

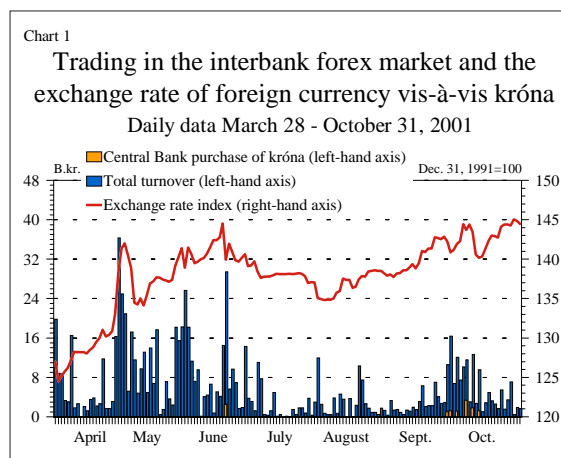
Financial markets and Central Bank actions¹

Balance, outflows, interventions and tight liquidity

After remaining in broad balance from July to mid-September, the króna started to slide which continued despite Central Bank efforts to stem it by intervention on several occasions. Demand for foreign currency has exceeded supply in recent weeks and its price has risen accordingly. Unease developed after the terrorist attacks on the USA on September 11, although this alone does not explain the depreciation of the króna. The exchange rate index, i.e. the price of foreign currency, rose by 5% from July 20 to October 29. The Central Bank intervened in the foreign exchange market at the end of September and beginning of October, selling currency to counter the depreciation. Some shortage of liquidity has been noticed but access to Central Bank repos is unlimited as long as credit institutions have assets to serve as collateral for their trading with the Bank. The impact of tight liquidity has been reflected in higher interest rates in the interbank market for krónur. The yield on various securities has also risen. Several instances of relatively large sales of bonds on Iceland Stock Exchange have been noted as well. Ways to change the intermediation process are being examined in order to achieve a better balance in the market for liquid funds. Equity prices have begun rising and the operating performance of a number of companies is apparently better now than it has been for some time, despite considerable financial expenses.

After reasonable balance between supply and demand ...

From the beginning of July until mid-September the interbank forex market was in fairly good balance. Supply of currency largely matched demand apart from a very few days in August when the króna appreciated somewhat. From July 2 to September 14 the foreign exchange index went up by 0.2%. Trading over this period was much smaller than the preceding months, however. Chart 1 shows the foreign exchange index and trading from the date of the change in monetary policy, March 27. Daily trading averaged 3.4 b.kr. from July 1 to October 31, while from March 28 to July 1 the daily average was more than 9 b.kr. The causes of lower trading volume are among others a lower merchandise trade deficit in July and August compared with the year before (2.1 b.kr. compared with 5.8 b.kr. in 2000) and less



investment by Icelanders in foreign securities. In July, August and September such net investment amounted to only 0.5 b.kr. A sharp turnabout has taken place between the years, since net investment at the same time in 2000 was 10.8 b.kr. Furthermore,

1. This article uses data available on October 31, 2001.

the fisheries catch and prices for pelagic species created promising prospects that foreign currency earnings would increase from earlier forecasts.

... supply began to halter, the index rose and the Central Bank intervened

After the terrorist attacks on the USA, uncertainty began to be felt in the foreign exchange market. It was also noted that pension funds were buying currency in order to take advantage of the fall in share

prices in foreign markets. Uncertainty about the global economic outlook also had a considerable impact, compounded by uncertainty about how to evaluate the draft budget for next year. Íslandsbanki's forecast for the year-end exchange rate of the króna also had a temporary effect. All these factors combined to cause the króna to slide, even though no spiralling was noticed except possibly on one occasion, which the Central Bank succeeded in halting. On September 28 the Central Bank intervened in

Box 1 Market upheavals following terrorist attacks

The terrorist attacks on the USA on September 11 caused great upheavals in markets around the world. The attacks were made just before markets opened in the USA and it was immediately decided not to open New York Stock Exchange for trading. Many other markets were open, however. The initial impact reflected great uncertainty, both about what exactly had happened and not least about the conceivable effect on market infrastructure and the financial system as a whole. Major financial institutions had facilities at the World Trade Center and it was unclear whether important hardware or data were housed there which could be vital for normal trading.

In the markets, the first discernible signs were sharp rises in the prices of oil and gold, and bond prices rose at once, a classical response to uncertainties. The US dollar fell immediately against most other currencies, but given the uncertainty that prevailed, the drop was regarded as a fairly small one. One contributing factor was the Federal Reserve's immediate announcement that access to its discount window, which normally is discouraged, would be unrestricted for the time being. Work also began on setting up emergency facilities for the Federal Reserve in London. The European Central Bank and other major central banks soon announced that measures would be taken to ensure smooth settlement of currency trading.

Hiccups were noticed on foreign exchange markets but most of them were kept open, although trading contracted sharply. A few banks temporarily suspended bid quotations in dollars and others announced

qualifications about being uncertain whether settlements could be made at specific times. Trading shrank substantially in most markets. Calm was restored in the course of time and intervention by central banks in Europe and Japan, together with swaps made by the Federal Reserve with several central banks, dispelled uncertainties about payments settlements.

In Iceland, the most noticeable impact for foreign exchange market participants was the difficulties they encountered in obtaining quotes in dollars from established international credit institutions, and when such quotes were made they typically included qualifications about delivery and settlement. ACI – the Financial Markets Association – suggested to its members not to make any aggressive quotes in financial markets for the time being. At 14:00 GMT on September 11 Iceland's interbank foreign exchange market makers made a gentlemen's agreement not to trade for an unspecified period. Early on the morning of September 12 the Central Bank met the market makers and Financial Supervisory Authority to appraise the foreign exchange market situation. It was decided that the market would open as normal but that market makers would refrain from trading as far as possible for the time being. The Central Bank cited the clause in its joint declaration with the government of Iceland from March 27 authorising it to intervene in the foreign exchange market if large swings posed a threat to financial stability. As the day wore on it became clear that foreign exchange trading ought to be able to continue as usual and gradually the situation normalised.

events by selling US dollars. It intervened in the market again in the following days. The Bank's total intervention in this round amounted to almost 10 b.kr. While the interventions had some impact, they did not manage to counter the underlying imbalance between foreign currency supply and demand. Part of the imbalance in recent weeks may be the result of seasonal items.

Following the interventions, liquidity shortages resurfaced ...

When the Central Bank takes Icelandic currency out of the market, as has happened in interventions in the foreign exchange market, the results can be temporary imbalances in the market for liquid funds. Balance is only restored if the Central Bank channels liquid funds into the economy through increased lending to banks or if the treasury does so by reducing its deposit at the Central Bank. The Central Bank's main way to inject domestic currency into the economy is through repurchase agreements with credit institutions. No ceilings have been put on repo amounts, but the Central Bank has determined interest rates on them. Apparently, the main restriction on repurchase agreements is that credit institutions are beginning to run short on assets which can be used as collateral for them with the Central Bank. The stock of outstanding Central Bank repos was 74 b.kr. after mid-October, a record amount. The position of individual credit institutions varies, however. Some seem to be squeezed, while others have ample liquidity. Balance can be achieved if the better-placed institu-

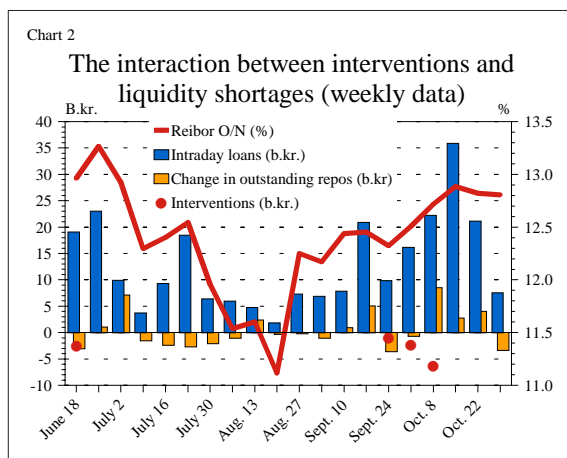
tions in this respect lend to those which are not in such a good position, although fully utilised credit lines can sometimes hamper efficient distribution of liquidity. Interest rates have risen significantly in the interbank market for krónur and peaked at more than 13% in the middle of October. Chart 2 shows the interaction between interventions, interest rates in the domestic currency market, repos and day-lending. Tight liquidity has also been reflected in offers of very favourable deposit terms to companies with ample cash positions.

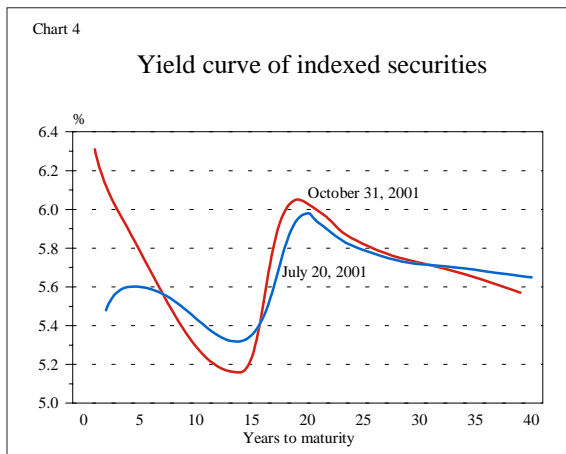
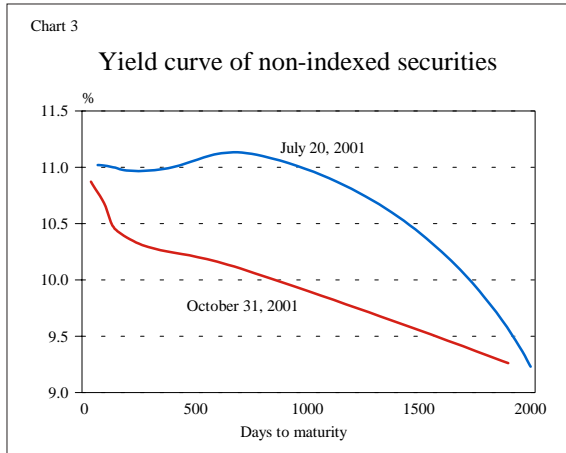
... but the effectiveness of the liquidity transmission mechanism needs to be examined

A study of establishing a formal FX swap market for dollars and krónur is now being conducted. The benefit of such a market would be to enable institutions with ample positions in krónur to lend domestic currency on a forward basis against counter-loans in dollars. Since this arrangement is not as risky as direct non-indexed loans in the market for krónur, it ought to be able to allow larger credit lines than in the traditional interbank market. The conclusion of this study should be known shortly.

The interest rate trend is not absolutely consistent, but more demand impact can be discerned ...

Yields in the bond market have tended to slip in recent months, in line with the well known "flight to quality" effect during periods of uncertainty, which causes prices to rise and a corresponding reduction in yields. However, this trend is not absolutely consistent. Yields on most benchmark categories in the bond market rose somewhat in October. The main reason was that market participants of all sizes have needed to sell bonds from their portfolios in order to raise liquid funds. Also, for quite a while, some had been expecting a cut in Central Bank interest rates, with a corresponding rise in bond prices. This wait may have become excessively long, forcing them to sell bonds. Yields on housing bonds with a maturity in 2022 rose marginally, while yields on housing financing fund bonds with a similar lifetime showed some reduction. Yields on government bonds with a maturity in 2015 went down somewhat. Over the period from July 20 to October 31 the yield on housing fund bonds with a maturity in 2038 went down from 5.57% to 5.44% and housing bonds with the





same redemption date from 5.68% to 5.58%. Yields on treasury notes maturing in 2003 dropped sharply over the period, from 11.10% to 10.10%. Chart 3 shows the yield curve for non-indexed securities and Chart 4 the yield curve for indexed securities on July 20 and October 31. The reason for the dip in the first half of the indexed security yield curve is that the market for the shorter instruments, which are government savings bonds, is not as active as the market for housing bonds, which form the backbone of the longer end.

... but interest rates rose somewhat in the domestic currency market

Interest rates on overnight loans in the interbank market for krónur went up by 0.67 percentage points from July 20 to October 26. Transaction volumes were fairly low, which can be explained by the fact

Table 1 Central Bank policy rate and inflation forecast in selected countries

	Policy rate (%)			Inflation forecast (annual rate, %)
	July 20	Oct. 31	Change	
Iceland	10.90	10.90	.	6.4
Denmark	4.50	3.75	-0.75	2.7
Norway	9.00	9.00	.	2.6
Sweden	4.25	3.75	-0.50	1.8
Euro area	4.50	3.75	-0.75	2.0
USA	4.00	2.50	-1.50	2.7
Japan	0.00	0.00	.	-0.3
United Kingdom	5.25	4.50	-0.75	2.3

Sources: Reuters, Consensus Forecasts, Central Bank of Iceland.

that credit lines between participants were by and large fully utilised, curbing further transactions. The highest recorded yield was 13.03% on October 16, after which it fell again.

The interest rate differential with abroad widened significantly when many central banks lowered their policy rates in the wake of the terrorist attacks on the USA. It increased from 6.78% in the middle of July to 7.33% in the second half of October. Domestic interest rates measured in terms of the yield on three-month T-bills fell somewhat, from 11.07% to 10.61%, but the weighted average yield on foreign T-bills went down from 4.29% to 3.28% at the same time. After the terrorist attacks, central banks in the leading industrialised countries lowered their policy rates to ease liquidity and reduce the likelihood of a sharp economic downswing. These measures were mainly implemented by the largest central banks, but there are examples of central banks which have not cut their rates. The Federal Reserve cut its rate by 0.5 percentage points on September 17 and again on October 2. Many others followed suit, such as the ECB, Bank of England and the Swedish, Danish and Swiss central banks. Table 1 shows policy rates in selected countries on July 20 and October 31 respectively. The ECB and Central Bank of Canada, in fact, also reduced their rates by 0.25 percentage points at the end of August.

The bond market has thrived ...

Trading in the bond market has continued to increase with total transactions of 190 b.kr. from July 20 to

Box 2 Are credit institutions overdependent on the Central Bank?

The credit institutions' large facilities with the Central Bank invite the question whether they are overdependent on it for their funding. Since 1994, the credit institutions' net position with the Central Bank (as a proportion of M3) has swung from +3.4% to -11% (in September 2001). Institutions which formerly had large net balances with the Central Bank now owe it considerable sums over and above their deposits. The bulk of these liabilities are repurchase agreements. A similar development has taken place among deposit money banks in particular.

The table shows the net position of deposit money banks (DMBs) towards central banks in selected countries. It reveals that the scope of the Central Bank of Iceland's facilities for DMBs is not abnormal compared with what has been happening elsewhere.

Deposit money banks' net position with Central Bank as % of M3

Average for selected countries in the period 1990-2000

Country	Highest value	Lowest value	Average	Latest value	Standard deviation
Iceland ¹	-6.9	15.0	4.4	-5.9	-4.5
Denmark	-13.0	10.2	0.2	0.3	-4.2
Finland	-5.6	14.8	5.6	3.3	-4.8
Norway	-19.6	6.5	-3.3	-0.3	-6.9
Sweden.....	-20.6	8.8	-0.7	-4.0	-4.1
Japan	-3.3	2.5	-0.7	0.1	-1.1
New Zealand	-2.9	3.0	0.7	-1.3	-1.2
Switzerland	-2.4	1.9	0.6	-1.5	-1.2
Germany	-7.9	-3.1	-5.9	-4.8	-1.1
Chile.....	-56.3	2.2	-20.9	-4.9	-17.3
Brazil.....	-13.7	30.0	6.9	19.9	-9.6
Mexico	-21.8	32.6	3.8	-1.1	-8.4
Korea.....	-28.5	-2.0	-13.4	-1.1	-6.4
India	5.2	13.1	9.7	6.3	-2.2
Thailand	0.5	9.2	3.1	4.5	-2.1
Israel	0.7	92.8	12.6	17.3	-13.1
USA	0.9	1.7	1.3	0.0	-0.2
France	-8.6	0.9	-2.1	-2.7	-2.0

1. To September 2001.

Source: International Monetary Fund (*International Finance Statistics*).

October 31 and 494 b.kr. so far this year. During the past three months, total daily bond trading exceeded 4 b.kr. on six occasions, compared with three during the previous three months. Trading in housing bonds and housing fund bonds amounted to 92 b.kr. over the past three months and in government bonds to 35 b.kr. Treasury bond volume was 40 b.kr. over the past three months, and T-bill turnover 8 b.kr. The outstanding T-bill stock has averaged 12 b.kr. On several occasions large-scale bond movements have been noticed within the course of a day, sometimes connected with the closure of currency forward agreements. It is interesting to note that trading in bank bills has been growing, amounting to 12.5 b.kr. over the period from July 20 to October 31 and 31 b.kr. so far this year.

... and the equities market appears to be starting to pick up

Equity prices continued to fall until the end of August and the ICEX-15 index dipped below 1000 points in the second half of that month. Since then prices have been on an upward path and by October 31 the index had risen to 1088 points, up 4.9% since July 20. Since the beginning of the year, however, the index has slid by 16.7%. The largest rise in the index was at the beginning of October when the government announced proposals for changes in corporate taxation. Turnover in the equities market increased considerably in the latter part of the period and amounted to 35.5 b.kr. in all from July 20 to October 31. From the beginning of the year to the end of October, turnover totalled 110 b.kr. By the end of

October a handful of companies had announced their nine-month figures. Improvements in operations seemed to be on the horizon for various companies, particularly in the fisheries sector, although financial

expenses are a heavy burden on most of them, the product of both exchange rate changes and high levels of indebtedness.