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Turbulence in Iceland's financial markets in 2006¹

Where is Iceland? What is it? Why do we want to know about it? In the first half of 2006, hardly a day passed without Iceland and Icelandic banks being mentioned in newspapers and financial journals around the world. Although attention is often welcome, this was not necessarily true of all the discussion about Iceland and its banks a year ago. The coverage was highly critical, in some ways rightly so but in other ways not.

When I was asked to address this conference, the turbulence in the Icelandic financial markets in the first half of 2006 was doubtless fresh in the organisers' minds. So I was asked to discuss that episode and how the Central Bank of Iceland monitored it and responded. As well as covering this topic I shall add some comments on recent developments and prevailing conditions. But first a few facts and a brief description of the background are needed.

Iceland is an advanced industrial economy with one of the highest national incomes per capita in the world. Through membership of the European Economic Area, Iceland is part of the European single market and has the same financial infrastructure as in the European Union. The Icelandic economy has witnessed huge changes in recent years following the deregulation of cross-border capital movements in the 1990s and market liberalisation. In the 1990s, the Central Bank of Iceland adhered to a fixed exchange-rate regime with tolerance limits, which was supposed to provide an anchor for the core policy of keeping inflation under control. The arrangement was successful then and for much of that decade inflation in Iceland was close to or below the OECD average. Over time it became increasingly clear that a fixed exchange rate was incompatible with full deregulation of capital movements. Bearing this in mind and because a floating exchange rate would arguably suit the Icelandic economy better, the tolerance limits were extended in phases from 2.25% at the beginning of the 1990s to 9% early in 2000.

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In the course of the 1990s, an episode of overheating began. It originated in a massive increase in foreign investment in the aluminium sector but gradually became driven by private consumption. Inflationary pressures amplified and the current account deficit widened sharply to 10% of GDP in 2000. Market expectations shifted and the Icelandic currency, the króna, began to depreciate. Over the year and a half from spring 2000, the króna depreciated by one-third. The Central Bank raised its policy rate, although its hands were partly tied by the fixed exchange rate regime. It also repeatedly intervened in FX market trading to defend the króna, significantly eroding its net foreign reserves.

To cut a long story short, it was decided to introduce a new monetary framework in March 2001. An inflation target was set for the Central Bank and the króna was floated. By that time it had already fallen to the lower tolerance limit. The króna then depreciated further, driving up inflation which rose beyond 9% in January 2002. A rapid reduction in inflation followed, the target was attained by the end of the year and the policy interest rate was quickly lowered.

Inflation remained below or close to target until the middle of 2004. Later that year, major investments were decided in the aluminium and power sectors. Shortly afterwards, sweeping structural changes in the housing mortgage market caused a surge in bank lending and domestic demand. The current account also deteriorated significantly. In the face of mounting inflationary pressures, the Central Bank steadily raised its policy rate (undiscounted yield) from 5.3% in spring 2004 to 14.25% at the end of last year, where it still remains. Higher interest rates caused the króna to appreciate and it ended up at a historical high, especially in late 2005. Following earlier comments to that effect in its *Monetary Bulletin* in December 2005, the Central Bank pointed out that the króna was at its strongest in real terms since 1988. One assumption in the inflation report presented then was that the exchange rate would remain unchanged over the forecast horizon. The Bank described this assumption as unlikely to hold. In historical terms, the real exchange rate has only remained so high for short periods. The Central Bank thus openly stated its view that the exchange rate was unsustainably high and must weaken. However, the timing and pace of the depreciation was unknown.

Following the privatisation programme that was completed in 2003, the Icelandic banks expanded very rapidly. Privatisation unleashed an enterprising spirit and the resolve and ambition to enter new territory. The banks sharply stepped up their activities outside Iceland by acquiring foreign financial companies and establishing branches.

These radical changes are reflected in the growth of the three largest Icelandic banks' total assets from the equivalent of 96% of GDP at the end of 2000 to roughly eightfold GDP at the end of 2006. A distinctive feature of Iceland's financial sector is that no foreign banks operate directly in the country. However, the domestic banks have become less Icelandic, so to speak. The greater part of their operations are now in other countries. The bulk of their revenues and profits are generated abroad, in the other Nordic countries, the UK, Luxembourg and elsewhere in Europe. As a result, their revenue base is significantly broader and they are less exposed to cyclical fluctuations in the Icelandic economy than before. All the same, if the Icelandic economy were to weaken significantly, reports about it could affect the banks' potential for securing foreign financing.

In expanding abroad, the banks relied heavily on very favourable global financial market conditions, which were reflected in a glut of liquidity and low interest rates. Perhaps the banks were not prudent enough about making contingencies if the climate should change. Easy access to ever-increasing borrowed funds in global bond markets could not be taken for granted forever. In the second half of 2005, doubts were first raised about the banks' ability to fund their activities as before and refinance their outstanding debt. Conceivably, the context was a market-wide reassessment of risk. For the Icelandic banks, this was reflected in rising CDS spreads and yields on their bond issues in global secondary markets.

In the first half of 2006, international financial journals published critical analyses of the position of the banks, their recent rapid growth, heavy borrowing, relatively short maturities and the enormous refinancing requirement they faced. Other aspects of the banks' operations, and their ownership, also came under scrutiny. Early in 2006 Fitch Ratings downgraded its sovereign outlook for Iceland from stable to negative. The rating downgrade, harsh criticism of the banks and the Icelandic economy in general, and interest rate and exchange rate movements in other countries caused the króna to depreciate by one-quarter in the first half of 2006, and share prices on Iceland Stock Exchange also fell by one-quarter from their peak in February until mid-year. The access of the Icelandic banks to foreign credit in traditional markets was seriously curtailed. Negative coverage of the banks and Icelandic economy went hand in hand at this time, both temporarily eroding international investor confidence. The reputation of Iceland's economy and banks was tarnished.

From an Icelandic perspective, the first months of 2006 were therefore characterised by a currency depreciation, falling equity prices and

international discussion about the viability of Icelandic banks and macroeconomic imbalances in Iceland. A massive economic downswing was even predicted, possibly comparable to the southeast Asia crisis of the late 1990s. This was a development we had not particularly expected or prepared for. Interestingly, not only did Iceland feel the tangible effects of changes in sentiment in global financial markets – the turbulence in Iceland also reverberated through a number of distant countries with which we have no business contact. This shows that Iceland had become integrated into the global financial market.

It was obvious that the Icelandic banks and authorities faced a major challenge that called for a serious response. The banks responded with greatly increased communication about their activities, financial position and other targets of criticism. They made various reforms, answered other points in detail, slowed down their expansion, tapped new credit markets and, last but not least, refuted predictions that the turnaround in external conditions, weaker króna, lower Icelandic equity prices, higher finance costs, etc. would have to dent their profitability severely. As it turned out, the three largest commercial banks reported record profits in 2006 and ended the year with their strongest capital adequacy ratios since the Basel Accord went into effect, as well as building up very strong liquidity. In the autumn the banks announced that they had completed refinancing of all their loans maturing that year and virtually all their 2007 maturities, thereby dispelling doubts about their ability to refinance outstanding debt. The liquidity risk that loomed in the first half of 2006 was a thing of the past. In their refinancing arrangements the banks rested the EMTN market that had been their main source of capital and successfully tapped others, mainly in the US but also in Australia and Japan. Some have now successfully returned to the EMTN market.

The first signs of a change in foreign investor sentiment towards the Icelandic banks appeared in higher CDS spreads for their bonds in secondary markets, which had been in the range of 0.1 to 0.15%. They began to inch up late in 2005, rose sharply in the first half of 2006 and peaked around mid-year close to 0.8%. At that time, this trend was very much at odds with CDS spreads on issues by comparable banks in other countries. Towards the end of last year spreads began to decrease again and have narrowed steadily to only marginally higher than before the market turned uneasy at the end of 2005, at near 0.2% to 0.25%. The only conclusion to be drawn is that with their operational reforms, strong communication, successful financing arrangements, building of liquidity and ongoing strong business performance, the

banks have largely reclaimed their former position in the eyes of global investors.

The authorities, and the Central Bank in particular, focused their efforts on communication about the character and structure of the economy, the current position and outlook, and other relevant information. The Central Bank's regular *Monetary Bulletin* includes inflation and macroeconomic forecasts and a detailed analysis of economic developments. Once a year the Central Bank publishes a separate *Financial Stability* report and a more detailed and comprehensive edition than otherwise was produced in spring 2006 in response to prevailing conditions. It sought to address as many points as possible that had been raised by foreign analysts in the preceding months. The Bank's financial stability analysis has been described by international reviewers as professional and transparent. It strove to fulfil such expectations a year ago in difficult circumstances. In the Bank's view this aim was achieved and the report played an important role in explaining the position of the Icelandic financial sector at that time. Another crucial factor was that the Central Bank tightened the monetary stance sharply by raising its policy rate by 3.75 percentage points during the year and signalling clearly to the markets a firm commitment to bring inflation back to target after it had risen substantially as a result of the króna depreciation. Without a credible monetary policy, the króna would undoubtedly have depreciated by more than it actually did last year, which could have undermined financial stability.

In other respects the authorities – in particular the Financial Supervisory Authority and the Central Bank – responded with even closer monitoring of the banks' position, not least their financing, liquidity and risk management. The Bank remained especially alert until autumn 2006 and strengthened its contingency plans at the same time. The banks were very well aware of this close monitoring and cooperated fully. At the beginning of 2006 a Memorandum of Understanding on contingencies, which had been under preparation for some time, was signed between the government ministries responsible for financial markets, the Central Bank and the Financial Supervisory Authority, and a contingency exercise was held which actually had been planned well in advance. The Central Bank kept a close watch on market developments and the views of foreign commentators. Along with other government authorities and the Financial Supervisory Authority it communicated a wealth of information and held numerous meetings with foreign analysts and media in spring 2006, in Iceland and abroad.

At the beginning of 2006 the Central Bank announced a decision to boost its foreign reserves. This was done later in the year with an international issue of five-year Treasury Eurobonds. The proceeds were deposited in the Central Bank, more than doubling the reserves from the equivalent of 7% of GDP to almost 15%. The proceeds from the loan will not be used for other purposes. The Bank's capital was also boosted. The main rationale for increasing the reserves and capital was to strengthen the Bank in performing its functions in a much-expanded financial sector, and to address comments from rating agencies and others about the Bank's inadequate foreign liquidity relative to Iceland's large foreign debts, which are overwhelmingly in the private sector. There was no other motive behind boosting the reserves and the Central Bank has underlined the importance of not creating moral hazard.

Unease in the markets lasted until mid-2006, when it calmed down significantly. By then, the króna had depreciated by one-quarter and around mid-year the real exchange rate was close to the twenty-five-year average. In historical terms it was much more normal than in the second half of 2005, i.e. before the depreciation in the first half of last year. This is an important fact to bear in mind, i.e. that the króna depreciated from an unsustainable and far higher real exchange rate than was compatible with external balance of the economy. The change was actually normal and necessary, and formed part of the pressing external adjustment of the economy.

Since the middle of last year, the króna has been fairly stable. It has fluctuated within a relatively narrow corridor which it has only moved beyond in a few exceptional cases. So far this year it has strengthened. Since the beginning of 2007 the nominal exchange rate has on average been 14% weaker than the average for the last quarter of 2005. Nonetheless, the real exchange rate is still high in historical terms. There is no doubt that the tight monetary stance has been crucial in maintaining the relatively stable exchange rate over the past year or so.

To fight the overheating of the economy that was brought about by increased investment in the aluminium and power sectors and changes in the domestic capital markets, the Central Bank was forced to raise its policy interest rate, as I mentioned earlier, above the prevailing level in other industrialised countries. In a climate of excess liquidity, historically very low global interest rates and risk-seeking investors, it was only to be expected that investors would notice high-yield instruments in Icelandic currency. So no one need have been surprised when the first króna-denominated bonds, known as glacier bonds, were issued in the global market in autumn 2005. Issuance was driven

by carry trades and global investors' search for yields, and partly also by the demand for credit in Iceland. Despite the great deal of information that is generally available about the economic position and outlook in Iceland, and the Central Bank's very candid appraisal of the exchange rate of the króna in autumn 2005, which I have already described, it seems certain that many investors in glacier bonds, at least during the first months of issuance, had not examined the potential risks properly. Investors probably bore in mind Iceland's high sovereign rating in their decisions but ignored the risk that the króna might still depreciate, given that the real exchange rate was far above the average for the past quarter-century. At least, this risk was obscured by high interest rates. In the turmoil in early 2006, various investors in glacier bonds, institutional investors in particular, are likely to have closed their positions from autumn 2005 and thereby contributed to the depreciation of the króna, losing sizeable funds in the process.

Glacier bond issuance has gone in waves, largely in line with global movements in carry trades. It was substantial in autumn 2005, dropped sharply in the first half of 2006, then picked up in the autumn and has been fairly large since then. Currently the outstanding amount of glacier bonds is equivalent to roughly a third of GDP. The first issues matured in autumn 2006 and several others since then. Maturities have not sent tremors through the FX market, even when relatively large issues mature. This is consistent with the experience of countries such as New Zealand, where "kiwi bonds" denominated in the New Zealand dollar have been issued for much longer than glacier bonds. Large issues of glacier bonds will mature shortly and it cannot be ruled out that they will cause some unease.

There have been a number of effects from the glacier bond issuance. Derivatives in connection with these issues have dampened the impact of Central Bank policy rate changes on other interest rates in domestic financial markets. Glacier bonds thereby delayed the transmission of monetary policy measures, diverting more of its impact into the exchange rate channel. Another effect of glacier bonds was to make the current account deficit easier to fund. It caused a surge in trading in the domestic interbank and bond markets, deepening them and producing more reliable price formation. Nevertheless the exchange rate of the króna is very sensitive to changes in the markets where carry trade investors seek funding as well as in other high-yield markets. Glacier bonds therefore expose the exchange rate to volatility in the event of sudden shifts in, for example, investor sentiment or incentives for carry trades. Turbulence in markets in the early part of last year and in February this year is proof of this. An offsetting factor

may be that the bonds are probably distributed very widely across investors and portfolios. To an important extent, the investors appear to be European ones who are likely to hold their paper until maturity.

Carry trades are highly sensitive to changes in global financial conditions. This makes them impossible to predict if conditions shift. In Iceland it has sometimes been claimed that carry trades prevent the Central Bank from lowering its policy rate. The Bank disagrees. Its forecast published in March this year indicates that inflation will decelerate rapidly in the second half of this year and into 2008, and will be close to target after the middle of next year. One of the forecast assumptions is that the policy rate will be lowered in the final quarter of this year and continue to come down next year and into 2009. Such a development need not affect carry trades. However, it could depend on the scale of the reduction in the current account deficit. The more that it narrows, the less risk investments in Icelandic currency should entail, other things being equal. Under such circumstances, conditions may well emerge in which carry trades can continue with a smaller interest rate differential between Iceland and abroad than has been the case in recent times. Nonetheless, the Central Bank underlines that investors should be aware of the risk involved in investing in króna-denominated bonds. It is clear, as already mentioned, that some investors in glacier bonds have not made the effort to acquaint themselves properly with this risk.

The way that events unfolded in 2006 was instructive. It is important to point out that no serious incidents or credit events ever arose and if there had been a risk of a real financial crisis a year ago – which we considered unfounded – it is scarcely present now. Many lessons can be learned from last year's experience. First, the open financial system and free capital movements gave opportunistic investors the chance to discover Iceland. Their trading has a range of positive effects but also poses a risk of heightened volatility and fluctuations in exchange rates and interest rates. Icelandic financial companies have expanded rapidly overseas, and too rapidly in some people's view. Meteoric growth tends to raise questions anyway, and when small institutions are involved from a country that has not had a high profile in the banking world, these questions may be more aggressive and critical than otherwise. Icelandic banks discovered this last year. They have learnt a valuable lesson and clearly realise the importance of transparency and open communication, and the need for leeway in their funding and good credit ratings. This experience must not be forgotten. General market discipline and scrutiny will help to prevent that from happening.

For government authorities, it is important to pursue balanced and credible economic policies and ensure that the administrative and financial infrastructure remain solid, including strong and efficient financial supervision. The Central Bank tightened its monetary stance sharply last year, one result of which was a lower rate of inflation than otherwise. The Treasury has shown a surplus for many years and privatisation proceeds were deployed to retire debt. Today, the Treasury's foreign debt is not higher than the Central Bank's foreign reserves, i.e. roughly 15% of GDP, and its domestic debt only 10% of GDP. Financial supervision has been boosted and will be strengthened further. It is in line with best European practice.

Iceland's economic imbalances are waning and the inflation rate and current account deficit are coming down, the latter from a record level in 2006. The financial sector is on a firmer footing than a year ago. The headline of the Central Bank's *Financial Stability* report for 2007 was *The commercial banks are more resilient*. However, the battle is not over and risks may still be present. The current account deficit is still large. Tighter conditions for funding it could undermine the exchange rate and rekindle higher inflation and instability. While the banks have strengthened their liquidity and have a larger share of deposits on the liabilities side of their balance sheets and fewer challenges in their refinancing, they still rely on easy access to international credit markets. A shift in investor sentiment about the banks, or in general risk assessment in the markets, could tighten liquidity and lead to less favourable borrowing terms. Thus prudence is called for, along with contingencies for facing tighter conditions and awareness that changes can take place very suddenly. Iceland's currency is the smallest in the world with an inflation targeting framework and a floating currency. The króna probably tends to be more volatile than currencies of larger countries, which will cause sharper fluctuations in yields on króna-denominated investments. While major currencies are certainly prone to volatility, the crucial consideration is that exchange rate movements have a much greater impact on small, open economies than on larger ones. The globalisation of Iceland's financial markets means that, in the short run at least, the exchange rate of the króna is determined less by economic aggregates than before. International conditions have much greater impact, such as changes in exchange rates and interest rates in other advanced industrial countries.

One consequence of the unease in 2006 has been that many more people, including investors in the Icelandic market, now know about Iceland, the Icelandic economy and Icelandic banks, and watch them more often and more closely. One lesson of last year's experience was

that events in or connected with Iceland can cause contagion in other countries, so that it is important now to know what is going on there. And more people these days definitely do know more about Iceland than simply that it is the country that produced Björk and Einar Guðjohnsen.