

## *Financial stability*<sup>1</sup>

# Satisfactory position but concerns over lending, foreign debt and asset prices

*The bottom line of the Central Bank's analysis of financial stability presented below is that the position of major financial companies and markets is relatively firm. Macroeconomic conditions are favourable on the whole and have changed little since the last financial stability report in November. The main concerns are the expansion in largely foreign-financed lending, and high asset prices. A number of noteworthy developments have unfolded over the relatively short time since the last financial stability analysis was published. There has been a flurry of leveraged buyouts of listed and unlisted companies, which provide one explanation for the surge in lending by banks. These transactions have driven up equity prices of several listed companies, including financial companies, prompting the question of what the impact will be should share prices head back down. Housing prices in real terms have stopped climbing, for the time being at least, but a substantial drop is unlikely in the near future. Asset price developments are an important factor for financial stability assessments and may also influence monetary developments, especially in an economic climate such as the present. A decline in equity and housing prices could serve to counter potential overheating of the economy in the next few years. The main shock to financial stability and monetary policy would be if asset prices were to drop sharply at the same time as the growth of real disposable income slows down at the end of the aluminium-related investment boom.*

Although there is no unambiguous definition of financial stability, it broadly hinges upon the stability of the key institutions and markets that make up the financial system. "This requires (1) that the key institutions in the financial system are stable, in that there is a high degree of confidence that they continue to meet their contractual obligations without interruption or outside assistance; and (2) that the key markets are stable, in that participants can confidently transact in them at prices that reflect the fundamental forces and do not vary substantially over short periods when there have been no changes in the fundamentals."<sup>2</sup> Compared with previous financial

stability reports, the following analysis focuses more explicitly on the stability of markets. It highlights a number of characteristics of the domestic markets – both weaknesses and strengths – and makes some references to conditions in foreign funding markets.

The Central Bank's studies of financial stability are published twice a year in *Monetary Bulletin*. As of this year, publication has been rescheduled from May and November to March and September. Consequently, an exceptionally short time has

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1. This article uses data available on March 3, 2004.

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2. Crockett, Andrew (1997), 'Why is Financial Stability a Goal of Public Policy?', in *Maintaining Financial Stability in a Global Economy*, a Symposium sponsored by the Federal Reserve Bank of Kansas City, Jackson Hole, Wyoming, 7–36.

elapsed since the last study of financial stability was published. The analysis presented in the November 2003 issue of *Monetary Bulletin* remains essentially valid, but many noteworthy developments have also occurred since then.

Following the Bank's financial stability analysis in November, the Board of Governors met chief executives of the commercial banks and largest savings bank and reiterated their concern about the rapid increase in lending and high levels of foreign short-term financing. The Board of Governors deemed it necessary to emphasise these views with a letter to the banks dated December 18, 2003, which was later made public.

The bottom line of the analysis presented below is that the position of financial markets and major financial companies is relatively firm and they are acceptably resilient towards conceivable shocks. However, some strain is foreseeable on account of investments in the aluminium industry in the coming years, compounded by the risk of overstretched asset markets, i.e. for housing and domestic equities. Housing prices appear to have already peaked but prices of listed equities have been buoyant so far this year, on top of a record rise in 2003. A pattern has been noticed in the equities market, characterised by portfolio investments by banks and leveraged buyouts by a limited number of investors, while pension funds and ordinary shareholders have been withdrawing as corporations are delisted. The number of corporations listed on Iceland Stock Exchange (ICEX) decreased last year and this trend has been continuing. An asset price adjustment is becoming increasingly likely. A correction normally causes least harm at times when real disposable income is growing. In the current situation, a drop in asset prices would restrain demand and contribute to greater macroeconomic balance. The severest strain upon the financial system would be caused by a substantial drop in asset prices at the time of a possible stagnation or contraction in real disposable income when the aluminium investment projects come to an end.

The study in *Monetary Bulletin* in November underlined the importance of taking financial stability into account in economic policy formulation, especially given the approaching scenario. Fiscal policy should not overburden

monetary policy, it was asserted then, since this could undermine financial stability. Failure to take timely measures to contain inflation could erode the financial position of households and businesses during the prospective boom years, resulting in a more abrupt adjustment when this comes to an end.

Domestic lending has been growing at a brisk rate recently. Total domestic lending by deposit money banks (DMBs) over the twelve months to the end of January increased by 23.4%, which is above a rate consistent with long-term price stability and economic stability. The period 1998 to 2001 provides a recent example of the consequences of heavy credit growth. Arrears and loan losses rose in the wake of the credit boom, leading to a temporary tightening of the commercial banks' and savings banks' foreign funding. While the recession and the ensuing strain on the financial system are now over, it can be partly ascribed to relatively favourable economic conditions and the consequently sharp turnaround that financial companies only sustained minor setbacks.

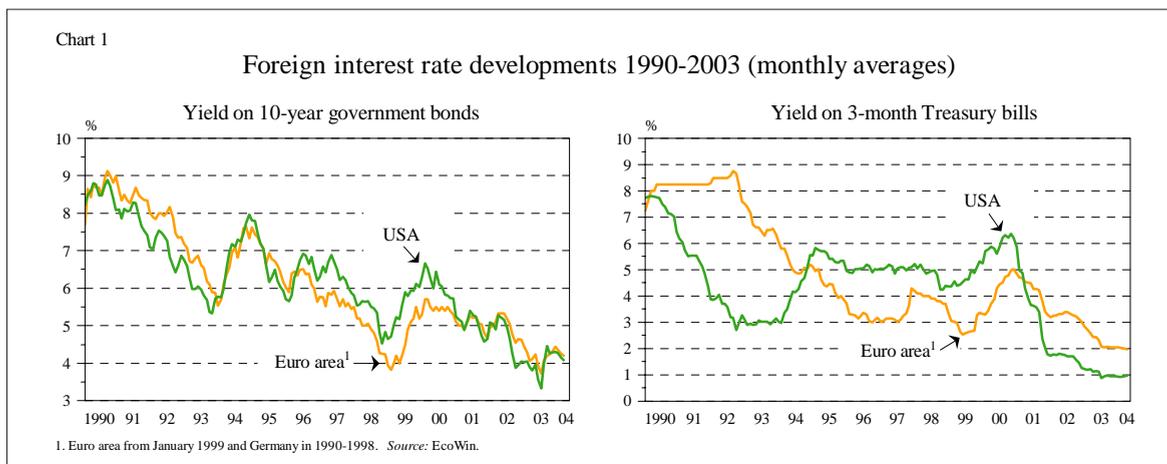
Proportionally, the highest growth in DMB lending has been to foreign borrowers,<sup>3</sup> but foreign currency-denominated lending to domestic entities has also surged, by 47% over the past 12 months.<sup>4</sup> By no means all this foreign currency-denominated credit has been provided to domestic businesses and households that have foreign currency income or other hedges against exchange risk. This poses a particular risk for borrowers and lenders alike.

The commercial banks and savings banks have increasingly financed their activities by borrowing abroad and their outstanding foreign loan stock at the end of January stood at 727 b.kr. Almost half this amount will fall due over the period until the end of January 2005, creating a very high refinancing requirement this year. Furthermore, a greater refinancing risk can be identified in the development towards increasingly large single debt issues. In the first months of 2004 the commercial banks have already made several issues under MTN programmes (as described in the Appendix). An important

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3. DMB lending to foreign borrowers increased by more than 96% over the 12 months until the end of January 2004.

4. The change in loan classification may have had some statistical impact, see Box 1.



consideration is that the banks have managed to broaden their investor base and lengthened the tenor of their borrowing in recent quarters.

Over the past two years, conditions in foreign markets have been quite favourable for debt issues by Icelandic banks. One explanation is that they have sought out new markets to procure funding. Nonetheless, experience shows that it is imprudent to trust that favourable conditions will always persist. A change in the foreign securities market environment, and also a change in attitude by foreign lenders towards the economic climate in Iceland, could tighten the finance available.

Ratings agencies and international institutions, along with the Central Bank, have repeatedly focused on Iceland's foreign debt, not least its heavy short-term liabilities. In Iceland, the public sector and the Central Bank have improved their foreign position, but that of others has worsened in recent years. It is important for the banks to take advantage of opportunities that arise in the near term to strengthen their positions further with moderate levels of lending and balanced financing.

Several organised financial markets operate in Iceland. In the space of less than two decades, ICEX has managed to build up a well functioning securities market. An interbank forex market was established in 1993 and an interbank króna market in 1998. In 2001 an interbank market for currency swaps was added to the array. The legal and regulatory framework for the markets has been formulated over several years and is considered effective. Operational security is in fairly good order but the main weaknesses of

Icelandic markets are their limited liquidity and limited number of participants.

### Macroeconomic indicators

Only four months have elapsed since the last analysis of macroeconomic indicators for financial stability, instead of the customary six-month interval between reports. The macroeconomic indicators for financial stability are broadly unchanged since November. The following provides a fairly brief survey, primarily focusing on the main changes since the last analysis.

#### *Global conditions for financial stability remain favourable and other external conditions broadly the same as in November*

In *Monetary Bulletin* 2003/4 it was pointed out that, bearing in mind the negative short-term position of domestic credit institutions, stable foreign interest rates are of critical importance. At that time, long-term rates had risen some way from their historical low in mid-2003. Long-term interest rates been broadly stable since then and the outlook is for fairly stable rates in the near term. The economic recovery is continuing, quite robustly in the USA and many parts of Asia, but more slowly in Europe. Inflation is low and, if anything, on a downward path in Europe. Thus there is low probability of a sharp rise in short-term interest rates.

The US dollar has weakened further since November, particularly against the euro. In February 2004 the euro had strengthened by 8% on average against the dollar since October, almost one-quarter

since December 2002 and 48% since October 2000. Such volatility can of course entail sizeable risks for businesses with unhedged exchange rate risks in individual currencies, but on the whole the depreciation of the dollar has probably been quite favourable for businesses in general, due to their relatively high share of dollar-denominated debt.

External conditions are broadly unchanged since November. Export prices of marine products have shown some decline while aluminium prices have risen, like global commodities prices in general. Fuel prices have remained fairly stable in euros, although they have risen in US dollars.

#### *Current account deficit remained wide in the second half of 2003*

The current account deficit is an important indicator of potential threats to financial stability. *Monetary Bulletin* 2003/4 noted that the current account deficit had widened substantially in Q2. A large deficit was also sustained in the second half of the year. Over the whole year, the current account deficit was equivalent to roughly 5½% of estimated GDP. More than one-third of the deficit is explained by trade in goods, and increased imports of investment goods accounted for around 4/5 of the merchandise trade deficit in 2003. The service account deficit is presumably also affected by the aluminium and hydropower projects. Weak performance in the fisheries sector, which is hopefully only temporary, and in merchandise exports in general also contributed to the larger deficit.

To the extent that the current account deficit is explained by increased investment, a temporary contraction in exports or even an adjustment of the households' stock of consumer durables to expectations of higher growth in real disposable income, there is little reason to regard it as a threat to financial stability. The part of the deficit connected with aluminium investments will be easy to finance and will disappear when the projects are completed. According to the updated macroeconomic forecast presented in this *Monetary Bulletin*, the current account deficit will widen further over the next few years and reach the equivalent of 8% of GDP in 2005. Imports of investment goods and other inputs for hydropower projects are expected to account for roughly half the deficit. Whether a rough adjustment

on the scale experienced in 2001 and 2002 can be expected will depend on the success of efforts to avoid economic overheating for the duration of the projects. Whether economic policies will succeed on this point is too early to say.

#### *Favourable outlook for price stability in the near term, but much depends on exchange rate developments*

Surging growth in demand has not led to a fundamental change in the outlook for prices over the next two years, according to the updated inflation forecast. As before, however, uncertainty beyond the forecast horizon has increased due to intensifying aluminium project activities. Potential risks to financial stability need to be evaluated on a considerably longer horizon. It is conceivable that the strength of the króna during the investment period will prevent the impact from being felt until some events induce a depreciation of the króna.

#### *The rise in housing prices in real terms in the Greater Reykjavík Area has halted for the time being, but a significant decrease is unlikely in the near future*

Financial companies tend to secure a considerable share of their lending with collateral in the form of real estate, and own extensive real estate themselves or shares in asset management companies. For this reason, and because downturns in asset prices are often associated with shocks to household and corporate finances with an accompanying increase in defaults, a sudden fall could harm financial companies' balance sheets. High real estate prices exacerbate the risk of a price slump.

In real terms, housing prices in the Greater Reykjavík Area appear to have peaked in autumn 2003, at least for the time being. Although available indicators about real prices of business premises are not fully reliable, they suggest a downturn in the final quarter, after some increase in Q3.<sup>5</sup> Nonetheless, prices are high in historical terms. From the

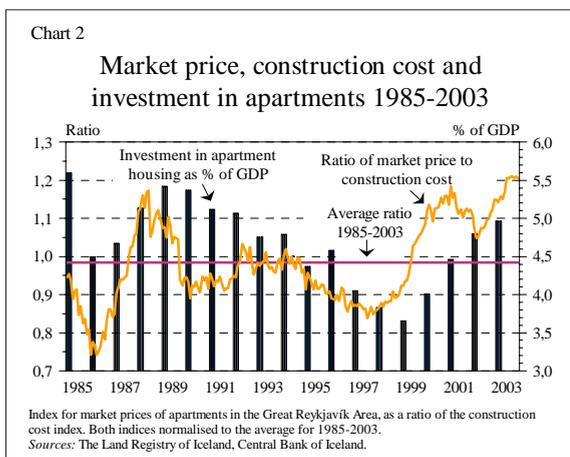
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5. The rise in Q3, which can be traced to higher prices of office premises, conceivably reflected both the quality of the real estate that was traded then rather than real price changes, and also the fact that favourable lease agreements were involved in these transactions. It should be underlined that the disparate nature of business premises makes an effective index difficult to compile. Attempts to do so should be regarded as rough estimations rather than precise measurements.

perspective of financial stability the current slower rate of increase in housing prices is positive, since the higher that real estate prices rise above long-term equilibrium, the greater the risk of a subsequent fall which could severely harm household and corporate balance sheets. However, a halt in housing price increases implies only that the risk has stopped growing, and not that it has ceased to be present in the event of sudden changes in macroeconomic conditions.

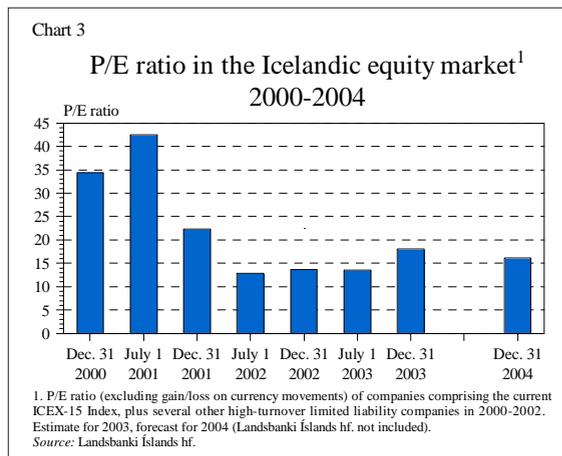
Two factors could support the view that housing prices have only come to a temporary halt. Firstly, the renegotiation of wage settlements, which creates uncertainty about household income in the near future, has led potential buyers to defer housing purchases. Secondly, a similar effect may have been caused by the announcement of plans to change housing financing arrangements, which suggested that they will lead to lower interest rates on housing loans.

As long as output growth remains robust, employment prospects are bright and real wages rise, a fall in housing prices seems to be little cause for concern. However, it is likely that a tightening of monetary policy in the coming years, combined with conceivable overinvestment in housing after a sustained period when the ratio of housing prices to construction cost has been exceptionally high, could spark a downturn in prices at some point over the next five years. The risk that this poses to households is discussed in more detail below.



*Equity prices have risen by one-third from end-October to February*

In *Monetary Bulletin* in November, doubts were raised as to whether higher equity prices over the past year were based entirely on realistic prospects for earnings growth of Icelandic companies. While apparently not out of line with historical P/E ratios, price increases may to some extent reflect changes in ownership and battles for boardroom control. Equity prices have continued to rise since November. From the end of October 2003 to the end of February this year, the ICEX-15 index gained one-third. The November financial stability report noted that despite the recent surge in equity prices, P/E ratios were still not far from the historical average. Equity prices have since risen considerably by this criterion, but the ratio is still much lower than in 2000 and 2001, based on 12-month corporate profits. It should be remembered that the P/E ratio is highly sensitive to short-term fluctuations in company profits and changes in their growth expectations. Several companies listed on ICEX have much higher P/E ratios than the market average, implying expectations about their rapid growth – which is always a major uncertainty.

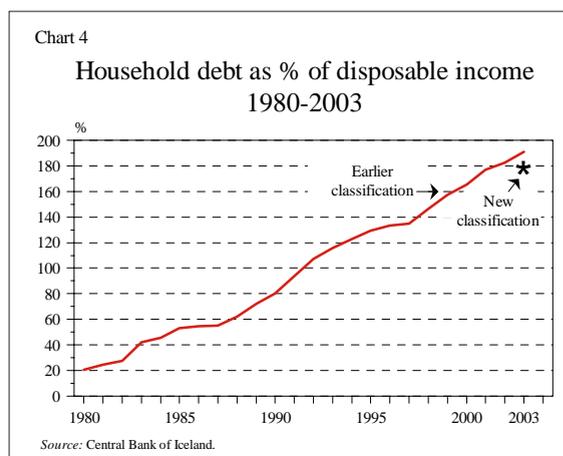


Soaring demand for domestic equities seems to be sustained by relatively few investors, since pension funds are apparently holding back on domestic investment and have opted to invest in foreign markets instead. To a large extent, trading seems to entail leveraged buyouts with involvement by domestic credit institutions. Strong but often vague

ownership links between parties to these transactions creates the risk of a chain reaction if any buyers involved in a leveraged buyout encounter problems in honouring their obligations and equity prices fall. These characteristics of recent developments in the equity market, i.e. a handful of companies sustaining the rise in the index, involvement of few investors, substantial links between them and the presence of leveraged buyouts, give grounds for more cautious equity trading. Equity prices ought to reflect the higher risk presented by limited liquidity in the Icelandic market, and in general their P/E ratios should probably be lower than in deeper markets.

## Households

The report presented in the last *Monetary Bulletin* in November concluded 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, which is almost unparalleled since the inflationary episode of the early 1980s – when debt as a proportion of disposable income was only a fraction of its present size – was regarded as cause for concern, however. High debt service levels were considered unlikely to pose a serious problem unless disposable income drops, unemployment increases or interest rates rise sharply. This finding is still valid. Household debt has continued to increase since the last report was made, but household assets are expected to have grown by considerably more last year. Burgeoning debt over the past year would appear to be linked with housing purchases to a considerable extent. Comparisons are not fully reliable, however, since a new loan classification system lowers the loan stock classified as household debt. These changes are described in Box 1 on p. 39. Since the historical data cannot be reclassified, the most recent figures on household debt are not fully comparable with them. An extrapolation based on the older classification yields an estimated increase of 13% during the 12-month period to the end of December 2003. However, the new classification caused the ratio of household debt to disposable income to decline from 191% to 180%. This does not essentially alter previous conclusions concerning household debt developments.



The updated macroeconomic and inflation forecast presented in this issue of *Monetary Bulletin* indicates stable employment and low inflation for the next two years, although inflation is expected to begin to rise towards the end of this period if no action is taken.

Of particular concern is the coincidence of high household debt, historically high prices of the housing that is mortgaged as collateral for a large share of it, and the increasing probability that prices will fall, at least in real terms, in the event of a downturn in the economy. Much housing is heavily mortgaged, as shown by the fact that, for the past three years, total household debt has been equivalent to roughly 90% of the cost price of all residential housing in Iceland, according to national wealth accounting, and 65% of this figure was in the form of housing loans. Since the extent of individual debt varies, it can be assumed that a considerable number of properties are mortgaged practically to the hilt.

Since 1999, the Housing Financing Fund (HFF) has been authorised to grant supplementary loans amounting to as much as 25% of the purchase price, resulting in a loan-to-value ratio as high as 90%. During the period 1999-2003 around 10 thousand supplementary loans were granted in all, another indication of the fairly high number of home owners who have mortgaged their property almost completely. Furthermore, the great majority of housing loans issued in recent years have been for a 40-year term. The longer term leads to very slow asset formation over the first few years after a housing purchase, which increases the likelihood that

Table 1 Recent episodes of housing booms and subsequent declines

<i>Region</i>	<i>Period</i>	<i>Duration (years)</i>	<i>Average house price inflation (%)</i>	<i>Cumulative house price inflation (%)</i>	<i>Change four years after boom (%)</i>	<i>Share of house price increase lost<sup>1</sup> (%)</i>
Ireland.....	1996-1999	4	16.1	189	?	?
Iceland .....	1997-2003	7	5.5	45	?	?
Finland.....	1987-1989	3	16.3	57	-46	127
Norway .....	1985-1987	3	13.0	44	-31	102
Denmark .....	1983-1986	4	10.4	48	-26	81
Sweden .....	1987-1989	3	10.5	35	-26	98
UK .....	1986-1989	4	14.1	69	-25	62
Japan .....	1986-1990	5	11.9	76	-25	57 <sup>1</sup>
New Hampshire.....	1984-1988	4	14.6	72	-25	60
Connecticut.....	1983-1988	6	11.8	95	-24	50
Massachusetts.....	1983-1987	5	15.3	104	-19	38
New Jersey.....	1984-1989	5	12.6	81	-19	42
Rhode Island.....	1985-1988	4	16.1	82	-17	38
Spain.....	1986-1991	5	18.4	133	-16	27
New York.....	1982-1988	7	10.2	98	-13	26
Italy.....	1989-1991	3	14.9	52	-12	36

1. A much greater share of the Japanese housing price increase has now been lost following nine consecutive years of falling land prices.

Sources: Ireland: Selected Issues and Statistical Appendix, IMF Staff Country Report No. 00/99 and Central Bank of Iceland.

prices could drop below the value of outstanding mortgage principal. A statistical analysis of fluctuations in housing prices in the Greater Reykjavík Area since 1983 indicates a 1/4-1/3 probability that this will occur during the lifetime of a 30-year loan. Bearing in mind that housing prices are currently at a historical high, a negative equity position at some point during the lifetime seems almost certain. Prices in the Icelandic housing market appear to show roughly average fluctuation by international comparison, and there are a number of instances of considerably more volatility, for example in the Nordic countries just over a decade ago. This underlines the possibility that the market value of almost fully mortgaged housing can drop well below the value of the outstanding loans against it. Inflation indexing, and the heavily back-loaded payment which it causes in combination with annuity loans, increases the likelihood that a home owner can expect to sustain negative equity for a long time.

As discussed in previous financial stability reports (for example *Monetary Bulletin* 2003/2),

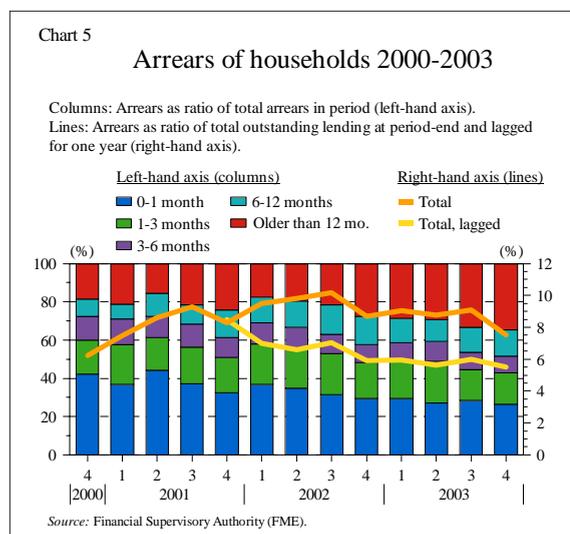
Icelandic households are particularly sensitive to inflation because, unlike most countries in a similar position, the bulk of Icelandic household debt is inflation-indexed. A steep rise in inflation and the resulting need for a hard monetary adjustment could induce a fall in housing prices at the same time as the debt burden increases and disposable income shrinks. Indexation of a major share of household debt leaves it exposed to economic shocks, especially if they follow a period of overheating, kindle inflation and erode purchasing power. Under such conditions, shocks could cause a simultaneous depreciation of the króna, a temporary surge in inflation and a drop in housing prices, at least in real terms. Icelandic households, however, would benefit from the fact that the bulk of their debt bears a fixed interest rate.

For the moment, housing prices in the Greater Reykjavík Area appear to have stopped rising in real terms. Nonetheless, it is still too early to assert whether they have merely paused as a result of uncertainty in the labour market and proposed changes to housing loan arrangements. If a decline in

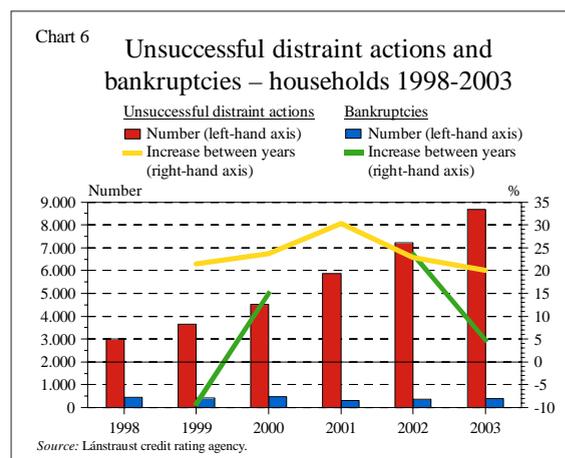
housing prices is unavoidable, it could be preferable for this to commence while the economy is still fairly resilient, rather than during the ensuing downturn. This would counteract the expansionary impact of the pending series of investments in the aluminium industry and reduce the risk that a slump in housing prices would compound the contraction when these projects come to an end.

### Lower total but more serious arrears

Total household arrears with commercial banks and savings banks, as a proportion of outstanding loans to them, reached a peak at the end of Q3/2002. In 2001 and 2002 the proportion rose during the first three quarters, while last year it remained fairly steady. The lower ratio can to some extent be attributed to the substantial growth in lending in 2003, since there tends to be a lag between fresh lending and the emergence of arrears. Hence the higher proportion of new borrowing has lowered the ratio in arrears. This can be adjusted for by examining the arrears position relative to outstanding loans at the end of the previous year. By this criterion, total household arrears have also gone down since 2002, although by less. Arrears in 2003 were generally more serious than in the previous year, i.e. a larger share of loans had been in arrears for over 12 months. As a result, commercial banks and savings banks could face further loan losses this year.



Unsuccessful distraint actions against individuals increased by 20% year-on-year in 2003. The number of actions gives only a rough indication of the extent of difficulties that could result in final loan losses; information is not available on the amounts involved. Such actions seldom result in formal bankruptcy proceedings. Actual bankruptcy rulings are relatively few compared with the number of unsuccessful distraint actions and in 2003 they only increased slightly. The number of unsuccessful distraint actions and increase in serious arrears is noteworthy, given that the external conditions of households, e.g. the growth of disposable income, labour market developments, interest rates and price stability, have been quite favourable recently. It is conceivable that this is a lagged effect from turbulence in previous years, as unemployment peaked last year. This development can also be seen as a sign that the service of mounting debt is becoming an excessive burden on more household balance sheets, even in relatively good economic conditions.



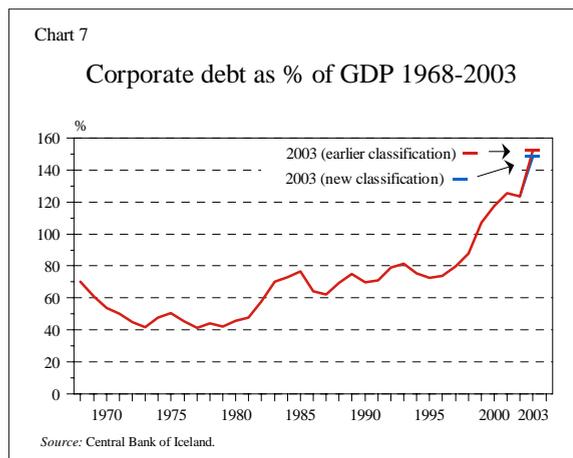
### Businesses

#### Overall strong EBITDA of listed companies

EBITDA of listed companies last year was broadly in line with projections in the last analysis in November. Despite difficult operating conditions in many respects, EBITDA of fisheries companies was slightly better than expected. Net profit was slightly lower, which can be attributed to lower exchange rate gains than in the previous year.

### Surge in foreign currency-denominated corporate debt

Corporate debt began to increase again last year, after levelling off in 2002 when investment dropped and the domestic currency appreciation reduced foreign-denominated debt in króna terms. Since November, the rate of borrowing has increased even further. It should be pointed out, however, that a reclassification of loan categories means that recent and older figures are not fully comparable, as explained in Box 1. As classified at the time, corporate debt amounted to 973 b.kr. at year-end 2002, and 1,186 b.kr. at the end of last year. Due to the reclassification of DMB lending, however, debt at the end of 2003 was roughly 20 b.kr. lower than it would otherwise have been. Nonetheless, corporate debt rose substantially as a proportion of GDP, from an estimated 124% to 149% last year. Under the earlier classification, the end-2003 figure was 152%, an increase in debt of about 20%. Growth in foreign-denominated debt probably accounts for about 70% of that increase. Businesses are clearly becoming more sensitive to exchange rate changes.

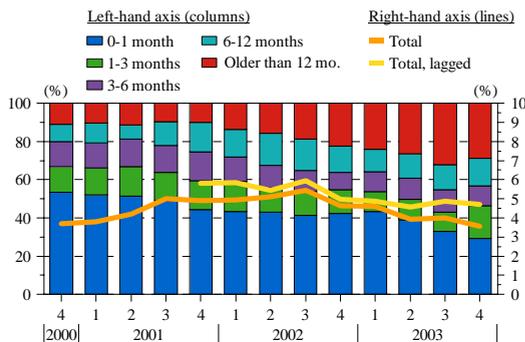


The rate of corporate debt growth last year is a cause for some concern. It is no less noteworthy that increasing indebtedness appears to correlate only slightly with gross fixed capital formation. General gross fixed capital formation in industry would seem to have decreased last year. Increased corporate debt appears to be rather more closely linked to leveraged buy-outs, including those made in connection with delisting of companies, and thus also linked to the

Chart 8

### Arrears of businesses 2000-2003

Columns: Arrears as ratio of total arrears in period (left-hand axis).  
Lines: Arrears as ratio of total outstanding lending at period-end and lagged for one year (right-hand axis).



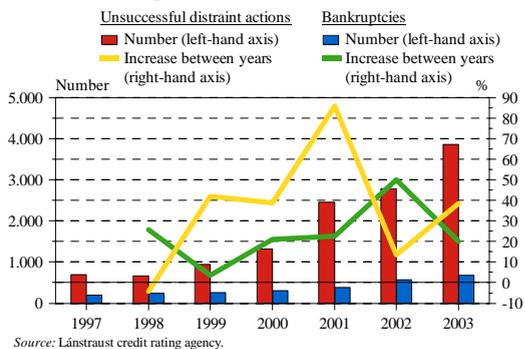
surge in asset prices in the recent term. If anything, the purpose of this increase in debt exacerbates the risk to financial stability.

### A sharp increase in unsuccessful distraint actions suggests more bankruptcy rulings next year

Data on corporate arrears suggest a broadly unchanged position since the November report, after allowance for hefty credit growth. As in the case of households, the lower proportion of loans in arrears appears to be a consequence of last year's sizeable increase in corporate debt. Based on outstanding loans at the beginning of the year, however, the proportion in arrears remained fairly steady during 2003. The proportion of loans in serious arrears decreased slightly during Q4, after rising steadily for

Chart 9

### Unsuccessful distraint actions and bankruptcies – businesses 1997-2003



## Box 1 Reclassification of lending and marketable securities

In September 2003 a new method was introduced for classifying credit institutions' lending and marketable securities. Individual loans and marketable securities are now automatically classified by economic activity, instead of being done manually. Files from credit institutions are collated with the register of enterprises which uses economic activity codes according to the ÍSAT-95 standard, based on the European Union's NACE (Nomenclature générale des Activités économiques dans les Communautés Européennes) standard.

The new methodology resulted in various changes. All transactions that are entered against a personal ID number are now classified as household debt, even those involving businesses that may previously have been classified under the respective economic activity. The reason is that automatic classification does not enable a distinction to be made between lending for private consumption and for business operation if both are recorded against a personal ID number rather than an enterprise ID number. Although fewer and fewer people probably run businesses using their personal ID number, this is undoubtedly still done on some scale, especially in the case of small activities.

One change entailed by the reclassification led to a sizeable reduction in household debt figures. Previously, the Housing Financing Fund (HFF) classified all its lending as household debt, on the grounds that individuals ultimately paid the loans irrespective of the identity of the original borrower. Under the new classification, a loan is recorded against the registered debtor at any time. More than 11% of HFF lending has thereby been transferred to other entities than households, i.e. local authorities, construction contractors and other economic activities. At the end of September 2003, outstanding HFF lending to households amounted to 380 b.kr., and to other entities 48 b.kr. under the new classification.

The figure for lending to the agricultural sector also decreased because processing of agricultural products was transferred to the manufacturing industry sector and their sale reclassified under the retail sector. A corresponding change was made for fisheries. Furthermore, in both these sectors some business operations are likely to have been registered against per-

sonal ID numbers, and have therefore now been reclassified under households.

Of total domestic lending and marketable securities in the banking system at the end of September 2003, 2% (19 b.kr.) could not be classified under a specific economic activity. This applies to businesses classified in the register of enterprises under codes 97000 (no operations) and 98000 (unspecified operations).

The accompanying table compares the new and previous classifications of domestic lending and marketable securities in the banking system on September 30, 2003. The discrepancy between the bottom-line figures is explained by the fact that lending to foreign entities was formerly incorrectly classified under domestic entities.

Table 1 Sectoral breakdown of deposit money banks' credit and marketable securities  
September 30, 2003

<i>M.kr.</i>	<i>New classification</i>	<i>Earlier classification</i>	<i>Difference</i>
Treasury and government institutions .....	5,542	12,910	-7,368
Municipalities .....	13,620	16,533	-2,913
Non-bank financial institutions .....	170,537	131,525	39,012
Enterprises .....	566,540	594,453	-27,913
Agriculture .....	6,245	15,200	-8,955
Fisheries .....	48,844	136,261	-87,417
Commerce .....	126,232	100,381	25,851
Manufacturing .....	143,932	77,865	66,067
of which agricultural products .....	4,439	-	4,439
of which marine products .....	84,885	-	84,885
Contractors <sup>1</sup> .....	38,435	25,418	13,017
Communications .....	16,835	14,745	2,090
Electric power, water and heating .....	2,574	2,560	14
Services .....	183,444	222,024	-38,580
Households <sup>2</sup> .....	174,604	208,041	-33,437
Housing mortgages to individuals .....	-	25,869	-
Other .....	-	182,171	-
Unclassified .....	18,991	-	18,991
Total .....	949,833	963,462	-13,629

1. Earlier as two items; 'housebuilding contractors' and 'other contractors'. 2. A distinction is no longer made between households' mortgage loans and other loans. *Source:* Central Bank of Iceland.

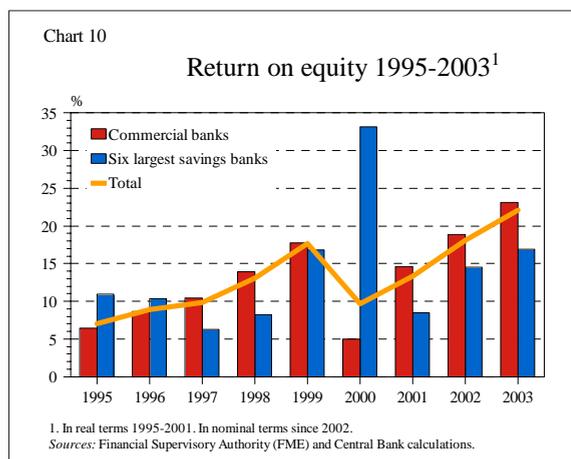
almost two years. Figures for arrears should be interpreted with caution, since one of the commercial banks altered its method of processing arrears information last year, as discussed in the section on financial companies.

When the last financial stability report was made in November, the increase in the number of unsuccessful distraint actions appeared to have slowed somewhat. This trend seems to have reversed in the last quarter of the year. Unsuccessful distraint actions against businesses increased by 40% year-on-year in 2003. In fact the number of actions increased by roughly the same as between 2000 and 2001, but the proportion was lower. Bankruptcy rulings increased by 20%. Considering the number of unsuccessful distraint actions, bankruptcy rulings can be expected to increase still more in 2004.

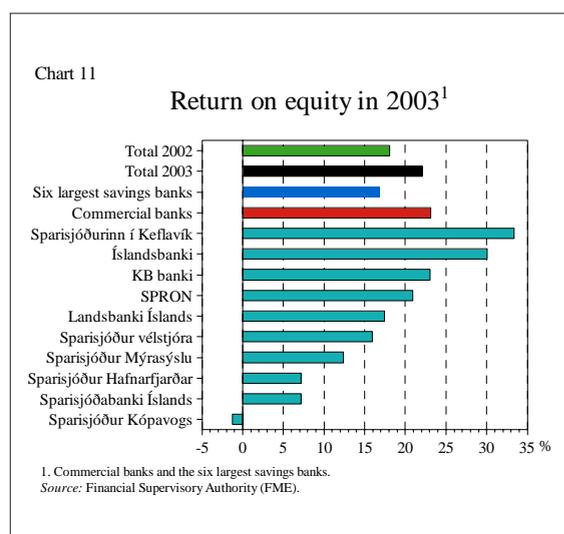
## Financial companies

### *Record profitability of financial companies ...*

On the whole, the profitability of the commercial banks and six largest savings banks increased still further in 2003, although at the beginning of the year profits were expected to be slightly lower than in 2002.<sup>6</sup> As the year progressed it became clear that the banks' profitability would be exceptionally high. Total profit of the four commercial banks amounted to 16.5 b.kr. (almost exclusively accounted for by the



6. Forecasts by the research sections of financial companies at the beginning of 2003.



## Definitions

### *Commercial banks:*

Íslandsbanki, KB banki, Landsbanki Íslands and Sparisjóðabanki Íslands (Icebank)

### *Six largest savings banks:*

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

three largest) last year while the total profit of the six largest savings banks was 2.3 b.kr.

### *.... largely due to factors other than traditional commercial banking activities*

Net interest income of the commercial banks increased by 24.5% year-on-year from 2002, to over 31 b.kr. Interest income increased by 3% while interest expenses dropped by 8%. The main decrease was in interest income and expenses in connection with claims on other credit institutions, with little change in other items. There was no year-on-year change, however, in the commercial banks' interest margin<sup>7</sup> as a whole, which can be attributed to a large

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

increase in total capital during the year, as discussed below. Commercial banks have expanded their activities outside Iceland in recent years and an estimated 16-20% of their net interest income in 2003 derived from operations abroad.<sup>8</sup> The interest margin at the six largest savings banks narrowed slightly in 2003. Interest expenses decreased while interest income was practically unchanged, resulting in higher net interest income; because the savings banks' total capital grew, the margin was narrower.

Total commissions of commercial banks increased by 37% during 2003, most markedly at KB banki.<sup>9</sup> Net commission income in 2003 amounted to over 19 b.kr. Increased commissions mainly derived from securities brokering and corporate advisory services. At least 25% of the commercial banks' net commission income can be estimated to have come from their foreign activities in 2003.<sup>10</sup>

Trading rate gains on other financial activities grew by 162% in 2003 and amounted to 16.6 b.kr. for the year as a whole. Of this figure, around 61%, or over 10 b.kr., was profit on trading-book equity exposures. As discussed in *Monetary Bulletin* 2003/4, commercial banks' equity exposures increased substantially last year, as examined in more detail below. Around 30% of these gains were on domestic bond trading books, and the remainder exchange rate gains on FX trading. It should be noted that although 16.6 b.kr. was entered as trading rate gains, this is before deduction of the financing cost of securities exposures<sup>11</sup> and only a part of this profit was realised at year-end. An examination of individual annual reports reveals that equity assets of Íslandsbanki hf. and Landsbanki Íslands hf. appear to

be primarily in domestic companies, while according to information presented with KB banki's annual financial statement, around 50% of its trading rate gains of over 10 b.kr. originated outside Iceland.<sup>12</sup> In addition, the majority of KB banki's equity trading book assets are shares which are not listed on ICEX.

The performance of the six largest savings banks presents a similar picture; while their core income came from traditional deposit and lending activities, the outcome of their trading books was also very strong.

Income from traditional commercial banking activities, i.e. deposits and loans, have been and will likely continue to be the commercial banks' largest steady source of income. In recent years the banks' profitability has become more dependent upon the performance of their securities trading books, securities brokering and corporate advisory services. On bond trading books, yields of bonds listed on ICEX dropped in 2003, and ICEX's bond indices rose by 7.5%-14%, depending on bond type. Yields dropped still further during the opening weeks of 2004. Whether yields will fall even more this year will depend on factors including Central Bank interest rate decisions, proposed listing of bonds in an international settlement system and the degree of interest shown by foreign investors.

It is highly unlikely that equities will rise in 2004 on the scale witnessed in 2003, when the ICEX-15 index gained more than 56%. *Monetary Bulletin* 2003/4 examined the question of whether the equity market rise was higher than warranted by economic fundamentals. While there is no conclusive answer to this question, the analysis pointed out that the rise was driven by a small number of companies, and furthermore that the P/E ratio of listed companies at that time was not abnormally high in historical or international terms. As mentioned above, the ICEX-15 index has risen by one-third since that analysis was made at the end of last October and until March 3, 2004. Recent growth in commercial banks' domestic equity exposures may thus be double-edged in view of the small size of the market and the restrictions on obligations that financial enterprises are allowed to undertake towards individual

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8. This is stated specifically in the information accompanying KB banki's annual report; it is more difficult to estimate this figure for the other commercial banks. Defining who are considered "foreign entities" needs careful consideration. To some extent these are Icelandic legal entities who have established companies abroad. As a result, these figures and those of the following paragraph should be interpreted with caution.

9. An increase of 56% from 2002.

10. In the case of KB banki, this proportion was around 50%.

11. Financing cost can be expected to bring down gains on trading book equities by 2.5 b.kr., leaving a net result of 7.5 b.kr. This financing cost is entered as interest expense and thus skews the interest margin calculation. Financing cost for bond trading books was probably of a similar magnitude, or just over 3 b.kr., while trading rate gains on bond trading books were around 5 b.kr.

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12. The bulk of this amount, roughly 3.4 b.kr. came from the UK.

companies and related parties, i.e. their combined equity holdings in and loans to individual companies. This could possibly pose a risk to the performance of individual financial companies, with a possible contagion effect across the financial system. A risk of conflicts of interest also arises if financial companies have major holdings in companies while at the same time serving as their bankers. Here it should be borne in mind that there are now more conglomerates in the domestic market, making it often difficult to discern ownership links between individual companies.

The banks' main growth potential would seem to lie in expansion abroad and/or participation in activities other than traditional commercial banking operations. In recent years, expansion abroad has not always proved profitable, and there are also instances of financial enterprises withdrawing from non-banking operations. Boosting balance sheet totals should not be an end in itself; the primary driver should be the profit motive, together with maintaining a good overview of risks and sensible management of them.

A rough estimate of the magnitude of the banks' profits originating abroad in 2003 could be 15-20% of total profits, or around 2.5-3.3 b.kr. of their total profit of 16.5 b.kr.<sup>13</sup> Whether this is a fairly exact estimate or not, it is clear that commercial banks' activities abroad are on the increase. It is always difficult, however, to determine the source of profit, since cross-border enterprises may post income in one country even though it originates in another.

#### *Substantial year-on-year increase in loan-loss provisions and final write-offs ...*

The commercial banks' specific loan-loss provisions increased by 45% in 2003, or 3.6 b.kr. They also allocated over 1.5 b.kr. as general provisions for loan losses in 2003, which is a year-on-year increase of 342%. Increased general loan-loss provisions can be in part attributed to the commercial banks' 34.5% lending growth in 2003. Higher specific provisions are possibly explained by the change of ownership at Landsbanki Íslands hf. and Búnaðarbanki Íslands hf.,

as well as the merger of Búnaðarbanki with Kaupþing banki later in the year. The new owners have reassessed their loan portfolios and stepped up provisions for loan losses. Insofar as this explanation is justified, specific loan-loss provisions should decrease in 2004, other things remaining equal. Specific loan-loss provisions by the six largest savings banks grew by 27% year-on-year, but a withdrawal was made from the general loan-loss provisions (negative contribution), despite the fact that lending by these six savings banks had increased by 3.7% during 2003.

Final write-offs by commercial banks increased by 28% in 2003, to more than 6.5 b.kr. In 2002, there was a sharp jump in final write-offs, by over 103% year-on-year. Loan loss provisions should give some hint about future final write-offs. Considerable amounts were written off in 2003 and by no means need be expected to decrease this year. Final write-offs by the six largest savings banks grew by 67%, amounting to total losses of 2.1 b.kr. at year-end 2003.

Fierce competition appears to prevail for corporate lending, especially to larger and more solid enterprises. Competition in lending to this sector has brought down the risk premium on the basic lending rate, prompting the question whether it still reflects possible loan loss. It is also noteworthy that foreign banks appear to have reduced their direct lending to Icelandic businesses. This has been replaced by loans denominated in foreign currency provided by domestic commercial banks. The extent to which foreign banks have withdrawn from competing for larger corporate clients, and the subsequent fall in interest premium, prompts another question of whether this confirms that the lending risk is underestimated.

The proportion of non-performing loans<sup>14</sup> to the total outstanding lending of commercial banks decreased in 2003 to a level similar to that of 2001. This drop must be regarded as a positive sign, since this ratio had risen steadily since 2000 and reached a

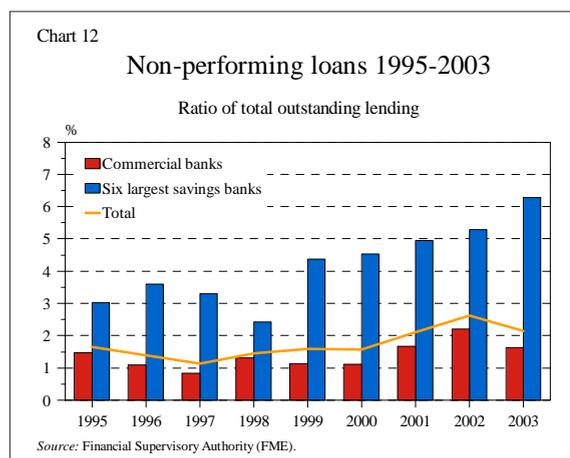
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13. Around 20-25% of the banks' net earnings on operations can be estimated to derive from foreign operations. A major portion of operating costs and loan-loss provisions can be assumed to derive from domestic activities.

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14. Loans for which specific provisions have been posted, less specific loan-loss provisions, plus 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.

peak in 2002. For the six largest savings banks, the picture was different. Their ratio continued to rise in 2003, reaching 6.3% at year-end after increasing continually since 1998. Together with high loan losses, this trend is a cause for concern. The loan portfolios of the six largest savings banks appear to be of considerably lower quality than those of the commercial banks.



... and considerable arrears apparently continue

Serious arrears, i.e. of more than 12 months, grew as a proportion of total arrears with commercial banks and savings banks in 2003, as shown in Chart 13. The ratio of total arrears to outstanding loans, however, has decreased since peaking at the end of Q4/2002.<sup>15</sup> Total arrears also reached a peak in absolute terms then, at 49.5 b.kr. At year-end 2003, total loans by commercial banks and savings banks in arrears amounted to over 41 b.kr.<sup>16</sup> Since commercial banks' lending also soared in 2003, it may give a distorted picture to compare the ratio of loans in arrears at the end of one lending period to total lending at the end of the same period. Given that new loans are unlikely to end up in arrears straightaway, loans in arrears were therefore compared to total loans one year earlier. This ratio decreased by considerably less in 2003, as Chart 13 shows. Another difficulty in interpreting arrears figures is that they are not completely comparable between periods, since new

15. The data extends back to year-end 2000.

16. It should be noted that arrears generally decrease in the fourth quarter.

procedures introduced by one commercial bank caused its loans classified as being in arrears to swell, although there had been no real increase. Other things remaining equal, provisions for loan losses and final write-offs should decrease this year since it can be assumed that the banks took special action to weed out their loan portfolios in 2003. Judging from the pattern of loans in arrears, however, some backlog may well remain, and substantial write-offs may still be warranted in 2004, especially in view of the continued increase in serious arrears.

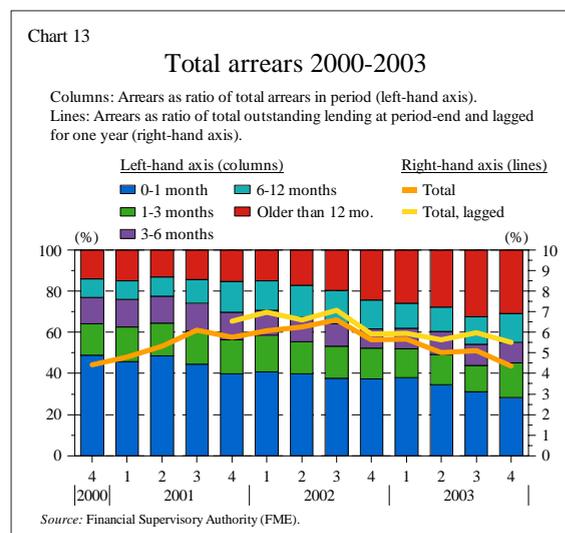
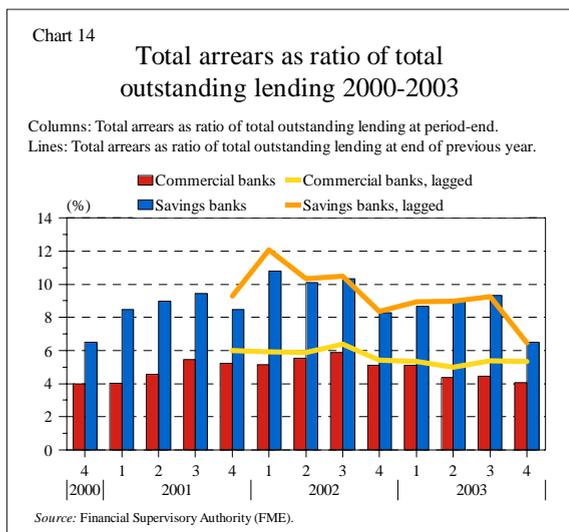


Chart 14 shows the ratio of total arrears to total loans outstanding, for the commercial banks and savings banks respectively. This ratio is always higher for the savings banks and the trend was similar for both the groups over the period examined. A significant shift appears to have occurred in Q4/2003, however, when the two groups converged for the figures both with and without a lag. This is almost entirely explained by a drop in the savings banks' ratio in the fourth quarter, which probably has something to do with their record final write-offs last year. It is interesting to note that the ratio for commercial banks and savings banks at year-end 2003 is very similar to that at year-end 2000, before provisions for loan losses began to rise substantially.

Cost/income ratio has generally decreased

Expenses in 2003 increased substantially, but not as much as income. As a result the cost/income ratio<sup>17</sup>



of commercial banks has generally decreased. Earlier financial stability reports have often pointed out that this indicator is not without its flaws. Commercial banks' operating expenses rose by over 35% in 2003, with the greatest increase at KB banki with 48%. Higher cost is partly the result of performance-linked salaries and costs incurred following mergers and acquisitions by both Íslandsbanki and the current KB banki. The cost ratio of the six largest savings banks also decreased in 2003, despite a rise of 7% in their operating expenses.

The banks' operations probably do not yet fully reflect all the synergies of last year's mergers. Other things remaining equal, operating costs should not increase greatly in 2004, so that the cost/income ratio could drop still further.

### *The commercial banks' total capital grew substantially ...*

Assets of commercial banks grew by over 39% in 2003, to reach almost 1,500 b.kr. at year-end, an increase of around 420 b.kr. This is a massive increase in a single year and reflected both organic and external growth. In 2003, KB banki acquired several foreign companies and merged them with its operations, while Íslandsbanki merged with Sjóvá-  
Almennar tryggingar hf. insurance company. During the same period, the assets of the six largest savings banks grew by 7%, to 147 b.kr. at year-end.

### *... as a result of growth in lending ...*

Of the commercial banks' 420 b.kr. increase in assets, 257 b.kr. (61%) is attributable to increased lending, corresponding to a 35% rate of lending growth in 2003. A new classification system for loans and market securities was introduced during the latter part of 2003; the principal changes are described in Box 1 on p. 39. The six largest savings banks recorded much lower growth in lending, at 3.7%.

Lending by all DMBs<sup>18</sup> increased by 25.6% year-on-year in 2003. There was an increase of 19% in loans to domestic borrowers, and 118% to foreign borrowers. DMB domestic lending to households increased by 15.4% last year, while loans to domestic corporations were up by more than 30.3%.

It is not possible to determine exactly what these loans were used for. Businesses do not appear to have invested heavily in fixed capital in 2003, compared with previous years. On the other hand, asset value has risen considerably in terms of both securities and real estate. It has been discussed earlier how much the ICEX-15 index has increased recently and how few companies have mainly been involved. Part of the lending by commercial banks and savings banks has gone towards financing this rise. While a number of companies have been delisted from ICEX over the past few years, a record of 18 were delisted in 2003. In some instances these were leveraged buyouts. Large holdings in listed and unlisted companies also changed hands last year. Domestic financial companies probably financed these transactions, and almost certainly would have secured their loans at least in part with owners' shares or assets of the companies concerned. A downturn in equity prices could result in loan losses for these financial companies. Real estate management companies and holding companies have also stepped up their activities in recent years. These are generally highly capital-intensive operations and finance their investments for the most part with borrowed capital. Finally, it should be mentioned that Icelandic banks have increasingly undertaken refinancing of the foreign debt of large Icelandic corporations and have also followed their clients' lead in investing abroad. Last year, for example, the banks participated with

17. Operating expenses as a proportion of operating income.

18. By the parent company and not the group.

foreign banks in syndicated loans to Landsvirkjun<sup>19</sup> and Pharmaco hf.. These two loans alone amounted to a total of 45 b.kr. The banks have therefore also begun lending to corporations which previously procured their financing almost exclusively from foreign banks.

*... increased securities exposures ...*

Some 91 b.kr. of the banks' capital growth lies in increased securities exposures<sup>20</sup> in 2003 – primarily in bonds, where exposures grew by over 51 b.kr. The commercial banks' total securities portfolios stood at 254 b.kr. at year-end 2003. Only part of this figure is accounted for by the banks' own positions. Of 158.5 b.kr. on the commercial banks' bond trading books at end-2003, 101 b.kr. (or 64%) were in connection with customers' derivative contracts. Similarly, of 89.5 b.kr. on their equity trading books at the same time, 15.5 b.kr. (17%) were exposures in connection with customers' derivatives. The commercial banks' own securities exposures at the end of 2003 thus totalled around 138 b.kr.<sup>21</sup> *Monetary Bulletin* 2003/4 included a survey on commercial banks' securities portfolios based on their six-month interim financial statements and it is clear that these exposures had increased by the end of 2003, which could be the result of either a general rise in securities markets or acquisition of assets. The commercial banks' equity exposures have tended to grow as a proportion of their equity capital in recent years, indicating that investment banking activities are becoming a more important source of income for them, as has been previously discussed.

Exposures of the six largest savings banks in marketable bonds decreased slightly in 2003 and amounted to 11 b.kr. at year-end. Their equity exposures, on the other hand, rose slightly to 5.5 b.kr.

*... and increased claims on other credit institutions, as well as higher goodwill*

A further 48 b.kr. of the banks' increased assets is explained by a rise in claims on other credit institutions, which totalled 131 b.kr. at year-end

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19. A revolving credit facility.

20. Both trading book and investment book exposures.

21. i.e. own positions on trading books plus positions on investment books.

2003. Finally, some 15 b.kr. is derived from an increase in the book value of their goodwill in 2003, which stood at 19 b.kr. at the end of the year. This generally represents a premium arising from the commercial banks' mergers and acquisitions in recent years.

*Financing abroad grew ...*

A number of funding channels are available to financial companies. In 2003 the largest increase was in foreign-denominated issuance, chiefly under MTN programmes.<sup>22</sup> According to the Central Bank's monetary statistics, the banks' securities issuance increased by 290 b.kr. in 2003, of which 285 b.kr. was foreign-denominated. The commercial banks' consolidated financial statements for 2003 report an increase of 308 b.kr. Assuming that a similar share is foreign-denominated, around 302 b.kr. of the commercial banks' securities issuance according to their annual accounts was foreign-denominated. This is an increase of over 130% in a single year. Other borrowing contracted by 31 b.kr. over the same period.

Little year-on-year change took place in the foreign financing of the six largest savings banks in 2003.

In many ways 2003 was a favourable year for Icelandic banks, not least for their relatively easy access to foreign loan markets and favourable terms. As discussed in the section on foreign markets below, no change is foreseen this year. The main risk for Icelandic banks would be if this access were to be significantly restricted or even closed. While this is highly unlikely, markets can be prone to fluctuations and their supply of financing be reduced at short notice. The Icelandic banks' access also depends highly on their credit ratings. By lengthening the maturities of the foreign loans they take, and even by avoiding very large single issues, the banks reduce their refinancing risk. Another consideration to make in good time is the possible impact that new capital adequacy rules under Basel II may have on their foreign borrowing, which has been examined in previous financial stability reports. A more detailed discussion of the commercial banks' foreign indebtedness is provided in the Appendix.

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22. See the discussion in the Appendix.

## Box 2 Credit ratings agencies' reports on the Icelandic financial system in 2003<sup>1</sup>

*Standard & Poor's, December 16, 2003 (A+/A-1+)*<sup>2</sup>

- “Levels of net external debt are very high throughout the economy at an overall 272% of current account receipts in 2003. Capital outflows from Icelandic pension funds diversifying abroad put additional structural pressure on the balance of payments. Despite the rapid reduction of the current account deficit and a very strong increase in foreign exchange reserves, external liquidity has improved only slightly and will remain one of the weakest among rated sovereigns for the foreseeable future.”
- “The off-budget and contingent liabilities of the government are subsiding. Imbalances in the financial sector had been significant as a result of the credit boom, and downside risks remain due to the large external leverage of the sector and a volatile exchange rate. However, tighter regulation and supervision, improved prudential indicators and increased profitability leave the sector in a better position than at the beginning of the decade.”
- “A potential upgrade of Iceland's foreign currency ratings hinges on further strengthening of the financial sector, as well as a prudential macroeconomic policy stance over the period ahead. Conversely, any significant increase in external leverage or a recurrence of macroeconomic imbalances on the back of the country's large investment projects could lead to a downward revision of the outlook.”  
(*Standard & Poor's, Press release, December 16, 2003*)

*Moody's, June 5, 2003 (Aaa/P-1)*<sup>2</sup>

- “Improvements in banking system supervision ... should help banks better administer their loan books. The adoption of more aggressive provisioning policies, more conservative standards for recognizing problem loans, and banks' increased capital reserves are important factors in containing the risk to the financial system, although short-term external exposure remains high. Continued consolidation of the industry, such as the recent merger of

the savings bank Kaupthing and Bunadarbanki, will improve competition. Growing household debt service requirements should also restrain loan demand.” (p. 3)

- “Another concern is the substantial external debt of the banking system. Icelandic banks are permitted to keep open positions in foreign currency of up to 30% of their capital, a significant level of exposure. Still, ... supervision and regulation has improved, and the primary clients to which they onlend in foreign currency tend to have exporters' natural hedge. Throughout the episodes of krona devaluation and appreciation, the banks' asset quality has suffered only marginally.” (p. 5)

(*Moody's Analysis, May 5, 2003*)

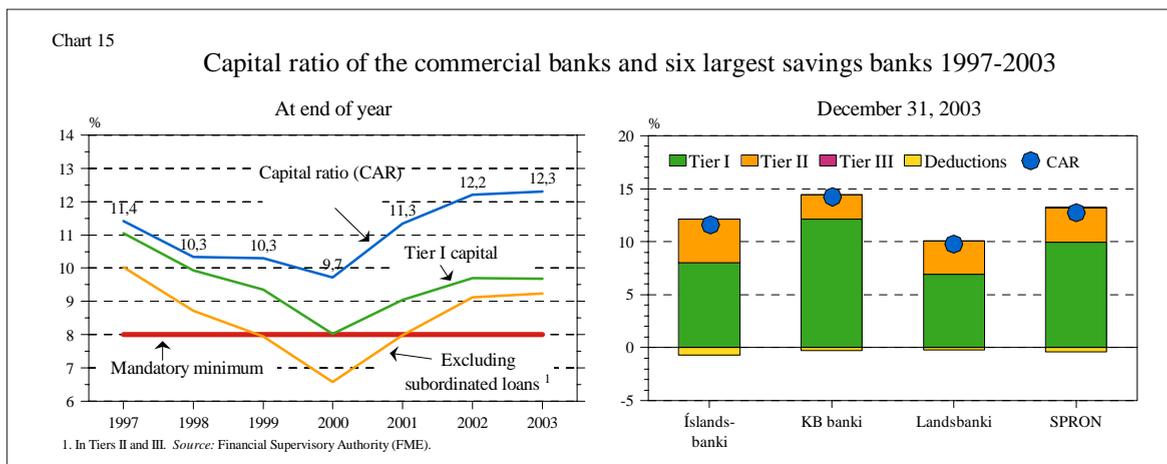
*Fitch Ratings, March 2003 (AA-/F1+)*<sup>2</sup>

- “Of more immediate concern has been the extent to which the banks have financed the surge in domestic lending with foreign borrowing. Banks' open foreign exchange positions are limited to 30% of capital, but exchange risk may still be a problem where domestic borrowers without foreign exchange revenues have contracted loans in foreign currency.” (pp. 9-10)
- While expressing concerns about Iceland's high net external debt, Fitch points out that it “makes good sense that a country with good demographics and able to offer good investment returns should build up a negative investment position, though in relation to the size of its economy Iceland has gone even further in this direction than Australia and New Zealand. And unlike those two countries, Iceland has added further to its net external debt by, in national terms, building up debt to finance equity assets.” (p. 1)
- Fitch identifies net external debt as “the main constraint on the rating. Net external debt ratios should fall – and the ratings could improve – more quickly if Icelandic pension funds curbed their appetite for foreign equities.” (p. 1)

(*Fitch Ratings, Sovereign Report Iceland, March 31, 2003*)

1. Included in their sovereign reports.

2. Sovereign foreign currency rating.



*... alongside an increase in deposits ...*

Deposits with commercial banks also grew sizeably in 2003, rising by 83.5 b.kr. or 23% from the previous year. The greatest increase was in cheque accounts and inflation-indexed deposits. Deposits with the six largest savings banks increased by 14.6 b.kr., or a marginally smaller 22%.

While the growth in deposits in the banking system should be welcomed, one consequence will directly affect DMBs in Q1/2004. They are required to make an additional contribution of ISK 466 million to the Depositors' and Investors' Guarantee Fund to ensure that it reaches its mandatory minimum.

The ratio of deposits to total capital of the commercial and six largest savings banks has changed somewhat over the years. In 1995 deposits were equivalent to over half of total capital, while at the end of 2003 this ratio had dropped to just over one-third.

*... and new share capital was issued*

All the commercial banks apart from Sparisjóðabanki issued new share capital in 2003. New shares were used, among other things, as payment in mergers and acquisitions. The commercial banks' equity grew by over 27 b.kr. or 37%, primarily as a result of last year's profits and the premium on new share capital issued. This amount will drop again, as dividends for 2003 have yet to be paid.

Three-quarters of the 420 b.kr. increase in the commercial banks' total capital was financed with loans. The extent varies from one bank to the next,

but their obviously higher leveraging will require considerable discipline and good risk management on their part.

*The capital adequacy ratio was unchanged from the previous year ...*

The commercial banks' overall mandatory capital adequacy remained practically unchanged from year-end 2002 to year-end 2003, at just over 12%. The ratio varies among the commercial banks; it is lowest at Landsbanki Íslands (9.9%) and highest at KB banki and Sparisjóðabanki (14%). At the six largest savings banks, capital adequacy rose to 14.8% at the end of the year. Once dividends have been paid in the first quarter of this year, this ratio will drop for both commercial banks and savings banks.

Despite quite steady capital adequacy, the commercial banks' risk-adjusted asset base rose sharply in 2003, partly as a result of growth in lending and securities assets. The risk-adjusted asset base rose 33.5% for commercial banks as a whole, but most at Landsbanki Íslands, where it was 57%. The risk-adjusted asset base of the six largest savings banks also rose in 2003, but by considerably less at 10.5%.

Both Landsbanki Íslands and Íslandsbanki issued subordinated debt in 2003, but otherwise there was little new issuance of subordinated loans.

The capital adequacy of the commercial banks and six largest savings banks was relatively strong at the end of 2003, giving them more scope in this respect than has often been the case.

## Foreign markets

### *Robust financial markets ...*

Financial markets have been robust so far this year, despite uncertainty about interest rate developments. Issuance in the longer end of the market, however, has been somewhat subdued, as investors have tended to seek shorter and more secure assets. The MTN market has been lively, especially for public offerings of sovereign, financial corporation and agency instruments. Moreover, fluctuations in interest rates and exchange rates have led to a reduction in turnover of derivatives-based issuance, as call options have in some instances not been exercised. Demand has been brisk for instruments from higher-rated issuers with low BIS risk weights. Financial institutions have benefited from this development, as investors have been seeking spread. Less supply of corporate issues has driven investors towards financial institution securities, which essentially are a similar type of asset.

### *... and spreads narrowed in 2003*

Spreads narrowed in 2003, partly driven by expectations of a global economic recovery. This was particularly marked in spreads of corporates, which had experienced a widening in 2001 and 2002. Corporations took advantage of opportunities to refinance in 2003, which to a certain extent is reflected in reduced supply this year. Furthermore, corporation funding requirements remain somewhat subdued, as investment is sluggish and ample capacity appears to be available. Financing of mergers and acquisitions, which generally gives a large boost to market turnover, seems to be recovering after a lull.

Bank funding requirement remained high, sustained by refinancing of loans, lending to households and funding of real estate transactions. The maturities of their issues have been in the shorter to medium term and they have tapped the FRN market in Europe where 3-5-year issues have been in demand. Sovereigns, supranationals and agencies have also been issuing at these maturities.

### *Syndicated loans*

The syndicated loan market has been buoyant and favourable for issuers, as bank liquidity is sound. Banks have been increasing the size of their portfolios, but remain sensitive to credit ratings in their investments. Participation in syndicated loans has tended to be motivated by strengthening business relationships, in the hope of attracting auxiliary business. Icelandic banks have been regular participants in the syndicated loan market, but recently their issuance has shifted to the MTN market, predominantly with maturities of two to five years.

Conditions have been favourable for Icelandic banks in 2003 and so far this year. They enjoy high credit ratings and low risk weights and have emphasised shorter maturities in their issues. Íslandsbanki has the highest credit rating among Icelandic banks. New capital adequacy rules under Basel II could potentially affect credit terms in the future.

## Domestic markets

### *High operational security of Iceland Stock Exchange and Central Securities Depository ...*

The regulatory framework for Iceland Stock Exchange (ICEX) is very solid, based on the rules set by the EU and NOREX alliance, and comparable with those governing main western markets. ICEX is a financially strong institution<sup>23</sup> operating an advanced and reliable trading system which is used in the main Nordic exchanges. NOREX is an alliance of stock exchanges in Stockholm, Copenhagen, Oslo and Iceland. Helsinki Stock Exchange, which also owns the exchanges in Tallinn and Riga and a share in Vilnius Stock Exchange, is poised to join NOREX. It is expected to sign an agreement to that effect before the end of March 2004 and join the joint trading system (SAXESS) in the autumn. It is hoped that the Baltic stock exchanges will subsequently participate in the joint trading system. The Faroe Islands Stock Exchange cooperates closely with ICEX. Participation in NOREX involves operation of

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23. In 2003, Iceland Stock Exchange's net profit after tax amounted to 36 m.kr. on operating revenues of 363 m.kr. Its equity amounted to 180 m.kr., of a total capital of 250 m.kr.

the SAXESS system and application of similar regulatory frameworks. A joint trading system, with several partners sharing its operating costs, greatly enhances operational security. The trading environment is fully computerised, and settlements are mostly electronic as well. On-line communication with the other member exchanges was the chief concern regarding operational security and has been addressed by opening more submarine telephone cables to Iceland.

The Icelandic Securities Depository (ISD) operates under the provisions of the Act on Electronic Registration of Title to Securities. Its establishment marked a major step forward in efficiency by eliminating the costs associated with paper securities and has significantly increased security of trading and settlements as well. ICEX and ISD are owned by the same holding company, Eignarhaldsfélag Verðbréfabings hf.

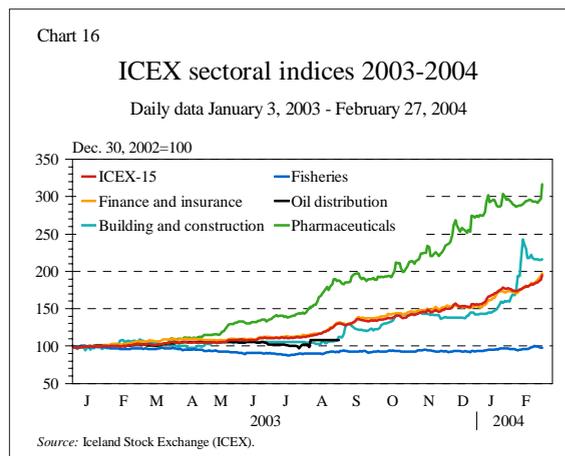
*... but the main weaknesses are the small size of the market and limited number of bonds and market participants*

The small size of the market, and the limited number of actively traded securities and market participants, are ICEX's main weaknesses. Although turnover in 2003 amounted to 1,578 b.kr., the market is tiny by international standards. In 2003, the top 15 traded equities accounted for 83% of total turnover; however, six of these companies have now been delisted. Furthermore, 12 bonds accounted for 87% of total bond turnover in 2003. No trading took place with 57% of listed bonds last year. Clearly the small number of actively traded bonds curbs exchange activity and creates a fairly narrow spectrum. There were 19 members of ICEX in 2003, of which the three largest<sup>24</sup> accounted for 80% of equity trading and 71-77% of other trading. Few market players and few actively traded securities always create the risk of imperfect competition and fragmentary price formation.

24. Figures for Kaupþing banki hf. and Búnaðarbanki Íslands hf., which merged in 2003, are combined for the whole year.

*More turnover but fewer investment options*

Eighteen companies were delisted from ICEX in 2003. There were several reasons for this record number of delistings in a single year. The new owners are usually investment companies, and although some of them are also listed on the market, opportunities for direct public share ownership in listed commercial enterprises has been curtailed as a result. To some extent this has made the Icelandic equity market less transparent. With fewer listed companies, pension funds and UCITS are left with fewer companies to target according to rules governing their operations and their investment strategies. Many of these funds are obliged by their investment strategies to maintain part of their portfolios in listed domestic equities, and some are obliged to mirror the composition of the ICEX-15 index. Delistings channel demand towards the remaining listed companies. It is noteworthy that pension funds were net sellers of domestic equities in 2003. Net sales amounted to just over 7 b.kr., but revaluation for the increase in share prices during the year was 27 b.kr.



*The Central Bank operates three interbank markets, ...*

Three interbank markets are operated by the Central Bank of Iceland. They are regulated, but their chief weaknesses are their small size and limited number of market participants. As provided for in legislation governing it, the Central Bank sets rules for interbank markets, formulating them in close consultation with market participants. Trading is conducted by telephone or the Reuters system and information is communicated on Reuters pages. A reasonable

degree of operating security is maintained, and has been greatly enhanced by additional submarine telephone cable links. Telephone outage has occasionally prevented interbank market functionality.

#### *... for foreign exchange, ...*

There are three members of the FX market. This leaves the market fragile and creates problems in the event of outage at one of the participants. Turnover in the FX market in 2003 was 1,185 b.kr. Although this is a fairly large amount, a substantial part of it reflects capital going in circles. The scope of real trading is difficult to estimate, but it could be pointed out that Central Bank currency purchases in this market last year, which amounted to 43 b.kr., matched 2/3 of the largest participant's net sales in the market. Experience has shown that the FX market is highly sensitive to changes. The Central Bank has been active in this market and its readiness to facilitate very large transactions helps to reduce volatility.

#### *... domestic currency ...*

Three of the six participants operating in the interbank króna market are very large, and the other three much smaller. Participants can lend to or borrow from each other. Loans are unsecured and participants agree among themselves on credit lines, based on risk evaluation. In some instances this has caused gridlocks in the market when all the credit lines have been fully utilised, and no recourses have been available for unblocking them. Such a situation is much more likely when total liquidity is tight, and a solution clearly needs to be identified. If the market were backed up with guarantees (collateral), gridlocks would be unlikely to form. Turnover in the interbank króna market amounted to 585 b.kr. last year.

#### *... and currency swaps*

The interbank market for currency swaps was set up to open up new avenues for trading and ease liquidity formation. Participants are the same as in the FX market. Experience of this market has been positive, especially when liquidity has been tight. Turnover was 110 b.kr. last year and 177 b.kr. in 2002, which was the market's first full year of operation.

#### *Interaction of interbank markets and securities markets*

Although the interbank markets are not formally linked with ICEX, the impact of trading is often felt in them. Leveraged buying of equities and bonds is generally reflected immediately in the FX market, where the foreign currency has to be converted. A corresponding effect is felt in the case of major sales to foreign entities. A chain reaction may result, whereby an appreciation of the króna encourages foreign borrowing for investment in domestic securities. The effect can also operate in the opposite direction, i.e. lower prices reduce collateral which leads to repayments of loans and purchases of currency, resulting in a lower FX rate.

#### *Payment and settlement systems*

##### *Development of payment systems*

Two types of payment system are in operation in Iceland, both of them settlement systems, i.e. the Central Bank's real-time gross settlement (RTGS) system and the netting system operated by Fjölgreiðslumiðlun hf. (FGM). Settlements of securities transactions are processed by the former system. Participants are the commercial banks, savings banks and Central Bank. The Icelandic Banks' Data Centre (RB) provides software services for both systems and the Central Bank acts as a settlement provider.

The Central Bank's RTGS system entered service in December 2000. It handles final settlement of individual payment orders of 10 m.kr. or above as soon as the deposit in the payer's account allows this to be done. The system thereby transfers payment orders which are above the minimum needed to qualify for the RTGS system directly to or from participants' current accounts with the Central Bank.

The FGM netting system handles netting of accumulated payment orders between participants lower than 10 m.kr. Real-time netting positions between system participants are visible so that they can monitor and manage payment intermediation risks. Customers have access to money deposited in accounts as soon as payment is made. Participants negotiate authorisations for netting positions between them and pledge securities as collateral for the highest individual authorisation. They can also

deposit liquid funds in dedicated accounts to meet temporary imbalances in payment positions between them. Settlements are made on participants' RTGS accounts in the Central Bank at 17.00 hrs.

Since 2001, the Central Bank has been working in close collaboration with FGM, RB and credit institutions on development of payment systems with the aim of bringing them into compliance with the BIS Core Principles for Systemically Important Payment Systems. This work has focused on clarifying the qualifications and responsibility of management and netting system participants. Settlement processes have been reviewed with respect to finality of payments and timing of settlements. Risk management has been strengthened by defining and monitoring risks, making debt positions visible, restricting debt positions and requiring collateral for settlements. Arrangements for oversight, communication of information and contingency plans have also been reviewed.

An important aspect of this work has been to adopt rules on the main elements of payment system operation, which have been under preparation since 2002. On October 20, 2003, the Central Bank

adopted two new sets of Rules on payment systems: Rules No. 788/2003 on the Central Bank's Real-Time Gross Settlement System and Rules No. 789/2003 on Activities of Netting Systems. The Rules are based on the Central Bank of Iceland Act No. 36/2001 and entered into force on November 1, 2003. Furthermore, they expand on provisions in Act No. 90/1999 respecting the Security of Transfer Orders in Payment Systems, which in turn is based on Directive 98/26/EC of the European Parliament and of the Council of 19 May 1998, on settlement finality in payment and securities settlement systems. The principle aim of the Rules is to promote financial stability and enhance legal certainty and transparency in system operations.

Work was completed in 2003 on payment system software modifications to accommodate the provisions of the new Rules. At the end of the year the systems were designated and notified to the EFTA Surveillance Authority in accordance with Act No. 90/1999. The RTGS system and netting system have thereby been recognised as legitimate payment systems in Iceland and across the European Economic Area.

## Appendix The foreign debt position of commercial and savings banks and systemic reforms

### *Net foreign position of commercial banks and savings banks has deteriorated considerably in recent years*

A striking feature in recent coverage of the commercial banks' and savings banks' foreign debt has been its rapid rate of growth along with the short-term nature of the borrowing. Foreign assets have also increased, so the net debt position has grown by less than the gross position. From the viewpoint of financial stability it is important to distinguish between net and gross debt, and it is not enough merely to monitor the position of debt net of assets. Assets and debts are intrinsically different, with different risk levels. Foreign debt of commercial banks and savings banks comprises issued bonds and borrowing from banks, while their assets are in the form of lending to foreign borrowers, deposits abroad, and equities and other securities.

borrowers to be domestic entities with no foreign currency income. The Central Bank's rules on foreign exchange balance ensure that the commercial banks' and savings' banks total foreign currency-denominated assets and liabilities are in broad balance. While these rules limit the banks' own direct foreign exchange risk, the same does not apply to their customers.

### *Detailed analysis of the foreign position of the three largest commercial banks*

Over the whole of 2003, claims by foreign entities on commercial banks and savings banks surged by 69%. These banks' claims on foreign entities grew by proportionally even more over the same period, swelling by 148%. Nonetheless, the net position deteriorated in 2003 (see Chart 1).

To identify which accounting items changed most during the year, a comparison was made using data from reports on residual maturity, monetary indicators and liquidity for the three largest commercial banks. Data for the respective foreign positions of Kaupping banki and Búnaðarbanki Íslands at end-2002 were combined and compared with those of the merged KB banki on December 31, 2003. Glitnir asset leasing company merged into Íslandsbanki last year and a number of smaller domestic financial companies changed hands which could affect this comparison, while KB banki acquired several others in other countries. No attempt was made to adjust the figures to accommodate these factors, and the reports on which the survey was based are not comparable in all cases. However, the overall picture ought to be fairly clear.

### *Sizeable growth in claims on foreign entities in 2003 ...*

The commercial banks' and savings banks' claims on foreign entities increased by 186 b.kr. from the end of 2002 to end-2003. For the three commercial banks alone, the increase was broadly the same. The time to maturity of the commercial banks' and savings banks' claims shortened slightly in 2003 – a breakdown of their residual maturity is shown in Chart 2. As regards changes in individual asset

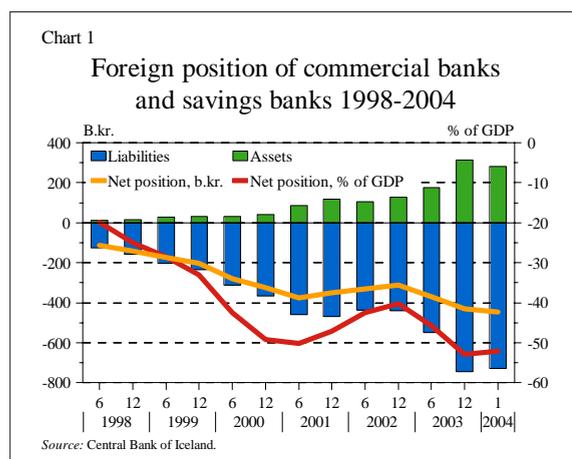
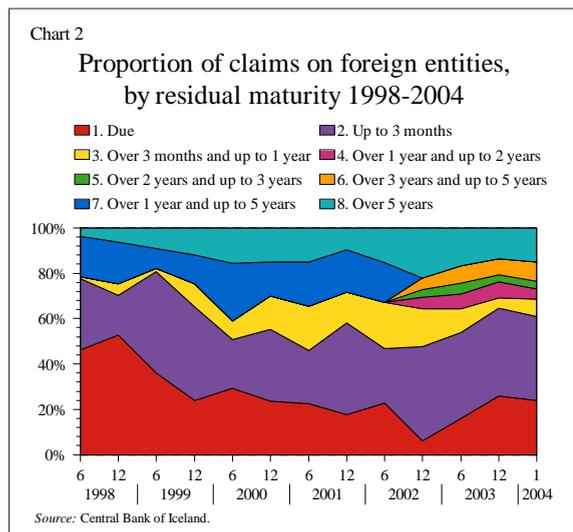


Chart 1 shows that total liabilities amounted to 742 b.kr. at the end of 2003, and that the net debt position had grown from 201 b.kr. at the end of 1999 to 430 b.kr. in December last year. As a proportion of GDP, net debt increased from 33% to 53% over the same period. This large inflow of foreign capital has been channelled into foreign currency-denominated lending to domestic businesses and on a small scale to households (4.1% of their total outstanding debt at the end of 2003). The more that exchange-rate indexation is used, the more common it becomes for

categories for the three commercial banks, lending to foreign entities accounted for 36% (67 b.kr.) of the increase and deposits in foreign currency 34% (64 b.kr.). Another major asset category that swelled during the year was deposits in Icelandic currency in foreign banks, which accounted for 16% (30 b.kr.) of the rise in claims on foreign entities.<sup>1</sup>

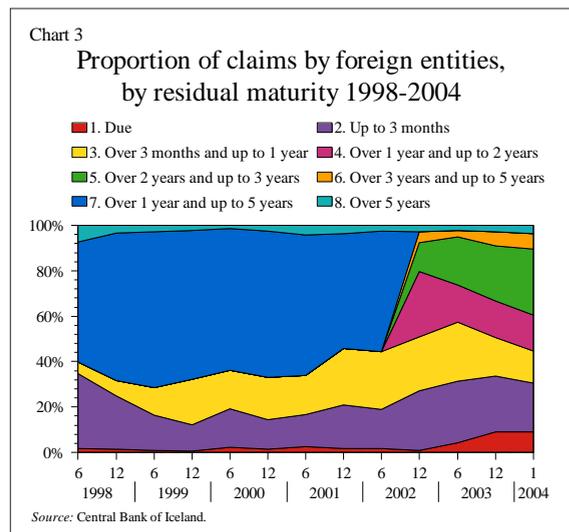


... but foreign entities' claims on the commercial banks grew by even more

Foreign entities' claims on commercial banks and savings banks increased by 303 b.kr. from the end of 2002 to end-2003. Claims on the three largest commercial banks rose by 305 b.kr. over the same period. Residual maturity of foreign entities' claims lengthened marginally, as Chart 3 shows. One category overshadows all other foreign liabilities of the three commercial banks: foreign currency-denominated securities issues with a maturity of more than one year. These soared by 207 b.kr. last year, accounting for 68% of total growth in claims by foreign entities. However, this increase needs to be seen in the context of a drop in long-term borrowing for relending amounting to 83 b.kr. As pointed out before, the increase in securities issues may be explained by the growth in the banks' MTN programmes, which appear to be replacing direct foreign borrowing by the banks to a substantial

1. It should be noted that in some cases the entity involved might be a foreign subsidiary of the respective bank.

degree. A sizeable increase also took place in issues of foreign currency-denominated securities with a maturity of less than one year, which grew by 78 b.kr. last year.



### What are MTN programmes?

A common format for securities issuance in the European market is through European Medium-Term Note (EMTN) programmes. In order to qualify to issue under an MTN programme, the issuer must undertake to fulfil specific conditions and the market generally requires the issue to be awarded a credit rating from a recognised agency. MTN agreements include stipulations on maximum amount of the total issue and a panel of appointed dealers, as well as general provisions on the liabilities that the notes confirm. In this way the programme aims to minimise paperwork in corporate and sovereign instrument issuance and trading. Issues made under these programmes enable more flexibility in credit procurement, reduce issuance costs and give access to a broader investor group. Greater access to institutional investors is particularly important.

The three commercial banks, the Republic of Iceland and Landsvirkjun (the National Power Company) have all set MTN programmes in recent years. Landsvirkjun was first in spring 1998, FBA hf. (investment bank, later merged into Íslandsbanki) followed a year later, the three commercial banks launched programmes over the period 2000 to 2002

Table 1 Icelandic MTN programmes<sup>1</sup>

	<i>Treasury</i>	<i>Landsvirkjun</i>	<i>Íslandsbanki hf.</i>	<i>FBA hf.</i>	<i>Landsbanki Íslands hf.</i>	<i>Búnaðarbanki Íslands hf.</i>	<i>KB banki hf.</i>
Ceiling	1,500 USD	1,000 USD	2,500 EUR	1,500 EUR	2,500 EUR	1,000 EUR	2,000 EUR
Outstanding	1,027 USD	912 USD	2,262 EUR	71 EUR	1,602 EUR	145,3 EUR	1,369 EUR
First deal (dd.mm.yy)	22.03.01	19.05.98	23.03.00	24.02.99	28.04.00	09.07.02	24.06.03
Latest review (dd.mm.yy)	28.05.03	12.08.03	22.07.02	01.03.00	19.02.04	...	...
First issue (dd.mm.yy)	06.03.01	10.07.98	12.04.00	30.03.99	May 2002	Oct. 2002	July 2003
Latest issue (dd.mm.yy)	12.05.03	22.03.04	11.03.04	31.01.00	10.03.04	20.02.03	17.02.04
Largest issue	250 EUR	150 EUR	350 EUR	60 USD	400 EUR	75 EUR	500 EUR
Longest tenor (years)	10	30	20	5,16	30	10	10
Shortest tenor (days)	913	730	362	1.827	183	540	183
No. of issues	7	27	59	3	31	5	16

## Amount and no. of issues, by currency

EUR	977 (6)	550 (14)	1,786 (33)	.	1,559 (21)	135 (4)	1,165 (12)
USD	100 (1)	310 (11)	328 (7)	60 (1)	.	.	101,05 (2)
JPY	.	1,700 (1)	17,000 (8)	3,000 (2)	19,200 (6)	.	5,000 (1)
GBP	.	.	183 (4)	.	25 (1)	.	30 (1)
CAD	.	.	48 (3)	.	7 (1)	.	.
HKD	.	.	200 (1)	.	50 (1)	100 (1)	.
CZK	.	.	500 (1)	.	.	.	500 (1)
ISK	.	670 (1)	550 (2)	.	.	.	6,000 (3)
SEK	.	.	.	.	.	.	300 (1)
NOK	.	.	.	.	100 (1)	.	.

1. All amounts in millions. Data from Reuters, March 3, 2004. Includes agreed issues not due for payment until later in March.

and the Treasury negotiated a programme in March 2001. In general, Icelandic MTN issues have gone very smoothly and have been growing annually. Between them, the three commercial banks are authorised to issue €5.7 billion of debt, and Íslandsbanki has the highest ceiling at €2.5 billion. The Treasury and Landsvirkjun together have a ceiling of €2 billion. Table 1 presents details of the MTN programmes in which the banks, the Treasury and Landsvirkjun are involved.<sup>2</sup> It shows that notes are still outstanding under MTN programmes made by FBA hf. and Búnaðarbanki Íslands hf. These programmes have been closed, i.e. no further issues can be made under them, and the outstanding amount is €215 m. The single largest issue made by an Icelandic entity is a €500 m. issue by KB banki hf. in

July last year, and next-largest a €400 m. issue made by Landsbanki Íslands hf. in March the same year. Landsbanki Íslands hf. and Landsvirkjun have made the longest Icelandic issues currently in the system, with a tenor of 30 years. Landsbanki Íslands hf. also

Table 2 Issuing currencies

%	<i>Commercial banks</i>	<i>Treasury and Landsvirkjun</i>
EUR.....	78.3	81.4
USD.....	6.6	17.5
JPY.....	5.5	0.7
GBP.....	6.0	.
CAD.....	0.6	.
HKD.....	0.6	.
CZK.....	0.5	.
ISK.....	1.3	0.4
SEK.....	0.5	.
NOK.....	0.2	0.0

2. Based on data from Reuters (MTNINDEX). Some discrepancies are possible between data recorded there and the real position, but should not alter the overall picture.

shares the shortest tenor with KB banki hf., both at 183 days.

Íslandsbanki hf. has the most diverse currency composition in its MTN programme with outstanding issues in eight currencies, including 550 m.kr. in Icelandic currency. KB banki hf. comes just behind with seven currencies. Íslandsbanki also has the largest number of single issues, namely 59 as of March 3.

Around 80% of MTN issues are denominated in euros. Some 17.5% of issues by the Treasury and Landsvirkjun are in US dollars, but only 6.6% by the commercial banks. Also, 6% of commercial bank issues are in sterling and 5.5% in yen. These figures do not necessarily reflect the final currency composition of liabilities, because the liabilities can be altered with derivatives.

Table 2 shows remaining facilities under the MTN programme. The programme sets a ceiling at a fixed amount in either euros or US dollars. For example, the Treasury has a US dollar-denominated facility and if it issues a euro series the amount is converted to USD at the dollar-equivalent exchange rate on the date of issuance. This is done for all issues in other denominations than US dollars. The remaining facility is calculated as the ceiling less cumulative issues at the dollar-equivalent exchange rate at any time. On the basis of these calculations, all the Icelandic issuers had room for issuance under their facilities in March.

*One driver of debt is interest-rate differential, although this has been narrowing in the recent term ...*

The interest-rate differential between Icelandic and international financial markets, with higher domestic than foreign long-term rates, has given impetus to foreign debt accumulation, which has been the case for a long time and presumably will remain so. Icelandic commercial banks and savings banks have easy access to foreign credit markets, and this has never been easier than over the past two years. Ample access to foreign financing has prompted commercial banks and savings banks to offer foreign currency-denominated loans for a wider range of purposes and to more groups of borrowers than before. For example, leasing companies' contracts for vehicle and machinery purchases are largely denominated in foreign currencies. Partial or full currency-linked mortgages are now available as well. It should be borne in mind that financial services in the form of basket loans and exchange-rate hedging derivatives can simplify and soften the risks entailed by foreign borrowing, if customers chose to take advantage of them.

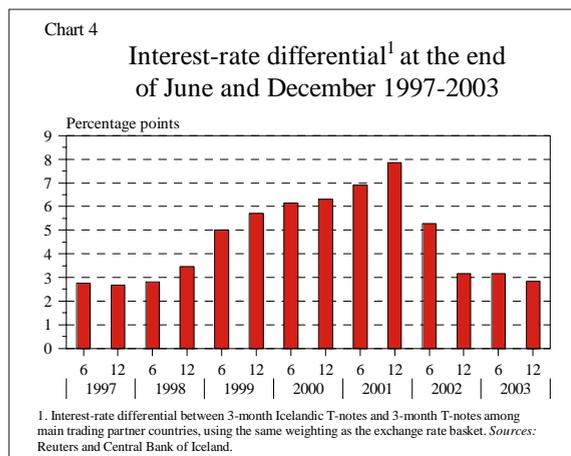
Over the period 1997-2001 the interest-rate differential with abroad widened, but since the end of 2001 it has narrowed again and is currently broadly the same as at the beginning of the period. The development of the interest-rate differential with abroad can hardly be the sole explanation for

Table 3 Room for issuance under Icelandic entities' MTN programmes<sup>1</sup>

<i>Outstanding as per Reuters</i>	<i>Treasury</i>	<i>Landsvirkjun</i>	<i>Íslandsbanki hf.</i>	<i>FBA hf.</i>	<i>Landsbanki Íslands hf.</i>	<i>Búnaðarbanki Íslands hf.</i>	<i>KB banki hf.</i>	<i>Total</i>
EUR .....	822	730	2,262	71	1,758	145	1,369	7,156
USD .....	1,027	912	2,826	88	2,001	181	1,710	8,745
<i>Ceiling</i>								
EUR .....	1,201	801	2,500	1,500	2,500	1,000	2,000	11,501
USD .....	1,500	1,000	3,123	1,874	3,123	1,249	2,498	14,367
<i>Room for issuance</i>								
EUR .....	379	70	238	Closed	742	Closed	631	2,061
USD .....	473	88	297	Closed	1,122	Closed	789	2,770
<i>Outstanding as per Central Bank calculations<sup>2</sup></i>								
EUR .....	1,057	819	2,518	70	1,758	145	1,444	7,810
USD .....	1,320	1,23	3,145	88	2,196	181	1,804	9,757

1. All amounts in millions. Data from Reuters, March 3, 2004 and Central Bank calculations.

2. Based on the exchange rate on March 3, 2004 (www.oanda.com).



mounting foreign debt in recent years. However, businesses have probably become more sensitive to interest rates and the interest-rate differential alongside the ever-increasing opening of the economy, liberalisation of markets and competition.

#### *...and various systemic reforms*

Many landmarks have been reached in the financial markets in recent years. Systemic reforms and innovations in services have tended to increase the foreign debt position and change the nature of the risks faced by credit institutions and the Icelandic economy. Credit institutions, businesses and households have directly and indirectly been replacing Icelandic krónur with foreign currency in their balance sheets.

It is important to bear in mind a number of changes that have taken place over the past five years relating to commercial banks and savings banks:

1. Lending to foreign entities.
2. Investment in foreign market securities.
3. Overseas expansion of Icelandic banks with the establishment of foreign branches and subsidiaries.

4. Overseas expansion of Icelandic businesses with acquisitions of foreign companies, financed by Icelandic commercial banks.
5. Participation by Icelandic banks in foreign banks' syndicated loans.
6. Emergence of real estate management companies and other asset management companies, partly financed with foreign capital.
7. Leasing agreements are now largely foreign-financed.
8. Mortgages available denominated in foreign currencies.
9. Credit ratings for the largest commercial banks.
10. Icelandic banks have access to a deep market for debt instrument issues (MTN, ECP) by virtue of their credit ratings.

#### *Various consequences*

This development has already had wide-reaching consequences. Ample liquidity is available for foreign currency-denominated lending and borrowers face heightened exchange rate risk. As far as monetary policy and financial stability are concerned, the impact of changes in the Central Bank's policy interest rate has diminished accordingly – in particular in the corporate sector. This makes it more difficult to apply monetary policy measures to bring about cyclical adjustments. However, monetary policy still has undiminished potential for determining the long-term rate of inflation in domestic currency. It should also be borne in mind that the Central Bank's scope for providing liquidity facilities is becoming correspondingly narrower. While the Bank has virtually unlimited scope for providing domestic liquidity facilities to a credit institution with adequate capital, this is substantially restricted if the liquidity problem occurs in a foreign currency.