Financial markets and Central Bank measures:[1]

Interest rate rises and wider exchange rate bands

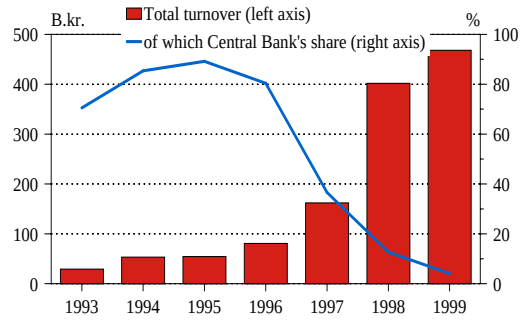
The króna appreciated considerably in December under the impact of various temporary factors such as caution towards conceivable Y2K compliance problems and low levels of Icelandic investment in foreign securities. The exchange rate weakened again in January, and the Central Bank responded by raising its policy rate by 0.8 percentage points on January 12. Following this move, the króna strengthened and remained in the range 4%-5% above the central rate. On February 14 the Central Bank extended the exchange rate target zone to ±9% and raised its interest rate by 0.3 percentage points at the same time. At the beginning of 2000, new rules on liquidity ratios of credit institutions went into effect, based on classifying the liquidity character of their assets and liabilities. The rules demand that liquid assets over the coming three months should be equal to or greater than the liabilities which may fall due during that time. The Central Bank also set new rules on indexation of savings and credit which went into effect at the beginning of the year. Furthermore, changes in the Bank's rules on the króna interbank market took effect on February 1. Two new maturities were added, 9 and 12 months. Finally, minor amendments were made to the Bank's rules on trading with credit institutions which also came into effect at the beginning of February.

Heavy foreign exchange market trading in 1999 but little Central Bank intervention

Trading on the interbank foreign exchange market totalled 468 billion kr. in 1999, an increase of 16% from the previous year. The Central Bank's share in transactions was 4% and has been rapidly diminishing since 1996, when it accounted for 80%. Market trading volume fluctuates considerably from one month to the next but averaged almost 40 billion kr. a year last month.

The Central Bank has not traded in the interbank market since June 1999, and thus not directly influenced the exchange rate of the króna. The exchange rate strengthened in December and peaked towards the end of the month. At its strongest point the króna was more than 5% above the central rate. In the Central Bank's view this was the result of temporary factors at that time, most importantly the low volume of foreign securities bought by institutional investors and the ample foreign credit at the disposal of credit institutions. Also, a cautious approach on account of conceivable Y2K compatibility problems may have encouraged the króna to strengthen.

Chart 1
Total turnover on the domestic interbank foreign exchange market and Central Bank's share



1. This article uses data available on February 15, 2000.

Tight monetary stance led to strengthening of the króna

The exchange rate of the króna weakened during the first few days of January, when the impact of the temporary strengthening factors was reversed. A weakening in the dollar and sharp drop in share prices on both sides of the Atlantic seemed to kindle interest among Icelandic investors in foreign securities purchases. The Central Bank responded by raising its policy rate by 0.8 percentage points on January 12. In deciding this rise, the Central Bank also took into account greater inflationary expectations prompted by inflation in excess of forecasts during the last months of the year, and by the prospect of a large rise in the CPI in January. The króna rallied following the interest rate rise and fluctuated in the range 4%-4.7% above the central rate, fairly close to the target zone ceiling in effect then.

Exchange rate bands widened to give more scope for restraint

In the Central Bank's view, the exchange rate bands were beginning to prevent the further strengthening of the króna which it considered desirable in order to counter growing inflation. Consequently, the Central Bank proposed to the government to extend the target zone by 3% in both directions in order to create scope for tighter monetary restraint. This reform was made on February 14, and the Bank's policy rate and repo rate were raised by 0.3% at the same time. A twin purpose lay behind raising interest rates: to respond to foreign interest rate rises in January and February which reduced the differential between money market rates abroad and in Iceland, and also to relay a clear message that the aim behind extending the target zone was to tighten monetary restraint and strengthen the exchange rate of the króna. It is too early to state what effect these actions had, but the initial impact appears to be the strengthening of the exchange rate of just over one percent.

New liquidity rules promote development of interbank market

Interest rates on longer maturities in the interbank market for króna dropped sharply in the New Year immediately after new rules were set on the liquidity ratio of credit institutions. Last year, interest rates on such transactions had risen by far more than yields on other money market instruments as the older liquidity rules applied in 1999 were particularly unfavourable to the deposit market. After the rules were set, three-month interbank interest rates were similar to the yield on treasury and bank bills, while those on longer lending were somewhat higher. The Central Bank's interest rises on January 12 levelled out the yield curve and money market yields from one to twelve months became fairly similar. At the same time, yields on money market bills and interbank market interest rates restated as annualized yield appear to be quite well harmonized, suggesting little expectation of further interest rate rises on the part of the Central Bank. From a longer-term perspective the yield curve seems to show a downward trend; the yield on 3-year treasury bonds was 10.2% at the time of writing. However, it does show a slight upward trend from one to three months, which could

Chart 2

Official exchange rate index and Central Bank repo rate 1999-2000

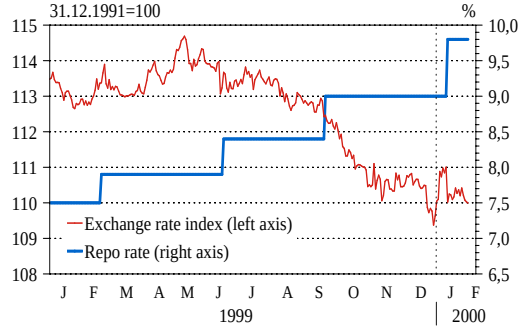
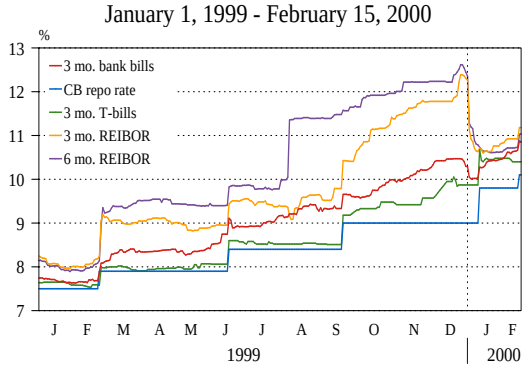


Chart 3

Yields in the money market
January 1, 1999 - February 15, 2000



signal expectations of some rise in interest rates by the Central Bank in the next few months.

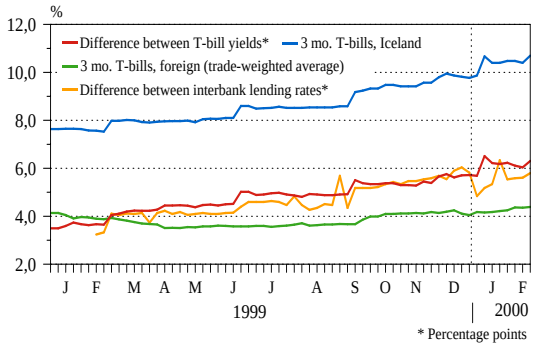
It has been noticed recently that overnight interest rates in the interbank market have been higher than Central Bank overnight rates. This can only happen if credit institutions lack acceptable instruments for trading with the Central Bank. This is an indication that some credit institutions are suffering tight liquidity and have excessively granted credit or invested in instruments that cannot be used to access Central Bank facilities. Such a situation is generally interpreted as a warning sign on stability of individual institutions, cf. the discussion of financial stability elsewhere in this Monetary Bulletin.

Policy rate remains similar in real terms despite nominal rises ...

Despite five rises in Central Bank interest rates over the past twelve months totalling 2.6 percentage points, the policy rate has hardly managed to keep pace with the change in inflationary expectations over this period. Fig. 5 shows imputed real yield on the policy rate compared with the inflation premium on treasury bonds. The inflation premium on T-bonds is calculated as the difference in yield between unindexed and indexed ones of the same maturity. In fact, the real yield calculated in this way was exceptionally high at the end of 1998, at just over 5%, having fluctuated between 4% and 4.5% for most of that year. After the Central Bank's interest rate rises in January and February this year, the real yield on the policy rate is in the range 4.8%-4.9%.

Chart 5

Domestic and foreign 3 month money market rates from the beginning of 1999



* Percentage points

... while the money market interest differential with abroad reaches a record high

On the other hand, the differential between short-term interest rates in Iceland and abroad has been widening in recent months, apart from the drop at the very beginning of this year. This drop was jointly caused by an easing in the tight money market situation with new liquidity rules which went into effect in the New Year, and by rising money market rates abroad, which were partly prompted by expectations of tighter monetary restraint in the main industrial countries. These expectations were borne out by rises in central bank rates both in the USA and the EU. At present the money market interest rate differential is in the range 5.5% to 6%, depending upon whether it is measured against interbank market rates or T-bill yields.

The new liquidity rules cut back the margin

Chart 4

Real interest rates and the Central Bank policy rate from January 1, 1996 to February 15, 2000

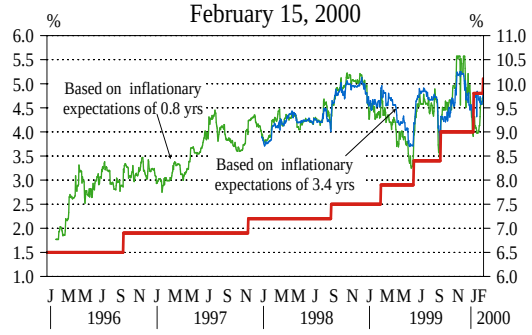


Chart 6

Policy rates in selected countries from January 1999

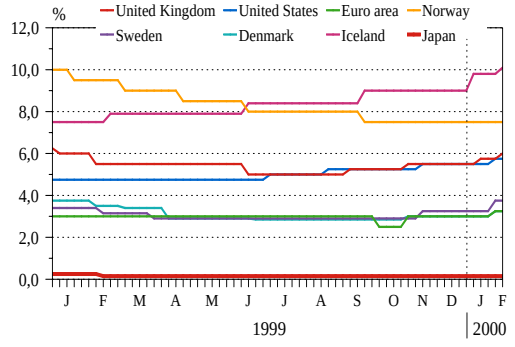


Chart 7

Turnover in the interbank market for króna and the margin between lending and deposit rates from June 1998

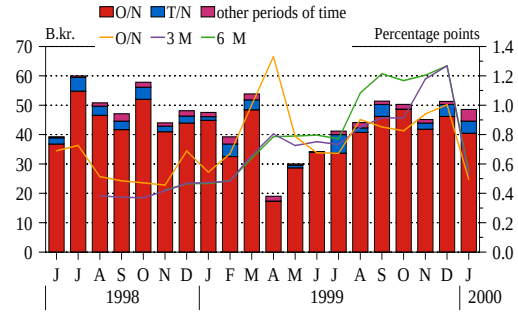
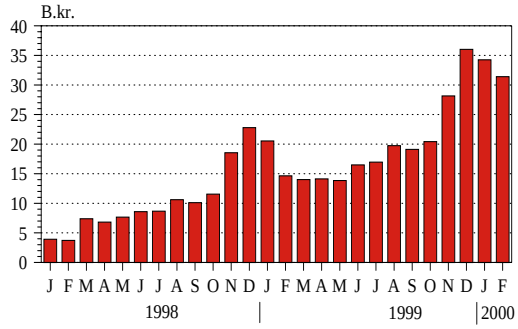


Chart 8

Central Bank repurchase agreements

Position at end of month. Latest February 15, 2000



between borrowing and lending in the interbank market once more and it is now around 0.4% after peaking at 1.2%-1.5% towards the end of 1999. Interest rate margins are now fractionally lower than before the earlier liquidity rules were set in February 1999, which caused them to widen last year. Trading in treasury and bank bills has also picked up so far this year, after a contraction caused by the earlier rules.

In the beginning of February a further step was taken in evolving the interbank market for króna. Organized trading in 9- and 12-month deposit and lending instruments began, and minimums for 6-month instruments were raised from 50 million kr. to 100 million kr. Minimums for the new maturities will be 50 million króna. These reforms represent a milestone, since the interbank market in Iceland now extends to all the same maturities as in neighbouring countries.

Growth in Central Bank repos

Central Bank repurchase agreements grew sharply in the final months of 1999 to leave their year-end balance at just over 36 billion kr., having increased by 13 billion kr. in the course of the year. Some reduction has taken place in January and February, although less than might have been expected. The reason is the improvement in the treasury's position with respect to the Central Bank in the first two months of the year.

The repo balance is always highest at the end of the year, as a result of fluctuations in liquidity at deposit money banks which as a rule are caused by seasonal changes in the treasury's position vis-à-vis the Central Bank and seasonal currency outflows. In addition, special factors came into play at the end of last year, i.e. privatisation which was largely settled with payments to the treasury during the closing months of the year. In the first half of January, payment again fell due for the sale of the treasury's shares in the two state-owned commercial banks which were sold in the preceding month. This is the main reason that the repo balance has not yet dropped.

Another factor which has contributed to greater Central Bank facilities for DMBs with deposit requirements with it is an increase in the required reserves. Last year, required reserves rose by 4 billion kr. This increase partly reflects the rapid growth of credit institutions last year, but also the extension of the required reserves base which now covers more balance sheet items and more credit institutions.

Temporary rise in base money in December with Y2K contingencies

A large increase took place in Central Bank base money in 1999, amounting to 15.6 billion kr. Besides the factors outlined above, precautions for conceivable Y2K compliance problems also led credit institutions to increase their repo purchases towards the end of the year, thereby building up their current account balances with the Central Bank in order to meet possible withdrawals by customers. The balance of the DMBs' current and foreign exchange accounts with the Central Bank was 7.9 billion kr. higher at year-end 1999 than at the same time the previous year. Central Bank base money immediate-

What is the Central Bank of Iceland managing?

The large increase in repo transactions in recent months between the Central Bank and credit institutions has prompted questions about whether this is not in fact the root of the heavy growth in lending and money supply, and likewise whether the Central Bank does not have grounds for restricting the supply of repurchase agreements in order to curb the growth in money supply and credit institutions' lending capacity. These ideas hinge on the theory that greater central bank base money increases money volume in circulation and thereby causes higher inflation. Admittedly it is not enough to focus only on repos in assessing Central Bank money supply, since other factors impact base money, as explained below.

Theoretically, the Central Bank's interest rates on its facilities are the price it puts on the supply of base money. This means that the Central Bank can choose to manage money supply either by determining volume or interest rates in its monetary actions, but not both.

Most central banks in industrial countries have opted to manage interest rates on their facilities rather than supply of base money.

There are several reasons for this preference for managing interest rates in monetary actions. Firstly, quantitative management of base money leads to greater fluctuations in money market interest rates, which can create uncertainty about the real intent of the Bank's monetary stance. Interest rate management is more transparent and is also less disruptive. Secondly, quantitative restrictions on credit supply from the Central Bank can exacerbate liquidity troubles among individual credit institutions and produce systemic problems. This happens when the Central Bank refuses to lend funds to a credit institution on account of monetarist viewpoints about base money supply. Finally, central banks which have attempted base money management have discovered that there are technical problems to targeting this variable in an open economy with free capital flows. Applying base money management under such circumstances can generate currency fluctuations, since the Central Bank is unable to intervene to influence exchange rate developments.

The Central Bank does not apply money supply management, and interest rates are its main instrument. Until relatively recently the Bank controlled all interest rates in Iceland on the basis of legal provisions allowing it to determine minimum interest rates for deposits and maximum rates for lending. After deregulation of interest rates in Iceland over the period 1986-1987 the Central Bank has continued to prioritise interest rate management. Initially its instrument was the yield on treasury bonds in the secondary market, but the money market has now evolved into the forum for its interest rate action. The arrangement has proved an effective one. The Central Bank policy rate, which is now the yield on repurchase agreements with credit institutions, creates a marginal short-term capital cost for credit institutions, and changes in Bank policy rates have a quick impact on other money market and credit market interest rates.

It should also be pointed out that Central Bank repos are not the only factor possibly affecting base money, and quantitative controls on such transactions by themselves would not set out a specific pattern for the Bank's base money to develop. Thus Central Bank base money grew by only 0.9 billion kr. in 1998 but repo trading volume by 16.3 billion kr. at the same time. The reason was a substantial improvement in the treasury's position with the Central Bank. Similarly, foreign currency trading by the Central Bank can impact base money.

ly dropped by 15.1 billion kr. in January when the DMBs reduced their current and required deposit account balances again.

In the beginning of February, revised Central Bank rules took effect for its transactions with credit institutions which are required to have reserves in the Central Bank. The reforms were minor in character. Mainly these involved formally incorporating provisions from earlier rules concerning correction of transaction errors, and switching the Central Bank's deadline for announcing forthcoming weekly repo auctions from the Friday to the Monday morning. A new bond category was added to the list of tradable securities for repurchases and overnight facilities with the Central Bank.

Commercial and savings banks' interest rates have risen by more than the Central Bank policy rate ...

In 1999 and this January, rises in interest rates on unindexed lending by commercial and savings banks

Chart 9

Bank lending rates and the Central Bank policy rate

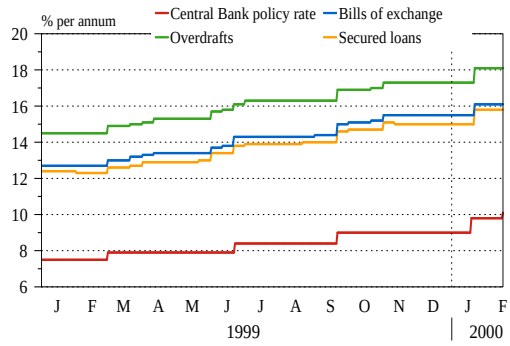
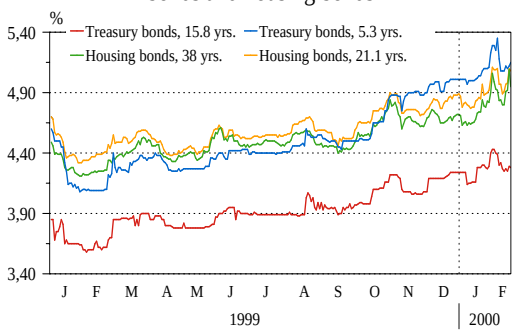


Chart 10

Daily yields in selected benchmark issues of treasury bonds and housing bonds



have largely taken into account the changes announced by the Central Bank in its own policy rate. The commercial banks' interest rates went up in March, June and September 1999 and again on January 21 this year in the wake of Central Bank interest rate rises. The average rate of interest on the banks' unindexed secured loans rose by 2.6 percentage points in 1999, and on indexed securities by 0.1 percentage points. A further interest rate rise of 0.8 percentage points was announced in January, but the response to the last changes in the Central Bank's interest rates in February is still unclear. From the beginning of 1999 to January 21 this year, interest on unindexed secured loans has risen by just over one percentage point more than the Central Bank policy rate. Besides matching the Central Bank rises, banks may have been encouraged by the new liquidity rules to raise their own interest rates even further in order to curb their lending growth.

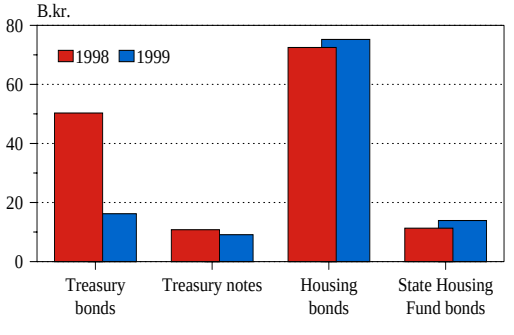
... but real yields on unindexed secured loans were lower than on indexed securities

Despite these rises in interest rates on unindexed securities by commercial and savings banks, they were not as high as the growth in inflation in 1999. The CPI, which is used for indexation purposes, rose by 5.6% in 1999 compared with only 1.3% the previous year. Real yields on unindexed secured loans fell by 2.8 percentage points between 1998 and 1999, averaging 8% in 1999 but 11.8% the year before. Average interest rates on indexed securities also fell, to 8.6% in 1999 from 8.8% in 1998. However, the interest margin at commercial and savings banks appears to have widened, since interest rates rose less on deposits than on lending. On the deposit side, rises in the yields on money market accounts in the banks were largest, up to 2 percentage points.

In December, the Central Bank issued new rules on indexation of savings and lending. The main changes were that plans to prohibit indexation of deposits and extend the minimum term for indexation of lending to seven years were not put into effect. This decision was made following a proposal from a committee appointed by the Minister of Commerce. Another change in the rules raised the maximum permissible imbalance between indexed and unindexed obligations from 20% to 30% of equity.

Chart 11

Trading volume in bonds on Iceland Stock Exchange in 1998 and 1999



New liquidity rules effective from the beginning of the year

The Central Bank set new rules for the liquidity ratio of credit institutions subject to reserve requirements in the Central Bank in December which came into effect on the 31st of that month. Earlier rules on liquidity of credit institutions with required reserves were rescinded at the same time and the reference period ending on December 20 was the last in which they were in effect. An adjustment period is given whereby penalties for non-compliance with the new rules are not applied in full until after three months.

Work on drafting the new rules took place from spring 1999 onwards, in collaboration with credit institutions and the Financial Supervisory Agency. In order for them to take effect, provisions on liquidity of credit institutions in the Central Bank Act had to be amended, and a bill to this effect was passed by the parliament just before Christmas.

The new liquidity rules are modelled on those of the Deutsche Bundesbank, the EU's "Groupe de Contact" and BIS. Based on different principles from the earlier rules, they involve an overall assessment of liquid assets and liquid liabilities on the credit institutions' balance sheets, along with non-balance sheet items. The former rules, however, only took into account domestic and foreign credit institutions' claims and liabilities among themselves, and their dealings with the Central Bank. Thus the new rules are even better designed to ensure that credit institutions have adequate liquidity for meeting their liabilities. They do not involve less restraint on the liquidity position of credit institutions, and will reduce the negative impact that the earlier rules had on interest rate formation in the money and securities markets.

Highlights of the new rules:

1. Liquidity is classified into four time-bands within the following twelve months. These are: Liquid within one month, from one and up to three months, from three and up to six months, and from six and up to twelve months.
2. The liquidity ratio (ratio of liquid claims to liquid liabilities) as defined in the rules shall be calculated monthly on the basis of end-of-month data.
3. Assessment includes the liquid value of all claims and liabilities that may have either a market value or a specified income or expenditure flow.
4. Individual balance sheet items and non-balance sheet items have been assessed with respect to the ease and security of liquidating them. An item is assessed at 100% if it has a full effect, but as not having any effect if it is highly uncertain whether it can be liquidated.
5. According to the weighting of each item, liquidity is assessed at the end of each month, taking into account each item's market worth, position and income or expenditure flow.
6. Liquid claims are required to be greater than liquid liabilities during the first two periods (cf. item 1), i.e. the ratio of claims to liabilities must not be lower than one for each period. A surplus during the first period may be carried over to the second.
7. If the liquidity ratio does not reach specified minimum levels, penalties are calculated on the amount of the shortfall, corresponding to 30-day penalty interest at any time.

Sluggish bond market in 1999 ...

Yields on indexed marketable securities rose sharply in the last quarter of 1999 and the beginning of this year. The rise varied according to categories. In general, yields on benchmark issues of treasury bonds and housing bonds rose by 0.5-0.6 percentage points. It is noteworthy that yields on treasury bonds and housing bonds rose fairly steadily but slowly until the autumn, and then jumped during the last quarter. The rising yield towards the end of the year can be attributed to a greater tendency among institutional investors, in particular pension funds, to deploy capital in foreign markets and the domestic equity market. Thus demand for new market securities ran low in the last quarter. Trading rallied at the end of January and beginning of February this year following the rise in yields, prompting them to drop again in February. One reason for this increased demand is the treasury's buy-back plans for several issues of T-bonds, in response to the favourable cash position of the treasury.

Yields on unindexed treasury notes have also risen substantially in recent months, under the impact of higher inflation and inflationary expectations. For

example, the yield on longer (3 yr) treasury paper was 10.2% at the end of January this year, compared with 9.25% at the end of October.

Secondary market trading with treasury-guaranteed market securities, especially savings bonds, diminished in 1999. A relatively smaller contraction took place in treasury bond trading, while trading in housing and state housing fund bonds in the secondary market showed a slight increase.

... but a strong upswing in the equities market

A strong upswing took place in the Icelandic equities market last year. Trading volume increased sharply and prices of shares in most ICEX-15 companies climbed significantly. Greater interest was shown in new issues, both privatisation offerings and new equity issues by established companies.

Equities trading on Iceland Stock Exchange tripled in 1999 compared with the previous year. Total volume amounted to 39 billion kr. in 1999, as against just over 13 billion kr. in 1998. The ICEX-15 index rose by 47% in 1999, reflecting strong demand for shares. The market worth of shares listed on ISE was 361 billion kr. at the end of 1999, compared with 233 billion kr. at the beginning. This growth is the combined effect of rising share prices, new issues and new listings. Market worth of listed equities is equivalent to 53% of GDP, a figure approaching that in neighbouring countries. Last year's rise in share prices reflects strong demand for shares which is partly caused by high investor optimism about the profitability prospects for Icelandic companies in the future.