

**Iceland: Financial System Stability Assessment Update,
including Report on the Observance and Standards and Codes on the following topics:
Banking Supervision, Insurance Regulation, Securities Regulation, Payment Systems,
and Monetary and Financial Policy Transparency**

This Financial System Stability Assessment Update on **Iceland** 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 **July 30, 2003**. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of **Iceland** or the Executive Board of the IMF.

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

To assist the IMF in evaluating the publication policy, reader comments are invited and may be sent by e-mail to publicationpolicy@imf.org.

Copies of this report are available to the public from

International Monetary Fund • Publication Services
700 19th Street, N.W. • Washington, D.C. 20431
Telephone: (202) 623 7430 • Telefax: (202) 623 7201
E-mail: publications@imf.org • Internet: <http://www.imf.org>

Price: \$15.00 a copy

**International Monetary Fund
Washington, D.C.**

INTERNATIONAL MONETARY FUND

ICELAND

Financial System Stability Assessment (FSSA) Update

Prepared by the Monetary and Financial Systems and European I Departments

Approved by Tomás Baliño and Michael Deppler

July 30, 2003

This FSSA Update report provides the main findings and conclusions of an IMF mission that visited Reykjavik from April 1 to April 10, 2003. The mission received excellent cooperation and support from the authorities.

The 2001 FSSA identified risks of financial sector instability. Economic imbalances generated during Iceland's economic expansion of the late 1990's magnified risks of exchange rate depreciation. High levels of indebtedness, including substantial foreign exchange lending, created a risk potential that was compounded by the need to reinforce Iceland's financial supervision and central bank legal and regulatory infrastructures.

Iceland's financial sector has returned to a more balanced risk profile. The potentially destabilizing effects of the 2000–01 króna depreciation were attenuated by the timely adoption of a credible inflation targeting framework. While measures of private sector indebtedness remain high, Iceland's modern banking sector has managed to control credit risks, maintain profitability, and improve regulatory capital positions despite weak domestic economic conditions. The pension industry posted negative average real returns in 2001 and 2002 but, because benefit guarantees are not common in Iceland, pension industry results do not create systemic concerns. The Housing Financing Fund posted a small loss in 2001 but regained profitability in 2002 while the insurance industry has remained, on average, profitable and adequately capitalized.

Since the 2001 FSSA, the Financial Supervisory Authority (FME) has received increased funding and additional supervisory powers as a result of new legislation. These changes have enabled the FME to become a more effective supervisor. A new assessment of the Basel Core Principles for Effective Banking Supervision finds major improvements in compliance. The Central Bank of Iceland (CBI) has undertaken important initiatives regarding Iceland's payment systems that are designed to address the shortcomings identified in the 2001 FSSA report and improve compliance with international best practice standards.

The author of this report is Paul Kupiec (MFD).

FSAPs 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. FSAPs do not cover risks that are specific to individual institutions such as asset quality, operational or legal risks, or fraud.

Contents	Page
I. Introduction and Summary of Findings	4
A. Background	4
B. Summary Stability Assessment	4
C. Summary of BCP Assessment Findings.....	6
II. Detailed Stability Assessment	7
A. Macroeconomic Environment.....	7
B. Banking Sector	11
C. Housing Financing Fund (HFF)	15
D. Pension Funds	18
E. The Insurance Sector	19
III. Supervisory Developments.....	19
A. Overview of Recent FME Activities.....	19
B. Banking Supervision	21
C. Pension Industry	21
D. Insurance Industry	21
E. Financial Sector Liquidity Developments	23
F. Payments and Settlement Systems.....	23
IV. Other Issues and Recommendations	24
Text Tables	
1. Principal Recommendations of the 2001 FSSA.....	5
Tables	
2. Financial Soundness Indicators.....	8
3. Distribution of Assets and Deposits in Iceland's Deposit Taking Institutions	12
4. Financial Conditions in Iceland's Banking Sector.....	13
5. Prudential Indicators for the Housing Financing Fund.....	17
6. Insurance Sector Selected Statistics	20
Figures	
1. Loan Credit Quality in Iceland.....	12
2. Insurance Industry	20
Boxes	
1. Savings Bank Performance in Iceland	14
2. Stress Testing and the FME's New Risk Assessment Framework	16
3. Connectednes and Financial Sector Supervision in Iceland	22

Appendix

Observance of Financial Sector Standards and Codes—Summary Assessments and Factual Updates	26
I. Summary Findings of the BCP Updated Assessment.....	26
A. General	26
B. General Preconditions for Effective Banking Supervision	26
C. Summary of Detailed Assessment.....	26
D. Authorities' Response	29
II. Factual Updates of Remaining ROSCs	30
A. Observance of IAIS Insurance Core Supervisory Issues	30
B. Observance of IOSCO Principles of Securities Regulation	30
C. Observance of CPSS Core Principles for Systemically Important Payment Systems	31
D. Observance of Transparency Practices of the Central Bank in Monetary Policy....	31
E. Observance of the Transparency Practices of the Financial Supervisory Authority in Financial Policies	32
Appendix Table	
7. Recommended Action Plan to Improve Compliance with the Basel Core	28

I. INTRODUCTION AND SUMMARY OF FINDINGS

A. Background

1. **The 2001 FSSA identified risks of financial sector instability, as rapid increases in foreign and domestic currency indebtedness, accumulating external imbalances, and inflation accompanied Iceland's expansion of the late 1990s.** By mid-2000, accumulated pressures prompted a sharp depreciation of the króna. Financial sector risks were magnified by weaknesses in Iceland's regulatory and supervisory infrastructure. Iceland's financial sector supervisor, the FME, while competent, was under staffed, under funded, and operating under an inadequate supervisory and legal framework. Systemically important payments systems lacked appropriate risk management and oversight. The CBI, Iceland's central bank, formally lacked independence, operated under an outmoded exchange rate targeting framework and lacked a modern legal basis for lender of last resort operations. Table 1 reviews the principal recommendations of the 2001 FSSA.

B. Summary Stability Assessment¹

2. **The financial sector imbalances that were identified in the 2001 FSSA have subsided, and Iceland's financial sector has returned to a more balanced risk profile.** Iceland's financial sector weathered the stresses subsequent to the 2001 FSAP remarkably well, aided by perspicacious policies and adept supervisory responses. The potentially destabilizing depreciation of the króna anticipated in the FSSA report was realized, but the timely adoption of a credible inflation targeting framework has helped to attenuate imbalances, and the exchange rate quickly rebounded from its 2001 lows.

3. **Icelandic banks increased profits in 2001 and 2002, and encouraged by supervisory recommendations, bolstered their regulatory capital ratios (CARs) in each year.** As anticipated by both authorities and the 2001 FSSA report, banks' asset quality has deteriorated since 2000, as loan performance in the consumer and retail service sector suffered from weakening domestic demand. Foreign currency denominated loans, however, have performed better than anticipated. The transitory nature of the exchange rate shock and

¹ This FSSA Update mission focused on a reassessment of financial sector stability conditions in Iceland, production of a new BCP assessment, and factual updates of the various ROSCs that were assessed in the initial 2000–01 FSSA report. The mission visited Reykjavik from April 1 to April 10, 2003, and included Mr. Paul Kupiec MFD (Mission Head), and Mr. Tuomo Malin of Finland's Financial Supervision Authority, an expert on banking supervision. The mission met with the authorities at the Central Bank of Iceland (CBI), the Financial Supervisory Authority (FME), officials from four commercial banks, a savings bank, the Iceland Stock Exchange, The Housing Financing Fund (HFF), two pension funds, The National Debt Agency, the Ministry of Commerce (MIC), and accounting experts.

Table 1. Principal Recommendations of the 2001 FSSA

<p>Basle Core Principles for Effective Banking Supervision</p> <ul style="list-style-type: none">• FME staff and resources should be expanded• FME should be empowered to grant licenses and promulgate rules and regulations• Changes in the structure of the FME board should be considered• FME powers of consolidated supervision should be expanded• Rules and guidelines regarding fit and proper test, connected lending, loan loss provisioning could be strengthened or clarified
<p>IAIS Insurance Core Supervisory Principles</p> <ul style="list-style-type: none">• FME staff and resources should be expanded• Licensing authority should be vested in the FME• Guidance on internal risk management standards and governance should be issued or strengthened• An active on-site inspection approach for supervision should be adopted
<p>IOSCO Principles of Securities Regulation</p> <ul style="list-style-type: none">• FME staff and resources should be expanded• FME should introduce a continuing education programs for its staff• FME should be empowered with licensing authority• Legislation governing collective investment schemes should be updated
<p>CPSS Core Principles for Systemically Important Payment Systems</p> <ul style="list-style-type: none">• The supervision and oversight roles of the CBI and FME should be clarified• The CBI should be empowered to issue payment system rules and regulations• The legal basis for the payment system should be revised in order to make electronic payment system information acceptable evidence in a court of law• Rules should be issued regarding access and participation in the payment system• Features should be developed that allow securities to settle using the RTGS system• Policies should be adopted that require adequate collateral for CBI lending to banks• Risk management practices should be strengthened
<p>Transparency Practices of the Central Bank in Monetary Policy</p> <ul style="list-style-type: none">• The New Central Bank Act (pending at the time of the 2000-2001 FSAP) addressed most of the Transparency Issues identified in the ROSC• Data on International Investment Position do not meet IMF's dissemination standards
<p>Transparency Practices of the Financial Supervisory Authority in Financial Policies</p> <ul style="list-style-type: none">• The empowering legislation for the FME should be revised• Payment system supervision and oversight responsibilities should be clarified• The legislative framework and FME supervision and disclosure should be revised to provide additional resources and disclosures on the activities of the Housing Financing Fund

the application by banks of selective criteria for qualifying foreign currency borrowers (restricting FX loans to borrowers who are organically hedged) helped to boost foreign currency loan performance. Both commercial and savings banks have increased loan loss provisions to account for the deterioration in their credit portfolios, although relatively faster deterioration in credit quality has resulted in a decline in the ratio of loan-loss provisions to NPLs. Fjarmalaeftirlitid (FME), Iceland's financial supervisory authority, has conducted focused onsite examinations to ensure the adequacy of institutions' collateral valuations and loan loss provisions. The loss phase of the credit cycle may be nearing a peak as high frequency economic indicators suggest that the economy has begun the expansion phase of the next business cycle. Intermediate term forecasts anticipate a strong króna and the resumption of noninflationary investment driven growth.

4. **The pension industry on average posted real losses in 2001 and 2002 and some firms will likely need to adjust pension members' contribution and benefit rates to satisfy regulatory requirements.** Because pension plans in Iceland are not guaranteed benefit plans, these developments do raise any financial stability issues. The insurance industry posted profits in 2001 and 2002, and all firms are expected to exceed minimum solvency standards. The Housing Financing Fund (HFF), a government sponsored enterprise, recorded a small loss in 2001, but returned to profitability in 2002. Overall the HFF seems to have been well managed within the constraints of its charter and operating mandates, but it retains equity capital that is modest by banking standards (a standard that may not be fully appropriate). At present there are no minimum prudential standards that apply to the HFF and the FME has only limited responsibility for its supervision.

5. **Since the 2001 FSSA, the FME has received additional resources and additional supervisory powers as a result of new legislation.** The FME's operating budget has expanded by almost 50 percent, enabling it to hire additional staff including actuaries and other specialists, and allowed it to increase financial sector monitoring. The FME has developed new data reporting systems and analytical tools to aide it in carrying out risk-based supervision using new powers that enable it to specify a minimum CAR in excess of 8 percent should an institution's risks warrant.

C. Summary of BCP Assessment Findings

6. **The regulatory and supervisory changes that have occurred since the 2001 assessment of compliance with the Basel Core Principles for Effective Banking Supervision (BCP) have been quick and comprehensive.** In qualifying its findings regarding weakness relative to best international practices, the 2001 FSSA recognized the FME's underlying supervisory strengths. In the interim period, the FME has repeatedly used its existing powers to quickly address issues raised in the context of the 2001 FSSA and the subsequent Article IV mission.

7. **The new assessment finds significant improvements in BCP compliance.** The passage of new legislation has helped to improve compliance with the BCP, but the newness of the Financial Undertakings Act (January 2003) has precluded the drafting of some of the

rules that are required to exercise new legislative powers. The FME's supervisory objectives are clearly stated in law, and its status as the regulatory authority responsible for issuing prudential regulations has been established by the latest amendments to the banking law (Act on Financial Undertakings, 161/2002). These recently enacted changes have strengthened the FME's enforcement powers. Substantial increases in FME resources have resulted in increases in the capacity and staffing expertise of this active and effective supervisory agency.

II. DETAILED STABILITY ASSESSMENT

A. Macroeconomic Environment

8. **Relative to the macroeconomic imbalances that had accumulated at the time of the 2000–01 FSAP missions, Iceland's economy has experienced only a mild correction, as the relative strength of exported-related industries offset weak domestic demand.**

Output growth in 2002 was slightly negative and, after posting a record reversal in the last two years, the current account was broadly in balance in 2002. After rising through early 2003, unemployment appears to have peaked and high frequency indicators and national account data for 2003 Q1 suggest that growth has resumed.

9. **Corporate profits were strong in 2002, bolstered by fishery products and manufacturing exports. In contrast, construction, retail, and service results were depressed by domestic demand weakness.** Real long-term yields declined significantly over 2002 and into 2003 and shares listed on the Iceland stock exchange posted strong gains while virtually all other world equity markets declined in value. Housing prices posted only modest nominal gains that were outpaced by inflation in both 2001 and 2002.

10. **The outlook for 2003 and over the medium term is positive. Inflation decelerated rapidly in 2002, and the CBI's May forecast for 2003 was for inflation of 2.2 percent.** Output growth is projected at 2¼ percent in 2003 and 3¾ percent in 2004 and is expected to gather pace subsequently, as the investment projects in electricity generation and smelting take place. Growth is currently being spurred by a pickup in private consumption, albeit from low levels and tempered by household debt burdens. The appreciation of the króna in anticipation of strong investment inflows and weakness in world economic growth pose downward risks in the short term. In the medium term, large capital inflows are expected to result in a temporary deficit of the current account and a strong króna—which, however, will remain manageable, provided that appropriate fiscal policies are adopted.

11. **GDP and disposable income based measures of private sector indebtedness continue to increase from already high levels but may overstate leverage as more inclusive indicators suggest that corporate and household net worth have been rising faster than private sector debt** (See, Iceland—Staff Report for the 2003 Article IV Consultation, Annex II). This trend is evident for example in the debt-to-market equity value ratios of listed companies (Table 2). Notwithstanding any gains in private sector net worth, the legacy of high leverage and economic stress has contributed to an increase in corporate

Table 2. Iceland: Financial Soundness Indicators

	1996	1997	1998	1999	2000	2001	2002	2003	As of
Capital Adequacy									
Risk-based capital adequacy ratio (CAR) ¹	12.4	11.6	10.4	10.6	9.7	11.3	12.2	...	...
CAR excluding subordinated loans	11.1	10.2	8.8	8.2	6.6	8.0	9.1	...	...
Tier 1 capital ratio	12.1	11.3	10.0	9.6	8.0	9.0	9.7	...	...
Equity as percent of regulatory capital	92.6	92.9	86.7	82.9	79.7	62.0	66.2	...	...
Asset Quality									
<i>Credit Institutions</i>									
Total lending (in ISK billion) ²	275	308	386	476	602	704	740	793	May
Thereof: foreign loans (in percent)	29.0	31.8	34.4	36.5	41.6	44.3	39.6	40.7	May
Sectoral credit concentration									
Real estate loans (as percent of total loans)	6.9	6.7	6.3	6.8	6.6	5.8	5.4	5.0	May
Loans to fisheries (as percent of total loans)	28.7	29.4	27.7	24.8	22.9	21.2	17.1	16.1	May
Thereof: foreign loans (in percent)	75.5	79.1	83.3	83.9	86.5	86.8	87.0	86.9	May
Loans to households (as percent of total loans) ³	25.9	26.6	27.9	27.3	27.5	25.5	26.3	24.0	May
Thereof: foreign loans (in percent)	0.3	0.5	1.8	4.8	8.1	10.4	8.6	7.2	May
Loans to business (as percent of total loans)	65.5	65.2	64.8	65.7	65.2	64.2	62.6	65.3	May
Thereof: foreign loans (in percent)	43.6	46.8	49.8	50.6	55.6	54.7	49.4	50.1	May
Loans to retail and services (as percent of total loans)	20.8	19.8	24.8	28.6	29.4	30.0	32.7	37.6	May
Thereof: foreign loans (in percent)	14.0	15.2	19.5	29.5	37.0	36.1	33.7	38.8	May
Loans to manufacturing et al. (as percent of total loans)	16.0	16.0	12.3	12.2	12.9	13.0	12.7	11.6	May
Thereof: foreign loans (in percent)	24.5	26.7	35.5	32.4	43.0	45.3	39.2	36.0	May
Nonperforming loans (NPL) as percent of total loans ⁴	5.1	3.8	2.4	2.5	2.0	2.8	3.4	...	...
Loan-loss provisions as percent of NPL ⁵	44.8	45.6	51.9	50.5	52.5	46.8	43.7	...	...
Off-balance sheet exposure (w/out OTC derivative) (as percent of regulatory capital)	114.9	143.8	159.7	135.5	127.3	74.0	...	...	...
Off-balance sheet exposure (with OTC derivative) (as percent of regulatory capital)	116.7	147.1	163.4	140.4	143.4	85.5	...	...	...
Foreign-currency den. Assets as percent of total assets	21.1	30.0	27.0	31.1	49.4	50.1	48.7	...	...
Foreign-currency den. Liabilities as percent of total assets	20.6	29.6	27.4	31.6	49.9	50.0	48.2	...	...
Leverage ratio (equity as percent of total assets)	7.9	7.4	7.0	6.8	6.4	6.6	6.3	...	...

Sources: Financial Supervisory Authority; and Central Bank of Iceland.

1/ Deposit money banks, i.e., commercial banks and savings banks. Consolidated accounts.

2/ Deposit money banks. In the year 2000 a merger among domestic financial institutions in part explains the increase in figures.

3/ Includes private business operations of individuals.

4/ Loan values gross of collateral and net of specific provisions and including appropriated assets. Commercial banks and savings banks. FBA and its predecessors included.

5/ General and specific provisions over stock of gross nonperforming loans. Commercial banks and savings banks. FBA and its predecessors included.

Table 2. Iceland: Financial Soundness Indicators (continued)

	1996	1997	1998	1999	2000	2001	2002	2003	As of
Borrowing Entities									
Debt-equity ratios									
All listed companies (except financial companies)	1.82	1.96	1.85	1.96	2.21	2.27	1.72	...	...
Fisheries companies	1.95	1.67	1.75	1.87	2.57	2.59	1.97	...	...
Manufacturing companies	1.14	0.41	1.11	1.40	1.62	1.68	1.35	...	...
IT companies			2.80	2.28	1.90	1.43	1.32	...	...
Corporate profitability (EBITDA/turnover)									
All listed companies (except financial companies)									
Fisheries companies	15.8	16.5	17.8	14.7	17.2	27.1	23.3	...	...
Manufacturing companies	17.7	10.7	7.2	7.5	13.2	13.4	13.6	...	...
IT companies	-	-	6.1	8.7	9.6	17.4	18.4	...	...
Retail, services, and construction companies	-	9.3	2.2	5.6	14.7	5.6	-1.0	...	...
Household indebtedness (total debt/disposable income)	133.4	134.7	138.7	145.8	158.5	171.1	175.9	186.3	Forecast
Management Soundness¹									
Expense ratios									
Operating expenses as percent of gross income	66.6	65.3	67.1	60.4	65.6	64.2	59.4	...	...
Operating expenses as percent of average total assets	4.7	4.4	4.1	3.7	3.1	2.8	3.0	...	...
Staff costs as percent of avg. bal. sheet total	2.4	2.3	2.1	1.9	1.5	1.5	1.6	...	...
Staff costs as percent of gross income	33.9	33.6	35.2	31.2	33.0	32.9	30.9	...	...
Earnings per employee (gross inc./employees)(Kr. Millions)	7.7	8.3	8.9	10.9	11.0	12.5	18.1	...	...
Earnings per branch (gross inc./branches) (Kr. Millions)	107.7	119.0	131.9	171.4	238.2	280.2	406.0	...	...
Earnings and Profitability									
Return on assets	0.8	0.9	0.9	1.3	0.6	0.8	1.1	...	...
Return on equity	9.5	10.3	13.5	19.3	9.7	13.4	18.1	...	...
Interest income (as percent of total revenue)	62.1	58.9	56.0	52.4	60.7	73.8	51.4	...	...
Non-interest income (net) as percent of gross income	...	...	...	...	39.3	26.2	48.6	...	...
Fees and commissions (as percent of total revenue)	24.8	24.5	23.1	23.1	24.9	27.7	26.2	...	...
Net profit or loss on financial operations (as percent of total revenue)	5.3	7.5	15.0	12.0	(2.2)	(8.5)	12.1	...	...
Dividends from shares and other holdings (as percent of total revenue)	4.7	6.1	3.9	9.6	6.3	2.5	2.7	...	...
Other income (as percent of total revenue)	3.1	3.1	1.9	2.9	10.4	4.4	7.6	...	...

Sources: Financial Supervisory Authority; and Central Bank of Iceland.

1/ Deposit money banks, i.e., commercial banks and savings banks. Consolidated accounts.

Table 2. Iceland: Financial Soundness Indicators (continued)

	1996	1997	1998	1999	2000	2001	2002	2003	As of
Liquidity									
Central bank credit to banks (end of period, in ISK billion)	...	...	22.80	36.00	46.90	68.70	73.70	64.10	July
Deposits to M3 ratio	0.97	0.97	0.97	0.97	0.98	0.98	0.98	0.98	May
Loans-to-deposits ratio	1.25	1.29	1.46	1.53	2.07	2.09	1.91	1.87	May
Liquidity ratio (cash and short-term assets/demand and short-term liabilities)	...	...	...	...	1.2	1.2	1.2	1.2	May
Measures of secondary market liquidity									
Interbank FX market turnover (Kr. Billions)	80.8	162.2	401.7	468.0	768.0	1,218.0	834.4	572.5	Jan-June
Interbank domestic market turnover (Kr. Billions)	...	...	447.7	502.9	524.3	426.1	420.8	332.1	Jan-June
Residential housing prices (y-o-y increase)	1.0	2.7	7.3	21.9	13.5	3.3	6.5	5.2	Dec-Jun
Market-based indicators									
Stock market index (ICEX-15; y-o-y change)	59.3	14.7	9.8	47.4	(19.3)	(11.2)	16.7	11.0	Jan-Jun
Price/earnings ratio	...	...	19.3	21.7	...	...	...	...	...
Market capitalization at year-end/GDP ¹	19.5	28.5	39.9	57.6	59.5	57.0	68.2	68.0	Jun
Turnover rate (trading/market capitalization)(12 month trading)	...	15.6	17.2	32.4	50.0	32.4	60.8	70.5	Jun
Credit ratings:									
Moody's short-term	...	...	P1-P2	P1-P2	P1-P2	P1-P2	P1-P2	P1-P2	Jun
Moody's long-term	...	...	A2-A3	A2-A3	A2-A3	A2-A3	A2-A3	A1-A3	Jun
Fitch short-term	...	...	...	...	...	F1	F1	F1	Jun
Fitch long-term	...	...	...	...	...	A	A	A	Jun
Sovereign yield spreads (spread between yields on Icelandic and foreign trade-weighted 3-month T-bills)	2.8	2.7	3.4	5.7	6.3	7.9	3.1	3.2	Jun
Financial market structure									
Concentration ratios in the banking sector									
Number of banks accounting for 25 percent of total assets	1	1	1	1	1	1	1	1	Jun
Number of banks accounting for 75 percent of total assets	3	3	3	3	3	3	3	3	Jun
Number of financial institutions	33	31	30	29	29	28	29	28	Jun

Sources: Financial Supervisory Authority; and Central Bank of Iceland.

^{1/} Including equity mutual funds.

bankruptcies, primarily in the retail and service sectors (in both 2001 and 2002), and a rise in credit institutions' nonperforming loan (NPLs) rates (Figure 1).

B. Banking Sector

12. **Banking represents Iceland's largest financial sector with total assets equal to about 160 percent of GDP.** Five commercial banks hold about 86 percent of all assets in deposit taking institutions and more than 80 percent of total system deposits (Table 3).² The system includes 24 savings banks, many of which are small institutions. The six largest savings banks account for more than 11 percent of system assets and almost 15 percent of its deposits. The remaining savings banks account for less than 6 percent of system deposits and about 3 percent of its assets.

13. **All five commercial banks were profitable and well capitalized in 2002 with a group average ROE of 18.4 percent and a group average CAR of 12.09 percent.** All banks exceeded minimum regulatory capital standards. Banks' performance benefited from gains in securities, foreign exchange, and asset sales.³ Similar to 2001, the 2002 results for the six largest savings banks trailed those of commercial banks with average return on equity of 14.5 percent. All six banks recorded positive profits (Table 4).⁴

14. **Bank NPLs and related provisions continued to climb in 2002, reflecting not only a true decline in credit quality, but also newly tightened regulations that classify loans as nonperforming after they are delinquent for 90 days (instead of 180 days).** Savings banks continued to post NPL rates that were roughly double those of commercial banks, but these are in part offset by higher average lending rates as savings banks continue to enjoy interest margins that are higher than those in commercial banks (Box 1).

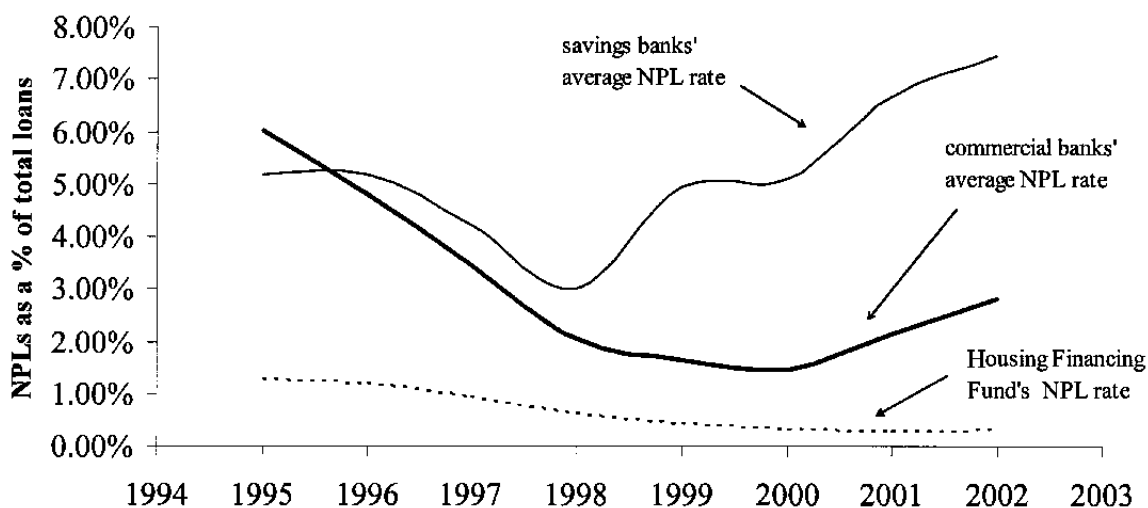
15. **The FME has addressed the issues raised by IMF staff in the 2001 FSSA and the 2001 Article IV reports regarding the adequacy of banks' loan loss provisions.** The new BCP assessment finds that Iceland's written regulations, while strengthened, are less prescriptive than staff recommends. The FME's approach, however, includes exhaustive on-site examinations of each bank's loan performance, collateral valuations and provisioning to buttress its provisioning regulations. This combination of regulation and active monitoring achieves a supervisory standard that few country experiences match in practice.

² On May 27, 2003, two of Iceland's five commercial banks were joined in a merger.

³ A significant share of the profits of the bank posting the highest return was generated by divesting part of a recently merged firm.

⁴ The largest savings bank's profit was boosted by a one-time tax effect.

Figure 1. Loan Credit Quality in Iceland



Sources: FMF data; Housing Financing fund data; and Fund staff calculation. Bank NPL definition changes in 2002, reducing delinquency period from 6 months to 3 months.

Table 3. Distribution of Assets and Deposits in Iceland's Deposit Taking Institutions

	2000	2001	2002
Total assets in deposit taking institutions (thousands of ISK)	932,529	1,152,069	1,243,625
<i>As a percentage of nominal GDP</i>	141.70	154.80	160.00
<i>Of which, percentage in:</i>			
Commercial banks	84.61	85.85	85.91
Six largest savings banks	11.63	10.79	11.02
Nine intermediate sized savings banks	2.98	2.64	2.49
Seven smallest savings banks	0.57	0.55	0.58
Total deposits in deposit taking institutions (in thousands of ISK)	289,075	345,029	450,412
<i>Of which, percentage in:</i>			
Commercial banks	76.00	77.00	80.02
Six largest savings banks	18.20	17.30	14.85
Other savings banks	5.80	5.70	5.13

Source: FME.

Table 4. Financial Conditions in Iceland's Banking Sector¹

	2000	2001	2002
	(In percent)		
Capital Adequacy Ratios			
Commercial banks	9.52	11.24	12.09
Six largest savings banks	12.32	12.58	13.48
Nine intermediate savings banks	11.47	10.28	12.38
Seven smallest savings banks	23.19	22.11	22.55
Tier I Capital to Risk Weighted Asset ²			
Commercial banks	6.35	7.94	9.01
Six largest savings banks	8.68	8.98	10.27
Loans As a percentage of Total Assets (average figures)			
Commercial banks	67.11	67.91	69.08
Six largest savings banks	72.28	72.99	71.28
Nonperforming Loans as a percentage of Total Loans			
Commercial banks	1.45	2.14	2.83
Six largest savings banks	5.11	6.65	7.50
Other savings banks	9.49	12.39	13.08
Provisions as a percentage of Average Loans			
Commercial banks	0.77	1.09	1.12
Six largest savings banks	1.09	2.05	1.53
Other savings banks	3.19	3.62	2.88
Net Interest as a percent of Assets			
Commercial banks	2.56	2.82	2.42
Six largest savings banks	3.53	3.91	3.81
Provisions as a percentage of Net Interest Income			
Commercial banks	19.60	25.20	32.30
Six largest savings banks	22.00	37.90	28.40
Other savings banks	53.60	58.00	42.00
Operating Expense to Gross Income			
Commercial banks	70.50	66.20	58.20
Six largest savings banks	49.80	69.80	67.00
Other savings banks	50.40	71.90	61.10
Other Income as a percentage of Assets			
Commercial banks	1.82	1.65	2.47
Six largest savings banks	5.12	1.83	2.19
Profitability Measures			
Return on assets before tax ³	0.94	0.74	1.22
Return on assets after tax ³	0.66	0.78	1.09
Return on equity (after tax) ²	10.70	13.50	18.40
By groups			
Commercial banks	6.50	14.60	19.20
Six largest savings banks	33.20	8.50	14.50
Other savings banks	17.20	-4.80	5.50

Sources: FME data; and Fund staff calculations.

1/ Two of the 24 savings banks operating in Iceland are excluded in the figures as they are subsidiaries of other deposit money banks. The CAR ratios of these banks are 34.6 percent and 36.2 percent, respectively.

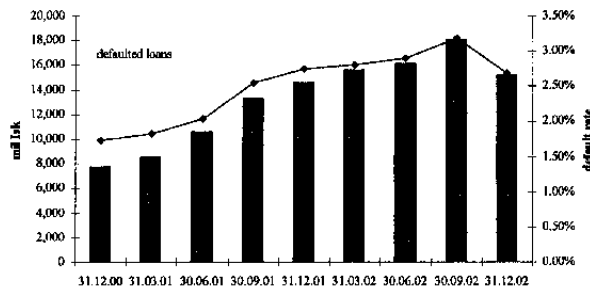
2/ Holdings in financial institutions are deducted in Tier I measure.

3/ Average across commercial banks and six largest savings banks.

Box 1. Savings Bank Performance in Iceland

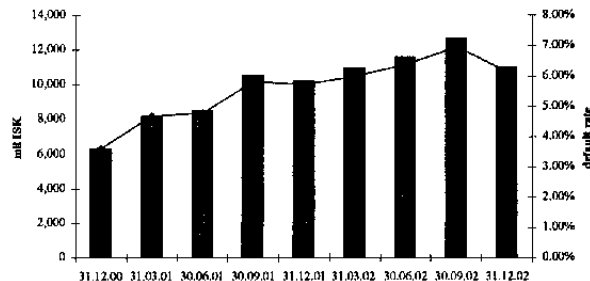
In recent years, savings bank performance has lagged that of commercial banks (Table 4). Commercial and savings banks differ in important respects that may, in part, explain these differences. Savings banks' NPL rates exceed those at commercial banks, and savings banks invest a higher share of their assets in loans. Savings banks also earn higher net interest margins, which may reflect differential compensation for loan risk (that offsets loan losses) and perhaps some pricing advantage in the household deposit market, where savings banks consistently score above banks in household opinion surveys. The persistent difference in loan performance between commercial and saving banks owes to differences in borrower characteristics.

Defaults of Industries to Deposit Institutions,
(amortisation and interest payments in arrears that are more than one month past due)



FME data show that household loans comprise about 22.3 percent of commercial banks' aggregate loan portfolio but account for 49.5 percent of savings bank loans. Industry loans have had substantially lower default rates in the recent environment. Among the industrial loans, savings banks have a larger share of commerce loans, and these loans (domestic retail) have performed poorly, as domestic consumption has been weak.

Defaults of Households to Deposit Institutions,
(amortisation and interest payments in arrears that are more than one month past due)



Savings banks are small and are unable to capture any natural economies of scale. In addition to lack of scale, they may lack geographical diversification (many are linked to a specific region). Both features may increase their performance volatility relative to the commercial bank sector. Savings bank outcomes are also highly dependent on managerial performance, as even a single decision lapse may have significant and visible performance effects. Despite the importance of managerial oversight, there are features in the governance structure of Icelandic savings banks that may mute efficiency incentives.

Source: FME data.

Savings banks are not typical profit-driven institutions. Guarantee capital certificate (GCC) owners provide the initial capital and may receive an annual dividend and exercise voting rights over 3 of 5 board member positions. Local councils or regional authorities generally appoint the remaining board members. GCC can only be sold with Board of Directors' permission (subject to FME approval on qualifying interests), and an individual may never exercise more than 5 percent of the total voting rights in an institution. Specific features of the Financial Undertakings Act No. 161/2002 make it virtually impossible for a savings bank to merge unless it merges with another savings bank, or it first converts into a limited liability company. The later conversion, however, will convert GCC into shares in the new company with an ownership share equal to the ratio of GCC share capital (at book value) to the estimated market value of the savings bank. The remaining portion of shares that are not allocated to GCC become the property of a self-governing foundation that is tax exempt and managed by a Board chosen by a representative council comprised of all the GCC owners when the conversion takes place. By law, the goal of the foundation is to "encourage growth and prosperity of activities of the savings bank" (Article 76). These unusual governance features seemingly limit the potential for consolidation outside of the savings bank sector and may well dull managerial incentives to improve efficiency within an individual institution.

16. **At year-end 2002, banks' financial statements showed large short-term foreign exchange liabilities as a significant volume of long term foreign funding (when originally issued) matured into short term obligations.** On average, the CBI estimates (Table 2) that 40.7 percent of lending in the Icelandic banking sector is denominated in or linked to foreign exchange. The vast majority of this lending is done by the commercial banks and to match this exposure, these banks raise a significant portion of their funding in foreign exchange. The CBI monitors the liquidity of the banking system including the foreign exchange funding needs of the banks. Banks have continued to respect CBI minimum liquidity requirements and have been successful in their ongoing refunding operations. They have diversified their investor base using euro medium-term note programs and tapping new long-term syndicated loan markets.

17. **The FME is among the few national supervisors who have formally integrated uniform supervisory stress test analysis into routine regulatory capital and bank risk rating processes.** Supervisory stress tests (Box 2) conducted using end-2002 data suggests that all systemically important banks could sustain significant financial shocks and still exceed regulatory capital minimums even excluding income from continuing operations. Of the 5 commercial banks and the 6 largest savings banks, all exceed stress test capital thresholds. While the smaller savings banks all meet minimum regulatory capital requirements, stress tests suggest that some banks could have their capital adequacy challenged by the FME's stress scenario. The FME is taking appropriate steps to safeguard prudential standards.

18. **Since the 2001 FSAP, the government has sold its remaining ownership interests in commercial banks.** The divestiture of government shares has been followed by restructurings, management changes, and mergers in the affected banks.

19. **The outlook for banking has improved significantly since the 2001 FSSA. The banking system has returned to a more favorable risk profile and supervisory oversight has been strengthened.** Going forward, the strength generated by new investments could cause a prolonged strengthening of the króna and weaken the profitability of the industries that have helped to sustain bank profitability through the recent correction. While domestic conditions are expected to improve, the overall credit portfolios of some commercial banks are weighted towards export industries and so the overall effect on their portfolio credit quality is dependent on the adoption of prudent macroeconomic policies.

C. Housing Financing Fund (HFF)

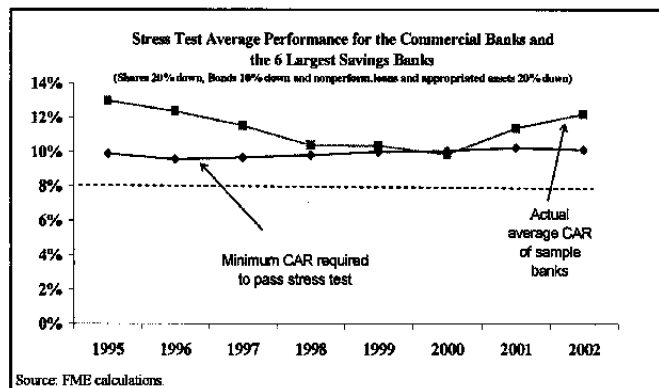
20. **The FME has limited supervisory responsibility for the HFF.** It reviews annual accounts and conducts limited examinations but does not have explicit rulemaking authority regarding minimum prudential standards. The HFF is a government sponsored enterprise established by Act 44/1998 to provide affordable housing credit while maintaining operating cost independence from the government. The HFF's primary financing instrument, housing

Box 2. Stress Testing and the FME's New Risk Assessment Framework

The FME has developed an internal risk assessment framework for evaluating deposit-taking institutions. In this framework, the FME calculates an aggregated score that represents a composite measure of the bank's overall prudential soundness. The score is constructed by first scoring a bank, on a scale of 1 to 5, on a number of individual numerical measures of performance, including operating efficiency, asset quality, liquidity, market risk, and capital adequacy. A rating of 1 indicates the strongest possible performance; a rating of 5 represents the lowest performance rating. A composite risk score, or CAMELS rating, is a weighted average of individual bank scores on the univariate quantitative performance measures, and qualitative assessments, scored on the 1 to 5 scale, of the FME's internal views on the strength of bank management according to various criteria. Lower composite scores reflect a more favorable prudential rating. These composite risk assessment scores are currently being used in the FME examination process. These scores will be a criterion that helps to ensure equal treatment when the FME discharges its new regulatory power, established under Article 84 of the Financial Institutions Act that enables it to set individual institution's minimum regulatory capital requirement in excess of the absolute regulatory minimum of 8 percent should risks warrant.

The results of a bank's performance on a standardized stress test are an important feature of this new bank-risk assessment process, and these results are considered in arriving at a bank's CAMELS rating. The FME standardized stress test evaluates the impact of a shock in which the net value of a bank's nonperforming loans and appropriated assets are reduced by 20 percent; the value of the unhedged position in a bank's equities is reduced by 20 percent; and the value of the unhedged position in banks bonds is reduced by 10 percent. The FME calculates the regulatory capital adequacy ratio (CAR) that is required to endure the stress conditions and still exhibit a CAR that satisfies the regulatory minimum of 8 percent. The stress test performance of a bank is measured according to the degree to which a bank's current CAR exceeds the minimum CAR value that is required to withstand in stress conditions.

The FME's stress testing results for the banking sector are reproduced in the adjacent figure. The chart plots the average of the stress test results for all of the commercial banks and the 6 largest savings banks in the system. The results highlight the significant capitalization improvements that have been undertaken in the past two years.



bonds are actively traded inflation-indexed instruments that account for about 72 percent of the outstanding value of Iceland's sovereign debt issues. The operational responsibility of the HFF rests in the Ministry of Social Affairs, and notwithstanding the HFF position as the single largest financial intermediary in Iceland, Article 111 of the Act on Financial Undertakings No. 161/2002 states that the HFF is not a financial undertaking for purposes of the Act.

21. **The HFF posted a minor loss in 2001, and returned to profitability in 2002** (Table 5). The HFF issues audited financial statements annually, but it discloses less detail than is typically reported in listed financial institutions' annual reports. Its NPL ratio

Table 5. Prudential Indicators for the Housing Financing Fund

	2001	2002
Total Assets (mil ISK)	362,263	401,722
Total assets as percentage of nominal GDP	48.68	51.37
Loans and appropriated assets (mil ISK)	355,569	392,926
Percentage of loans 30 days past due	-	0.40
Percentage of loans 90 days past due	0.28	0.31
Loan loss provisions for year as a percentage of total loans	0.21	0.17
Actual loan loss during 2002, as a percentage of loans	-	0.10
General and specific reserves for loan losses as a percentage of total loans	-	0.41
Indexed assets to indexed liabilities (in percent)	-	100.60
Net foreign assets to equity (in percent)	-	-24.63
<i>Of which:</i>		
Foreign currency assets from derivative contract exposure	-	20.12
Foreign currency liabilities from derivatives contract exposures	-	18.80
Return on assets (in percent)	-0.09	0.35
Equity to asset ratio (in percent)	2.40	2.48

Sources: Housing Finance Fund 2002 Annual Report; CBI data; and Fund staff calculations.

(Figure 1) is near the historical low. The HFF's equity-capital ratio of 2.48 percent reflects both the nature of its assets and its government guaranteed status. If the HFF is evaluated using the Basel Accord standards, its CAR is about 5 percent.⁵ While such a calculation may suggest that the HFF is significantly undercapitalized, such a conclusion may not be warranted as the Basel capital standard covers both interest rate and default risk, and the indexing feature of HFF loans substantially diminishes the HFF's interest rate risk exposure.⁶ The HFF is not bound by minimum prudential guidelines regarding its operations; there is no minimum capital requirement or public financial operating limits to guide its management as it pursues its goal of providing affordable housing finance. Annual accounts indicate that the HFF has a net short position in foreign currency that represents almost 25 percent of its equity. This exposure is a consequence of foreign currency borrowing from Icelandic pension funds that are set to mature within the next four years.⁷ These exposures are large relative both to the HFF's domestic function and to conventional prudential standards that constrain bank behavior, but they do not raise any immediate financial stability concerns.

⁵ Mortgages secured by residential property are subject to a 50 percent risk weight.

⁶ The proposed revisions in the New Basel Accord will lower the risk weights on residential mortgages.

⁷ Additional foreign currency borrowings by the HFF must be set in accordance with yearly national parliamentary budgets, but the size of these exposures is not limited by law or regulation.

D. Pension Funds

22. **Preliminary analysis of 2002 pension accounts show that, similar to experiences in many countries, the pension fund industry will post losses for the year.** By convention, the FME measures pension returns net of an inflation adjustment and in 2002 the industry posted a real loss of 3 percent following a -1.9 percent real average fund return in 2001. Among pension funds there is wide variability of performance owing to differences in portfolio compositions. Pension funds can invest up to 50 percent of their assets in listed equities and up to 50 percent of their assets in foreign securities. There is a 10 percent limit on asset holding of unlisted securities. New life expectancy tables were also introduced in 2002, and lengthening life expectancy has produced extra technical provisions that have reduced the pension funds' net assets in surplus.

23. **At the end of 2001, pension funds in aggregate held assets with value equivalent to over 86 percent of GDP.** Funds held 10 percent of their assets in domestic equities and on average almost 5 percent of their assets in unlisted securities.⁸ Loans to members comprise approximately 12 percent of pension fund assets, and discussions with industry members and the FME suggest that default rates are modest and little changed from 2001 experience.

24. **Given the industry results, it is likely that a number of pension funds will fail minimum solvency margin regulations.** These funds will need to alter their articles of association and increase contribution rates and/or reduce benefits to satisfy solvency margin regulations. There are no guaranteed pension benefits at risk and so pension fund performance does not raise any direct financial stability issues. Based on preliminary results for 2002 and the past four years of results, some pension funds will need to alter their articles of association to revise contribution and benefit rates.⁹

⁸ There is no price index for unlisted shares. These shares reportedly are heavily weighted toward small technology and biotechnology companies. Unlisted shares are illiquid and have lost significant value in recent years.

⁹ Solvency margins represent the difference between the sum of a fund's net asset value (bonds are accounted for at historical costs) and the net present value of future premiums, and the present value of current and future actuarial pension obligations. The difference is expressed as a percentage of the present value of the fund's liabilities. If the difference is in excess of 10 percent, or 5 percent for five consecutive years, the pension fund must alter its articles of association and change contribution rates and/or current and future planned member benefits in order to return the fund to a proper prudential balance (0 deficit).

E. The Insurance Sector

25. **The insurance sector, composed of 15 domestic insurance companies including four life insurance companies and three larger companies that dominate the non-life market (Figure 2), is the smallest sector in the financial system.**¹⁰ The largest share of nonlife premiums as well as the largest share of non-life claims are generated by compulsory motor vehicle insurance. Reinsurance activities are small. The industry overall has been profitable (Table 6), and the profits earned by the motor vehicles insurers are a reoccurring issue of public discussion and an issue for the FME under its legal obligation for insurance consumer protection.

26. **An insurer's capital adequacy is monitored using its regulatory solvency margin.** When the margin falls below 1.25 (1 firm in 2001), FME internal guidelines require the formulation of a cooperative solution to improve the balance. Should the solvency ratio fall below 1, the FME assesses the capital position relative to minimum legal capitalization levels according to Article 33 of the Act on Insurance Activity and may recommend license suspension.¹¹

III. SUPERVISORY DEVELOPMENTS

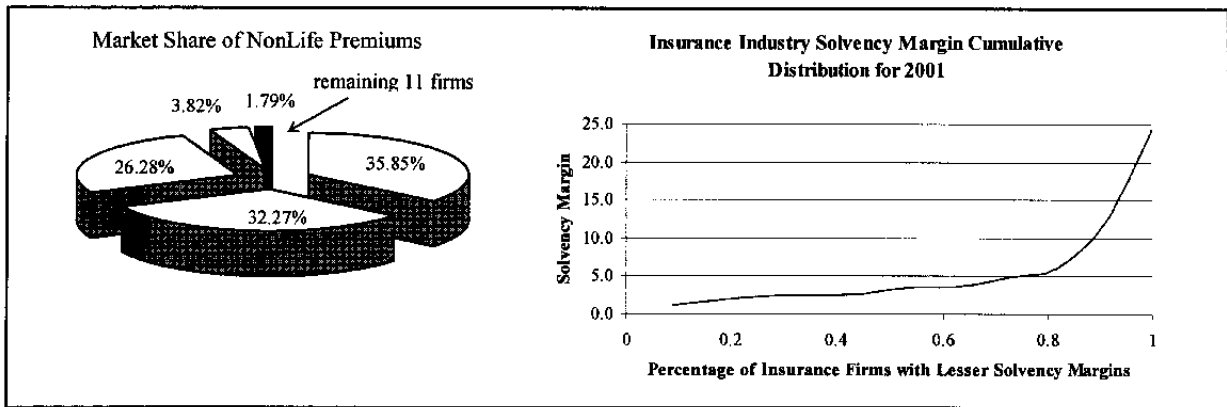
A. Overview of Recent FME Activities

27. **The FME has been very active since the 2001 FSSA.** Its operating budget has increased by almost 50 percent since 2000, enabling it to expand staff by 30 percent, including hiring new financial sector specialists and actuaries. It has expanded its offices, introduced a continuing education program for its staff, increased on-site monitoring, and augmented its participation in fora that further the international coordination of supervision. In addition to managing routine duties, the FME has assisted in the drafting of new financial sector legislation, issued new regulations, increased its use of focused on-site examinations, developed new risk assessment procedures, issued numerous discussion papers for planned regulatory changes, reviewed ownership relationships for potential violations of qualifying interest rules, conducted fit and proper tests for new owners, intervened in a takeover bid, assisted with and recommended the license suspensions in the insurance, pensions and

¹⁰ There are also over 200 foreign firms that are licensed to transact business in Iceland under EEA agreements.

¹¹ Of the firms that have reported 2002 results (all the large firms), one life insurance company has a solvency ratio below 1.25, and the firm with a solvency ratio of 1.23 in 2001 significantly improved its position. The Ministry of Industry and Commerce (MIC) retains insurance licensing powers.

Figure 2. Insurance Industry



Source: FME data.

Table 6. Insurance Sector Selected Statistics

	1998	1999	2000	2001	2002 ¹
	(In millions ISK, 2002 prices)				
After tax profit	1,518	1,554	1,665	2,850	1,773
Total assets	37,280	40,157	42,076	45,333	45,886
	(In percent)				
Total assets as a percentage of nominal GDP	6.6	6.6	6.4	6.1	5.9
Asset portfolio shares					
Variable yield (equities)	27.7	32.4	39.8	45.0	50.7
Fixed income	32.3	26.9	21.7	24.7	21.8
Mortgages	40.0	40.7	38.4	30.4	27.4
Portion of total pretax profit from:					
Non life insurance	23.7	10.1	-8.6	23.8	57.5
Investments	71.1	82.3	105.5	59.3	44.2
Life insurance	5.2	7.6	3.2	17.0	-1.8

Sources: FME data; CBI data; and Fund staff calculations.

1/ Preliminary estimates.

securities sectors, and consulted with multiple foreign financial supervisors regarding the foreign activities of two of its banks.

28. **The FME has developed a web-based internal handbook that provides ready access to all laws, rules, guidance, and discussion papers associated with any of its regulatory functions.** It is selectively transferring some of this operational information to its public web site. The FME has also implemented an efficiency enhancing work planning and tracking system that assigns a primary contact person for each open case and establishes a database that tracks all related correspondence, including scanned letters, emails, and formal

internal and external correspondence. This tracking system can be accessed by all FME staff (with appropriate clearance) and it has enhanced coordination among FME's professionals.

B. Banking Supervision

29. **Since 2001, the FME has conducted focused on-site examinations regarding the risk management, information technology, and the collateral valuation and loan loss provisioning standards used in Iceland's the banks and savings banks.** In some cases the FME has found deficiencies and has required banks to increase provisions. While significant weaknesses have not threatened the stability of major banks, some significant shortfalls have been identified in the smaller savings banks and the extra provisions mandated by the FME required capital increases in some instances.

30. **Following last year's Article IV discussions, the FME began collecting data on bank securities lending and borrowing activities and now receives regular activity reports from banks.** In discussions with banks' management, the FME has reinforced the need to prevent internal conflicts of interest concerning these operations.

31. **The FME has developed a new risk assessment system for commercial and savings banks.** This system will become a key component of the FME's rules (issuance pending) regarding the discharge of its new power that allows it to set a higher minimum CAR for an institution with elevated risks. The new system, more formally described in Box 3, explicitly includes the results of stress test analysis. The system produces a so-called CAMELS rating which represents a composite measure of a bank's prudential soundness.

32. **The FME increasingly has focused attention on the interconnectedness of** connected lending that require a special approval process within an institution and are subject to regulatory restrictions.

C. Pension Industry

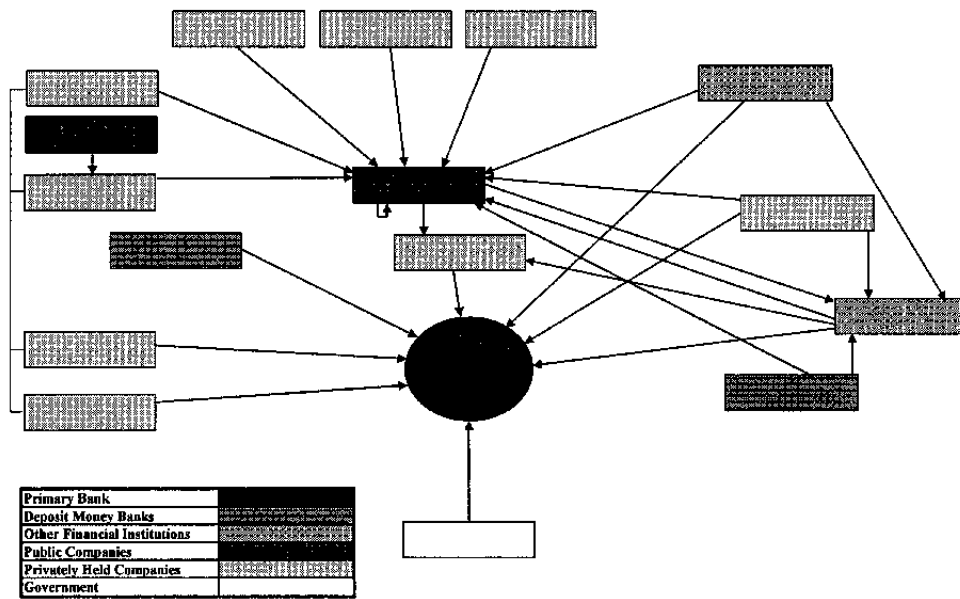
33. **In special examinations conducted by the FME, some pension funds were found to be in violation of the unlisted securities investment limits (10 percent of assets).** In other supervisory developments, since the 2001 FSSA, the FME has hired two actuaries and these actuaries have developed a new offsite monitoring system for pension funds that will be active from July 2003. In part as a response to the 2002 Article IV's mission's cautions regarding securities lending, the FME reviewed pension fund internal controls and reinforced guidance regarding the segregation between pension fund management and banking operations in financial institutions.

D. Insurance Industry

34. **The FME has moved toward a more active risk-based on-site supervisory approach for insurance that emphasizes risk management and the adequacy of internal control procedures.** Since the 2001 FSAP, the FME has hired two actuaries, one of which

Box 3. Connectedness and Financial Sector Supervision in Iceland

The 2001 FSSA encouraged the FME to increase the resources it devoted to monitoring the interconnectedness of holding in the financial sector. In recent years the FME has been actively monitoring ownership relationships and has, on numerous occasions, used its powers to inquire whether groups of owners that, on an individual basis fall under the threshold of qualified holding status, may be connected through share holdings or management relationships. In some cases, groups have been required to file an FME application for permission to acquire a qualified holding in a financial institution. Should a group not comply and receive approval for a qualified holding, the FME has the power under Article 45 of the Act on Financial Undertakings (the Act) to suspend the group's voting rights and require the sale of acquired shares.¹ If a connected group's effective control, either through direct holding or through managerial or board interrelationships, exceeds regulatory thresholds set out in Article 40 of the Act, Article 43 gives the FME power to require that a connected group's interest to be held in a single purpose financial holding company. The regulatory complications associated with connected relationships are illustrated in a recent case requiring FME action. The ownership relationships of this case are unusually complicated.



In a recent evaluation process of applicant owners in the purchase of a large share in a commercial bank, the FME determined that the bidding firms were a connected group. The ownership structure (arrows indicate share ownership) of the associated transaction (illustrated above, reproduced with FME permission) was documented by the FME during the application evaluation. To approve the ownership change, the FME required that the new shares, when fully subscribed, be held in a single purpose holding company to improve transparency and facilitate supervision.

¹ Articles 42, 49, and 56 of the Act are also relevant on the issue of FME approval of qualified holdings.

specializes in non-life insurance activities and the other in life insurance and pension fund issues. The FME has been active in resolving issues associated with the difficulties of a few small insurance companies (including the failure of a small marine insurer) and some domestic insurance brokers. In 2002, the FME assisted in the licensing of two new domestic insurance companies.

E. Financial Sector Liquidity Developments

35. **The 2001 Central Banking Act makes the CBI responsible for the provision of systemic liquidity through its traditional central bank function of lender of last resort.** In relation to this duty, the CBI issued Board of Governors Resolution No. 982 in January 2003 in which the CBI sets out internal guidelines for operations including conditions under which it may lend and the characteristics of liquidity support facilities that may be utilized.

36. **The CBI monitors banks' liquidity positions according to the prudential minimum liquidity requirement set by the CBI. The CBI sets reserve requirements as well and it is altering these in two phases.** The first phase (completed at end-March 2003) reduced reserve requirements for savings and demand deposits to 1 percent and 3 percent, respectively. The second phase, which will be implemented by year's end, will reduce the reserve requirement to a uniform 2 percent and achieve parity with EBB rules. The CBI is analyzing the effects of these changes on the money supply and liquidity conditions.

37. **The FME supervises banks' control functions regarding liquidity risks and performs on-site inspections to ensure compliance with minimum prudential liquidity standards.** Banks file comprehensive monthly liquidity reports with the CBI (which are shared with the FME) and must meet strict asset-liability maturity matching requirements in time bands up to a year. Banks are subject to immediate penalties if they fail to comply with minimum regulatory liquidity requirements. If liquidity issues are identified at an individual institution or in the financial system as a whole, the CBI and FME coordinate their actions.

38. **The authorities monitor banks long-term foreign exchange refunding needs and the outcomes of refunding operations.** Since the latter half of 2002, the system and individual institutions have been faced with an unusually heavy refunding calendar, but banks have been successful at securing long-term roll over financing from a diversified investor base.

F. Payments and Settlement Systems

39. **Article 4 of the 2001 Central Bank Act assigns the CBI the responsibility to promote an efficient and safe financial system, including rules making powers and oversight over payment systems domestically and with foreign countries.** Two types of payment system are in operation in Iceland, both of them settlement systems: the CBI's real-time gross settlement (RAGS) system, and a netting system operated by Fjölgreiðslumiðlun hf. (FGM) that handles netting of accumulated payment orders between participants lower than 25 million króna. Settlements of securities transactions are also processed by these systems and settlements are made through the participants' RTGS accounts with the Central Bank. FGM is jointly owned by the commercial banks, payment card companies and the CBI. The Icelandic Banks' Data Centre (RB) provides software for all the systems and the CBI acts as a settlement provider.

40. **In response to issues raised in the 2001 FSSA, the CBI took initiatives to develop the FGM netting system and in 2001 the FGM Board approved reforms to the system with the aim of bringing it into line with international standards.** The reforms included changes in RB's software design (completed in December 2002) and require system participants to post collateral. Initial collateral requirements were deposited with the CBI on January 1, 2003.

41. **Since the 2001 FSSA, the CBI has strengthened RTGS risk management and is currently developing a system that will allow it to actively monitor participants' positions within the day.** The CBI operates Iceland's RTGS system for final settlement of individual payment orders of 25 million króna or above. It has established participant agreements regarding collateral security for settlements in which each institution must provide sufficient collateral security to cover its payment position in the system at all times. The CBI also has enhanced access to funding during the system's business hours and coordinated with the FME regarding system oversight and supervision. A CBI proposal will empower the FME with supervision of participants' implementation of CBI rules. The CBI and FME have also been involved in coordinated contingency planning discussions.

42. **In 2002, the CBI also presented proposals for refinements in the ICEX securities settlement system including rules clarification regarding the system's operations, the introduction of risk management, and the expedition and netting of payment orders from the Central Securities Depository (CSD) to the CBI so that credit institutions can be notified of their securities trading positions in order to prepare settlements which are made the following morning.** The CBI, CSD are jointly examining the benefits of developing a system for settlement of transactions involving securities in foreign currencies.

43. **In 2002, the CBI held talks with the ECB concerning closer cooperation on European payment systems and securities settlement systems.** It was agreed that cooperation should be enhanced with a goal of allowing Icelandic credit institutions participation in Pan-European payment systems that are under development.

IV. OTHER ISSUES AND RECOMMENDATIONS

44. **HFF operations should be constrained by appropriate minimum prudential financial standards and be subject to formal supervisory oversight.** The HFF operates under a general mission statement that requires it to provide mortgage funds to the public as cheaply as possible without imposing costs on the government. The public operating guidelines do not include any either a transparent prudential standard or a provision for an agency to monitor the HFF's compliance with such a standard. HFF bonds carry a sovereign guarantee, and should the HFF suffer operational failures, the potential exposures are large. The 2001 FSSA also recognized this issue.

45. **Measures could be taken to alter contract terms and modify clearing and settlement arrangements of HFF liabilities to facilitate direct foreign ownership.** An official advisory committee has considered options that might be taken to restructure the terms of HFF liabilities to facilitate foreign investor ownership as well as ownership by domestic retail investors. Features of existing bond contracts make them unsuitable for direct foreign investor holdings, and some banks have been using derivative contracts to synthetically satisfy foreign demand. While profitable, these bank practices require banks to hold large portfolios of domestic bonds as a hedge, increasing their operational risks (and perhaps their regulatory capital requirements) in addition to reducing transparency and increasing the risk of unfavorable rating agency opinions. Such changes may also have benefits in the form of reduced long-term real rates of return.
46. **While there may be important social reasons to safeguard the existence of independent savings banks, the discharge of these nonprudential social goals, currently assigned to the FME, are more appropriately aligned with other Ministries' functions.** The mandate regarding savings bank takeover protections in the new Financial Undertakings Act are not complementary with the FME's central mission of prudential supervision. The takeover protections may, moreover, limit efficiency incentives created by the market for corporate control.
47. **Authorities should consider reassigning the FME's insurance consumer protection mandate as this role is not complementary with the FME's primary role of prudential supervision.**
48. **Authorities should stand prepared to reassess the FME's future resource requirements** as the legislative activities related to new EU directives and the rule making burdens associated with newly adopted legislation should not be allowed to compromise the resources available for supervision.
49. **The FME voiced concerns regarding the limited police agency resources that are available to investigate potential criminal acts referred by the FME.** Staff agree that authorities risk compromising the underlying integrity of the financial market place if agents discount the probability of timely prosecution for a criminal act.
50. **Authorities should consider adopting an IAS consistent national accounting standard for all listed firms and design a credible mechanism to enforce national listing standards.** Discussions with the FME and accounting professionals suggest that listed firms increasingly are adopting selected aspects of IAS rules to construct their annual accounts notwithstanding the fact that these rules may be inconsistent with Iceland's legal accounting standards. As a consequence listed firm accounts are no longer comparable and market disclosure transparency may have diminished.

Observance of Financial Sector Standards and Codes— Summary Assessments and Factual Updates

I. SUMMARY FINDINGS OF THE BCP UPDATED ASSESSMENT

A. General

51. The assessment of Observance with the Basel Core Principles for Effective Banking Supervision was conducted on the basis of the “Core Principles Methodology” of October 1999.¹² The AML/CMT ROSC related to Principle 15 has been specifically excluded. The mission had at its disposal a new draft self-assessment of the “Basel Core Principles” prepared by FME. The main laws relevant to the assessment are: the Law on Official Supervision of Financial Operations (87/1998); the Act on Payment of Costs for Official Supervision of Financial Activities (99/1999); the Act on Financial Undertakings (161/2002); the Regulation on the Annual Accounts of Credit Institutions (692/2001); the Rules on the Solvency Ratio of Credit Institutions, etc.(693/2001); the Regulation on Additional Own Funds Items for Commercial Banks, Savings Banks, etc. (852, 964/2000); and, the Act on Measures to Counteract Money Laundering (80/1993). The assessment was conducted in a spirit of good cooperation with the local authorities and institutions. Laws and regulations were for the most part translated into English. The structure of the banking sector, a description of its recent performance and capital adequacy are reviewed in the body of this report. The assessor’s recommended actions appear in Table 7.

B. General Preconditions for Effective Banking Supervision

52. Laws and regulations concerning disclosure of information in audited annual statements and corporate governance are in place. The Act on Financial Undertakings has provisions concerning resolution of problem banks. FME has formal agreements with CBI for the eventuality of systemic risks. The EU directive concerning the deposit guarantee system has been implemented in Iceland.

C. Summary of Detailed Assessment

53. **Objectives, Autonomy, Powers, and Resources (CP 1):** FME’s supervisory and regulatory powers are adequate and clearly stated in law. Issues raised in the 2001 BCP assessment regarding potential governance issues arising from the role of the Consultative Committee and the composition of the FME’s Board have been discounted in the new assessment. The FME has demonstrated its capacity to act independently and its staff does not believe that FME autonomy is compromised by its governance structure. The FME’s

¹² The assessment was made by Mr. Tuomo Malin of the Financial Supervision Authority of Finland in April 2003.

resources have been expanded to allow it to fulfill its staffing needs. FME's powers to ensure safety and soundness have been improved. The legal protection of supervisors is not established in law but Icelandic jurisprudence accords sufficient protections. The law provides for cooperation and information sharing with foreign supervisory agencies and the FME has initiated MOU negotiations with authorities in the jurisdictions where Icelandic banks have established a presence.

54. **Licensing and Structure (CPs 2–5):** Licensing authority has recently been transferred to the FME, but public issuance of guidelines on the contents of an application for license with reference to the fit and proper tests of bank management are pending. The lack of clearly enunciated basic premises for safe and sound banking operations directed to new market entrants partially undermines the transparency of FME operations. The FME's powers to approve bank ownership have been increased and the FME may suspend voting rights on unapproved qualifying interests. FME's access to information extends also to parties that have not yet notified FME of their intentions to acquire a qualified holding. The FME is empowered to prohibit acquisitions in financial institutions in foreign jurisdictions where the Icelandic authority's possibilities to exercise consolidated supervision would be curtailed.

55. **Prudential Regulations and Requirements (CPs 6–15):** The FME's proactive powers now include the authority to set an individual bank's minimum CAR above the general 8 percent minimum should risks warrant, but the FME has not issued the 'clearly stated rules' that the law requires before the power can be exercised. The FME has proposed a rule that will link specific provisions to the present value of future cash flows (IAS 39). At present, there are no rules on provisioning criteria that would preclude banks from exercising a considerable amount of discretion as to the level of provisions and the accruing of interest on nonperforming assets, but the FME Act provides a legal basis for the FME to require a bank to increase the level of provisioning or otherwise strengthen its lending practices and these powers have been exercised. The FME actively monitors asset quality and the adequacy of provisions in on-site inspections. A definition of connected lending has been issued in a new guideline that requires connected lending to be extended only on an arm's-length basis. There are no requirements on regular prudential reporting on country risk positions and the FME collects related information on only a sporadic basis. Iceland's banks' foreign exchange denominated exposures are, however, primarily credits to domestic companies. The internal audit function is compulsory for all credit institutions, but no guidelines are in place regarding minimum requirements. The FME can require corrective action, but it is not invested with explicitly stated legal powers to have changes imposed in the composition of a bank's board of directors.

56. **Methods of Ongoing Supervision (CPs 16–20):** FME has an established planning system for on-site supervision in place. In the context of ownership control and licensing, FME ensures management is fit and proper according to law. However, FME has not issued guidelines for on-going reporting of changes in bank management. The FME seeks auditors' opinions mostly in special cases (not on a regular basis) and lacks powers to have an external

auditor replaced. FME’s access to information extends to holding companies, subsidiaries and affiliated companies.

57. **Information Requirement (CP 21):** The accounting rules are in the process of being brought more into line with IAS international standards; the rules related to specific provisioning are being made somewhat more stringent.

58. **Formal Powers of Supervisors (CP 22):** Some of the supervisory measures indicated in the BCP criteria are not at the FME’s disposal, i.e., restricting or suspending payments to shareholders or share repurchases, restricting asset transfers, barring individuals from banking, replacing or restricting the powers of managers, directors, or auditors and arranging a take-over or merger. FME’s powers have recently been enhanced; as to ownership control the measures at FME’s disposal are more proactive and far-reaching on the remedial side; and FME can prevent foreign acquisitions harmful to effective consolidated supervision.

59. **Cross-Border Banking (CPs 23–25):** In recent legislation FME has been invested with powers to block investments and operations of Icelandic banks abroad. However, establishing a branch outside the EEA only requires a prior notification to FME, and FME can block such establishments only on grounds related to the soundness of the institution. FME has initiated discussions for MOU’s with foreign supervisory authorities in countries where Icelandic institutions have established a presence. According to law, as host supervisor, FME is not required to (although it would in practice) determine that approval or no objection for the establishment of a branch or a subsidiary from the home supervisor has been received.

Table 7. Recommended Action Plan to Improve Compliance with the Basel Core Principles¹

Reference Principle	Recommended Action
CP 3 Licensing criteria	The FME is encouraged to proceed with its plans to issue a guideline containing a detailed description of the contents of an application for a banking license. The guideline should include criteria for assessing the application. Particular special attention should be accorded to the formulation of fit and proper tests of bank management and the description of risk management and internal controls.
CP 6 Capital adequacy	The FME should issue the detailed set of rules that the newly enacted law requires to enable it to set institution specific minimum capital requirements.

Reference Principle	Recommended Action
CP 8 Loan evaluation	In view of the discretion accorded to banks in written regulations, FME on-site examinations should continue to monitor the adequacy of loan-loss provisions and write-offs. Rules concerning loan-loss provisioning and interest accrual could be made more prescriptive, and the FME is encouraged to proceed with its plan to adopt IAS 39. Non-accrual of interest on loans in arrears for more than 90 days should be made the minimum standard.
CP 10 Connected lending	The FME has issued new guideline on connected lending. The FME should monitor that connected or related parties are not extended loans on terms that differ from those of non-related counter-parties.
CP 11 Country risk	It will be prudent for the FME to require regular reports on country risk positions.
CP 17 Bank management	The FME should issue a guidelines on fit and proper tests and on reporting of changes in bank management.
CP 23 Global consolidation	The establishment of a branch by an Icelandic bank in a foreign country outside the EEA should be subject to FME's approval. FME should be able to block the establishment of such branches if the secrecy laws and other regulations in the foreign jurisdiction would prevent the flow of information necessary for supervisory purposes.
<p>¹There are no specific BCP issues that generate financial sector stability concerns in the present environment.</p>	

D. Authorities' Response

60. The FME welcomes the comprehensive work done by the IMF mission with regards to the BCP updated assessment. In particular, the FME welcomes the recognition of regulatory and supervisory amendments in recent years, which have resulted in major improvements with regards to the Observance with the Basel Core Principles. The FME will continue to aim for full harmonization with the Codes. Furthermore, the FME will continue to take into account and implement recommendations made by the IMF, many of which are already in due process.

II. FACTUAL UPDATES OF REMAINING ROSCs

A. Observance of IAIS Insurance Core Supervisory Issues

61. The 2001 IAIS assessment recommended that supervision move toward a risk-based focus and place greater emphasis on corporate governance and risk management and more reliance of the work of actuaries and accountants. The assessment recommended that the FME receive additional powers and resources, including the licensing power that resided in the MIC. The assessment noted that the consumer protection responsibility assigned to the FME was awkward, and posed potential conflicts of interests regarding the FME's responsibilities. The assessor encouraged the FME to provide additional guidance on key risk management issues, corporate governance, internal controls, asset provisioning, and recommended that compliance be monitored in on-site inspections. The assessor noted the interconnectedness of the insurance sector and encouraged the FME to assess its importance.

62. Subsequent to the 2001 IAIS assessment, the FME has undertaken an active work program aimed at addressing the assessor's recommendations. It has received expanded resources and has added technical staff. It has moved toward a more risk-focused approach to supervision and has augmented reporting requirements. It has conducted on-site examinations and issued guidance regarding mandatory risk management protocols, board of directors' responsibilities, and internal controls. Analysis of interconnectedness among financial sector institutions has received elevated importance and sometimes lead to inquiries to assess the qualified holding status of related shareholdings. The Act on Insurance Undertakings has been revised regarding fitness and propriety of holdings, but the FME still retains the legal responsibility of insurance consumer protection and the MIC still retains licensing authority.

B. Observance of IOSCO Principles of Securities Regulation

63. The 2001 IOSCO assessment found the FME compliant or partially compliant on all principles. The FSSA recommended an increase in FME resources, a continuing education program for FME professionals, and revised legislation that was more general but allowed the FME to issue technical regulations. Licenses were granted by the MIC and the assessor suggested that this power be transferred to the FME. The assessment found the need to establish a legal basis for information sharing between the FME and the Iceland Stock Exchange and for some legislative changes to the laws regarding mutual fund regulation.

64. Since the 2001 IOSCO, the staff and resources of the FME have been expanded. It has instituted a continuing education program for its staff. New legislation has been passed that may strengthen the regulatory and supervisory framework and resolve the legal lacunae. For example, Act No. 76/2002 on Undertakings for Collective Investment in Transferable Securities which replaces Act No. 10/1993 should address the legal issues regarding mutual funds.

C. Observance of CPSS Core Principles for Systemically Important Payment Systems

65. The 2001 CPSS assessment found that Iceland lacked any legislation that designated regulatory or supervisory authority over payment systems and so the CBI and the FME's roles in supervision and regulation were not well defined. The assessor found that the net settlement system, the FGM, lacked appropriate risk management and the system itself had no provision to contain risk. Participants could not monitor their risks in the system and, since the CBI provided uncollateralized credit for settlement, banks lacked any incentive to limit exposures. The FGM would not have sufficient funds to settle if its largest participant defaulted. The RTGS system lacked collateral requirements for participants creating potential exposure for the CBI.

66. Article 4 of the 2001 Central Bank Act assigns the CBI the responsibility to promote an efficient and safe financial system, including rules making powers and oversight over payment systems domestically and with foreign countries. In response to issues raised in the 2001 FSSA, the CBI took steps to establish risk management within the systems including requiring the posting of collateral, introducing settlement guarantees, formulating contingency plans, and increasing system transparency. Following CBI recommendations, the FGM Board approved proposals for reforms to the system with the aim of bringing it into line with international standards including requiring payment system participants to post collateral. The CBI is developing a system that will allow it to actively monitor FGM participants' positions within the day.

67. The CBI has strengthened risk management for the RTGS system. It set collateral security amounts for each participant and agreements were reached with all participants concerning collateral security, in the form of either a required reserve in a separate blocked account or securities which fulfill collateral requirements. Once pending changes in the reserve ratios and reserve base are finalized, it is expected that securities will be the sole form of collateral for settlements.

68. The CBI has also been coordinating with the FME regarding system oversight. A CBI proposal is that the rules on payment systems would empower the FME with supervision of participants' implementation of CBI rules. The CBI and FME have also been involved in coordinated contingency planning discussions.

69. In 2002, the CBI also presented proposals for refinements in the ICEX securities settlement system including rules clarification regarding the system's operations, the introduction of risk management, and the expedition and netting of payment orders from the Central Securities Depository (CSD) to the CBI.

D. Observance of Transparency Practices of the Central Bank in Monetary Policy

70. The 2001 Central Bank Act, which was already under consideration at the time of the 2001 FSAP mission, addressed the primary monetary policy transparency issues raised in the 2001 FSSA report. Under the Central Bank Act, the CBI now specifies a numerical target for

domestic inflation and no longer targets the exchange rate. The Central Bank Act does not allow the CBI to make loans to the treasury, but it is permitted to purchase government securities in the secondary market for monetary policy purposes. This Act also explicitly empowers the CBI to provide lender of last resort assistance in emergency situations. In other developments Iceland's data on its International Investment Position has been modified to fully meet IMF dissemination standards.

E. Observance of the Transparency Practices of the Financial Supervisory Authority in Financial Policies

71. The new legislation has been passed since the 2001 FSSA report addresses the most important issues that were raised regarding the transparency of financial sector policies. The 2001 Central Banking Act clarified the roles of the CBI and the FME regarding payments system supervision and regulation. The Act on Financial Undertakings (effective January 1, 2003) moves many licensing powers (excepting insurance and pensions companies) from the MIC to the FME. Transparency will be further improved when the FME issues public licensing criteria regarding fit a proper tests for potential bank management (see BCP Principle 3). Transparency has also been improved by transfer of the power (from the MIC to the FME) to frame supervisory rules and regulations regarding financial soundness and transparency in the operations of financial undertakings.