system for retail payments
POPS	POPS interbank payment system for express transfers and checks
RM	APK settlement system for non-equity rated securities
SME	Small-and medium-sized enterprise
TARGET	Trans-European Automated Real-Time Gross Settlement Express Transfer System

EXECUTIVE SUMMARY

The Finnish financial sector has weathered the global financial crisis and a subsequent sharp downturn in the economy in 2009. The global financial crisis led to a collapse in demand for Finland's capital-intensive goods exports, resulting in GDP falling by 7¾ percent in 2009. The recovery is expected to be slow and will depend on a pickup in external demand and maintaining competitiveness in key sectors of the economy. The financial sector is highly integrated into the broader Nordic financial system, but exposure to toxic assets has been minimal. Banks have remained profitable, NPLs increased slightly but remain low, and capital levels are well above the regulatory minimum. Insurance companies and pension funds have been relatively more affected by the turbulence in capital markets, but were helped by a recovery in equity markets in 2009 and the long-term nature of their liabilities.

Banks' capital buffers on average seem sufficient to withstand fairly adverse stress scenarios, but liquidity and credit risks require monitoring. Although competition is putting pressure on net interest margins, stress test results show that banks can absorb sizeable shocks. Banks' exposures to direct interest rate risk are limited, as loans are mostly at floating rates, but this leaves their borrowers exposed and banks vulnerable to the indirect effects of interest rate shocks. In addition, banks' reliance on wholesale funding leaves them exposed to liquidity risk and vulnerable to an intensification of regional sovereign risk concerns; funding costs may also be affected by tighter regulations governing liquidity risk. Contagion risks are significant, owing to the high degree of concentration; and domestic and cross-border interlinkages.

The safety net and crisis management framework faces several challenges, in both the domestic and the cross-border dimensions. Bank resolution options should be expanded beyond the existing bail-out and liquidation modalities, and its cost effectiveness improved. An evaluation of the Deposit Guarantee Fund (DGF) using the Core Principles for Effective Deposit Insurance Systems would support reform efforts in this area.

As in other countries, the main regulatory and supervisory challenges for Finland will entail strengthening regulatory and supervisory frameworks in line with reforms currently under discussion at the European Union (EU) and international levels. The structural features of the financial system, including its regional dimension, suggest that the country would benefit from the adoption of reforms being developed internationally, in particular the EU overhaul of the cross-border supervisory and crisis management frameworks.

Banking supervision is robust, and follows relevant EU Directives and the Basel Core Principles for Effective Banking Supervision (BCP) closely. The Financial Supervision Authority (FIN-FSA) has implemented the 2001 FSAP recommendations, but some challenges remain, particularly in the area of its supervisory powers, where the ability to impose administrative sanctions appears weak.

Relatively large foreign bank ownership brings about specific challenges for home-host cooperation that require further attention. Plans by some of the largest foreign banks, now on hold, to convert from subsidiaries into branches should be met by further enhancement of cross-border information sharing and crisis preparedness. In addition, although FIN-FSA has already made significant efforts in integrating its procedures and practices between banking and insurance supervision—reflecting the structure of the financial industry—further cross-fertilization remains possible, including by aiming to reach international agreement with relevant home supervisors on deepening cross-sectoral (banking/insurance) supervisory cooperation.

In support of these broader conclusions, Table 1 provides detailed recommendations.

Table 1. Finland FSAP Update—Key Recommendations

Recommendation	Timeline
Financial Stability Analysis	
Monitor bank mortgage pricing practices and household debt service capacity closely. Increase efforts to compile information on banks' mortgage portfolio, including loan-to-value (LTV) ratios. Frequency: annually.¶19	6 months
Enhance the top-down stress testing framework by (i) modeling macro-financial linkages on a bank-by-bank basis; (ii) further integrating bank and sectoral data; (iii) incorporating financial conglomerate dimension; and (iv) improving the synergies between the Bank of Finland's (BOF) Research and Financial Stability Divisions and the FIN-FSA. Exercise can be conducted quarterly. ¶23	6-12 months
Make available quarterly core financial soundness indicators using the data dissemination system already in place. ¶23	3 months
Enhance the current framework to assess systemic risk by: (i) using more detailed information on cross-border exposures; (ii) including all nonbank elements of the financial sector and cross-border linkages; (iii) establishing cross-border cooperation on systemic risk assessment with other authorities; and (iv) integrating the framework in the set of supervisory tools, to better feed into policy action. ¶30	6-12 months
Safety Net	
Set up a bank-specific resolution regime to enhance cost-effectiveness and speed of bank resolution. ¶47	1-2 years
Use Core Principles for Effective Deposit Insurance Systems to evaluate and assure operational resources of the Deposit Insurance Scheme commensurate with needs. ¶49	6-12 months
Supervision and regulation	
Improve FIN-FSA's supervisory powers to impose administrative fines and/or penalty payments beyond the current securities markets related scope; increase the maximum amount of such fines and penalties. ¶34	6–12 months
Increase the effectiveness of cross-border supervision, including information sharing with home supervisors with respect to the activity of foreign branches. ¶29	6 months
Increase the focus on liquidity risk, using the forthcoming liquidity standard of FIN-FSA as a catalyst for detailed analysis of supervised institutions' funding profiles. ¶36	6 months
Further integrate procedures and practices of banking and insurance supervision, with a view to enhancing FIN-FSA's analysis of the (consolidated) risk profile of complex financial groups active in Finland. ¶35	1–2 years

Table 2. Risk Assessment Matrix

Threat	Likelihood Considerations	Impact Considerations
A. Adverse developments for the financial sector	**Medium**	**Medium**
A.1. Slow real sector recovery	**Medium** Finland may recover more slowly than many other countries due to the structure of the country's exports (slanted toward information and communication technology and capital goods, and directed toward hard-hit markets). Moreover, fast rising unit labor costs due to high wage increases and the appreciation of the effective exchange rate have reduced competitiveness. Consumption is likely to remain weak in the face of decreased net worth and rising unemployment. Investment is expected to remain subdued given the uncertainty on export recovery. A modest recovery of 1.2 percent is projected for 2010 (up from -7.8 percent in 2009). Risks are balanced, but greater than usual.	**High** The slow recovery would have an adverse effect on both household and corporate balance sheets and hence on the domestic banking system, through increased loan losses related to rising unemployment and more bankruptcies. Although nonperforming loans (NPLs) increased slightly to 0.7 percent of gross loans at-end-2009, a further increase in impairment losses should be expected in the small- and medium-sized enterprise (SME) and household sectors. This could limit the financial system's ability to support the economic recovery. Credit to corporates declined by 3.5 percent in 2009 as investment demand dried. However, credit growth to households remained positive. Interest rate developments are key. A prolonged period of low interest rates may further reduce banks' net interest income owing to competitive pressure and the zero bound on much of the deposit base. A lower lending stock in response to slower recovery would work in the same direction. At the same time, an increase in the policy interest rate can be expected even if growth remains subdued. The sharp reduction in interest rates over the past year from 5 percent in January 2009 to 1.25 percent in January 2010 (base rate) has made household loan repayments easier and contributed to limiting loan losses. The reversal of this trend can hurt household and housing companies' ability to repay their mortgages. However, the use of loan insurance and interest rate caps would partly mitigate this effect.
A.2 Higher funding costs	**Medium** Banks need to readjust the maturity structure of their funding to fulfill new liquidity regulations in the context of the Basel Committee proposals. An increase in policy rates and	**High** There is a heavy reliance on wholesale funding (the loan-to-deposit ratio is well above 100 percent), and competition in deposit markets has recently driven up rates. The tight competitive environment implies increased pressure on bank

Threat	Likelihood Considerations	Impact Considerations
	withdrawal of European Central Bank (ECB) liquidity support might affect market rates and translate in higher funding costs.	profitability.
A.3 CRE exposure of banks	**Medium** Recent developments in rents and vacancy rates in Finland show a sharp increase in vacancy rates and decline in rental rates, signaling a potential misalignment in the commercial real estate (CRE) market.	**Low** Overall exposure by banks to CRE appears to be limited. Foreign investors are reportedly trying to reduce their portfolio.
A.4 Declining residential property values	**Medium** Housing prices grew steadily in line with fundamentals until 2008 when they started to decline. Housing prices have recovered on the back of low interest rates and have recently surged.	**Low** In an environment of increasing credit risk, collateral value would decline, possibly requiring higher provisions and leading to larger losses in case of loan defaults. Lending to property developers would slow and credit quality of property sector loans could deteriorate. Mortgage loans are experiencing historically low loan loss rates.
B. Supervisory Challenges	**Medium**	**High**
B.1 Fallout from conversion of subsidiary to branch	**Medium** In the past, two of the pan-Nordic financial groups active in Finland have indicated that they may want to convert their subsidiaries into branches. However, these plans have been put on hold as a result of the financial crisis.	**High** A subsidiary-to-branch conversion is likely to limit supervisory effectiveness in Finland, given that the two largest banks might become branches, since FIN-FSA would have much more limited supervisory power over these institutions, including in a crisis situation.
B.2. Lack of an effective resolution framework	**Low** The financial sector robustness makes the likelihood of facing a severe banking crisis limited.	**High** Currently, Finland lacks a well-defined domestic resolution framework, limiting effective and prompt corrective actions by the authorities. Deposit institutions are subject to the same liquidation proceedings as any other company, with very limited possibility for least cost resolution. The Finnish financial sector has a high concentration of multinational banks but there is no ex-ante clarity on burden-sharing among the countries involved.

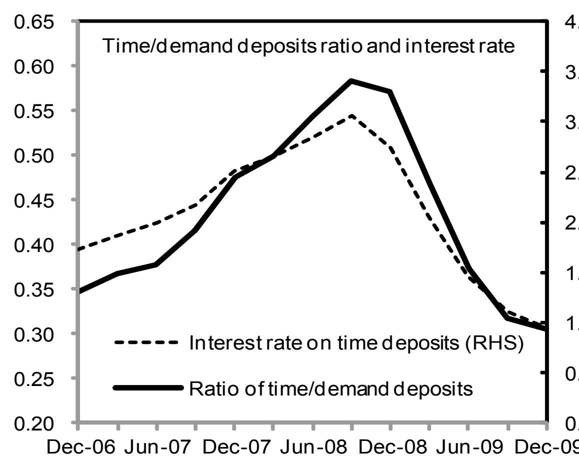
I. BACKGROUND

1. **Upcoming changes in the international regulatory landscape are likely to have a significant impact on the Finnish banking sector.** The system is largely foreign-owned and concentrated, yet with a large number of small banks. These features, and its overwhelming reliance on variable-rate lending, are factors that will need to be carefully considered as regulatory and market developments play out.

A. Structure of the Financial System

2. **A range of deposit-taking institutions (commercial, cooperative, and savings banks) stands at the core of Finland's financial system.** Total banking assets were around EUR 350 billion at end-2009 (equivalent to about 200 percent of GDP), up from 110 percent of GDP in 2003. There is a significant foreign penetration in the banking sector—assets of majority foreign-owned banks amount to around 70 percent of all banking system assets. Despite the large number (349) of credit institutions, the banking system is quite concentrated, with four banking groups accounting for over 90 percent of total assets; the largest two account for three quarters of lending. The high degree of concentration is related to the large number of small cooperative banks (263), most of which are part of the OP Pohjola group (Finland's second largest banking group), and savings banks (35). Table 3 provides more detailed information on the financial sector structure.

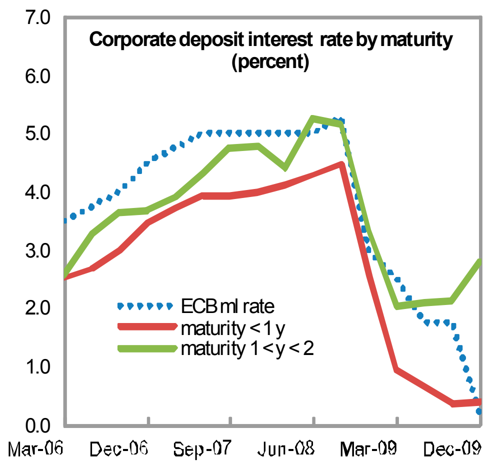
3. **Financial conglomerates figure prominently, with a strong Nordic cross-border dimension.** The Nordic financial system is characterized by (a) high concentration, reflecting the consolidation of the industry and the drive for economies of scale; (b) links between banks and insurance, pension, and asset management firms, resulting from financial liberalization and increased demand for long-term savings products ; and (c) cross-border linkages reflecting limited opportunities for domestic growth.[1] Most groups operating in Finland comprise banks, insurance, securities, and other financial services companies. In addition, the insurance-centered Sampo Group increased its holdings in Nordea to over 20 percent and as a consequence Nordea Group (Sweden) became Sampo's associated company. Given that Nordea Group owns the largest bank in Finland, this further increased the complexity of financial conglomerates in Finland.

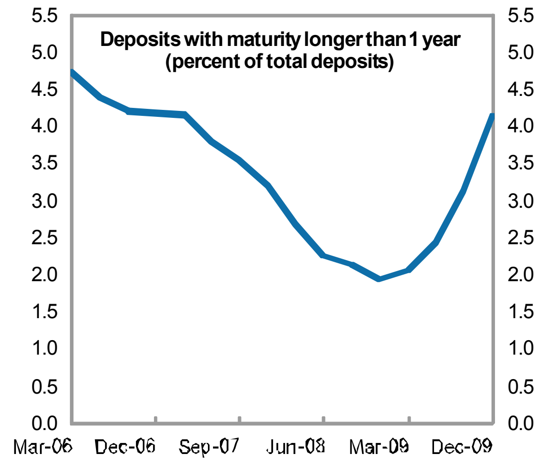


Source: Bank of Finland.

[1] See Financial Integration in the Nordic-Baltic Region—Challenges for Financial Policies, IMF, 2007.

4. **The turmoil in the global financial markets resulted in large dislocations of financial flows in Finland.** Domestic corporate debt issue fell sharply in 2008 and was to a large extent replaced by bank credit; this was reversed in 2009 as market conditions normalized. Bank deposits grew as agents fled riskier asset classes. As interest rates on deposits fell, the ratio of term to demand deposits fell back to their 2006 level of around 0.3 from a peak of almost 0.6 in 2008: Q3. Recently, the popularity of term deposits with long maturities (greater than one year) has again increased. Despite the financial market uncertainty, bank lending continued to grow in response to historically low interest rates.





Source: FIN-FSA

5. **Capital markets suffered in 2008—corporate debt issues declined sharply and stock market capitalization fell dramatically.** The corporate debt market, which traditionally plays an important role in Finland with outstanding debt equivalent to about 26 percent of bank lending in 2009, witnessed a sharp decline in new issues through February 2009, but recovered subsequently with new bond issues peaking at EUR 1 billion in 2009, up from EUR 287 million in 2008.[2] Corporate financing needs during this period were met by banks as well as by direct lending from employee pension funds.[3] The flight to safety brought about by the loss of confidence in the global financial markets led to a sharp fall in equity prices. By end-2009, market capitalization had recovered significantly to EUR 141 billion (equivalent to 82 percent of GDP) from EUR 116 billion at end 2008.

6. **Insurance companies and pension funds saw their investment income turn negative, but most of the losses were reversed in 2009.** Total assets of these companies fell in 2008 owing to the steep drop in equity prices and increasing corporate bond interest rates. Earnings were also affected by a sharp slowdown in new insurance origination. Asset values,

[2] Multinational firms also re-entered the international capital market in 2009.

[3] Companies are allowed to borrow from their employee pension fund up to the amount of their contributions and up to a maximum fraction of assets of the fund. These loans must carry a bank guarantee or other collateral.

solvency, and profitability recovered in 2009. There are ongoing simulations in preparation for the implementation of Solvency II for insurance companies. Final parameters to calculate solvency have not yet been determined.

B. Recent Macroeconomic Developments and Outlook

7. **The Finnish economy suffered a steep recession in 2009 that will continue to affect the financial sector in the near future.** Real GDP fell by 7.8 percent as exports collapsed. The general government incurred an overall deficit—the first since 1997—of 2.4 percent of GDP, reflecting the weak economy and a discretionary stimulus adopted in early 2009 equivalent to 1.7 percent of GDP. The low debt ratio (44 percent of GDP at end-2009) provides a buffer to weather the present downturn. In addition, with a comprehensive social safety net, automatic stabilizers imply a large budget relaxation, estimated at 3-4 percent of GDP.

8. **Economic activity is projected to rebound somewhat in 2010, but unemployment is expected to increase further.** Growth is likely to remain subdued, with private consumption remaining weak in the face of decreased net worth and rising unemployment, which is expected to approach 9 percent in 2010. Investment is also expected to lag, owing to excess capacity and tighter lending conditions, as reflected in higher lending margins to corporates. Inflation is likely to decline given the sizable output gap.

9. **Interest rates are likely to remain low for some time to support the economic recovery and maintain financial stability.** In the medium term however, interest rate conditions are expected to normalize as the output gap narrows and monetary policy tightens to avoid upward inflation pressures.

Table 3. Finland: Structure of the Financial System, 2003–09

	2003	2006	2009
Number			
Banking groups	11	14	15
of which: Domestic-majority owned	9	10	11
Foreign-majority owned	2	4	4
Branches of foreign banks	8	13	15
Domestic banks	336	330	313
Other MFIs	52	50	53
Insurance companies	153	128	109
Life	15	14	11
Non-life (incl. mutual associations)	138	114	98
Statutory employee pension funds	7	7	7
Voluntary pension funds	101	78	70
Mutual funds	307	435	456
Securities dealers	48	44	59
Financial system assets (in millions of euro)			
Banking groups	160,021	228,901	349,109
of which: Domestic-majority owned	65,611	70,514	102,600
Foreign-majority owned	94,410	158,387	246,510
of which: 4 largest banking groups	149,747	214,727	328,033
Branches of foreign banks	11,841	12,436	17,392
Other MFIs	22,663	35,678	43,175
Insurance sector	36,516	45,190	48,900
Life	27,420	34,374	36,498
Non-life	9,096	10,816	12,402
Statutory employee pension funds 1/	49,483	64,809	74,744
Voluntary pension funds	4,774	4,823	4,573
Mutual funds	15,355	44,777	43,271
Securities dealers	764	480	249
Stock market capitalization	157,768	234,691	140,931
Corporate debt			
outstanding	16,442	17,055	18,637
issued in Finland	130	751	1,075
Assets as percent of GDP			
Banking groups	110.0	138.2	204.2
Other MFIs	15.6	21.5	25.3
Insurance companies (life and nonlife)	25.1	27.3	28.6
Statutory employee pension funds	34.0	39.1	43.7
Voluntary pension funds	3.3	2.9	2.7
Stock market capitalization	108.5	141.7	82.4
Mutual funds	10.6	27.0	25.3

Source: FIN-FSA.

1/ Balance sheet assets valued at historical cost. Does not include public sector funds.

Table 4. Finland: Selected Economic Indicators, 2005–10

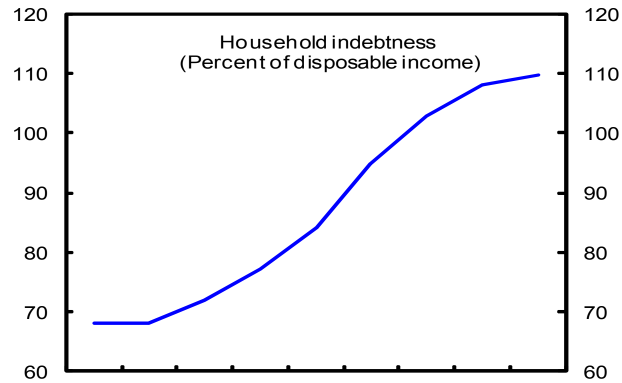
	2005	2006	2007	2008	2009	2010 Proj.
	(Percentage change, unless otherwise indicated)					
Output and demand (volumes)						
GDP	2.9	4.4	4.9	1.2	-7.8	1.2
Consumption	2.8	3.1	2.7	2.0	-1.3	1.5
Private consumption	3.1	4.3	3.4	1.7	-2.1	1.6
Public consumption	2.2	0.4	1.1	2.7	0.7	0.9
Gross fixed capital formation	3.6	1.9	10.6	-0.2	-13.4	-2.5
Private investment	6.1	3.1	11.0	-0.2	-15.7	-3.3
Public investment	-11.2	-6.4	7.9	-0.7	4.0	2.1
Exports of goods and services	7.0	12.2	7.9	6.5	-24.3	0.1
Imports of goods and services	11.4	7.9	6.0	6.6	-22.3	-2.3
Foreign contribution to growth (in percent of GDP)	-1.0	2.1	1.2	0.3	-1.8	1.1
Prices, costs, and income						
Consumer price inflation (harmonized)	0.8	1.3	1.6	3.9	1.6	1.4
GDP deflator	0.5	0.9	3.3	1.4	0.6	1.7
Terms of trade	-0.7	-3.2	-0.8	-3.0	1.7	-3.0
Unit labor cost, economy-wide	2.3	0.1	1.0	5.4	6.8	-0.3
General Government (in percent of GDP)						
Revenues	47.6	47.8	47.4	48.1	47.1	47.5
Expenditures	45.0	43.8	42.2	43.9	49.5	51.6
Balance	2.6	4.0	5.2	4.2	-2.4	-4.1
Gross debt (EMU definition)	41.7	39.7	35.2	34.8	43.8	49.7
Labor market						
Unemployment rate (in percent)	8.4	7.7	6.8	6.4	8.3	8.8
Potential output and NAIRU						
Output gap (in percent of potential output) 1/	1.4	3.0	5.4	4.3	-4.3	-3.7
Growth in potential output	2.9	2.7	2.6	2.3	0.5	0.6
NAIRU (in percent)	8.6	8.3	8.1	8.0	7.9	7.9
Money and interest rates						
M3 (Finnish contribution to euro area , growth rate, e.o.p.)	8.2	8.1	19.7	5.0	-1.6	-2.1
Finnish MFI euro area loans (growth rate, e.o.p.)	12.2	11.5	11.7	11.6	1.7	3.0
3-month money market rate	2.2	3.1	4.3	4.6	1.2	0.7
10-year government bonds yield	3.4	3.8	4.3	4.3	3.7	3.4
	(In percent of GDP, unless otherwise indicated)					
National saving, investment, and income						
Gross national saving	25.2	25.5	27.0	24.7	18.2	18.8
Gross domestic investment	21.9	21.3	22.8	21.6	16.9	17.0
Private saving	20.2	19.4	19.4	18.0	17.8	20.7
Household saving as percent of disposable income	0.0	-1.5	-1.1	-0.6	2.5	2.9
Private investment	19.4	19.1	20.4	19.1	14.1	14.8
Private savings surplus	0.0	0.0	0.0	0.0	0.0	0.0
Government saving surplus	2.6	4.0	5.2	4.2	-2.4	-4.1
Households' real disposable income (increase in percent)	3.3	4.1	3.1	4.2	1.3	-0.4
	(In percent of GDP, unless otherwise indicated)					
Balance of payments						
Current account balance	3.4	4.2	4.3	3.1	1.3	1.8
Trade balance	4.7	5.2	5.1	3.7	2.3	1.9
Net external debt (excluding equity FDI and shares)	-5.5	-5.0	-4.3	10.5	9.9	7.9
Net international investment position	-14.7	-14.0	-29.6	-8.1	-10.6	-7.3
Exchange rates (period average)						
Euro per US$	0.80	0.80	0.73	0.68	0.72	…
Nominal effective rate (increase in percent)	-0.4	-0.1	2.2	2.6	1.3	…
Real effective rate (increase in percent) 2/3/	-0.1	-0.4	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 2009, data are for first ten months.
3/ Based on relative normalized unit labor costs.

C. Household and Corporate Balance Sheets

10. **Household balance sheets are recovering, but the build-up of variable rate debt that currently carries low interest rates poses latent credit risk for banks.** Financial assets of households, including those linked to equity market performance such as pension funds, mutual funds, and unit-linked insurance products, have almost recovered to their pre-crisis level largely due to the rebound in equity markets in 2009. However, household indebtedness has continued to increase (to 110 percent of disposable income in 2008), and the proportion of loans with floating interest rates—in particular mortgage loans—is over 95 percent. Rising unemployment points to increased risk for debt service capacity, which is partly mitigated by limited mortgage insurance protection against unemployment and illness, as well as by interest rate caps on floating rate mortgages.



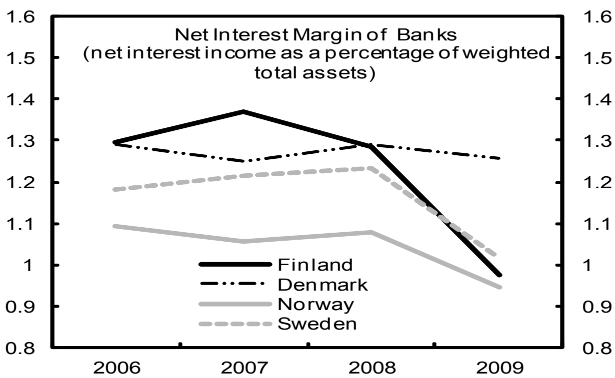
Source: Bank of Finland.

11. **Firms entered the crisis with solid balance sheets, but are confronted with higher borrowing costs that reflect greater uncertainty about credit quality.** The credit tightening of 2008 increased borrowing costs and shortened maturities, in particular for smaller firms, and corporates increasingly turned to banks and employee pension funds to meet their funding needs. The ratio of debt to total assets increased from less than 23 percent in 2007: Q3 to over 40 percent in 2009: Q1. With the improvement in global financial conditions in 2009, corporations have been able to return to the domestic capital market, and larger corporates have returned to the international loan and syndicated loan markets, allowing the stock of bank loans to slightly decrease during 2009. However, the recession has resulted in a rise in payment defaults and bankruptcies that are expected to rise further. Small enterprises have suffered most from tighter collateral requirements, turning increasingly to public funding sources, like Finnvera, which has seen its loans to SMEs increase from EUR 852 million in 2007 to EUR 1,031 million in 2009.

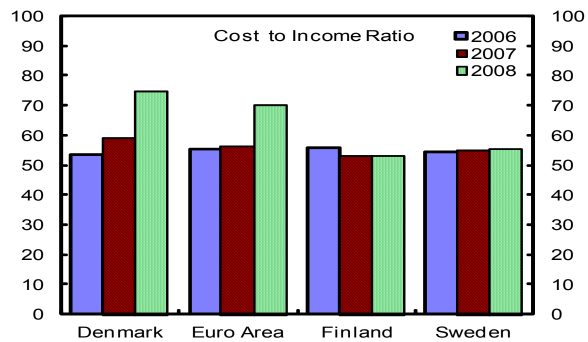
II. Banking Sector Vulnerabilities

A. Soundness and Resilience

12. **Despite its concentration, the banking sector is highly competitive and efficient by international standards.** Finnish banks compete fiercely in the domestic market both with each other and with other Nordic banks, both for funding (deposit rates on maturities have increased, likely in anticipation of changes in liquidity risk regulation) and for loans (on expectations of future cross-selling opportunities). As a result, net interest margins have narrowed significantly in recent years, and are indeed lower than in most neighboring countries. Cost efficiency ratios compare well with peer banking sectors for the large banking groups, but have deteriorated in the face of lower margins.

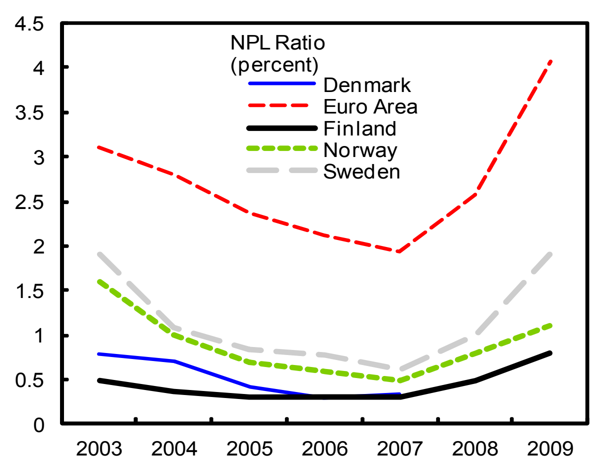


Source: IMF staff calculations based on BankScope data.
1/ Total assets include the large increase in Nordea's derivatives in 2008, therefore it understates the ratio that year.



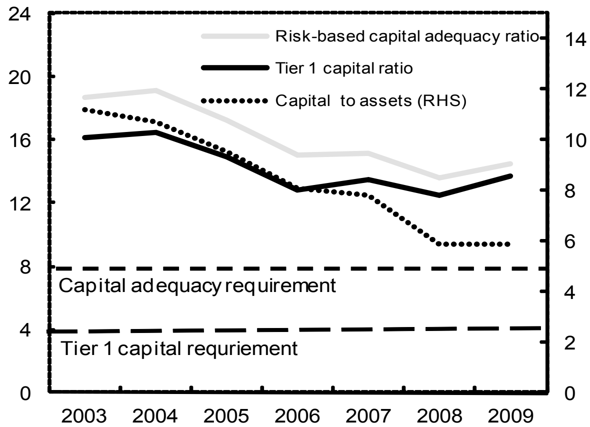
Source: EU Banking Sector Stability Reports, staff calculations.

13. **Asset quality has deteriorated only slightly despite the economic downturn.** Exposure to toxic assets was minimal. The NPL rate increased to 0.7 percent in 2009 from a comparatively low 0.5 percent in 2008. Corporate loans have been the major source of credit risk for banks, while households have broadly been able to continue servicing debts thanks to low interest rates and the social safety net. Further increases in NPLs are expected for SMEs in 2010. Although banks tightened their lending conditions, the credit slowdown observed in 2009 was related to businesses regaining access to capital markets.

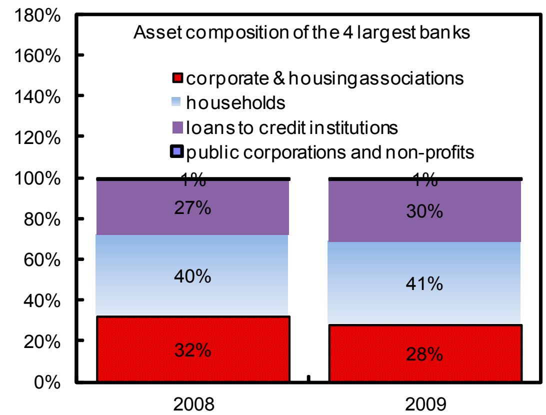


Source: GFSR.

14. **Banks report solid capital adequacy.** After declining slightly in 2008, the Tier 1 capital ratio improved in 2009 thanks to rights issues, a partial portfolio reallocation toward less risky assets, and the expiration of transitional additional capital requirements related to the implementation of Basel II. Smaller cooperative and savings banks have even larger capital buffers.

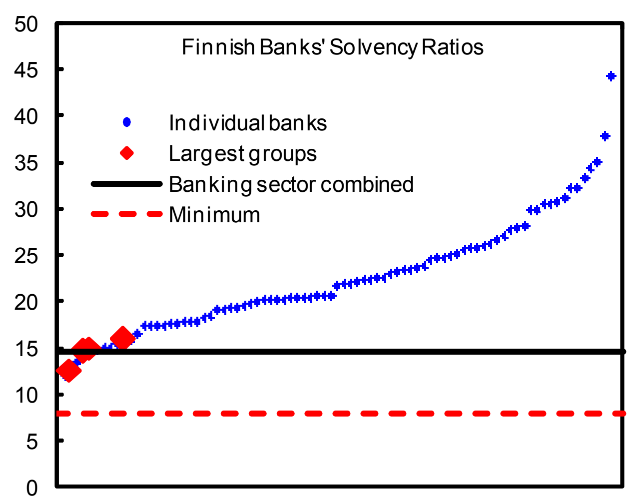


Source: Bank of Finland.



Source: Bankscope and staff estimates

15. **Low interest rates depressed earnings markedly.** Net interest income decreased as the fall in interest received on the mostly variable rate asset portfolio was not offset by a commensurate decrease in interest paid on deposits—at current low policy rates, a large part of deposits is already unremunerated and hence cannot be further lowered. Rising loan losses related to the corporate credit portfolio further contributed to lower profits. Aiming to attract deposits, also with a view to improving the funding profile in anticipation of regulatory changes, banks offered more attractive rates that further decreased the margins of the banking system. The decline in net interest income was offset for the larger banks by an increase in non-interest income.



Source: FIN-FSA.

Table 5 . Finland: Financial Soundness Indicators of the Banking Sector, 2005-09

	2005	2006	2007	2008			2009		
				Total	BIG 4	Others	Total	BIG 4	Others
				(Million of Euro unless indicated)					
Banking sector									
Capital adequacy									
Regulatory capital	20,729	19,156	20,843	20,682	18,957	1,726	20,948	18,907	2,042
of which Tier 1	17,988	16,255	18,572	18,947	17,363	1,584	19,820	18,035	1,785
Tier 2	3,183	3,292	2,632	1,689	1,547	141	1,128	872	256
Tier 3	0	0	0	0	0	0	0	0	0
Other own funds	0	0	0	47	47	0	0	0	0
Deductions from own funds total (until 2007/COREP-reporting)	-442	-391	-360	0	0	0	0	0	0
Risk Weighted assets (mln euro)	120,199	127,221	138,040	151,907	142,775	9,132	144,533	134,290	10,243
of which for Credit risk	110,764	124,571	126,187	128,843	120,885	7,958	128,900	120,012	8,888
Market risk	9,435	1,808	2,222	5,016	4,962	55	4,801	4,655	146
Operational risk	0	0	4,718	9,378	8,258	1,119	10,832	9,623	1,209
Any other requirement (specify): Basel II transitional IF	0	842	4,913	8,670	8,670	0	0	0	0
Regulatory capital as percent of risk-weighted assets *	17.2	15.1	15.1	13.6	13.3	18.9	14.5	14.1	19.9
Regulatory Tier I capital to risk-weighted assets *	15.0	12.8	13.5	12.5	12.2	17.3	13.7	13.4	17.4
Capital as percent of assets *	9.2	9.4	7.9	6.2	6.1	7.7	6.4	6.3	8.2
Total banking sector assets	217,590	228,901	258,000	347,061	327,975	19,086	349,109	328,033	21,076
Asset composition and quality									
*Sectoral distribution of bank credit to the private sector (as percent of total credit to private sector) **									
Agriculture/Food Industry	3.6	3.3	3.5	3.5	…	…	3.8	…	…
Real estate/Construction and Development loans	11.3	11.6	11.6	12.6	…	…	9.5	…	…
Energy and utilities	1.1	1.2	1.1	1.8	…	…	1.3	…	…
Transportation and Road Construction Loans	2.0	1.9	1.7	2.0	…	…	1.7	…	…
Other Industrial/Commercial loans	9.5	8.6	9.6	10.9	…	…	10.6	…	…
Consumer loans	58.6	58.4	58.1	56.3	…	…	58.8	…	…
Housing loans	43.6	43.4	43.5	41.9	…	…	43.9	…	…
Consumer credit	5.5	5.3	5.4	6.1	…	…	6.3	…	…
Other	9.5	9.7	9.2	8.2	…	…	8.5	…	…
Government loans									
Loans to Banks	3.2	4.3	3.4	2.2	…	…	3.2	…	…
Other financial intermediaries	4.5	4.5	4.5	4.7	…	…	5.2	…	…
Other	6.3	6.3	6.4	5.9	…	…	5.9	…	…

Table 5 . Finland: Financial Soundness Indicators of the Banking Sector, 2005-09 (continued)

	2005	2006	2007	2008			2009		
				Total	BIG 4	Others	Total	BIG 4	Others
*Geographical distribution of bank credit (as percent of total bank credit)**									
Finland	70.9	69.9	70.6	70.8	…	…	68.7	…	…
Other EMU countries	2.0	0.9	1.5	2.0	…	…	1.5	…	…
Other EU Countries	20.8	23.1	20.7	19.3	…	…	20.8	…	…
Other countries	6.3	6.2	7.2	7.9	…	…	9.0	…	…
Asset quality									
Non-performing loans (NPL) as percent of gross loans *	0.3	0.3	0.3	0.5	0.5	0.6	0.7	0.8	0.6
Writedowns on loans as percent of NPLs	15.4	0.0	12.8	24.9	10.9	…	41.0	22.0	…
Earnings and profitability (in percent)									
Gross profits as percent of average assets (ROAA) *	0.9	1.2	1.4	0.8	0.8	…	0.6	0.6	…
Gross profits as percent of average equity capital (ROAE) *	11.8	14.4	19.1	13.4	13.2	…	11.6	11.1	…
Net interest margin (net interest income as percent of interest bearing assets) *	1.5	1.6	1.6	1.7	1.6	…	1.0	1.3	…
Gross income as percent of average assets	2.3	2.5	2.8	2.2	…	…	1.5	…	…
Net interest income as percent of gross income	53.7	53.1	47.9	62.1	…	…	49.0	…	…
Non-interest income as percent of gross income	46.3	46.9	52.1	37.9	…	…	51.0	…	…
Trading income as a percent of gross income *	3.9	5.6	6.5	4.0	…	…	16.8	…	…
Non-interest expenses as percent of gross income *	46.2	42.2	38.8	43.4	…	…	41.2	…	…
Personnel expenses as percent of non-interest expenses *	47.6	48.5	46.7	47.0	…	…	47.3	…	…
Spread between reference loan and deposit rates *	2.3	2.6	2.6	2.5	…	…	1.6	…	…
Cost-to-income ratio (excl. writedowns on credit)	56.1	46.9	45.2	53.8	50.0	87.3	52.2	49.0	79.1

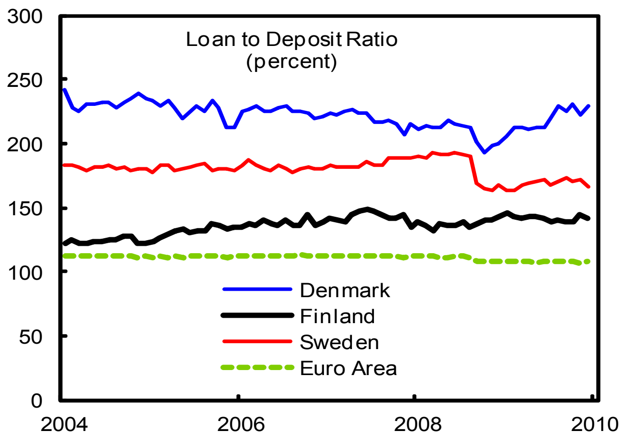
Table 5. Finland: Financial Soundness Indicators of the Banking Sector, 2005-2009 (concluded)

	2005	2006	2007	2008			2009		
				Total	BIG 4	Others	Total	BIG 4	Others
Liquidity									
Liquid assets as percent of total assets *	6.3	6.4	4.8	5.0	5.1	4.4	7.7	8.1	6.2
Liquid assets as percent of short-term liabilities *	12.2	12.8	9.0	11.0	13.3	6.3	16.6	20.5	8.8
Foreign currency loans as percent of total loans *	1.7	1.7	2.1	2.0	2.4	1.4	1.5	2.0	0.8
Foreign currency liabilities as percent of total liabilities *	5.6	7.3	6.1	4.7	5.6	1.3	5.3	6.4	1.3
Deposits as percent of assets (excl. interbank deposits)	47.3	46.3	46.6	39.1	27.1	78.3	41.9	29.1	80.0
o/w Household deposis	30.8	29.8	29.6	24.6	14.2	58.7	26.4	15.3	59.2
o/w Corporate deposits	8.4	8.8	9.9	8.2	6.9	12.3	8.6	7.1	13.2
o/w other	8.1	7.7	7.1	6.3	6.0	7.2	6.9	6.7	7.6
Net Interbank positions (in millions of euro)	22,831	25,351	26,799	20,287	22,015	-1,728	28,603	28,485	118
Gross Interbank Assets (in millions of euro)	70,471	80,974	86,870	99,866	85,946	13,920	117,729	103,466	14,263
Gross Interbank Liabilities (in millions of euro)	47,640	55,623	60,071	79,579	63,931	15,648	89,126	74,981	14,145
Other wholesale/market-based funding as percent of assets	17.8	19.4	18.3	14.3	16.6	5.7	12.8	15.1	5.1
Credit from BOF or ECB as percent of assets	0.8	0.4	0.2	1.2	…	…	0.8	…	…
Loans as percent of deposits *	123.0	132.5	130.7	127.6	140.4	113.1	123.4	136.1	109.7
Sensitivity to market risk (in percent unless otherwise stated)									
Off-balance sheet operations as percent of assets	16.4	13.4	18.1	13.6	14.1	4.3	15.3	15.9	4.7
Gross asset position in derivatives as a percentage of tier I capital *	160.3	151.0	171.5	467.7	509.9	5.1	389.3	427.2	6.3
Gross liability position in derivatives as a percentage of tier I capital *	160.1	154.2	180.0	477.0	520.2	2.9	382.6	419.7	7.7
Average maturity of assets, months	31.0	33.4	34.0	27.1	…	…	27.4	…	…
Average maturity of liabilities, months	13.5	14.2	12.1	9.0	…	…	9.3	…	…
Net long position in foreign exchange as a percentage of tier I capital *	…	…	0.1	-0.1	0.1	-2.0	1.9	2.0	0.9
Net open position in equities as a percentage of tier I capital *	…	…	…	2.7	1.7	13.1	2.2	0.9	16.0

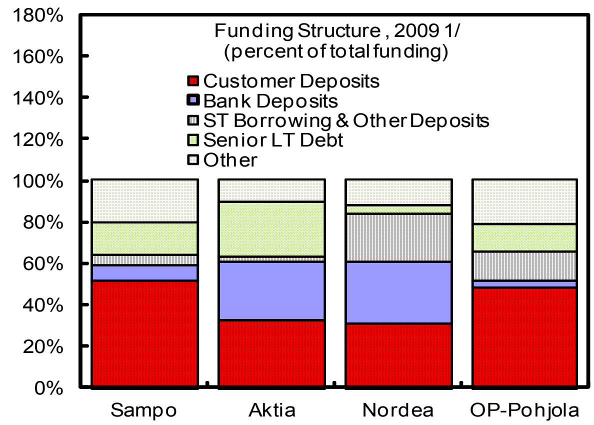
Source: Finnish Financial Supervisory Authority.

* Core and encouraged set of indicators

16. **Overall, Finnish banks are quite dependent on wholesale funding—although less so than other Nordic banks—but access to markets has not been a concern.** Liquidity ratios (e.g., cash and trading assets to total assets) are lower than in neighboring countries, but the main banking groups have good credit ratings and can easily access funding from the market, the parent banks, and/or the ECB.[4] There is the potential for bank funding costs to be pushed wider by stricter liquidity rules, higher yields on bank bonds, and increasing sovereign spreads—the latter creates a potential channel of contagion from the sovereign to the banking sector.



Source: GFSR.



Source: FIN-FSA.
1/ Excludes Nordea's derivatives.

B. Stress Testing Results

17. **Stress tests confirm that credit risk is the key source of risk.** However, capital adequacy of the system would remain above the mandatory level under most stress scenarios given large capital buffers. Only an extreme increase in the rate of default—similar to that observed during the 1990s banking crisis—or a massive default of mortgage loans would bring capital adequacy below the regulatory norm. Finnish banks are vulnerable to concentration risk given banks' exposure to their largest clients.

18. **For the system as a whole, market risk seems relatively modest.** Single-factor shocks for equity price and exchange rate risk suggest a relatively small impact on banks' capital adequacy, mainly because banks trade mostly on customers' behalf and hedge positions to maintain limited exposures in their books.[5] The effects of residential real estate shocks are minor given the historically low default rate of mortgages. Although the increase in value of commercial property has been significant through 2009, the small proportion of

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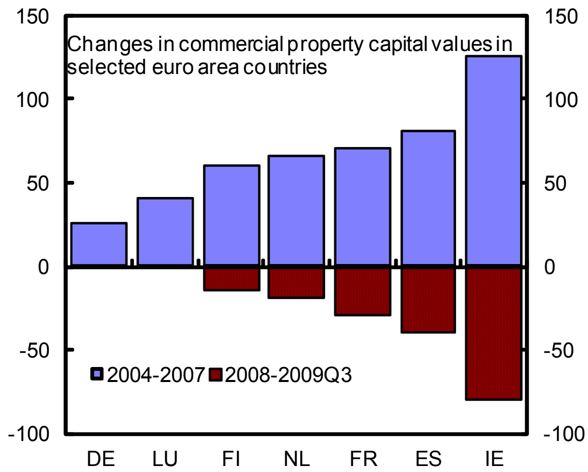
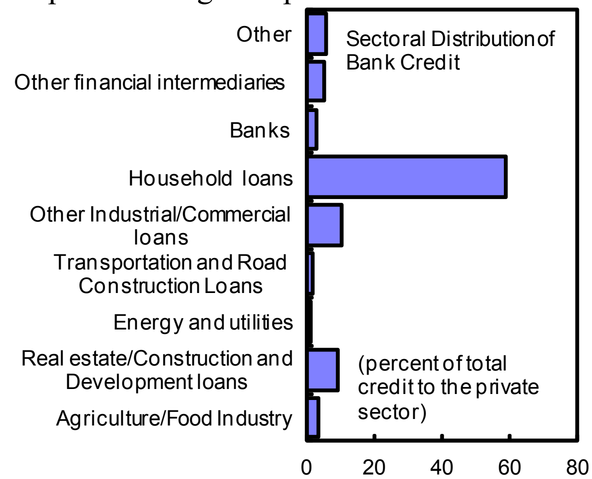
[4] Nordea Bank Finland Group and OP Pohjola Group are Aa2 while Sampo Bank Group and Aktia are A1.

[5] It should be noted that Nordea Bank Finland is the booking center for all derivative transactions of the Nordea Group.

lending by Finnish banks to that sector reduces the impact of a negative price shock.



Source: ECB Monthly Bulletin, February 2010.



Source: FIN-FSA.

19. **Interest rate risk of banks also seems modest, but the indirect effects on credit risk should be monitored carefully, especially since house prices have surged.** The direct effects of interest rate shocks are small given the minimal maturity mismatch of the balance sheet. However, the predominance of variable interest rate lending means borrowers that have taken out mortgage loans at the low rates available in the last two years would see their debt service increase sharply when market rates return to historical averages. Credit risks are exacerbated by the fact that house prices have risen rapidly recently with the growth of mortgage lending. These risks are partly compensated by the use of loan insurance, interest rate caps on mortgage loans, as well as the use of mortgages with a fixed monthly payment amount. These risk-mitigating practices vary widely across banks, with resulting different incidences of interest rate increases on households, banks, and insurance companies. Banks also indicated that clients' debt-service capacity is stress tested to interest rate levels of 6 percent, and that current debt service-to-income ratios are quite low. FIN-FSA should monitor bank mortgage lending practices (including pricing and LTV ratios) and household debt service capacity regularly, and ensure banks follow the recently issued guidance on LTV (with a maximum of 90 percent).

20. **Low liquidity buffers and reliance on wholesale funding expose banks to significant liquidity risk.** Liquidity stress tests were performed on the four largest banking groups, by simulating deposit outflows of both households and corporates as well as a contraction in the interbank market, and measuring the effect on liquid assets. Two alternative definitions of liquid assets were used, one narrower (including only the most liquid assets), and a second including all securities eligible for ECB refinancing. Haircuts were applied to take into account drops in market value. Results suggest that liquidity buffers are low, especially for one of the banks. However, a broader definition of liquid assets suggests a lower risk because of banks' large holdings of securities eligible as collateral for ECB refinancing. Moreover, foreign-owned banks' liquidity is managed by the group treasury, which can distribute liquidity within the group.

21. **Contagion risk is significant owing to the high degree of concentration in the banking sector.** The methodology is based on the construction of contagion maps between banks using all balance sheet interrelations, and simulating multiple-rounds of cascading defaults. The analysis shows that some of the largest banks act as liquidity hubs for the whole system. A smaller hub is also evident, based on cooperation agreements between cooperative and savings banks. Banks acting as hubs would become immediate channels of contagion in the event of a major crisis.

22. **Stress tests suggest that the banking system is resilient to combined shocks.** A multi-factor scenario including a sharp increase in NPLs and a decline in interest rate and asset prices would decrease capital significantly for some small banks. The four largest banking groups, however, would maintain sufficient capital adequacy. A "loss of confidence" scenario combining both adverse effects in the domestic economy and adverse global market developments that would sharply reduce external demand, replicating the 2008–09 crisis, leaves capital adequacy well above the regulatory norm. FIN-FSA conducted additional stress tests after the mission's departure in the context of an EU-level exercise; the results were broadly in line with the findings reported here.

23. **A number of recommendations arise from the stress testing exercise.** The authorities regularly perform a battery of stress tests that explore various risk dimensions of the financial system. These stress tests would benefit from further improvements, especially in methodology. The model linking macro-financial variables to NPLs on a bank-by-bank basis would need to be enhanced to obtain more detailed insights into vulnerabilities.[6] Also, as part of the banking risk analysis, it would be useful to develop a model for projecting key items of the banks' profit and loss account on a bank-by-bank basis to obtain a more accurate picture of how banks' earnings and capital will evolve during a full business cycle. In developing these models, greater synergies can be achieved between the BOF's Research and Financial Stability Analysis Divisions and the FIN-FSA. In this context, it is critical that the offsite supervision and financial stability departments have ready-access to bank and sectoral level data and use them in their offsite monitoring and scenario analysis. While preserving confidentiality, these data should be readily available for analytical work. Transparency could be increased by publishing the results of stress testing in the English version of the Financial Stability Report or other publication. Quarterly dissemination of a table of core financial soundness indicators using the existing data dissemination practices would be useful.[7]

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[6] This will require first to construct longer time series of individual bank data using observations available since 1996.

[7] Some financial soundness indicators such as NPL ratios are published quarterly in the FIN-FSA website, but there is no single table of core financial soundness indicators.

Table 6. Summary Results: Stress Test Results for Banks

(Based on end-December 2009 data)

Type of Shock	Top-Down Sensitivity Analysis			
	CAR			Percent of Bank Assets
	Min	Average	Max 1/	CAR < 8 %
Pre-shock CAR (end-December 2009)	12.3	14.5	25.8	
Credit Risk 2/				
1 Increase in NPLs by 700 percent	9.4	11.8	25.0	0
2 Increase in NPLs to 13 percent (1990s banking crisis levels)	2.4	7.0	24.6	31.6
3 30 percent of loans to commercial real estate turning into NPLs	11.2	13.0	25.6	0
4 30 percent of loans to manufacturing turning into NPLs	11.2	13.3	25.6	0
5 30 percent of mortgage loans turning into NPLs	5.8	10.6	25.8	24.5
6 30 percent of consumer loans turning into NPLs	11.4	13.4	24.6	0.0
7 30 percent of loans to the three sectors with the highest credit growth turning into NPLs 3/	9.3	11.0	25.3	0
Interest Rate Risk - Effect on Net Interest Income				
1 Parallel upward shift of the interest rate by 200 basis points	13.5	15.3	29.9	0
2 Parallel downward shift of the interest rate by 100 basis points	11.5	14.1	23.8	0
3 Reduction of Net Interest Margin by 50 percent	11.2	13.3	23.0	0
Interest Rate Risk - Effect on Economic Value of Banking Book				
1 Parallel upward shift of the interest rate by 200 basis points	12.4	14.7	23.4	0
2 Parallel downward shift of the interest rate by 100 basis points	12.3	14.7	27.8	0
Exposure Concentration 4/				
1 Default of banks' largest 10 exposures	0.0	…	6.9	100
Asset Price Risk				
1 Equity prices decline by 70 percent	11.4	14.2	25.8	0
2 Residential real estate prices decline by 30 percent	11.6	14.0	25.8	0
3 Commercial real estate prices decline by 30 percent	12.1	14.2	25.7	0
Foreign Exchange Rate Risk				
1 Euro apreciates by 30 percent	11.1	14.4	25.8	0
2 Euro depreciates by 30 percent	12.3	14.6	25.8	0
Multi-factor shock				
1 Increase in NPLs by 700 percent, and decline in interest rates by 100 percent, equity prices by 70 percent and commercial and residential estate prices by 30 percent	4.6	10.4	24.9	1.1

	Scenario Analysis		
	CAR		
	2010	2011	Cumulative to 2011 5/
Scenarios			
1 Double dip	14.1	13.5	14.4
2 Global financial shock	13.4	12.4	12.5
3 Loss of confidence	13.1	12.0	11.7

Sources: FIN-FSA, Bank of Finland; and IMF staff estimates.

1/ The maximum is 44.6 percent, excluding an outlier of 144 percent. For the exercise 77 banks of the smallest banks are grouped togethe

2/ Assumes 50 percent provisioning, except for mortgage loans at 25 percent.

3/ The highest sectoral credit growth in 2008 was in manufacturing, commercial real state, and energy.

4/ Assumes 50 percent provisioning. Eight relevant banks participated in the exercise.

5/ Using the Aino model.

24. **Insurance companies and pension funds are also able to withstand a battery of stress tests.** Various interest rate shocks (up to 400 basis points in either direction on both assets and liabilities), shocks to equity prices (with decreases up to 70 percent), to real estate prices, and to exchange rates (up to 30 percent in either direction) were performed. Balance sheets of these companies are much more sensitive to market risk, but maintain acceptable levels of solvency except for some life insurance companies, which would become insolvent under the most extreme equity price scenario due to their large equity portfolio (around 20 percent of assets).

III. Supervisory Challenges

25. **Finland faces critical regulatory and supervisory challenges stemming from both domestic and international developments.** Most demanding of these will be the need to dovetail major upcoming changes in the EU supervisory framework to the Finnish financial system, covering prudential regulation and supervision (including for cross-border activities) and systemic oversight. Good progress has been made in implementing the recommendations of the 2001 FSAP, and the authorities have implemented the EU capital requirements directive, which leaves them well placed to meet these tests.

Reform of prudential regulation

26. **As in other countries, the new regulatory measures being developed by the Basel Committee would likely have significant impact.** In many respects, the Finnish banking sector appears better positioned than other European countries to adopt these measures, especially since the system as a whole already maintains a high Core Tier 1 capital ratio. However, some individual institutions may be more affected than others, in particular with respect to the proposed capital deductions, which would affect most those groups having cooperative structures with mutual shareholdings. The proposed new requirements with respect to liquidity risk, in particular the Net Stable Funding Ratio (NFSR), would also affect those banks that rely significantly on short-term wholesale funding and, as discussed earlier, push-up funding costs. However, concerns on this front are mitigated by the likelihood that these measures would be introduced gradually to provide banks with sufficient time to adjust.

Cross-border supervision

27. **The significant presence of foreign banks in Finland puts a premium on effective cross-border supervision.** Arrangements for home-host supervisory cooperation, especially at the regional level, have been overall satisfactory (see below). Plans—currently on hold—by Nordea and Danske Bank, two pan-Nordic financial groups whose Finnish subsidiaries are among the largest banks in the country, to convert their operations from subsidiaries into branches have raised some concerns by the authorities, and effective supervision by FIN-FSA will require enhanced efforts at home-host cooperation, including in terms of timely and relevant information sharing, and effective cross-border crisis management planning. Ongoing EU-level and international initiatives to strengthen the operation of supervisory

colleges and enhance cooperation in cross-border crisis management should be helpful in this respect.

28. **At a minimum, the authorities should pursue improvements in the cross-border supervisory framework pending EU decisions in this area**. These should build on the good Nordic supervisory cooperation, and include (a) more explicit information exchange; (b) clear understanding on burden sharing; (c) increased harmonization of how international standards are applied to improve joint monitoring of main risks; and (d) a common supervisory approach and a common reporting system.

Dealing with systemic risk

29. **The BOF and FIN-FSA regularly monitor systemic and contagion risks in light of the concentration of the banking system, but this monitoring framework could usefully be broadened through closer cross-border cooperation.** The framework captures systemic interconnectedness and vulnerabilities in the banking sector. However, the sizeable nonbanking component of the country's financial sector and the existing cross-border linkages are important reasons to include both the insurance sector and all major cross-border connections, which are currently only partially captured. Use of more detailed information available to FIN-FSA and through enhanced cross-border supervisory cooperation would make the framework more comprehensive. Also, the payment system simulator operated by the BOF to analyze possible infrastructure problems could also be integrated in the regular systemic risk analysis. The results from the monitoring should also be reflected in adjustments to supervisory tools to limit systemic risk exposure, and in contingency planning.

30. **With several cross-border institutions of systemic importance, measures to deal with the moral hazard posed by institutions that may be considered too important to fail will pose significant challenges.** While initiatives are under discussion at the international (including EU) level, further efforts by Finnish authorities to develop a systemic stability framework would be useful in this respect. This would require a more integrated approach by Nordic countries, including possibly adopting on a regional basis the Swedish "stability fee" levied on bank liabilities, to ensure a level playing field in the region.

Improvements in supervisory practices

31. **Banking supervision in Finland is robust and in broad compliance with relevant EU Directives and the BCPs.** As a member of the EU, Finland has implemented the Capital Requirement Directive, which closely follows the Basel II Capital Framework. The regulatory framework has also undergone recent structural changes: the Financial Supervision Authority has been combined with the Insurance Supervision Authority to create the new FIN-FSA, which started its activities on January 1, 2009. FIN-FSA has promulgated various regulations, building on the efforts that its predecessor since 2005. FIN-FSA cooperates with the BOF in the field of financial stability. FIN-FSA also closely cooperates

with its Nordic peers in the context of the supervision of the pan-Nordic financial groups that are active in Finland: (a) memoranda of understanding (MOUs) on supervisory cooperation are in place; (b) there are cross-border institution-specific MOUs for Nordea and Sampo Group describing detailed requirements for the supervision of the respective groups; and (c) there is a specific crisis management MOU signed by all Nordic central banks.

32. **FIN-FSA has materially addressed the 2001 FSAP recommendations, but some challenges remain.** Firstly, a further reinforcement of FIN-FSA's powers in the context of early intervention would be beneficial. The authorities may want to investigate whether the usability of certain formal powers contained in the Act on the FSA can be improved, for example the framework for administrative fines and penalty payments, by extending its coverage beyond the current securities markets scope, and by increasing the maximum amount of such fines and penalties.

33. **Since its creation in 2009, FIN-FSA has made significant efforts on integrating best practices of the former supervisory authorities and realizing synergies in the execution of its supervisory program.** The effectiveness of its supervisory program can be improved by further dovetailing procedures and practices of banking and insurance supervision. Especially in the context of the FIN-FSA's supervision of the large and complex groups that carry out both banking and insurance activities on the Finnish markets, increased cross-fertilization can greatly enhance FIN-FSA's understanding of the (consolidated) risk profile. In this context, it is recommended that FIN-FSA reach international agreements with relevant home supervisors on the deepening of cross-sectoral supervisory cooperation.[8]

34. **A detailed review of selected banking supervision core principles highlights a number of other areas that can be enhanced:** (a) FIN-FSA should ensure that liquidity risks receive greater coverage in its risk assessments; (b) FIN-FSA should improve the granularity of its standards on liquidity risk management (in progress), and analyze in greater detail banks' funding profiles with a view to discussing possible structural changes, to prepare for the upcoming changes in regulation of liquidity risk; and (c) the authorities should pursue clear agreements on specific information to be distributed on a regular basis by home supervisors (above and beyond what is provided by supervisory colleges and through other cross-border arrangements), to overcome obstacles to obtaining a sufficient insight in the solidity of foreign groups that are active in Finland.

35. **Insurance supervision is in line with international standards and earlier FSAP recommendations have been implemented.** FIN-FSA is in the process of reviewing some of its supervisory processes (e.g., risk assessment and onsite inspection programs), to

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[8] FIN-FSA already has cross-border cross-sectoral cooperation arrangements in place to discuss banking and insurance supervisory issues for two financial groups. It has also developed internal processes to integrate the supervision of these groups.

combine the best practices of the previously separate supervisory authorities and to create a consistent and comprehensive supervisory framework for banking and insurance supervision. The legal framework for insurance supervision was revised in 2008 and as a result, FIN-FSA closely follows the relevant principles regarding insurance supervision. Recommendations from the 2001 FSAP were implemented to (a) add independent experts to the board; (b) obtain a legal basis for the early intervention mechanism; and (c) enhance investment and derivatives expertise.

36. **The securities market legal framework has undergone many changes since the 2001 FSAP.**[9] These revisions were in large part triggered by changes in the EU legal framework, including the Markets in Financial and Instruments Directive (MiFID). The authorities are working to further update the Securities Markets Act. FIN-FSA investigates suspicions of market abuse, which is more challenging now that securities markets have become more international and trade fragmented, particularly with regard to information collection. In line with EU developments, FIN-FSA is in the process of implementing a transaction reporting system that should help provide more comprehensive information on the trading of listed securities and derivatives. Further improvements to this system (e.g., capabilities to monitor over-the-counter trading of derivates and linking individual trades to individual investors via standardized ID's) would result in a further improvement of its effectiveness.

37. **Market infrastructure is undergoing major changes.**[10] The separate laws regulating various areas of the payment systems were replaced by the new Payment Services Act and Payment Institution Act that entered into force on May 1, 2010. As a member of the European System of Central Banks (ESCB), the BOF is responsible for oversight of payment systems in Finland, and should "participate in maintaining the reliability and efficiency of the payment system and overall financial system and participate in their development." During the recent past, all three major payment systems have been assessed, and fulfilled the relevant requirements. In the securities settlement area, Euroclear Finland (EFi) is working on the

[9] Since the 2001 FSAP, the Helsinki Stock Exchange (HEX) has been acquired by NASDAQ OMX and subsequently renamed into NASDAQ OMX Helsinki (NASDAQ). The primary responsibility for supervision of the securities markets in Finland resides with FIN-FSA, in which the Markets Supervision Department is responsible for the supervision of NASDAQ, the clearing corporation and the central securities depositary, as well as for supervising information disclosure and financial reporting of publicly quoted companies. Stock and derivative exchanges, clearing houses, central counterparty clearing houses (CCPs) and the central securities depository (CSD) are authorized by the Finnish Ministry of Finance (MOF).

[10] There are three major payment systems operating in Finland (a) BOF TARGET2 component system (TARGET2-Suomen Pankki system); (b) the POPS inter-bank system for express transfers and checks (POPS); and (c) the PMJ system for retail payments (PMJ). Furthermore, in December 2008 a license for payment transmission was granted to ACH Finland Plc (ACHF). Replacement of the POPS and PMJ systems in the next few years with the Euro Banking Association STEP2 system (which is subject to Eurosystem oversight) for the processing of national payments is currently under consideration.

migration to Euroclear's Single Platform in 2012–13.[11] In mid-November 2009, mandatory CCP-clearing was introduced for large and mid-cap cash equities traded on Nasdaq OMX Helsinki. CCP-services for the Finnish market are provided by the European Multilateral Clearing Facility (EMCF), which offers similar services to other Nordic exchanges. The BOF and FIN-FSA have signed a multilateral MOU with the Dutch, Danish, Icelandic and Swedish counterparties on the cooperation in the supervision and oversight of the EMCF.

IV. Safety Net and Crisis Management

38. **The Finnish safety net and crisis management framework faces several important challenges.** Although important lessons have been learned from the 1990s banking crisis, the recent global financial crisis has surfaced areas that will require further enhancement, including (a) the identification and monitoring of systemic risk; (b) the bank resolution framework, for both domestic and cross-border institutions; and (c) the operation of the deposit insurance fund. Frameworks for crisis preparedness and management and for emergency liquidity assistance (ELA) are in place. Among these issues, the cross-border dimension stands out as particularly challenging, despite the current high degree of cross-border cooperation with home supervisors in ongoing supervision and crisis management.

A. Bank Resolution Framework

Cross-border bank resolution framework

39. **An effective cross-border resolution framework is a necessary complement to strong cross-border supervision.** Enhancing supervisory cooperation for large systemic cross-border institutions before distress occurs is necessary but not sufficient to simultaneously pursue the goals of financial stability and market discipline and needs to be tied to a robust and credible cross-border crisis management framework.

40. **Finland has accumulated significant regional experience with crisis management.** The recent MOUs with Nordic and Baltic countries are a significant step up in regional crisis readiness, and may address the weaknesses identified during the Nordic Financial Crisis Exercise carried out in 2007. At the same time, the authorities are well aware of the challenges ahead of them, including (a) seeking international coordination at an early stage; (b) communicating effectively with the public through the media; (c) avoiding ring-fencing and immediate application of domestic resolution options; (d) ensuring domestic coordination; and (e) analyzing the legal and burden-sharing implications of joint decisions to recapitalize. In light of these, the effectiveness of the agreements needs to be periodically

[11] Securities settlement is performed by the EFi (Euroclear Finland, formerly Finnish Central Securities Depository, (APK) Securities Settlement System, comprising of the APK settlement system for equity rated securities (OM) and the APK settlement system for non equity rated securities (RM). Both OM and RM operate on a continuous and real-time basis.

tested and reviewed, especially with regard to the provisions on burden sharing. Initiatives under discussion at the EU level may help move the policy agenda forward in some of these areas.

Domestic bank resolution framework

41. **There is significant room for improvement in the domestic bank resolution regime.** The absence of a specific insolvency framework for banks implies that deposit institutions are subject to the same liquidation proceedings as any other company. This reduces the effectiveness of bank resolution and is likely to increase its cost. It can also lead to delays in depositors payouts, as recently observed in the case of the failure of a small institution.

42. **The law establishes two mechanisms for bank intervention, both of which have limitations.** The first (Act on the Temporary Interruption of the Operations of a Deposit Bank (1509/2001)) is mainly designed to manage a sudden bank run and entails freezing temporarily a bank's operation—at the risk of further undermining confidence, with potential systemic consequences. The second (Act on the Government Guarantee Fund (379/1992)) entails a state participation in the bank's capital and is hence subject to EU approval. On the other hand, the Act on Credit Institutions, while not providing precise power and intervention criteria, does allow the supervisory authority some degree of freedom to shape possible actions. The Kaupthing branch intervention is an example where action was taken based on a flexible interpretation of the banking law, as no precise power at this regard is defined.

43. **International evidence illustrates the benefits of a special resolution regime for banks and financial groups to support orderly and least-cost resolution, and the authorities should consider steps in this direction.** This would enhance the toolbox available to intervene promptly in case of rapidly deteriorating conditions that threaten financial stability or depositors. Key features of a special resolution regime that merit consideration include authority for: mandatory debt restructuring, purchase (of assets) and assumption (of liabilities) transactions, use of bridge banks to maintain the going concern value, temporary public ownership, merger with other banks, and liquidation.

44. **A special resolution regime may entail the "official administration" of a troubled institution.** Because of possible budgetary implications, any such decision should involve the fiscal authorities, acting on a proposal from the FIN-FSA. The special regime should provide for a mechanism to override shareholder rights in case the public interest requires it—as opposed to exercising the threat of liquidation the authorities have at their disposal currently. The administration would be designed in such a way to allow a timely adoption of mandatory restructuring measures that would enable burden sharing across debt holders—as opposed to providing a bail-out of all creditors when the government takes over the bank. Compulsory liquidation in order to minimize the cost of the crisis and reduce possible contagion effects would remain an option. To facilitate dissolution of group structures, the

regime might also include features such as: (a) having multiple insolvency proceedings rather than a single proceeding for a group, thus respecting the separate legal personalities of group entities; and (b) not creating a legal requirement of the parent company to satisfy subsidiaries' obligations (or vice versa). Constitutional constraints to set up a bank insolvency regime may need to be overcome.

B. Deposit Insurance Guarantee

45. **The ongoing EU-level reform of deposit insurance regimes will require important operational changes in Finland's DGF.** The Finnish scheme, which is mandated by law and managed by contributing banks, is pre-funded and collects risk-based premiums, and has assets under management amounting to EUR 629 million at end-2009, corresponding to 1.1 percent of the system's deposits by households and nonfinancial corporation. In 2008, the level of coverage was increased from EUR 25,000 to EUR 50,000; by end-2010 it will be further increased to EUR 100,000, in line with the amended DGS Directive 94/19/EC. The authorities also intend to shorten substantially the payout period (from 3 months, extendable up to 3 times to 1 year, to 20 working days, extendable 10 more days)—though this falls short of current EU proposals to ensure payouts within 1 week. These are substantive reforms and the authorities will need to ensure that the operational resources of the DGF enable it to carry out its new mandate. The recent failure of a small domestic bank provides an opportunity to test the performance of the scheme.

46. **Authorities should also consider carrying out an evaluation of the DGF.** The Core Principles for Effective Deposit Insurance Systems were issued by the Basel Committee on Banking Supervision and the International Association of Deposit Insurers in 2009 and an assessment methodology is under preparation. An assessment of the DGF against those principles would support efforts to reform the DGF, also in the context of the ongoing EU initiatives to harmonize and enhance existing schemes.

C. Emergency Liquidity Assistance

47. **The existing framework for ELA seems solid but may need to be supplemented by additional clarity on cross-border access to ELA.** The first line of defense against liquidity emergencies is provided by the ECB refinancing framework, which has shown to have the flexibility to meet even a systemic liquidity crisis. The BOF has developed a contingency plan to provide short-term collateralized financing in case a solvent systemically important supervised entity faces a liquidity crisis. The process foresees collaboration with the FIN-FSA, including for determining eligibility and adequacy of collateral. Arrangements with other central banks, through crisis management MOUs, also exist, but do not cover certain operational cross-border dimensions, e.g., on explicit listing of possible collateral from another jurisdiction eligible for ELA.