Financial stability¹

In the Central Bank's survey on financial stability, published in Monetary Bulletin 2002/2 in May, it was noted that external imbalance in the economy had been substantially reduced and that the macroeconomic fundamentals for financial stability had improved. Broadly speaking this trend has continued this year. However, the repercussion of the recent period of overheating may not have fully emerged and may weigh down the financial system over the next few years.

On the whole, macroeconomic indicators relevant to financial stability have improved somewhat since the spring, as the economy has gradually moved towards balance. The process of adjustment has been faster than expected, and the current account deficit has vanished even more rapidly than was assumed in the spring. Relatively favourable external conditions and an adjustment of domestic demand accompanied by an even sharper contraction in imports caused less strain on the financial system than could have been expected in light of contraction in domestic demand in 2001 and 2002. A sharp turnaround in the exchange rate of the króna during the first months of this year and relative stability since the spring are crucial factors in this respect. However, an accumulated problem may emerge later and could intensify if external conditions deteriorate. The scale of such a problem will to some extent be determined by the degree of success in maintaining the stability that has been achieved during this year.

Disinflation and more stable exchange rates have reduced the risk that the financial system faced from a potential decline in the capacity of household and corporations to service their debt, due a fall in real income or rising foreign currency denominated debt. Asset prices have also been more stable than could have been expected under the circumstances. The price of commercial and office premises has dropped considerably, however, and could continue to decline.

Little change has taken place in the position of commercial banks and savings banks since the last analysis. However, the commercial banks showed considerably higher profitability than the largest savings banks during the first half of this year. Expansion of credit institutions' balance sheets has slowed down in 2002. Credit growth dropped significantly during the first four months of this year, but lending has grown slowly since that time. It may be assumed that the full impact of the significant increase in lending over the period 1997-2001 has still not been felt in terms of loan defaults and loan losses. Credit institutions stepped up their provisions for loan losses this year. Little change has taken place in the capital adequacy ratio of the commercial banks and six largest savings banks. There have been major changes in ownership of the commercial banks this year and some uncertainty still prevails about ownership of savings banks.

The financial stability survey published in *Monetary Bulletin* 2002/2 noted a potential risk posed by unfavourable economic developments which could lead to a spiral of dwindling disposable income, falling real estate prices, deteriorating collateral, tighter credit and therefore a further drop in

^{1.} This article uses data available on October 31, 2002.

disposable income of households. Under the present conditions, the only possible catalyst of such scenario would seem to be a sizeable external trade shock, which would result in a weaker exchange rate, higher rate of inflation and unemployment. No such shock is however in sight. Although the position of credit institutions has improved in general, it is important to realise that defaults are likely to increase further and further loan losses could bring down their capital adequacy ratios. Under present conditions, credit institutions should preferably continue to boost their capital adequacy ratios and take a cautious approach towards stepping up their lending.

Macroeconomic indicators

External conditions are favourable despite delayed economic recovery among trading partner countries The economic recovery among Iceland's main trading partner countries has slowed down somewhat, as discussed in the preceding article on Economic and monetary developments and prospects. According to current projections and forecasts, economic growth will be somewhat slower in 2002 and 2003 than previously anticipated and figures for economic growth in the USA in 2001 have been revised downwards as well.

Export prices of marine products have remained buoyant, although they decreased somewhat in late summer. If the global economic contraction persists, and especially if private consumption growth slows down among trading partner countries, prices could drop further. Moreover, exceptional conditions in the European agriculture, which affected the food market last year and supported relatively high marine product prices, will gradually return to normal. Metal prices have gone down, including aluminium. According to CRU Group International² the outlook is for a further decline in aluminium prices. Because aluminium smelters in Iceland are owned by foreign investors who largely fund their activities abroad without the intermediation of domestic financial institutions, Iceland's financial system has scant vested interests in metal production. Consequently, the development of aluminium prices is not a cause

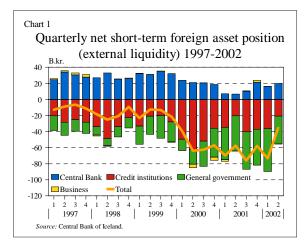
of concern from a financial stability perspective. On the whole, the terms of trade remain favourable and no serious shocks to exports are foreseeable, although their growth will slow down according to forecasts, as discussed on pp. 20-24.

Current account in balance, stable exchange rate and rapidly declining inflation contribute to financial stability

The current account deficit has narrowed even faster than assumed in the Central Bank's last financial stability study in *Monetary Bulletin* 2002/2. According to current forecasts, which do not assume any aluminium smelter project, the deficit will be very small in 2003 and certainly sustainable. The contraction in national expenditure is estimated at 3.5% this year, following last year's 3% contraction - marginally more than had previously been assumed.

The exchange rate has been by and large stable since the spring, when the króna had strengthened significantly after reaching a low in November 2001. The exchange rate strengthened somewhat in May and again in late summer, while this autumn it has been at broadly the same level as in May. Exchange rate developments have been a major contributor the sharp decline in inflation since the spring. From a financial stability perspective these developments are important, because they has prevented a sharp deterioration of real incomes and contributed towards a relative tranquility in the labour market.

Iceland's short term asset position has been seen as a sign of vulnerability over the past two years,



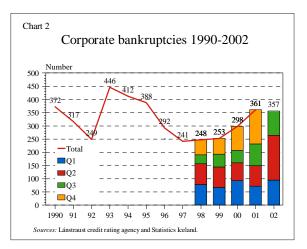
CRU Group International of London is a leading global information provider and consultant on metals, energy and earth materials.

making the economy sensitive to shocks to the supply of foreign credit and prone to exchange rate instability. The short term asset position was at its nadir at the end of Q3/2001, when it was negative by 76.3 b.kr., of which 40.2 b.kr. was accounted for by credit institutions. By the end of Q2/2002, the position had improved by more than half. Thus the risk has eased significantly, although Iceland's foreign liquidity position is still some way from balance. As long as short-term foreign borrowing remain relatively favourable, short term foreign liabilities are likely to be reduced only gradually.

The stronger króna has boosted the balance sheets of corporate debtors, yet bankruptcies increase

Last year, many businesses sustained considerable shocks to their balance sheets with the weakening of the króna. A number of bankruptcies can be traced to such upheavals, since the liabilities of a large number of companies are to a large degree denominated in foreign currency. In 2002, the impact of last year's currency depreciation has been reversed to a large extent, as clearly shown by the accounts of companies listed on Iceland Stock Exchange (ICEX). A large number of these businesses are exporters. Thus their EBITDA increased at the same time as the slide in the króna hit their balance sheets, enhancing their ability to service larger debt. In fact, EBITDA among fisheries companies reached a record level last year, since product prices in foreign markets were quite favourable at the same time as the appreciation of foreign currencies against the króna boosted revenues in terms domestic currency. This year, companies listed on ICEX have continued to show good EBITDA and a sizeable increase in sales turnover, 14.5% during the first half of the year. Profit after tax has grown substantially. The position of IT, retail, service and communications companies has improved, although still weak, since their domestic activities are relatively more important than in case of the fisheries and the manufacturing sectors. Estimated after tax profit of sectors that are broadly domestic in their orientation is projected at roughly 6% in 2002, and profit of export sectors just over 10%. Bankruptcies and operational difficulties which have emerged in the retail and service sector, however, are mostly limited to companies which are not listed on the stock market. A September survey of the

expectations of 400 businesses, conducted in partnership with Gallup by the Central Bank and Ministry of Finance, revealed that smaller business as a rule were not as optimistic as larger ones about the prospects for growth and profits in the following 6 months.³ Nonetheless, a majority of them still expects their profit and turnover to increase. Exceptions are medium-size enterprises with 50-99 employees, which foresee a contraction in turnover this year, and manufacturing companies, which expect a minor contraction in turnover. In real terms all businesses assume only a modest growth in turnover, which implies that a fairly large group of firms are expecting some contraction in real terms.



Corporate debt has grown by leaps and bounds in recent years, as explained in previous fiancial stability reports. Debt accumulation was particularly large last year, to a great extent due to the exchange rate depreciation. At the end of last year corporate liabilities towards the credit system were estimated at 963 b.kr., equivalent to roughly 130% of GDP. Foreign liabilities accounted for almost half of this figure. The outlook is for some decline in corporate liabilties relative to GDP this year. A rough estimate puts it at 125% of GDP at year end. This turnabout can be attributed solely to this year's appreciation of the króna, which in this projection is assumed to be 14%. In the absence of the appreciation, foreign business

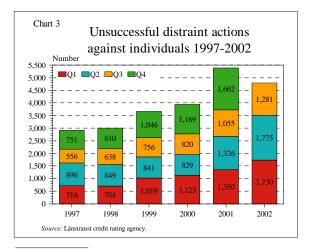
^{3.} Results of this survey are discussed in more detail on p. 10 in the Article *Economic and Monetary Developments and outlook*.

liabilities at year-end would have been roughly 60 b.kr. greater than otherwise, and debt service (i.e. interest payments and amortisation) close to 20 b.kr. higher. Thus the strengthening of the króna has clearly lifted a sizeable burden from many indebted corporations.

Nevetheless, bankruptcies are likely to rise in the aftermath of the debt accumulation in recent years. Over the first nine months of the year, the number of corporate bankruptcies were already as many as during the whole of last year, when it also rose substantially. A rising number of unsuccessful distraint actions against businesses also indicate more bankruptcies next year. The high ratio of wages in gross factor income and correspondingly low profit margins could indicate an underlying problem among companies not listed on ICEX.

Lower inflation strengthens the position of households but financial difficulties have increased as the debt service burden increases

After years of rapid debt accumulation and soaring debt service burden last year, more households can be expected to face serious financial difficulties. One indicator of this is the increase in unsuccessful distraint actions among individuals. Over the first 9 months of the year they were up 28% compared with the same period last year and more than double the average for 1996-1999.⁴



4. Claimants (headed by the Directorate of Customs in Reykjavík) generally no longer insist on bankruptcy proceedings unless assets are at hand; unsuccessful distraint action is otherwise allowed to suffice.

Nonetheless, in many respects households face more favourable circumstances than the outlook suggested for a while. Diminishing inflation during 2002 meant that real wages were running higher in the course of the year than had been foreseen at its beginning. The outlook is for wage increases in the course of the year somewhat in excess of what had been forecast earlier at the same time as inflation was below forecast. From the viewpoint of financial stability, however, the distribution of wage rises must be taken into account. Wage gains have been much larger in the public sector than the private sector. In O1 private sector real wages had shrunk by roughly 2% from the previous year, but in Q3 the year-on-year gain measured 1.5%. For the year as a whole, the outlook is for roughly unchanged real wages from 2001. Unemployment, seasonally adjusted, on the other hand, continues to grow steadily. Since April the employmend trends in the Greater Reykjavík Area and in the regions have not diverged significantly.

In the Central Bank's macro economic forecast, published in this issue of *Monetary Bulletin* for the first time, real disposable income is expected to grow slowly this year and next year.⁵ At such a low rate of growth real wages of some households are likely to decline. Tax changes, e.g. a sizeable reduction in mortgage interest rebates caused by a rise in asset values, to which they are linked, exacerbates the impact of the divergent real wage developments. Interest payments of households, in real terms, has continued to increase this year. Disposable income after net borrowing and interest payments, which was discussed at some length in *Monetary Bulletin* 2002/2, is therefore likely to drop even more between 2001 and 2002.

Household debt has increased further this year in pace with disposable income. At the end of this year liabilities are projected to be equivalent to roughly 175% of disposable income, compared with 170% at the end of last year. Recently one of the fasted growth has been in housing loans, which are invariably long-term. These figures suggest that although

This applies in particular to individuals and explains why fewer bankruptcies were recorded among them in 2001 and 2002.

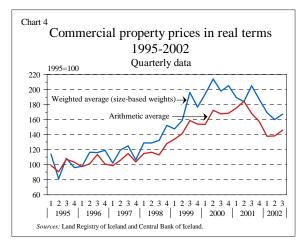
The Ministry of Finance's national economic forecast in October assumed a somewhat greater increase in real disposable income, or 1.5% between 2001 and 2002 and 2% next year.

households were forced to reduce their consumption on a sizeable scale last year and this year, they have still not reached the point of cutting back their indebtedness, as has happened widely in other countries under similar circumstances.

Residential accommodation prices have stayed higher than expected, while commercial real estate prices have gone down considerably

As described in the preceding article on Economic and monetary developments and prospects, residential housing prices have remained higher than had been expected. In real terms housing prices showed a considerable fall in the Greater Reykjavík Area last year, but this year they have risen somewhat. Various reasons for this trend have been outlined above, such as a rise in maximum loan amounts and changes to the social housing system which were introduced at a time when the supply of residential accommodation belatedly appeared to be moving into line with demand. Also, households' expectations about their future real disposable incomes have probably brightened significantly after inflation began to drop. In this sense the timing of these developments is favourable, dampening the risk of a sharp drop in housing prices during a period of contraction in domestic demand, since the trickle down of last year's injection into the housing market will take some time. The deteriorating employment situation and reduced migration to the Greater Revkjavík Area, however, should alleviate emerging pressures in the housing market in Reykjavík. When the temporary impact of last years injection begins to fade out, downward pressure on housing prices is likely to resume. In view of the nascent economic recovery and bearing in mind the crowding-out effect of proposed large-scale industrial projects, if realised, the outlook is for a more modest and slower correction in residential housing prices than envisaged a year ago. The housing investment ratio is still relatively low in a historical context, although investment has increased considerably over the past two years. Thus large-scale overinvestment in residential accommodation hardly seems likely.

In 2000, commercial real estate prices were much farther from their historical average than residential housing prices, peaking at a level roughly twice as high in real terms than in the middle of the last



decade. Thus the financial system probably faces higher risk from a potentially much larger and faster decline in commercial real estate prices, which in real terms could conceivably return to their pre-boom level. A considerable drop has already taken place there, especially in retail and office premises, which are down by roughly one-fifth in nominal terms from their highest value, which was recorded last year. Although heterogeneous properties making such measurements uncertain the trend is obvious. Industrial premises, which have experienced sharp price swings in recent years, seem to have risen again in Q3, however, and reached a similar level to their peak in 2000. In spite of this, the construction of commercial real estate has continued at a significant pace, cf. the discussion above, since prices are still high in historical terms and there is less construction work in other fields. Thus commercial real estate price developments still pose a considerable risk for credit institutions.

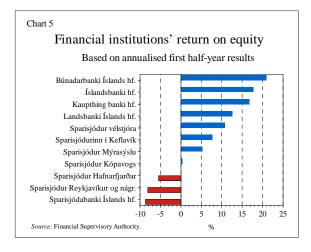
Equity prices have been fairly stable, despite a slide in foreign markets

Equity prices have remained relatively stable since the spring, despite a slide in foreign markets during the year. Given that this divergence is largely rooted in the distinctive features of the Icelandic market, there do not seem to be strong reasons to conclude that Icelandic share prices will drop in line with foreign equity markets this year. However, growing signs of rather anaemic growth of private consumption in some of the main trading partner countries could put downward pressure on marine products prices and hence shares in fisheries companies. On the other hand, there still appears to be considerable potential for rationalisation within the fisheries sector, which gives the most dynamic companies significant scope for growth and could could counteract any preasure on their share prices.

Aggregate microprudential indicators

Profitability of finance companies varied ...

Most of the commercial banks⁶ reported an excellent rate of return⁷ in their six-month interim statements. However, Icebank reported a loss. Of the six largest savings banks,⁸ only one reported a rate of return above 10%, while SPRON and Hafnarfjördur savings banks generated a loss and Kópavogur Savings Bank made a profit of 1 m.kr. after tax. These companies discontinued inflation-adjusted accounting principles in their statements this year, and their profit over the first six months would have been lower had they not done so.

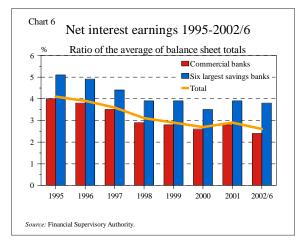


... and net interest earnings declined ...

Net interest earnings⁹ of the commercial banks¹⁰ and six largest savings banks narrowed on the whole dur-

9. Interest income less interest expenses as a ratio of the average of bal-

ing the first half of this year, after the surge of inflation in 2001, and will clearly be somewhat lower in the final statements for 2002 than in those for last year.



On the whole, net interest earnings have contracted in recent years while income from other activities has increased. In the first half of this year, trading gains on other financial activities than traditional banking activities accounted for a large share of the profit at Búnadarbanki Íslands hf. and Kaupthing Bank hf., while all the commercial banks apart from Kaupthing reported a loss on this item in their final statements for 2001. In this year's first-half statements, trading gains on other financial activities were recorded by all commercial banks and the six largest savings banks, apart from Icebank and Keflavík Savings Bank.

Earnings from equities and other shareholdings have also been prone to swings over the years, especially among the savings banks, which in recent times have mainly focused on trading with their shares in Kaupthing, as discussed in previous articles on financial stability. In the final statements for this year, such revenues can be even be expected to exceed those for last year at several companies. Landsbanki Íslands hf. sold a large holding in

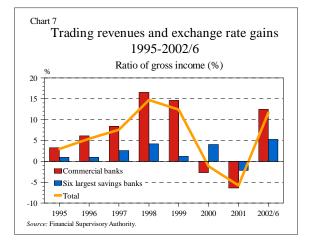
Búnadarbanki Íslands hf., Íslandsbanki hf., Kaupthing Bank hf., Landsbanki Íslands hf. and Icebank (Sparisjódabanki Íslands hf.).

The ratio of net profit to the average between equity at the start and end of the period, less profit for the period. Annualised figure.

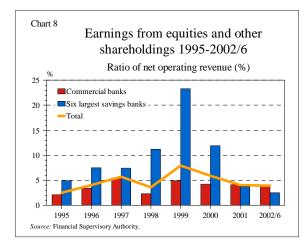
i.e. SPRON, Hafnarfjördur, Sparisjódur vélstjóra, Keflavík, Mýrasýsla and Kópavogur.

ance sheet totals at the beginning and end of the period. Annualised figure.

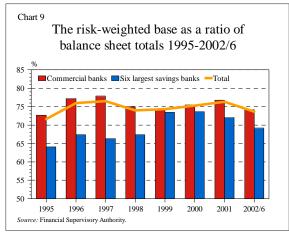
In discussions of commercial banks, the following applies: The Fisheries Investment Fund and Industrial Loan Fund are included in figures from 1995 to 1997. FBA hf. is included from 1998 to 1999 and Kaupthing Bank is included from 1996.



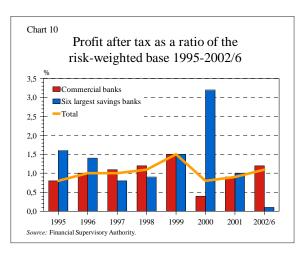
Vátryggingarfélag Íslands hf. (VÍS) insurance company in August, and consequently entered a trading gain of more than 900 m.kr. to its accounts.¹¹ At the end of September Kaupthing sold the part of Frjálsi fjárfestingarbankinn hf. that had not been merged into its own operations, to SPRON. According to an announcement to ICEX, gain on this sale amounted to 1.5 b.kr. before tax.



Other financial activities than traditional lending and borrowing have grown in recent years and intensified the swings in finance companies' profitability. One yardstick for evaluating whether the operating



risk of finance companies has increased is the riskweighted base¹² as a ratio of balance sheet totals. Over the past eight years, operating risk seems to have grown at the six largest savings banks, measured against this criterion, while the commercial banks' operating risk has been fairly even; savings banks increasingly embarked on other financial activities than traditional deposits and lending. However, profit does not seem to have grown in pace with the greater risk, judging from figures for profit after tax as a proportion of the risk-weighted base. Inherently, profit swings have become more exaggerated, as discussed above.

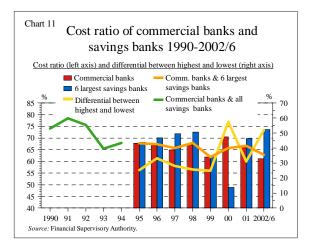


^{12.} The risk-weighted base covers lending risk, currency risk, position risk, counterparty risk and specific risks on large exposures. For a more detailed description of the risk-weighted base, see the last financial stability study in *Monetary Bulletin* 2002/2, Appendix 1.

^{11.} Landsbanki still owns a share of 118 m.kr. nominal in VÍS. The bank has the right to sell 115 m.kr. nominal and must announce whether it will exercise this right before January 1, 2003 - if so, the transaction will be made on February 1, 2003.

... and cost ratio has fallen

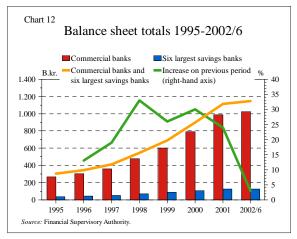
On the whole the cost ratio¹³ of commercial banks and the six largest savings banks went down from 66.7% at the end of 2001 to just over 62.8% in this year's six-month interim statements. However, the trend was not the same among commercial banks and savings banks - the cost ratio went up at the six largest savings banks to its highest level since 1992, while at commercial banks it fell. The interval between highest and lowest cost ratio figure for the commercial banks and six largest savings banks generally narrowed from 1996 but rose sharply in 2000, dropped again last year and has risen again this year. In this year's six-month interim statements there was an interval of 52 percentage points between the highest and lowest cost ratio.



The cost ratio of major Nordic banks appears to have fluctuated between 55% and 65% on average. Some Icelandic commercial banks and savings banks therefore seem to be on a par with banks in Scandinavia as far as cost ratio is concerned. However, some work lies ahead in cutting the cost ratio at various banks and savings banks.

A year-on-year comparison of cost ratio does not yield a clear picture, because of the great effect that income swings have on ratios. An example is the cost ratio of the six largest savings banks in 2000, when several of them sold their shares in Kaupthing or posted trading gains which had accumulated in their accounts because of Kaupthing. Their cost ratio went down to 49% then, only to rise to 70% a year after.

Balance sheet growth has decelerated but the slowdown in lending growth seems to have bottomed out From 1997 to 2001 the commercial banks and six largest savings banks witnessed an enormous expansion in their balance sheets, which has now slowed down significantly. For example, the commercial banks' balance sheets grew from the end of last year until the end of June by only 3.4% and the corresponding figure for the six largest savings banks was 1.6%.¹⁴

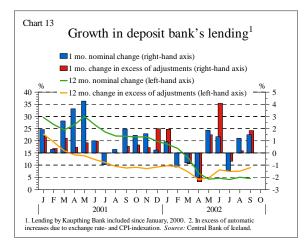


Twelve-month nominal growth in lending by credit institutions decreased during the first half of the year but now seems to have reached bottom. Twelve-month lending growth until the end of September was 4.6%.¹⁵ Just over 41% of credit institutions' lending was foreign-denominated at the end of September this year, compared with 44% at end-2001. From the end of last year until the end of this

 Including lending by Kaupthing bank although it did not become a commercial bank until the beginning of 2002.

^{13.} Operating expenses as a proportion of net operating revenue.

^{14.} The balance sheets of four institutions shrank from the end of last year to the end of June, namely Íslandsbanki (8%, lending and market securities), Icebank (8%, claims on credit institutions and lending), Hafnar-fjördur Savings Bank (0.6%) and Kópavogur Savings Bank (5.2%, market securities). If Kaupthing Bank's takeover of JP Nordiska goes through, the former's balance sheet will expand considerably. Allowing for the takeover of JP Nordiska and its merger with Audlind hf., Kaupthing Bank's balance sheet will grow by an estimated 56% from its half-year result.

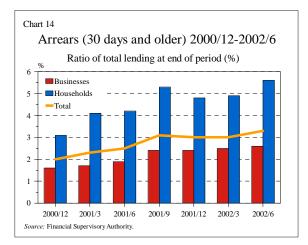


September, foreign-denominated lending by credit institutions has contracted by 8% in króna terms, but the exchange rate of the króna strengthened by just over 10% at the same time, meaning that foreigndenominated lending grew in real terms over this period. Some 6.4% of credit institution's lending was to foreign parties at the end of September, compared with 4% at end-2001. This represented a figure of 47.1 b.kr. at the end of September. The interesting point about these loans is their composition, because at the end of 2001 virtually all loans to foreign parties were denominated in foreign currencies, while at the end of September 22% of them were in króna, suggesting growing activity by foreign parties in the domestic market. From the end of last year to the end of this September, price-indexed lending by credit institutions grew by 1.7%, fractionally more than inflation over that period. The largest increase was in non-indexed lending, which went up by 16% from the end of the year to end of September. In making comparisons of lending figures for end-2001 and end-September this year, it should be remembered that Kaupthing Bank was not included in the end-ofyear figures for 2001 since it was not yet a deposit institution at that time. Excluding the effect of exchange rate and price changes, twelve-month growth of lending by credit institutions, including Kaupthing Bank, stood at 9% at the end of September and is on the increase.¹⁶

Twelve-month nominal growth of lending by investment credit funds, excluding the Housing Financing Fund, until the end of August amounted to 6.5%. The figure for the Housing Financing Fund over the same period was 11.8%.

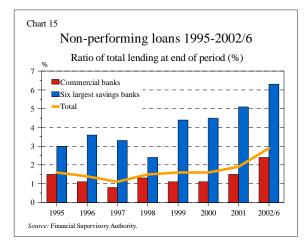
Defaults and provisions for loan losses have increased ...

According to data from the Financial Supervisory Authority, defaults by businesses and households have continued to increase this year. At the end of June, defaults by individuals and businesses, defined as arrears of thirty days or more with the commercial banks and six largest savings banks, amounted to just over 23.6 b.kr. As a proportion of total lending at the end of the period, defaults increased from 3% at the end of 2001 to more than 3.3% at the end of June 2002. Defaults by individuals amounted to 5.6% of lending to them at the end of June 2002, compared with 4.8% at end-2001. Businesses' defaults as a ratio of lending to them were just over 2.6% at the end of June, up from 2.4% at the end of last year. According to provisional Central Bank figures, defaults defined as arrears of thirty days and more with the commercial banks and six largest savings banks increased by 9% from the end of June to the end of September this year. As pointed out above, there has been an increase in bankruptcies and unsuccessful distraint actions among businesses and unsuccessful distraint actions among individuals this year, and this trend appears to be continuing.

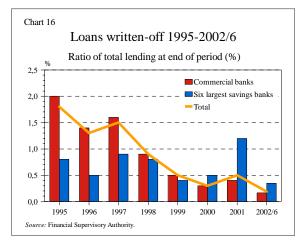


^{16.} Including lending to foreign parties.

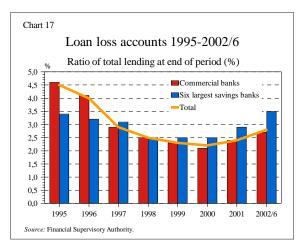
This development has an impact on the profitability of finance companies, which is best shown by the fact that non-performing loans¹⁷ as a proportion of total lending have increased in recent years and a particularly large increase took place from the end of last year until the end of June, from 1.9% to 2.9% at commercial banks and the six largest savings banks. Such an increase is understandable in light of the great credit growth that took place from 1997 until 2001.¹⁸



The ratio of loans that have been finally writtenoff to total lending at the end of the period rose during 2001 from 2000 when it reached its lowest point, and it is interesting to observe this increase between the years at the six largest savings banks (Chart 16). In their six-month interim statements for this year, this ratio was down again, although it is too early yet to claim that final loan losses are falling again, since the six-month statement does not always give an adequate picture of what will be written off finally at the end of the year.



The commercial banks and savings banks stepped up their provisions for loan losses last year and so far this year. At the end of 2001 the ratio of loan loss accounts to total lending was 2.4% but by the end of June this year it was up to 2.8%. bearing in mind the point made here and in previous financial stability articles, finance companies' loan losses will conceivably increase still further in the future and have an effect on their profits, since loan losses tend to accompany excessive lending growth with a considerable lag.



... but capital ratio similar

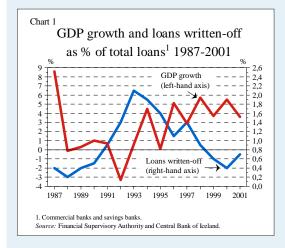
There was little change in the mandatory capital ratio of the commercial banks and six largest savings banks from the end of last year to this year's interim six-month statement, and the small reduction that took place was largely the result of dividend pay-

^{17.} Loans for which special provisions have been posted, and other loans which have been interest frozen.

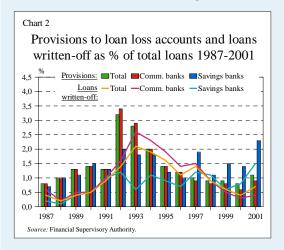
^{18.} The Financial Supervisory Authority issued Regulation no. 51/2002 amending Regulation no. 692/2001 on annual accounts of credit institutions. The new regulation tightened provisions concerning borrowers which should be examined in assessments of special loan loss reserve provisions. In this context the reference period for default was expected to be shortened from six months to three months. These changes could have played some part in the growth in non-performing loans, although it seems unlikely to have been substantial.

A large increase took place in write-offs of loans by commercial banks and savings banks last year. Landsbanki Íslands hf., Búnadarbanki Íslands hf., Íslandsbanki hf. and the savings banks wrote off a total of 4.2 b.kr., or 73% more than in 2000.

These same banks also substantially increased their provisions for loan losses in 2001, allocating a total of 8.5 b.kr. to such reserve accounts. Credit losses typically follow in the wake of an economic downswing, with some lag.



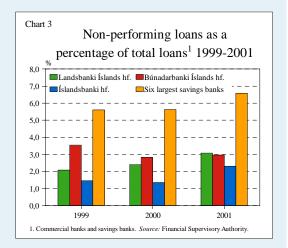
Lending by these institutions soared over the period 1998-2001 and their proportion of loan losses decreased for this and other reasons until last year. Thus commercial banks and savings banks lost an



annual 1.7% of their total lending over the period 1992-1995, compared with 0.6% from 1998 to 2001.

It is interesting to note that 1997 appears to mark a turning point insofar as the ratio of final write-offs to total lending at savings banks outstrips that of commercial banks then, and the gap between them progressively widens.

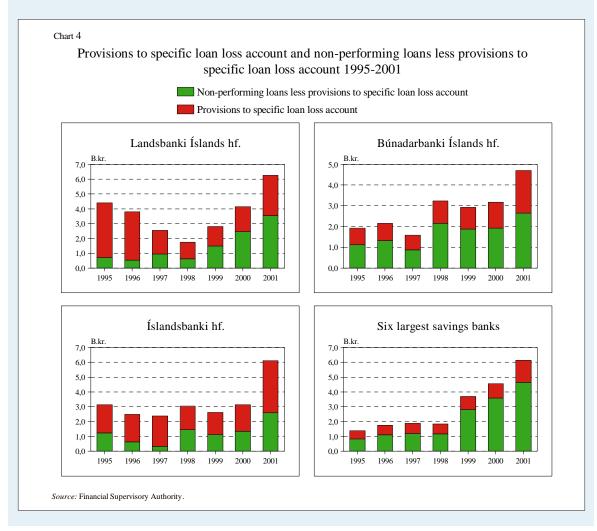
In 2001 the ratio of loan losses to total lending was 0.6% at Landsbanki, 0.3% at Íslandsbanki and 0.2% at Búnadarbanki. At the savings banks, however, this ratio was more than 1.5% in 2001, having risen from 0.8% the year before.



Looking at the stock of non-performing loans, which are loans for which special loss provisions have been made along with other interest-frozen loans, an increase can be discerned in recent times.

It is noticeable that the proportion of non-performing loans is much greater at the six largest savings banks than at the commercial banks which were examined - more than twice as high as at Landsbanki and Búnadarbanki and three times higher than at Íslandsbanki. These institutions have allocated varying provisions for non-performing loans to reserves dedicated to this purpose. Íslandsbanki made provisions for more than half of its non-performing loans, Landsbanki and Búnadarbanki for just under half, and the six largest savings banks only just under one-quarter.

From the interim statements that are available at the time of writing, it is obvious that the effects of the economic downswing are still emerging. The non-performing loan stock has increased, but so have provisions to loan loss reserves. Loan losses can therefore be expected to eat into the profits of commercial banks and savings banks in the near term.

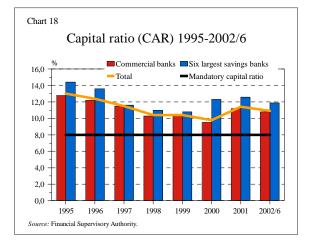


ments. Landsbanki's sale of its shareholding in VÍS boosts the bank's capital ratio. Also, Kaupthing's sale of Frjálsi fjárfestingarbankinn has a positive effect on its capital ratio, although Kaupthing's holding in Meidur hf., which owns shares in the bank, is deducted from calculations of the capital ratio, as is its share in Meidur's holdings in other finance companies.

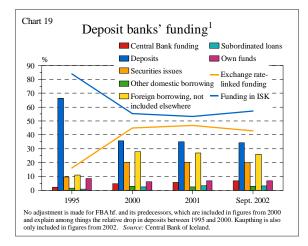
Funding of finance companies

Credit markets have tightened up somewhat on both sides of the Atlantic recently. Investors seem more

prepared to lend to sovereigns and international institutions with a high credit rating at the expense of corporations and financial institutions. Icelandic banks have not encountered any major problems in accessing foreign credit, but they can be expected to have faced somewhat tougher terms and needed to shop around more than before. The three largest banks, i.e. Búnadarbanki, Íslandsbanki and Landsbanki, all have a credit rating from Moody's, and Íslandsbanki and Landsbanki also from Fitch. The three banks have all set up Medium-Term Note



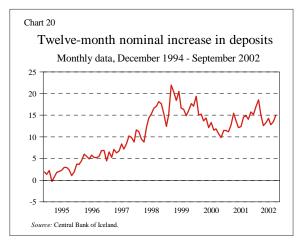
(MTN) programmes which enable them to tap foreign capital markets instead of procuring funds solely in the foreign bank loan market. The length of these notes has changed somewhat and it is now common for banks' MTN market issues to have a lifetime of less than three years. This leads to more rapid recapitalisation and greater recapitalisation risk, offset by the fact that terms for shorter issues are more favourable and the market is deeper than at the longer end.



It will be interesting to see whether Moody's upgrading to Aaa of its credit rating for the Republic of Iceland's foreign borrowing, in October 2002, will have the effect of raising the credit rating of the three Icelandic banks. The Republic's credit rating forms the basis for ratings of obligations by domestic parties undertaken in foreign currency. Rating agencies are also likely to take into account the changed composition of shareholder groups in Landsbanki and Búnadarbanki, since it is now known that the state has sold its holding in the former and talks are in progress on further privatisation of the latter. Over the years, rating agencies have often mentioned the state's large presence in the domestic financial market and have considered this inappropriate.

Bank funding appears to be along similar lines to those described in the last study in *Monetary Bulletin* 2002/2, but the strengthening of the króna has led to an increase in funding in domestic currency, which was approaching 60% of total funding at the end of September.

It is interesting to note that deposits have increased with a twelve-month nominal rise of more than 15% at the end of September, which is somewhat more growth than lending at the same time.



Payments system modifications approaching completion

An important factor in financial stability is secure and effective payment systems. In collaboration with credit institutions, the netting system provider FGM and the Icelandic Banks' Data Centre (RB), the Central Bank drew up proposals last year for reforms to the netting system for low-value payment orders¹⁹ with reference to the BIS Core Principles. Consensus was reached on these proposals at the end of last year, when work began on necessary modifications

^{19.} FGM's netting system for payment orders under 25 m.kr.

to system software. This task is expected to be completed this year. Certain parts of the system have already been taken into service.

Statistics compiled on credit institutions' exposures in payment systems

In consultation with credit institutions and FGM, the Central Bank has made its first analysis of credit institutions' exposures in payment systems. Details of each institution's lowest position within the day were compiled both within the netting system and the Central Bank's RTGS system for the period May-August 2002. These data will be used as a basis for decisions on settlement guarantees and liquidity management in the payment systems. Meetings have been held with credit institutions to announce the results of this analysis. By the end of the current year, a similar analysis will have been made from September onwards, before a final decision is reached about the amount of settlement guarantees in payment systems.

Proposals have been drawn up for reforms to securities trading settlement arrangements

The Central Bank, Iceland Stock Exchange and Icelandic Securities Depository are engaged in cooperation about settlement of securities transactions. Proposals have been drawn up for specific changes to the securities settlement process, with aims including faster transfer of information to credit institutions about the payment position formed by securities trading, thereby facilitating settlement preparations.

... and the possibility of settlements in foreign currencies has been examined

Under a new law, limited companies may now denominate their capital stock in a foreign currency. This legal amendment has prompted questions about arrangements for settlements of transactions involving shares that might be listed in foreign currencies. The reform could effect the structure and mechanisms of Iceland's securities settlement system. The current settlement system is inadequate for meeting the wishes that may result from the change in the law. Full adjustment to this change would mean that transactions could be settled in many currencies in Iceland. Cooperation between the Central Bank, Iceland Stock Exchange and Icelandic Securities Depository have included discussions of whether to consider allowing payment settlements in euros and US dollars in the Central Bank at T+3,²⁰ in a separate foreign currency settlement system. RB has been asked to evaluate the extent and cost of making the technical adjustment that such a change would entail. Such a reform would clearly prove both costly and time-consuming, as well as entailing new and greater risks for the settlement system. Thus a precise analysis should be made of the need for such a system, its construction costs, work on operating it and, above all, the risk that would accompany it.

Financial stability microprudential indicators 1997-2002

	1997	1998	1999	2000	2001	2002	Date
Capital ratios ¹	1777	1770	1777	2000	2001	2002	Duie
Solvency ratio ratio ¹ by legal definition (%)	11.6	10.4	10.6	9.9	11.5	10.9	June 30
Solvency ratio excl subordinated loans (%)	10.2	8.8	8.2	6.7	8.2		
Capital adequacy ratio Part A (Tier I) (%)	11.3	10.0	9.6	8.4	9.2	8.9	June 30
Quality of assets							
Credit institutions							
Total lending (m.kr.) ²	308.459	385.742	475.784	601.522	705.334	738.707	Sept.
Thereof foreign-denominated (%)	31.8	34.4	36.5	41.6	44.3	41.1	Sept.
Sectoral breakdown of lending							
Households (% of total lending) ³	26.6	27.9	27.3	27.5	25.5	26.1	Sept.
Thereof foreign-denominated (%)	0.5	1.8	4.8	8.1	10.4	9.2	Sept.
Thereof residential housing-related (%)	21.3	18.7	20.2	18.3	16.1	14.4	Sept.
Businesses (% of total lending)	65.2	64.8	65.7	65.2	64.2	63.1	Sept.
Thereof foreign-denominated (%)	46.8	49.8	50.6	55.6	54.7	51.1	Sept.
Fisheries sector (% of total lending)	29.4	27.7	24.8	22.9	21.2	17.7	Sept.
Thereof foreign-denominated (%)	79.1	83.3	83.9	86.5	86.8	85.5	Sept.
Retail and services (% of total lending)	19.8	24.8	28.6	29.4	30.0	32.4	Sept.
Thereof foreign-denominated (%)	15.2	19.5	29.5	37.0	36.1	35.6	Sept.
Manufacturing, transportation, electricity							
and construction sectors (% of total lending)	16.0	12.3	12.2	12.9	13.0	13.0	Sept.
Thereof foreign-denominated (%)	26.7	35.5	32.4	43.0	45.3	43.0	Sept.
Foreign sector (% of total lending)					3.6	6.4	Sept.
Thereof foreign-denominated (%)					99.4	77.8	Sept.
Non-performing loans ⁴ (% of total lending)	4.1	2.4	2.2	2.0	2.6	3.5	June 30
Equity as a percentage of total assets	8.7	7.4	7.1	6.3	6.6	6.3	June 30
Borrowers							
Households							
Household debt (% of disposable income)	134.7	138.7	145.8	159.5	169.1	175.0	Forecast
Number of private bankruptcy rulings	333	463	421	446	289	211	Jansept.
Number of unsuccessful distraint actions	2.919	3.001	3.662	3.941	5.393	4.786	Jansept.
Businesses							
Debt as a percentage of equity							
Publicly listed companies (excluding banks)	1.96	1.85	1.96	2.21	2.27	2.1	June 30
Fisheries sector	1.67	1.75	1.87	2.57	2.59	2.0	June 30
Retail, construction and services	2.10	2.39	2.28	1.94	1.71	1.9	June 30
Manufacturing and production	0.41	1.11	1.40	1.62	1.72	1.8	June 30
Information technology		2.80	2.28	1.90	2.60	1.3	June 30
Number of corporate bankruptcy rulings ⁵	197	248	253	298	361	357	JanSept.
Number of unsuccessful distraint actions ⁵	698	669	951	1.214	2.176	1.892	JanSept.
Profitability							
Publicly listed companies (excluding banks)	8.0	8.2	7.3	9.2	11.0	10.9	
Fisheries	16.5	17.8	14.7	17.2	28.2	26.5	June 30
Retail, construction and services	9.3	4.7	5.6	14.7	12.6	1.3	June 30
Manufacturing and production	10.7	9.3	7.5	13.2	13.5	13.4	June 30
Information technology	•	6.1	8.7	9.6	1.2	18.9	June 30
Management ¹							
Cost ratios (% of net operational revenues)							
Operating expenses	65.3	67.1	60.4	66.3	66.1	62.8	June 30
Labour cost	33.6	35.2	31.2	33.2	33.6	32.5	June 30

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Financial stability microprudential indicators 1997-2002 (continued)

Profits and profitability ¹	1997	1998	1999	2000	2001	2002	Date
Return on assets	0.9	0.9	1.3	0.6	0.8	0.8	June 30
Return on equity	10.3	13.5	19.3	9.9	13.7	12.8	June 30
Interest margin (% of total revenue)	58.9	56.0	52.4	54.3	63.4	55.0	June 30
Commissions (% of total revenue)	24.5	23.1	23.1	31.4	32.1	27.4	June 30
Value adjustments of other financial operations	21.0	20.1	2011	51.1	02.1	27.1	e une e o
(% of total revenue)	7.5	15.0	12.0	-1.4	-5.9	11.6	June 30
Dividends from shares, other holdings, etc.							
(% of total revenue)	6.1	3.9	9.6	5.9	4.0	3.9	June 30
Other income (% of total revenue)	3.1	1.9	2.9	9.8	6.5	2.2	June 30
Liquidity position							
Central Bank funding of financial institutions							
(b.kr., position at end of year)		22.8	36.0	46.9	68.7	82.2	Oct. 29
Deposits as ratio of broad money (M3)	0.97	0.97	0.97	0.98	0.98	0.98	Sept.
Lending as ratio of deposits	1.29	1.46	1.53	2.07	2.09	1.95	Sept.
Liquidity ratio (short-term assets as ratio of	1.2)	1.40	1.55	2.07	2.07	1.75	Sept.
debts (< 3 months)				1.20	1.21	1.22	August
Market risk	•			1.20	1.21	1.22	Tugust
Foreign exchange market							
Effective exchange rate of Icelandic króna							
(% change between years)	1.4	0.7	2.0	0.0	16.0	77	In Ort
Effective exchange rate of Icelandic króna	-1.4	-0.7	-3.0	9.8	16.9	-7.7	JanOct.
(standard deviation)	1.0	0.0	1.2	4.1	0.1	17	Ian Oat
Turnover (b.kr.)	1.0	0.9 401.8	1.3 468.0	4.1 768.0	9.1 1.218.0	4.7 698.5	JanOct. JanOct.
		401.8	408.0	/08.0	1.218.0	098.3	JanOct.
Equity market							
ICEX-15 (% change between years)	14.7	9.8	47.4	-19.3	-11.2	11.5	JanOct.
Market capitalisation (b.kr.) ⁶	151.0	231.9	369.8	397.2	428.0	515.3	Sept.
Market capitalisation (% of GDP) ⁶	28.5	39.9	57.6	59.5	57.0	65.5	Sept.
Turnover velocity (over latest 12 months)	15.6	17.2	32.4	50.6	32.3	55.5	Sept.
Bond market							
Commercial banks' credit ratings							
Short-term (Moody's)				P1-P2	P1-P2	P1-P2	Oct.
Long-term (Moody's)				A2-A3	A2-A3	A2-A3	Oct.
Short-term (Fitch)					F1	F1	Oct.
Long-term (Fitch)					А	А	Oct.
Interest rate differential with abroad (3-m. T-bills)	2.7	3.4	5.7	6.3	7.9	3.6	Oct.
Product prices							
Marine product prices in foreign currency							
terms (January 1999=100)	88.3	99.5	97.3	99.8	101.3	103.4	JanAug.
Fish quota prices (long-term cod quota, kr./kilo)	650	758	771	860	709	899	JanSept.
Aluminium prices US\$/ton	1.592	1.336	1.364	1.551	1.445	1.345	JanOct.
Real estate market							
Residential housing prices (January 1996=100)	104.4	111.8	136.1	154.5	159.5	165.7	Sept.
Commercial property prices (1995=100)	106.3	155.7	178.6	205.2	188.3	177.4	O3 '02

1. Commercial banks and six largest savings banks. 2. Deposit money banks, adjusted for FBA and Commercial Loan Fund. Kaupthing Bank included from 2002. 3. Item "miscellaneous" also includes individuals' private business operations. 4. Commercial banks and six largest savings banks. FBA included as of 1999. 5. *Source:* Lánstraust credit rating agency. Figures for January-September 2002 are liable to change.