

Exchange rate and interest rates on the move

Issues of króna-denominated bonds by foreign borrowers in international markets led to an appreciation of the króna. The Central Bank announced a 0.75 percentage-point rise in its policy interest rate on September 29, at the same time as Monetary Bulletin was published. This measure also strengthened the króna. Interest rates on indexed long-term bonds went up after the policy rate hike. Issues of króna bonds in international markets have driven up demand for medium-term bonds and long-term borrowing in the interbank market for domestic currency, with corresponding pressure on interest rates. In 2006 the Central Bank will reduce its purchases of foreign currency in the interbank market from the level that has been maintained since September. It will mostly purchase currency to meet Treasury requirements and only on a much smaller scale to maintain the foreign exchange reserve. A number of central banks have raised their policy rates recently and others have hinted strongly that hikes may be pending. Iceland's equity market calmed down after prices were buoyant for most of the year, but trading picked up in mid-November and the ICEX-15 index began to climb rapidly once again.

Issues of króna bonds caused a currency appreciation

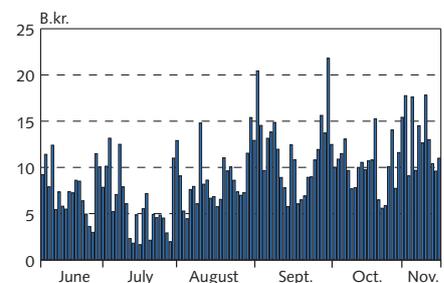
Foreign borrowers issued more than 114 b.kr. of króna bonds in international markets from the end of August, when issues began, and until mid-November.² Buyers had to procure the krónur to pay for the bonds in the Icelandic market, which duly affected the exchange rate. Exchange rate impacts of specific transactions are difficult to measure, but because of their character, frequency and information given about them, the impact of króna Eurobond issues is exceptionally visible. The Central Bank monitors movements in the exchange rate of the króna and has generally been able to discern quite reliably when buyers of the bonds have acquired krónur for them, and likewise when their impact wanes. This is very interesting information, because specific events in an FX market can rarely be isolated so decisively. On average, a 3 b.kr. purchase of krónur appears to lower the exchange rate index by 0.44. The standard deviation of the 16 measurements involved was 0.18. The impact became noticeably more pronounced over time, probably because market agents had difficulties in offloading repeated foreign currency inflows under conditions when the currency was appreciating. From August 24 to November 11 the króna appreciated by almost 8%, which presumably is largely explained by króna bond issues. Exchange rate developments are shown in Chart 1. Turnover in the FX market surged after króna Eurobond issues began. For example, turnover in September alone amounted to 255 b.kr., more than one-quarter of total annual turnover in 2004. Turnover so far this year has already broken the previous annual record and by November it was approaching 1,700 b.kr. The development of FX market turnover is shown in Chart 2. Turnover in the interbank currency swap market has picked up slightly and measured 14 b.kr. from the beginning of September to November 16, which is 38% of the total since the beginning of the year.

Chart 1
Exchange rate index of the króna
Daily data June 1 - November 16, 2005



Source: Central Bank of Iceland.

Chart 2
Turnover on the interbank foreign exchange market
Daily data June 1 - November 16, 2005

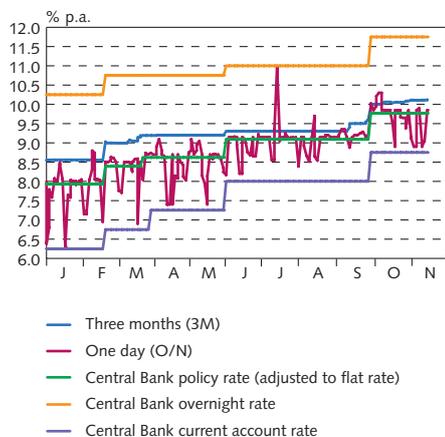


Source: Central Bank of Iceland.

1. This article uses data available on November 16, 2005.
2. For a detailed analysis see the article by Thorvardur Tjörvi Ólafsson in this edition of *Monetary Bulletin*, 55-83.

Chart 3
Interest rates in the interbank market
and Central Bank policy rate

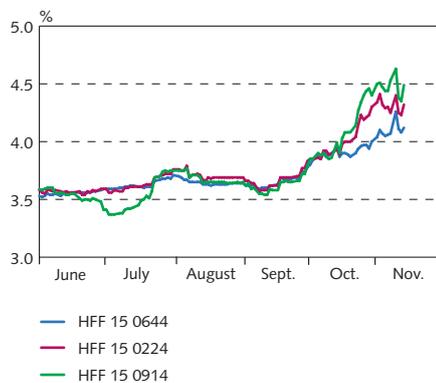
Daily data January 4 - November 16, 2005



Source: Central Bank of Iceland.

Chart 4
HFF bonds – real yield

Daily data June 1 - November 16, 2005



Source: Central Bank of Iceland.

Policy interest rate hike

The Central Bank of Iceland raised its policy interest rate by 0.75 percentage points at the end of September. The scale of the hike seemed to take market agents by surprise – market analysts had forecast an increase of 0.25 to 0.5 percentage points. Also, the wording of the Bank's message about a tight monetary stance seemed firmer than market agents had expected. In the wake of the policy rate hike, the króna strengthened and interest rates moved up, especially at the shortest end of the interbank market for domestic currency, where they broadly matched the policy rate increase. Rates at the longest end rose by less, however, which can be explained by hedging of international issues of króna bonds and the small size of the Icelandic market. The development of Central Bank and interbank market interest rates is shown in Chart 3.

Significant rise in HFF bond yields

Ever since the Housing Financing Fund introduced its HFF bonds in the middle of last year they have carried a low required yield relative to historical yields on indexed securities in Iceland. For a while, HFF bond yields dropped below 3.5%, indicating that the market was driven not by domestic pension funds, which are obliged to fulfil certain criteria in their investments, but by other investors. In September, HFF bond yields began to climb and reached a peak in the shortest class, which matures in 2014. The cause of this rise is unclear, but tighter liquidity might be a contributing factor, partly caused by the large Treasury position on its account with the Central Bank. Another possibility is that investors were drawn to non-indexed bonds by market expectations of low inflation over the next few months. The development of HFF bond yields can be seen in Chart 4.

Is the yield curve a reliable indicator?

Interest rates express the price of money. As a rule, market expectations can be read from interest rates over different time scales. Supply and demand in the market are balanced at the point where the market's view can be read. However, this does not apply in all cases, because market failures can distort the balance and thereby the point where market expectations are actually reflected. Iceland's thin market, for example, can lead to market failures that complicate normal interest rate formation. One instance was when the National Debt Management Agency waived market-making obligations for a class of Treasury bills which ended up almost entirely in the hands of a single buyer at an auction – it was obvious that normal price formation was impossible and market making could not function. Another example is the development of the shortest interest rates on Treasury notes (RB 2007) and the longest rates in the interbank market for domestic currency. Heavy demand from investors who were hedging exchange rate and interest rate risks for issuers of króna Eurobonds drove interest rates on these bonds/loans down below credible levels. By mid-November, the nominal stock of issued króna Eurobonds exceeded 114 b.kr., the bulk of them with a maturity of one to three years. Central Bank sources suggest that some 85-90% of the issues are hedged

against movements in the króna vis-à-vis other currencies, but the market value of the most suitable T-note class for hedging is only 26 b.kr. While other hedging formats are doubtless used, it is clear that the thin Icelandic market is currently forcing down interest rates over specific lengths, more or less regardless of expectations about pricing and interest rates.

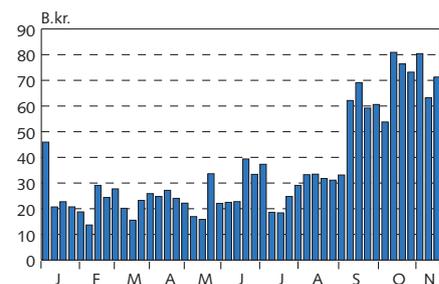
The Central Bank's foreign reserves

In recent years the reference level for Iceland's foreign reserves has been the average three-month level of merchandise imports over the past five years. The minimum size of the reserves is reviewed annually. However, the appreciation of the króna has eroded the reserves' value in domestic currency terms, although it has changed little in foreign currency terms. A new assessment of the foreign reserves reveals that only a slight increase is necessary and the Central Bank plans to purchase foreign currency for that purpose next year. As the agent for the Treasury's foreign currency transactions, the Central Bank will probably purchase foreign currency for the equivalent of 25 b.kr. this year to meet its requirements. The Treasury has systematically been reducing its foreign debt, including allocating a large share of the proceeds from the privatisation of Iceland Telecom towards prepayments. Also, the Treasury has made preparations in connection with foreign debts that mature next year and plans to purchase foreign currency for an additional 10 b.kr. then, to retire as much as possible. Debt service will amount to 3.5 b.kr. next year and extra foreign currency will be purchased to meet it. Total purchases to meet Treasury requirements and add to the reserves are therefore estimated at 5 m. US dollars per week in 2006, equivalent to 16 b.kr. over the year at the current exchange rate. The volume of purchases will be reduced from the level in effect from September to the end of this year, i.e. from 2.5 m. US dollars five days a week to 2.5 m. US dollars twice a week. Currency purchases will be arranged along the same lines as before, i.e. the Central Bank will make its purchases before the markets open in the morning.

Impact of the Treasury

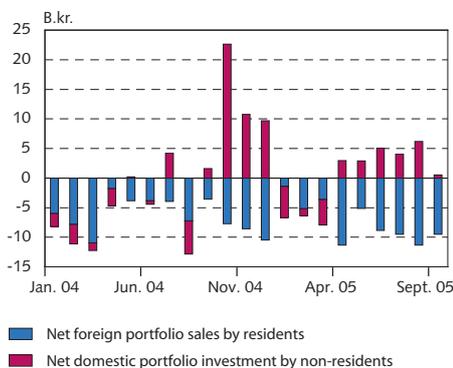
Changes in Treasury liquidity often have a considerable effect on Icelandic money markets. The Treasury's liquidity position is strong at present, even if the domestic-denominated share of the privatisation proceeds from Iceland Telecom, which was deposited with the Central Bank, is not included. As a consequence, roughly 60 b.kr. have been tapped out of the money markets which banks have to borrow from the Central Bank in the form of repo agreements, as shown in Chart 5. This enhances the impact of the policy rate instrument and sharpens the effect of monetary policy measures. The banks' financing costs rise and they are forced to respond by raising their interest rates, as has proved to be the case. Average interest rates in the interbank market for domestic currency (expressed as yields) have been higher than the policy rate yield for all lengths except overnight, nine-month and twelve-month loans; the impact of króna Eurobonds on the longest maturities has already been discussed above.

Chart 5
Outstanding stock of Central Bank repos
Weekly data January 4 - November 15, 2005



Source: Central Bank of Iceland.

Chart 6
Capital flows from cross-border securities trading
January 2004 - September 2005



Source: Central Bank of Iceland.

Changing patterns of portfolio investments

Residents have made sizeable foreign portfolio investments in the recent term. In 2004, net foreign portfolio investment amounted to 76 b.kr. From January to the end of September this year, the figure has been 66 b.kr. Residents have been net buyers every month since the beginning of 2004. Non-residents' investment in domestic portfolios have followed a different pattern with alternating net sales and purchases. Over the last four months of 2004, non-residents made net investments of 45 b.kr. in Icelandic securities. Net sales of 11 b.kr. followed in Q1/2005, and net investment of 22 b.kr. since then. Chart 6 shows capital flows in connection with portfolio investment by residents and non-residents. It presents currency inflows in connection with domestic portfolio investment by non-residents as a positive value and outflows in connection with foreign portfolio investment by residents as a negative value. Over the whole period in question, i.e. since the beginning of 2004, there has been an outflow of roughly 100 b.kr. in connection with cross-border portfolio investments.

Interest rates rise abroad

The Bank of Canada raised its key policy rate (overnight rate target) by 0.25 percentage points on October 18. The Federal Reserve also continued its measured hikes by raising its federal funds rate to 4% on November 1. In Norway, Norges Bank raised its sight deposit rate by 0.25 percentage points the following day. Nonetheless, the interest-rate differential between Iceland and abroad has widened because of the Central Bank's own policy rate hikes. Measured in terms of three-month debt instruments in the interbank market, the interest-rate differential widened from 6.44 percentage points at the beginning of September to 7.01 percentage points in mid-November. In terms of five-year Treasury notes, however, it narrowed from 4.34 percentage points to 4.22 percentage points.

Equity prices rally

After a relatively calm period in the equity market from mid-September to mid-November, the ICEX-15 index began to climb again when it gained almost 4% on November 16. Since the beginning of this year, ICEX-15 has risen by more than 48%. Chart 7 shows the development of equity prices since the beginning of the year. Trading on November 16 was very brisk at 19 b.kr. Most of the largest listed corporations have published their nine-month interim results and they have tended to report profits above the expectations of market analysts.

Chart 7
The ICEX-15 equity price index
Daily data January 4 - November 16, 2005



Source: Iceland Stock Exchange.