*Financial stability*[1]

# The position of the financial system is sound, but has not strengthened

*The macroeconomic fundamentals for financial stability are currently favourable but there is substantial uncertainty about what lies ahead. Economic policy decisions will be crucial, especially in light of the large-scale investment programmes that have already been launched and will have an extensive impact on the economy. The relationship between monetary policy and financial stability is complex, but the main risk facing the financial system in the years to come would definitely be a failure to contain inflation, which could lead to volatility of real interest rates, the exchange rate and domestic demand. Failure to take timely measures to contain inflation could undermine the financial position of households and businesses during the prospective boom years, resulting in a more abrupt adjustment when this comes to an end. In a worst-case scenario, financial stability could be threatened. The financial system therefore needs to build up its strength to sustain shocks. Iceland's financial system has changed fundamentally and the commercial banks and savings banks have consolidated their position recently. Hopefully they will be able to take advantage of the pending phase of expansion to do so even further.*

Global conditions for financial stability are currently quite favourable and stronger signals of a global economic recovery have emerged since the spring. Foreign interest rates are likely to rise in the wake of the recovery. This will affect financial companies in Iceland, since a sizeable part of their financing is procured abroad.

The short-term outlook for price stability is promising but exchange rate developments become increasingly uncertain as construction of the aluminium smelter and hydropower station heads to a peak. Previous financial stability studies have highlighted real estate prices and the risk that financial companies would face if prices collapsed. Residential housing prices are currently at one of the highest levels ever in real terms and further rises in the near term cannot be ruled out. Prices of business premises in real terms are some way below their previous peak, but appear to have strengthened recently. Real estate prices are unlikely to drop significantly in the immediate future. However, the probability of a sharp decline increases, the more that prices rise above what can be justified by fundamentals, with more serious consequences for financial stability. The current account deficit is rapidly widening. An unsustainable current account deficit is one of the main indicators of conditions that could conceivably threaten financial stability. To some extent the current account deficit may be explained by a deterioration in the terms of trade, but imports of investment goods have also been robust and private consumption has been on the increase. A wider current account deficit need not signal a risk of shocks in the near

1. This article uses data available on October 30, 2003.

future, especially if it is largely the result of imports of investment goods for the aluminium project. But a significantly wider deficit, on the scale seen in 1998-2000, could result in a rough adjustment, and there is no guarantee that external conditions will then be as favourable as they were in 2001 and 2002.

Household finances are relatively solid, at least for the next few years. As long as employment remains steady and inflation low, the future stream of household earnings ought to be relatively secure.

Listed companies reported generally favourable EBITDA in their half-year statements, and earnings forecasts indicate that this will also be the case for the year as a whole. Businesses are increasingly sensitive to fluctuations in the exchange rate. Excessive appreciation of the króna, which could erode the competitive position of exporters, is some cause for concern.

The Icelandic financial system has changed fundamentally in the past few years. For more than a century after Landsbanki Íslands began operations in 1886, the state owned Iceland's largest commercial bank. Other state-owned commercial banks emerged in the course of the last century, along with sector-specific investment funds. Notwithstanding the important role played by the savings banks, the operations of the former Íslandsbanki from 1904 to 1930 and other private banks which were founded in the second half of the last century, the state directly dominated financial services for businesses and households. It was not until 1990, when Útvegsbanki Íslands hf. was privatised and four commercial banks merged to form Íslandsbanki hf., that a public limited company became the second largest bank. The merger with FBA hf. in 2000 made Íslandsbanki hf. the largest commercial bank. At the end of 2002 and beginning of 2003, the privatisation of the other state-owned banks – Landsbanki Íslands hf. and Búnaðarbanki Íslands hf. – was finalised, marking the state's complete withdrawal from commercial banking. The landscape has kept on changing rapidly after privatisation. In May 2003, Kaupþing banki hf. and Búnaðarbanki Íslands hf. merged. Landsbanki has also undergone substantial changes and Íslandsbanki hf. is adding insurance to its operations with the acquisition of Sjóvá-Almennar tryggingar hf. Four commercial banks currently operate in Iceland. The three dominant players are all engaged in general banking activities, i.e. Kaupþing Búnaðarbanki hf., Íslandsbanki and Landsbanki. These are all listed public limited companies with comprehensive operations both in Iceland and abroad. The fourth is Sparisjóðabanki Íslands hf., which provides banking services for the savings banks.

### Box 1 Iceland – Financial System Stability Assessment

Now that the International Monetary Fund has made two financial system stability assessments for Iceland it is informative to look back on how much progress has been made. Although the IMF only made its first financial system stability assessment less than three years ago, the economy and financial system have been significantly transformed since then. The new Central Bank Act and setting of an inflation target have been crucial, along with the new Act on Financial Undertakings and the results achieved by strengthening and focusing the work of the Financial Supervisory Authority (FME).

The Financial System Assessment Program, a joint IMF and World Bank effort introduced in May 1999, aims to increase the effectiveness of efforts to promote the soundness of financial systems in member countries and thereby reduce the probability of shocks and financial crises. Priorities include enhanced supervision of financial sector activities among all member countries and ensuring a reliable legal and regulatory framework for them. Each assessment is concluded with a Financial System Stability Assessment (FSSA) report.

In November 2000 an IMF mission visited Iceland and spent several weeks preparing its assessment. The Central Bank and FME worked with the Fund's experts who also acquired data from the Ministry of Finance, Ministry of Commerce and a number of financial companies and their organisations. A draft report was delivered in January 2001 and in June 2001 the IMF published its FSSA report after this had been discussed by the Fund's Executive board.

In its main findings announced in January 2001, the mission expressed clear concern about Iceland's macroeconomic imbalances. It outlined the need for concerted action including measures to reduce external and internal imbalances, strengthen the financial system and boost national saving. Such measures would be more successful under a monetary framework which allowed greater exchange rate flexibility, it pointed out. Reduction of systemic risk was crucial, and the government was urged to raise the capital adequacy ratio of domestic banks and empower the FME to demand even greater capital adequacy from banks that were considered under particular risk. Potential weaknesses could also stem from flaws in the legal, regulatory and supervisory framework – especially compared with international best practice. The mission therefore recommended that the government should take the necessary legislative and regulatory measures to enhance domestic banks' credit evaluations and loss provisioning, among other things. Significant improvements were subsequently made with the Act on Financial Undertakings No. 161/2002. Regarding supervision, the main finding was that the financial market legislative framework was up-to-date and broadly in line with the Basel Core Principles for Effective Banking Supervision. The FME performed its duties well but was found to be understaffed.

As far as the Central Bank is concerned, various shortcomings were identified in legislation at that time. However, the new Central Bank Act was passed by parliament before the FSSA was published, addressing the flaws identified by the mission. The FSSA also examined compliance with IMF rules on monetary transparency and deemed the Central Bank to fulfil them in virtually all respects. It found that the Icelandic payment and settlement system did not conform to international best practice in important respects. By that time the Central Bank had already taken an initiative on reforms which have now largely been implemented, bringing the systems into line with international practice to a very large extent.

Another IMF mission visited Iceland in April 2003 to reassess the financial system. The mission was smaller than before and produced a less comprehensive update to the original FSSA. The mission delivered its draft FSSA Update at the end of June this year. After discussion by the IMF Executive Board the Update was published on August 29 and is accessible on the Fund's website (www.imf.org).

The tone of the second FSSA is much more positive, reflecting the major changes that have taken place in the meantime: "Iceland's financial sector has returned to a more balanced risk profile. The potentially destabilizing effects of the 2000-2001 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 and maintain profitability … 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." The pension industry posted negative average real returns in 2001 and 2002, the assessment noted, but since secured pension fund payments are not the norm in Iceland, the funds' operations do not entail a systemic risk.

The FSSA also reports that "the FME has received increased funding and additional supervisory powers as a result of new legislation ... these changes have enabled the FME to become even more effective. A new assessment of the Basel Core Principles for Effective Banking Supervision finds major improvements in compliance and the Central Bank of Iceland 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."

Alongside the FSSA, the IMF published its regular Article IV Consultation. The concluding statement notes that macroeconomic imbalances have been corrected and commends the authorities for doing so. The economy appears poised for a resumption of growth, but large planned foreign investments in aluminium smelting and construction of associated power-generating facilities will complicate macroeconomic management. After increasing rapidly in recent years, the external liabilities of the Icelandic economy are high, which makes it vulnerable to external shocks. Continued progress on strengthening the institutional policy frameworks will be crucial, especially in the fiscal area, and on market-oriented structural reforms – which refers in particular to power companies and the Housing Financing Fund.

The FSSA reports have proved useful for the Icelandic government, and especially for the FME and the Central Bank. Views from the outside are always welcome. It was interesting to receive the IMF's reassessment of financial stability following the exchange rate volatility of 2000-2001, and the cautionary note in the FSSA report has supported the FME and the Central Bank in their work in this area. Receiving the update following a readjustment in the economy was no less constructive. It confirms the results that have been achieved and points out a number of areas for closer consideration. Because of the backlog of requests for Financial System Stability Assessments, it will foreseeably be many years until the IMF makes another in-depth study of the Icelandic financial system. However, although another FSSA report is not expected in the next few years, financial stability will remain one of the regular issues examined by the IMF in its Article IV consultations.

## Box 2 Financial Soundness Indicators

Financial system stability and monetary stability are vital for the functioning of the economy. Financial instability creates uncertainties and inefficient utilisation of capital. Shocks to the financial system can have serious consequences for economic activity and entail substantial costs. This makes it increasingly important to monitor the soundness and efficiency of financial market institutions, and the development of aggregates and markets that could jeopardise financial stability.

In cooperation with other organisations, in recent years the International Monetary Fund has been developing financial soundness indicators (FSIs) and methodologies for macroprudential analysis. Work in this area has constituted part of its Financial System Assessment Program (FSAP).[1] Originally this embraced a fairly broad range of macro- and microprudential indicators, consisting of macroeconomic aggregates that have a bearing on financial stability, aggregated individual financial institution data and indicators that are representative of the markets in which the financial institutions operate.

In January 2000 the Executive Board of the IMF proposed limiting the number of indicators to a core set which would be useful for FSAP assessments and surveillance within the countries themselves. In 2000 the IMF undertook a survey of its member countries and of regional international agencies to identify those indicators considered to be most relevant to them both as compilers and users of data.[2] The outcome of the survey was that it was decided to divide FSIs into a core set and encouraged set. The core set provides data covering all main categories of bank risk, while the encouraged set includes more indicators from the banking sector as well as other institutions and markets which were considered important in financial stability assessments. These include data on the corporate and household sectors, real estate developments and non-banking financial institutions. By compiling two datasets, the IMF aimed to avoid imposing too rigid a system, and instead to give respective countries the opportunity to select the indicators that are most relevant to their circumstances.

Work began in 2001 on producing a guide for compiling, working with and analysing FSIs. A Draft Compilation Guide was published in March 2003 which is expected to be completed before the end of the year.

The IMF, along with other national and international institutions, has clearly made a determined effort to decide on a set of indicators which will present a realistic picture of financial system stability. However, this remains an ongoing task, since markets and financial systems are in a continuous process of development and new risks are constantly emerging. Research in this field therefore needs to be stepped up still further.

1. Introduced in May 1999 as a joint effort of the IMF and World Bank.
2. Six criteria were used to determine the most important indicators: focus on the core markets and institutions; analytical significance; revealed usefulness through high scores in the survey results; relevance in most circumstances; availability; and keeping them to a minimum.

## *Core Set*

*Deposit-takers*

| | |
|---|---|
| *Capital adequacy* | Regulatory capital to risk-weighted assets<br>Regulatory Tier I capital to risk-weighted assets |
| *Asset quality* | Nonperforming loans to total gross loans<br>Nonperforming loans net of provisions to capital<br>Sectoral distribution of loans to total loans<br>Large exposures to capital |
| *Earnings and profitability* | Return on assets<br>Return on equity<br>Interest margin to gross income<br>Noninterest expenses to gross income |
| *Liquidity* | Liquid assets to total assets (liquid asset ratio)<br>Liquid assets to short-term liabilities |
| *Sensitivity to market risk* | Duration of assets<br>Duration of liabilities<br>Net open position in foreign exchange to capital |

## *Encouraged Set*

| | |
|---|---|
| *Deposit-takers* | Capital to assets<br>Geographical distribution of loans to total loans<br>Gross asset position in financial derivatives to capital<br>Gross liability position in financial derivatives to capital<br>Trading income to total income<br>Personnel expenses to noninterest expenses<br>Spread between reference lending and deposit rates<br>Spread between highest and lowest interbank rate<br>Customer deposits to total (non-interbank) loans<br>Foreign currency-denominated loans to total loans<br>Foreign currency-denominated liabilities to total liabilities<br>Net open position in equities to capital |
| *Other financial corporations* | Assets to total financial system assets<br>Assets to GDP |
| *Nonfinancial corporate sector* | Total debt to equity<br>Return on equity<br>Earnings to interest and principal expenses<br>Net foreign exchange exposure to equity<br>Number of applications for protection from creditors |
| *Households* | Household debt to GDP<br>Household debt service and principal payments to income |
| *Market liquidity* | Average bid-ask spread in the securities market<br>Average daily turnover ratio in the securities market |
| *Real estate markets* | Real estate prices<br>Residential real estate loans to total loans<br>Commercial real estate loans to total loans |

The nature of banking activities has also changed greatly in recent years. Financial services have become more global and investment banking accounts for a larger share of commercial banks' activities. Private ownership, larger banking units, increased foreign business and new areas of operation are all factors that affect how dynamic and secure the financial system is. While the system has certainly become more dynamic now, for the benefit of businesses and households, the question of security is rather more ambiguous. Direct and indirect Treasury guarantees for financial companies are a thing of the past, replaced by a brisker financial system which has to build up its strength to sustain shocks.

A Central Bank study of key figures for 1998-2002 reveals that the three largest Icelandic commercial banks are well comparable with other large Nordic banks (see Appendix 1). Admittedly the Icelandic banks' net interest margin is somewhat larger, but the gap has been narrowing. One explanation for this discrepancy is that, unlike the other Nordic countries, low-interest housing loans account for only a small share of banks' loan portfolios in Iceland, due to the activities of the Housing Financing Fund. On the other hand, their profitability, cost-income ratio and capital ratio are well on a par. The following analysis of the position of commercial banks and savings banks reveals a generally acceptable position. This is an important consideration for financial stability. An expansionary phase lies ahead and hopefully they will be able to take advantage of it to consolidate their positions even further, in order to face the inevitable contraction which will follow in its wake.

## Macroeconomic conditions and outlook, and external conditions

### *Fairly favourable global conditions for financial stability*

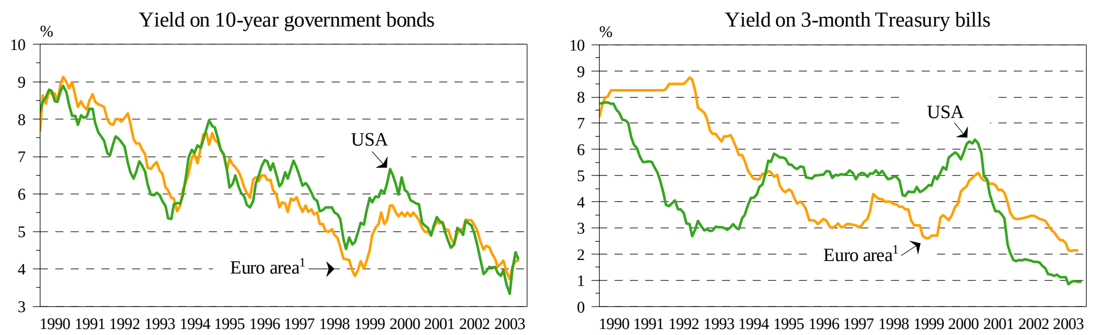
Global economic developments have increasing bearing on domestic financial companies. Since the Central Bank's last financial stability report in May (see *Monetary Bulletin* 2003/2) some of the global economic uncertainty has been dispelled. Although the war in Iraq was over by then and the rise in oil prices during the buildup to it had been reversed, economic indicators showed that the uncertainty caused by the conflict had dampened the vitality of the global economy. As noted in the preceding chapter on Economic and monetary developments and prospects, signs of a global economic recovery have strengthened since the spring. This applies in particular to various leading economic indicators, but a convincing recovery of private consumption in Europe is still lacking and the medium-term outlook for consumption growth in the US is subdued.

### *Foreign long-term interest rates heading upwards*

From the perspective of financial companies, signs of economic recovery are not entirely positive, because this will presumably drive up interest rates on foreign capital from the exceptionally low levels of recent years. Initial indications of such a trend have already emerged in the form of higher long-

Chart 1

Foreign interest rate developments 1990-2003 (monthly averages)




1. Euro area from January 1999 and Germany in 1990-1998. *Source:* EcoWin.

term interest rates on treasury bonds, especially in the US. Expectations of more robust economic growth and higher inflation, coupled with a tighter monetary stance, probably explain the interest rate rises, while purchases of US bonds by Asian banks have offset the effect. Nonetheless, short-term interest rates seem likely to remain low for the time being, given the sluggish pace of the recovery.[2] Bearing in mind the negative short-term position of domestic credit institutions, it is important that foreign interest rates should not change sharply.

Another factor that may affect domestic financial companies is exchange rate volatility. The US dollar has weakened considerably over the past year. Since the exchange rates of the main Asian currencies, the yen and the Chinese RMB (yuan), have been held steady against the dollar, the depreciation has mostly been reflected in the euro rate. Some companies and their loan providers will always be prone to volatility of this kind, and their loan procurement will be hit too, but in most cases their gains on the depreciation of the dollar will probably outweigh their losses as a result of the more modest strengthening of the euro.

### *Positive outlook for price stability in the near term but growing uncertainty about exchange rate developments when aluminium project activity peaks*

Price instability should not pose much of a risk to financial stability for the next two years, on the basis of the inflation forecast presented in this *Monetary Bulletin*. Beyond the forecast horizon, however, uncertainty increases as the aluminium investment programme gains momentum. Exchange rate developments are likewise prone to uncertainties. An appreciation of the króna followed by a depreciation could erode profitability in various sectors, leading to bankruptcies and loan losses. This uncertainty is difficult to evaluate, but financial companies must exercise caution and take the possibility of fluctuations into account in their planning.

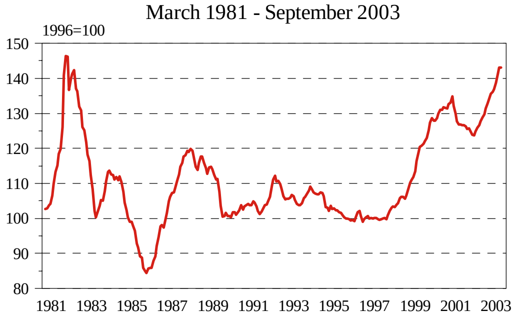
### *Housing prices reach a fresh record high*

The risk that financial companies face from a sudden drop in real estate prices has often been pointed out

Chart 2

**Price of housing in real terms[1]**

March 1981 - September 2003




1. In Greater Reykjavík Area. Three-month moving average, deflated with the CPI.
*Sources:* The Land Registry of Iceland, Statistics Iceland and Central Bank of Iceland.

in *Monetary Bulletin*. In real terms, housing prices are currently at one of the highest levels ever recorded, and the period of rising housing prices that began in the middle of 2002 may not be over. Prices of business premises are some way below the previous peak in real terms, but appear to have been strengthening recently (see the section on the housing market on pp. 17-21). There is little sign of a turnaround in the real estate market in the immediate future, but from the viewpoint of financial stability the development of real asset prices needs to be considered from a long-term perspective. The higher that real estate prices move beyond long-term equilibrium, the greater the risk of a subsequent slump, which could deliver a blow to financial companies' balance sheets. High real estate prices are not confined to Iceland and are a cause of concern to governments in many countries, e.g. the UK, the Netherlands, Australia and the US. In some countries prices have been even more buoyant than in Iceland. Financial companies face an assortment of risks from this development. Firstly, in many cases their loans are secured against collateral in real estate. Secondly, a slump in real estate prices is often connected with shocks to the balance sheets of households and businesses, which in their own right lead to more defaults. Thirdly, companies may hold considerable assets in the form of real estate.

The section on pp. 17-21 discusses the interaction between the long-term determinants of housing prices and factors affecting demand at any time, on the one hand, and their sustainability on the other. It reveals strong indications that real estate prices could

2. GDP growth soared in the US during Q3, however, with the sharpest quarterly jump since 1984.

be unsustainable, although it may be argued that the rise in prices of land is to some extent permanent.

*Prices are unlikely to fall in the immediate future ...*
Although it may be inferred that housing prices have risen above what is sustainable in the long run, this does not imply that the peak has been reached, and a significant drop in the next few years seems unlikely. However, the probability of a price slump increases the further that prices move above long-term equilibrium, and the more serious the consequences are likely to be. This risk tends to be overlooked due to the fact that tensions often develop over a long period, giving the impression of a long-term trend. Sometimes a sizeable shock is needed to reverse this apparent trend.

Such a development does not seem to be in sight for the next few years, although some disturbances cannot be ruled out if labour disputes break out. The rate of population growth in the Greater Reykjavík Area has slowed down, but for as long as real wages continue to grow, and if external conditions do not take an unexpected turn for the worse, real estate prices seem unlikely to fall enough to have a significant effect on financial companies' balance sheets.

*... but the risk grows over the investment period*
While real asset markets seem likely to remain strong for at least the next year, the greater risk of negative shocks in connection with the emerging investment boom should not be overlooked; this will put the economy under severe strain. From a financial stability perspective the crucial point is not whether prices of housing or other real estate will rise or fall in the near term, but rather whether there is a risk of a sharp slump later on. Interest rates are likely to rise during the investment boom. A rise in short-term interest rates is transmitted to the most important long-term rates for the housing market (indexed housing bonds and pension fund lending) with some lag. If increasing construction boosts housing supply at the same time as the impact of a rise in the policy interest rate begins to be felt in the housing market, this could trigger a downturn in prices, not least if they have become even higher than at present and the gap between current market prices and underlying construction cost, including land, has widened as well. As noted in the previous chapter, these conditions are not properly defined as an asset bubble in the strictest sense of the term. There is little evidence of purely speculative transactions which would exacerbate the risk of a sharp reversal.

Data on prices, supply and demand for business premises are much less reliable. However, prices clearly remain high in historical terms, despite substantial vacancies and considerable construction in progress. In this respect the position has not changed much from former financial stability reports. As far as prices go, the same principles apply to business premises as to residential housing.

*Equity prices may have risen more than warranted by economic fundamentals, but P/E ratios are still moderate*
Equity prices in Iceland have soared over the past two years, at a much faster rate than foreign equities which did not begin to rally until the end of the war in Iraq. Higher equity prices, however, may not be based entirely on realistic prospects for earnings growth of Icelandic companies. To some extent they may reflect the changes in ownership and battles for control that have been going on in recent months. If the latter explanation applies, it is possible that the current share prices which have partly been driven up by the activities of financial companies are not sustainable. Relatively few companies account for most of the rise in share prices. These have performed very well recently and are widely considered to be promising. Another factor which has possibly pushed equity prices up is the fewer investment opportunities at hand after recent mergers and delisting have reduced the number of listed companies, at the same time as ample liquid funds have been available for investment. Even if the recent surge in equity prices is only partly based on fundamentals, they are not particularly high in international historical terms. P/E ratios of listed companies have climbed from an average of 12.6 in 2001 to 15.6 this year, which is well below their peak in 1999 and 2000 but not far from the average P/E ratio in the US stock market over the past decade and much lower than the current US ratio.[3] Accordingly it can be concluded that

3. By way of qualification, P/E ratios in the US and Icelandic equity markets are not entirely comparable, because the US market is much deeper and US equities therefore much more liquid assets.

although equity prices may have inched above what the economic fundamentals warranted, the probability of a subsequent slump is no greater than usual.

*Sharp interest rate changes not expected over the next year*

Sharp changes in interest rates over a short period can push wage earners into arrears and disturb the competitive position of credit institutions. Although domestic demand is clearly on an upswing, a large-scale jump in interest rates over the next year is unlikely. Even if the policy rate is raised over the next 12 months, the initial impact on long-term interest rates for households and businesses will probably be slight. Capital inflows in connection with the aluminium project could also keep interest rates relatively low as the upswing takes off. Towards the end of the investment period, however, there is a risk that a significantly tighter stance will be needed.

*Terms of trade risk on the low side*

Fluctuations in the terms of trade can undermine financial stability. Lower export product prices or higher imported input prices can weaken exporters' ability to service debt. A deterioration in the terms of trade can also lead to a depreciation of the domestic currency, inflation, unemployment and higher foreign currency-denominated debt, thereby weakening the ability of both households and businesses to service their debt. The terms of trade have worsened over the past year. This does not necessarily entail a higher risk, since the change has nonetheless been moderate and foreseeable capital inflows soften the impact of adverse terms of trade changes on the exchange rate. On the contrary, it can be argued that if the terms of trade had previously risen to a level that would be unrealistic to sustain in the long run, this would entail a greater risk for financial stability. Such conditions could fuel overheating which would leave the economy exposed when the terms of trade inevitably weakened afterwards.

*The current account deficit is growing rapidly, but is hardly a particular cause for concern yet*

An unsustainable current account deficit is one of the clearest indicators of conditions that could threaten financial stability. Currency crises and financial crises are often closely related and the causal relationship can operate in both directions. In 2001, after three years of excessive current account deficit, Iceland was on the verge of a currency crisis, but its financial system escaped unscathed. Part of the explanation was that the direct exposure of the financial system itself was quite limited, and the depreciation and contraction that accompanied it were relatively short-lived, among other things because of fairly favourable external conditions during the adjustment period.

The current account deficit has widened sharply in 2003, after balance the year before. In Q2 the deficit was wider than at any time since 2001/Q1 – in fact this was one of the largest quarterly deficits ever. Part of the extra deficit was due to heavy imports of investment goods for the aluminium project. As such it is not a cause for concern. Another contributing factor was conditions in the fisheries sector, which are hopefully short-lived. Other merchandise exports have also weakened, and imports of consumer goods have soared. Although the deficit is to some extent benign in origin, the pace of increase so early on in the upswing is a matter of some concern.

A widening of the current account deficit does not necessarily herald a risk of shocks to the financial system in the near future, and it will presumably increase substantially before it begins to shrink again. If the deficit broadly corresponds to the growth in imports of investment goods in connection with aluminium and hydropower projects, it should return to normal without substantial disruptions in economic activity. But should the deficit become mush larger, as it did over the period 1998-2000, it could be followed by a hard landing – and there is no guarantee that external conditions will be as favourable during the adjustment period as in 2001-2002.

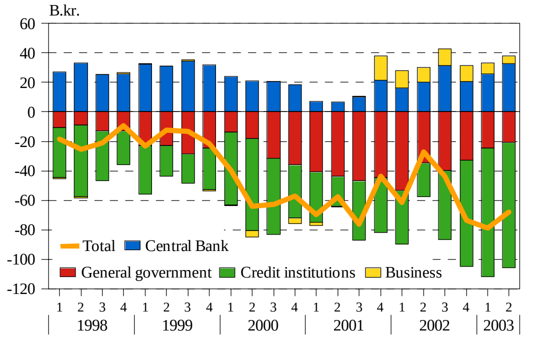
*Short-term national debt*

Since the previous financial stability report in May, external liquidity[4] has improved on the whole. It deteriorated from the end of 2002 and into Q1, then

4. External liquidity is defined as monetary assets less current liabilities (with a shorter original maturity than one year). Monetary assets are defined as assets with a maturity shorter than one year or liquid market securities.

Chart 3

External liquidity, quarterly data 1998-2003




*Source:* Central Bank of Iceland.

improved in Q2. At the end of Q2 it was negative by 68 b.kr., or just over 8% of GDP. Negative external liquidity mainly derives from the deposit money banks (DMBs), whose short-term financing was described in *Monetary Bulletin* in May this year. The analysis presented there is still fully valid and needs little qualification. Negative external liquidity on such a scale entails a considerable refinancing risk which it is important for DMBs to be aware of. The Central Bank's external position has strengthened significantly in 2003, as described in more detail elsewhere.

## Households

The preceding chapter on Economic and monetary developments and prospects includes a fairly detailed discussion of wage developments, employment, assets and debt. It concludes that the financial position of households is fairly robust, at least looking a couple of years ahead. The interaction of high and growing debt with housing prices that are hardly paralleled since the inflationary episode at the start of the 1980s – when the ratio of debt to disposable income was only a fraction of what it is today – remains a cause for concern. High debt service levels, however, are unlikely to pose a serious problem for the bulk of households, unless their position weakens in other respects, e.g. with a drop in real disposable income, significantly higher unemployment or sharp rises in interest rates.

As long as employment remains steady and inflation low and stable, household earnings ought to be fairly secure. This is the bottom line of the current macroeconomic and inflation forecast. Wage bargaining, however, always entails a risk of disruptions to the future stream of income. As before, the risk appears greater on the horizon beyond the next few years. A number of risk factors warrant closer scrutiny.

The high share of wages in gross factor income could imply an underlying long-term weakness, i.e. the risk that real wages will deteriorate. The share of gross profits is exceptionally small, which could indicate underlying weaknesses among businesses and thereby the risk of bankruptcies that in turn would lead to higher unemployment. However, it is still not entirely clear whether the higher wage ratio is permanent, cf. the discussion on page 14.

Household debt has continued to build up, as mentioned before. Since household assets have followed the same trend, it could be tempting to conclude that households do not face much risk from their high indebtedness. This argument carries less weight, however, if housing prices – always an indi-

### Box 3 Changes to housing finance arrangements and their impact on financial stability

The following survey provides a broad assessment of the impact that planned changes to the housing finance system could have on the stability and efficiency of the financial system.[1] It forms part of a report requested by the Ministry of Social Security housing project director and submitted to him on October 23, 2003. Full details of the proposed changes to housing finance arrangements were not available at that time. The report was published in its entirety, in Icelandic, on the Central Bank's website. It is based on the assumptions of raising the general housing loan-to-value ratio to 90%, charging an interest rate premium

1. For a discussion of the impact of these changes on price stability and monetary policy, see *Monetary Bulletin* 2003/3, pp. 24-25.

for higher loan-to-value ratios, and increasing the loan ceiling.

*Impact on the stability and efficiency of the financial system*

Easier access to credit from the Housing Financing Fund (HFF) will probably increase total household debt.[2] This would increase their debt service burden. In the event of unexpected shocks to household finances, the higher loan-to-value ratio would leave them less scope for borrowing from the banking system. Given the expected timing of the changes, households would make their borrowing decisions on the basis of financial assumptions during an upswing in the economy. This could exacerbate the risk of arrears by households and subsequent loan losses by financial companies, especially when the economy enters a downswing.

The changes may be expected to drive up housing prices for some years, but in the long run prices will reflect construction costs. A temporary surge in housing prices could entail a risk for financial stability when they turn down again, due to the greater probability of arrears and loan losses. A higher loan-to-value ratio could heighten the risk that both the HFF and credit institutions would lose claims to mortgage collateral. This could then lead to higher loan losses within the financial system.

The HFF would have a more systemically important role. It would face a greater risk of arrears and loan losses even if housing prices remained buoyant. This risk would be amplified by a substantial downturn in housing prices and/or an economic contraction. It should be noted that the HFF operates under separate legislation and is not classified as a financial institution.[3] Thus it is not obliged by law to meet conditions set for financial companies such as the minimum capital adequacy requirement of 8%. The Housing Act, No. 44/1998, stipulates that the FME (Financial Supervisory Authority) shall monitor whether the Fund operates in accordance with that legislation.[4] However, the nature of this surveillance is different from other financial companies, and much more limited.[5]

Growth in HFF lending could subdue demand for credit within the banking system and the pension fund system. On first impression, this would appear to have a positive effect on financial stability. Within the financial service sector, however, the mortgage market is generally regarded as more secure than others such as those for consumption, operations or investment. Housing loans have been regarded to some extent as the anchor of banking operations, in that they entail less risk than other lending categories.[6] The HFF's share in the housing finance market has made it difficult for Icelandic banks to reap such benefits from offering mortgages. The proposed changes would constrict the Icelandic banking system even further in this respect, which could lead to wider interest margins.

Furthermore, the proposed reforms would substantially increase the state's share and influence in the domestic credit market. Such a development is generally deemed undesirable, provided that secure financial companies operate in that market and are able to provide reliable and cost-effective services. Accordingly, the government's policy has been to reduce direct participation by the Treasury in financial activities. Competition in the credit market and in financial services must be considered crucial for the evolution of an efficient financial system and financial markets. Iceland currently has one of the largest state shares in the housing finance market by international comparison. Increasing this share still further would pose the risk of creating less competitive financial companies in

2. It is particularly the higher loan ceiling rather than the increased loan-to-value ratio which would have this effect.

3. See Article 4, paragraph 2 of Act No. 161/2002.

4. Article 27, paragraph 1 of the Act is as follows: *The FME shall monitor whether the operations of the Housing Bonds Department are in accordance with the provisions of this act and regulations set under it. Monitoring shall be conducted according to the provisions of the Act on Official Supervision of Financial Operations. The issue of Housing bonds and the finances of the Housing Bonds Department shall be under surveillance. The Housing Financing Fund shall provide FME with all the information that the latter deems necessary. To the degree that FME deems it necessary to evaluate the financial position of the Housing Bonds Department, it is entitled to collect information and make on-site examinations of other departments in the Housing Financing Fund.*

5. The latest IMF Article IV Consultation urges the Housing Finance Fund to be made subject to prudential guidelines. See IMF: *Iceland – Staff Report for the 2003 Article IV Consultation*, July 30, 2003, p. 21 (para. 22).

6. In the IMF report (p. 25/para. 29) the authorities are furthermore urged to limit gradually the Housing Financing Fund's role to strictly social objectives and open the bulk of the mortgage market to banks. The IMF mission also underlined the importance of housing finance for the banking system.

the credit market, with undesirable effects on financial system efficiency.

In their credit market activities, Icelandic banks comply with comparable legislation to that which is in effect elsewhere in the European Economic Area in fields including prudential regulation, surveillance and competition. It is worth considering the impact that the changes would have on the position of Icelandic banks in this respect. Conceivably, the effect of state activity in this area could weaken the competitiveness of Icelandic banks within the EEA. Article 59 of the EEA Treaty should also be borne in mind.[7]

Another likely consequence would be increased purchases of Icelandic bonds by foreign investors.[8] Although such a development could have a favourable short-term effect on interest rates and the exchange rate under certain economic conditions, it likewise entails risks, especially in the form of foreign exchange and interest rate risks, for the Icelandic financial system. A change in domestic or foreign market conditions could prompt foreign investors to decide without notice to divest bonds from their portfolios on a large scale over a short space of time, as has happened in markets in other countries.[9] This could have serious consequences for Iceland's FX, bond and money markets, and thereby for financial and economic stability.

Alongside greater foreign bond portfolio investment in Iceland, the changes would probably increase Iceland's total external liabilities. On a short-term view this could hinder the upgrading of the Republic of Iceland's credit rating. Rating agencies have announced that the high level of national debt, especially the short-term debt position, is a negative factor for Iceland's ratings. In the long run, a downgrading of ratings cannot be ruled out, if the agencies consider that the changed housing loan framework will have an expansionary impact, raise the level of national debt and create the risk of instability if expectations change suddenly.[10] This could have a detrimental effect on capital markets and on the credit access and terms enjoyed by the Treasury, credit institutions and domestic non-financial corporations. A further consideration might be that if it is decided under the proposed Basel II Rules to calculate financial companies' CAD ratios on the basis of sovereign ratings, a downgraded rating could directly impair their competitiveness.

*Conclusion*

The impact of the proposed changes to the Housing Financing Fund's lending arrangements is difficult to evaluate as long as details of them remain unannounced. However, they are almost certain to stimulate demand in the economy. Probably the effect will be greater in the short run than in the long run. The economic conditions under which the short-term impact is transmitted will be crucial. If it takes place at the same time as the aluminium investments – which will put the economy under great strain – are at a peak, the outcome could be severe economic instability with unforeseeable consequences. Thus it would be desirable to phase them in over a long adjustment period, making only modest changes before 2007 and exercising great caution about raising the loan ceiling.

Changes to housing finance arrangements could have a considerable impact on the Icelandic financial system. The framework for these changes, and economic developments over the next few years, will prove crucial. They may be expected in advance to raise the risk profile for household arrears, loan losses in the financial system and financial instability. In the long run they are also likely to handicap competitiveness in financial markets and the efficiency of the financial system. All in all, the proposed changes must be deemed to have an undesirable impact on the Icelandic financial system and its stability and efficiency.

---

7. The provision is as follows:
*1. In the case of public undertakings and undertakings to which EC Member States or EFTA States grant special or exclusive rights, the Contracting Parties shall ensure that there is neither enacted nor maintained in force any measure contrary to the rules contained in this Agreement, in particular to those rules provided for in Articles 4 and 53 to 63. 2. Undertakings entrusted with the operation of services of general economic interest or having the character of a revenue-producing monopoly shall be subject to the rules contained in this Agreement, in particular to the rules on competition, in so far as the application of such rules does not obstruct the performance, in law or in fact, of the particular tasks assigned to them...*
8. Such an increase is assumed in a memo by project director Hallur Magnússon concerning restructuring of the housing market, dated August 25, 2003.
9. See also *Monetary Bulletin* 2003/3, pp. 2 and 24-25.
10. It should be noted that the IMF unequivocally discourages a rise in the Housing Financing Fund's loan-to-value ratio which under the current circumstances would prove expansionary and lead to higher real interest and exchange rates See, IMF, op. cit., pp. 12 (para. 11), 18 (para. 14) and 27 (para. 37).

vidual's most important asset apart from pension fund assets – have become abnormally high and are likely to fall if a shock occurs. Heavy indebtedness makes households more sensitive to interest rate changes and inflation. As discussed in *Monetary Bulletin* in May, Icelandic households are particularly exposed to inflation, because unlike most other countries in a similar position the bulk of household debt in Iceland is indexed to the CPI.

The greatest threat currently faced by Icelandic households is probably if inflation rises unexpectedly beyond the Central Bank's target. This would probably call for real interest rates to rise more than otherwise. The lags and uncertainties that monetary policy always involves could make a hard landing impossible to avoid. Households could then face a situation where inflation would not only erode real wages but also, in tandem with high interest rates, would raise household debt service, as has happened in the past. The falling employment rate which would probably follow could reduce disposable income even further. Such a combination of events would probably cause demand for housing to contract and prices to slide. Since housing prices are very high in historical terms, it is easy to imagine that, under such conditions, the collateral value could fall below the value of loans secured against it.

Such a hypothetical scenario is not in sight at the moment. There is little evidence that debt accumulation has peaked and the trend may be unlikely to reverse unless households suffer sizeable shocks or property prices fall. In recent years, households have mostly been increasing their housing debt, all of which is indexed to the CPI. Thus they have a growing vested interest in price stability being maintained.

### *Some reduction in household arrears, and unsuccessful distraint actions and bankruptcy rulings increased at a slower pace*

Household arrears (thirty days or more) have decreased somewhat since September 2002, from 7% of lending to households to 6.4% at the end of June.[5] The number of unsuccessful distraint actions against private individuals will probably be marginally higher in 2003 than the year before, however, although the year-on-year growth rate has slowed down. The same applies to private bankruptcy rulings, which increased considerably in the first half of the year, but now appear to be growing more slowly, although the full picture has yet to emerge. In recent years, many bankruptcy rulings have been delivered in the final quarter of the year.[6]

## Businesses

### *Overall favourable EBITDA of listed companies*

EBITDA of listed companies has generally been favourable so far in 2003 and profitability forecasts assume a similar position for the year as a whole (see p. 12). However, EBITDA deteriorated among fisheries companies, whose external conditions were fairly unfavourable in many respects. The low ratio of gross profit to gross factor income suggests that profitability may be low in many cases, although such a generalisation needs to be made with reservations. They could be sensitive to shocks, and reliable data is lacking.

### *Indebtedness is increasing again, raising their currency risk profile*

As noted in the box on national debt on pp. 41-44, Icelandic businesses are heavily indebted. A larger proportion of debt is probably exposed to currency risk than in other countries. This is likely to make businesses more sensitive to exchange rate fluctuations, unless their income is also mainly foreign-denominated.

Corporate debt growth came to a halt in 2002, when a contraction in investment reduced credit demand and the appreciation of the króna reduced the stock of foreign-denominated debt. So far this year debt has risen substantially again. Credit system lending to businesses grew by 125 b.kr. during the first half of 2003. Roughly two-fifths of new lending was foreign-denominated, which is broadly the same

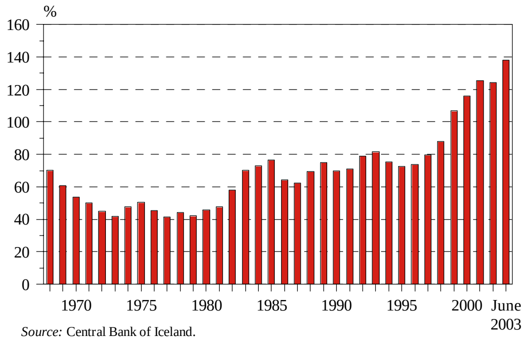
5. At the beginning of the year the ratio was even lower, at 6.1%. The explanation may be that DMBs generally scrutinise their lending and write-offs at the end of the year and therefore the amount of loans in arrears will go down, i.e. they are written off. *Source*: FME statistics on arrears and defaults with DMBs.

6. *Source*: Lánstraust hf. credit information agency for statistics on bankruptcy rulings and unsuccessful distraint actions.

ratio as in total corporate debt. Demand for foreign credit appears to have grown even further in Q3.[7]

Chart 4

Corporate lending as % of GDP 1968-2003




*Source:* Central Bank of Iceland.

Businesses are therefore becoming more exposed to exchange rate volatility. It is unlikely that this sensitivity will be tested in the next few years, however, since the króna will probably stay fairly strong for the duration of the aluminium project construction. If anything, an excessively strong króna would be a cause for concern, because it could erode the competitiveness of export sectors.

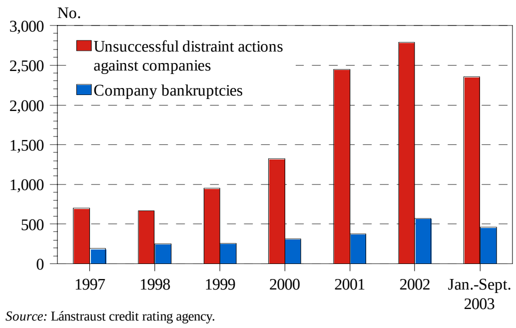
### *Business arrears decrease, while the increase in unsuccessful distraint actions and bankruptcy rulings is slowing down*

Difficulties among businesses tend to be reflected soon afterwards in the increasing frequency of unsuccessful distraint actions, and eventually in bankruptcies. Business arrears have been decreasing since their peak in September 2002. At that time arrears with DMBs (thirty days or more) were equivalent to 3.1% of all corporate lending, but by the end of June 2003 this figure had dropped to 2.4%.[8] Of course, DMBs only account for part of business arrears. Other forms are arrears with the Treasury (e.g. withholding taxes) and intercompany arrears which sometimes spark a chain reaction.

As previous financial stability reports have described, there was a surge in unsuccessful distraint actions against businesses in 2001, which slowed down in 2002. A further increase seems to be on the cards this year, although the year-on-year increase slowed down over the first three quarters compared with the corresponding period in 2002. Given the drop in corporate loan arrears, it may be hoped that unsuccessful distraint actions are slowing down as they approach a peak. Bankruptcy rulings increased sharply in 2002, to a record level. The outlook is for no fewer in 2003. A large number of bankruptcy rulings were made in the first part of this year.[9]

Chart 5

Unsuccessful distraint actions and company bankruptcies 1997-2003




*Source:* Lánstraust credit rating agency.

## Financial companies

### *Strong profitability of financial companies...*

The profitability[10] of the commercial banks[11] as shown by their first-half results for 2003 was very strong on the whole. On average, the six largest savings banks[12] also recorded strong profitability, but there were sharp differences in performance among them.[13] Although not all the commercial banks' nine-

7. Lending to the energy sector, which is virtually all foreign-denominated, explains less than 1/10 of this growth, although a much larger share is probably indirectly connected with the aluminium project.

8. *Source*: FME statistics on arrears with DMBs.

9. *Source*: Lánstraust hf. credit information agency for statistics on bankruptcy rulings and unsuccessful distraint actions.

10. The ratio of net profit to the average between equity at the start and end of the period, less profit for the period (annualised).

11. Íslandsbanki, Kaupþing Búnaðarbanki, Landsbanki Íslands and Sparisjóðabanki Íslands.

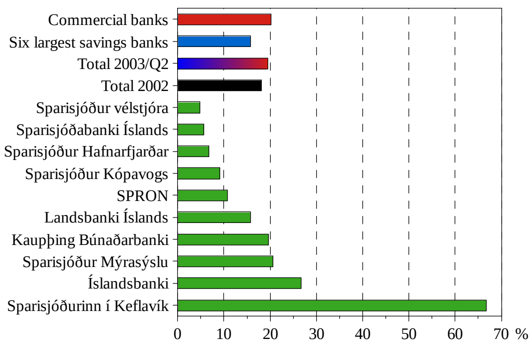
12. Sparisjóður Reykjavíkur og nágrennis (SPRON), Sparisjóður Hafnarfjarðar, Sparisjóður vélstjóra, Sparisjóðurinn í Keflavík, Sparisjóður Kópavogs and Sparisjóður Mýrasýslu.

13. Three reported profitability of less than 10% and one 67%, calculated according to the above definition.

month results are available at the time of writing, their overall profitability for the year will clearly be very strong, possibly even stronger than in 2002.[14]

Chart 6

Return on equity in the first half of 2003




*Source:* Financial Supervisory Authority (FME).

*... almost entirely due to trading gains ...*

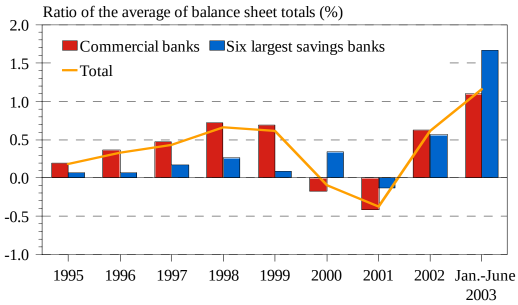
Gains on other financial activities[15] in the first half of this year reached one of the highest levels that have been seen, at 7.5. b.kr.[16] Primarily this was due to positive developments in prices of domestic equities on trading books. The banks' strong overall performance is attributable almost entirely to this item and an increase in net commissions.[17] Judging from domestic securities market developments, profit seems unlikely to drop in the second half of the year. The commercial banks' securities position and its development in recent years are discussed in Appendix 2.

The interest margin[18] of the commercial banks and six largest savings banks in the first half of 2003 was broadly the same as at the end of last year. As discussed in *Monetary Bulletin* 2003/2, the interest margin measured in these terms has been shrinking in recent years. However, this ratio does not invite sweeping conclusions to be drawn regarding the commercial and savings banks' profits on deposits and borrowing. One reason is that the cost of financing securities positions is posted as interest expenses, which distorts the picture. It should also be noted that the steady growth of foreign-denominated lending results in much thinner margins.[19]

International expansion by commercial banks has apparently not yet made much contribution to profits, which can mostly be traced to activities in Iceland. Nonetheless, all the commercial banks have stated an interest in strengthening their positions overseas further. In the long run, activities outside Iceland will need to generate similar profits to those in the domestic market. Such a situation will enable risks to be spread and will present opportunities for making rapid advances in the provision of financial services.

Chart 7

Gain/loss on other financial activities 1995-2003[1]




1. Result for 2003/Q1-2 is annualised. *Source:* Financial Supervisory Authority (FME).

*... which brought down the cost-income ratio*

The cost-income ratio, i.e. operating expenses as a proportion of net operating revenue, was broadly the same as last year for the commercial banks. The six largest savings banks reported a considerably lower ratio in their first-half statements, to some extent reflecting improved profitability during that period. The cost-income criterion has its drawbacks, as pointed out in earlier articles on financial stability in

14. Net return on equity (after tax) over the first nine months amounted to 21.3% at Landsbanki Íslands hf. and 31.3% at Íslandsbanki hf.

15. Gain/loss on other financial activities specify into: 1) Gain/loss on bonds on the trading book, 2) Gain/loss on shares on the trading book, 3) Gain/loss on foreign exchange trading and 4) Gain/loss on other financial instruments. A more detailed description is given in Article 40 of Rules No. 692/2001 on the Annual Accounts of Credit Institutions, as amended.

16. Before deduction of finance costs on exposures.

17. Commissions receivable less commissions payable. A more detailed definition is given in Articles 38 and 39 of Rules No. 692/2001 on the Annual Accounts of Credit Institutions, as amended.

18. The ratio of interest income less interest expenses to the average between equity at the start and end of the period. Annualised figure.

19. Other possible reasons are cited in the last study of financial stability in *Monetary Bulletin* 2003/2.

*Monetary Bulletin*. However, Iceland's financial system has clearly undergone consolidation in the recent term and the cost-income ratio of commercial banks in Iceland is well on a par with the other Nordic countries. Nonetheless, there are still opportunities for further streamlining.

### *Arrears similar ...*

The ratio of arrears (thirty days or more) to lending has changed little since the last financial stability study in May, but data from the FME show some decrease from the beginning of the year to the end of June. No more recent figures are available at the time of writing, but according to the Central Bank's information from other data sources the ratio of arrears of thirty days or more has remained fairly stable in recent months.

### *... but considerable write-offs of loans and holdings in unlisted companies*

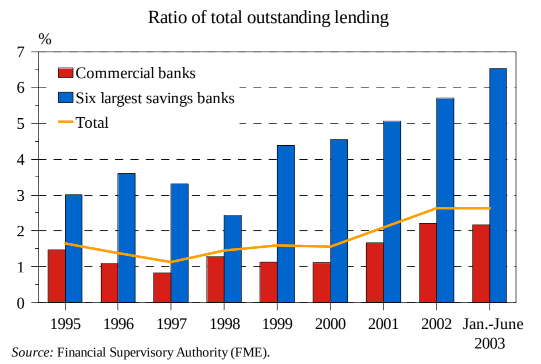
A high level of loan write-offs was made by the commercial banks and six largest savings banks in the first half of this year, at just over 3.4 b.kr. compared with 6.4 b.kr. for the whole of 2002, which was the highest figure since at least 1995. In their half-year statements, two of the commercial banks also needed to write down shareholdings in unlisted companies.

The ratio of non-performing loans[20] to total outstanding lending was similar in mid-2003 and in their end-2002 results for the commercial banks as a whole, but rose overall for the six largest savings banks. Divergent developments took place not only between the commercial bank and savings bank sectors, but also between individual institutions.

More provisions were made to loan loss reserves in the first half of 2003 than over the same period the previous year, in particular by Kaupþing Búnaðarbanki and Landsbanki. Financial companies needed to post higher provisions to reserves to meet the write-offs mentioned above, as they did last year and in the first half of this year. Looking to the future, the outlook seems to be for yet another record year in terms of corporate and personal bankruptcy rulings. Thus the surge in bankruptcies discussed in *Monetary Bulletin* in May continued, and was particularly pronounced in the first half of the year. The rate of increase in unsuccessful distraint actions against businesses and individuals seems to be slowing down slightly this year, but the total number of actions will be on the high side. Although there has not been an increase in loan defaults defined as arrears of thirty days or more, figures for bankruptcies and unsuccessful distraint actions indicate that financial companies can still expect to sustain losses on claims in the medium term.

Chart 8

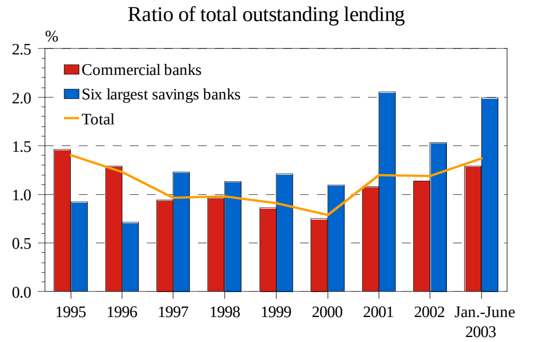
Non-performing loans 1995-2003




*Source:* Financial Supervisory Authority (FME).

Chart 9

Provisions for loan losses 1995-2003[1]




1. Result for 2003/Q1-2 is annualised. *Source:* Financial Supervisory Authority (FME).

20. Loans for which specific provisions have been posted, and other interest-frozen loans. Other interest-frozen loans are deemed potentially at risk, i.e. it will temporarily not be possible to collect interest on them but the principal will be retrieved. No provision is therefore made for such loans.

### *Credit growth picked up and securities portfolios swelled*

Total deposit money bank (DMB) lending to residents and non-residents has risen in recent months. By the end of September, twelve-month growth in lending was more than 16%, both in nominal terms and after adjustment for changes in the exchange rate and CPI.

Bond portfolios of the commercial banks and six largest savings banks also swelled, as discussed in Appendix 2. The bulk of bond exposures is in the form of market securities which are marked to market, so this growth reflects increases not only in volume but also in price. Equity exposures have also been bolstered since the beginning of the year according to first-half statements, and will have tended to increase following recent events, whereby Landsbanki acquired a major share in Eimskip and Íslandsbanki had acquired a holding of more than 90% in Sjóvá-Almennar tryggingar hf. at the time of writing.

### *Financing and refinancing risk*

Foreign and domestic financing were in broadly the same proportions at the end of September as over the past three years, with a 45% foreign component. The main change in foreign financing from the end of 2002 to the end of September 2003 was a lengthening of the maturity of claims by non-residents on Icelandic commercial banks and savings banks. Around 80% of claims had a maturity of less than two years at the end of 2002, but 66% at the end of September. The share of claims with a maturity of less than one year remained similar, at 50%. Hence the banking system faces some refinancing risk which has by no means diminished in the recent term. One of the reasons for relatively short-term funding (not much longer than two to three years) is that the largest banks – Íslandsbanki hf., Landsbanki Íslands hf. and Kaupþing Búnaðarbanki hf. – have set up MTN programmes.[21] Over the past few years, some of the easiest credit to tap in the MTN market has been with a maturity of two to three years. One reason is that fund managers in other countries with short-term investment requirements, who invested in equities before those markets turned tough, ploughed large amounts of credit into the shorter end of the MTN market. The result was much more favourable interest-rate terms than could be obtained at the longer end. Now that foreign equity markets appear to be heading for a recovery, however, fund managers might switch back to them, which would tighten the supply of two- to three-year credit. Icelandic banks therefore need to focus more closely on interesting foreign investors in longer-term issues, and appear to have been taking steps in that direction recently.[22]

As noted above, Icelandic banks have been successful in procuring credit in the recent term and have made a number of large issues in 2003. In July, Kaupþing Búnaðarbanki made by far the largest, a 500 million euro issue of two-year instruments. Thus the three commercial banks seem to have more or less met their funding requirements for 2003, with issues to the equivalent of 178 b.kr. so far this year[23] based on the Central Bank's central exchange rate on September 30. According to reports on residual maturity at the end of last year their funding requirement for 2003 was just over 212 b.kr., of which a substantial amount has apparently been tapped in the MTN market.

At the end of September, claims by non-residents on the three commercial banks amounted to 563 b.kr. according to Central Bank of Iceland reports. Reuters reported the outstanding amount in MTN facilities at 310 b.kr. (based on the Central Bank's central exchange rate on September 30), excluding interest payments. This figure represented 55% of total claims by non-residents on the three banks at the end of September.

So far in October, the banks have continued to issue under MTN programmes, in the amount of 50 b.kr.[24]

21. Despite their name, issues under Medium-Term Note programmes may feature both long- and short-term instruments.

22. Landsbanki completed a 250 million euro issue of four-year notes at the end of October.

23. The figure for total issues from the beginning of the year to the end of September was higher, but some short-term issues had matured by the later date.

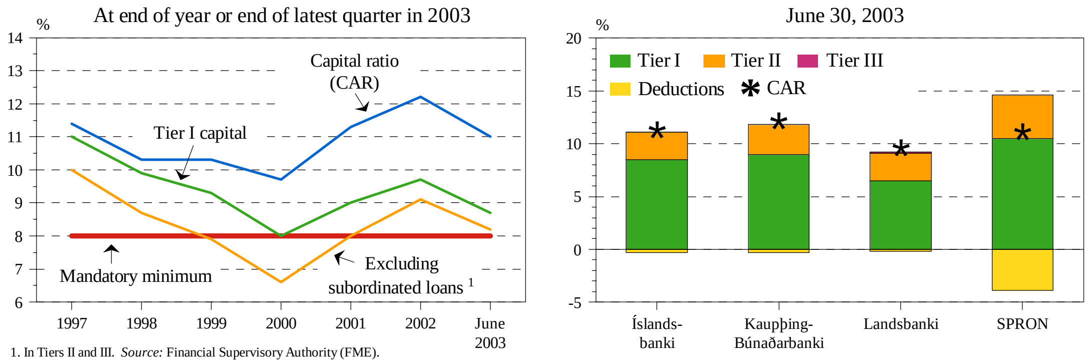
24. Of this 50 b.kr., Landsbanki is responsible for 35 b.kr.

*Capital ratio declined*

In their first-half statements, the commercial banks and six largest savings banks reported lower capital ratios than at the beginning of the year. A number of factors are involved. Dividends were paid out at the end of their annual meetings during that period, and some banks acquired own shares. Furthermore, risk-weighted assets (the denominator in the ratio) increased for some of them. Of the commercial banks, Landsbanki had the lowest capital ratio at mid-year, largely because its risk-weighted assets increased by more than 21%. Landsbanki's nine-month statements had been published by the time of writing and showed that the capital ratio had risen again, to 9.8%. Risk-weighted assets had continued to grow, by more than 14% since the end of June, but the bank had also strengthened its Tier I capital with a new share offering, new subordinated borrowing and a profit of 1.3 b.kr. during Q3. Íslandsbanki's acquisitions, including Sjóvá-Almennar tryggingar hf. insurance company, led to a larger deduction from its CAD ratio compared with the first-half position, which brought down its capital ratio to 9% and Tier I ratio to 6.8% at the end of Q3.[25]

Chart 10

Capital ratio of the commercial banks and six largest savings banks 1997-2003




1. In Tiers II and III. *Source:* Financial Supervisory Authority (FME).

From the beginning to the middle of 2003, none of the commercial banks or six largest savings banks had issued subordinated debt which qualified as Tier I Capital. Two additional issues had been made which qualified as Tier II, but none as Tier III.[26] As noted above, Landsbanki made an additional bond issue in Q3 which qualified as Tier I Capital, in the amount of just over 1 b.kr. The commercial banks and six largest savings banks still have some scope for strengthening their equity positions by issuing subordinated debt if necessary. Íslandsbanki has issued subordinated debt to the maximum amount that may qualify as Tier I Capital.

None of the commercial banks raised capital with a new equity offering during the first six months of 2003.[27] At the end of August Landsbanki increased its nominal share capital by just over 654 m.kr., partly in connection with its acquisition of the investment company Fjárfestingarfélagið Straumur hf. At the end of September Kaupþing Búnaðarbanki announced that it would increase its nominal share capital by just over 332 m.kr. in connection with the acquisition of a Finnish investment company. And in October, Íslandsbanki increased its nominal share capital by 1 b.kr. in connection with its acquisition of Sjóvá-Almennar tryggingar hf.[28]

Generally speaking, the equity position of the commercial banks and six largest savings banks is

25. Íslandsbanki's stated target is for a capital ratio of 10% and Tier I capital of 7%.

26. Landsbanki was the only financial company with a Tier III debt issue in its last half-year statement.

27. Íslandsbanki, in fact, reduced its share capital by 1 b.kr. in March. When the merger of Kaupþing banki and Búnaðarbanki went through, the share capital of the merged bank, Kaupþing Búnaðarbanki hf., was raised by almost 2 b.kr. nominal.

28. A shareholders' meeting authorised the management of Íslandsbanki to increase its share capital by 1.5 b.kr. in the beginning of October.

sound and it is a positive development that their recent acquisitions have been financed mainly by issuing new shares rather than by borrowing.

## Economic policy and financial stability

Economic policy decisions are generally made on the assumption that a sound financial system is in place. This cannot always be taken for granted. Economic policy can have an extensive effect on the financial system. Thus it is important to take financial stability into account when shaping economic policy. This is crucial when projects are decided with as large and sweeping an effect on the economy as the aluminium investments that have just been launched.

As noted above, one of the greatest potential risks to the financial system in the years to come would be a failure to contain inflation, causing volatility of real interest rates, the exchange rate and demand. It is important to achieve an economic and fiscal mix that contributes to this goal, but there are limitations to the synergy of these policies. By law, the Central Bank of Iceland is obliged to pursue a monetary policy which keeps inflation as close as possible to the target stipulated in its joint declaration with the government. In this respect its hands are tied. In effect it can only respond to a given fiscal policy at any time by determining a rate of interest that contributes to a low rate of inflation.

Conversely, this obliges the government to set fiscal targets that do not overburden monetary policy, with the consequences for financial stability that this would entail. A counterargument could be that the Central Bank is also obliged by law to contribute to financial stability, and that the inflation target might need to be put aside temporarily when these two aims conflict. While this is correct in principle, the praxis is not so straightforward as to allow a simple choice between financial and price stability under all circumstances.

Firstly, a financial crisis is difficult to predict, even if certain danger signals are well known. Extensive research into financial crises in recent years has not succeeded in identifying the economic indicators that can predict crises with a satisfactory degree of certainty.

Secondly, the interaction between monetary policy and financial stability is complex and rather ambiguous. It is instructive to consider a conceivable scenario for the next few years. Tight monetary policy might be necessary in order to maintain price stability during the height of the investment boom, for example if fiscal restraint is insufficient. This could entail significant rises in interest rates and an appreciation of the króna, which in turn could erode household and business finances while the project is in full swing and lead to a hard landing when it comes to an end. In a worst-case scenario, financial stability could be threatened. One possible recourse would be not to apply monetary policy with full force, in order to avoid excessive interest rates and an overly strong currency. However, a lax monetary policy could spur inflation, which would need to be driven back down with even higher interest rates later, both of which pose a threat to indebted households. It cannot be taken for granted that such an approach would be more conducive to financial stability, especially given the widespread indexation of financial obligations. In this case it cannot be automatically assumed that a looser monetary stance would reduce the risk of financial instability in the long run.

## Payment and settlement systems

### *New rules on payment systems*

On October 20, 2003, the Board of Governors of the Central Bank of Iceland issued two new sets of Rules on payment systems: on activities of netting systems and on the Central Bank's real-time gross settlement system. These Rules replace Rules No. 951 from December 29, 2000 (on access to settlement accounts in the Central Bank of Iceland), and entered into force on November 1, 2003.

Work on compiling the Rules began in 2001. One reason for setting them was the IMF's assessment in 2000 that Icelandic payment systems did not entirely comply with the BIS Core Principles. In collaboration with credit institutions, the Fjölgreiðslumiðlun hf. netting service provider and the Icelandic Banks' Data Centre (RB), the Central Bank subsequently drew up proposals for payment system reforms. When consensus was reached on them at the end of 2001, work was launched on making the necessary changes to system software and work processes. It was also decided then that the Central Bank should set official basic rules for the operation of the systems.

The new Rules are intended to create a more solid framework for safe and efficient activities of payment systems in Iceland in order to fulfil internationally accepted principles in this respect. They are intended to provide greater legal security in implementation of payment orders, enhance transparency and clarity in payment intermediation and settlements, and create a firmer foundation for risk analysis and risk management in payment systems, thereby contributing to financial stability.

The Rules stipulate conditions for participation in payment systems, finality of payment orders, participants' overdraft limits and collateral security. They also provide for risk surveillance, contingency plans and oversight. On November 1, 2003 the minimum amount of a payment handled in the RTGS system was lowered from 25 m.kr to 10 m.kr. Payment orders amounting to 10 m.kr. or more are therefore handled in the RTGS system, and those for amounts up to 10 m.kr. in the netting system operated by Fjölgreiðslumiðlun hf. However, all payment orders in connection with settlements in the netting system and securities settlement system are handled in the RTGS system irrespective of their amount. The regular operating time of the RTGS system was shortened and after November 1, 2003 is from 09.00 to 17.00 on regular banking days (instead of 08.45 to 18.00). From 08.45 to 09.00 the system is open for payment orders in connection with the settlement of securities transactions, and from 17.00 to 17.30 for banks to settle payments among themselves.

The adoption of these Rules is one landmark in the evolution of payment systems in Iceland. Consequently, Icelandic payment systems are expected to fulfil international standards for safety and efficiency. However, this will depend to a large extent on the credit institutions' awareness of the importance of secure payment transactions and on good cooperation with the Central Bank in this area.

# Appendix 1 Comparison of Nordic commercial banks 1998-2002

As part of the analysis of the position of Icelandic banks, a comparison has been made of key figures for Nordic commercial banks over the period 1998-2002. The largest Nordic commercial banks have been chosen for the comparison and it is interesting to note that the Icelandic banks are fully on a par with them in terms of performance, despite the difference in their sizes.

Data from Moody's Investors Service are used to provide close comparability. The banks and their total assets at the end of 2002 are shown in the following table:

Table 1 Banks and their total assets at end-2002

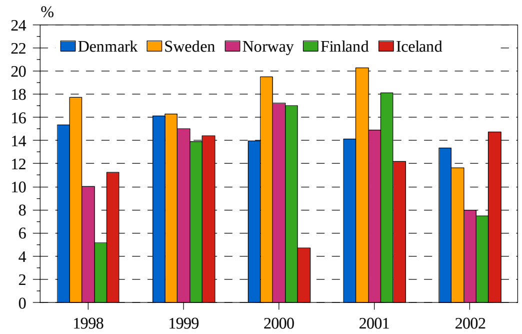
| | |
|---|---|
| *Denmark* | *EUR millions* |
| Danske bank A/S | 235,899 |
| Nordea Bank Danmark A/S | 87,529 |
| Jyske Bank A/S | 20,629 |
| *Sweden* | |
| Svenska Handelsbanken | 139,441 |
| SEB AB | 135,467 |
| Swedbank | 104,511 |
| Nordea Bank Sweden AB | 66,251 |
| *Finland* | |
| Nordea Bank Finland plc | 226,074 |
| Sampo Bank plc | 18,062 |
| OKO Bank | 12,709 |
| *Norway* | |
| Den norske Bank ASA | 52,850 |
| Union Bank of Norway ASA | 34,804 |
| Nordea Bank Norge ASA | 33,087 |
| Sparebanken Nord-Norge | 5,197 |
| *Iceland* | |
| Íslandsbanki hf. | 3,673 |
| Landsbanki Íslands hf. | 3,267 |
| Búnaðarbanki Íslands hf. | 2,892 |

### *Most volatile return on equity[1] among Icelandic and Finnish banks*

The Icelandic banks have shown broadly the same return on equity as other Nordic banks over the period apart from their poor profitability in 2000. It should be noted that ROE is stated in real terms for the Icelandic banks until 2002 because of price indexation, but in nominal terms for the other banks. Nominal ROE of the Icelandic banks for the period 1998-2001 is therefore higher than shown in the chart. ROE is generally best among Swedish banks, while the Danish banks show little year-on-year change.

Chart 1

Nordic banks' return on equity 1998-2002



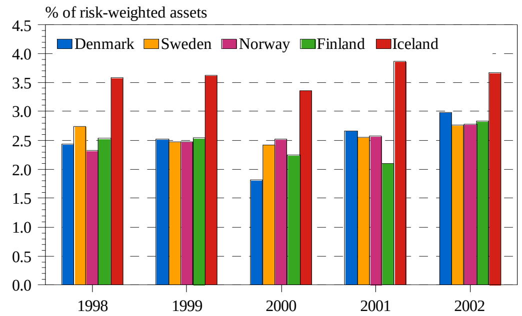

*Sources:* Moody's, Central Bank of Iceland.

### *Net interest margin highest at Icelandic banks*

Icelandic banks are well ahead of the rest for net interest earnings as a percentage of risk-weighted assets. One explanation is the small share of narrow-

Chart 2

Nordic banks' net interest margin 1998-2002




*Sources:* Moody's, Central Bank of Iceland.

1. Return on equity is defined here as the ratio of profit after tax to equity at the end of the year. The Icelandic ROE figures are therefore not identical to others published earlier in *Monetary Bulletin*, which are calculated by a different method.

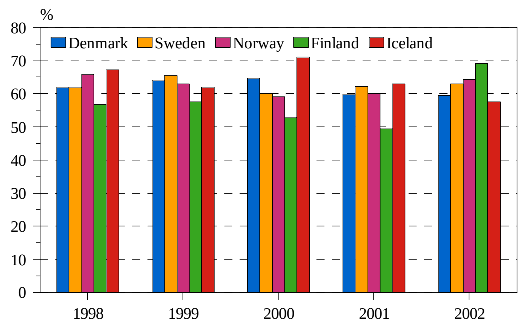
margin housing loans in the Icelandic banks' lending portfolios, due to the activities of the Housing Financing Fund. Banks' interest margins have tended to move closer to each other over the period.

### *Cost-income ratio similar in Iceland*

The cost-income ratio of Icelandic banks, i.e. operating expenses as a proportion of net operating revenue, decreased in 2002 to the lowest overall figure ever, falling below 60% for the year.

Chart 3

Nordic banks' cost-income ratio 1998-2002




*Sources:* Moody's, Central Bank of Iceland.

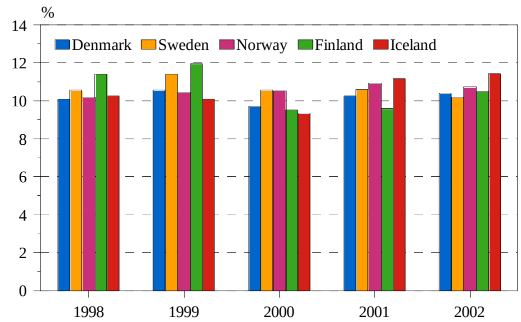
As the Central Bank has pointed out in its financial stability reports, the drawback to using cost-income ratio as a measure is that operating income volatility may cause it to change sharply from one year to the next. Privatisation of Landsbanki Íslands hf. and Búnaðarbanki Íslands hf. was completed during the first half of 2003, along with the merger of Búnaðarbanki and Kaupþing banki. A merger between Íslandsbanki hf. and Sjóvá-Almennar tryggingar hf. is pending as well. These transformations can be expected to allow the cost-income ratio to be reduced even further.

### *Capital ratios also broadly the same*

The final criteria involve capital ratios. The first is the mandatory CAD ratio, which for the Icelandic banks contracted from 1998 until 2000, then rose. A comparable fluctuation apparently took place among the other Nordic banks. Average CAD does not appear to be below 10% over the period examined; the mandatory minimum is defined as 8%.

Chart 4

Nordic banks' mandatory CAD ratio 1998-2002

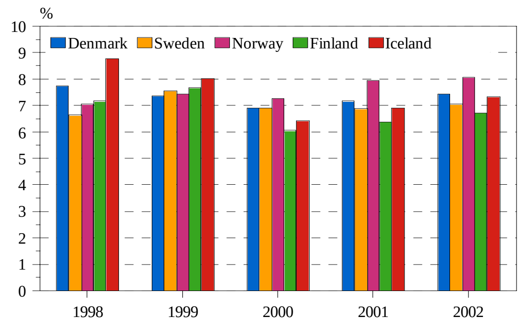



*Sources:* Moody's, Central Bank of Iceland.

A similar picture is provided by Tier I capital (i.e. total capital excluding subordinated loans which are not classified as Tier I capital). It is interesting to note that the Norwegian banks' Tier I capital has been on a fairly steady upward trend apart from 2000, while the Finnish banks have had one of the weakest ratios in recent years.

Chart 5

Nordic banks' capital ratio (Tier I) 1998-2002




*Sources:* Moody's, Central Bank of Iceland.

Thus the Icelandic banks appear to be fully on a par with those in the other Nordic countries in terms of profitability, cost and capital ratio. Although their small size is obvious compared with the very largest Nordic banks, the recently merged Kaupþing Búnaðarbanki has now entered the top ten.

# Appendix 2 Securities portfolios of the commercial banks and six largest savings banks

The development of the securities portfolios of the commercial banks[1] and six largest savings banks is analysed below for the period 1996-2003/Q2. A further breakdown of the portfolios between investment books and trading books is given for the three largest commercial banks, i.e. Íslandsbanki hf., Kaupþing Búnaðarbanki hf.[2] and Landsbanki Íslands hf., using year-end figures for 2000-2002 and the most recent position according to first-half statements for 2003. Equities positions and bond positions are discussed separately.

*Equities positions*

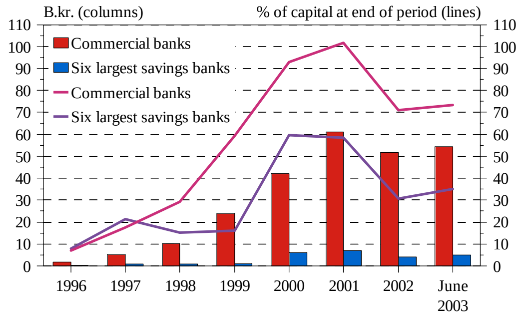
The commercial banks' holdings in other companies have been very much in the spotlight recently. Equity portfolios of banks take various forms but on the basis of the Rules on Credit Institutions' Accounts No. 692/2001 (as amended) they can broadly be divided into four groups:

- *Related companies*, which are subsidiaries of the financial institution, its parent company or sister companies (i.e. when companies are owned by the same parent). The parent company and its subsidiaries are termed a group.
- *Associates* are not subsidiaries, but the relevant institution (and where appropriate, its subsidiaries) owns either separate or joint holdings in them and exerts control on their boards. An institution (and where appropriate, its subsidiaries) holding at least 20% of the votes in a company is considered to exert control on its board.
- *Investment equities* are equities that an institution has made a formal decision to own for a longer period (at least one year). Shares in associates or related companies are not classified as investment equities.
- *Trading equities* are equities that are not acquired with the aim of owning them as long-term operating assets. The term embraces, among other things, short-term positions in other companies, assets in connection with the role of market making, and hedges against derivative contracts made with customers.

This appendix does not discuss related companies[3] and associates[4] in particular; their number has increased considerably in recent years, mainly due to international expansion by commercial banks.[5] The commercial banks' and six largest savings banks' equities exposures have grown enormously in the past few years. In 1996 they held equities in the amount 2.3 b.kr., but in their half-year statements for 2003 total portfolios had reached 59.4 b.kr., having peaked at the end of 2001 at just over 68.2 b.kr. Chart 1 shows the development of equities positions in b.kr. and as a ratio of capital.

Chart 1

Equities positions of commercial banks and the six largest savings banks 1996-2003




*Sources:* Financial Supervisory Authority (FME) and banks' annual/interim reports.

1. Kaupþing banki hf. (previously Kaupþing hf.) and FBA hf., which were originally investment banks but later merged with commercial banks, are included in figures for the commercial banks over the period 1996-2002.
2. For the period 2000-2002, Kaupþing banki hf. and Búnaðarbanki hf. are regarded as a single bank.
3. E.g. foreign subsidiaries of Icelandic banks such as Kaupthing Bank Sverige (a subsidiary of Kaupþing Búnaðarbanki), R. Raphael & Sons (Íslandsbanki) and Heritable Bank (Landsbanki), plus many others.
4. E.g. banks' shareholdings in the Icelandic Banks' Data Centre (RB) and other companies.
5. Exceptions include Glitnir (asset-based financing) and VÍB (asset management) which were previously subsidiaries of Íslandsbanki hf. but have been virtually or entirely merged into the parent company.

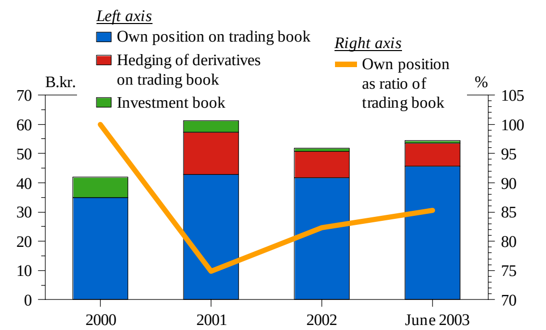
While broadly the same trend can be discerned for the commercial banks and six largest savings banks, in 1998 the commercial banks'[6] ratio of equities to capital overtook that of the savings banks and has been growing at a faster rate since then. The six largest savings banks' equity portfolios swelled in 2000 when they marked to market their shareholdings in Kaupþing on their trading and investment books, as discussed in previous financial stability reports.[7] The commercial banks' ratio of equities to capital exceeded 100% at the end of 2001, dropped suddenly in 2002 and has been climbing again in 2003. It is clear that the banking system's market risk has been increasing in recent years, although with the qualification that some of these exposures are hedges in connection with the banks' derivatives books. In this light, it is worth examining how their equity portfolios are spread between trading books and investment books. Chart 2 shows this distribution for the commercial banks in 2000-2003/Q2.

Chart 3 shows a breakdown of the commercial banks' equity portfolios into shares listed on Iceland Stock Exchange (ICEX), other listed shares and unlisted shares. On average, just over one-quarter of their equity exposures were in unlisted shares over the period 2000 to 2003/Q2. In the middle of the year the book value of unlisted shares amounted to 13 b.kr.

Only two of the four commercial banks, Íslandsbanki and Landsbanki, have announced their nine-month results. Their equities exposures have grown considerably since they published their half-year statements. Landsbanki's equities portfolio swelled by 5.8 b.kr. over the period, virtually all of it (5.5 b.kr.) in trading book equities listed on ICEX. Íslandsbanki reported much lower growth, at 1 b.kr., but in the nine-month statements its holding in Sjóvá-Almennar tryggingar hf. insurance company was booked as shares in related companies, with a book value of more than 8.4 b.kr.[8]

Chart 2

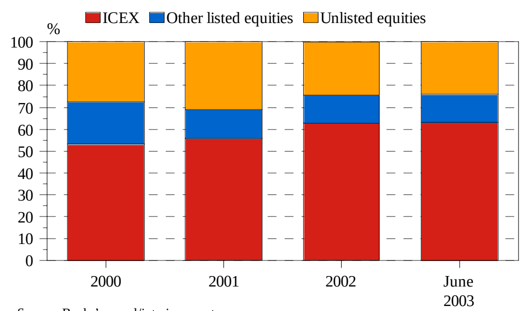
Equities positions of commercial banks 2000-2003[1]




1. Since not all hedging of derivatives was reported for 2000, some customer portfolios are included in the banks' own positions for that year. *Source:* Banks' annual/interim reports.

Chart 3

Commercial banks' trading and investment equities 2000-2003




*Source:* Banks' annual/interim reports.

Investment book exposures have decreased noticeably in recent years, with a corresponding increase in the trading book position. As a proportion of the total trading book position, the banks' own positions in equities have clearly been increasing in recent years. from 75% in 2001 to beyond 85% in mid-2003.

### *Bond positions*

Chart 4 shows that the commercial banks' and six largest savings banks' bonds portfolios, i.e. on both their investment books and trading books, have been growing in recent years and amounted to just over 158 b.kr. in mid-2003.

As a ratio of capital, the six largest savings banks' bond positions peaked in 1998, then fell until 2000 but have been increasing since. The lower ratio

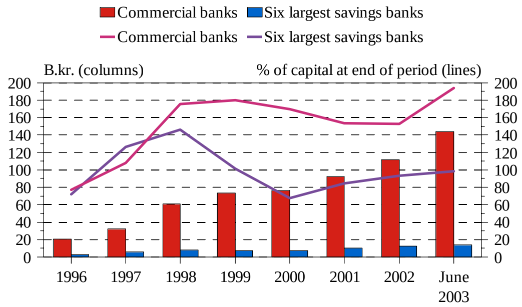
6. Including figures for Kaupþing hf. and FBA hf.

7. Some double counting would be involved for the years when the savings banks marked their holdings in Kaupþing to market and Kaupþing itself was included in the figures as well.

8. Íslandsbanki's shareholding was 44.8% at that time but had increased beyond 90% at the time of writing.

Chart 4

Bond positions of commercial banks and six largest savings banks 1996-2003




*Sources:* Financial Supervisory Authority (FME) and banks' annual/interim reports

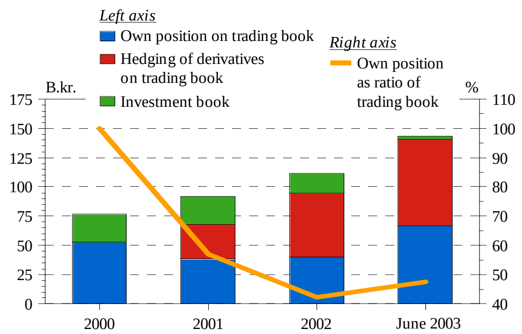
after 1998 did not reflect a reduction in króna terms; the explanation was a sizeable increase in their capital at that time. The commercial banks' bonds positions have grown year-on-year, but the increase between 1999 and 2000 was only slight. However, their bond holdings mushroomed between the end of 2002 and their half-year statements. Some of this growth can be attributed to lower yields, and some to increased position-taking by their customers through derivative contracts. Part of the increase has also been traced to foreign investors.

The investment book position has been steadily dwindling and stood at 3 b.kr. in the banks' most recent half-year figures, while their own positions on trading books and hedges against customers' derivative contracts have spiralled over the past two years to total 141 b.kr. in the most recent six-month statements. It is interesting to note that since the commercial banks' own position-taking accounted for less than 50% of their bonds on the trading book in mid-year, the derivatives market where bonds are the underlying asset has obviously multiplied in value in recent years. This prompts the question of when this trading will be made more visible by listing bond derivatives on ICEX. Such a move ought to deepen the Icelandic bond market even further and kindle even more interest among foreign investors.

The bulk of the bonds portfolios was listed on ICEX. However, this ratio has fallen from more than 93% in 2000 to just over 80% in mid-2003. The proportion of other listed bonds grew over the same period from 3.4% to 13.2%.

Chart 5

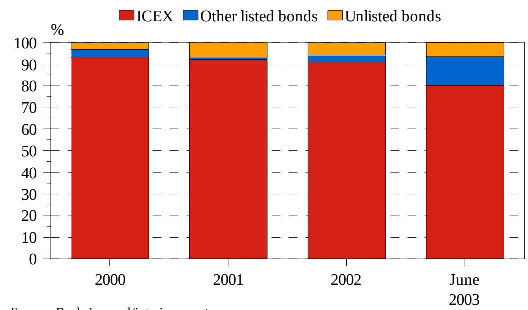
Bond positions of commercial banks 2000-2003[1]




1. Since not all hedging of derivatives was reported for 2000, some customer portfolios are included in the banks' own positions for that year. *Source:* Banks' annual/interim reports.

Chart 6

Commercial banks' trading and investment bonds 2000-2003




*Source:* Banks' annual/interim reports.

## *Conclusion*

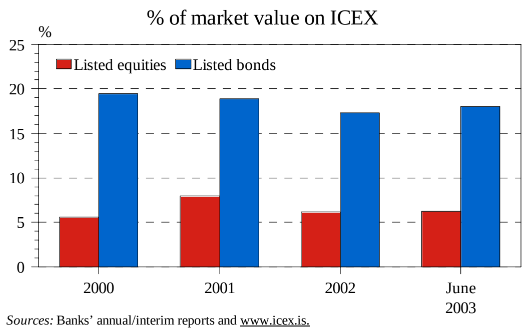
It is clear from the above that the risk faced by the commercial banks and the six largest savings banks has grown in recent years in pace with their securities market activity. This is clearly illustrated in the most recent half-year statements which show that 24% of their income[9] was derived from shares and investments, together with gains on other financial activities, compared with just over 9% in 1996.[10] The commercial banks' share of listed securities on ICEX

9. I.e. the ratio of income from equities and investments, plus gains on other financial activities, to total net interest income, net service income, income from equities and investments and gains on other financial activities.

10. The figure fluctuated from one year to the next; for example, there was a loss on these items in 2001.

Chart 7

Commercial banks' listed securities portfolios 2000-2003




*Sources:* Banks' annual/interim reports and www.icex.is.

is noteworthy, relative to total market value on the exchange. Total value was much higher for listed bonds[11] than for listed equities, as can be seen from Chart 7. Since a large proportion of the banks' securities exposures are in connection with customers' derivative contracts, it seems desirable that ICEX should make such transactions more visible by setting up a market for listing and trading derivatives.

11. I.e. on investment and trading books, own positions and positions connected with customers' derivative contracts.