



# FINANCIAL STABILITY

2013 • 2

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Financial stability means that the financial system is equipped to withstand shocks to the economy and financial markets, to mediate credit and payments, and to redistribute risks appropriately.

The purpose of the Central Bank of Iceland's *Financial Stability* report is:

- To promote informed dialogue on financial stability, i.e. its strengths and weaknesses, the macroeconomic and operational risks that it may face, and efforts to strengthen its resilience;
- To provide an analysis that is useful for financial market participants in their own risk management;
- To focus the Central Bank's work and contingency planning;
- To explain how the Central Bank carries out the mandatory tasks assigned to it with respect to an effective and sound financial system.

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Icelandic letters:

ð/Ð (pronounced like th in English this)

þ/Þ (pronounced like th in English think)

In *Financial Stability*, ð is transliterated as *d* and þ as *th* in personal names, for consistency with international references, but otherwise the Icelandic letters are retained.

## Financial system risk broadly unchanged, but resilience must be safeguarded

*Financial Stability* is published twice a year. Each year, the latter of the two reports is generally shorter than its predecessor and focuses on the most important changes that have taken place in the half-year since the publication of the earlier report. In the main, the situation has changed little since late April.

It can be said that the financial system is characterised at present by considerable resilience that has been growing and will help financial institutions to meet the risks on the horizon in coming years. The financial system's main strength lies in systemically important financial institutions' capital ratios, which are high and have been on the rise this year. Non-performing loan ratios are falling, and debt restructuring is moving forward. Liquidity levels are well above the limits set by the Central Bank and the Financial Supervisory Authority. The domestic economic recovery has continued, and output growth has begun to gain momentum among Iceland's main trading partners, including Europe, its most important one. As a consequence, it can be said that risk in financial institutions' operating environment is generally receding, although the situation in the US has caused a wave of unrest in the recent term.

Although Icelandic financial institutions' position is generally strong, it is important not to lose sight of the risk still present in the economic environment and the weaknesses in the banks' balance sheets and operations. In a sense, Iceland's financial institutions are sheltered by the capital controls, although the controls do not eliminate foreign refinancing risk. For the longer term, they give rise to certain kinds of risk, including distorting asset prices. This risk will surface when the controls have been lifted, with potential impact on the banks' balance sheets.

Furthermore, it is impossible to ignore the fact that default is still widespread, although it has diminished. Given the heavy debt position of a large group of companies and households, default levels could rise again if the economy should sustain further shock. To an increasing degree, leveraged companies' debt problems have been addressed with extension of loan maturities, which could prove insufficient. In this context, it should be noted that the leeway resulting from the conservative pricing of assets transferred from the old banks has grown narrower. To a greater degree than before, the banks' resilience to new shocks will depend on their having a substantial capital and liquidity buffer and sufficiently profitable core operations. As a result, their core operations should be strengthened.

In view of the above, it is important to temper expectations of sizeable dividend payments to the banks' owners. The reduction of capital and the weaker liquidity position that would result from

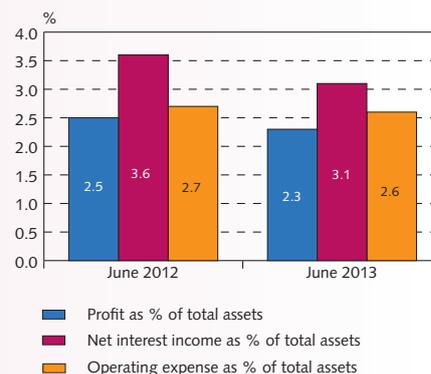
generous dividend payments would cut into the banks' resilience to risk upon the liberalisation of the capital controls. In particular, care must be taken not to weaken Landsbankinn's liquidity position, given its heavy debt service burden in coming years. Furthermore, changes made in the international regulatory environment in coming years could result in stricter capital requirements for systemically important banks. The cornerstone of the Icelandic financial system is its three systemically important banks. These banks must work under the assumption that their capital requirements will be tightened in accordance with developments in the international regulatory framework and that particular emphasis will be placed on the risk accompanying capital account liberalisation.



- Risk in the financial system is broadly unchanged since the spring. Household debt restructuring is moving forward, and various indicators imply that households' financial situation is improving. On the other hand, companies' position has changed little, and indicators suggest that many firms are still too heavily leveraged.
- The commercial banks recorded a substantial profit for the first half of 2013, although returns on total assets and interest rate differentials have declined year-on-year. Calculated returns on core operations rose marginally, to 0.7% of total assets, which is approximately one-third of the banks' total returns. The net increase in loan values rose somewhat year-on-year. In general, corporate loan values increased, while household loans fell in value. The ratio of costs to total assets fell slightly year-on-year. The banks have focused on reducing operating expenses in the recent term and will probably continue to do so in coming quarters. High non-performing loan ratios, companies' vulnerable position, significant loan revaluation, and the intended liberalisation of the capital controls are all factors that underline the importance of maintaining financial companies' resilience at this juncture, and ideas concerning sizeable dividend payments by the banks should be examined in this light.
- The economic recovery in the euro area has gained momentum in recent months, but in the US, growth seems to have lost pace. Global markets were shaken by fears that the US Federal Reserve Bank would withdraw its quantitative easing (QE) programme earlier than previously anticipated: interest rates and interest premia rose (including the spread on the Icelandic Government's foreign bonds), asset prices fell, and various emerging countries' currencies depreciated. The unrest subsided somewhat after it came to light that the Fed would not scale down its QE programme at present, although it has escalated again in the recent past, owing to uncertainty about whether the US debt ceiling will be raised.
- The Central Bank's most recent forecast assumes that domestic GDP growth will rise from 1.9% in 2013 to 2.8% in 2014, which is somewhat higher than in most comparison countries. Terms of trade have deteriorated in recent quarters and are expected to continue to worsen. As a result, they will remain poor – actually, the poorest they have been in decades. Poor terms of trade cut into the trade surplus and therefore tend to weaken the króna.
- Household debt has fallen in real terms, while households' equity position has improved and debt service declined. To a large degree, this is due to debt restructuring measures. Household debt problems have subsided. As real estate prices rise higher and further restructuring is undertaken, households' position should continue to improve in terms of these factors.
- The main risks facing the financial system at present relate to the settlement of banks in winding-up proceedings, the intended

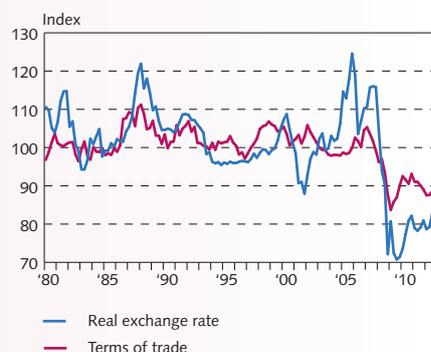
## The financial system: outlook and main risks

Chart 1  
Returns, interest rate differential, and expense ratio<sup>1</sup>  
H1/2012 and H1/2013



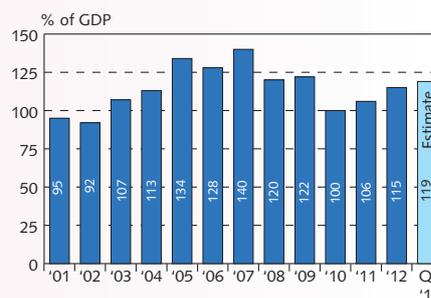
1. Consolidated accounts. Operating expense in H1/2013 adjusted for Landsbankinn's 4.7 b.kr. income entry for receipt of shares and Arion's 500 b.kr. charge of Competition Authority.  
Sources: Financial institutions' annual and interim financial statements.

Chart 2  
Real exchange rate and terms of trade  
Q1/1980 - Q2/2013



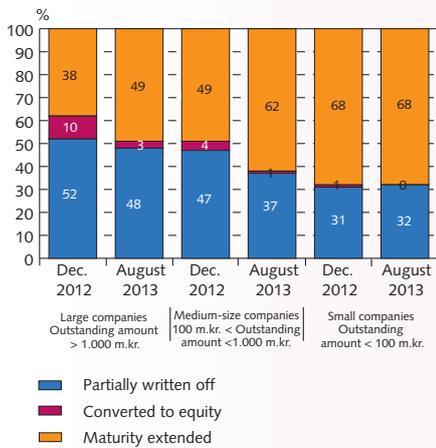
Source: Central bank of Iceland.

Chart 3  
Household's net assets as % of GDP<sup>1</sup>  
2001 - Q2/2013



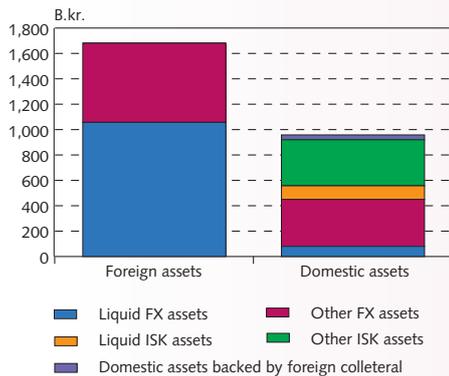
1. Without pension assets.  
Sources: Directorate of internal revenue, Central Bank of Iceland.

Chart 4  
Corporate debt restructuring by corporate size<sup>1</sup>



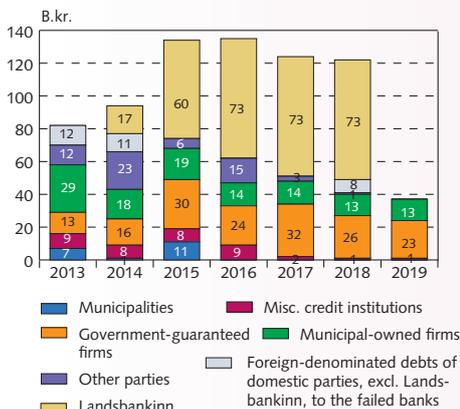
1. Parent companies, book value. Corporate loans include loans granted by the three largest commercial banks.  
Source: Financial Supervisory Authority.

Chart 5  
Glitnir, Kaupthing and LBI assets  
Book value 30 June 2013



Sources: Financial informations Glitnir, Kaupthing and LBI, Central Bank of Iceland.

Chart 6  
Estimated payments by parties other than the Treasury and CBI on foreign loans and foreign-denominated debts to the failed banks<sup>1</sup>



1. All figures in b.kr. as of year-end 2012 and exchange rates of 29 August 2013.  
Source: Central Bank of Iceland.

liberalisation of the capital controls, foreign debt refinancing, and high corporate debt levels. In addition, the Housing Financing Fund's (HFF) difficult situation could prove costly for the Treasury.

**High corporate debt levels**

- The operating environment of Icelandic companies has improved marginally in recent months. Uncertainty reigns in Iceland's main export markets, and the prices of its principal export products have fallen this year. Icelandic companies are still heavily leveraged, and their debt multipliers<sup>1</sup> are high in international comparison. Many firms are still too leveraged in spite of restructuring measures, and this indebtedness cuts into their capacity to invest. The decline in the three largest commercial banks' non-performing corporate loan ratios has slowed down, and the banks have relied more on extension of maturities in their restructuring efforts. It is important that measures of default give an accurate view of financial institutions' loan portfolios and not reflect a relaxation of loan terms.

**Settlement of banks in winding-up proceedings**

- Uncertainty surrounds the winding-up process of the failed banks' estates. Winding-up committees have responded in part by slowing the pace at which they convert assets to liquid funds – domestic assets in particular – as returns on liquid investments are low, both in Iceland and elsewhere. Prolonged uncertainty about the future of the winding-up process could result in an increase in the share of creditors that specialise in recovery of legally disputed claims. It is estimated that the winding-up of the estates will adversely affect Iceland's external position in the amount of 45% of GDP, based on the book value of assets. This is similar to previous estimates.

**Foreign refinancing risk**

- Estimated foreign loan repayments in 2013-2018 by borrowers other than the Treasury and the Central Bank total about 700 b.kr. If the underlying current account surplus in coming years is similar to that projected for 2013, or approximately 2½% of GDP, the accumulated surplus through 2018 will cover less than half of these repayments. If it is no larger, the gap must be bridged with capital inflows, refinancing, or extended maturities, which are subject to some uncertainty. It is important that the maturity of the bonds between the new Landsbankinn and LBI (the former Landsbanki Íslands) be extended, because the repayment profile is so heavy at present, given Iceland's foreign exchange revenues and the current level of access to foreign credit, that payment of instalments could cause instability in the foreign exchange market. If the bonds are not lengthened by negotiation, the capital controls will prevent the payments to the old bank's creditors from threatening stability. For other domestic borrowers, particularly the heavily leveraged energy companies, the outlook for foreign refinancing will improve gradually over the next few years, as they scale down their foreign debt.

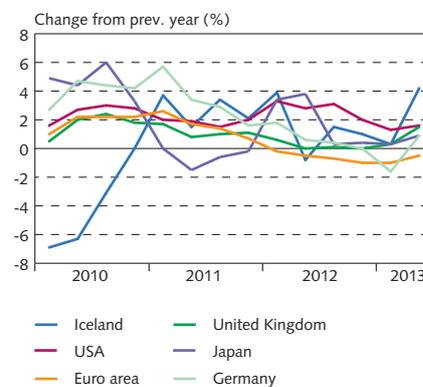
1. Debt ratio in defined as total debt divided by EBITA without irregular items.

## The economic environment

### Gradual economic recovery in industrialised countries

- *Output growth gained pace in many industrialised countries in Q2.* GDP rose year-on-year in the US, the UK, Japan, and Germany. In the euro area it fell by 0.5%, which is a smaller contraction than in the preceding two quarters (Chart 1).
- *In most cases, the economic outlook for the coming year has improved.* The average projection from Consensus Forecasts provides for just under 2% growth in Japan in 2013, but only 1.5% in the US. Growth in the US is projected at 2.6% in 2014, when increased public sector spending will supplement private consumption growth. Output growth could reach 1.9% in the UK, but the most pronounced change is expected in the eurozone, where it is projected at 0.9% in 2014, according to the Consensus Forecasts average, on the heels of a contraction of 0.6% this year.
- *The resolution of the debt crisis in the southern part of the euro area is still shrouded in uncertainty.* Financial market unrest has abated somewhat in Southern Europe, but the situation has changed little since the spring. Financial market stability depends on cooperation among the countries in the region as long as the harmonisation of the regulatory framework for banking operations remains incomplete and banking supervision is not jointly administered. This summer, progress was made on arrangements for intervention in systemically important euro area banks with capital adequacy problems, with the aim of safeguarding financial stability in the region as a whole and preventing contagion between the financial sector and public sector finances. The establishment of a joint financial supervisory agency for the euro area is generally thought to be a prerequisite for such intervention.
- *The spread between short- and long-term interest rates widened this summer.* Market interest rates rose in May, triggered by market participants' interpretation of the Federal Reserve's statements in May that the US Federal Reserve Bank was considering cutting back on its quantitative easing (QE) programme. The effects could be felt in emerging economies as well, where currencies fell in price and interest rates rose. The Fed's 18 September decision to keep the pace of the QE programme unchanged therefore took the market by surprise. Projections continue to assume a slack in output in major economies, with limited inflationary pressures.
- *Interest expense on Iceland's foreign debt is likely to rise over time.* Rising base interest rates in global financial markets, and the simultaneous rise in interest premia for countries with credit ratings similar to Iceland's, could cause such a development.
- *Share prices in Europe and the US have risen markedly during the year.* At the end of September, major share price indices in the

Chart 1  
GDP growth in selected countries



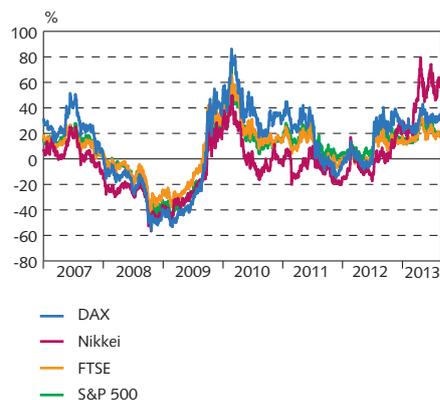
Source: Macrobond.

Chart 2  
Interest rate spread on 2- and 10-year  
US Treasury bonds<sup>1</sup>  
1 January 2012 - 30 September 2013



Source: Macrobond.

Chart 3  
Share price indices<sup>1</sup>



1. Year-on-year change.  
Source: Macrobond.

Chart 4  
Investment as a percentage of GDP

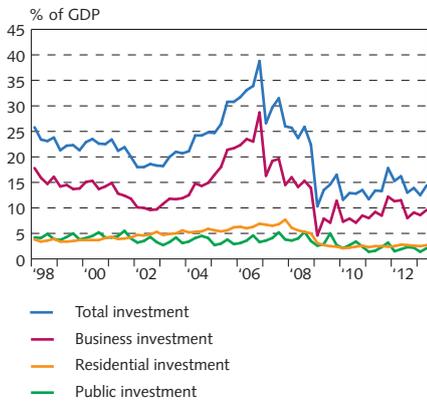


Chart 5  
Energy-intensive investment and general business investment<sup>1</sup>  
2011-2015

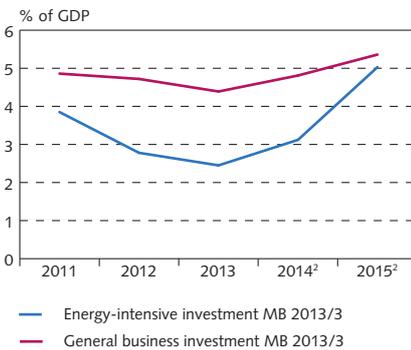
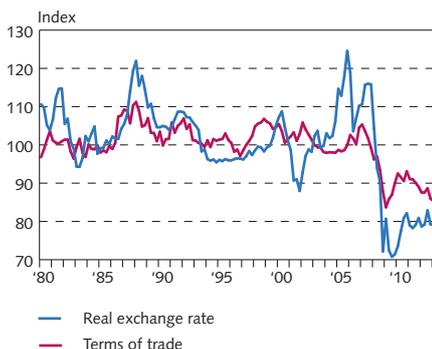


Chart 6  
Real exchange rate and terms of trade  
Q1/1980 - Q2/2013



US and the UK were up 20% year-on-year, and Germany's DAX index was up 36% (Chart 3). In Japan, share prices have risen by a full 63% in the past 12 months. The upward trend in these markets has lost momentum since May.

- *The uncertainty in output growth forecasts is tilted to the downside.* Some market participants interpreted the Fed's statements in May as signalling that it would begin to tighten monetary policy this autumn. Although this tightening has not occurred, the possibility that the QE programme will be scaled down in the near term cannot be ruled out. Neither is it certain that governments in the eurozone have solved the persistent problems plaguing its financial system as a result of excessive debt in a few countries. In addition, Japan's fiscal response to increased output growth could prove too abrupt and could trigger renewed stagnation.

#### Outlook for growth depends on energy-intensive investment

- *Last year's output growth has been revised downwards recently, while H1/2013 GDP rose by 2.2% year-on-year in real terms.* In the Central Bank's most recent Monetary Bulletin, published in August, is a discussion of the worsening output growth outlook, partly because of an anticipated aluminium smelter investment that did not materialise.
- *The Central Bank anticipates increased output growth next year.* The Bank's August forecast provides for 1.9% growth in 2013 and 2.8% in 2014. The forecast is based, among other things, on an increase in the investment level, which has accounted for an unusually small share of national expenditure in the past five years (Chart 4).
- *Both public and residential investment have been at a low ebb in recent years.* Residential investment rose from about 4% of GDP at the turn of the century to 6.9% in 2007 (7.7% in Q4/2007), only to plunge to 2.5% in 2010 and 2011. Public investment, which averaged 3.8% of GDP from 1998 to 2010, has hovered around 2% since 2011.
- *The Central Bank anticipates growing energy-intensive development activity in 2014 and 2015* (Chart 5). Business investment averaged between 13% and 14% of GDP from 1970 onwards but has averaged just under 9% since the financial system collapse in autumn 2008. Investment in energy-intensive projects is forecast at 5% of GDP in 2015. Forecasts of business investment growth are predicated on assumptions concerning investment in the energy-intensive sector, which has been subject to repeated postponements in recent years.
- *In spite of a historically low real exchange rate, exports are not expected to grow strongly.* Exports of marine products and aluminium are subject to capacity and resource constraints. Export

revenues have grown even more slowly than exports have, due to worsening terms of trade (Chart 6). Terms of trade have deteriorated by approximately 15% since 2007 and are expected to continue to slide to their weakest in decades. Marine product prices, particularly for demersal fish, are lower than in recent years, and aluminium prices have fallen sharply this year. As in the recent past, the most promising opportunities for exports appear to be in the tourism industry.

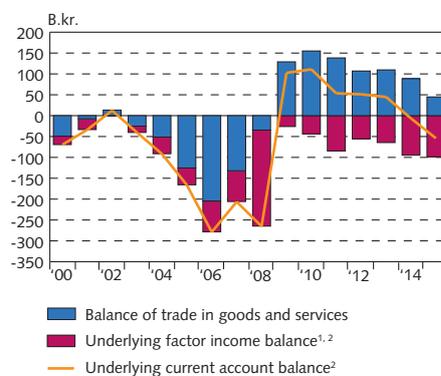
- *Standard & Poor's affirmed Iceland's sovereign credit rating at BBB- in June but changed the outlook to negative.* According to the rating agency strong economic system infrastructure and ground gained in the wake of the International Monetary Fund (IMF) Stand-by Arrangement support the rating, but hefty external and public sector debt point in the opposite direction. S&P pointed out the risk that the household debt relief measures proposed in the Government's policy statement will prove detrimental to the Treasury or will adversely affect the assessment of the effectiveness and predictability of economic policy. If debt relief is financed at the expense of the failed banks' creditors, investors' confidence in Iceland could be compromised and capital account liberalisation delayed further. According to S&P, the proffered debt reduction could amount to well above 10% of GDP, most of it due to the Housing Financing Fund (HFF).

#### Extension of foreign financing needed

- *The underlying current account surplus for 2013 is projected at about 50 b.kr., or 2.6% of GDP, according to the baseline forecast in the Bank's most recent Monetary Bulletin.* The current account balance is sensitive to changes in interest rates, the real exchange rate, and terms of trade. As is stated above, terms of trade have deteriorated and forward yield curves slope upwards. Other things equal the current account balance will deteriorate in the next few years.
- *The repayment profile of foreign loans and foreign-denominated debt to DMBs in winding-up proceedings is shown in Chart 8.* A comparable profile has been published in previous issues of Financial Stability. The main changes from the previously published profile, apart from exchange rate movements, are Arion Bank's 10 b.kr. bond, issued in Norway in February and maturing in 2016, and the inclusion of more complete information on the repayment profiles of municipalities' and other parties which are more back-loaded than previously thought.
- *Estimated repayments in 2013-2018 by borrowers other than the Treasury and the Central Bank total about 700 b.kr.* If the underlying current account surplus in coming years is similar to that forecast for 2013, or 2.6% of GDP, it can be expected to be about 315 b.kr. in 2013-2018. The difference between the estimated current account balance and contractual loan instalments is

Chart 7

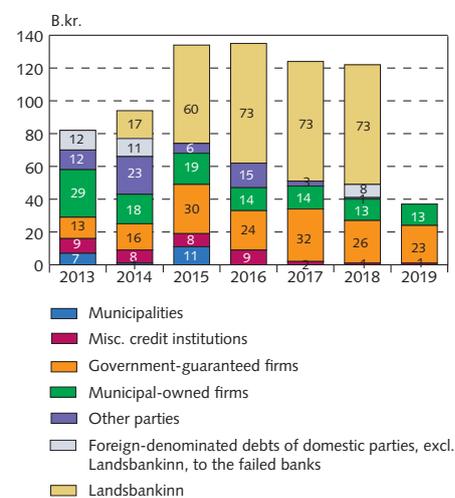
Balance of trade in goods and services, underlying factor income and current account balances



1. Operating contributions included with factor income. Central Bank of Iceland forecast 2013-2015 published in *Monetary Bulletin* 2013/3.  
2. Excluding calculated income and expenses of DMBs in winding-up proceedings and the effects of the settlement of their estates and the impact of the pharmaceutical company Actavis until 2012.  
Source: Central Bank of Iceland.

Chart 8

Estimated payments by parties other than the Treasury and CBI on foreign loans and foreign-denominated debts to the failed banks<sup>1</sup>



1. All figures in b.kr. as of year-end 2012 and exchange rates of 29 August 2013.  
Source: Central Bank of Iceland.

just under 385 b.kr. Bridging the gap requires a combination of an increased current account surplus, inflows of capital, refinancing, and lengthening of loan maturities. It is also appropriate to bear in mind that, to some extent, domestic borrowers have been saving up for expected payments.

- Uncertainty about domestic access to foreign credit on acceptable terms has grown in the past few months, owing to the aforementioned rise in market risk premia. *In some instances, domestic borrowers depend either on gaining easier access to foreign credit markets on acceptable terms or on negotiating longer maturities with current lenders in order to service their future debt without putting undue pressure on the exchange rate of the króna.*
- As has been pointed out in previous Central Bank publications, *the repayment profile on the bonds between the new Landsbankinn and its predecessor, Landsbanki Íslands, is too heavy to be covered by Iceland's foreign exchange revenues.* If the bonds are not lengthened through negotiation, will the capital controls prevent the payment of recoveries on the bonds to the old bank's creditors from destabilizing the economy. Payments of recoveries on domestic assets to creditors could cause exchange rate instability if the payments are disbursed from the current account balance more rapidly than the economy can tolerate. A number of factors indicate that the scope for such payments will be limited in the next few years.
- Excluding debts to the failed banks, some ⅓ of foreign loan instalments in 2013-2018 derive from domestic energy companies' debts. *As Table 1 shows, domestic energy companies are much more heavily leveraged than their counterparts in neighbouring countries.* Consequently, it is essential that they reduce their debt in coming years so that they can refinance on acceptable terms. Moreover, domestic energy companies' balance sheets reflect substantial interest rate risk. If foreign interbank rates rise, it will have a direct negative effect on their operating performance unless they can find a way to hedge against this risk.

Table 1. Debt levels and credit ratings of selected energy companies

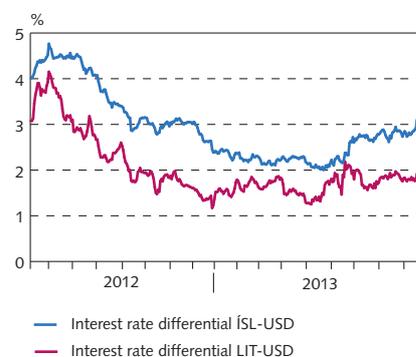
	Net debt relative to EBITDA 2012	Location of headquarters	State and municipal ownership share	Credit rating from S&P	Credit rating from Moody's
Orkuveita Reykjavíkur	8.97	Iceland	100%	-	B1 / negative
Landsvirkjun w/Gov't guarantee	7.62	Iceland	100%	BB / negative	Baa3 / stable
Landsvirkjun w/o Gov't guarantee	7.62	Iceland	100%	BB / negative	Ba2 / stable
HS orka	7.04	Iceland	-	-	-
Vattenfall	2.61	Sweden	100%	A- / stable	A2 / negative
Fortum	3.25	Finland	50.76%	A- / negative	A2 / negative
Statkraft	3.55	Norway	100%	A- / stable	Baa1 / stable
Dong	7.12	Denmark	81.02%	BBB+ / negative	Baa1 / stable
E.on	2.36	Germany	-	A- / stable	A3 / negative

Sources: Energy companies annual financial statements, Moody's, Standard and Poor's.

### Yields on Treasury foreign issuance

- *The spread between the Icelandic Government's 10-year US dollar bond, issued last year, and a comparable US Treasury bond maturing in 2022 has widened in recent months. Interest rate differential is now slightly less than 300 basis points. The secondary market yield on the above-mentioned Icelandic Treasury bond peaked last summer at just over 6.2% and then tapered off steadily, reaching 3.8% in May. Since then, however, it has risen rather abruptly, moving temporarily above 5.6% early in September. The spread against US bonds has changed less radically; however, it fell below 2% in May and is now nearing 3% again (Chart 9). Similar developments can be seen in the spreads of government bonds issued by other European countries with a credit rating similar to Iceland's. The spread of a 10-year Lithuanian government bond issued in US dollars is also shown in the chart. The spread between it and the US Treasury bond maturing in 2022 has widened by about 50 basis points since May, whereas the spread between the Icelandic and US bonds has widened by 80 points. Lithuania's sovereign credit rating from Standard & Poor's is BBB, while Iceland's is BBB-.*

Chart 9  
Interest rate differential with the USA  
Government bonds with maturity 2022

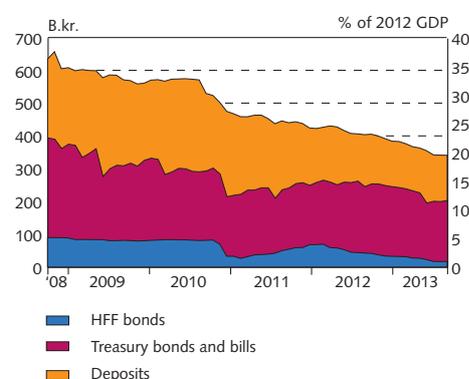


Source: Bloomberg.

### Non-residents' short-term króna assets

- *Non-residents' short-term króna assets totalled 341 b.kr., or roughly 20% of GDP, at the end of July 2013, after having declined by 65 b.kr. over the previous 12 months. For the most part, the reduction is attributable to the foreign currency auctions held by the Central Bank, which acted as an intermediary in the transfer of 50 b.kr. in short-term króna assets over this period.*
- *One nominal Treasury bond, RIKB 13, matured in May. Non-residents owned roughly 75% of bonds issued in the series, or about 64 b.kr. They have reinvested the lion's share of the proceeds in nominal and indexed Treasury bonds, predominantly in the shortest maturities. For instance, as of end-August they owned 107 b.kr. worth of nominal Treasury bonds maturing in 2016 or earlier, or 78% of bonds issued, an increase of 30 b.kr. since the end of April.*

Chart 10  
Short-term króna assets held by non-residents  
October 2008 - August 2013

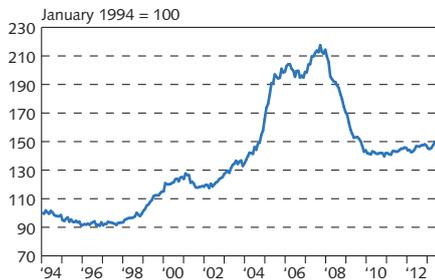


Sources: Statistics Iceland, Central Bank of Iceland.

### Capital account liberalisation

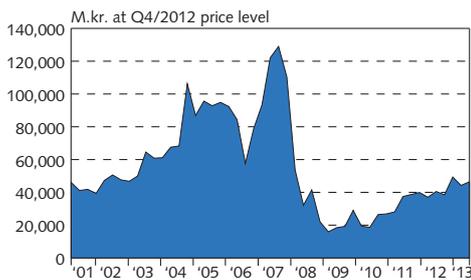
- *The capital controls eliminate the risk of substantial capital outflows that could cause instability. Before further steps can be taken towards lifting the controls, resident borrowers must lengthen their foreign financing, an acceptable solution for the settlement of the Glitnir and Kaupthing estates must be reached, and a more permanent channel must be found for non-residents with short-term króna positions so as to reduce the instability associated with them. Further discussion of the status and effects of the settlement of the failed banks' estates can be found in Appendix 1.*

Chart 11  
Real house prices



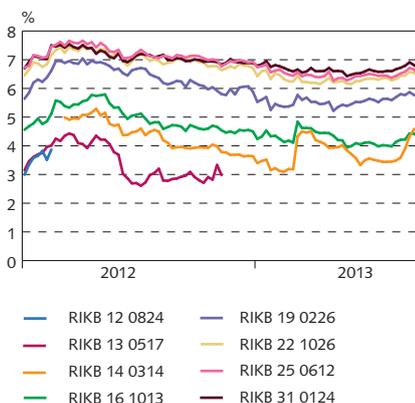
Source: Registers Iceland.

Chart 12  
Real estate market turnover



Sources: Statistics Iceland, Registers Iceland, Central Bank of Iceland.

Chart 13  
Government bond yields



Source: Central Bank of Iceland.

- Domestic financing costs could increase after the capital controls are lifted, as capital that would ordinarily seek an exit route is locked inside the country. It is important to use the shelter provided temporarily by the controls to prepare for their removal.

## Domestic markets

### Real estate prices rising

- Real house prices in greater Reykjavík have risen steadily since the beginning of 2011 and are now back to the level first seen in late 2004. Between October 2007 and year-end 2010, real house prices in the greater Reykjavík area fell by roughly 36% (Chart 11) but nonetheless remained higher than at any point between 1960 and 2003.

- Real estate market turnover has been on the rise in the recent term. Measured at constant price levels, it has fluctuated over the past five quarters in a range similar to that seen between 2001 and mid-2003. When new mortgage lending by the banks peaked in 2005 turnover doubled and for a short time in 2007, owing to the surge in exchange rate-linked mortgage lending it trebled (Chart 12). Real estate market turnover collapsed after the failure of the financial system in autumn 2008, and calculated at constant prices it was down to only a third of 2001-2002 levels by Q1/2009. Since then it has grown steadily, however, and is now similar to the level seen before the surge in 2004-2007.

- Since February 2012, just under 5% of real estate market turnover has been attributable to the Central Bank's Investment Programme. Real estate investment under the programme peaked at 7.2% of total turnover in the fourth quarter of the year. These figures take into consideration the fact that euros in an amount equivalent to that imported through Central Bank auctions must enter the country through the foreign exchange market. On the other hand, large investments in industrial and commercial housing have been deducted from the figures. Although the programme does not account for a large share of total turnover, it is responsible for a considerable proportion of quarter-on-quarter growth in market activity. As a result, the possibility that this additional demand has affected prices cannot be ruled out, particularly if it is directed primarily at specific neighbourhoods in greater Reykjavík. A discussion of differing price trends within the greater Reykjavík area can be found in *Financial Stability 2013/1*.

### The bond market

- A large nominal Treasury bond matured on 17 May. Non-residents owned 64 b.kr. of the 79 b.kr. total. Participation in Treasury bond auctions was strong, and the two remaining Q2 auctions, scheduled for June, were cancelled as a result.
- In the first eight months of 2013, bond market turnover contracted by nearly 20% year-on-year, from 194 b.kr. per month in

2012 to 157 b.kr. per month in 2013. Treasury bond issuance has contracted, particularly for shorter maturities, and the Housing Financing Fund (HFF) has not issued any bonds year-to-date. Market activity is limited almost entirely to Treasury bonds (about 75% of turnover) and HFF bonds (about 23%), which have the largest series by far. Trading in corporate and financial company bonds has grown in the past year but remains limited. Increased corporate and financial company bond turnover is a sign that the bond market is livening up again.

- *Yields on longer Treasury bonds have changed little this year, whereas shorter bond yields declined from March until the summer. They have begun to rise again since August, however, mostly on the shortest maturities. On the other hand, indexed yields have declined steadily after peaking in early June.*

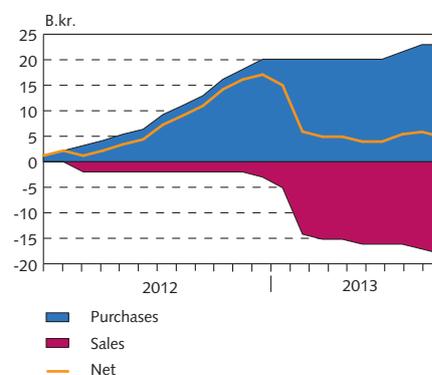
### Change in monetary policy focus

- *So far in 2013, the Central Bank has intervened more actively in the interbank foreign exchange market than it has in previous years. On 15 May the Bank's Monetary Policy Committee (MPC) announced intentions to step up foreign exchange market activity in an attempt to mitigate exchange rate volatility.*
- *Chart 14 shows accumulated foreign currency purchases by the Central Bank since the beginning of 2012. Last year the Bank's policy was to purchase currency in the market each week to expand its non-borrowed reserves. Since the beginning of 2013, however, the Bank has sold more foreign exchange than it has bought. Since May, the króna has been more stable than in the preceding months (Chart 15).*

### Share prices fluctuate widely

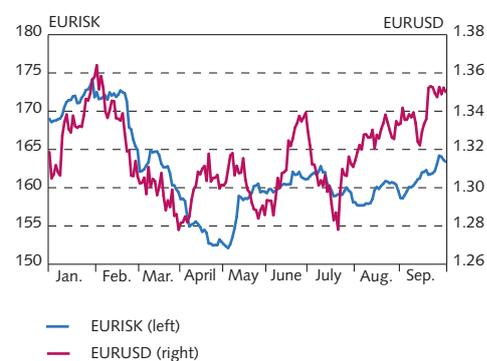
- *This summer's rise in the share price index proved short-lived. At the end of Q3, the Main List index, OMXI6, had risen by 7.5% year-to-date, although the shares of some OMXI6 companies had appreciated much more – Icelandair hf., for instance, by 85% and Hagar hf. by about 34%. The composition of the index changed in July, when Reginn hf. and Össur hf. dropped off it and were replaced by two insurance firms, Vátryggingafélag Íslands hf. (VÍS) and Tryggingamiðstöðin hf. (TM). Össur hf. is the second-largest company listed on the Icelandic exchange, but trading with its shares plummeted on the Icelandic market after it was listed in Denmark.*
- *The Financial Supervisory Authority (FME) responded to strong excess demand in recent public stock offerings. The two insurance companies were listed on the exchange in rapid succession in April and May. The enormous excess demand for both companies' shares drew considerable attention. In the wake of the offerings, the FME issued an announcement warning investors that placing larger bids than they could act on could constitute market abuse in the legal sense of the term. In August the FME also stated that,*

Chart 14  
Accumulated Central Bank foreign exchange transactions  
January 2012 - September 2013



Source: Central Bank of Iceland.

Chart 15  
EURISK and EURUSD exchange rates<sup>1</sup>  
1 January - 30 September 2013



1. Daily data.  
Source: Central Bank of Iceland.

Chart 16  
OMXI6 share price index  
1 January - 30 September 2013



Source: Nasdaq OMX Iceland.

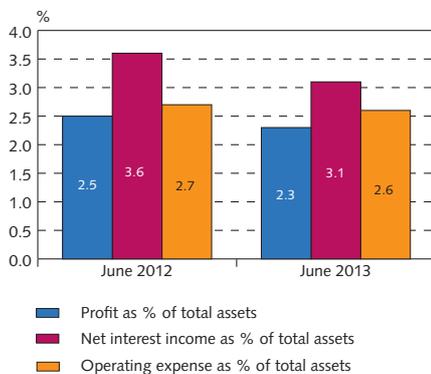
in publishing the results of the offerings, counting invalid bids as legitimate demand could be a violation of the law. This was done in order to prevent public discussions of demand that is actually non-existent from triggering price increases and attracting buyers on false pretences.

## Operations and equity

### Commercial banks' operations

- *Iceland's commercial banks recorded strong profits in the first half of 2013.*<sup>1</sup> Total assets increased slightly, particularly liquid assets, whereas loans to customers contracted marginally. As before, the banks' financial statements featured a number of estimated and irregular items, and their external environment was somewhat changeable.<sup>2</sup> These factors should be considered in any assessment of operating results, financial ratios, and equity.
- The commercial banks' combined profits fell by 2 b.kr. year-on-year in H1, to 32.6 b.kr. Their return on total assets was 2.3%, and return on equity was just over 13%, which was less than in the same period in 2012. Calculated profits on core operations are improving, however, and totalled 0.7% of total assets in H1/2013, as opposed to 0.5% in H1/2012.<sup>3</sup> Net interest income totalled 44.2 b.kr., and the combined interest rate margin fell 0.5 percentage points year-on-year, to 3.1%. Allocated discounts on interest income are on the decline; restructuring of customer loans, now well underway, has led to a reduction in calculated interest income; and inflation was down year-on-year in H1/2013. In addition, interest expense rose because of increased bond issuance.
- The net rise in loan values totalled 15.6 b.kr., an increase of 14.7 b.kr. between years. Upward loan revaluations totalled 36.6 b.kr. (including Landsbankinn's 4.7 b.kr. increase due to receipt of shares in the bank), whereas impairment totalled 22.3 b.kr. and capitalisation of valuation changes in Landsbankinn's contingent bond totalled 1.3 b.kr. *In general, corporate loan values increased, while household loans fell in value.* Default is still rela-

Chart 17  
Returns, interest rate differential,  
and expense ratio<sup>1</sup>  
H1/2012 and H1/2013



1. Consolidated accounts. Operating expense in H1/2013 adjusted for Landsbankinn's 4.7 b.kr. income entry for receipt of shares and Arion's 500 b.kr. charge of Competition Authority.

Sources: Financial institutions' annual and interim financial statements.

1. The discussion of commercial bank operations in H1/2013 is based on the consolidated accounts of the three largest commercial banks and comparison figures for H1/2012. Figures represent the aggregate operating results of the commercial banks unless otherwise stated. Discussion of the aggregate position may diverge from that of individual financial companies.
2. In H1/2013, the trade-weighted exchange rate index fell by 6.7% and the króna appreciated commensurably (the index rose by 0.6% in H1/2012). The CPI as used for indexation rose by 2.7% during the half (as opposed to a 3.5% rise in H1/2012). In general, bond yields declined, whereas share prices on the Main List rose by over 6%. The Central Bank of Iceland held interest rates unchanged during the period. The banks' financial statements are affected by all of these factors, among others.
3. Core operations based on a 3% calculated interest rate differential, 1% net loan valuation reduction on an annualised basis, commission income, and operating expense. H1/2013 operating expense is adjusted for the largest irregular items (Landsbankinn's charge of 4.7 b.kr. for its obligation to allocate to employees the shares received in connection with the settlement with LBI, and Arion Bank's charge of the 500 m.kr. fine imposed by the Competition Authority on its subsidiary, Valitor). Thus calculated, the return on total assets from core operations was 0.7% in H1/2013, as opposed to 0.5% in H1/2012.

tively common and further restructuring is needed. The difference between claims and book value is diminishing, but some scope for additional restructuring remains. Loan valuations will probably continue to fluctuate somewhat, although the volatility should diminish as restructuring progresses.

- Net commission income rose 13% year-on-year in H1, to 13.4 b.kr., due in part to market transactions and asset management. Net income from financial activities declined somewhat between years, to 5.5 b.kr. in H1. Gains on equities and bond holdings amounted to 7.7 b.kr.; however, exchange rate losses due to foreign currency mismatches totalled 1.8 b.kr., as opposed to a gain of 1.6 b.kr. a year ago. *At the end of the period, all of the commercial banking groups recorded positive foreign currency mismatches.* The exchange rate losses in the first half of the year go hand-in-hand with the appreciation of the króna during the period.
- The commercial banks' operating expenses totalled 42.1 b.kr. in H1/2013, an increase of 4.9 b.kr., or 13%, year-on-year. Excluding Landsbankinn's charge of 4.7 b.kr. for its obligation to allocate to employees the shares received in connection with the settlement with LBI, and Arion Bank's charge of the 500 m.kr. fine imposed by the Competition Authority on its subsidiary, Valitor, the ratio of operating expenses to net interest and commission income rose year-on-year, to 64%. *Excluding these items, operating expenses totalled 2.6% of total assets, a slight decline from the previous year.* In general, the Icelandic banks' ratio of operating expenses to total assets is high in comparison with Nordic banks.<sup>4</sup> The banks have focused on reducing operating expenses in the recent term and will probably continue to do so in coming quarters.

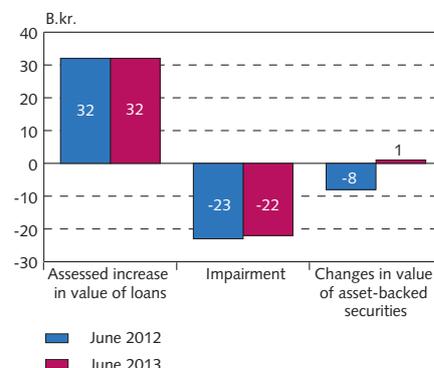
### Commercial banks' equity

- The equity of Iceland's large commercial banks totalled 522 b.kr. as of end-June 2013, after increasing by just over 18 b.kr. since the beginning of the year. Over the same period, their leverage ratio (the ratio of total liabilities to equity) fell to 4.5 by the end of the first half. Their capital ratio averaged 25.9% as of end-June 2013, including 23.5% in Tier 1 capital. *The large commercial banks' capital ratios are currently at their highest since the banks were established.* Furthermore, the banks fulfil the capital adequacy requirements set by the FME.<sup>5</sup> MP Bank's capital

4. For most large Nordic banks, the ratio of operating expense to total assets is under 1%. Smaller banks' expense ratios are usually between 1% and 2%.

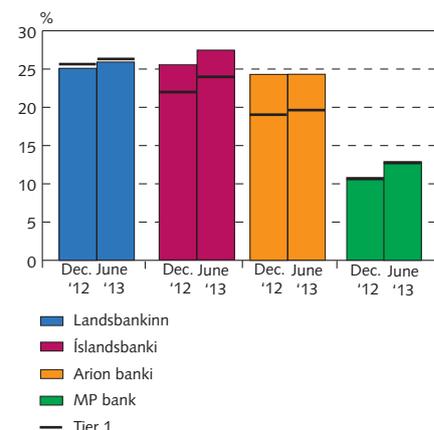
5. The Act on Financial Undertakings, no. 161/2002, stipulates that a financial undertaking's capital base shall be at least 8% of its risk base; however, based on the authority contained in the Act, the FME has set a higher minimum. The commercial banks have conducted their own internal capital adequacy assessment process (ICAAP) and the FME has then conducted its supervisory review and evaluation process (SREP), after which it has determined the banks' minimum capital ratios. Landsbankinn is the only bank that has published the FME's SREP-based capital requirement, which is 19.5%, based on the bank's position as of end-2011.

Chart 18  
Income and expenses due to changes in valuation of loans and receivable<sup>1</sup>  
June 2012 and June 2013



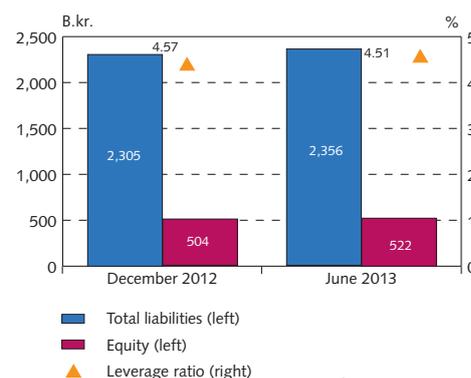
1. Consolidated accounts. Revaluation increase in loan values in June 2013 adjusted for Landsbankinn's 4.7 b.kr. increase due to receipt of shares.  
Sources: Commercial banks' interim financial statements.

Chart 19  
Commercial banks' capital adequacy ratios<sup>1</sup>  
2012 - H1/2013



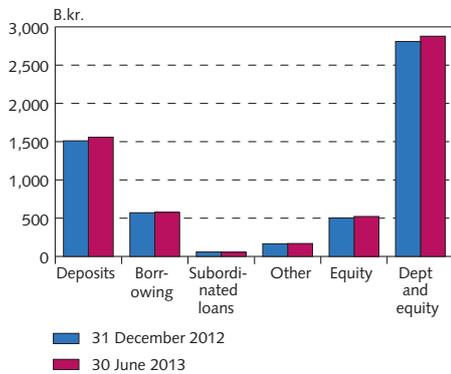
1. Commercial banking groups.  
Sources: Commercial banks' annual and interim financial statements.

Chart 20  
Liabilities, equity and leverage ratios<sup>1</sup>



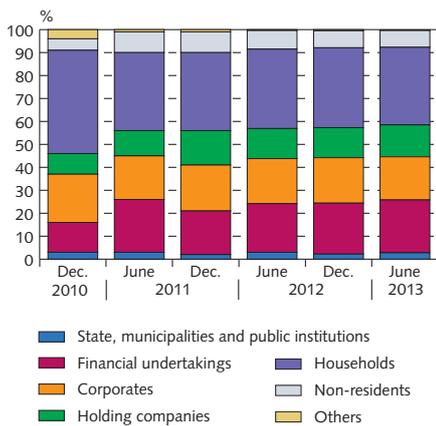
1. Consolidated figures for the three largest commercial banks.  
Sources: Commercial banks' annual and interim financial statements.

Chart 21  
Funding<sup>1</sup>



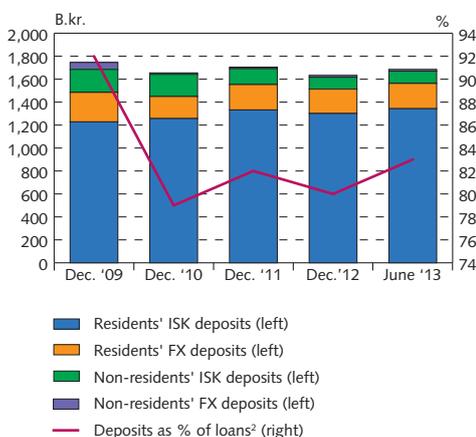
1. Consolidated figures for the three largest commercial banks.  
Sources: Commercial banks' annual and interim financial statements.

Chart 22  
Deposit holders<sup>1</sup>



1. Parent companies.  
Source: Central Bank of Iceland.

Chart 23  
Deposits with commercial banks in FX and ISK<sup>1</sup>



1. Parent companies. Deposits of customers and financial undertakings.  
2. Customer deposits as a % of loans to customers and asset-leasing agreements.  
Source: Central Bank of Iceland.

totalled nearly 6 b.kr. as of end-June 2013, its leverage ratio was just over 10, and its capital ratio was 12.9%.

- The banks' operating environment still reflects a number of legal and political uncertainties. Among these are the interpretation of the Supreme Court decisions on exchange rate-linked loans and the uncertainty concerning removal of the capital controls, which could affect loan valuation and funding. Furthermore, many borrowers remain highly leveraged and could need further debt restructuring (see the section on businesses). The banks must adapt their business models to the current operating environment as they prepare for capital account liberalisation. They are faced with the problematic task of increasing their share of performing loans; or downsize their balance sheets and cut costs.

## Funding

### Little change in the banks' funding

- The commercial banks' principal source of funding is deposits, which have grown since the beginning of 2013, in a reversal of the trend of recent years. As of June 2013, the commercial banks' deposits had increased by over 50 b.kr. since the beginning of the year. The rise is due largely to investment and mutual funds, whose deposits have grown by almost 50% since the beginning of the year. It appears as though depositors are investing in such funds in ever-greater measure. Non-residents' deposits grew by over 1.6 b.kr., partly due to the maturity of RIKB 13 in May, whereas their foreign-denominated deposits contracted in H1/2013, to about 1% of the banks' total deposits.
- The commercial banks' liquidity is well above the minimum stipulated in Central Bank rules and FME requirements. Credit institutions have submitted new liquidity reports for informational purposes since year-end 2012, along with regular reports submitted pursuant to current rules. New liquidity rules will take effect later this winter. Credit institutions will then submit one report according to the new rules, and the previous requirements set by the Central Bank and FME will cease to be valid at that time.<sup>6</sup>
- Term deposits increased in the first half of the year, the new liquidity rules include more stringent requirements for deposits, which lengthens their commitment period.
- The banks are gradually stepping up market funding. The three largest commercial banks have all been authorised by the FME to issue covered bonds to fund mortgage lending. In June, Landsbankinn issued covered bonds for the first time, in the form of a nominal series 1.2 b.kr. in size. The bank is authorised to issue

6. Further information on the new liquidity rules can be found in Box V-1 of *Financial Stability* 2013/1.

covered bonds for up to 10 b.kr. Íslandsbanki has issued four covered bond series – three indexed and one nominal – in the total amount of 20.6 b.kr. Arion Bank has issued covered bonds for a total of 9.8 b.kr., including a new indexed covered bond series issued in July. This was the second indexed series issued by Arion, which has also issued one nominal covered bond. Since March 2013, Íslandsbanki has held five commercial paper auctions for a total amount of 10.45 b.kr. and is the only Icelandic bank to issue commercial paper on the OMXICE exchange since 2008.

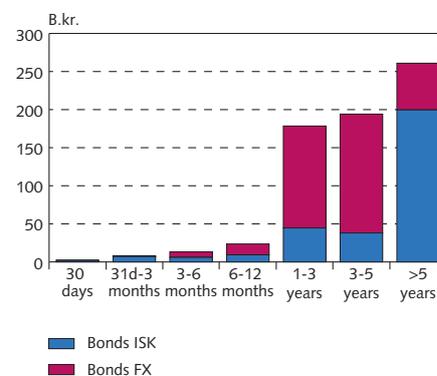
- *Landsbankinn has the largest share of non-deposit funding.* This is due primarily to the bank's debt to its predecessor, Landsbanki Íslands, which stems from the difference between the value of assets and domestic deposits transferred to Landsbankinn upon its establishment. The bonds were recognised at 297 b.kr. in Landsbankinn's accounts at the end of June 2013. With quarterly instalments, the bonds were denominated in foreign currency. Landsbankinn's debt to the old bank constitutes the bulk of the three commercial banks' bond issuance and explains most of their repayment profile for the next several years. Just under 70% of the next three years' instalment payments, or 157 b.kr., are denominated in foreign currency.
- The commercial banks' encumbrance ratios vary greatly; because of the Landsbankinn bonds, *Landsbankinn has the highest*, with 41% as of June (up 9 percentage points since the beginning of the year), followed by Arion Bank with 30% and Íslandsbanki with 12%.
- A bond issued by Arion Bank in Norwegian *kroner* was admitted for trading on the Oslo exchange in July. In mid-September, the premium on the bond was about 478 points above NIBOR, which is less than at the time of listing but similar to the premium in the spring. Trading has been limited, however. The banks have not expanded their foreign issuance. In June, Íslandsbanki received confirmation of the base prospectus for its issuance under the Global Medium Term Note Programme (GMTN). The programme provides for total issuance in an amount equivalent to 250 million US dollars in various currencies, at fixed and floating rates.

## DMB assets

### Total DMB assets increase

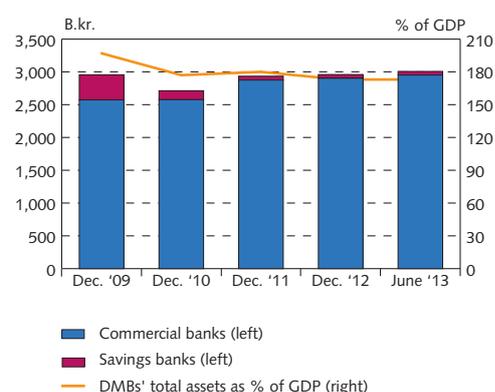
- *Total assets held by deposit money banks (DMB) have increased since the beginning of the year.* As of end-June, DMB assets totalled 3,007 b.kr., up from 2,960 b.kr. at year-end 2012 and 2,886 b.kr. at the end of June 2012. In real terms, they have grown by 0.8% in the past 12 months. As a share of GDP, total DMB assets are unchanged year-on-year, although they have shrunk slightly since 2009, from 200% of GDP to 173% as of end-June 2013.

Chart 24  
Bond maturities<sup>1</sup>  
Three largest commercial banks as of 31 August 2013



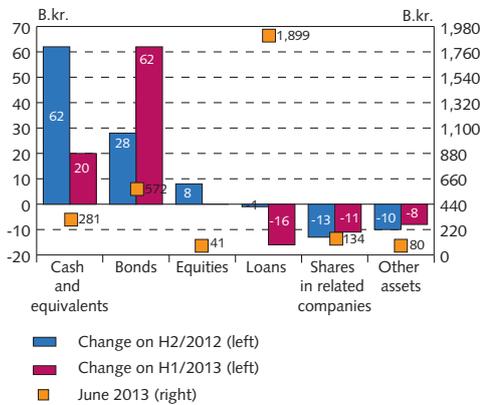
1. Instalments and interests.  
Source: Central Bank of Iceland.

Chart 25  
DMBs' total assets, % of GDP<sup>1</sup>



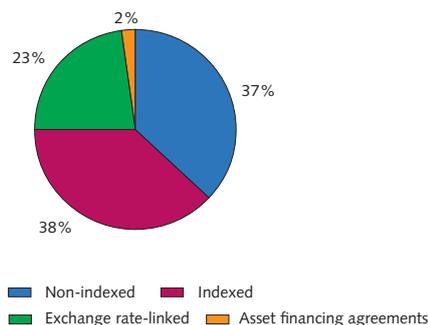
1. Parent companies.  
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 26  
DMBs' total assets<sup>1</sup>



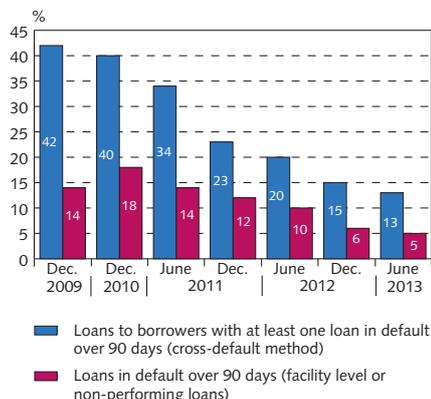
1. Parent companies.  
Source: Central Bank of Iceland.

Chart 27  
DMBs' loans<sup>1</sup>  
June 2013



1. Parent companies.  
Source: Central Bank of Iceland.

Chart 28  
Default ratios of the three largest commercial banks<sup>1</sup>



1. Parent companies, book value.  
Sources: Financial Supervisory Authority, Central Bank of Iceland.

- Loans constitute the lion's share of the DMBs' asset portfolios, at 63% of the total, or 1,899 b.kr., as of mid-year 2013. Loans as a share of total assets have declined by about 3% in the past 12 months and by about 2% since the beginning of the year. In real terms, the book value of loans has fallen by 3.7% in 2013 and by 4.3% in the past 12 months. The sharp decrease in book value so far in 2013 indicates strongly that demand for new credit is very limited. Bonds are the second-largest class of DMB assets, at 19% of the total, and cash is the third-largest, at 9%. An examination of individual asset classes shows that, in the past 12 months, DMBs have added substantially to their holdings of bonds (90 b.kr.) and cash (82 b.kr.) but have reduced their equity holdings in related companies (24 b.kr.), as their liquidity position has strengthened during this period.

- Exchange rate-linked loans continue to shrink in importance, accounting for 23% of the DMBs' total loan portfolios at the end of June 2013, as opposed to 27% a year earlier. The decline in exchange rate-linked loans is offset by an increase in indexed and nominal loans, which accounted for 38% and 37% of the mid-year total, respectively, as compared with 36% each at the end of 2012. The share of indexed loans therefore rose more strongly in the first half of 2013, indicating a shift in demand from nominal to indexed loans.

- As of end-June, 5.1% of the banks' loans were 90 days in arrears, a decline of about 4.4% year-on-year.<sup>7</sup> The share of arrears fell by only 1% in the first half of 2013, however, indicating a clear slowdown in the decline in default ratios. In terms of the more conservative cross-default method, however, which includes all loans taken out by borrowers in arrears, the default ratio was 13% at the end of June 2013, as opposed to 20% a year earlier. Default has declined more slowly in 2013 than in 2012, probably reflecting the fact that resolution of more difficult cases has been postponed. In confirmation of this, the amount in default that is classified as non-fulfilment – including, for instance, loans that have been frozen or are legally disputed – has remained broadly unchanged in the past 12 months. Disputes about the legality of loan agreements can be expected to persist for some time. According to the Judicial Council, in June 2013 a total of 60 cases were awaiting a ruling by the District Court of Reykjavik on the legality of linking a financial obligation or the settlement of such an obligation to a foreign currency exchange rate or index.<sup>8</sup> Furthermore, it appears that only three of the 11 test cases mentioned in the stakeholders' collaboration on responses

7. Including only those loans that are 90 days in arrears or more, which is the most common measure of non-performing loans used in international financial reporting and annual accounts.

8. See the statement submitted by the Judicial Council to Parliament on 19 June 2013, concerning the bill of legislation amending the Code of Civil Procedure, no. 91/1991, with subsequent amendments (expedited handling).

to the February 2012 Supreme Court judgment on the validity of full payment receipts will actually be tried in court. Among other things, the Debtors' Ombudsman considers it unclear to what extent these test cases will resolve the disputes that remain.<sup>9</sup>

## Households

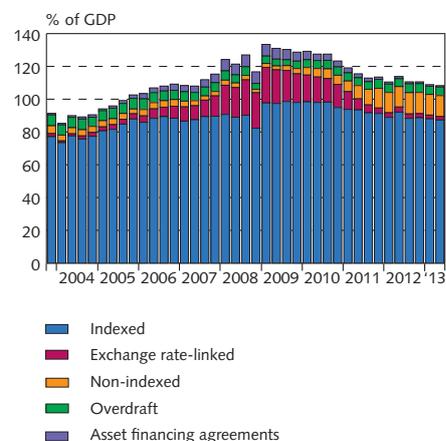
### Household balance sheets continue to improve

- *At the end of June 2013, household debt was estimated at 108% of GDP, after falling by 2% of GDP since the beginning of the year. In real terms, household debt has fallen by 3.2% in 2013, whereas it rose by 0.5% in the latter half of 2012. Developments so far this year indicate that household debt reduction has gained pace again after a period of minimal change in H2/2012. The reduction in 2013 is attributable in large part to recalculation of illegal exchange rate-linked loans, debt retirement, and instalment payments, which have exceeded the amount of new loans granted.*
- *At year-end 2012, indexed household debt amounted to 87% of GDP, non-indexed debt 13%, overdraft loans 5%, exchange rate-linked loans 2%, and asset financing agreements 1%. The main change in the composition of debt in H1/2013 is that indexed loans declined by 1.4% of GDP, while exchange rate-linked loans fell by 0.4% and overdraft loans by 0.2%. The share of non-indexed loans is unchanged, as it has been since end-September 2012. Demand for non-indexed mortgages was strong when the banks first began offering them. Many borrowers have taken advantage of the cancellation of stamp fees for refinanced debt and have converted from indexed to non-indexed mortgages. However, demand for non-indexed mortgages has been falling in 2013, and in the first half of the year, new indexed mortgages amounted to 17.7 b.kr., as opposed to 12.9 b.kr. for non-indexed.<sup>10</sup> Initially, debt service is higher on non-indexed mortgages than on indexed mortgages. Credit institution staff believe that most borrowers with the desire, ability to pay, and mortgage capacity to convert indexed debt to non-indexed debt have already done so, and that demand for new non-indexed loans is therefore concentrated among borrowers who are buying or building a home rather than refinancing.*
- *Net household wealth excluding pension savings rose considerably as a share of GDP in 2012, from 106% to 115%. The increase in net wealth is due almost entirely to rising real estate prices. Because house prices have continued to rise this year and debt has remained broadly unchanged in nominal terms, net household wealth has grown still further, to an estimated 119% of GDP by end-June. It has risen by a full 19% of GDP since year-end 2010,*

9. See the Debtors' Ombudsman's memorandum of 4 July 2013 on the status of exchange rate-linked loan cases: <http://www.ums.is/fraedsla-og-frettir/nr/385>.

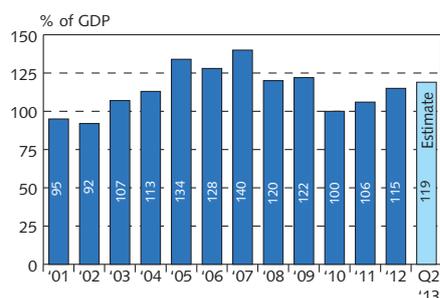
10. This refers to new mortgage loans granted by deposit money banks (DMB), the Housing Financing Fund (HFF), and the pension funds.

Chart 29  
Household debt as % of GDP  
Q4/2003 - Q2/2013



Sources: Statistics Iceland, Central Bank of Iceland.

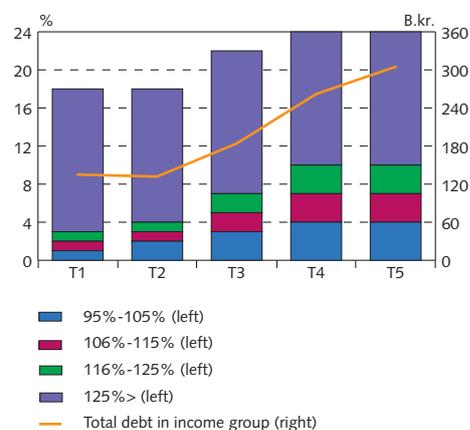
Chart 30  
Household's net assets as % of GDP<sup>1</sup>  
2001 - Q2/2013



1. Without pension assets.

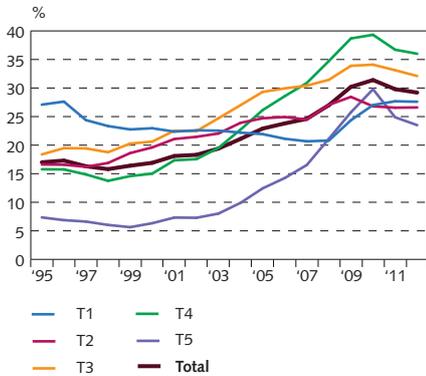
Sources: Directorate of internal revenue, Central Bank of Iceland.

Chart 31  
Debt ratio range of individuals owing more than 95% of assets<sup>1</sup>  
Year end 2012, by income group



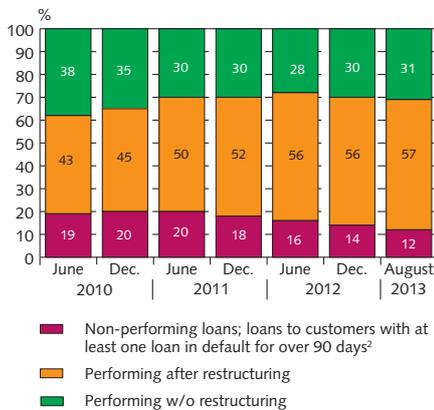
1. The left axis shows the distribution of households owing more than 95% of assets among periods and income groups. The right axis shows total household debt at year-end 2012, by income group.  
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 32  
% of taxpayers owing more than 300% of disposable income  
By income group



Sources: Statistics Iceland, Central Bank of Iceland.

Chart 33  
Status of loans to households from three largest banks and Housing Financing Fund<sup>1</sup>



1. Parent companies, book value. 2. Non-performing loans are defined as loans in default for over 90 days or deemed unlikely to be paid. The cross-default method is used, i.e. if one loan taken by a customer is non-performing, all of that customer's loans are considered non-performing.  
Source: Financial Supervisory Authority.

and the situation is now better than it was before the 2005-2007 bubble, when net household wealth averaged 102% of GDP (in 2001-2004). Furthermore, households' net pension assets totalled 2,658 b.kr. at end-June 2013, or 152% of GDP, including third-pillar pension savings of 395 b.kr.

- *Household debt problems have subsided.* At year-end 2012, some 31.3% of individuals owed 95% or more of the value of their assets, as opposed to 32.8% in 2011 and 35.3% in 2010. This group can be classified as having negative equity (leverage of 95% or higher), and an examination of income groups reveals that most borrowers in this group belong to the two highest income quintiles, while very few belong to the bottom two quintiles. In all income groups, most overleveraged borrowers owe more than 125% of the value of their assets (Chart 31).
- Individuals with negative equity owed a total of 1,018 b.kr., or 53% of total household debt, at year-end 2012. *The position of this most-leveraged group has improved dramatically since bottoming out 2010*, when 65% of individuals debt fell into this category. Of the 1,018 b.kr. total, 567 b.kr., or 56%, was owed by the two highest income quintiles, while 267 b.kr. was owed by those in the two lowest quintiles. In terms of either the number of individuals or the amount owed, the vast majority of those with negative equity are among the highest-income individuals in the country; however, research and official data show that only a small proportion of these individuals are in financial distress (i.e., having difficulty servicing their debt).<sup>11</sup>
- *In 2011, the proportion of income tax filers who owed more than three times their annual income declined for the first time since 1998. This trend continued in 2012*, and by the end of the year 29.2% of filers fell into this category. About 11.5% of filers owed 300-450% of their annual income, 6.3% owed 450-600% of their income, and 11.4% owed more than 600%. An examination of the various income groups shows that, between 2011 and 2012, the percentage of filers owing more than three times their annual income fell by an average of 1% in the three highest quintiles but remained unchanged in the lowest two quintiles.
- *The percentage of loans in default continues to fall.* Using book value and the cross-default method,<sup>12</sup> about 12% of total loans granted to households by the three largest banks and the Housing Financing Fund (HFF) were in default at the end of August 2013, compared with 16% as of end-June 2012. The default ratio has therefore fallen by about a percentage point per quarter since

11. See, for instance, Central Bank of Iceland Working Paper no. 59, by Thorvardur Tjörvi Olafsson and Karen Áslaug Vignisdóttir, entitled Households' position in the financial crisis in Iceland (<http://www.cb.is/library/Skráarsafn---EN/Working-Papers/Working%20Paper%2059.pdf>).

12. According to the cross-default method, if one loan taken by a customer is non-performing, all of that customer's loans are considered non-performing.

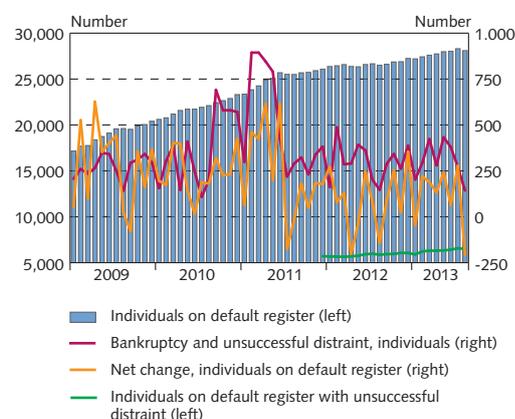
mid-2011. The decline in default in the past 14 months breaks down as follows: other non-fulfilment (4% at end-August 2013) and loans in collections (3%) fell by about 2 percentage points each, whereas default cases undergoing enforcement proceedings (3%) and restructuring (1%) were unchanged, as were frozen loans (1%).

- Developments in the default register differ from the developments in default to credit institutions.* While default has declined by 4% since June 2012, the number of individuals on the default register has risen by more than 1,500, to a total of 28,099, or 11.6% of individuals aged 18 and over, as of end-August.<sup>13</sup> The bright spot on the horizon, however, is that even though the default register has grown in the past 12 months, it shrank by 208 individuals between July and August, the largest contraction in a single month since the Central Bank began monitoring it in early 2009. In addition, an ever-increasing number drop off the default register each month. Many debtors have been on the default register for a long time: about 60% for two years or more, and almost 30% for four years or more.
- A total of 4,820 borrowers had applied to the Debtors' Ombudsman for debt mitigation by the end of August.* Of that total, 333 applications were in processing at the Ombudsman's Office, 852 were in the hands of supervisors, and 3,635 cases had been concluded. The number of applications for debt mitigation has fallen since the spring, with 230 applications filed between March and August 2013, as opposed to 307 over the same period a year ago. In accordance with reduced activity, staffing levels at the Ombudsman's Office have fallen by 45% in the past 12 months. The Ombudsman expects a further reduction in activity in 2014. The applicant group has changed concurrent with the downturn in debt mitigation applications: applicants are younger, the percentage of individuals in the group has risen (from 36% in 2012 to about 45% in 2013), and a greater number live in rented housing. It appears as though the difficult situation in the rental market is emerging ever more clearly in the Ombudsman's case load.
- Households' position continues to improve.* A drop in the real value of total debt, which shows in a stronger equity position and reduced debt service, indicates clearly that household debt restructuring efforts have produced results. As real estate prices rise higher and further restructuring is undertaken, households' position should continue to improve in terms of these factors. In addition, households have benefited from the strong labour market recovery in 2013, with employed persons increasing in number by 3,000 in the past 12 months, working hours lengthening, and unemployment on the decline.

Chart 34

Individuals on default register, bankruptcy, and unsuccessful distraint

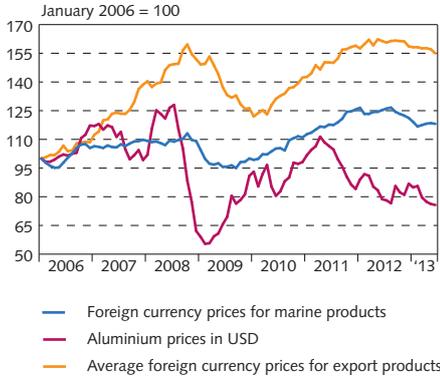
Monthly data, January 2009 - August 2013



Source: CreditInfo.

13. Default according to the CreditInfo default register is reported with a time lag, as there is a delay before individuals drop off the register after having satisfied their creditors or been declared bankrupt. As a result, actual default could be less than the register indicates.

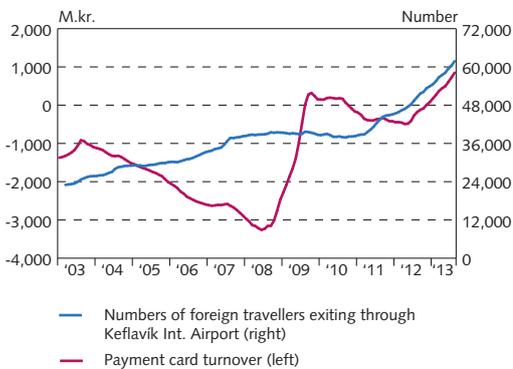
Chart 35  
Prices for export products<sup>1</sup>



1. The average price for export products and the price for marine products in foreign currency are calculated by dividing these prices in Icelandic krónur by the export-weighted trade basket. Monthly data is used for marine products and 12 month average for export products. LME aluminium prices are in US dollars and show monthly averages and the most recent aluminium price.

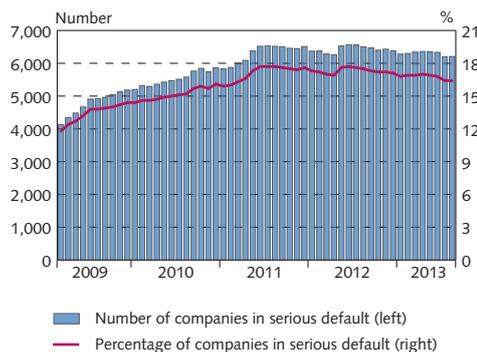
Sources: Statistics Iceland, London Metal Exchange, Central Bank of Iceland.

Chart 36  
Balance of payment-card turnover and number of foreign visitors  
12 month moving average, monthly data.



Sources: Icelandic Tourist Board, Central Bank of Iceland.

Chart 37  
Companies in serious default  
Monthly data, March 2009 - August 2013



Source: CreditInfo.

## Companies

### Marginal improvement in Icelandic companies' operating environment

- *The operating environment of Icelandic companies has improved only marginally in the past year. The situation is still quite uncertain in their principal export markets, and economic recovery has been weak among Iceland's main trading partners. Average foreign currency prices for exports have been on the decline since October 2012, following a virtually uninterrupted rise beginning early in 2010. Marine product export prices have declined in price by 6% in the past 12 months, and global aluminium prices continue to fall. Marine product prices are expected to keep falling in coming years, although a turnaround is expected in aluminium prices.<sup>14</sup>*
- *The surge in tourist visits to Iceland continues unabated, with a year-on-year increase of roughly 43,500, or 14%, over the summer months. The year-on-year increase over the first eight months of 2013 was 20%. The month of July saw a payment card turnover surplus of 8.5 b.kr., the largest ever recorded in a single month.<sup>15</sup> For the first eight months of the year, the card turnover balance was positive by 17.4 b.kr., whereas it was quite often negative during the years before the crisis. The card turnover balance for 2012 as a whole was positive by just under 1 b.kr.*
- *Optimism has grown among executives in Iceland's 400 largest firms, according to the Capacent Gallup survey of companies' situation and outlook. In Capacent Gallup's May survey, about half of executives were of the opinion that economic conditions would improve in the next six months, roughly twice the number in the previous survey. Only 7.4% of respondents considered current economic conditions good, however, and 43.4% considered them poor.*
- *Business investment excluding ships and aircraft grew by about 10% year-on-year in H1/2013. Investment in the energy-intensive sector could rise in coming years if planned development projects – i.e., the Helguvík aluminium smelter – take place. Falling aluminium prices could affect aluminium producers' plans to expand production capacity, however.*

### Gradual reduction in default and bankruptcy

- In August, a total of 6,207 firms, or about 16.4% of all firms in Iceland, were on the default register, a decline of 169 since year-end 2012.<sup>16</sup> In general, since the banking system collapsed, more

14. See *Monetary Bulletin* 2013/3.

15. The payment card turnover balance shows the difference between non-residents' card use in Iceland and Icelanders' card use abroad.

16. Default according to the CreditInfo default register is reported with a time lag, as there is a delay before companies drop off the register after having satisfied their creditors or been declared bankrupt. As a result, actual default could be less than the register indicates.

firms have been added to the default register than have left it. Since November 2012, however, that trend has reversed, with the exception of July and August 2013.

- Corporate bankruptcies and unsuccessful distraint measures have continued to decline in number, and new company registrations are on the rise.* A total of 1,802 new companies were registered in the first seven months of 2013, an increase of 3.4% year-on-year. Of that total 1,169 were private limited companies.<sup>17</sup> Corporate bankruptcies peaked in 2011 but have been on the decline since. In the first six months of this year, 531 firms were subjected to bankruptcy proceedings, or 7% fewer than over the same period in 2012. If developments in 2013 are in line with those in recent years, about 1,000 firms, or 2.8% of the total, will be subjected to bankruptcy proceedings during the year. As in 2012, companies in construction and wholesale/retail are prominent among those that have been declared bankrupt so far this year.<sup>18</sup> A total of 2,262 unsuccessful distraint measures were carried out against companies in the first half of this year. If the trend of recent years holds, unsuccessful distraint will affect an estimated 12.8% of firms in 2013.
- At approximately 154% of GDP as of June 2013, Icelandic corporate debt levels are still high in international context.<sup>19</sup> *The decline in default on corporate loans granted by the three largest commercial banks has lost pace.* The non-performing loan ratio fell from 15% at the end of 2012 to 12% by June 2013. At mid-year, the Financial Supervisory Authority required a somewhat changed methodology for the definition of default. As a result of the change, which is only now fully in place, the non-performing loan ratio rose to 14% in August.<sup>20</sup> For this reason, figures on default are not fully comparable with previous figures.
- Companies that have undergone debt restructuring and are no longer in arrears have grown somewhat in number this year. Some 49% of loans were classified as performing after restructuring in August, an increase of 11 percentage points year-to-date. It should be noted, though, that these changes are due in large part to incorrect classification rather than to actual debt restructuring measures.

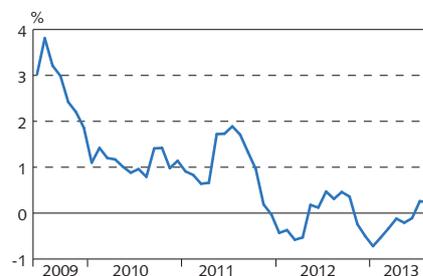
17. The increase was greatest among financial and insurance companies.

18. Firms are classified as bankrupt when they are listed as bankrupt in official data. The number of companies listed as bankrupt could be greater, as it is possible that firms not yet listed are technically bankrupt; that is, they are unlikely to be able to satisfy short-term obligations and their assets cannot cover their liabilities, yet they have not yet been officially classified as bankrupt.

19. Debt to domestic and foreign financial institutions and issued marketable bonds, without FDI.

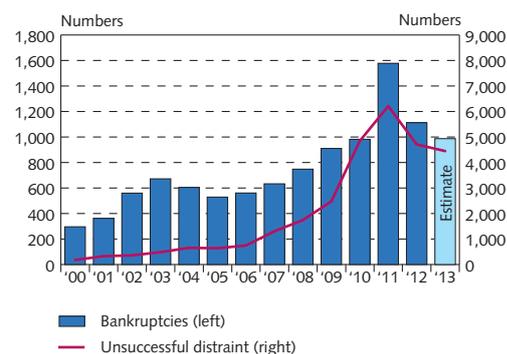
20. The status of the three largest commercial banks' loans is assessed using book value and the cross-default method.

Chart 38  
Difference in the percentage of corporations in and out of the default register  
6-month average, June 2009 - August 2013



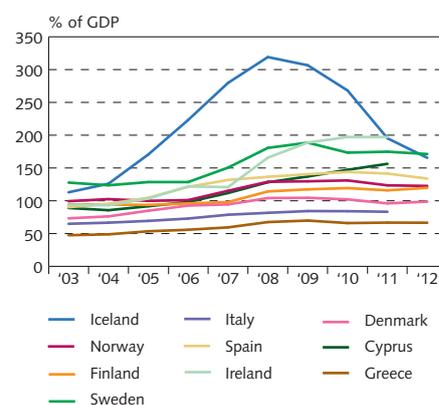
Sources: CreditInfo, Central Bank of Iceland.

Chart 39  
Corporate insolvencies and unsuccessful distraint  
Total for entire year; 2000-2013<sup>1</sup>



1. Total for 2013 is extrapolated from the first 6 months of the year.  
Sources: Registers Iceland, Statistics Iceland.

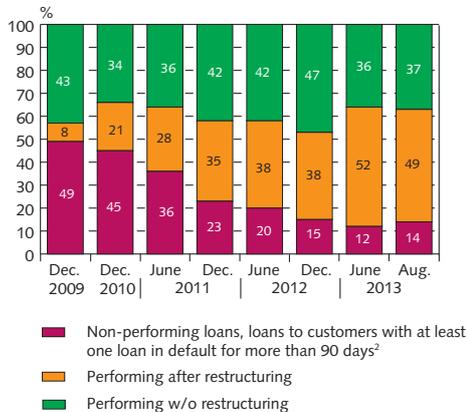
Chart 40  
Corporate debt as percentage of GDP



Sources: Eurostat, Statistics Iceland, Central Bank of Iceland.

Chart 41

Status of the three largest commercial banks' corporate loans<sup>1</sup>



1. Parent companies, book value. 2. Non-performing loans are defined as loans in default for more than 90 days or deemed unlikely to be paid. The cross-default method is used; that is, if one loan taken by a customer is non-performing, all of that customer's loans are considered non-performing.

Source: Financial Supervisory Authority.

- The banks have been relying increasingly on lengthening of loan maturities in their corporate debt restructuring efforts; however, a number of factors suggest that they are merely deferring potential losses and that further write-offs will be needed. *It is important that measures of default give an accurate view of financial institutions' loan portfolios and not reflect forbearance, such as extended maturities.*

#### Uncertainty about deferred loans and the legality of exchange rate-linked loan agreements

- In some instances, the commercial banks have extended deferred loans to firms that are undergoing restructuring and can only service a portion of the debt level corresponding to the company's value. In most cases, the deferred loans are granted for three years at favourable terms. In addition, if deferred loans are paid off before the maturity date, a discount is given on the outstanding amount owed.<sup>21</sup> The original idea was that by the time the deferred loans matured, economic conditions in companies' operating environment would have begun to take shape, and it would have become clear how much debt service they could afford under normal circumstances. The first of these deferred loans have matured, but considerable uncertainty remains, particularly in connection with the legality of exchange rate-linked loan agreements, which complicates the processing of default cases and delays restructuring efforts.<sup>22</sup> Few companies have paid these loans before maturity, however, which indicates that liquidity is tight among firms with deferred loans and/or that it is difficult to acquire external financing for restructuring. This could also be an indication that *companies are still too heavily leveraged in spite of restructuring*. The low level of overall corporate investment points in the same direction, as does the fact that much of the investment undertaken seems to be financed with equity rather than borrowed funds. According to the Competition Authority's assessment of Iceland's 120 largest companies, a large number of these firms need further relief measures. Domestic service companies – that is, those whose revenues are generated solely in Iceland – are particularly weak in this regard and return relatively little profit.<sup>23</sup>

#### Icelandic firms still heavily leveraged

- In assessing the position of Icelandic companies, it is useful to compare their debt with that of international firms rated by major credit rating agencies such as Moody's. Icelandic companies' debt multiplier is calculated from tax returns, but because of filing

21. See the Supervisory committee's final report to the Ministry of Industries and Innovation, pursuant to Act no. 107/2009 on measures to assist individuals, households, and businesses due to extraordinary circumstances in the financial market.

22. See Footnote 21.

23. See the Competition Authority report entitled "Are we entering a lost decade? More effective competition is the cure against stagnation."

deadline rules, the dataset only extends through 2011.<sup>24</sup> Moody's splits companies into two groups: investment grade and speculative grade. Companies with a debt multiplier between 0.6 and 3.1 have generally received an investment-grade rating (in the Aaa to Baa3 range), whereas firms with a multiplier between 3.2 and 7.6 have received a rating ranging between Ba1 and C, which is speculative grade.<sup>25</sup> Chart 42 shows that Icelandic companies with positive equity have similar multipliers in 1997 and 2011. These firms' multipliers have usually been relatively far from the level required for a speculative rating, not to mention an investment-grade rating. Companies that generated an operating surplus and a profit were at the upper end of the speculative range in 2011, however. *Data on Icelandic companies' debt multipliers and comparisons made with international firms therefore indicate that Icelandic companies are still heavily leveraged.*

## Financial market participants

### Miscellaneous credit institutions<sup>26</sup>

- Miscellaneous credit institutions – that is, credit institutions other than deposit money banks (DMB) – held assets amounting to some 1,074 b.kr. as of end-June, as opposed to 1,069 b.kr. a year earlier. *The value of these assets is therefore virtually unchanged in nominal terms over the past 12 months but has fallen by 2.9% in real terms.* Housing Financing Fund (HFF) assets account for the vast majority of miscellaneous credit institutions' assets, totalling 873 b.kr. as of end-June 2013, including mortgage loans amounting to 777 b.kr.
- The HFF granted 468 general mortgages in the first half of 2013, as compared with 611 over the same period in 2012. Prepayments totalled just under 8.5 b.kr. in the first six months of the year, roughly 1 b.kr. less than in the first half of 2012. HFF lending continues to contract in response to increased competition in the market. *The Fund is faced with substantial refinancing risk, as borrowers are permitted to prepay their HFF loans while the HFF bonds issued by the Fund are not prepayable.* An in-depth analysis of the HFF's prepayment problem can be found in the Parliamentary Investigation Commission's report on the Housing Financing Fund, published on 2 July 2013.<sup>27</sup>

24. The data are taken from corporate tax returns, but it is uncertain whether firms will file on time year after year. There are examples of some firms that submit only a balance sheet and others that submit only a profit and loss account. The Icelandic firms referred to include all companies except those in the financial and insurance sector. The dataset therefore contains not only companies with actual operations but also all holding companies that have filed tax returns. The debt multiplier is then calculated from the sum of debt and operating profit (operating revenues less operating expenses, excluding irregular items) for companies that submitted either a balance sheet or a profit and loss account.

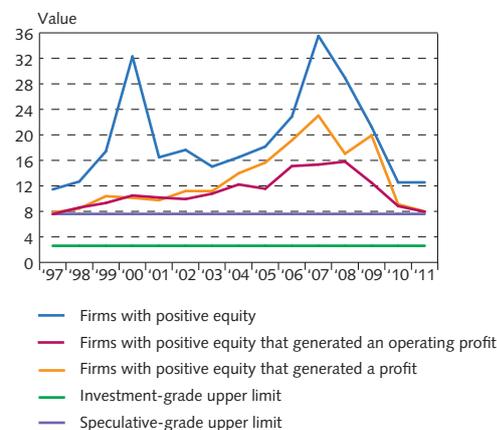
25. See Moody's Financial Metrics™ Key Ratios by Rating and Industry for Global Non-Financial Corporations: December 2012. It should be noted that a company's credit rating is affected by many factors other than the debt multiplier alone, which is only an indicator of a firm's rating.

26. Miscellaneous credit institutions are the Housing Financing Fund, Valitor hf., Borgun hf., Lýsing hf., Straumur Investment Bank hf., the Icelandic Regional Development Institute, and Municipality Credit Iceland Plc.

27. <http://www.rna.is/ibudalanasjodur/skyrsla-nefndarinnar/> (in Icelandic).

Chart 42

Debt ratio for Icelandic corporations by equity in comparison to Moody's rating classification for global corporations<sup>1</sup>

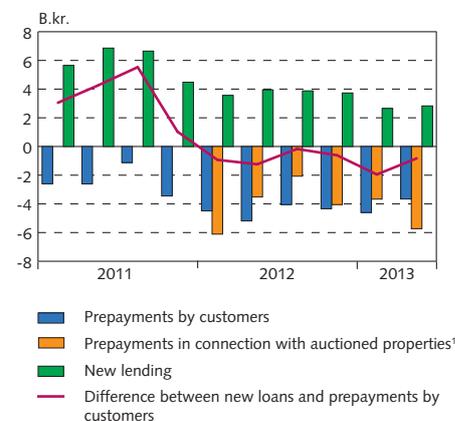


1. Debt ratio is defined as total debt divided by EBITDA without irregular items.

Sources: Moody's, Statistics Iceland, Central Bank of Iceland.

Chart 43

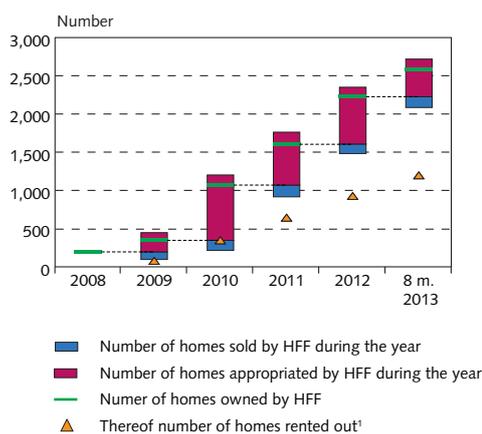
Housing Financing Fund: customer prepayments and new loans



1. Data for 2011 not available.

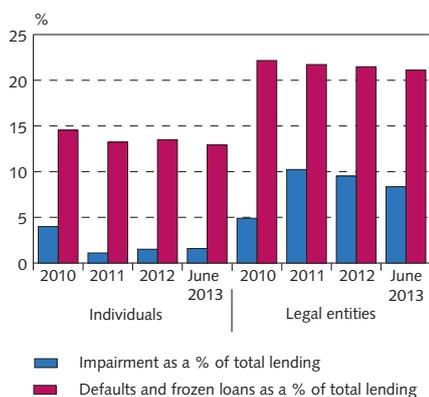
Source: Housing Financing Fund.

Chart 44  
Residential properties owned  
by the Housing Financing Fund



1. The Housing Financing Fund began renting out residential property in March 2009.  
Sources: HFF annual financial statements.

Chart 45  
Impairment, defaults and frozen loans  
as a % of total lending¹



1. Total defaults and loans frozen over 90 days.  
Sources: HFF annual financial statements and monthly reports.

Table 2. HFF-owned property, by region and status at end-August 2013

Number	Rented out	Empty	Uninhabitable¹	In processing	Total	Percentage
Greater Reykjavík	386	137	62	15	600	23%
Suðurnes peninsula	295	390	125	4	814	32%
West Iceland	105	132	37	4	278	11%
West Fjords	15	43	15	1	74	3%
Northwest Iceland	7	11	0	1	19	1%
Northeast Iceland	102	59	1	3	165	6%
East Iceland	115	134	11	3	263	10%
South Iceland	170	156	30	6	362	14%
<b>Total</b>	<b>1,195</b>	<b>1,062</b>	<b>281</b>	<b>37</b>	<b>2,575</b>	<b>100%</b>
– for sale	0	640	242	0	882	34%

1. Most of these flats are under construction and not yet complete, but some are uninhabitable due to their age and condition.  
Source: Housing Financing Fund monthly report.

- In the first eight months of 2013, the HFF appropriated 492 residential properties to satisfy claims and sold 141 properties. Residential properties owned by the Fund therefore continue to increase in number. Of the 2,575 flats owned by the HFF at the end of August, 46% were being rented out. Just under half of the property owned by the HFF was previously owned by individuals or households, while the remainder was owned by construction companies, rental agencies, or other legal entities. A full 32% of the Fund's property is located on the Suðurnes peninsula. This autumn the HFF will transfer 525 appropriated properties to Klettur ehf., the rental company established by the Fund this past January.
- According to its profit and loss account, the HFF recorded a loss of 3.0 b.kr. in the first six months of 2013. At the end of June, its capital ratio was approximately 2.5%. The Fund's operational viability depends in part on the Treasury guarantee of all of its obligations.
- The underlying loan value of loans frozen or in default was 113.2 b.kr., or 14.1% of all HFF loans, as of end-August, as opposed to 14.7% at the beginning of the year. Loans frozen or in default accounted for just under 12.4% of loans taken by individuals and households, as opposed to just over 21% for legal entities. Households in arrears on their loans have declined in number by 420, or almost 10%, year-to-date. Just under 3.5% of all households nationwide were in arrears with the HFF in August, based on the number of households at year-end 2012.<sup>28</sup>
- The Minister of Social Affairs and Housing has decided to appoint a task force on the future structure of housing affairs.<sup>29</sup> At the same time, the Minister will appoint a collaborative group on the future structure of housing affairs, which will act as advisor to the task force.

28. According to Statistics Iceland, there were 123,900 households in Iceland at year-end 2012.

29. In accordance with Item 4 of the action plan on measures to address household debt problems in Iceland, approved by Parliament on 28 June 2013.

## Savings banks

- The savings banks' total assets amounted to 56 b.kr. as of end-June, marginally less than at the end of 2012. As is pointed out in Icelandic State Financial Investments' annual report for 2013, further savings bank mergers are inevitable in the current operating environment, owing to more stringent capital and liquidity requirements and increased public levies on retail banking activities.<sup>30</sup>
- *With the July 2013 merger of Sparisjóður Svarfdæla and Sparisjóður Þórshafnar*, the number of savings banks in operation has fallen to eight. The FME has given consent for the merger, which currently awaits approval from the EFTA Surveillance Authority. The effective date of the merger is 1 January 2013, and the total assets of the merged savings bank will probably approach 6 b.kr. Arion Bank is still planning a merger with AFL Savings Bank, which will reduce total savings bank system assets by about 25%.

## Pension fund assets increase<sup>31</sup>

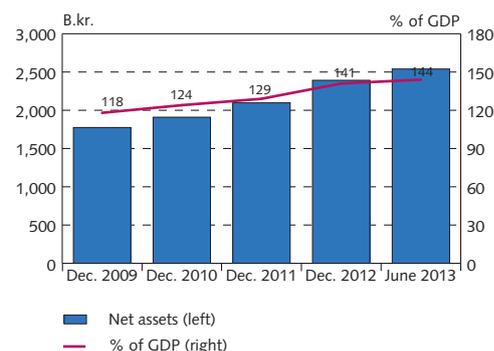
- Net pension fund assets totalled 2,510 b.kr. as of end-June, or 144% of estimated year-2013 GDP.<sup>32</sup> The increase in the first half of the year measured 2.1% in real terms, as compared with 3.3% during the same period in 2012. *The pension funds' domestic holdings in equity securities and mutual and equity funds (including the Enterprise Investment Fund) rose most during the period, or by 23%, to approximately 250 b.kr., or 9.9% of net assets, as of end-June.* In addition, foreign shareholdings and mutual and equity fund shares increased by just over 16 b.kr. in the first half of the year, to 492 b.kr., owing to the depreciation of the króna and rising foreign share prices. Shareholdings and mutual and equity funds (including the Enterprise Investment Fund) therefore comprise about 30% of total pension fund assets, the largest percentage since the collapse of 2008. The pension funds' shareholdings as of end-June specify as follows: 47% listed in Iceland, 31% listed abroad, and 22% unlisted.
- Holdings in marketable bonds, other bonds, and bond funds increased by 2.4% since year-end 2012, to a total of 1,564 b.kr. as of end-June. At that time, these holdings accounted for 61% of net pension fund assets, a percentage that has been relatively stable since year-end 2008, when it was just under 62%, but peaked at 67% at year-end 2010.

30. Icelandic State Financial Investments (2013). *Report on the activities of Icelandic State Financial Investments in 2013*.

31. Based on pension funds' balance sheet summaries, collected by the Central Bank of Iceland. Monthly data are compiled from samples from the largest pension funds in Iceland and total assets are estimated from these data. Based on preliminary figures.

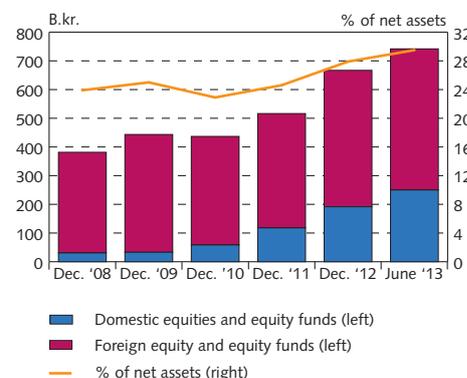
32. In addition, third-pillar assets held with custodians other than pension funds amounted to 148 b.kr. as of end-June; therefore, household pension assets totalled 2,658 b.kr., or 152% of GDP.

Chart 46  
Pension funds' net assets<sup>1</sup>



1. Figures are based on the pension funds' summaries of assets and liabilities, which are gathered by the Central Bank of Iceland. Monthly data is collected from a sample of the largest Icelandic pension funds and total pension fund assets are estimated on this basis. Based on provisional figures.  
Source: Central Bank of Iceland.

Chart 47  
Pension funds' assets - equities and equity funds<sup>1</sup>



1. Figures are based on the pension funds' summaries of assets and liabilities, which are gathered by the Central Bank of Iceland. Monthly data is collected from a sample of the largest Icelandic pension funds and total pension fund assets are estimated on this basis. Based on provisional figures.  
Source: Central Bank of Iceland.

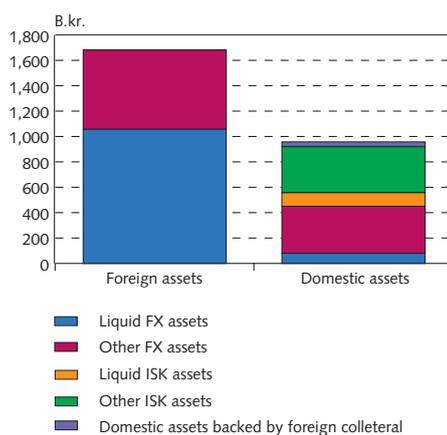
## Appendix 1

### Settlement of the failed banks' estates

#### The estates of Glitnir, Kaupthing, and LBI (formerly Landsbanki Íslands)

- According to estimates from the winding-up committees, the book value of Glitnir, Kaupthing, and LBI's assets was 2,639 b.kr. at the end of June, after having declined by 111 b.kr. since the beginning of the year. The main reasons for the change in book value are the 6.7% appreciation of the Icelandic króna, which shows in the estates' accounts as an exchange rate loss of 150 b.kr., and the offsetting increases due to LBI's sale of a 5% stake in Glitnir and Glitnir's write-up of the value of the estate's share in Íslandsbanki. The price-to-book ratio rose from 0.8 to 0.9. If the estates' interest income exceeds their operating expenses, this will be reflected in higher book value of assets.

Chart 1  
Glitnir, Kaupthing and LBI assets  
Book value 30 June 2013



Sources: Financial informations Glitnir, Kaupthing and LBI, Central Bank of Iceland.

- The estates' domestic assets are now estimated at 960 b.kr., including 40 b.kr. in domestic assets backed by foreign collateral. The total includes liquid assets of about 110 b.kr. denominated in Icelandic krónur and about 80 b.kr. denominated in foreign currency. Foreign assets are estimated at 1,680 b.kr., including liquid assets of approximately 1,060 b.kr.
- A number of factors indicate that *the estates have temporarily slowed the pace at which they convert assets (particularly domestic assets) to liquid funds* because of uncertainty about the next steps in the winding-up process. The liquid assets held by the estates are invested in deposits or highly liquid securities generating negligible returns.
- If this uncertainty about the winding-up process persists, there is the risk that the *claims will end up in the hands of investors that specialise in recovery of disputed assets*.
- In September, LBI disbursed its fourth partial payment to creditors, almost 70 b.kr. These funds, which the estate held in liquid form prior to 12 March 2012, were exempt from the restrictions provided for in the Foreign Exchange Act, no. 87/1992, as amended on that date. In recent months, Kaupthing has satisfied all unpaid priority claims against the estate, which totalled some 6 b.kr. The estates have now paid a total of 935 b.kr. to holders of priority claims. Of that total, LBI has paid roughly 705 b.kr.
- The recent Supreme Court judgment to the effect that foreign-denominated disbursements shall be converted to krónur at the official selling rate on the date of payment *has an insignificant effect on the winding-up of Glitnir and Kaupthing but exacerbates LBI creditors' exchange rate risk*.<sup>1</sup> It is in priority creditors' interest

Table 1 Classification of the claims of DMBs in winding-up proceedings: approved claims according to claims registers

	Share of domestic claims (%)	Share of foreign claims (%)
Glitnir	9.6	90.4
Kaupthing	11.2	88.8
LBI, priority claims	0.001	99.999
LBI, general claims	8.9	91.1

Central Bank classification of underlying claim ownership<sup>1</sup>

Glitnir	6.1	93.9
Kaupthing	8.1	91.9
LBI, priority claims	0.001	99.999
LBI, general claims	7.5	92.5
Total: weighted	5.3	94.7

1. A portion of domestic claims are from DMBs in winding-up proceedings. The analysis examines the underlying and actual owners of those claims.

Sources: Creditor registers of Glitnir, Kaupthing, and LBI; Central Bank of Iceland.

that the króna be strong while they are being paid, while general creditors benefit from its being weak.

- The Central Bank has updated its estimated classification of claims as foreign or domestic in accordance with approved claims on recent claims registers (see Table 1). Underlying ownership of the claims has changed very little from the Bank's previous classification, with domestic creditors accounting for some 5% of approved claims.<sup>2</sup> In determining underlying ownership of the claims, claims held by other estates in winding-up proceedings are ignored. A considerable number of claims are still in dispute; furthermore, parties often reach voluntary agreements among themselves by netting out debt. This could change the ratio of domestic to foreign claims.

### Effects of settlement on Iceland's external position

- Underlying domestic claims account for an estimated 5% of the total amount, and foreign claims are estimated at 95%. On the other hand, based on book value, the calculated distribution of the estates' assets is 35% domestic and 65% foreign. As Chart 2 shows, there is a mismatch between the classification of assets, on the one hand, and claims, on the other, as domestic or foreign.
- Based on the calculated settlement, it is assumed that 2,499 b.kr. of assets will revert to foreign creditors and about 140 b.kr. to domestic creditors. Therefore, assets valued at about 871 b.kr., or some 50% of GDP, would revert to foreign creditors and create an external debt. On the other hand, an estimated 91 b.kr. (roughly 5% of GDP) in foreign assets will revert to domestic creditors and create an external asset. The net position, then, is an external debt in the amount of 780 b.kr., or 45% of GDP (Chart 3).

Chart 2

Estimated domestic/foreign breakdown of assets and claims of Glitnir, Kaupthing and LBI  
Book value 30 June 2013



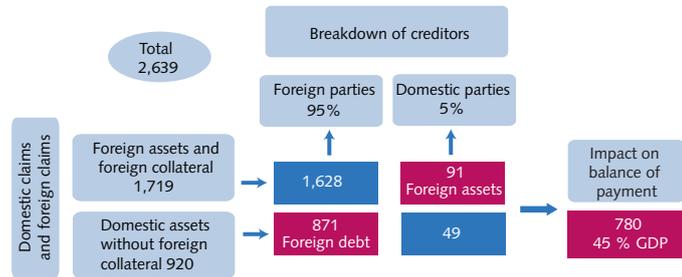
Sources: Claims lists and financial informations Glitnir, Kaupthing and LBI, Central Bank of Iceland.

1. Case no. 553/2013

2. See also *Special Publication* no. 9 and *Financial Stability* 2013/1.

Chart 3

Estimated impact of the winding-up of Glitnir, Kaupthing and LBI on the external position

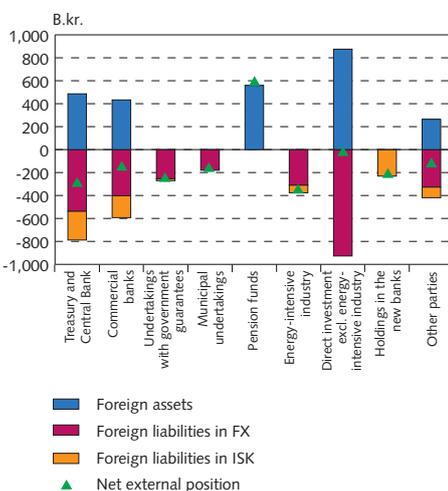


Amounts in b.kr. Breakdown of creditors is based on recognised claims in the banks' lists of claims. Based on asset portfolios as of end Q2/2013. Domestic appropriated assets secured by foreign collateral are classified as foreign assets. The estates' assets may not be recognised in a manner which makes them fully comparable.  
Sources: Financial information and lists of claims of Glitnir, Kaupthing and LBI, Statistics Iceland, Central Bank of Iceland.

**International investment position (IIP)**

- Each quarter, the Central Bank publishes a preliminary summary of the balance of payments for the preceding quarter and the external position of the Icelandic economy, or international investment position (IIP), at the end of the quarter. The figures are published both including the claims value of the failed banks' liabilities and excluding their assets and liabilities. *To complement this information, the Bank has begun recently to include with the balance of payments an estimate of the underlying IIP that will result if the failed banks' estates are wound up based on the book value of assets and the underlying classification of approved claims according to claims registers.*
- According to the Bank's last estimate of the underlying IIP (Table 2), foreign assets are estimated at 2,613 b.kr., or 152% of GDP, and foreign liabilities at 3,775 b.kr., or 219% of GDP. *The net external position is therefore estimated to be negative by 1,162 b.kr., or roughly 67% of GDP.* The effects of the pharmaceuticals company Actavis are included in these figures.<sup>3</sup> The position has deteriorated by 2% of GDP from previously published figures, owing to a decline in the book value of the failed banks' foreign

Chart 4  
Estimated foreign assets and liabilities in underlying net external position  
End of June 2013<sup>1</sup>



1. At 29 August 2013 exchange rate.  
Source: Central Bank of Iceland.

Table 2 Underlying international investment position as of end-June 2013

% of GDP 2012	Foreign assets	Foreign liabilities	International investment position
Total	271	-729	-458
excl. DMBs in winding-up proceedings (WUP)	153	-180	-27
based on calculated settlement of DMBs in WUP	158	-230	-72
underlying debt based on calculated settlement of DMBs in WUP and excluding other firms in WUP	152	-219	-67

Sources: Statistics Iceland, Central Bank of Iceland.

3. Now that the company has been sold and its debt has been restructured, it is no longer considered necessary to omit its balance sheet.

assets, which in turn is due to the appreciation of the króna, and the simultaneous rise in the value of their domestic assets.

- As is discussed in *Financial Stability 2013/1*, foreign assets and liabilities are held only to a limited extent by the same owners. In broad terms, then, it is not possible to reduce external debt by downsizing Iceland's balance sheet without creating obligations between domestic entities (Chart 4).

## Appendix 2

### Financial system assets

Assets, b.kr	31.12. 2008	31.12. 2009	31.12. 2010	31.12. 2011	31.12. 2012	30.06. 2013	Change from 31.12. 2012
Banking system <sup>1</sup>	4,632	3,967	3,878	4,402	3,862	3,824	-38
thereof Central bank of Iceland	447	1,011	1,114	1,466	902	816	-86
thereof commercial banks	3,417	2,573	2,627	2,875	2,903	2,951	48
thereof savings banks	768	383	137	60	57	56	-1
Other credit institutions	1,284	1,194	1,129	1,097	1,076	1,074	-3
thereof Housing Financing Fund	733	795	836	864	876	873	-3
Pension funds	1,665	1,849	1,989	2,169	2,439	2,546	107
Insurance companies	122	131	138	145	155	167	12
Mutual funds, investment and institutional funds	212	195	284	516	583	604	22
State loan funds	125	146	161	171	192	205	13
Total assets	8,040	7,483	7,579	8,500	8,306	8,419	113

1. The banking system consists of commercial banks, saving banks and the Central Bank of Iceland. Internal trades between the Central Bank of Iceland and other parties are excluded.  
Source: Central Bank of Iceland.

## Appendix 3

### FSI core indicators for the three largest commercial banks<sup>1</sup>

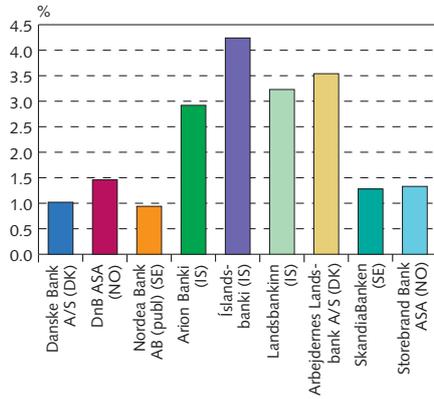
%	2011				2012				2013	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Regulatory capital to risk-weighted assets <sup>2</sup>	21.4	23.2	23.9	21.1	21.1	22.7	22.9	24.6	25.2	25.5
Regulatory Tier 1 capital to risk-weighted assets <sup>2</sup>	19.7	21.0	21.8	19.4	19.2	20.9	21.1	22.6	23.1	23.6
Return on asset <sup>2</sup>	3.0	3.3	2.7	1.1	2.5	2.5	2.1	2.4	2.0	2.3
Return on equity <sup>2</sup>	19.0	20.2	15.7	6.7	16.5	15.5	12.8	13.8	11.3	13.0
Interest margin to gross income <sup>2</sup>	57.2	47.1	53.4	53.9	56.7	50.3	53.3	48.8	51.7	41.7
Non interest expenses to gross income <sup>2</sup>	75.9	88.8	86.5	108.1	72.9	79.0	80.7	79.9	77.4	77.2
Liquid assets to total assets <sup>3</sup>	19.2	18.2	21.3	18.0	18.0	17.5	19.5	20.7	21.0	20.3
Liquid assets to short term liabilities <sup>3</sup>	32.3	30.9	35.3	30.1	31.4	30.5	34.6	35.9	36.9	35.2
Net open position in foreign exchange to capital <sup>3</sup>	68.1	61.1	29.1	22.6	25.9	18.2	18.4	7.7	3.7	3.6

1. The Central Bank intends to publish core indicators of financial stability in collaboration with the IMF. All definitions used by the Central Bank accord with IMF definitions or have been approved by the IMF. These are still provisional figures, which could change, and comprise only part of the indicators. Results for Q1 and Q3 are unaudited. 2. Consolidation, operating expenses and net operating income calculated in accordance with definitions of the European Banking Authority (EBA). 3. Parent company, definitions differ from those in the Central Bank's rules.  
Sources: Financial Supervisory Authority, Central Bank of Iceland.

## Appendix 4

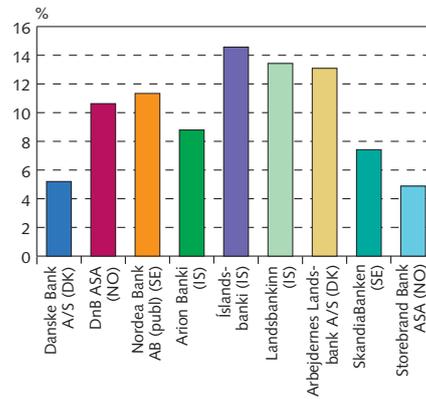
### Nordic comparison

Chart 1  
Net interest margin<sup>1</sup>



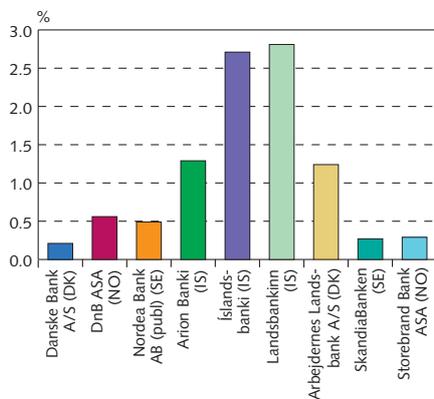
1. June 2013. Islandsbanki's large net interest margin is due largely to a difference in financial reporting methods used by the banks; Islandsbanki uses a different method for redemption of interest income from transferred loans.  
Source: Bankscope.

Chart 2  
Return on equity<sup>1</sup>



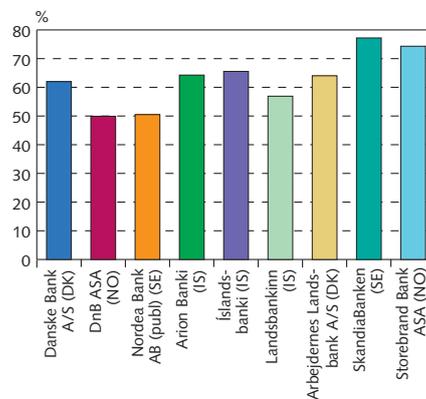
1. June 2013.  
Source: Bankscope.

Chart 3  
Return on total assets<sup>1</sup>



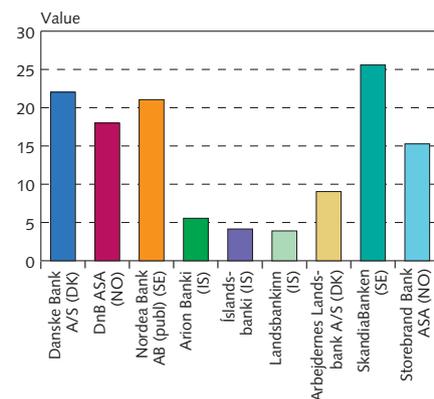
1. June 2013.  
Source: Bankscope.

Chart 4  
Cost-to-income<sup>1</sup>



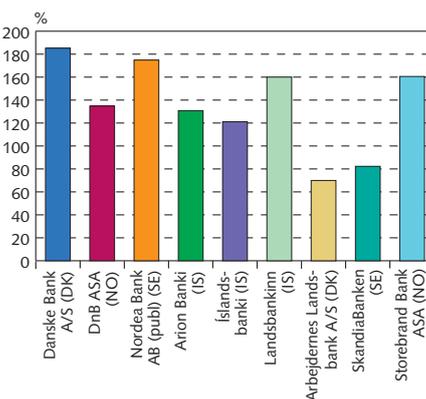
1. June 2013.  
Source: Bankscope.

Chart 5  
Leverage<sup>1</sup>  
Debt as proportion of equity



1. June 2013.  
Source: Bankscope.

Chart 6  
Loans-to-deposits<sup>1</sup>



1. June 2013.  
Source: Bankscope.