Financial markets and Central Bank measures:

Króna strong during the autumn [1]

The Central Bank has raised its interest rates three times this year, in February, June and September, by a total of 1.5 percentage points. Since the start of the current economic upswing in 1996, the Bank's policy rate (repo) has been raised by 2.5 percentage points altogether. The differential between money market interest rates in Iceland and trade-weighted comparable interest rates abroad peaked in September at 5.5 percentage points. In the course of this year the differential has widened by just over 2 percentage points. The króna did not strengthen during the first half of the year despite these actions by the Central Bank, since the February rise aimed to strengthen currency reserves rather than the exchange rate. At the end of August the exchange rate was similar to that at the beginning of the year. The rises in the bank's repo rate in June and September by 0.5 and 0.6 percentage points respectively, together with the restraint measures announced in the government's draft budget, appear to have prompted the króna to strengthen, and the exchange rate reached a historical peak at the beginning of November, at 4% above the central rate. Temporary factors may also have contributed to the strengthening of the króna, such as capital inflows from abroad linked to special investment items and a lower outflow on account of securities purchases than earlier in the year. The Central Bank's aim with its actions in June and September was to dampen domestic demand and strengthen the króna in order to counter domestic price rises.

Money market interest rates have kept pace with Central Bank interest rate adjustments, but interest rates on 3-6-month interbank loans have risen by more than the Central Bank´s rates. This is due to the liquidity rules which the Central Bank set early in 1999 to counter the deteriorating liquidity position of credit institutions and their increasing use of short-term foreign capital. The liquidity rules have achieved these aims and also appear to have contributed to a reduction in the growth of lending by credit institutions. Along with other factors, the liquidity rules have led to some reduction in trading in bank and treasury bills.

Chart 1

Official exchange rate index and Central Bank repo rate 1999

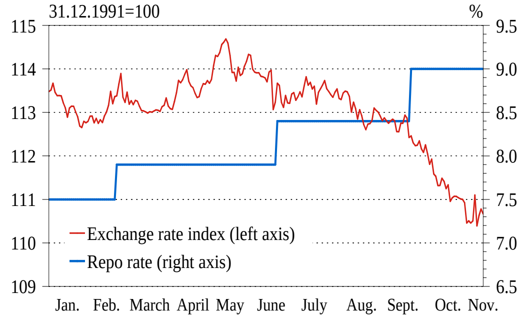
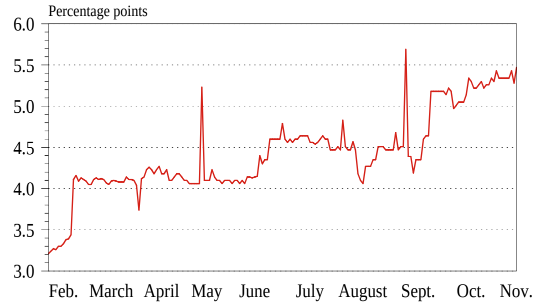


Chart 2

Difference in Icelandic and trade-weighted foreign 3 month money market rates 1999



1. Latest monthly data at the end of October, daily data to November 9.

In cooperation with credit institutions, the Central Bank has developed new liquidity rules which may take effect at the beginning of next year.

This year has not seen a continuation of the reduction in yields which took place in the bond market and in bank interest rates in 1998. The yield on indexed treasury bonds has increased by 0.2-0.3 percentage points and interest rates on indexed bank loans went up by 0.1 percentage points from the beginning of the year until early November. An even larger rise took place in the yield on unindexed market securities, since inflationary expectations have been increasing during the course of the year. The yield on unindexed treasury notes went up by 1.9 percentage points from the beginning of the year until November, and interest rates on non-indexed secured loans from commercial and savings banks by 2.4 percentage points.

Fewer market bonds and bills have been issued during the year than last year. This is both because there is no treasury borrowing requirement and because the large interest differential vis-à-vis abroad prompts the use of foreign capital. A contraction has also taken place in the trading of bills and bonds in the secondary market. However, a large increase has taken place in equity trading on Iceland Stock Exchange and share prices have risen.

1. Foreign exchange market

The króna appreciated for the first three weeks of the year by 0.46%, then fell during February until the Central Bank raised its repo rate by 0.4 percentage points on February 21. The króna strengthened somewhat following the interest rate rise, but the impact was dampened by the fact that the Bank used the resulting inflow of foreign exchange to boost its currency reserves. This strategy was outlined when the interest rate adjustment was announced. A large currency outflow linked to foreign securities trading and a relatively small capital inflow on account of loan movements caused the króna to weaken in the latter part of the winter and into spring, and the exchange rate reached a low in mid-May of 0.3% above the central rate. On June 21 the Central Bank raised its repo rate by 0.5 percentage points with the aim of cooling down the economy, strengthening the króna and counteracting growing inflationary pressure. However, this action did little to strengthen the exchange rate at first, not least because of a temporary currency outflow on account of investment in foreign securities. From the beginning of August the króna began to climb, and even more so after the Central Bank's interest rate rise in September. In the first days of November the exchange rate was 4% above the central rate, its highest level since June 28, 1993.

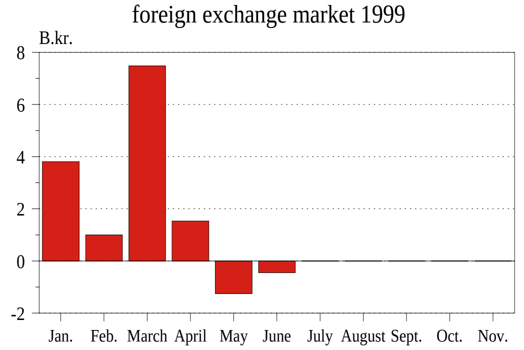
Central Bank interest rate rises have widened the difference between domestic and trade-weighted foreign money market interest rates during the year. The differential was 3.2 percentage points at the beginning of the year but grew in the course of the year to reach 5.3 percentage points at the beginning of November.

A wider interest rate differential along with confidence in continuing exchange rate stability generally lead to a greater inflow of currency and strengthen the króna. The reason is that it becomes more profitable to hold a króna position, and this encourages borrowing abroad in order to purchase bills and other securities denominated in domestic currency. A wider interest rate differential also prompts conversion of foreign currency earnings and forward sales of foreign currency.

Net transactions by the Central Bank in the interbank foreign exchange market over the period January to October were positive to the tune of 12.1 billion kr. compared with 17.5 billion kr. over the same period last year. The Central Bank engages in market operations for two reasons. Firstly, it can

Chart 3

Central Bank net purchases in the interbank foreign exchange market 1999



intervene to influence the exchange rate, by buying or selling currency according to the impact it wishes to have, primarily aiming to reduce exchange rate fluctuations. Secondly, pure business considerations may be involved if the bank purchases foreign currency in the market specifically in connection with treasury foreign loan repayments.

The Central Bank has not made any transactions in the interbank market since the middle of June. This is an unusually long interval, but the exchange rate of the króna has broadly speaking evolved in accordance with the Central Bank's expectations following the actions it had taken.

Despite much lower involvement by the Central Bank in the domestic currency market, the exchange rate has fluctuated less than in 1998. Nevertheless, intraday fluctuations are no less than before. The main reason appears to be a far higher level of speculative trading this year than last. Speculators define upper and lower limits for an exchange rate at any time and sell or buy when it approaches them. For this reason the market has had a tendency to fluctuate within a narrower range than before and substantial changes within a single day are normally quickly cancelled out.

Interbank foreign exchange market turnover has grown substantially in the past two years. This is the result both of increased capital movements following deregulation, and of the new foreign exchange market framework whereby participants began acting as market makers in 1997. A sharp increase in turnover occurred immediately in 1997, or 100%, and growth was even greater in 1998, or 148%. This year's turnover is heading for a 10% increase from the previous year. The increase in trading has been matched by less Central Bank involvement, which amounted to 82% of total transactions in 1996, dropped sharply in 1997, was 13% in 1998 and so far this year only 5%.

The exchange rate of the króna is determined in the interbank market and reflects supply of and demand for foreign currency in Iceland. The Central Bank's continually lower profile means that in effect the exchange rate is determined on a stronger market foundation than before. Currency index trends, both on a daily basis or between longer periods, thus provide the Central Bank with better information about market conditions at any given time and thereby whether and when there is a need for open market action, either intervention in the interbank market or changes in the policy rate.

Banks are allowed a foreign exchange imbalance of +/- 30% of equity. The average foreign exchange balance of the commercial banks as a whole during the first ten months of this year was well within these limits at 7%. In most cases it has been negative so far this year; since interest rates abroad are much lower than in Iceland, it is natural for banks to want to fund their operations to some extent from abroad.

Central Bank currency reserves strengthened in the wake of the interest rate rise in February. The bank has not intervened in the foreign exchange market since June, as mentioned above. Changes in currency reserves since then are therefore entirely explained by movements either in treasury foreign loans or Central Bank short-term foreign loans.

Chart 4

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

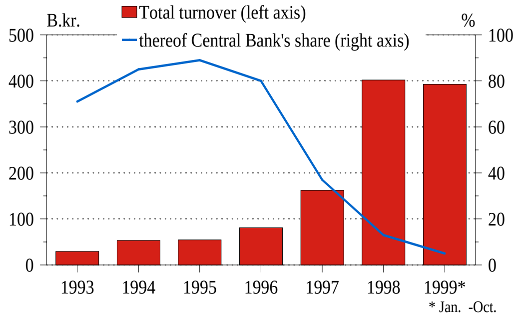
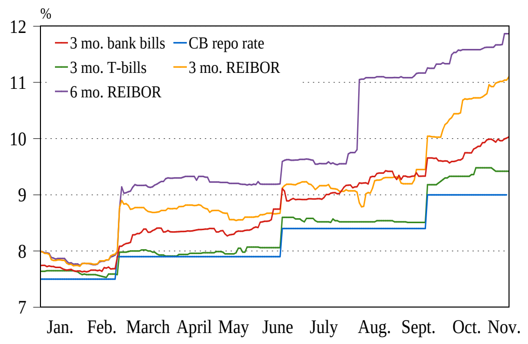


Chart 5

Yields in the money market 1999



2. Money market

Money market interest rates have risen this year as a result of Central Bank actions. The yield on treasury bills has kept pace with changes in Central Bank interest rates and the yield on bank bills has risen by more, influenced by the liquidity rules which the Central Bank set earlier in the year. Interest rates for longer interbank trading, with a term of three and six months, have also risen more than the repo rate for the same reason. Greater underlying uncertainty about long-term price developments may also be a factor at work.

The liquidity rules had some impact on price formation of bank bills and loans in the interbank domestic currency market, because interbank lending with a longer remaining maturity than 90 days, and bank bills irrespective of their lifetime, were not classified as liquid instruments. Credit institutions became reluctant to invest in bank bills or lend in the interbank market for longer terms than 90 days except against a higher rate of interest.

As outlined elsewhere, inflationary expectations have grown considerably during the year and pushed up the yield on unindexed instruments. At the beginning of the year the yield curve for unindexed obligations showed a downward trend from a six-month tied term and the yield on 4-year obligations was only marginally lower than that on 3-month treasury bills. In May, the curve showed an upward trend across the entire spectrum but the Central Bank's interest rates rises sent it downwards. Yields on four-year obligations, however, are similar to the short-term yield. Nonetheless, the curve is still rising up to the six-month mark, which suggests that the market expects further interest rate rises on the part of the Central Bank over the next six months.

Chart 7

Trading in bank bills and treasury bills in the secondary market

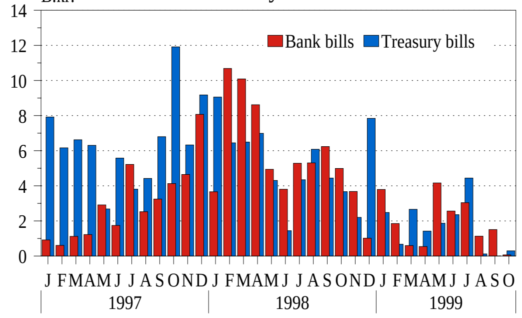
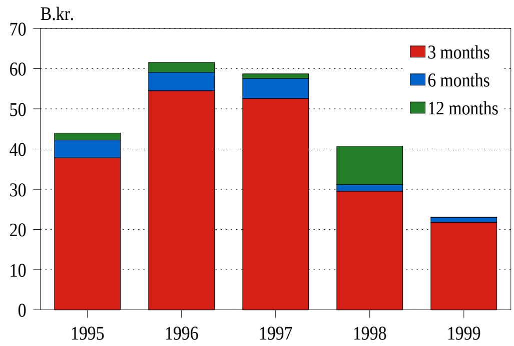


Chart 6

The primary market in treasury bills



Trading in treasury and bank bills

Money market trading with market securities with a shorter maturity than one year has contracted during the past two years, while interbank transactions have increased correspondingly. Trading in treasury bills on Iceland Stock Exchange amounted to 17.3 billions kr. during the first ten months of the year, but was 53.3 billion kr. over the same period in 1998. There are various reasons for the lower appeal of treasury bills among market players. One explanation is the establishment of a formal interbank króna market in June 1998, partly replacing treasury bills as a device for banks to manage their liquidity. Changes made to the Central Bank's instruments in March 1998, when the repurchase facility was restructured, have also had some impact. Previously only treasury bills and Central Bank certificates of deposits qualified for repo trading, but after the reform all classes of marketable treasury paper became acceptable. Furthermore, the Central Bank is the only market maker in treasury bills in the secondary market, so that their price formation is not as active as that of other paper in which more players are involved. Primary sales of treasury bills have also contracted with auctions to the value 22.6 billion kr. during the first ten months of 1999 compared with 40.8 billion kr. all last year. Furthermore, auction arrangements at the National Debt Management Agency mean that

Chart 8

Turnover on the interbank market in króna

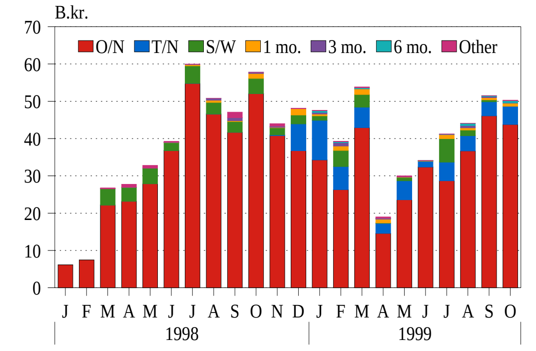
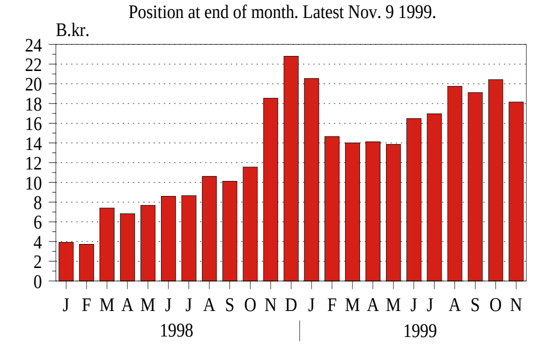


Chart 10

Central Bank repurchase agreements

Position at end of month. Latest Nov. 9 1999.



the supply of bills at any auction is unclear and offers are turned down without convincing explanation. This may have dampened interest among market players in participating in them.

Trading in listed bank bills has declined in the same way, amounting to 19.3 billion kr. during the first ten months of the year compared with 63.6 billion kr. over the corresponding period in 1998. In March and April this year, after the liquidity rules had gone into effect, trading dropped to 0.6 billion kr. for each month compared with just under 1.9 billion kr. in February, but later rallied.

Interbank króna market

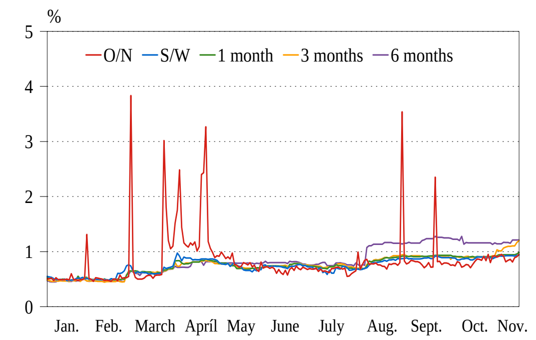
An interbank market in domestic currency has been in operation in Iceland for quite some time but was reorganized in June 1998. Eight credit institutions now take part in the market. According to rules set by the Central Bank in consultation with prospective players, participants undertake to place indicative bids for deposits and lending for a term of one day, one week, one month, three months and six months. At the same time, if requested by another participant, they undertake to place binding bids for specified minimum amounts. The minimum bid amount is 50 million kr. for six-month obligations and 100 million kr. for others.

Since its formal inception, average monthly turnover in the market has been 44.3 billion kr. Over the first ten months of this year total trading amounted to 407 billion kr. Average trading per month was thus just under 41 billion kr., while it was 50 billion kr. throughout the second half of 1998. Overnight transactions are mostly involved and have accounted for 91% of total turnover so far this year, compared with 93% from June to December in 1998.

In April this year trading dropped sharply in response to the Central Bank's liquidity rules and the resulting escalation of the spread between deposit and lending bids. Total trading in April was 19 billion kr., considerably below the year's average. Since then, turnover has been picking up and players in the market have managed to adapt to the new conditions. The spread between deposit and lending interest rates fell somewhat towards the end of April but has since then remained considerably higher than last year.

Chart 9

Interest spreads in the interbank market in króna 1999

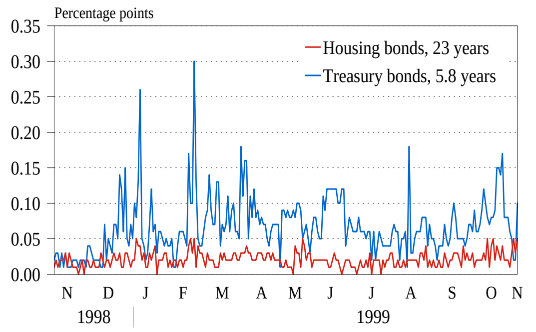


Transactions by the Central Bank

By the end of October the balance of outstanding Central Bank repos was 20.4 billion kr., and so far this year the repo balance has been in the range 12.5

Chart 12

Treasury and housing bonds.
Difference in bids and offers.



billion kr. to 22.6 billion kr. Despite the Central Bank's interest rate rises this year and the new liquidity rules, the repo volume has not declined. Their average level was 16.8 billion kr. during the first ten months of the year, as against 7.6 billion kr. last year. At the same time, the Bank's overnight lending facility averaged 0.4 billion kr. but was 0.3 billion kr. over the corresponding period in 1998.

The credit institutions' required deposits with the Central Bank have increased greatly of late because of large increases in their disposable funds, together with the fact that more institutions are obliged to maintain required deposits than before. At the end of October 1999 the total balance on required deposit accounts stood at 15.5 billion kr., which is an 80% increase from the end of 1997.

3. Interest rates of commercial banks and saving banks

Considerable fluctuations have taken place in the interest rates of commercial and saving banks in 1999. These fell somewhat during the first two months of the year but have been climbing since. For example, interest on indexed loans that fell by an average of half a percentage point in February, to 8.2%, had risen again to 8.8% in November. Nominal interest on secured loans fell by 0.2% in February, but has since gone up by 2.6 percentage points, partly in response to rising inflation, and now stands at 14.7%. The Central Bank's monetary policy actions had a considerable impact on lending rates of commercial and saving banks. Besides matching rises in the Central Bank repo rate during the year, commercial and savings banks may have been prompted by the new liquidity rules to raise their interest rates in order to curb credit growth. On the other hand, there are no signs that interest rates on unindexed obligations will go up as much as the rise in year-on-year inflation would justify. The interest margin appears to have widened, since interest on deposits has risen by less than interest on lending. For example, interest on general savings accounts has gone up by 0.3 percentage points and the yield on "money market" accounts by 1.8 percentage points. Interest rates on indexed deposits are thus virtually the same in November 1999 as they were at the beginning of the year.

Chart 11

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

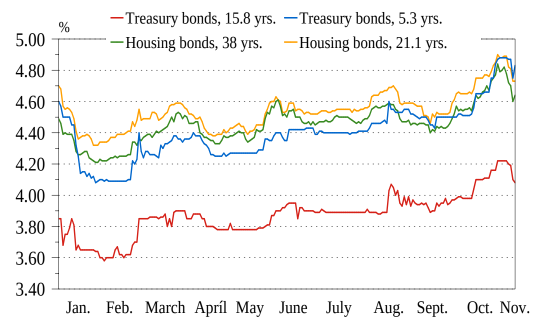


Chart 13

Trading volume in bonds on Iceland Stock Exchange

January - October 1998 and 1999

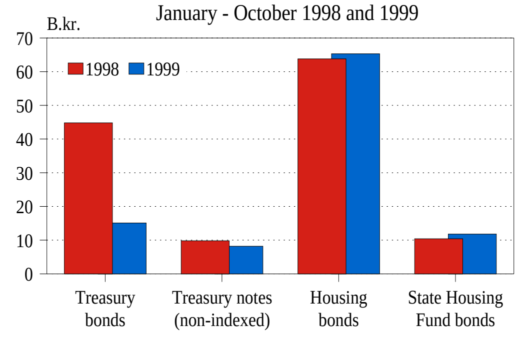
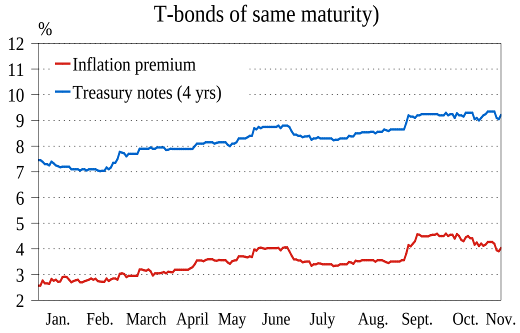


Chart 14
Treasury notes yields and the inflation premium (difference in yields on nominal T-notes and indexed T-bonds of same maturity)



4. Bond market

The yield on indexed market bonds has been climbing this year after a sharp drop in 1998. The yield on five-year treasury bonds has risen by 0.22 percentage points and is now 4.94%. A similar increase has taken place for other treasury bonds, at 0.25 percentage points. However, yields on housing bonds have not changed to any significant extent during the year. In fact their yield continued to drop until February, but a clear turnabout occurred with the new Central Bank liquidity rules. They made it more difficult for credit institutions to hold long-term marketable bonds, since these are not classified as liquid; when the rules were set, most credit institutions subject to them had a poorer liquidity position than was required.

The development of the spread between treasury bonds and housing bonds can be attributed to two factors. There have been no primary sales of savings bonds this year and the outstanding stock of treasury bonds has actually contracted because of early redemption. On the other hand, housing bond issues have increased. The spread between buying and selling bids for treasury bonds in the secondary market has also been widening, which has made them more difficult to sell. There is no single explanation for this development, but the treasury's buy-back procedures for government paper may play some part. The treasury has used two methods for buying back paper: auctions and purchases in the secondary market. The latter method creates uncertainty for market makers for these bonds and may have widened the spread. Another explanation may be that the lack of new paper has made the market less active, which is reflected in a wider spread.

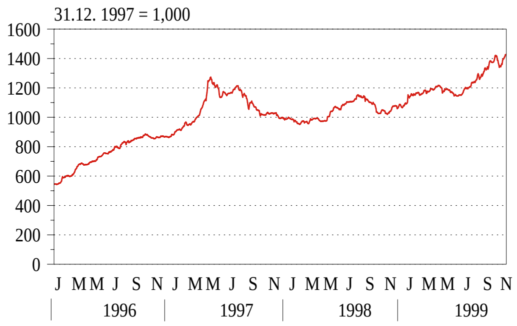
The yield on unindexed treasury notes has also increased during the year, by much more than that on indexed treasury bonds. This is due to the impact of higher inflation and inflationary expectations on their required yield.

Total trading in treasury-guaranteed marketable bonds in the secondary market has fallen this year. Trading in treasury bonds has declined in particular, falling to 15 billion kr. during the first ten months of this year compared with 45 billion kr. during the corresponding period of 1998. A relatively smaller contraction took place in trading in treasury notes, which nonetheless went down by 2.9 billion kr., or 6.7%, during the period. Secondary market transactions with housing and state housing fund bounds have shown some increase. Trading in them amounted to 77 billion kr. during the first ten months of the year, as against 74 billion kr. during the corresponding period in 1998.

5. Equity market

A large increase has taken place in share trading turnover during the current year. By the end of October, total share trading on Iceland Stock Exchange amounted to 30 billion kr. compared with just under 9 billion kr. over the same period in 1998. The ICEX-15 index rose by 31% up to the end of October. The market value of shares on the ISE main

Chart 15
Equity prices
Daily values of the ICEX-15



list was 281 billion kr. at the end of October, compared with 215 billion kr. at the beginning of the year. It is worth noting that share prices have risen substantially during the year at the same time as the Central Bank has raised interest rates three times. There is generally an inverse relationship between share price and interest rate movements in developed markets, although some exceptions can be found, for example when strong expectations about company performance or heavy demand smother the impact of higher interest rates, and also when rises in central bank interest rates are viewed as having a positive impact on the economy in the long run.