

Domestic markets calmer

Tension in the markets eased considerably in the second half of April after a quite eventful spell since February 20. The Central Bank of Iceland announced an 0.75 percentage-point rise in its policy interest rate on March 30, and again on May 18. A deterioration in the inflation outlook, partly caused by the depreciation of the króna, was cited as the rationale for both hikes. Interest rates in the interbank market for domestic currency rose in pace with the policy rate rises. The króna depreciated by roughly 10% from mid-March to mid-June. Changes in Treasury bond issuance were announced in the beginning of May and subsequent auctions went smoothly. While international equity markets witnessed a fair amount of volatility, the Icelandic market settled down somewhat. Many central banks have either raised their policy rates or appear poised to do so in the near future.

Did the Icelandic market spark an international reaction?

Unease has been rising in various international markets recently. In part this is the effect of tighter liquidity, but higher oil prices also appear to be causing concerns about a downturn in the economic outlook. Globalisation also causes contagion between different markets and countries. The outlook for higher inflation has prompted many central banks to raise their policy rates in order to smother inflationary pressures and expectations. Iceland has diverged from this broad trend, because massive investment projects and sudden structural changes in the mortgage loan market triggered imbalances which have been amplified by soaring domestic consumption.

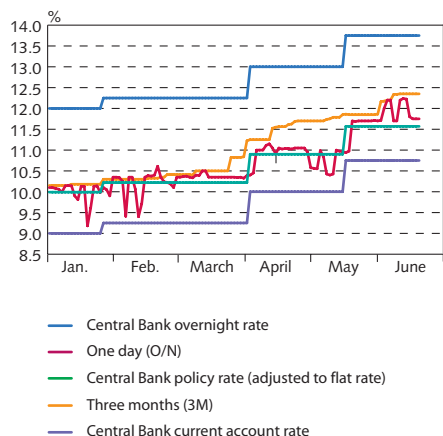
It has been obvious for some time that the economy needed to establish better balance – the Central Bank of Iceland began raising its policy rate in May 2004 in response to a downturn in the inflation outlook. Structural changes in the housing market, banking sector expansion and foreign investor activity caused a lag in the necessary effect of the Central Bank's measures. The record current account deficit, for example, indicated that the króna was overvalued, so a sizeable adjustment was not unexpected. The króna slid in February and March and equity prices, which had peaked in mid-February, also fell quite sharply. Notably, however, equity prices have not dipped much below their value at the end of 2005, even though this sealed in a rise of almost 90% over that year.

Carry trade began leaving its mark on market developments in August 2005. This caused the króna to appreciate and drove down interest rates in Iceland, counteracting the Central Bank's measures. Market unease in Iceland in February and March infected other markets which were in a comparable position. Investors who had hedged by spreading their trades across markets were forced to respond to losses in Iceland by closing their positions elsewhere, causing a chain reaction. The first-round effect on larger, more developed markets was only slight, but later it may have had an impact, because some of the investors were from these countries and their tighter positions may have set off a chain reaction. Thus changes in Icelandic markets might

1. This article uses data available on June 23, 2006.

Chart 1
Interest rates in the interbank market and
Central Bank policy rate

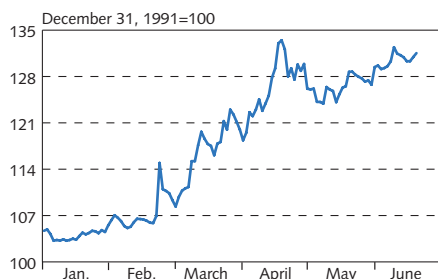
Daily data January 3, 2006 - June 23, 2006



Source: Central Bank of Iceland.

Chart 2
Exchange rate index of the króna

Daily data January 3, 2006 - June 23, 2006



Source: Central Bank of Iceland.

appear to have foreshadowed volatility in larger markets. However, global imbalances have been building up for some time and only a small spark may have been needed to light the fuse.

Two policy rate hikes

The Board of Governors of the Central Bank of Iceland decided to raise its policy interest rate by 0.75 percentage points on March 30, and by the same amount on May 18. A poorer inflation outlook was the reason for both hikes, with the depreciation of the króna in a decisive role. When the revised national accounts for 2004 were published in March it emerged that GDP growth had been seriously underestimated. Banks were likewise urged to tighten their lending, because all criteria for credit growth showed that it had been excessive. The development of the policy rate and interest rates in the interbank market for krónur is shown in Chart 1.

Weaker – stronger – weaker

The króna continued to weaken in March, for example in the wake of a foreign bank's report on the Icelandic economy published on March 21, when the exchange rate index rose by 2.7%. Shortly afterwards, on March 24, reports that US investors had called bonds issued by Icelandic banks drove the exchange rate index up by 2.3%. Further depreciation was caused by changes in assessments of the banks' financial strength and by higher-than-expected inflation figures in April. The króna appreciated intermittently between these events, but the trend was downward. The highest index value was reached on April 21 at 133.47, shortly after another foreign bank published a negative report on the Icelandic economy. A turning point was reached then, however, because the króna strengthened in the course of that day.

For the next days the trend was towards strengthening, partly shored up by Iceland Chamber of Commerce's publication of a report by Fredrick Mishkin and Tryggvi Thór Herbertsson on May 3. The next day the Central Bank published its annual *Financial Stability* report whose broad finding was that the financial sector was sound and could withstand considerable shocks, but challenges lay ahead. Around the same time, banks published their Q1 figures showing record profits. The exchange rate index rose even though the Central Bank's policy rate hike on May 18 was in line with expectations, possibly due to unease in other countries, including movements of the Turkish lira and South African rand.

Volatility had diminished by this time, but Standard & Poor's announcement in early June that it had changed Iceland's sovereign outlook from stable to negative weakened the króna. Fitch Ratings' claims that a harsh landing could be expected for the Icelandic economy, plus poor inflation figures, fuelled further depreciation. Occasional glacier bond (foreign króna-denominated Eurobond) issues have been made, which has supported the exchange rate value. The exchange rate index is shown in Chart 2.

Króna volatility eases towards average

One effect of the exchange rate movements in February was that volatility of the króna, measured as the floating monthly average stand-

ard deviation of daily changes, increased sharply, as shown in Chart 3. The exchange rate is clearly much closer to long-term equilibrium now than in the autumn, for example, but judging from the last spell of unrest, overshooting may be expected which could even persist for a while. Economic imbalances in Iceland and movements in international markets could cause intermittent tremors in the next few months.

Record FX market turnover

The jumpy state of the markets has boosted turnover substantially. Turnover in the foreign exchange market this year already exceeds the total for 2005, which was a record. From the beginning of 2006 to June 23, turnover amounted to 2,313 b.kr, compared with 2,077 b.kr. over the whole of the preceding year. In addition, in the beginning of May Reuters launched a market for Icelandic krónur which has witnessed a fair amount of trading and provides a welcome addition to the available options. Turnover in the Reuters trading system amounted to 243 b.kr. from the launch on May 6 until June 23. Spreads in this market are generally wider than in the domestic interbank market. A number of non-Icelandic banks have tapped into this market, largely using the euro as a reference currency, while the US dollar is used in Iceland's domestic interbank market, at least for now.

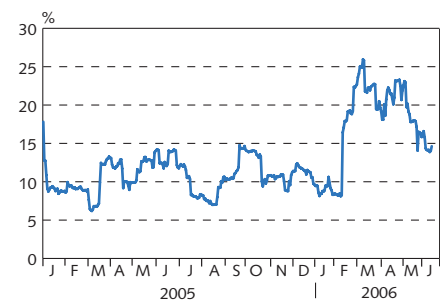
Foreign reserve movements

The Central Bank's foreign reserves have grown in krónur terms in pace with the depreciation of the króna, over and above its regular currency purchases to meet the Treasury's foreign debt service requirements. At the end of March, reserves exceeded 80 b.kr., including a sizeable amount of currency accumulated by the Treasury to service a loan maturing at the beginning of April. This repayment dented the reserves, which currently stand at 74 b.kr. The external position of the Treasury has improved significantly in recent years, because of easy liquidity connected with the present economic boom, and has been boosted by proceeds from the privatisation of Iceland Telecom.

Maturity of glacier bonds approaching

When the first glacier bonds mature in September 2006 it will be interesting to monitor their effect on the exchange rate and interest rates. Chart III-1 on p. 14 shows the maturity profile of the glacier bonds. Judging by the experience of New Zealand² the impact should not be as great as might be expected, for several reasons. Markets are forward-looking and since these known values can be allowed for, they should not deliver a surprise. Some of the redeemed Icelandic currency could conceivably be reinvested in Iceland by investors who intend to weather the current turbulence. Also, a sizeable group has probably already its closed positions with forward agreements and assumed the loss on investment. Yields on glacier bonds in the secondary market showed a marked rise when the tremors were felt in February and March, and domestic investors may well be attracted to these instru-

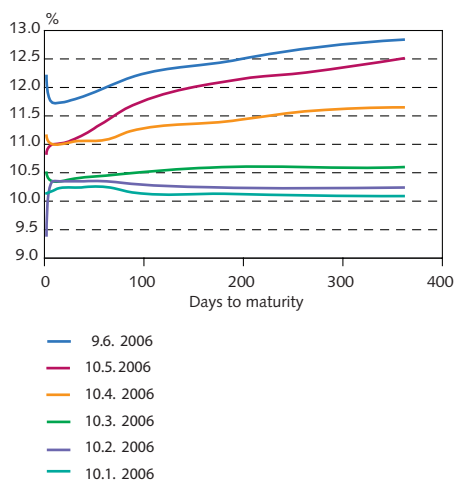
Chart 3
ISK volatility against USD
Daily data January 3, 2005 - June 23, 2006



Source: Reuters.

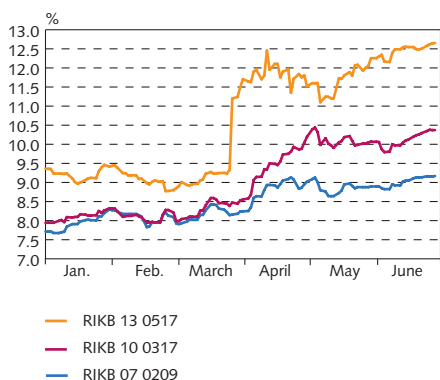
2. See Thorvardur Tjörvi Ólafsson: Króna-denominated Eurobond issues, *Monetary Bulletin* 4/2005, 55-83.

Chart 4
Yield curve on money market



Source: Central Bank of Iceland.

Chart 5
Treasury note yields
Daily data January 3, 2006 - June 23, 2006



Source: Central Bank of Iceland.

ments, which are generally backed by respected issuers. Such a development would alter the picture, because if the bonds are bought by domestic investors their exchange rate impact will be felt outside the maturity dates, terminating the foreign investors' króna positions.

Upward-sloping yield curve

Market agents' expectations about future interest rates can be read from a simple yield curve. The position of the curve at different points in time can make a revealing comparison; Chart 4 shows the change in future interest rates on long debt in the space of a very few months. Taking figures for January 10 and February 10, the yield curve in the interbank market for krónur shifted upwards then by broadly the equivalent of the Central Bank's policy rate hike on January 26. In the turmoil that broke on February 20, the risk of higher inflation suddenly dawned on the market, and longer rates jumped between February 10 and March 10, e.g. by 0.36 percentage points in the case of one-year rates, which may be partly explained by expectations of a further policy rate rise. Compared with March 10, one-year interest rates had risen by 2.24 percentage points on June 9, while the policy rate has gone up by 1.5 percentage points over the same period. Some impact can also be seen on nominal Treasury note yields, as shown in Chart 5. Yields on RIKB 10 0317 rose by 2.03 percentage points from January 10 to June 9, outstripping the policy rate hikes by 0.28 percentage points, while RIKB 13 0517 rose by 1.33 percentage points over the same period, namely by 0.42 percentage points less. Thus the market has signalled its view that the need for higher long-term interest rates has diminished, given that the inflationary spike is only temporary and will unwind over time.

The same inference can be made from calculated yields on swaps in the Reuters trading system.

Widening interest-rate differential with abroad

Measured in terms of three-month debt instruments in the interbank market, the interest-rate differential between Iceland and abroad widened from 7.0 to 8.6 percentage points over the period from March 14 to June 20. Partly this reflects policy rate hikes over the period, but domestic interest rates have also risen by more than the policy rate in response to higher inflation.

Treasury enhances monetary policy

It has been apparent for some while that nominal interest rate formation has been marred by market breach. Given the Treasury's negligible likelihood of default, its instruments conventionally represent the risk-free benchmark rate on which the market interest rate structure is based. Iceland's low central government borrowing requirement led to a decrease in short-term issuance by the Treasury, which decided to try to build up the series with the longest residual maturity, i.e. maturing in 2010 and 2013. T-bill maturities were also shortened from three months to one month. As a result, a sizeable gap developed in the yield curve. A review of this arrangement, launched on the Central Bank's recommendation, decided that the Treasury would

issue two-year notes at six-month intervals, and reintroduce monthly issues of three-month bills. In the course of time this will create a fairly continuous yield curve for the two years ahead. The value of each series of two-year T-notes will be roughly 15 b.kr. and they will be built up to that size with three auctions. It is hoped that this amount will suffice to establish credible price formation, especially since there will be so many closely spaced series. Eventually, the total volume of Treasury securities series with a maturity of two years or less will amount to around 60 b.kr. If primary dealers exercise their full entitlement to borrow government securities under new National Debt Management Agency (NDMA) rules, the total market value of each series could reach 25 b.kr. When the first tranche of two-year T-notes was auctioned on June 14, bids were submitted for 14 b.kr. In addition to accepted bids for 5 b.kr., primary dealers were allowed to buy a further 10% at the average auction yield, which was 11.6%. Total tranche volume therefore amounted to 5,424 m.kr. On May 30, the NDMA signed new agreements with five primary dealers in government securities. Market making for the RIKB 07 0209 series was also resumed after being discontinued for a period.

Brisk repo transactions

One consequence of the current ample Treasury liquidity and of requirements for minimum reserves is to create a strong need for Central Bank lending facilities. Repo volume has exceeded 100 b.kr. on several occasions, and on June 20 it amounted to more than 110 b.kr., the highest position ever. The repo stock is shown in Chart 6. The average balance on the Treasury's account with the Central Bank has been close to 40 b.kr., over and above its 32 b.kr. deposit of privatisation proceeds in a tied account with the Bank. Minimum required reserves have risen apace during 2006, by more than 36%. The main reason appears to be growth in foreign deposits with the deposit money banks. The minimum reserve requirement in June was 24.6 b.kr.

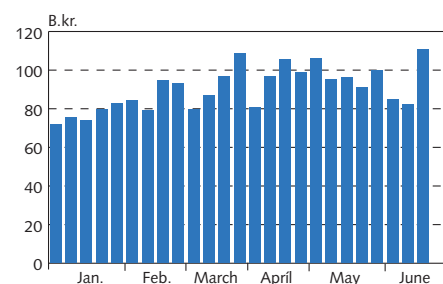
Decline in króna market trading

Trading in the interbank króna market so far this year is down year-on-year by 13%. Total trading has amounted to 691 b.kr. Swap market trading has been sluggish, at only 19 b.kr. this year. Overnight lending has been fairly sporadic, although almost 40 b.kr. has been granted so far, compared with 2 b.kr. at the same point in 2005. Of this figure, 21 b.kr. was provided on a single day, June 16, when one bank underestimated its credit requirement. Average weekly stock of certificates of deposit has run at 1.4 b.kr. so far this year, compared with 4.8 b.kr. over the corresponding period in 2005.

Volatile yields on Housing Financing Fund bonds

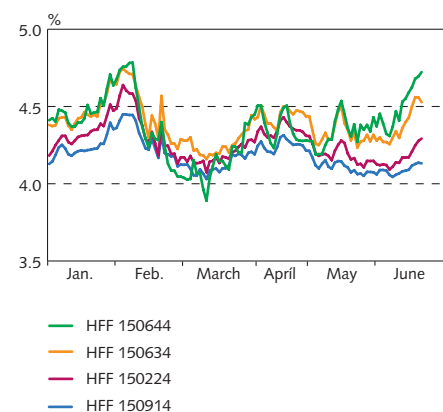
Yields on Housing Financing Fund (HFF) bonds on Iceland Stock Exchange (ICEX) have followed an ambiguous trend, as shown in Chart 7. This may well reflect the ongoing debate on the future of the HFF, as well as Standard & Poor's announcement in June that the fund was on CreditWatch negative. The HFF has held two bond auc-

Chart 6
Outstanding stock of Central Bank repos
Weekly data January 3, 2006 - June 20, 2006



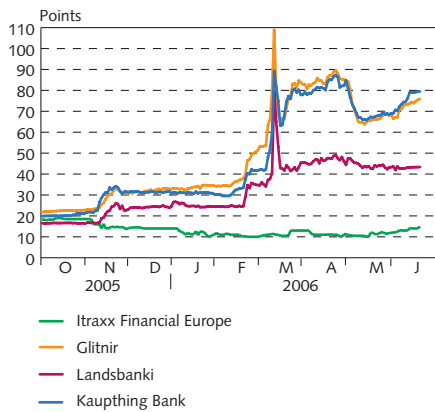
Source: Central Bank of Iceland.

Chart 7
HFF bond real yields
Daily data January 3, 2006 - June 23, 2006



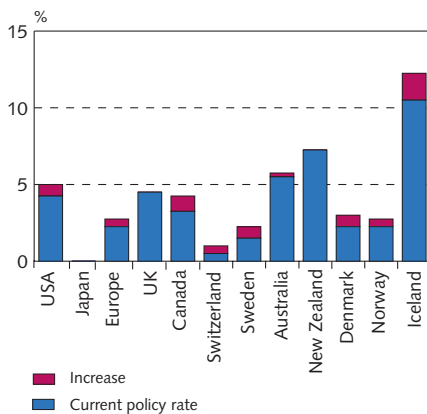
Source: Central Bank of Iceland.

Chart 8
CDSs of Icelandic banks and Itraxx
Financial Index
Daily data October 5, 2005 - June 20, 2006



Source: Reuters, Bloomberg.

Chart 9
Increases in selected central banks' policy
interest rates since the beginning of 2006



Source: Central Bank of Iceland.

tions but sold considerably less than in its original plans, and has now announced that they will be lowered. At the first auction on March 31, bids of 2.2 b.kr. for HFF 44 bonds and 1.5 b.kr. for HFF 14 bonds were accepted. In consequence, the HFF raised its new customer lending rate by 0.2 percentage points. The second auction, on June 16, saw total bids of 6.4 b.kr. accepted, comprising 1.7 b.kr. for HFF 34 and 4.7 b.kr. for HFF 14. The strengthening of HFF 14 deserves special note, because this series has been so small as to be marginally significant. Kaupthing Bank listed two series of mortgage-covered bonds on May 16 for a total market value of 48 b.kr. These bonds have not yet traded in the secondary market.

CDS prices on the rise

Credit default swaps (CDSs) are a recent addition to Icelandic securities trading. By pricing the risk of debtor default, CDSs offer investors a hedge to ensure payment on due date. CDSs for Icelandic bank bonds have not had a high market profile internationally, but in October 2005 their prices began to move upwards. Since then they have surged, albeit in a number of steps. Their increase is not in synch with the iTraxx Europe CDS index, which has trended downwards over this period, as Chart 8 shows.

Foreign portfolio investment still running high

Substantial levels of investment have been made in foreign portfolios in recent months, apart from March which saw sizeable net sales for the first month since 2002. Over the first four months of 2006, net foreign portfolio investment amounted to almost 61 b.kr., up from 22 b.kr. year-on-year. Non-residents made net sales of Icelandic securities for 30 b.kr. in Q1, as against net investment of 11 b.kr. in Q1/2005.

International fear of inflation

Many central banks have raised their policy interest rates over the past few months, as seen in Chart 9. High oil prices are probably leaving their mark, compounded by the tendency for housing price inflation in many countries to propel general inflation through the wealth effect and increased consumption. Rising interest rates push up the profitability required from investments and demand for liquidity is curbed. Equity prices have also come down so far in 2006, especially in European markets.

Equity market rallies

After coming under strain in February and March, Iceland's equity market has bounced some way back. Interestingly, equity prices have more often than not remained marginally higher than at the beginning of 2006, even after soaring by almost 90% in the course of 2005. Chart 10 maps the ICEX-15 index against indices of several major international exchanges.

New selection criteria for the ICEX-15 index will be introduced in mid-2006, whereby 12-15 of the 15 most traded and most liquid listed companies will be included in ICEX-15, instead of the previous arrangement of selecting 15 from a pool of 20.

Considerable changes have taken place in ownership of a number of companies listed on ICEX, including systematic measures to unwind the cross-ownership which came under criticism from international analysts when the unrest in February and March was at its greatest. Changes already made include Kaupthing Bank's sale of its 24% holding in VÍS insurance company to Exista investment company. Kaupthing Bank aims to retain only a negligible share in Exista, which aims for a listing in September, and will divest to institutional investors. Landsbanki sold its holding in the Swedish investment bank Carnegie at the end of April. Glitnir sold Sjóvá insurance company to Milestone investment company in May. FL Group sold its entire share in Easy Jet in April and has increased its holding in Glitnir from 4.2% to 23% since the beginning of this year.

Chart 10
Development of selected share indices
Daily data December 30, 2005 - June 23, 2006

