Upheaval in the global markets

The financial markets in Iceland and abroad have been in a state of flux in recent months, primarily due to the tumult in the segment of the US housing loan market known as the sub-prime mortgage market. This has kicked off a reassessment of risk after a long period of low interest rates, low credit spreads, a glut of liquid assets, increased risk-appetite and increased leverage. Central banks in Europe and the United States have taken steps to prevent a financial crisis. The European Central Bank significantly increased its liquidity facility, and the Bank of England did the same, granting one bank an emergency loan as well. The US Federal Reserve also increased its facility, reduced the overnight discount rate and finally resorted to a reduction in its federal funds rate which was beyond market expectations. There was no sign of a liquidity squezze in the króna market, and there was no need for the Central Bank of Iceland to take any special action. In the fall, the Icelandic Treasury's debt management affairs underwent a structural change when the National Debt Management Agency ceased operations and its activities were transferred to the Central Bank of Iceland.

Unease in the global markets ...

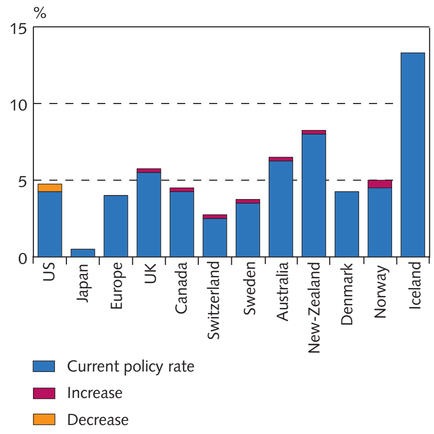
Concerns about the impact that unsecured mortgage lending in the US would have on the solvency of credit institutions led financial institutions to be reluctant to lend to one another or to corporations. The result was a sharp rise in interbank rates, with the spread between interbank rates and base interest rates the largest it has been in years. Investors fled, transferring their assets to short-term government-backed securities, suffering a substantial reduction in returns in the process. The turmoil peaked around mid-August. The European Central Bank, the Bank of England, and the US Federal Reserve responded with a tremendous injection of liquidity into the banking system.

The Federal Reserve reduced its overnight discount rate on 17 August. The premium on the fed funds rate dropped from one percentage point to 50 basis points, bringing the discount rate to 5.75%. On 18 September the Federal Reserve then lowered the fed funds rate from 5.25% to 4.75%, while most market agents had expected a decrease of 25 basis points. What followed was the largest one-day stock market surge in the US in quite a long time, and it is safe to say that the measure somewhat restored investor confidence. Shortly thereafter, the Dow Jones Industrial Average hit a record high but fell again soon afterwards. It appears as though the market's reassessment of risk is, to some degree, a permanent one. Conditions in the financial markets have been unusual in the past few years, with low base interest rates and spreads at a historical low. There has been easy access to capital, and investors with a high tolerance for risk have been amply rewarded. On the other hand, credit spreads are substantially wider now than they were at mid-year, and investors are clearly more risk-adverse than they have been in a long time.

Most central banks have the authority to grant emergency loans to financial institutions experiencing liquidity problems, and they can stretch their rules on collateral in order to provide easier access to such assistance. Central banks can provide a limitless amount of domes-

Chart 1

Changes in selected central banks' policy interest rates since the last *Monetary Bulletin*

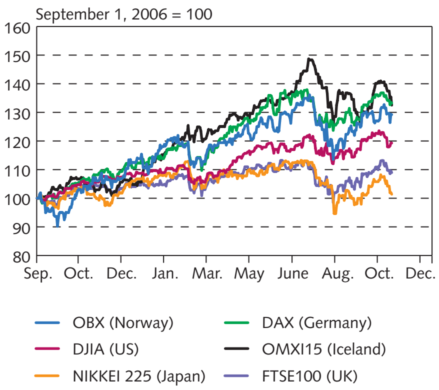


Source: Reuters.

Chart 2

Development of selected share indices

Daily data September 1, 2006 - October 24, 2007



Source: Bloomberg.

1. This article uses data available on 24 October 2007.

tic currency provided that the borrower meets the set requirements. The purpose of emergency lending is to prevent short-term liquidity problems from forcing a financial institution with a satisfactory equity position into bankruptcy. On 14 September the Bank of England announced that, following consultation with the UK's Financial Services Authority, it had granted the mortgage lender Northern Rock such a loan. Northern Rock deposit owners reacted quickly to the news and began withdrawing their balances, and for the first time since the mid-19th century, there was a run on a British bank. Thus the intended solution to the problem simply caused another, much graver, problem: lack of faith in the bank's ability to handle its affairs. Finally the British government announced its intention to guarantee all deposits in the bank, stating that the guarantee would remain in effect until the turmoil subsided. The reactions of the bank's customers took everyone by surprise, leaving governmental authorities and financial institutions all over the world to ponder the double-edged nature of intervention by a lender of last resort.

... and in Iceland as well

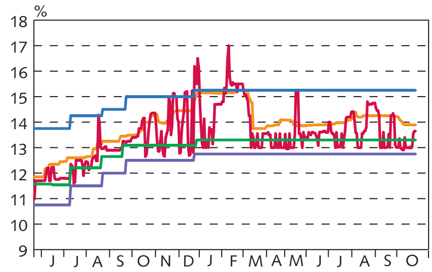
The unrest in the global capital markets did not make a major impact on the domestic money market, and there were no signs of liquidity problems requiring action by the Central Bank. Iceland's financial institutions seem quite well prepared to meet the challenge of a temporary squeeze in access to credit. The experience of last year was doubtless a valuable lesson.

The króna depreciated sharply while the commotion in the markets was at its peak. Between late July and mid-August it fell by roughly 15%, and position-taking in the króna was subject to wild fluctuation in August. According to the data that the Central Bank compiles on the commercial banks' foreign exchange balances,[2] their holdings in currency forwards totalled 769 b.kr. at the end of August, while the average balance for the month was only 674 b.kr., some 32 b.kr. less than at the end of July. Investors in the króna seem therefore to have closed their positions in the first half of August, when the turbulence was at a high point, and then reopened their positions toward the end of the month. Thus the banks' currency forwards rose substantially in August despite all the furore, whether the balance is measured in krónas or in foreign currency, while the króna depreciated roughly 3.5% over the course of the month. Since that time it has held its own, and exchange rate volatility has lessened. Because of the strong link between the Icelandic króna and the exchange rate of other high-yielding currencies, volatility in the króna is largely expected to be determined by conditions on the global financial markets.

Domestic equities hit a record high on 19 July, when the OMXI-15 index reached 9,080. A month later, however, it had plummeted 17% from its peak level and measured 7,550 on 16 August. Half of the loss corrected itself over the following days. Equity prices fell again, however, in mid-September, and the OMXI-15 dropped once more to 7,550. It began rising again soon afterwards, though and reached

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

Daily data May 22, 2006 - October 24, 2007

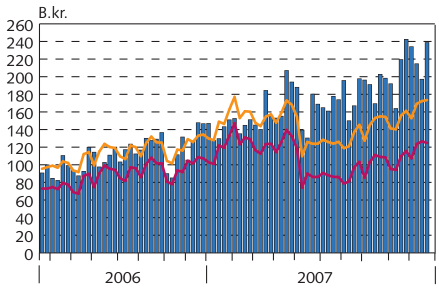


Central Bank overnight rate
One-day interbank market rate (O/N)
Central Bank policy rate
Three-month interbank market rate (3M)
Central Bank current account rate

Source: Central Bank of Iceland

Chart 4
Collateral loans, Treasury deposits
and reserve requirement

Daily data May 23, 2006 - October 24, 2007

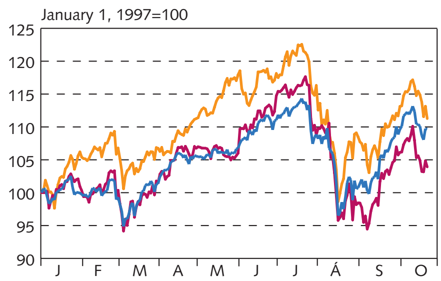


Collateral loans
Treasury deposits
Reserve requirement and Treasury deposits

Source: Central Bank of Iceland.

Chart 5
Exchange rate against JPY

Daily data May 22, 2006 - October 24, 2007



AUD
NZD
ISK

Source: Central Bank of Iceland

2. Data from Glitnir hf., Kaupthing hf., and Landsbanki Íslands hf.

8,600 by mid-October. Since then prices have been sinking further as earnings reports are published and it begins to emerge that the performance of the banks and investment companies forming the backbone of the OMXI-15 was much less stellar in Q3 than in the first six months of the year.

Glacier bond issuance abates

Glacier bond issuance net of maturities has totalled 109 b.kr. so far this year. The total outstanding glacier bond stock dropped by 16 b.kr. in the third quarter, while in August it was at a record high of 437 b.kr. The nominal value of the outstanding glacier bond stock now stands at 373 b.kr. Only 12 b.kr. will mature during the remainder of the year, as opposed to 68.5 b.kr. in January 2008. Over the past four weeks, glacier bond issuance has totalled a mere 4 b.kr., which indicates limited market interest at present.

Healthy Treasury liquidity and Central Bank collateral loan facilities

So far this year, the Treasury balance has been healthier than previously estimated. The Treasury's balance with the Central Bank has grown in recent months, totalling 133 b.kr. as of 17 October. The balance of Central Bank collateral loan facilities has also risen markedly. The surge just after the large glacier bond maturity date in September may indicate enhanced investor willingness to invest in the króna in the money market. The impact of the maturity date was hardly discernible on the currency market, which supports this conjecture. It could also mean that carry traders have chosen to conclude shorter contracts that can easily be closed at short notice.

The commercial banks also seem to have an ample balance in krónas. Interbank rates have been closer to the Central Bank's base rate than often before. Rates rose somewhat in August, however, when the unrest on the financial markets was at its peak. Most likely the banks cut back on lending temporarily while the storm blew over. However, interest rates never exceeded the Central Bank's overnight lending rate, which under normal circumstances forms a ceiling for short-term interest rates.

Long-term yields rise

Long-term indexed and non-indexed yields are now significantly higher than when the last *Monetary Bulletin* was published. Non-indexed yields have risen steadily throughout the year, partially in response to the Central Bank's message that a tight monetary stance is necessary for a while longer in order to rein inflation in. Indexed yields have also turned upward but moved off course following the tremors in July and August, when investors began hedging against inflation fuelled by a precipitous drop in the króna. Thus monetary restraint is clearly being transmitted to the far end of the yield curve.

Despite substantial increases in housing bond yields, the Housing Financing Fund has not changed the lending rates since 13 September. Yields on the secondary market for the longest maturities are now higher than the HFF's rates for loans without pre-payment fee. Because the Fund is large in comparison with the size of the domestic housing loan

Chart 6
Forward currency position
of the commercial banks
At end of month August 2006-September 2007

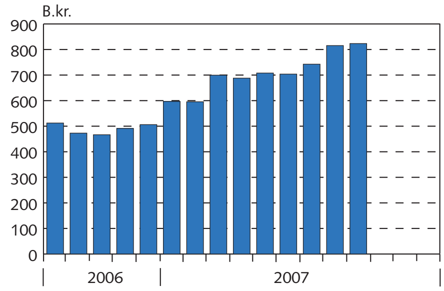
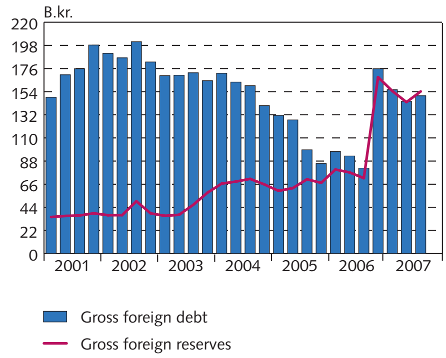
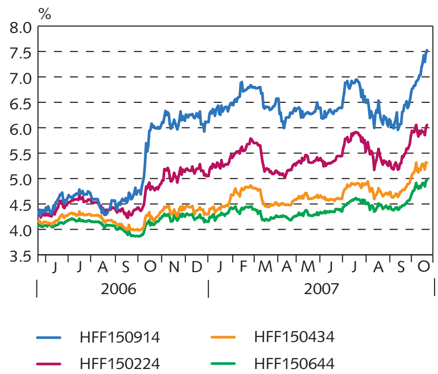


Chart 7
Gross researves and gross
central government foreign debt
Q1/2001 - Q3/2007



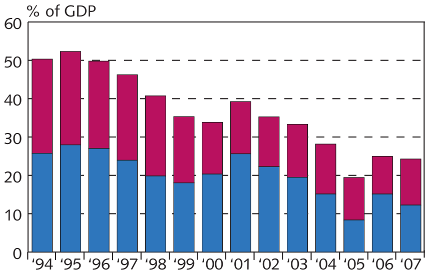
Source: Central Bank of Iceland.

Chart 8
HFF bond real yields
Daily data May 22, 2006 - October 24, 2007



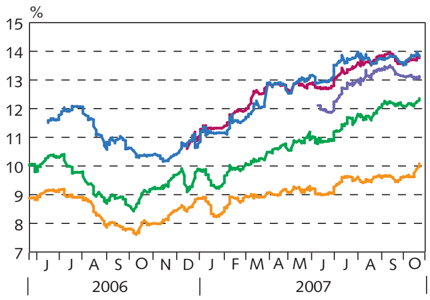
Source: Central Bank of Iceland.

Chart 9
Domestic and foreign Treasury debt[1]



1. Data until October 24, 2007 inclusive.
Source: Central Bank of Iceland.

Chart 10
Treasury note yields
Daily data May 22, 2006 - October 24, 2007



Source: Central Bank of Iceland.

market in Iceland, it is important that its lending rates reflect interest rate developments in the market. The Fund's interest rate policy has clearly obstructed the Central Bank's attempts to cut inflation.

Treasury bond issuance

The Treasury surpluses in recent years have been funnelled toward a substantial reduction of debt, with the result that the net Treasury balance – that is, Treasury claims and cash less liabilities – is in surplus of 63 b.kr. The Treasury's aim with its bond issuance is primarily to guarantee the existence of a secondary market in risk-free government instruments.

In 2001 the Treasury virtually stopped issuing indexed government bonds and turned its attentions to non-indexed T-notes and T-bills instead, with the objective of building up a risk-free non-indexed yield curve alongside the indexed yield curve of HFF bonds. Treasury and HFF issues provide an important foundation for pricing bonds issued by third parties, such as municipalities and corporations. The issuance also supports the development of domestic derivatives markets, and non-indexed Treasury issues support the build-up of a króna-based interest rate swap market. The yield curves are also an important measure of the market's inflation expectations.

In view of the Treasury's limited need for funding, the trend in domestic issuances has been to build up a limited number of non-indexed benchmark bonds. At present there are three T-bill series, the longest with a three-month maturity. In addition, there are five government bond series outstanding, two maturing in 2008 and the others maturing in 2009, 2010, and 2013.

Need for 10-year non-indexed T-notes

In recent years the average duration of the government loan portfolio has become shorter, having dropped from 4.5 years to 2.8 years in just over a year. The main reason is the Treasury's recent focus on the issuance of two-year T-notes. The last series of 10-year Treasury notes was issued in May 2002. Given the refinancing risk and the needs of the market, it would be desirable to lengthen the average lifetime of the portfolio by issuing a new series with a 10-year maturity. This would lessen the weight of indexed instruments in the domestic credit market and would facilitate the issue of long-term non-indexed bonds by other issuers. The issue of a 10-year T-note series would also facilitate price formation for 10-year króna-based interest rate swaps, whereas at present the banks post bilateral offers for interest rate swaps up to 5 years. Such an issue would also provide important additional information on the existing path and would improve monetary policy transmission across the yield curve. A comparison of yields between countries is generally based on 10-year benchmark bonds, and governments usually try to issue these regularly even in the absence of a need for funding. It is necessary to build up a new 10-year benchmark series quickly at first so that normal price formation can be achieved as soon as possible. As two T-note series with a total nominal value of 30 b.kr. will mature in 2008, this should pave the way for the issuance of a new 10-year series of Treasury notes.

Box 1

Changes in Treasury debt management administration

On 1 October 2007, the Central Bank of Iceland took over the administration of the Treasury's domestic debt management activities. An agreement to this effect was concluded on the basis of the Act on the National Debt Management Agency, no. 43/1990, which authorises the negotiation of an agreement with the Central Bank concerning the administration of foreign debt affairs, government guarantees, and relending, as well as other tasks assigned to the NDMA, as appropriate. Heretofore, the Bank has handled the Treasury's foreign debt management, while the NDMA has handled the domestic side.

The Treasury's credit market activities have dwindled in recent years. Total Treasury debt is projected at roughly 25% of GDP by year-end 2007, and it appears that the Treasury's funding requirements will be scant in the next few years. Roughly half of the Treasury's debt is in foreign currency. Since 1994 the proportion of foreign debt to total debt has ranged between 40% and 65%, most often hovering near 50%.

The Central Bank has handled foreign debt administration and communications with foreign ratings companies. A newly concluded agreement on domestic debt management assigns the Central Bank the task of administering and overseeing auctions, buybacks, and redemption of government securities, as well as agreements with primary dealers and administration of securities loans to primary dealers. The Bank will also handle regular information disclosure to the market and the Ministry of Finance and will maintain the website www.bonds.is. The transfer of the Treasury's debt management affairs to the Bank should not make any significant impact on the market.

According to the agreement, the Central Bank will also take over the NDMA's projects related to government guarantees and relending. The Bank will handle the administration of government guarantees and will assess the Treasury's risk due to such guarantees. It will also submit statements on government guarantees to the Ministry of Finance, as well as handling the processing and fee collection for such guarantees. The Central Bank will also handle the issuance of bonds for relending.

The agreement sets forth a clear division of tasks between the parties, assigning the management of debt policy affairs to the Ministry of Finance and authorising the Central Bank to execute day-to-day operations as the representative of the Ministry of Finance. The aim is to prevent a conflict of interest between the Central Bank's monetary policy objectives and the Treasury's debt management policy.

Lethargic T-bill market

The issuance of Treasury bills has unfortunately not yielded the expected results. Three-month T-bills are now sold on monthly auctions, with the size of each series roughly 4-5 b.kr. Thus there are usually some 12-15 b.kr. in T-bills outstanding, and the purchasers are mainly money market funds that hold them to maturity. The current trading volume in Treasury bills at the OMXI exchange is miniscule: while annual trading volume totalled around 80-90 b.kr. in 2003-2005, it has been below 10 b.kr. over the past two years. T-bills therefore make an insignificant contribution to price formation at the short end of the yield curve, as the interbank króna market has more or less taken on that role. The trend has been similar in other markets, including those in the Nordic countries. Lending fees for T-bill issues are high, as are short-term yields. The average yield on accepted bids in 2007 has been between 13.5% and 15%. Because the yield curve tilts downward, lending fees (at least for the short term) would be lower. Lengthening the non-indexed yield curve by issuing Treasury notes with longer maturities is important for the market, for monetary policy transmission, and for the de-emphasis of indexation at the longer end of the yield curve. Therefore it seems a logical move to terminate issuance of Treasury bills and focus on longer-term bond issuance.