Financial markets and Central Bank measures[1]

Continuing turmoil in the financial markets

Considerable turbulence continues to plague the global financial markets. The situation improved somewhat in April, however, as a result of co-ordinated efforts by leading central banks and the US Federal Reserve Bank's unexpected rescue of investment bank Bear Stearns from imminent collapse. Developments in the money markets have been somewhat positive, especially at the shorter end of the curve. Investors have been more risk-averse than they were in 2007, however, and their caution is reflected, for example, in high prices of credit default swaps. Rising oil and commodity prices have increasingly led to higher inflation in most parts of the world. Icelandic financial institutions still have very limited access to foreign credit markets. Icelandic banks' CDS spreads declined in April and May and then rose once again in June, but are lower than they were in April despite the recent increase. Turnover in the interbank money market has contracted substantially, and REIBOR rates have not changed markedly. The Central Bank's access to foreign currency was enhanced significantly in May when the Bank announced bilateral currency swap agreements with the central banks of Sweden, Norway, and Denmark.

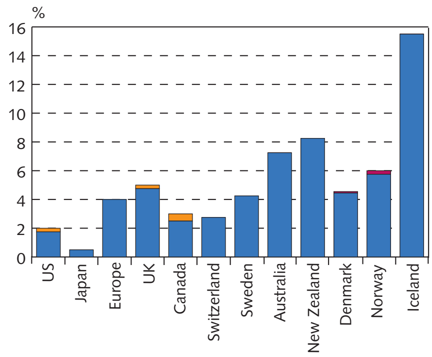
Monetary policy has relaxed in the US and the UK

In April, the US Federal Reserve Bank lowered its federal funds rate by 25 basis points to the current level of 2%. The Bank of England cut the bank rate in mid-April, also by 25 basis points, but the European Central Bank (ECB) has held its minimum bid rate unchanged for a full year. In June, upon announcing its decision to hold the minimum bid rate unchanged, the ECB intimated that, because of mounting inflationary pressures, it might raise interest rates on its next decision date. The market responded quickly, and interest rate developments in the swap markets imply that the market expects interest rates in the euro area to rise by at least 50 basis points before the end of the year.

In spite of the fact that the Federal Reserve cut the fed funds rate by a total of 1.25 percentage points in January 2008, the dollar held its ground against the euro for the first two months of the year. In early March, however, the euro began to appreciate markedly against the dollar, peaking in mid-April at a historical high of nearly 1.6 US dollars. Since that time the dollar has appreciated somewhat against the euro, due in part to growing inflationary pressures in the US, which in turn stem from rising oil and commodity prices and the growing conviction that the Federal Reserve's interest rate cuts are at an end.

Chart 1

Changes in selected central banks' policy interest rates since the last *Monetary Bulletin*[1]



1. The red portion of the bar represents the increase, and the yellow portion shows the decrease.
Source: Reuters.

Money markets have yet to recover fully

Considerable turmoil still reigns in the foreign money markets in spite of broad-based action taken by the Federal Reserve, the Bank of England, and the ECB. Money market rates on interbank loans with maturities of up to one month have remained more or less consistent with policy rates, but rates on longer-term nominal interbank loans have risen decidedly since the beginning of March. The differential between nominal and indexed interest rates has also widened during the period. When money market rates are high in comparison with policy rates, this is a sign of continuing caution in the interbank market, with the exception of very short-term transactions. The differential between

1. This article uses data available on June 23, 2008.

Chart 2

Spreads of three-month interbank rates to three-month expected rates[1]

Daily data January 1, 2007 - June 18, 2008

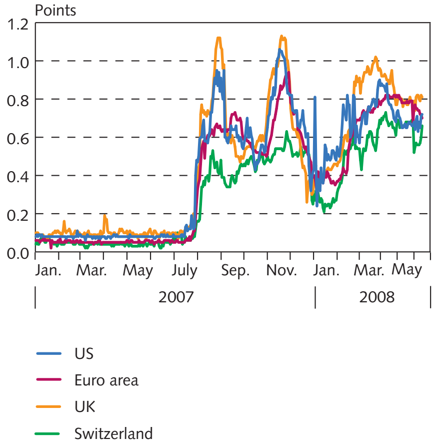
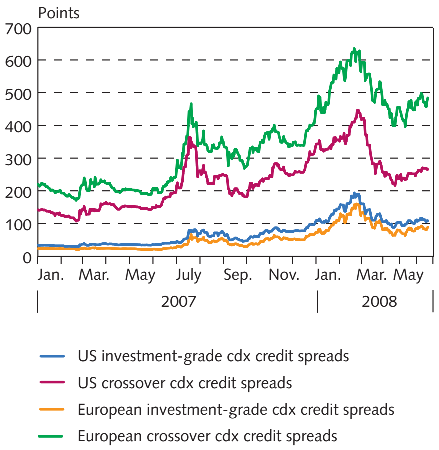


Chart 3

5-year corporate bond CDSs in Europe and in the US

Daily data January 1, 2007 - June 18, 2008



Sources: Bloomberg, Reuters.

money market rates and expected policy rates (see Chart 2) has declined somewhat in recent weeks but remains much wider than it was before the advent of the financial market turmoil late in the summer of 2007. This differential reflects a portion of the risk premium that banks and other financial undertakings must pay in order to obtain interbank loans.

Demand for liquid assets is still brisk among financial institutions and is likely to remain so for a while to come. Developments in the global economy are cloaked in uncertainty, particularly in view of rising oil and commodity prices and mounting inflation. However, the economic situation in Asia's leading emerging market countries remains stable, with robust GDP growth projected for the medium term. Furthermore, oil export countries are enjoying the benefits of increased revenues from rising oil prices. The underlying supply of savings worldwide is therefore still ample.

Volatility in the bond markets

Concerns over the credit ratings of monoline insurers have caused a certain amount of turbulence in the bond markets in the recent term. Monolines' business model is based on their having the highest possible credit rating, with the result that the bonds they guarantee receive a higher credit rating. Many companies of this type are experiencing severe difficulties in the wake of the US sub-prime mortgage crisis, and in many instances their credit ratings have been lowered. For example, Ambac and MBIA, two of the largest companies in this market, were downgraded in June by both Standard & Poors and Moody's. As a result, the value of the guarantees granted by the companies has dropped, and owners of the guarantees are forced to increase their write-offs.

In recent months, many banks have been forced to take on the assets and liabilities of special purpose vehicles (SPVs) that have invested in structured securities related to sub-prime mortgages in the US. Consequently, a number of banks have had to write off significant losses on structured securities that have adversely affected the banks' capital position. In view of the banks' large and frequently unexpected write-offs, it is unlikely that the full repercussions of the US sub-prime crisis have emerged. The turbulence in the equity markets and the increased risk aversion of bond market investors have prompted banks to secure funding more from sovereign wealth funds and through the issuance of covered and convertible bonds.

Limited activity in the króna interbank market

Trading on the interbank market for krónur has contracted sharply in recent months. In May, trading volumes totalled 9.5 b.kr., down from 12.7 b.kr. in April, which had been the lowest-volume month in the króna market to date. There is little movement in listed REIBOR rates, which have been virtually unchanged for several weeks. Therefore, under the current conditions, the króna market does not sufficiently facilitate the transmission of monetary policy.

As is mentioned above, the turmoil in the interbank markets is not limited to Iceland, although the effects in Iceland are certainly greater than in most other countries. However, the underlying problems are largely the same. One of the factors that compromise market functioning at a time of global illiquidity is increased counterparty risk. The banks are simply not willing to lend to one another without collateral. During an economic slowdown, write-offs of loans increase, and financial institutions prepare to protect their capital ratios. Their purchases of Central Bank of Iceland certificates of deposit does not affect their capital ratios, but unsecured lending in the interbank market generally has a negative effect. The considerable uncertainty about how long the current financial market difficulties will last has also prompted banks and other financial institutions to make every effort possible to protect and enhance their liquidity position.

Icelandic banks still have limited access to foreign credit

The Icelandic banks' CDS spreads rose constantly in early 2008, finally peaking in March. At that time, Glitnir and Kaupthing's CDS spreads were approximately 10 percentage points, while Landsbanki's was slightly lower, at 8 percentage points. Then the banks' spreads declined rapidly until the beginning of May, when they held steady for a while. They turned upwards again in early June, in line with increases in the CDS spreads of other European financial institutions, signalling that risk aversion was on the rise once more.[2] The banks' high CDS spreads and their limited access to foreign credit have obstructed the functioning of the foreign exchange swap market. The interest rate differential that Iceland's commercial banks could previously offer foreign investors has vanished. Glacier bond issuance has been more or less at a standstill because foreign investors have few options for hedging against foreign exchange risk.[3]

The bond market

Nominal bond yields were particularly volatile in the first half of the year, due in large part to the uncertain inflation outlook and the depreciation of the króna. The relatively shallow nominal bond market also played a part. Foreign demand for short-term Treasury notes in connection with carry trading has tended to magnify the volatility. Yields on HFF bonds have fluctuated less than Treasury note yields, which have tended downwards during the year.

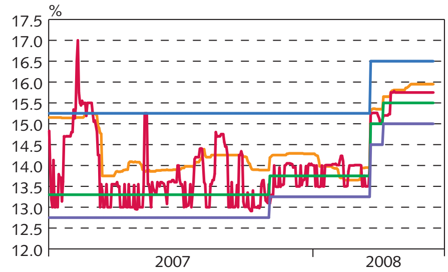
In response to brisk demand for short T-notes, the Treasury held special auctions in March and May, when it offered T-note series maturing in December 2008. Notes were sold for a nominal value of roughly 7 b.kr. in the former auction and 15 b.kr. in the latter. On June 19, the Government announced a supplemental issue of short-term Treasury notes for up to 75 b.kr. It was then decided to offer 15 b.kr. for sale in series RIKB 08 1212 and 10 b.kr. in series RIKB 09 0602.

Demand for long-term T-notes has not been as pronounced as that for short-term notes, as long-term securities are accompanied by

2. For a more detailed discussion of the Icelandic commercial banks' CDS spreads and their pricing, see Appendix 2 on pp. 69-74 of the Central Bank of Iceland's publication Financial Stability 2008.

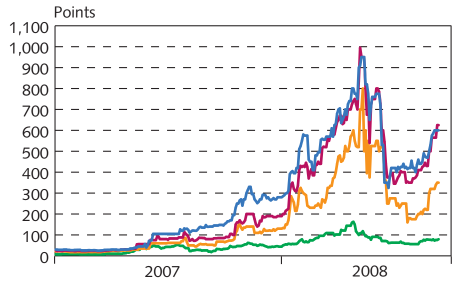
3. For further discussion, see Box III-1 on pp. 19-20.

Chart 4
Interest rates in the interbank market and Central Bank policy rate
Daily data January 3, 2007 - June 16, 2008



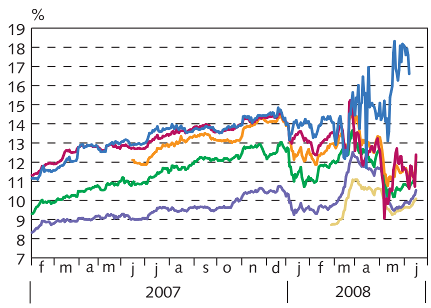
Central Bank overnight rate
One day (O/N)
Central Bank policy rate (adjusted to flat rate)
Three months (3M)
Central Bank current account rate

Chart 5
CDSs of Icelandic banks and Itraxx Financial Index
Daily data May 2, 2007 - June 20, 2008



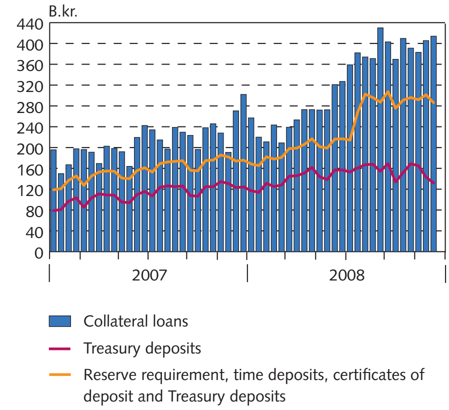
Kaupthing
Glitnir
Landsbanki
Itraxx Financial Europe

Chart 6
Treasury note yields
Daily data February 1, 2007 - June 20, 2008



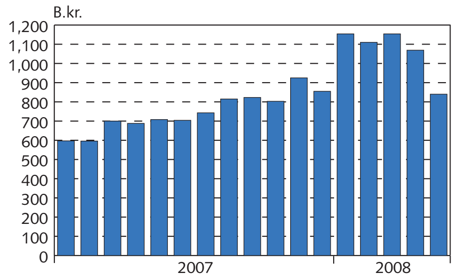
RIKB 08 0613
RIKB 08 1212
RIKB 09 0612
RIKB 10 0317
RIKB 13 0517
RIKB 19 0226

Chart 7
Collateral loans, certificates of deposit, Treasury deposits and reserve requirement
Daily data July 4, 2007 - June 18, 2008



Source: Central Bank of Iceland.

Chart 8
Forward currency position of the commercial banks
At month-end January 2007 - May 2008



Source: Central Bank of Iceland.

greater interest rate risk, especially when the inflation outlook is very unstable. The Government Debt Management Prospect for 2008 announced plans to issue Treasury notes in RIKB 19 0226 in the amount of 35 b.kr. The Prospect assumed this would be achieved in six monthly auctions, the last of which would be held in June. At present, a nominal value of just over 29 b.kr. has been sold; therefore, one more auction will probably be needed in order to meet the goal.

In order to meet the demand for Treasury notes, securities lending facilities to primary dealers have been gradually increased. Securities lending to primary dealers promotes more effective price formation in the bond market, as primary dealers have the option of selling the securities short, provided they submit other securities as collateral. At present, seven primary dealers have the option of borrowing up to 7 b.kr. in the shorter benchmark series of Government securities, as opposed to 4 b.kr. at the beginning of the year. Primary dealers have made extensive use of these facilities. The average balance of securities loaned to primary dealers tripled in just four months, from 40 b.kr. in January to 120 b.kr. in May.

Collateralised Central Bank loans have increased substantially since the beginning of the year, and the balance has not fallen below 350 b.kr. since the beginning of April. A part of this increase is due to the certificate of deposit issuance at the end of March. At that time, the balance in krónur on the market fell by some 75 b.kr. However, the rules concerning financial institutions' reserve requirements were amended in March so as to co-ordinate them more fully with the rules of the European Central Bank. According to the new rules, the balances of Icelandic banks' foreign branches are deducted from the reserve base, which increases the banks' liquid assets in foreign currency. As a result, financial undertakings' reserve requirements fell by nearly 20 b.kr. two months after the rules were amended.

The Treasury's balance with the Central Bank has increased steadily so far in 2008 but has been subject to fluctuation (see Chart 7).

Continuing pressure on the króna

Currency market turnover hit a historical high of 1,212 b.kr. in March. Trading has tapered off sharply since then, with May volume at just below 559 b.kr. For the first three weeks of June, trading volume totalled 420 b.kr. The exchange rate of the króna has been extremely volatile in recent months. On June 23 the exchange rate index was 164.27, its highest level since measurements began. At that point, the króna had depreciated by approximately 5.8% since the beginning of April and over 35% since the beginning of the year. The index reached an intraday peak of 170.46 on June 23.

The banks' forward balance in the foreign exchange market totalled 840 b.kr. at the end of May, having dropped substantially since the end of March, when it totalled 1,154 b.kr. The lower position suggests that investors have reduced their króna positions and/or refinanced foreign-denominated loans. On July 1, the Central Bank of Iceland issued new rules on the foreign exchange balance of financial institutions. The principal change from previous rules is that the mismatch between financial institutions' foreign currency assets and liabilities shall not exceed 10% of own funds at any given time, whereas the permissible mismatch was previously 30%. The lower mismatch percentage allowed under the new rules is intended to reduce risk and promote more effective currency price formation in the interbank market. The Central Bank is still permitted to grant special authorisations to financial institutions with substantial overseas operations, thus permitting them to maintain a positive foreign exchange balance separate from their general foreign exchange balance, so as to protect their capital ratios in the event of adverse exchange rate movements.

Slump in the equity market

The total market value of Icelandic companies listed on the OMX exchange has dropped considerably in 2008. At the market close on June 23, the OMXI15 index stood at 4,513 points, its lowest since October 11, 2005. The large decline in the domestic equity market as compared with markets abroad is due partly to the large proportion of financial companies in the Icelandic index, as financials constitute some 80% of the OMXI15. In most markets, financial company stocks have fallen more than companies in other sectors. A comparison of developments in the Icelandic index and price trends among financial companies in the other Nordic countries reveals a much less pronounced difference.

So far this year, a total of seven companies have announced plans for delisting; therefore, the number of companies listed on the OMX exchange in Iceland will probably drop sharply during the year. The board of directors of 365 hf. called a shareholders' meeting on July 1, for the purpose of presenting shareholders with a proposal to delist the company from the Icelandic exchange. The boards of Vinnslustödin, FL Group, Skipti, Icelandic Group, TM Insurance, and Flaga have announced similar plans.

Government and Central Bank measures

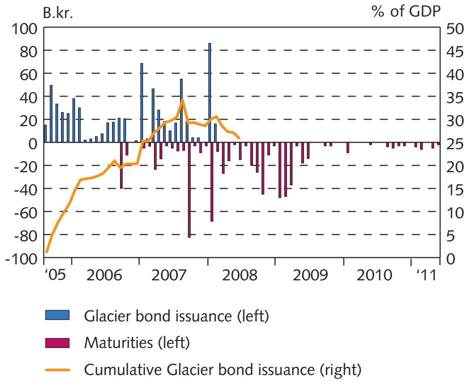
In mid-May, the Central Bank announced that it had concluded bilateral currency swap agreements with the central banks of Sweden, Norway, and Denmark. The agreements are a contingency measure that provides the Central Bank of Iceland with access to euros if the need arises. Each of the agreements provides access to 500 million euros in exchange for Icelandic krónur. The Central Bank may draw on the agreements when and if necessary. These agreements greatly enhance the Central Bank's access to foreign liquid assets.

Because of the Treasury's strong recent performance and low debt position, the supply of risk-free Treasury notes has been very limited, which has generated mounting pressure on the bond and foreign exchange markets. In order to enhance market activity, it has been decided to expand the issue of short-term Treasury notes. As is discussed above, a total of 75 b.kr. will be issued, but this is partially offset by the fact that T-notes valued at 15 b.kr. matured in June. Furthermore, the Board of Governors of the Central Bank has decided to continue issuing certificates of deposit in September, when the CDs issued in March mature. Issuance of CDs and T-notes is particularly important in view of the poorly functioning currency swap market. Purchasing

Chart 9

Króna Eurobond issuance[1]

Monthly data

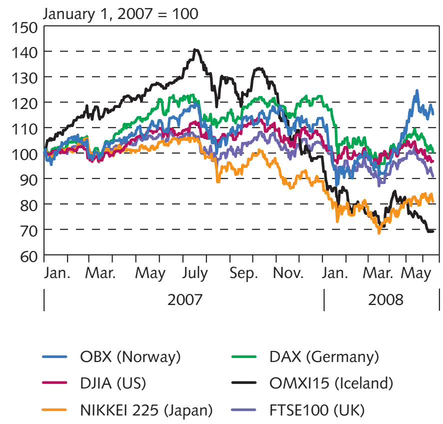


1. Data until July 1, 2008 inclusive.
Sources: Reuters, Central Bank of Iceland.

Chart 10

Development of selected share indices

Daily data January 1, 2007 - June 20, 2008



Source: Bloomberg.

Box 1

The Central Bank of Iceland's foreign exchange reserves

Most central banks maintain foreign exchange reserves to some degree. The purpose of holding foreign reserves can vary; therefore, there are no rules or generally accepted criteria concerning their minimum size.[1]

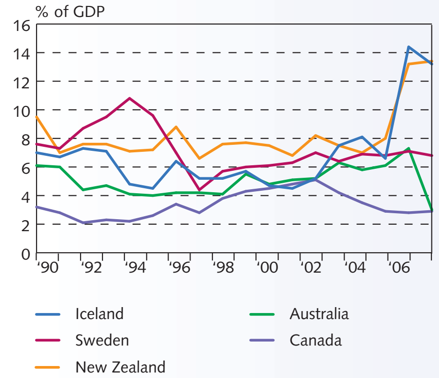
Foreign reserves increased through regular currency purchases
In the fall of 2002, the Central Bank began purchasing foreign currency on the domestic currency market according to a pre-announced schedule. Since then, the Bank has purchased over 2 billion US dollars on the domestic interbank market in regular increments. Initially, the purchases were used to repay the Bank's foreign short-term debt. That process was completed in mid-2003. Thereafter, they were used to repay foreign Treasury debt, with the result that net foreign Treasury debt is now zero. In a sense, this represents an indirect foreign reserve fund, in that a debt-free Treasury with an acceptable credit rating generally has ready access to global credit markets. Regular currency purchases were discontinued at the end of March 2008 because of the conditions on the foreign exchange market. They will resume as soon as market conditions permit.

Foreign reserves increased dramatically through foreign borrowings
The Central Bank's foreign reserves increased from 7 b.kr. in mid-2001 to 60 b.kr. in the fall of 2006. Towards the end of that year, a foreign loan was taken at the Central Bank's behest, with the aim of fortifying the reserves. This doubled the Bank's foreign exchange reserves. A Box in *Financial Stability* 2007 (p. 46) discussed the strengthening of the foreign reserves and the points of view taken into account at that time.

Access to foreign liquidity enhanced with swap agreements
In May 2008, the Central Bank concluded a bilateral currency swap agreement with three Nordic central banks, for a total amount of 1.5 billion euros. These swap agreements are essentially the equivalent of foreign reserves. Including the agreements, the foreign reserves now total 3.5 billion euros, or 400 billion Icelandic krónur. Because the Central Bank is not carrying any foreign debt at present, its foreign reserves have expanded from 7 b.kr. to approximately 400 b.kr. since mid-2001. The Government wishes to strengthen the foreign reserves still further, and work is being done to carry this out.

Chart 1

Foreign reserves 1990-2007

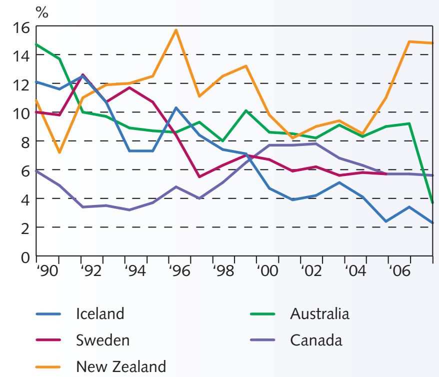


Source: IMF.

Chart 2

Foreign reserves of foreign debt

1990-2007

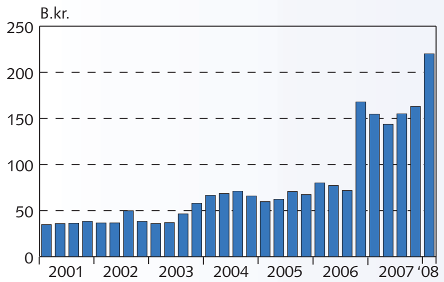


Source: IMF.

Chart 3

Foreign reserves of the Cental Bank of Iceland

Quarterly data



Source: Central Bank of Iceland.

1. Appearing in *Monetary Bulletin* 2005/3 was an article by Haukur C. Benediktsson and Sturla Pálsson on central banks' foreign reserves, explaining, among other things, the purpose of maintaining foreign reserves.
2. During the first half of 2000, the Central Bank of Iceland's foreign exchange reserves totalled just over 30 b.kr. In the middle of that year, the Bank began intervening in currency market trading in order to counteract the depreciation of the króna that had begun in the spring. In order to preserve the foreign reserves, the intervention measures were funded with short-term foreign loans. As a result, the Central Bank's foreign currency balance deteriorated sharply, falling to only 7 b.kr. in mid-2001. The Bank's final intervention in the currency market took place in the fall of 2001. In an article appearing in *Monetary Bulletin* 2003/1, Gerdur Ísberg and Thórarinn G. Pétursson discussed in detail the intervention and its effect on the exchange rate of the króna. Their conclusion was that the effect was rather limited.

krónur in the currency market and investing them in risk-free króna instruments is analogous to a swap agreement, where investors pay foreign interest rates on the currency used to fund the investment and receive krónur interest rates. Foreign investors can hedge against exchange rate risk through forward agreements on the currency market. Measures of this type should foster an increased supply of krónur in the market for forward contracts. T-note and CD issuance therefore substitutes for the currency swap market to a certain extent.

The Housing Financing Fund (HFF) is planning to establish two new loan series. The first involves lending to financial institutions in the residential mortgage market for re-financing of mortgages already issued by those institutions. By issuing certificates of deposit, the Central Bank subtracts liquidity from the króna market, which tightens the monetary stance. On the other hand, re-financing financial institutions' mortgage loans may enhance those institutions' access to liquidity, as the liquidity of HFF bonds and their eligibility as collateral are much better because they bear a Treasury guarantee.

The second newly announced series centres on lending to credit institutions for the financing of new mortgage loans. The prerequisite for loans in these series is that they be conducive to guaranteeing the security and supply of credit and that they promote normal price formation in the real estate market. A special fee will be charged for these loans because of the Government guarantee. The Housing Financing Fund's financing of the above-specified mortgage loans granted by financial institutions will be secured by the institutions' portfolio of mortgage loans, in a manner similar to that applying to covered bonds: either with liquid assets or with mortgage bonds that are eligible as collateral for Central Bank of Iceland facilities.