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The banking crisis in Iceland

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Executive summary

Financial crises offer important insights into banking sector vulnerabilities and policy responses. Over the past few decades, banks have been at the heart of several financial crises that affected both developed and developing economies. Although each crisis tends to have specific features, bank crises help to shed light on structural weaknesses, on shortcomings in bank regulation and oversight by financial authorities, and on the adequacy of policy responses. The latter can be of interest beyond the individual crisis episode itself. In this light, and more than 10 years after the start of the great financial crisis, several crisis episodes are likely to be of interest to policymakers.

This paper covers the banking crisis in Iceland that started in 2008, and was unprecedented in certain respects. The scope of the crisis – the three banks made up over 80% of the financial system and had experienced break-neck growth – and its speed – the banks collapsing within a few days of each other – was unmatched elsewhere. The root cause was the banks' excessive balance sheet growth, to an aggregate size of 10 times Iceland's GDP, and an outsized share of both foreign assets and liabilities. The Central Bank of Iceland (CBI) could not act as the lender of last resort in foreign currency as its FX reserves and foreign credit lines were no match for the banks' needs. A government bailout was also excluded as the state's resources were dwarfed by the size of the problem and it would have risked a sovereign default. Resolution options were therefore limited from the outset.

The main focus of this paper, the first of a series, is on the authorities' response to the banking crisis in Iceland. As the response evolved over time, the paper tracks and discusses the major measures taken in the immediate aftermath of the bank failures, as well as in the following months, when additional measures were introduced. The focus of this paper therefore differs from that of most of the existing literature on the Icelandic crisis, which tends to address its causes and consequences. Moreover, this paper does not seek to address the overall effectiveness of the policy response.

Emergency Liquidity Assistance (ELA) was part of the initial response, but it turned out to be inadequate. Although ELA in foreign currency was provided to one bank, this did not prevent it from defaulting. In practice, the banks were already insolvent but the financial authorities were unaware of their true financial position and unable to correctly assess the quality of their assets. In addition to uncertain asset valuations that arises in any crisis, the information initially provided to the government was neither sufficient nor reliable enough to allow it to determine whether the banks were merely illiquid or insolvent.

Emergency legislation conferred new resolution powers that allowed Iceland's authorities to create new, viable banks, and to establish depositor preference. Voted into effect overnight, the Emergency Act and its three main measures provided the legal basis of the resolution process. The first measure empowered the Ministry of Finance to provide funds and capital to establish new banks or to restructure an existing bank. The second measure authorised the supervisory authority to take control of failing banks. The third measure changed the hierarchy of claims by giving customer deposits priority of

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payment over general unsecured claims in a financial institution's bankruptcy proceeding ("depositor preference"). Without these measures, the Icelandic authorities would not have had the tools to resolve the banks and maintain at least some activities in the banking sector. Depositor preference, together with the government's blanket guarantee for domestic deposits, also put an end to bank runs by restoring retail customers' confidence.

Each of the banks was resolved by carving domestic activities out of the "old" bank and transferring them to a "new" bank. The objective was to maintain basic banking services for the domestic economy by separating domestic operations from the larger foreign operations of each bank. Other options, such as splitting each bank into a "good" and a "bad" bank, were not feasible in the absence of potential buyers. Accordingly, assets transferred to the new banks were principally loans and other claims related to the banks' domestic operations, while liabilities transferred were mostly domestic retail and corporate deposits.

Other measures involved the economic and financial assistance of an IMF programme, the introduction of capital controls and the restructuring of private debt. Such far-reaching measures were necessitated by the depth of the crisis, which required a multi-pronged response. In particular, the IMF programme, which lasted until 2011, gave credibility to Iceland's crisis response and stabilised markets. Authorities also introduced measures to keep payment systems operational.

In addition, regulation and supervision were overhauled. Among these reforms, higher capital levels are now required for all banks, especially larger ones. In addition, new liquidity requirements limit maturity and foreign currency mismatches.

The Icelandic crisis yields lessons for other countries and authorities. In some way, the Icelandic crisis was unique. At the same time, general lessons about crisis management can be drawn. The complex policy response also illustrates the trade-offs and challenges that may come into play when seeking to address a crisis of this intensity.

Significant operational challenges need to be addressed when creating new and viable banks. The major challenge relates to the uncertainties surrounding depressed asset values during a crisis, which may not necessarily reflect the potential for a recovery. When assets are transferred to a new bank, a priority is to put in place a mechanism that gives creditors of the failed entity a share in any increase in the value of the transferred assets. In Iceland, the risk of legal challenges arising from the allocation of the creditors' general claims to the old banks was mitigated by providing them with shares in the new banks, which could increase in value with the economic recovery. Bail-in was a necessary complement to the creation of new banks, and was challenged in court. Parity of treatment between creditors of the new and the old banks, which generally corresponded to domestic and foreign claims, was also debated and contested. Restructuring of domestic debt, both of households and corporates, was also an issue, because many of the transferred loans were inflation-indexed or linked to foreign currency.

Some form of public sector support was unavoidable during some phases of the crisis. The Icelandic banking sector was so large in comparison with the economy and public sector resources that a fully-fledged bailout was out of the question. Nonetheless, public funds were needed to set up new banks.

While capital controls helped to stem capital outflows, a carefully designed exit strategy was needed. Capital controls were a novel feature of the IMF programme, but they were kept in place for much longer than originally planned because their removal proved to be more difficult than initially envisaged. This was because their removal depended on solving balance of payments issues, so that they could only be lifted when the central bank could ensure that the release of króna-denominated claims held by foreigners would not result in a new currency crisis. However, they probably also imposed opportunity costs on the Icelandic economy by increasing transaction costs and reducing inward investment.

Section 1 – Introduction

1. **Iceland experienced a major financial crisis with the collapse of its three main banks in October 2008.** Within a few weeks, funding, which came largely from abroad, dried up and questions started to be raised about the banks' asset quality. The similarity of their business models, together with a high level of interconnectedness, implied that none would be viable without some major restructuring. Although the crisis in Iceland erupted at a time of global financial stress and following the collapse of Lehman Brothers, its intensity and speed was unmatched elsewhere. Icelandic authorities opted for a resolution response that led to a major overhaul of the structure of the banking system. International assistance was granted by the International Monetary Fund (IMF), and capital controls were introduced at the start of the IMF programme.

2. **Several features make the Icelandic crisis particularly interesting from a crisis management perspective.** To begin with, the crisis was truly systemic, and this required an all-encompassing approach that differs in both scope and substance from the management of individual bank failures. Second, the size of the banking sector relative to that of the economy and the speed of its growth were unprecedented. Third, Icelandic banks relied upon and intermediated foreign funding, primarily raised in the US markets and some EU ones, giving both the crisis and the policy response a strong international dimension. Interesting features are also evident in the crisis response. This required the use of tools such as creditor bail-in; the splitting of the existing banks into new and old parts; and the introduction and use of depositor preference, as well as sweeping resolution powers and capital controls. Moreover, the central bank could not meaningfully act as a lender of last resort because so much of the banks' funding was in foreign currency. Finally, Iceland's economy recovered quickly. A decade after the crisis, the transformed banking sector consists of domestically focused banks that are both smaller and stronger, suggesting that the policy response has been broadly successful.

3. **This paper focuses on the banking crisis and on the authorities' response.** The core of the paper documents and discusses the measures that authorities put in place, explaining their rationale. It describes the instruments used to implement the chosen resolution strategies and the policy choices made. Because the crisis response evolved over time, the paper tracks the major measures taken both immediately after the three bank failures and during the following months, when additional policies were introduced.

4. **The focus on crisis responses distinguishes this paper from the existing literature on the Icelandic crisis.** Many reports, books and papers by Icelandic authorities, the IMF, policymakers and academics appeared after the start of the banking crisis. Most focus on the causes of the crisis and its impact. This paper takes advantage of the fact that, by now, most of the emergency measures have been lifted (eg capital controls) and the restructuring of the financial sector and financial authorities has been completed (most recently with the merger of the central bank and the financial supervisory authority). This makes it possible to describe and explain the responses to the crisis and to draw some lessons. This focus also allows more detail to be provided on the policy instruments used in the crisis response and the reasons for their adoption. At the same time, this paper aims to be concise. Accordingly, each measure is not described in depth, and readers are invited to consult the more specific literature set out in the relevant sections and the references. The paper does not discuss monetary or fiscal policy, given its focus on the financial sector.

5. **The paper does not assess the effectiveness of the policy response, and such an overall assessment remains to be conducted.** The IMF most recently conducted an FSAP update on Iceland in mid-2008.[2] Since then, there have been several post-programme assessment reports. The IMF recently concluded an Article IV mission to Iceland (IMF (2019)), which assesses, among other things, the recent

[2] The latest full FSAP was conducted in 2001 (IMF (2001)).

efforts in improving bank supervision and regulation. Iceland's Special Investigation Commission (SIC (2010)) also conducted an extensive assessment of the causes of the crisis. An independent audit of the Icelandic Supervisory Authority (FME) was conducted in 2011 on behalf of the Icelandic government (Promontory Financial Group (2011)).[3] However, a comprehensive review assessing the cumulative effects of all the reforms undertaken since 2009 has yet to be undertaken.

6. **The paper draws on multiple sources.** In addition to the extensive literature on the Icelandic crisis, the paper draws on interviews with senior officials with direct experience of the crisis from the FME, the Ministry of Finance and Economic Affairs, the Ministry of Business Affairs and the Central Bank of Iceland (CBI).

7. **The paper has four sections.** Section 2 presents the main drivers of the crisis and the vulnerabilities that emerged prior to its outburst. Section 3 focuses on the crisis response by the authorities. Section 4 concludes with lessons.

Section 2 – Build-up of risks

8. **This section summarises the build-up to the financial crisis in Iceland.** It describes the weaknesses of the three major banks, and what made them vulnerable to the 2007–09 Great Financial Crisis, which engulfed Iceland after the collapse of Lehman Brothers in September 2008. The annex provides a detailed timeline of the crisis and the response.

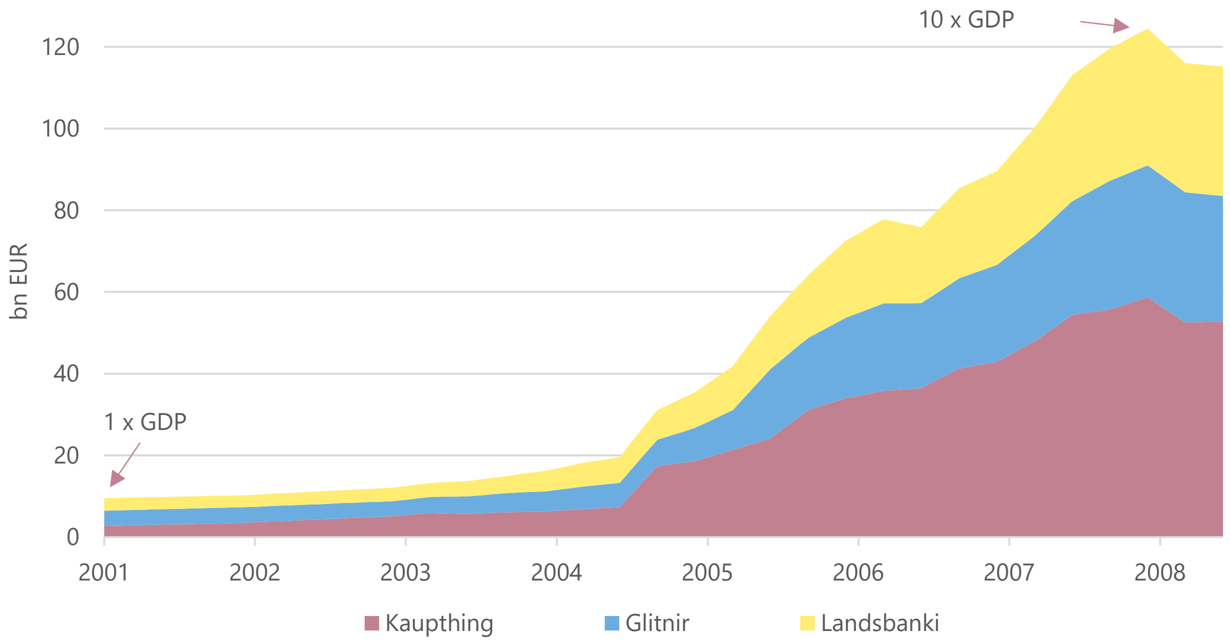
Excessive growth of the banking sector

9. **The Icelandic banking system grew at a blistering pace in the years leading up to the crisis.** Deregulation of the Icelandic banking sector started in the early 1990s, accelerating after Iceland joined the European Single Market by signing the European Economic Area (EEA) agreement in 1994. EEA membership facilitated the banks' expansion to other European countries via the "single passport".[4] Following the privatisation of Landsbanki and Bunadarbanki, and the latter's merger with Kaupthing in 2003, asset growth exploded, with the acquisition of foreign subsidiaries also playing a significant role. The total assets of the three largest Icelandic banks, Kaupthing, Glitnir and Landsbanki, more than doubled in 2004 and again in 2005, amid abundant liquidity worldwide. After a setback in early 2006, often referred to as the Geyser crisis, growth continued until the end of 2007. Bank growth significantly outpaced that of the economy and neither Icelandic regulation nor supervision were strong enough to contain it.

[3] The report found that the regulatory and supervisory frameworks were materially non-compliant with 12 out of 25 of the Basel Committee's Core Principles for effective supervision.

[4] Following the EU rules on single passports, a bank headquartered in the EEA does not need to apply for a license from a host EEA supervisory authority to open a branch in its jurisdiction. This is because banking regulations at national level are derived from common EU rules and are therefore deemed to be equivalent. However, this single passport approach does not apply to the opening of subsidiaries, which need to be licensed by the host authority as they are incorporated in the host country.

Graph 1: Growth of the assets of the three major banks (EUR billions)



Source: SIC (2010).

10. **As the economy started heating up in the early 2000s, the central bank increased interest rates.**[5] This had two effects. Borrowing by firms and households became more expensive, as intended. However, this also created an incentive for firms and households to borrow in foreign currency. A second effect, possibly also unintended, was that investing in Icelandic króna-denominated assets became attractive to foreign investors. This generated large capital inflows. Given the interest rate differentials between the króna and major funding currencies, the Icelandic currency became one of Europe's favourite carry trades. Investors would borrow in currencies with lower rates (eg the Swiss franc or Japanese yen), and invest in króna-denominated assets.[6] As long as the differential remained sufficiently positive and the króna kept appreciating,[7] the carry trade was highly profitable.

11. **The Icelandic banking sector became increasingly interconnected with the rest of Europe.** The primary catalysts were expansion into foreign markets and the funding of Icelandic holding companies' activities abroad. In addition, the use of "glacier bonds" increased the investor base abroad and made the carry trade a pervasive feature of the Icelandic banking system. Traditionally, carry trade transactions had been undertaken by more active market players. However, the abundant liquidity that became available during most of the 2000s brought this type of investment to a broader set of investors. One example was the króna-denominated "glacier bonds" issued by highly rated European financial institutions, and sold primarily to non-Icelandic retail investors. By mid-2007, the stock of glacier bonds amounted to about a third of Iceland's GDP (Benediktsdottir et al (2017)). Through swap agreements, the

[5] The monetary policy response was complicated by the slow fiscal adjustment. Had fiscal adjustment been faster, this could have helped to dampen the excessive economic expansion and lessen the burden on monetary policy (SIC (2010)). The SIC assessed monetary policy as having been too loose for too long, and found that concerns about carry trade could have been addressed via other means (eg through more restrictive liquidity requirements and/or by increasing the reserve requirement on banks' foreign funding) rather than by smaller hikes in interest rates.

[6] Starting in March 2001, the Central Bank of Iceland used an inflation target without setting an explicit exchange rate target, although it intervened in the FX market to limit short-term fluctuations.

[7] Statements by the CBI that it would defend the króna against possible devaluations, in order to keep the exchange rate consistent with the CBI's inflation target, may have further contributed to exuberance in the carry trade, since they could be seen as providing investors with a one-way bet (Jonsson and Sigurgeirsson (2016)).

issuers of the bonds could hedge their króna risk while the Icelandic banks could reduce their FX risk. As a result, heavy issuance generated increasing inflows into an already overheated Icelandic financial market (Baldursson and Portes (2013a)).

Liquidity and funding worries

12. **Bank funding went through three phases.** To support their rapid growth, the big three banks increasingly relied on funding abroad. Their sources of funding can be broken down into three types, as used successively over time. These were medium-term notes (MTN), foreign deposits and central bank collateralised borrowing.

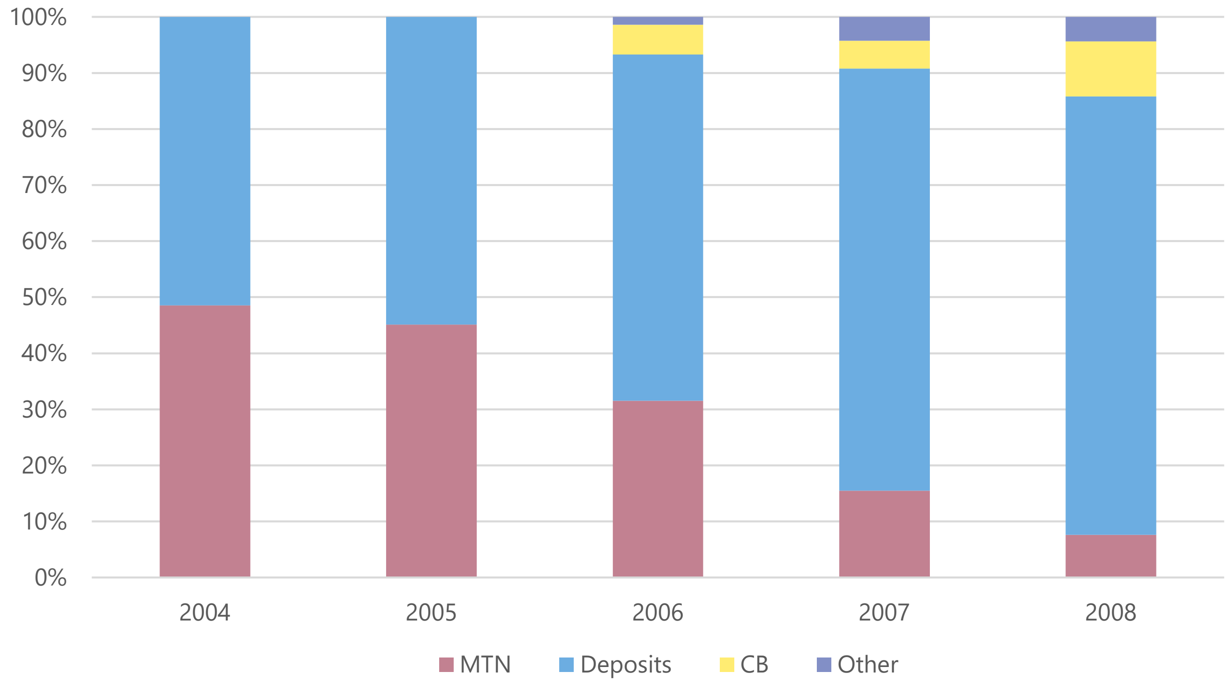
13. **During the first phase, Icelandic banks issued debt in the European MTN market, later turning to the US MTN market after the appetite for their bonds abated in Europe.** Because of the search-for-yield environment of the 2000s, there was a strong appetite in capital markets for Icelandic bank bonds. These were highly rated, partly on the back of the high sovereign rating and possibly because of an implicit too-big-to-fail assumption by rating agencies at the time.[8] The bonds offered higher returns than similarly rated debt instruments. In particular, Icelandic bank bonds were sought by issuers of collateralised debt obligations, as they could be bundled with other instruments, thus raising the average rating of the pool of exposures, while keeping returns relatively high. Access to the euro MTN market became more difficult for Icelandic banks around the time of the Geyser crisis. This led them to increasingly tap the US MTN market as an alternative. From 2004 to 2008, issuance by Icelandic banks totalled EUR 45 billion, accounting for a large share of their combined balance sheet in 2008 (Benediktsdottir et al (2017)).

14. **Deposit collection abroad started in earnest after the Geyser crisis.** In early 2006, worries about economic overheating intensified and some market analysts pointed to the risk of a financial crisis.[9] The impact on market confidence affected the access of Icelandic banks to wholesale funding, starting with the euro MTN markets. All three major Icelandic banks responded by stepping up their efforts to attract deposits abroad and over the internet. They focused on foreign European jurisdictions, with Landsbanki and Kaupthing being particularly aggressive in the United Kingdom and Landsbanki in the Netherlands. All three banks offered relatively high interest rates to attract deposits. By mid-2008, foreign deposits had increased to EUR 16 billion, or 15% of Landsbanki's and Kaupthing's combined balance sheet.

8 See for instance (Moody's (2008)).

9 Danske Bank was among the first to raise concerns in March 2006 about a substantial risk of a financial crisis developing as an integral part of an Icelandic recession in 2006–07 (Danske Bank (2006)). Others, including Fitch (Fitch Ratings (2006)), raised similar issues in the same year.

Graph 2: Composition of the three largest banks' funding



Source: SIC (2010).

15. **Customer deposits were expected to be the most stable source of funding.** However, this funding strategy was based on three faulty assumptions. First, deposits collected abroad may turn out to be less stable than those collected in the domestic market. This is especially the case when the banks collecting them have major currency mismatches and/or maturity mismatches in foreign currencies and when lender-of-last-resort support is limited in the relevant foreign currency. Second, Icelandic banks collected deposits online, attracting depositors by offering high deposit rates. These customers were among the most volatile and the most likely to withdraw their deposits quickly during a period of stress. Third, the stability of deposits also depends on the scope of the protection provided by the deposit protection scheme during times of stress. A significant share of foreign deposits (in particular those collected through Landsbanki's Icesave, as discussed in Box 4) were collected through branches rather than through subsidiaries. Accordingly, the protection provided depended upon the Icelandic deposit guarantee scheme's capacity to pay out in a timely manner and possibly also in foreign currency. Given the imbalance between the latter's very limited resources and the rapid growth of the deposit base abroad, and given the structure of Iceland's deposit insurance fund (see Box 1), the extent to which depositors in the Icelandic banks' branches abroad could be reimbursed by the Icelandic deposit guarantee scheme was highly questionable.

Box 1

The Icelandic Deposit Guarantee Fund①

The Depositors' and Investors' Guarantee Fund (TIF) began operations on 1 January 2000, as Iceland implemented the EU Directive on Deposit Guarantee Schemes (DGSD) of May 1994.② TIF was set up as a private foundation managed by an independent board largely comprising representatives of financial institutions (four members out of six are provided by the industry, the two others are appointed by the government). Should the fund's resources not suffice, the TIF's Board of Directors has the authority to borrow to meet its obligations. In 2008, TIF was required to be pre-funded up to a minimum of 1% of guaranteed deposits. At the end of 2007, the Fund's assets covered 2.6% of the guaranteed deposits.

In Iceland, guaranteed deposits include all customer deposits, which are guaranteed in full. This excludes deposits from financial institutions and public bodies – to the extent that these are classified as loans, they are not eligible. The arrangements in the Icelandic fund differ from those in the EU, where deposits are insured only up to a maximum (EUR 20,000 when the Icelandic crisis started; EUR 100,000 at the time of writing). The EU approach reflects the thinking that guaranteeing deposits in full may increase moral hazard for both depositors and banks. In Iceland, if existing funds turned out to be insufficient, as would likely be the case should a large bank fail, each depositor would have been entitled to a compensation of at least EUR 20,887.③

On the basis of regulation issued by the Ministry of Business Affairs, payments to depositors are required to take place within three months of a deposit-taking institution's default. The Ministry can extend the deadline up to three times, each time for another three months, based upon a proposal by the FME. This implies that payments may be delayed by up to 12 months.

Member banks' contributions to the TIF were settled once a year. Individual contributions were determined on the basis of the average of guaranteed deposits in the preceding year, with the annual contribution limited to 0.15% of the average of guaranteed deposits in the previous year. If this resulted in limiting a bank's contribution to less than 1% of its guaranteed deposit, the bank was required to issue a guarantee to the TIF to make up for the shortfall.

When the fund was established in 2000, assets of the Guarantee Fund, inherited from the previous scheme, represented around 1.2% of guaranteed deposits. However, by the time of the banks' collapse in October 2008, assets stood at only 0.41% of guaranteed deposits. A sizeable contribution shortfall emerged, with the shortfall caused mainly by the very rapid growth in deposits. It was also exacerbated by the fact that many deposits were collected in foreign currency, while contributions to the fund were in króna, which started to depreciate in late 2007.

A crucial feature of TIF was that there was no explicit backstop guarantee. While the fund could borrow to fulfil its obligations, member institutions were only obliged to provide guarantees up to 1% of the previous year's average deposit levels and the government had no legal obligation to fund the scheme. The scheme's ability to compensate depositors if one of the larger banks were to fail became highly disputed shortly before the crisis hit in earnest. The question of whether the government had a de facto obligation to shore up the fund was also a major issue in the aftermath of the crisis, as discussed in Box 4.

① This box draws on chapter 17 of SIC (2010). ② The most recent version of the Directive, known as DGSD3, was issued in 2014, but DGSD3 has not yet been approved by the EEA Joint Committee. In line with its membership of the EEA, Iceland is required to implement the DGSD after approval of the EEA Joint Committee. As of March 2020, Iceland has not implemented the DGSD3. In terms of content, this version of the Directive increases the coverage level of deposits to EUR 100,000. It also requires a maximum number of days to repay deposits, a term which is to be eventually reduced to seven working days. ③ This figure is determined by law. The law determines that, should the TIF run out of funds, the minimum guarantee is ISK 1.7 million. At the exchange rate on 5 January 1999, when the requirement was set, this was equivalent to EUR 20,887.

16. **As their international deposit collection slowed from mid-2007 onwards, Icelandic banks turned to central banks for funding.** Collateralised borrowing from central banks, in particular the CBI and the ECB, spiked in 2007 and had reached EUR 9 billion by the end of the year, up from EUR 2 billion some 12 months earlier (Benediktsdottir et al (2017)). The substantial increase in borrowing from the ECB took place through the Icleandic banks' subsidiaries in Luxembourg and the Central Bank of Luxembourg.

17. **A major concern with this surge in central bank borrowing was the quality of the collateral provided by the banks.** Icelandic banks issued bonds and exchanged them between each other so that they could be pledged as collateral with the central banks. This allowed them to break free from central bank funding limits since they could issue such bonds (which became known as "love letters") at will. As such practices became more widespread among Icelandic banks because of increasing funding pressures,[10] the ECB refused to accept any additional Icelandic bank bonds as collateral. This practice ended in August 2008 as far as the ECB was concerned. However, the CBI continued to accept these bonds out of concerns of systemic stress. By that time it was probably worried that its refusal to accept them as collateral would increase the Icelandic banks' funding difficulties and the likelihood of their failure.[11]

Undetected asset quality issues

18. **The extent to which the Icelandic banks were involved in connected lending**[12] **went undetected.** According to the large exposures rules in place at the time, the FME had to demonstrate the existence of connections. To the extent that credit was extended to holding companies or to businesses whose ownership was not transparent and which were often directly or indirectly controlled by some of the banks' larger shareholders, this burden of proof, which has since been reversed, was difficult if not impossible to meet. In addition, the concept of connected lending was itself subject to a narrow legal interpretation.[13]

19. **For similar reasons, the prudential rules on large exposures could often be bypassed, allowing banks to build up large and undisclosed concentration risks, mostly in relation to their larger shareholders.** The rules on large exposures, derived from international standards, provide that the total exposure to a customer or group of connected customers must not exceed 25% of the bank's regulatory capital. However, if connected lending between two parties cannot be demonstrated, then each party may borrow up to 25% of the bank's regulatory capital. Moreover, and as funding conditions for Icelandic banks tightened from 2006 onwards, banks increasingly extended loans to preferred customers for the purpose of acquiring their own shares and thus artificially propping up their share prices (with the shares being in addition pledged as collateral for the loan).[14] To the extent that it was able to explicitly document the loans, the SIC established that, at the time of the crash, at least 20% of the loan books had been lent to six groups of related parties. Each of these parties had a significant ownership (ie at least 10%

[10] Some euro area banks also seemed to have made use of "love letters" during the crisis.

[11] Because of the poor quality of this collateral, the CBI experienced losses and needed a capital injection, which it received from the state at the start of the crisis. The CBI recapitalisation was the most expensive outlay for the Icelandic state. The write-off of the so-called love letters amounted to 14.5% of Icelandic GDP by the time the banks collapsed.

[12] Connected lending refers to all loans extended by the lending institution to people, such as members of the board, directors and managers, key employees, qualifying shareholders (ie those holding 10% of more of the bank's shares or their equivalent) and to their close family members, or to firms that might be owned by any of these people. The purpose of regulating connected lending is to prevent anyone from using their position at the bank or as a significant shareholder of the bank from obtaining credit for themselves, their relatives or their businesses on preferential terms. It is also, where a connection between borrowers is established, to treat them as a single exposure for the purpose of the regulation of large exposures.

[13] As mentioned in Jännäri (2009), formal and restrictive interpretations were privileged so that laws and regulations were implemented and complied with literally but not necessarily in spirit. A striking example of such a narrow interpretation and of the inability to enforce the pre-2009 regulation on large exposures and connected lending was the fact that the FME had to allow one of the three largest Icelandic banks (Landsbanki) to declare as "unconnected" – and therefore as two separate exposures – the loans held against its two largest shareholders, who were father and son and who had purchased the bank together when it been privatised a few years previously (SIC (2010)).

[14] Many of these instances, discussed in (SIC (2010)), led to investigations. A number of these led to convictions for fraud and/or market manipulation and prison sentences of up to six years. See also Box 7.

of the shares) in one of the three banks. The recovery rates of these loans in the aftermath of the crisis were extremely low, ranging between 4 and 6%.

20. **First signs of deteriorating asset quality were already visible in early 2008 but capital adequacy was not considered a problem and indicators were somewhat conflicting.** On the one hand, the latest stress tests conducted by the CBI, published in May, and by the FME, published in August, indicated that the banks' solvency was not at risk (CBI (2008a), FME (2008a)) and reported that non-performing loan ratios had reached new lows at the end of 2007. However, a drop in the banks' stock prices and real-estate prices indicated worsening expectations and a deterioration in the quality and/or the amount of collateral that banks could provide. While the CBI's financial stability report mentioned the looming liquidity problems rather cautiously, authorities were increasingly concerned about the outlook and frequently discussed a potential crisis scenario and possible responses (SIC (2010)).

21. **Lack of sufficient information about the banks' liquidity and solvency positions further complicated the assessment of their asset quality**. Apart from the quality of customer loans, and the extent to which their future deterioration could be foreseen, the true liquidity and solvency positions of the Icelandic banks were unknown to the financial authorities, largely because of practices such as "love letters", high levels of unreported connected lending and loans collateralised by the banks' own shares. Authorities were unaware of the importance of these practices and of their cumulative impact on the banks' liquidity and solvency positions.[15]

International context and increasing concerns

22. **Iceland was particularly vulnerable to the international crisis because of its own imbalances.** The banking system was disproportionately large and a high proportion of the banks' assets and liabilities were denominated in foreign currency. Moreover, the larger banks were interconnected through credit links and there was no credible lender of last resort in foreign currency. Attempts to build up foreign reserves in order to provide banks with liquidity in foreign currency were not successful. By mid-2008, the banks had exhausted all funding options. As confidence in the Icelandic banks dwindled, funding strains increased, because wholesale funding could no longer be renewed, because customer deposits were withdrawn or because central bank collateralised lending had reached its limits. Separately, funding stress in global financial markets, which had started in 2007, became critical after mid-September 2008, following the collapse of Lehman Brothers, when repo and money markets dried up.

23. **On 25 September, Glitnir bank requested Emergency Liquidity Assistance (ELA) from the CBI.** Glitnir had been experiencing funding difficulties in foreign currency for some time and had exhausted its market options when it sought to meet instalments on four different facilities for a total of EUR 600 million. These were due in mid-October. Additional and sizeable instalments were due four months later. CBI declined the request and suggested a partial nationalisation instead, with the government offering to purchase 75% of the bank for EUR 600 million. The government made a proposal to that effect on Sunday evening 27 September. The offer was not well received by Glitnir's management and shareholders but, since there was no alternative on offer and rumours about the bank's problems were spreading, the bank's board and its main shareholders accepted it shortly before markets opened on September 28.[16]

24. **On 26 September, the FME met the CEOs of the three large banks and encouraged them to consider a bank merger.** Such ideas were not new, with merger scenarios discussed as early as March 2008. Earlier talks had come to a halt as change-of-control covenants were likely to be exercised, with some of the banks' funding becoming callable in such an event. When these discussions resumed in September, the bankers considered an equity injection from the state to be essential. However, it would

[15] For instance, as late as 2007, the CBI considered the financial system to be broadly sound (CBI (2007)).

[16] The bank's acceptance of the offer was subject to a shareholders' meeting, which had not yet taken place when Glitnir surrendered all shareholder rights to the FME.

have needed to be much larger than the cost of nationalising Glitnir. The government dismissed both proposals because the plan required a very large contribution from taxpayers in exchange for what was only a minority stake, while the impact that this would have on the level of confidence in the banks was highly uncertain (SIC (2010)).

25. **Following the announcement of Glitnir's nationalisation, its funding problems escalated and spread to other banks.** Credit default swap spreads jumped immediately after the announcement and Standard & Poor's cut ratings by three notches the same day for both Glitnir and the sovereign. Other ratings agencies followed suit. As a result, EUR 425 million of Glitnir's funding was called and margin calls amounting to EUR 1,100 million were required as the value of collateral provided in repo agreements declined. To add to the three banks' growing funding problems, retail depositors started to withdraw their deposits. By Friday 3 October, the whole Icelandic banking system was subject to an increasing and wide-spread run, bringing it to the brink of collapse (SIC (2010)).

26. **Faced with the imminent collapse of all three big banks, the government took drastic measures to secure basic banking services for households and firms.** Deliberations during the preceding weekend, including numerous meetings with advisors, bankers and other stakeholders, had failed to produce a plan that could restore confidence in the three large banks. The key decision was to present a bill to Parliament for express ratification, establishing the necessary powers for authorities to resolve failing banks and capitalise new banks, and safeguarding the interest of depositors. The Emergency Act (Law no 125/2008)[17] was passed in a single session in the early hours of Tuesday 7 October, and laid the foundation for the resolution process that followed.

27. **Resolving the three big banks was a long and complicated process.** Given the scope of the banking crisis and its uncertain effects on the economy, and as explained in the next section, an especially difficult and time-consuming element was determining the value of the banks' assets. Partly to address this uncertainty, the old banks, or in effect their creditors, received equity stakes in the new banks to offset the allocation of their claims to the old banks.[18] The resolution of the Icelandic banks was also special because the three new banks established in October 2008 became permanent entities. As this was a truly systemic crisis, no other domestic financial institution would have been large enough to purchase the new banks' assets. Therefore, the only possibility was to establish new banks from the old ones. This process took more than a year from the first decision on resolution to the permanent licensing by FME of the new banks.

[17] For an English translation of the original document, in Icelandic, see Government of Iceland (2008).

[18] In the case of Landsbanki, the equity stake was short-lived while creditors benefited from higher than expected recoveries on the assets through a contingent bond.

Section 3 – The crisis response

28. **This section covers the measures put in place by the Icelandic authorities in response to the crisis.** While multiple measures were at times applied simultaneously, they are presented here sequentially for discussion. The section starts with the first ones to be adopted before moving to those that were applied at a later stage or that took longer to implement.

Use of Emergency Liquidity Assistance (ELA)

29. **As the run on Icelandic banks developed, ELA was one of the first-response tools to be considered.** According to the Central Bank Act in force at the time, the CBI could grant ELA in special circumstances in order to preserve confidence in the financial system where normal provisions regarding rates and collateral need not apply.[19] Two banks, Glitnir and Kaupthing, applied for ELA. In both cases, the request was for a euro-denominated loan, which represented a large proportion of the CBI's foreign reserves. Using ELA as a first line of defence reflected the belief that the banks' were only illiquid rather than insolvent as well.

30. **Glitnir's request for an emergency loan was rejected on the basis of insufficient eligible collateral.** The bank application for EUR 500 million in late September was rejected. Although it remains unclear whether the request was for regular collateralised central bank funding or ELA, as it was never submitted formally, the CBI interpreted it as an ELA request.[20] The CBI asked the FME to confirm Glitnir's solvency before it extended ELA but the request for ELA was rejected before completion of the formal assessment of capital adequacy. Instead of providing ELA, the CBI suggested that the government should partially nationalise the bank (75%) in exchange for the needed funds. However, a possible reason for rejecting Glitnir's request for ELA could have been that the CBI, after supporting the Icelandic banks by lending to them against collateral of dubious value, could not justify any further funding as long as the bank's current ownership and management remained in control. Since Glitnir had not deleveraged as it had been expected to do, while continuing to lend extensively to the owner and related parties,[21] it seems that the CBI was concerned that additional funding might be simply re-lent by the bank to these borrowers.

31. **ELA was granted to Kaupthing, but this did not prevent the bank from defaulting.** Kaupthing was considered to be in a stronger position than Glitnir and it was thought that it would be able to survive its liquidity crisis (SIC (2010)). Ten days after Glitnir's ELA request, Kaupthing requested a loan amounting to EUR 500 million, for four days. The collateral offered by Kaupthing included all of the bank's shares in its Danish subsidiary FIH bank.[22] However, despite the provision of ELA, the bank

[19] Act no 36/2001, 7(2).

[20] The initial collateral was offered through a proposed securitisation of a portfolio of loans to corporates in the Norwegian offshore oil service sector. This option was dismissed because of covenants preventing a transfer to a non-financial institution. As an alternative, Glitnir offered three different asset-backed securities, on various underlying assets with a gross value of EUR 1.35 billion, or 270% of the requested funding. However, the valuation of the proposed collateral was questioned by the CBI.

[21] According to a CBI official in (SIC (2010)), chapter 20, pp 13–4.

[22] According to FIH Bank's latest financial reporting, its book value at the time was more than EUR 1 billion or roughly 200% of the loan amount. The rate included a spread of 5% above benchmark rates. In a telephone call between the chairman of the board of governors and the prime minister, which recently became public, the governor emphasised that high-quality collateral would be essential given the high risk associated with the loan (CBI (2019d)). FIH Bank subsequently faced significant difficulties as Denmark went through its own banking crisis and economic recession. The CBI later concluded that it was unlikely that more than EUR 260 million of the original EUR 500 million would be recovered (CBI (2019d)). Only half of the loan's outstanding amount was recovered by the central bank when FIH was sold in 2010 (Benediktsdottir et al (2017)).

defaulted a few days later.[23] This was triggered primarily by the UK Treasury's decision to transfer deposits from Kaupthing's UK subsidiary KSF to ING Direct, a Dutch-owned bank in the United Kingdom. KSF was subsequently placed in liquidation by the UK's Financial Services Authority. Since a significant share of the parent company's funding was callable in such a case, the demise of KSF lead to the downfall of Kaupthing, as cross-default covenants in the medium-term notes issued by Kaupthing were activated.[24]

32. **The fact that decisions varied can be explained partly by the evolving crisis.** When Kaupthing was granted ELA, the other big Icelandic banks were already failing. In such circumstances, the authorities may have believed that saving the last major bank still operating was even more important. However, the risk that these public interventions (ie, the nationalisation of Glitnir or the provision of ELA) would backfire was not fully understood by all authorities.

33. **ELA turned out to be an inappropriate policy response because the banks were, in practice, already insolvent.** Sufficiently accurate information on the banks' solvency position was lacking at the time, only becoming available months later. Such information would have considerably simplified the ELA decisions as it would have shown that all three banks were already insolvent (Flannery (2009)). Accordingly, granting ELA under these circumstances would not have prevented the failure of the banks since it would not have addressed their lack of solvency. In particular, even a very conservative assessment of the banks' assets would have overstated their capital positions because of connected lending and because their customers had pledged the bank's own shares as collateral. In the absence of a large recapitalisation, nationalising Glitnir would not have prevented its collapse either.

34. **In any event, the CBI would have been unable to provide large amounts of ELA because of its limited ability to provide liquidity in foreign currencies.** The ELA granted to Kaupthing in euros amounted to about a fifth of the country's entire foreign exchange reserves. This was clearly only a fraction of what the Icelandic banks needed to survive a period of very low market confidence.

Resolution of the major banks

Resolution powers

35. **Before October 2008, powers to intervene in the operations of failing banks were very limited.** While the FME had the power to revoke a bank's operating licence and could initiate a liquidation process, it would have been unable to execute an orderly resolution that maintained essential banking services. The Icelandic authorities started to recognise that FME needed resolution powers in early 2006, and, in spring 2008, the Ministry of Business Affairs started drafting the Emergency Act, based on previous work carried out by the FME and scenarios discussed in the Consultative Group on Financial Stability and Contingency Planning. Some key elements of the bill were completed only during the weekend of 4–5 October.

36. **The Emergency Act introduced three major changes, starting with the powers given to the Ministry of Finance to establish and capitalise a new bank.** The Minister of Finance was authorised by Parliament to provide the capital to establish a new financial institution or to restructure an existing one that was failing or likely to fail (FOLF). The definition of FOLF could refer to severe solvency or liquidity

[23] The Swedish subsidiary of Kaupthing, Kaupthing Sweden, had also received ELA funding from Sweden's central bank (Sveriges Riksbank (2008)).

[24] In the run-up to these events, Kaupthing had been ordered by the UK FSA to strengthen the liquidity position of KSF by GBP 1,600 million but progress had been slow. The ELA granted by the CBI was not sufficient to close the gap.

problems, or to the likelihood that the bank would infringe the requirements for retaining its banking license in the near future and other measures available to the FME were deemed unlikely to be successful.[25]

37. **Second, the FME was given new powers to intervene in the operations of failing banks.** These new powers included the authority to hold a shareholders' meeting and, if conditions required immediate action, to assume the full shareholder powers and take necessary decisions. Powers included curtailing the board's authority, dismissing it wholly or in part and taking control of and transferring assets and liabilities.[26] In May 2009, the FME transferred the administration and oversight of the old banks to court-appointed winding-up boards, in application of amendments to the Emergency Act.[27]

Box 2

Court rulings on deposit priority and capital controls

The change in bankruptcy legislation, giving customer deposits – whether retail or corporate – priority over general claims, was challenged in court, inter alia on the basis that Article 6 of the Emergency Act violated both a constitutionally protected property right and international accords, including Protocol no 1 to the European Convention on Human Rights.

In a case before the Iceland's Supreme Court in 2011 (H340/2011),① the plaintiffs requested that claims by the Financial Services Compensation Scheme (FSCS), the UK deposit protection scheme, in the estate of LBI (Old Landsbanki) totalling more than GBP 4.3 billion, should not be given priority over general claims. In its influential decision, the court ruled that, due to the extreme and unprecedented problem at hand and the legislator's clear objective, a considerable discretion on the legislator's part was warranted. To this end, the court pointed out that a full-scale run on the banking system had been averted and that giving deposits a priority claim was a critical factor that had contributed to that outcome.②

The EFTA Surveillance Authority (ESA) also reviewed the Emergency Act on the basis of the European Economic Area agreement after receiving multiple complaints. In December 2010, it concluded that the Emergency Act did not constitute an unlawful discrimination and that the apparent breach of the agreement's principle of free movement of capital was warranted by the real and serious threat to the banking system on which the Icelandic economy depended.③

① Icelandic Supreme Court Case 340/2011 (see Supreme Court (2011)). Similar rulings were passed in 10 other cases. ② Solnes (2016) and Olafsdottir et al (2019). ③ Olafsdottir et al (2019).

25 The Ministry of Finance was also authorised to provide savings banks with new capital of up to 20% of their current own funds. In the following year, several savings banks were recapitalised based on this provision and others were liquidated or merged into larger banks in the years following the banking crisis (Act no 125/2008).

26 In addition, and according to Article 5 of the Emergency Act, the FME may decide to merge a failing institution with another institution notwithstanding provisions to the contrary in the Competition Act regarding mergers.

27 When the full board is dismissed, the FME may appoint an interim board to execute its resolution decisions and temporarily assume full authority over the bank. In May 2009, the responsibility for managing the winding-up of the old banks was transferred to court-appointed winding-up boards, whose chairpersons were also moratorium administrators. The resolution committees remained responsible for managing their portfolio of assets until January 2012 when full responsibility was transferred to the winding-up boards. This was for instance the case for Glitnir (Glitnir (2012)).

38. **Third, customer deposits were given priority over general unsecured claims in a financial institution's bankruptcy proceedings.** This applied to all retail and corporate deposits, as covered by the Act on deposit insurance.[28] However, as the Act does not define maximum coverage explicitly, the full deposit amount was granted priority. This change in bankruptcy law, enacted in Article 6 of the Emergency Act, privileged banks' deposit holders at the expense of general unsecured claimants, including owners of medium-term notes issued by the three largest banks.

39. **All three banks were resolved in a similar way, splitting them into "new" and "old" banks.** The approach can be broken down into four steps. The first step was the transfer of selected assets and liabilities to a newly established bank. The second was the valuation of assets (net of liabilities) that were transferred to the new bank. Then, the new banks were capitalised and funded. Finally, the old banks were wound down.[29]

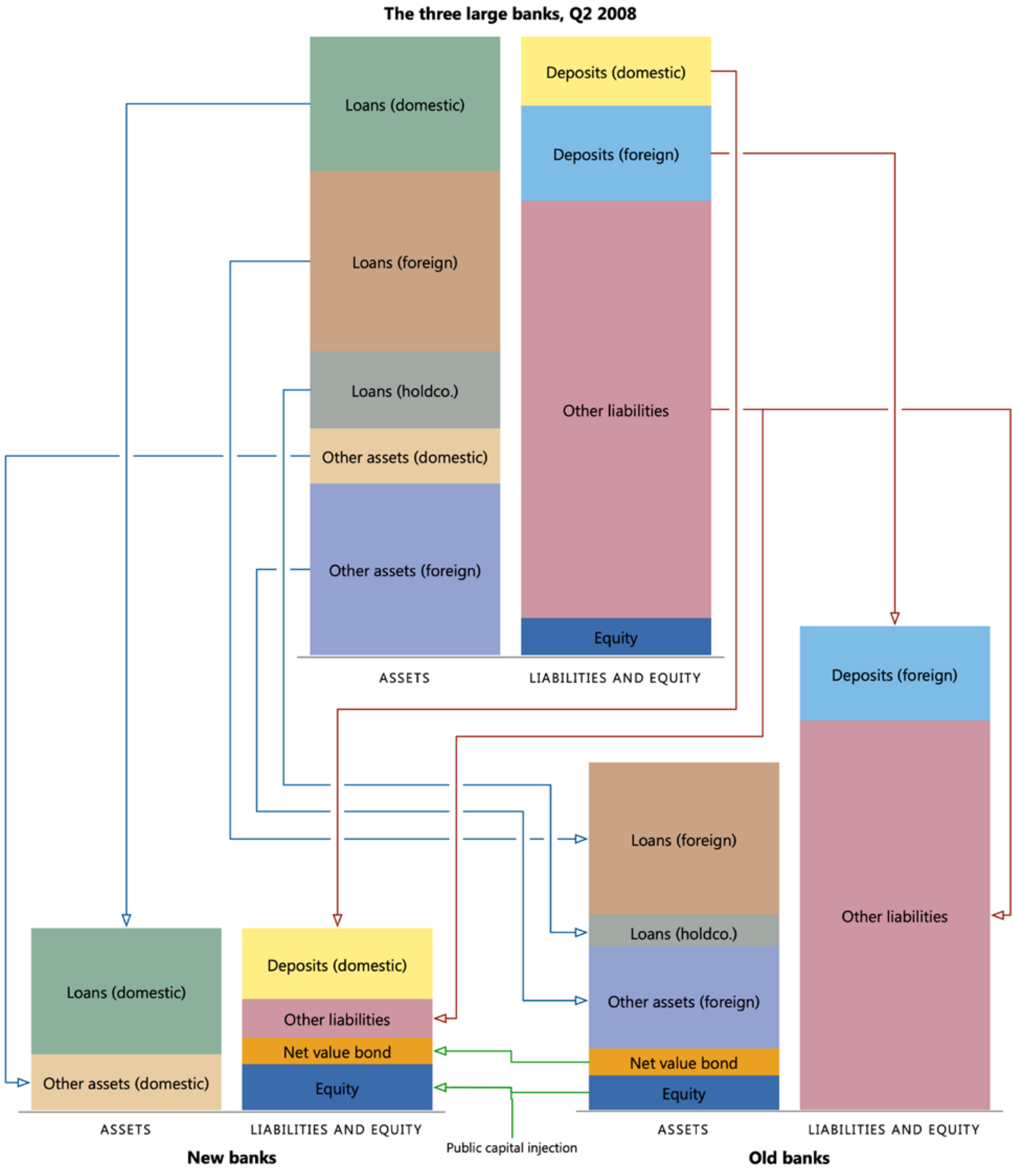
Transfer of assets and liabilities

40. **The approach taken by the Icelandic authorities was to carve out primarily domestic assets and liabilities and transfer them to the new banks.** This approach was chosen to ensure the continuity of basic banking services to the domestic economy and to separate them from the foreign operations that had proved to be too large in relation to the economy. This meant, in general terms, that assets booked in foreign branches remained with the old bank while loans and securities held by or owed to the parent company against domestic counterparties were transferred to the new banks, as were deposits from the parent companies' domestic branches, as illustrated in Graph 3.

[28] Deposits not covered are primarily deposits by financial institutions or their subsidiaries, public entities or firms under public ownership, and deposits by joint investment funds (Act no 98/1999).

[29] Following the Emergency Act, all three major commercial banks handed over full control to the FME. Landsbanki and Glitnir did so on 7 October, followed by Kaupthing on 9 October. The FME immediately appointed resolution committees to assume the role of the banks' boards. The FME then exercised its new powers to transfer assets and liabilities from the three failed banks to three new banks: Nyi Landsbanki Islands on 9 October, Nyi Glitnir banki on 15 October and Nyi Kaupthing banki on 22 October.

Graph 3: Transfer of assets and liabilities to the new banks



Source: This chart draws on Benediktsdottir et al (2017).

41. **The assets transferred to the new banks were principally loans and other claims related to the banks' domestic operations.** There were, however, several notable exceptions to this principle. Loans to the former Icelandic owners of the failed banks and other lending to leveraged holding companies were not transferred, as they were deemed to be of particularly low quality. Derivatives positions also remained with the old banks. Other assets not transferred, irrespective of domicile, were encumbered loans, loans to special purpose vehicles, loans made on the basis of a total return swap, loans in covered bond pools and high-risk lending including mezzanine loans and undrawn revolvers. Several types of assets, in

addition to loan portfolios, were also transferred based on their links with domestic operations, such as liquid funds, part of any balances with the CBI, fixed capital associated with the Icelandic headquarters and local branches and shares in domestic subsidiaries and affiliated subsidiaries. Table 1 (upper panel) lists in more detail how the failed banks' assets were split and the valuation principle applied – fair value, book value or adjusted book value.

42. **The key liabilities transferred were deposits in domestic entities.** This meant all customer deposits in Iceland were transferred to the new banks while deposits in foreign branches remained with the old banks. Deposits not covered under Iceland's deposit guarantee scheme also remained with the old bank. A small amount of other liabilities was also transferred, primarily short-term debt derived from unsettled transactions and operating expenses due to be paid. All other borrowings, subordinated debt and derivative positions remained in the old bank as claims on the estate. Table 1 (lower panel) lists how the failed banks' liabilities were split in more detail.

Assets and liabilities transferred to new banks

Table 1

Assets transferred	Initial valuation	Assets not transferred
Cash and balances with central banks	Book value	All assets of foreign subsidiaries and branches
Fixed income securities*	Fair value	Loans to customers**
Shares and other variable income securities	Fair value	Derivatives positions
Securities for risk management purposes	Fair value	Tax assets
Claims on financial institutions*	Fair value	
Loans to customers**	Book value adjusted for special provisions	
Shares in affiliated companies	Fair value	
Shares in domestic subsidiaries	Book value	
Operating assets***	Book value	
Intangible assets	Fair value	
Non-current assets held for sale	Book value adjust for depreciation	
Other assets****		
Liabilities transferred		**Liabilities not transferred**
Deposits in domestic branches	Book value	Borrowings
Other debt deriving from unsettled transactions	Book value	Subordinated debt
		Tax debt
		Derivatives

* Excluding claim on banks in resolution by FME.

** Loans not transferred: encumbered loans, loans to SPVs, lending on the bases of a total return swap, loans in covered bond issues, especially risky lending including mezzanine loans and undrawn revolvers.

*** Excluding assets associated with foreign branches.

**** Including receivables, uncleared trades and artwork.

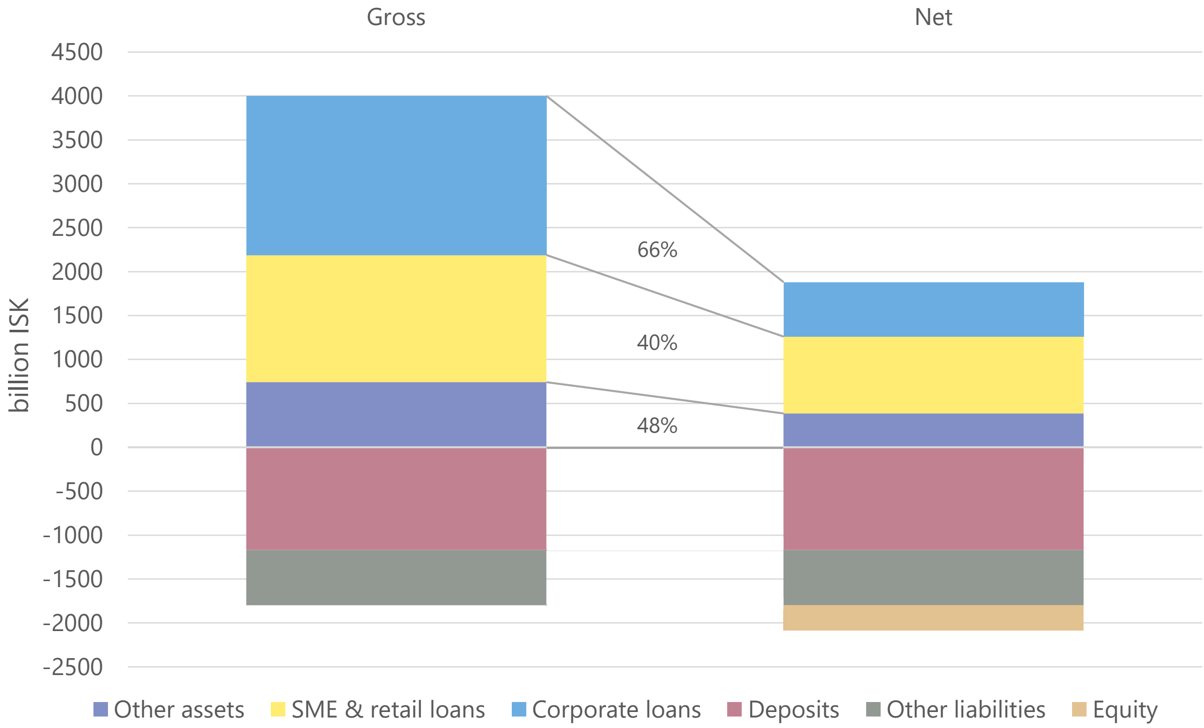
Source: FME (2015a).

Valuation

43. **The value of the transferred assets exceeded that of the transferred liabilities but the net value was highly uncertain.** The total book value of the assets transferred was ISK 4,000 billion while the value of domestic deposits transferred was ISK 1,313 billion. However, given the extremely negative macro-economic outlook at the time, the assets' recovery value was expected to be much lower than book value.[30]

44. **An independent third party was contracted by the FME to thoroughly evaluate the assets transferred in order to establish the basis for compensation.**[31] The main task was to evaluate the fair value of assets, where applicable, assuming that the banks were fully capitalised and funded, as opposed to being subject to stressed market conditions. However, the final report did not provide a point estimate of the net value of transfers but rather a series of ranges (high and low estimates) for each asset class, based on different assumptions (FME (2009a)). This was due in part to the complex external environment of the new banks and the uncertainty of the economic outlook.

Graph 4: Valuation of assets – gross and net values



The numbers attached to the lines in the graph refer to the average discount rate on each asset class.

Source: FME.

45. **Transferred assets and liabilities were split into three categories.** The first two categories, (a) loans to large corporate groups and (b) loans to small and medium-sized enterprises (SME) and households, amounted to more than 80% of gross assets transferred to the new banks (see Graph 4). Category (c) comprised various other assets. In category (a), the appraiser reviewed loans to individual obligors based on available information on 130 groups of large corporates including 450 individual companies.

[30] According to the FME's estimation of the first interim balance sheets for the new banks, published on 14 November, the recorded total assets amounted to ISK 2,501 billion, including loans to customers of ISK 1,826 billion.

[31] The FME hired the London office of Deloitte LLP for this task, while the international consultancy Oliver Wyman provided an external review.

46. **A different methodology was used in each case.** Particular attention was paid to underlying collateral pledged by the borrower and to the borrower's enterprise value based on its capacity to generate future cash flows. The appraiser also had to consider whether the borrower was in the process of liquidation or likely to enter such a process. In category (b), the value of various homogenous loan portfolios was assessed based on characteristics of borrowers, including performance indicators such as probability of default and loss-given-default and characteristics of the loan contracts, such as whether the loans were inflation-linked or indexed by a foreign currency and the interest rate schedule. The appraiser used the outcomes of previous crisis episodes to calibrate its assumptions. In this category, in particular, the outcome was a wide range of expected recovery outcomes for each of the new banks. Category (c) spanned a wide range of different assets and liabilities, as seen in Table 1. Crucially, and as opposed to banks' assets, deposits were transferred at book value.

47. **According to the valuation, the recovery rates on loans to all types of corporate and retail customer was expected to be in the range of 45–54%, on average.** The value of transferred assets, net of the ISK 1.4 billion of transferred domestic deposits, was in the range of ISK 442–766 billion.[32] The expected recovery rate for all three banks on aggregate was particularly low for loans to large corporates, ie in the range of 34–43%, and there were considerable differences between the three banks in the range of realised recovery values.[33] In the category of SME and retail loans, the expected recovery was estimated to range between 60 and 69%, on aggregate, and to be very similar for all banks, reflecting the more general methodology used there (FME (2009a), Ministry of Finance and Economic Affairs (2011)).

Capitalisation and funding

48. **The FME initially planned to make up the shortfall between assets and liabilities through the issuance of a fixed income instrument by each of the three new banks.**[34] This approach was, however, not pursued because the wide range of asset value estimates and the relatively low recovery rates made it controversial and likely to be contested in court. One of the main concerns was that the process did not provide creditors with legal recourse. An additional complication of the FME recapitalisation plan was the net foreign exchange positions of the new banks, because of the impact of their possible liquidation on the balance of payments. These positions resulted from the fact that many loans transferred to the new banks, especially loans to corporates and, to a lesser extent, loans to SMEs and households, were in foreign currency or indexed to a foreign currency. The further implications of this situation are discussed in the subsection on restructuring private debt.

49. **Subsequently, the government initiated negotiations that led to the granting of a significant equity stake in the new banks to the old banks.** Mindful of possible litigation and of the direct financial risk to government finances, the Icelandic government negotiated a settlement with the creditors of the old banks. The objective was to find a compromise for sharing the risk of ownership of the new banks and the potential upside in asset recovery. The parties involved reached an agreement in principle in July 2009 in the case of Glitnir and Kaupthing and in October 2009 in the case of Landsbanki.[35] In the case of Glitnir and Kaupthing, the old banks received a majority share in the new

32 These are the aggregate results provided by Deloitte, after some adjustments by the FME, taking into account minor changes in the transferred asset portfolio.

33 Looking at individual banks, the range is even greater, with the lowest lower bound being 27.4% in the case of New Kaupthing and the highest upper bound being 56.2% in the case of New Glitnir.

34 The first interim assessment by the FME suggested that the aggregate amount of bonds issued by the new banks to the old would be ISK 1,153 billion. Based on these early estimates, new capital, provided by the Ministry of Finance, would have totalled ISK 385 billion (FME (2008b)).

35 The Landsbanki negotiations were more complicated because a large proportion of the priority claims corresponded to deposits in the foreign branches that the British and Dutch deposit guarantee schemes had covered.

bank,[36] while under the settlement for Landsbanki the Ministry of Finance became the major owner of equity, while the old bank received a contingent bond from the new bank.[37] In all three cases, the settlement allowed for a larger net compensation from the new banks to the old ones should the value of the transferred assets turn out to be higher than initially expected (Ministry of Finance and Economic Affairs (2011)).

50. **The old banks' stake in the new banks amounted to a qualifying holding in all three cases, and efforts were made to preserve the operational independence of the new banks.** The old banks did not fulfil the standard legal criteria for qualifying holdings, as they were insolvent. In 2009, under these special circumstances, the FME had to grant an exception to these criteria based on several conditions, on the basis of existing legislation. Most importantly, the conditions required separate holding companies with an independent board[38] that assumed the voting rights in the new bank, and a minimum amount of available funds in case of a need for recapitalisation of the new banks.[39]

51. **The completion of the split between old and new banks took more than a year.** Following the FME's decision in October 2008, the old banks entered a temporary winding-down process. They were granted an automatic waiver on their compliance with regulatory requirements and against collection measures. This lasted until 2010, when the settlement of the net value of assets transferred to the new banks was completed. It ensured that the protections from litigation, collection measures and other depletion of assets that had been established during the moratorium period remained in place during the formal winding-down process. However, assets pledged as collateral, worth about EUR 5.2 billion,[40] were seized without delay by the ECB and the CBI. The new banks were also granted a waiver on their compliance with regulatory requirements and collection measures until they received a full banking license from the FME in 2009.

52. **The old banks' assets were managed with the objective of maximising value for the benefit of creditors, and assets were disposed of at different speeds depending on their features**. In accordance with that objective, some of the old banks' foreign subsidiaries were wound up in the relevant jurisdictions. However, others were sold relatively quickly, and at fire sale prices, to other financial institutions at the discretion of the relevant foreign supervisory authorities. The bulk of assets belonging to the mother company were held until maturity or sold over time. The currency denomination of assets created a particular concern for the Icelandic authorities, as a significant amount of króna-denominated assets would put pressure on the balance of payments should they all be liquidated and paid out to foreign claimants over a short period. The problem was ultimately resolved in late 2015 when the three banks concluded their winding-down process through a composition agreement, as discussed in the subsection on the balance of payments.

36 The final agreements concerning Glitnir and Kaupthing involved a choice between two alternatives that were presented to the creditor groups of the old banks: first, a *joint capitalisation* scheme, where the old bank would end up with an equity stake in the new bank rather than holding a bond; or second, *capitalisation by the Ministry of Finance*, where the old bank would receive a bond and an option to acquire a significant share in the bank. In both cases, the old banks were left with a large proportion of the upside arising from potential asset recovery and the government could limit its contribution to recapitalising the banks.

37 The principal of the bond was adjusted upwards based on the performance of transferred loan portfolios. The old bank held 19% of the new bank's equity until the bond was issued.

38 At most, only one board member was permitted not to be independent of the old bank.

39 The conditions also required a fiduciary agreement between the holding company and the old bank specifying that all decisions should be based on a simple majority and within the scope of predetermined governance benchmarks. Several other restrictions and reporting requirements were also established, including the need for preapproval by the FME of any sale of shares or any dividend payments.

40 This is a rough estimate based on estimated collateralised lending on 30 September 2008 (Benediktsdottir et al (2017)).

53. **According to a recent estimate, the aggregate recovery of claims against the old banks was slightly over 58%.**[41] However, recovery rates varied considerably by the type of claim. Claims by or on behalf of depositors against the estates of the old banks were fully satisfied due to the priority granted in the Emergency Act. For general claims – by far the largest class – the recovery was only 29% on average.[42] Previous owners of equity and subordinated debt issued by the failed banks recovered nothing.

Box 3

Resolution options

Several resolution strategies were considered at various stages. The final resolution strategy adopted by the FME was the product of last-minute analysis and fast-moving targets. The Emergency Act was an essential part of the process, as resolution powers were lacking in the run-up to the crisis. Still, the Act was not very prescriptive and it left authorities with considerable room for discretion. This box discusses some of the key choices made, and the main alternatives available at the time.

From the outset, the authorities realised that restructuring needed to entail a significant reduction in the size of the banking system. This would be achieved by separating a viable part from a non-viable part, with the latter to be wound up. In this respect, two extreme options were either to split each bank into a good bank and a bad bank, or to separate each bank into a foreign and a domestic part. A limitation of the first approach was that a large portion of domestic credit would remain in the bad bank, making debt restructuring of corporates and households very difficult. In the second approach, loans to holding companies would be placed with the domestic bank, burdening it with credit exposures of uncertain quality. Iceland chose a hybrid solution, which was to carve out new banks from each of the failing banks ("old banks"), transferring a large part of the domestic activities to the new banks. The hybrid solution was therefore a compromise. It created new banks that were broadly viable, even if they were far from problem-free, without causing an overwhelming balance of payments problem.

The decision to emphasise preserving domestic banking services was inevitable in order to avoid a complete meltdown of Iceland's economy, given the huge imbalance that had built up over the years between the size of the banking system, on the one hand, and the resources of the sovereign and the central bank's capacity for providing liquidity in foreign currencies on the other. Attempts made during 2008 to secure swap lines with major central banks to be able to provide liquidity in foreign currency had been unsuccessful (see subsection on the IMF programme).

The decision to transfer most of domestic assets to the new banks was perhaps the most controversial one for the creditors. Alternative strategies for resolution and recovery of the banking system were considered initially and during the following weeks and months. However, a split between "old" and "new" banks was considered the only feasible option, given that all of the large banks had failed within a few weeks. At different stages in the process, it was believed that at least one of the three main banks might survive. This could have been Glitnir – had the nationalisation been completed – and/or Kaupthing, after the provision of ELA. In such a case, an alternative strategy might have been chosen, with only a minimal amount of assets transferred, together with domestic deposits, to whichever of the three banks would continue operating.

An alternative to the new bank/old bank split would have been the creation of more limited "good banks" by transferring to a new entity only an amount of highly liquid assets that would match the level of domestic deposits. As deposits were a fairly modest part of the banks' funding, such an approach would have produced very small banks, with a large share of household debt and most of corporate debt continuing to be held by the "bad banks". The belief that such a banking sector would have been unable to adequately finance the domestic economy may have been a factor in favour of the eventual outcome, involving a transfer of assets well in excess of deposits.

[41] This recovery rate only applies to the parent companies. The recovery on general claims in foreign subsidiaries was higher and close to 100% (Benediktsdttir et al (2017)).

[42] Jonsson and Sigurgeirsson (2016) conclude that the recovery on general claims ranged from 14 to 30%. The worst recovery of general claims was at Old Landsbanki, which had a much larger share of priority claims than the other two. These estimates exclude recoveries in foreign subsidiaries.

(continued) Box 3

Early proposals to set up a national asset management company were rejected, even though this meant that assets transferred to the new banks would include a large amount of non-performing loans. Instead of creating a country-wide asset management company (AMC), as had been the case in Sweden in the 1990s, each Icelandic bank managed its own legacy assets. The alternative approach of creating a country-wide AMC was rejected by the management of the new banks, who worried that the "bad bank" would become too big to manage and would not be able to preserve whatever relationships each bank still had with its customers.

Deposits

54. **As the crisis erupted, several measures were taken in relation to deposits, starting with the government's announcement of a blanket guarantee for all domestic deposits.** The aim of the anouncement was to stop the run on the banks.[43] It was limited to covered deposits in domestic banks in Iceland, given the limited resources of the Deposit Guarantee Fund (TIF) and the Ministry of Finance's inability to provide a credible backstop. As mentioned in Box 1, TIF had the power to borrow in order to meet additional funding needs, but no specific lender was identified in the legislation and neither the central bank nor the Ministry of Finance had sufficient resources to become such a lender.

55. **With all three major banks nearing failure or having failed by early October 2008, it was clear that the Deposit Guarantee Fund could not meet the claims of the banks' depositors.** The TIF could not afford to cover domestic depositors, since all three major banks needed to draw on it at the same time. In response, one of the earliest announcements concerned the protection of domestic deposits. In the morning of 6 October,[44] a news bulletin was published on the website of the Prime Minister's Office to the effect that the government confirmed that deposits in the domestic commercial banks and savings banks and their local branches would be fully guaranteed. It was clarified later the same day that the Treasury would ensure that such deposits would be paid out in full. This measure was similar to those taken by other governments in Europe at the time.[45] It was understood that such a measure could trigger a credit rating downgrade of the sovereign but, on balance, the costs that a bank run would have entailed were considered higher than those of a sovereign downgrade.[46]

56. **Another emergency measure was to prioritise deposits in the creditor hierarchy, whether or not they were collected through domestic or foreign branches.** The Emergency Act introduced a depositor preference. Until then, deposits were general claims and were therefore more likely to bear losses. The change in the creditor hierarchy was expected to reduce losses to depositors, both in branches and subsidiaries in Iceland and abroad. However, a difference remained between the treatment of deposits at domestic operations of the Iceland banks and those abroad regarding the time value of money. When the three major banks were each split into old and new banks, foreign deposits remained a liability of the

43 In Iceland, the amount of cash in circulation was traditionally much less than in most other countries. This increased the pressure on the authorities to address concerns about deposits.

44 The prime minister first verbally announced the blanket guarantee in media on Friday 3 October, in order to stem the bank run that had started to build up by then.

45 The Irish government declared on 30 September 2008 that the state would provide guarantees for deposits and debt of six financial entities active in the Irish market for the next two years. Next, the government of Greece declared a state guarantee of deposits in domestic banks. On 5 October 2008, the German government declared an unlimited guarantee of all retail deposits in German banks. Several other European countries subsequently adopted the same measure, including Denmark and the United Kingdom. Coverage levels were also increased, in the EU to EUR 50,000 initially and then to EUR 100,000.

46 The blanket guarantee was removed in 2016; see Government of Iceland (2016).

old banks. It therefore took longer to repay them, while domestic deposits remained immediately accessible.

Box 4

The Icesave dispute

To diversify and support its funding needs, Landsbanki started collecting deposits abroad in 2006. In the United Kingdom and the Netherlands, Landsbanki offered "Icesave" accounts through its foreign branch, which attracted online deposits by offering relatively high rates. When Landsbanki went into receivership on 7 October 2008, its UK and Dutch deposits amounted to EUR 6.7 billion.

In line with the requirements in the EU DGS Directive, deposits in these branches were to be covered by the deposit insurance fund of the jurisdiction in which the bank was headquartered (ie its home jurisdiction), up to the coverage prescribed in the DGSD (EUR 20,000 at the time). The coverage for the UK deposits had been increased by the UK authorities from GBP 35,000 to GBP 50,000 on 3 October 2008, a few days before the date when Landsbanki went into receivership. As a result, the difference in coverage increased between the minimum prescribed in the UK regulations and that in the DGS Directive, a difference that the UK FSCS would have to make up.

The Icelandic deposit insurance scheme had insufficient resources to cover the claims of the Icesave accounts. While the Dutch and British governments stepped in at the beginning of October 2008 to guarantee the Icesave deposits collected in their respective jurisdictions, they laid claims on the Icelandic state to repay them as they assumed that the Icelandic deposit guarantee fund would receive emergency funding from the state.① However, the government of Iceland held that the Icelandic deposit guarantee fund was a private entity and that there was no state obligation to support it should it lack sufficient funding. It also pointed out that it had taken drastic measures to protect the interests of depositors by changing the preference of claims in the case of bankruptcy.

Following negotiations, in 2009 the Icelandic authorities agreed to guarantee the repayment of the Icesave deposits from the Landsbanki estate and negotiated interest on the delayed payments. However, two separate bills endorsing the repayment agreements, although voted in Parliament, were rejected in two national referenda, one in 2010 and the other in 2011. Following this, the UK and Dutch governments brought a formal complaint to the EFTA Surveillance Authority, which then referred it to the EFTA Court. The court issued a ruling in 2013 confirming the UK and Dutch governments' first-priority claims on the Landsbanki estate for the principal of the deposits paid out by the respective DGSs but did not recognise the claim on the Icelandic state, which was freed from paying the interest accrued on the Icesave claims. In early 2016, the old Landsbanki estate paid the last instalment on the principal of the Icesave debt and the case was closed.②

Ultimately recoveries on assets in the old banks were sufficient to meet all priority claims by all foreign depositors, not only those falling under national DGS schemes but also uncovered customer deposits.

① The UK authorities imposed a freeze on all Icelandic assets in the United Kingdom in early October using anti-terrorism powers. The freeze initially also applied to the CBI, the Ministry of Finance and the FME. By the end of October, the restrictions were limited to Icesave and Landsbanki, but they would not be removed until 2009, when an initial agreement on the repayment of the Icesave accounts was reached. ② EFTA Court (2013). The UK and Dutch deposit guarantee funds also claimed the full amount of the Icesave claims plus penalty interests and costs from TIF, which ultimately agreed to pay ISK 20 billion to settle all claims in 2015 (TIF (2015)).

57. **Guaranteed deposits in domestic branches were transferred to new banks and were unaffected by the crisis.** This was done overnight immediately after the new banks were established and deposits were immediately accessible the next business day. As a result, no households or firms that had deposits in the domestic branches had to be compensated. Deposits not covered by TIF remained for the most part in the old banks as general claims.[47] This split in the allocation of deposits between old and new banks, which was set out in a regulation by the ministry, was challenged in court but upheld.

[47] This was the case for instance for deposits of financial institutions and public agencies, which were not eligible under the deposit insurance scheme.

58. **All bank branches remained open and payment systems continued to be operational throughout the resolution process.** Despite the long and complicated process of resolution that followed public intervention, the technical aspect of the transfer of assets and deposits went smoothly. This was largely due to the concerted efforts of the CBI and the joint IT services provider, Reiknistofa Bankanna (RB). Since records for all bank deposits involved were operated by RB and the settlement of domestic payments jointly by RB and CBI, retail customers experienced no problems in their everyday transactions. Managing cross-border payments was more challenging, however. The effect of the freezing order delivered against Landsbanki by the UK Treasury on 8 October, on the basis of the Anti-terrorism, Crime and Security Act, was that almost all cross-border payments except those made through the CBI ceased and were not fully restored until mid-2009. Domestic retail payment systems remained fully operational, however, and the continued validity of credit cards was ensured.[48]

59. **Transferring deposits from branches into subsidiaries was an option considered in early 2008, but it turned out to be unfeasible.** Given the limited resources of the Icelandic deposit guarantee fund, the possibility of transferring deposits from foreign branches to banks' existing foreign subsidiaries was actively pursued in the case of one Icelandic bank's operations abroad.[49] The change would have shifted the burden of providing deposit insurance from the Icelandic fund to those in the host jurisdictions. Authorities in both Iceland and the host jurisdictions, together with the banks, discussed the matter. However, the proposal did not materialise in time. The main hurdles were additional restrictions on intra-group liquidity management imposed by the host supervisors, and the Icelandic banks' inability or unwillingness to comply with these requests. Separately, as time passed and the risks intensified, limits to the transfer of liquidity to the parent company became even stricter. In the end, by October 2008, the banks had collapsed and no arrangements to transfer deposits to subsidiaries had been initiated.

60. **A separate deposit guarantee fund was established, with some new features.** In 2011, a new division within the deposit guarantee fund was established, and by law it is separated from the old fund. This allows the resources in the new fund to be devoted to cover deposits in the new Icelandic banks, without the risk of being claimed by the depositors in the old banks. The new fund also has some new features, a key one being to abolish the 0.15% limit on banks' contributions.[50] Two major outstanding issues remain. One is the identification of the source of emergency funding in times of stress, and the other is the speed with which depositors can be repaid.

61. **A resolution fund still needs to be established.** One of the lessons of the banking crises of the 2000s is that resolution funds are needed in order to address system-wide stress in the financial system. Prior to the crisis, some deposit insurance funds were expected to also act as a resolution fund with the potential to cover liabilities beyond insured deposits. However, the available resources were insufficient.

48 Visa and MasterCard stopped using Icelandic króna in the settlement of credit cards, thereby threatening to make it impossible to use credit cards issued by Icelandic banks. Their request for a blanket guarantee was not granted, but the CBI issued two letters of comfort to facilitate the use of Icelandic credit cards. In one letter, the CBI assured the credit card companies that the new banks, as issuers, would be able to settle their customers' debts. In the other letter, the CBI assured the credit card companies that foreign exchange would be provided so that debts in króna could be converted into foreign currency. If Visa and MasterCard had not accepted these assurances, the clearing of credit card payments would have seized up with drastic consequences for the Icelandic payment system. In the case of debit cards, all settlements were handled domestically and were therefore not at risk (CBI (2019e)). At the time of the crisis, all settlements of debit card payments were under the direct control of the CBI. This is no longer the case as settlement now takes place through large international schemes.

49 This was the case of Landsbanki and its UK branch, whose deposits could be transferred to an existing subsidiary of Landsbanki, which was also located in the United Kingdom. According to SIC (2010), the UK FSA had indicated that this change, which would have covered the deposits collected under the Icesave programme, could be completed in three months. This was however conditional on the transfer of sufficient assets and liquidity to the subsidiary to back up the deposits.

50 Given the considerable reduction in the size of the Icelandic banking sector since the crisis and substantial contribution requirements set in the aftermath of the crisis, ie, around 24–25 basis points per year, annual contributions may be lowered to 15 bp. This provision may be reversed if necessary.

Governance could also be improved by separating the two funds. In Iceland, the draft bill to establish the resolution fund is still under discussion in the Parliament.

The IMF programme

62. **The Icelandic authorities applied for an IMF programme to stabilise the economy and address balance of payments pressures.** In October 2008, with a full-blown banking and currency crisis underway, the Icelandic authorities approached the IMF for assistance.[51] The programme was launched shortly afterwards, with the Icelandic authorities signing the Letter of Intent (LOI) in November (IMF (2008a)). The stand-by arrangement amounted to SDR 1.4 billion (around USD 2.1 billion at the time), equivalent to 1,190% of Iceland's quota.[52] The IMF loan was matched with bilateral funding from other countries.[53] The IMF loan was to be disbursed in seven tranches over three years; each tranche had a term of five years with interest-only payments in the first two years.

63. **The programme lasted until 2011.** The LOI proposed a stand-by arrangement for two years until November 2010, but this was subsequently extended by one year until August 2011 due to the delay in its inception in 2008 (CBI (2010)). The sixth and final review took place in April 2011. The loan was repaid in 2015, ahead of schedule. Iceland was the first developed economy to seek IMF assistance in over 30 years, since the UK programme in 1976. In several respects, conditions in the Icelandic programme were less demanding than those applied in earlier programmes and, in particular, those applied to countries engulfed by the Asian Financial Crisis of the late 1990s (Thomsen, (2018)).[54] This partly reflected lessons learnt since that crisis, and partly the existence of more fiscal space in Iceland, given the country's solid public finances up to the start of the financial crisis.

64. **The part of the IMF programme related to the financial sector had two main components.** The programme supported the measures taken by the Icelandic authorities in early October 2008 and included in the Emergency Act, ie the depositor preference, the powers given to the Ministry of Finance to establish new banks and to provide them with capital if needed, and the powers given to the FME to take over and restructure financial institutions. The second component of the programme was to introduce

[51] In the first half of 2008, the CBI approached the Bank of England, the ECB, the Nordic central banks and the Federal Reserve Bank of New York concerning the possibility of entering swap agreements with them (Jännäri (2009)). As a precondition, some authorities suggested that the IMF conduct an analysis of the situation in Iceland. As a result, the IMF conducted an Article IV Consultation (IMF (2008b)) and a Financial Sector Assessment Program (FSAP) Update (IMF (2008c)) around mid-2008. Both reports were concluded prior to the IMF Board discussion on the stand-by arrangement for Iceland. While these reports described the risks facing the Icelandic financial sector as serious but manageable, neither of the IMF reports changed the views of the major central banks with which the CBI was in discussion. As a result, swap lines were agreed only with the central banks of Denmark, Norway and Sweden.

[52] The IMF Board's approval of the loan for Iceland was delayed. The Dutch and British authorities vetoed an IMF Board approval until the Icelandic government had agreed to guarantee the Icesave deposits (Jonsson and Sigurgeirsson (2016)). The other Scandinavian countries also expressed concerns about this unresolved issue, withholding their share of bilateral funding to the programme until an Icesave agreement could be reached. This generated uncertainties as to whether the programme was still financed. Because IMF rules requires that a programme be fully financed before approval, this uncertainty caused delays in the subsequent reviews of the programme (Thomsen (2018)). An outline agreement was reached in mid-November 2008, according to which Icesave deposits would be guaranteed and the IMF Board approved Iceland's loan application three days later. For more on the Icesave dispute, see Box 4.

[53] Scandinavian countries contributed USD 2.5 billion, the Faroe Islands USD 50 million and Poland USD 200 million. The loans from the Scandinavian countries had a term of 12 years, with interest-only payments for the first five years. Both the loans by the IMF and the countries carried a 2.75% interest rate spread – the IMF loan over SDR interest rates, the Scandinavian loan over Euribor. All loans were repaid prior to maturity.

[54] For instance, automatic stabilisers were allowed to play out, thus softening the impact of the adjustment on the private sector, and structural conditionality was not included in the programme.

capital controls, something that the Icelandic authorities had not included in their first response. The controls were deemed necessary to stem capital outflows and stabilise the exchange rate. The controls were supposed to be removed at the end of the programme, but were retained for longer, as discussed in the subsection on the balance of payment.[55] These were capital controls, not exchange controls, and most current account transactions were not subjects to them. The controls did not affect the purchase of foreign currency for the imports of goods and services to Iceland, and scheduled repayment of foreign loans was permitted. Current account transactions related to external trade remained permissible in Iceland, while the controls placed broad-based restrictions on foreign exchange transactions and movements of capital between countries, including investments in any type of foreign asset (CBI (2012)).[56]

65. **The IMF programme lent credibility to Iceland's crisis response and stabilised markets.** The endorsement of the measures in the Emergency Act by the IMF substantially increased their credibility, putting its seal of approval on the approach taken by the Icelandic authorities. It also reduced room for these policies to be reversed as a result of the political and institutional debate in Iceland.[57] In addition, it enhanced the internal consistency between financial sector, monetary and fiscal policies (Baldursson and Portes (2018)).[58] The use of capital controls, although initially controversial, helped stabilise the exchange rate and created space to deal with the balance of payments disequilibrium in an orderly manner, so that monetary policy could support the domestic economy, allowing the domestic financing of the fiscal deficit and the cleaning up of domestic balance sheets. Over time, it also became clear that the controls gave the Icelandic authorities an additional tool to manage the repayment of external liabilities (see subsection on the balance of payments).

66. **The programme became an essential part of the crisis management strategy of the Icelandic authorities.** Without it, some of the policies may not have been implemented in the same way, or some of the measures may have lacked consistency. Perhaps more importantly, it would have been difficult for Iceland to generate confidence among its citizens and international counterparts in the recovery strategy without the programme. Moreover, the programme itself provided capacity and resources that could be used, if needed. However, it is important to recognise that many of the critical features of the financial sector strategy preceded the start of the programme. Capital controls were the main exception. Altogether, the programme's value lay mainly in its endorsement of the strategy and in fostering commitment to it.

55 For a discussion of the complexity of removing the controls, see eg Baldursson and Portes (2013b) and IMF (2015).

56 For instance, the controls applied to transferable financial instruments issued in foreign currency and real estate or other assets in foreign currency, whether or not these assets were sold by residents or non-residents. On the other hand, current account operations were unrestricted, although they were subject to an obligation to repatriate foreign currency.

57 For instance, Baldursson and Portes (2018) describe how the split of the three major banks into a foreign and domestic component was not supported by all of the Icelandic authorities, and the IMF support for the split was essential to ensure that it was not undone at a later stage.

58 One element possibly detracting from the credibility of the programme was the delay in its start, due to the unresolved dispute over the Icesave accounts (Jonsson and Sigurgeirsson (2016)). However, this may have affected its credibility more in the eyes of the Icelandic authorities and Icelanders than in those of foreign observers.

Box 5

Capital controls in the IMF programme for Iceland

The use of capital controls was an unorthodox element of the IMF programme, given the Fund's traditional stance on their use.① In Iceland, specific features may have justified using such controls. Since at least 2005, over half of non-financial firms' new loans were denominated in foreign currency and a large part of lending to households was linked to the consumer price index, which, in a small open economy such as Iceland, is strongly correlated with the exchange rate.

By October 2008, the króna had already lost 50% of its value since the beginning of the year, the annual inflation rate was close to 20% and official currency reserves had already fallen significantly. Moreover, with all major banks either failing or under extreme stress, banks' cross-border payments had frozen by the time capital controls were established. At least for some time, such payments could only be conducted as transactions over the balance sheet of the central bank (CBI (2008b)). Even in 2017, when payment conditions had returned to normal, only seven channels connected Iceland to the international financial system, ie via the central bank, four commercial banks and two payment institutions (Benediktsdottir et al (2017)). This made the controls easier to implement and monitor than it would have been in countries with a more complex financial system.

Capital controls were introduced to address the balance of payments imbalances and exchange rate instability, due, inter alia, to the large foreign holdings of króna-denominated assets that had been used for carry trade transactions as mentioned elsewhere in this section. A further drop in the exchange rate would have left many more firms and households with unserviceable debt levels. In addition, the resulting reduction in the purchasing power of Icelandic companies and households would have been politically difficult and could have created an inflationary spiral.②

Capital controls would, however, impose at least some costs on the Icelandic economy. Some criticised them because they alter the cost of capital, to the detriment of long-term investments; introduce distortions in the economy; erode investors' trust and transfer significant new discretionary powers to the government, such as the creation of exceptions to the controls for specific sectors or companies (Danielson and Arnason (2011)). Moreover, while the programme envisaged that capital controls would be removed promptly once certain conditions had been met,③ their removal and the full liberalisation of the capital account was almost completed only in 2017. In addition, loopholes were regularly found in the controls, which had to be tightened several times. The most important revision was made in March 2012, when restrictions were imposed in order to limit the possibility of cross-border transactions by the estates of the failed banks.

① The Rules on Foreign Exchange were first introduced in November 2008 (for an English translation of the Icelandic original, see CBI (2008c), and were modified several times to tighten loopholes (eg CBI (2017)). In broad terms, these controls prohibited any transfer capital out of the country (eg investment in securities denominated in foreign currency was prohibited; borrowing and lending between domestic and foreign parties for purposes other than cross-border transactions with goods and services was limited in size and could not be for a period shorter than one year; and it was prohibited to act as a guarantor or assume liability for payments between domestic and foreign parties, or to transact derivatives contracts involving the Icelandic króna against a foreign currency). Moreover, all foreign currency acquired by domestic parties, either for goods and services sold or acquired in another manner, was required to be submitted to a domestic financial undertaking within two weeks (surrender requirement). ② See IMF (2009), where some key preconditions identified at the start of the programme to gradually remove capital controls were "credible macroeconomic stabilisation policies (to reduce country risk and exchange rate risk); attractive returns (to give investors an incentive to remain in the króna); strong reserves and a good outlook for the balance of payments (to limit any near-term volatility after each step); greater financial system stability and adequate supervision (otherwise risks of financial and currency stability could be magnified); and fiscal stability (confidence that the government will be able to continue to issue and roll over debt in adequate volumes and at sustainable interest rates)." In practice, the "good outlook for the balance of payments" condition was one of the most difficult to fulfil without countervailing measures regarding the overhang of offshore króna and the estates of the old banks. Building consensus for measures that would be sufficient but did not result in the materialisation of major legal risks was complex and took time. ③ See Thomsen (2018) for an illustration of how far the IMF itself had moved away from studying capital controls as a possible policy tool in crisis situations.

(continued) Box 5

While capital controls had not been part of the mainstream policy toolkit,④ their use did not block the country's access to capital markets for long. However, Iceland's return to international capital markets, which was achieved as early as 2011, would have been more difficult without the credibility and funding that the IMF provided. Moreover, Iceland's capital controls were somewhat atypical, both because the Fund explicitly supported them and because the underlying debt that needed to be restructured under the cover of the controls was purely private.

④ The composition agreement with foreign creditors took place in 2015, before the capital controls were fully removed.

Restructuring private debt

67. **The shocks experienced during the 2008–09 crisis explain the high levels of domestic non-performing loans (NPLs) that the new banks had to bear.** GDP contracted by 10% between 2008 and 2009 and unemployment rose from 1% in 2008 to more than 9% two years later.[59] The Icelandic króna lost close to half its value during 2008 against the dollar and euro. Prices rose by 30% between 2008 and 2011 on aggregate. Given a long history of high inflation, a large part of households' and firms' debt was indexed to inflation, resulting in a proportional increase in the nominal amount of inflation-indexed debt. A significant share of private debt was linked to a foreign currency. As the króna lost value against other currencies, outstanding principal amounts denominated in króna increased, exceeding the amounts initially borrowed.[60]

68. **Following the separation of domestic and foreign exposures, the balance sheets of the "new banks" initially included many NPLs.** On average, about 70% of the domestic loan portfolios were in arrears at the time of the partition (Jonsson and Sigurgeirsson (2016)). Consequently, during the first years of their existence, the new banks had to concentrate on addressing these legacy issues.

69. **The conditions under which Icelandic corporate and household loans were transferred to the new banks created incentives for active restructuring.** In particular, the average discount at which claims on households and corporates were transferred to the new banks was around 50%.[61] This "deep discount" was high enough to create strong incentives for the new banks to restructure corporate and household debts. Initially, banks were left to restructure the debts of their own clients. However, as each bank had its own methods and strategy, there was a considerable lack of uniformity. As a result, the government stepped in from 2010 onwards to ensure that financial institutions applied the same general principles to all credit problems, and the treatment of corporate debts was differentiated from that of household debts. Also, from 2010 onwards, a series of court decisions shaped restructuring efforts.

70. **With some limited exceptions SMEs,[62] corporate debt continued to be restructured informally by the banks using a "London Approach".**[63] Informal case-to-case workouts were based on

59 According to the Icelandic Directorate of Labour, registered unemployment was at its lowest (0.8%) in the last quarter of 2007 and peaked (9.3%) in February and March 2010.

60 These two effects were intertwined, as the pass-through of changes in exchange rates to inflation has traditionally been high in Iceland (Petursson (2008)).

61 The discount rates varied across asset classes and banks as discussed in more detail in the subsection on valuation.

62 SMEs were defined as corporates with outstanding debt below ISK 1 billion (or EUR 7 million). They could apply for debt relief as part of a fast-track procedure if they could demonstrate positive cash flows arising from future activities. Debt could be written down to the net present value of future earnings or to the amount that creditors could expect to recover by seizing and selling the assets.

63 The London Approach refers to the key principles governing informal workouts, as first promoted by the Bank of England in the 1970s.

the common interest that the borrowing firm and its creditors may have in working together to resolve the firm's financial difficulties rather than entering into court receivership or liquidation procedures. Restructuring plans were based on the assumptions that the firm was viable and that a negotiated and informal workout would keep losses to a minimum. The key part was the creditor's review of the firm's financial position, business prospects and sustainable debt capacity to determine its viability. If deemed unviable by the creditor banks, as was the case for most holding companies, the firms were put into liquidation.

71. **Household debt was reduced by a combination of government measures and court decisions, with additional emergency measures taken by the government.** The government first took emergency measures to limit foreclosures and prevent a housing market meltdown, complemented by initiatives providing longer-term relief. This was followed by a series of Supreme Court decisions addressing currency-linked loans and by further government measures to reduce the principal of inflation-indexed loans. Emergency measures included a moratorium on foreclosures, a temporary suspension of debt service for exchange rate and consumer price index-indexed loans and debt rescheduling (or payment smoothing) for these loans. About half of all eligible households took advantage of payment smoothing. For programme participants, the average debt service was reduced by 15–40%.

72. **Longer-term relief measures were implemented in 2011.** The two main measures were the so-called "110% route", which applied to borrowers with over-mortgaged housing, and payment mitigation for individuals. The first measure allowed for the write-off of outstanding balances on housing debt that exceeded 110% of the value of the property, subject to limits. The second measure, which was administered either by the lending bank or by a new debtor's ombudsman, allowed for a payment mitigation period of one to three years, allowing borrowers to postpone their payments and giving them time to adapt their debts to their payment capacity.

73. **A series of Supreme Court decisions on currency-linked loans in 2010 and 2012 also alleviated household debt burdens.** These decisions declared currency-linking illegal, therefore reducing the outstanding principal amounts. The court's initial treatments were also complemented by a second set of rulings from 2012 onwards, whereby banks were forced to continue applying the loans' contractual interest rates as derived from the foreign currency although the corresponding loans were no longer currency-linked and were deemed to be denominated in króna (see Box 6).

74. **Following a Parliamentary Resolution passed in June 2013, the government took debt relief measures for inflation-indexed housing mortgages.**[64] The first objective was to correct the initial inflation assumptions, which were overtaken by higher than expected inflation between December 2007 and August 2010. The second was to encourage households to convert their indexed loans to non-indexed loans in return for a downward adjustment of the principal. The total scope of the debt relief programme was estimated at ISK 150 billion, spread over three years.

75. **The debt relief programme consisted of two measures.** The first allowed the writedown of part of the outstanding principal of inflation-indexed housing mortgages used to purchase real property for personal use. The amount written down corresponded to a 13% adjustment vis-à-vis the CPI used for indexation. The maximum writedown of principal was limited to ISK 4 million per household (around EUR 27,000 at the time). The second measure was a tax exemption. It allowed households with housing mortgages to use payments that would otherwise go to a private pension fund and to pay down their housing mortgages without being subject to income tax. To this end, the Ministry of Finance waived income tax on up to 4% of the earner's wage, for the employee's contribution, and up to 2% of this wage for the employer's contribution, if, instead of going to the private pension fund, the payments were used to repay the principal of housing mortgages. The measure applied to persons who had taken on a housing mortgage loan prior to 1 December 2013. Households with no investment yet in the property market could

64 The objectives of the debt relief measures and descriptions of the measures themselves are presented in greater detail in the report on reduction of the principal of housing mortgages (Prime Minister's Office (2013)).

also set aside part of their private pension contributions, to be used in future real-estate purchases, and enjoy the tax benefit. The maximum tax exemption for using private pension savings to repay the principal of housing mortgages was set at ISK 0.75 million (EUR 5,000) per household and year for three years.

76. **By the end of 2017, household and corporate debt levels, which had reached 350% of GDP in 2008, had more than halved, with foreign currency liabilities being greatly reduced.** According to the CBI, households no longer run any significant currency mismatches as of end-2017. The decline in the private sector's (corporate plus household) debt-to-GDP ratio was due to multiple factors. In addition to debt writedowns, court decisions and government-initiated debt relief measures also played a role, as did increased savings from households and rising GDP from 2011 onwards. Most of the corporate debt restructuring had taken place by the end of 2012.

Box 6

Reducing debt burdens in FX loans: court rulings and government measures 2010–12

The Supreme Court established a key principle in June 2010. Its initial verdicts stated that two car leasing agreements in foreign currency were, in fact, loans in króna. The court also established that, as currency-linking was a breach of the law on interest and indexation, it was therefore illegal. As a result, lenders could not require payments in accordance with the indexations and the loans had to be recalculated (and outstanding principal amounts reduced) as if they had been granted in króna. Similar verdicts in the following months applied to other types of loan, such as mortgage loans or loans to companies.

In practice, the initial verdicts did not clarify whether the interest rate clauses of currency-linked loans – with rates significantly lower than those for loans granted in króna – remained valid and, if not, what interest rates should apply. By the end of 2010, the government passed a bill through Parliament that declared foreign currency-linking illegal,① provided for the recalculation of principal as if the loan had been granted in króna and required the use of the lowest domestic rate offered by banks, in line the FME/CBI recommendation.

The law could be seen as a compromise whereby the outstanding principal of loans was lowered but where banks could also retroactively charge significantly higher domestic rates.

In February 2012, another Supreme Court judgment stated that, by way of derogation to the law, if interest had been paid off and the borrower expected that the payment was final, the lender could no longer require higher interest payments. In practice, this meant that the contractual foreign (and much lower) interest rate applied to the loan even though it was now deemed to be in the domestic currency and not indexed.

The derogation applied to most foreign currency-linked loans to households and SMEs, with the FME estimating at the time that the total loss for banks was EUR 1.1 billion.

The new banks were able to absorb these losses because the value of the transferred assets turned out to be higher than first reported on their balance sheets, thanks to the very conservative initial valuations. In addition, the interest rates applicable in 2008–09 that were used to discount the future cash flows from these loans turned out to be much higher than the effective rates from 2010 onwards. Finally, boosted by tourism, the economy recovered faster than expected.

① The EFTA surveillance authority found these arrangements inconsistent with the EEA agreement and they were later abolished. FX loans to consumers were later subjected to strict criteria, according to Act 36/2017.

Addressing balance of payments problems

77. **The banking crisis contributed to a balance of payments crisis.** Iceland's economy entered a recession in early 2008, dramatically weakening the króna in the first quarter. The banking crisis exacerbated the problem. Icelandic banks had established numerous cross-border links in the years leading up to the financial crisis. They had acquired corporate entities (both banks and non-banks) abroad. They had also funded themselves by issuing securities abroad and had lent in foreign currency to Icelandic

companies (both abroad and domestically) and to households. The approach taken in the resolution of the Icelandic crisis reflected the fact that foreign investors held considerable amounts of domestic assets denominated in króna. This was in addition to significant foreign holdings of króna-denominated-assets resulting from the carry trade in the preceding years. As a quick and uncontrolled repatriation of these positions would have severely destabilised the balance of payments and the exchange rate market, capital controls were introduced (see Box 5). A devaluation of the króna could also have had severe repercussions on the ability of banks' customers to honour their debts, when outstanding debt was fixed in terms of a foreign currency while their income was in the local currency.

78. **Two categories of assets were especially problematic, as they were large and highly volatile.** The first category was the stock of króna-denominated deposits and securities held by foreigners, ie króna offshore positions following the introduction of capital controls. The "glacier bonds" mentioned in Section 2 are an example of such exposures. The overall size of these positions peaked at 40% of GDP (CBI (2019f)). This would have put substantial pressure on the exchange rate had foreign investors attempted to unwind them rapidly. The second category was the part of claims on the estates of the failed banks that were backed by domestic assets. The (mostly foreign) creditors were likely to want to dispose of their investments, in order to divest from Iceland, irrespective of the currency of denomination. The distribution of króna-denominated assets from the estates would also have put pressure on the already strained foreign exchange market. The aggregate size of this balance of payments overhang was close to 70% of GDP.

79. **The treatment of the balance of payments overhang was a prerequisite for the removal of capital controls.** Finalising the conditions for the split of the three major banks into old and new banks took almost one year, during which time uncertainty about the value of króna-denominated claims was very high. Once the failed banks' estates started to repay investors' claims, managing the size of the related outflows, and more generally, re-establishing the convertibility of offshore króna, became a critical part of finding a solution to the the balance of payments overhang. Important amendments were made to the Foreign Exchange Act so that payouts to the estates' creditors were no longer exempt from capital controls.[65] As long as capital controls were in place, the Icelandic authorities could decide on the pace of the conversion of króna into foreign currency and the timing of the distribution of foreign currency-denominated recoveries from the estates. An abrupt removal of the controls would have triggered destabilising capital outflows, not only by the above-mentioned foreign investors but also by Icelanders themselves, given the low confidence in the Icelandic economy at the time (Baldursson et al (2017)). Accordingly, the removal of the controls needed to be managed carefully, and a strategy to reduce the overhang was developed by the Icelandic authorities over time.

80. **One early measure to deal with the overhang was a series of auctions by the CBI.** The purpose of the auctions was to reduce the amount of offshore króna, while preserving the CBI reserves. Between June 2011 and February 2015, the CBI held 23 auctions.[66] These auctions had two parts: in the first, the CBI would buy foreign currency against króna; and in the second, which was in most cases conducted in combination with the first, it would sell foreign currency for designated offshore króna. Overall, the amounts of currency bought and sold in the two parts were similar and at the same price (excluding a small margin) so that the reserves position was largely unaffected. Sellers of foreign currency in the first leg of the auction were required to re-invest in long-term exposures to the Icelandic economy

[65] Capital controls were in fact tightened several times, most importantly in March 2012 when strong limitations were imposed on cross-border transactions initiated by the estates of the failed banks (CBI (2012), Baldursson et al (2017)).

[66] In 2010, before the auctions started, the CBI had cleared around ISK 130 billion (out of the roughly ISK 600 billion overhang) in bilateral transactions (CBI (2019f)).

or buy a 20-year, index-linked treasury bond (Jonsson and Sigurgeirsson (2016), CBI 2019f)).[67] The mechanism was intended to intermediate króna demand and supply at rates close to the onshore price, without going through a market-clearing process. The underlying assumption was that there would be some parties willing to sell otherwise trapped króna at a discount and others willing to buy them at a favourable rate, albeit with restrictions.

81. **The backlog of offshore króna was only partially cleared through the auctions for several reasons.** By February 2015, the auctions had reduced the overhang of offshore króna by half, leaving around EUR 2 billion outstanding.[68] As expected, the most volatile part of the offshore króna holdings exited first, but not all owners of offshore króna were as impatient. Some preferred to hold on to their claims in order to continue collecting high returns, especially when compared with the low yields elsewhere. They may have also expected an appreciation of the market value of the króna after the liberalisation of the capital account. In addition, the auction mechanism was not straightforward, as the amount purchased and sold was not predetermined, but depended on supply and demand in both legs of the auction. Moreover, through the auction period from 2011 to 2015, and especially from 2014 onwards, the króna offshore rate strengthened, thus making it less attractive to dispose of these positions. However, a key consequence of the auctions was that the ownership of the offshore króna positions became more concentrated, with hedge funds holding most of the outstanding positions after other investors had exited the market.

82. **A more forceful approach was taken in 2015, when a two-track strategy for liberalising the capital account was announced.** In June, the Ministry of Finance announced how the offshore króna and the króna holdings of the failed banks' estates would be treated. Different approaches were envisaged for the two asset classes (Ministry of Finance and Economic Affairs (2015)). The provisions attempted to strike a balance between, on the one hand, removing capital controls and returning to normal cross-border transactions and, on the other, the need for this removal to be gradual in order to avoid undue pressure on the balance of payments.[69]

83. **The problem of offshore króna was solved in 2016–17.** By that time, the CBI could use the foreign exchange reserves that it had accumulated to buy offshore króna.[70] The implementation of the exit strategy, as described in Ministry of Finance and Economic Affairs (2015), started in May 2016.[71] The strategy initially envisaged that three exit options would be offered to holders of offshore króna.[72] Unlike earlier auctions, this took the form of an auction in which the CBI effectively pre-set prices for the króna. Another difference was that this time there were significant holdouts, primarily hedge funds. This was

67 The rationale for offering long-term exposures in the auction was to replace offshore króna, which were highly volatile for various reasons, with long-term investors. In order to guarantee that the sellers of foreign currency were truly long-term investors, they were barred from selling their assets for five years.

68 At the beginning of the crisis offshore balances were around ISK 300 billion or roughly 40% of GDP. From 2011 to 2015, ISK 175 billion was cleared through the auctions, leaving offshore króna equivalent to 15% of GDP in value (CBI (2016)).

69 A special bank tax was levied on all banks, including the old banks in a winding-down process, in 2014. This bank tax amounted to 1.2% of GDP for the old banks combined (Baldursson et al (2017)). The payment of this tax was unrelated to whether the estates would decide to pay the stability tax or reach a composition agreement, as explained later in this subsection.

70 The amount that remained after the 2016 auction and the bilateral deals conducted during the first half of 2017 were much smaller. By an Act of Parliament, holders of this amount were allowed to exit their positions through the onshore market in early 2019.

71 In 2015, capital inflows started to appear in the onshore market. Authorities imposed a reserve requirement on these inflows to prevent a new overhang from building up prior to a full liberalisation of capital outflows.

72 These were a currency auction, an exchange of their positions into long-term government bonds, or locking their positions into non-interest-bearing accounts for a specified period. The third option was eventually dropped. For more details of the auctions, see Gudmundsson (2016).

possibly because the exchange rate offered was too low, especially since economic conditions in Iceland had improved significantly by then. In addition, the fact that the assets held offshore were rather liquid also seems to have encouraged investors to hold out in the hope of better terms later.[73] In March 2017, the central bank reached an agreement to purchase a large share of the remaining offshore króna assets at an exchange rate that was 15% below the official onshore rate.

84. **The balance of payments overhang caused by assets in the old banks was dealt with through a composition agreement, concluded in 2015.** In that year, and in order to implement the measures announced in June by the Ministry of Finance, a law was passed subjecting banks still in a winding-down process by end 2015 to a stability tax of 39% on the book value of assets, subject to certain deductions. However, the creditors of the old banks were provided with an alternative. They could enter into a composition agreement by the end of 2015, subject to defined stability criteria and CBI approval, set out to reduce the risk that payouts to creditors would have an adverse effect on the balance of payments.[74] These agreements implied haircuts on the value of the assets held by the creditors of the old banks. The size of the haircuts, which were called a "stability contribution", was to be determined in the negotiations with the CBI and reflected the relative share of króna-denominated assets in each of the old banks. Part of the understanding with the creditors who would join the composition agreement was that they would refrain from litigation against the Icelandic state. In turn, they would be granted exemptions from the capital controls. Composition agreements were reached before the set deadline. All in all, the non-residents' share of the stability contributions amounted to about 17% of GDP (CBI (2016)).

85. **The composition agreements were slightly different from bank to bank, but there were common features.** Following the composition agreement, creditors were able to monetise their stakes, which they could sell in the foreign exchange market. In addition, the old bank would become a conventional limited liability company following completion of the winding-down process, with claims transformed into bonds and equity. This allowed the limited liability company replacing the old bank to operate as a normal holding company. While in all three cases the creditors accepted the composition agreement and paid a stability contribution rather than having to bear the stability tax, the stability contributions varied for each bank. According to Baldursson et al (2017), the haircuts were always lower than the planned stability tax. A major advantage of the stability contribution over the stability tax was legal certainty and prompt closure of the winding-up process. This is because the stability tax could be legally challenged as an expropriation – which would possibly have required drawn-out litigation with uncertain outcomes. For the same reasons of expediency and legal certainty, the Icelandic authorities were likely to prefer the stability contribution even if returns would have been higher with a stability tax.

86. **An unintended consequence of the composition agreement was that one of the new banks became state-owned.** Among the assets of the estates of the old banks were shares in the new banks, as a consequence of the split engineered in 2008. These shares could be used by the estates as part of their payment of the stability contribution. This was done by one bank, the old Glitnir, which used its shares in the new bank, Islandbanki, to comply with the stability contribution.[75]

87. **Capital controls on domestic residents were lifted in 2017.** This was the final major step in lifting of capital controls and, although it resulted in some weakening of the króna, financial stability was

[73] Around ISK 100 billion was cleared in 2016 and ISK 112 billion in 2017. Exemptions were made regarding ISK 24 billion through the period from 2010, and around ISK 52 billion remains in the offshore asset class, although all restrictions were removed in early 2019.

[74] The criteria are spelled out in CBI (2015). See Baldursson et al (2017) for a discussion of the stability tax rate versus the stability contribution rates.

[75] Landsbanki became publicly owned as early as 2008, although in this case the driver was the priority claims from the Icesave accounts abroad, for which the Icelandic state was the counterpart. Kaupthing remained privately owned.

not affected. With some minor exceptions, capital controls were finally lifted in April 2019. From that time, the remaining offshore króna could be freely exchanged for foreign currency.[76]

Overhaul of regulation and supervision

88. **Since 2008,[77] a "sea change" has taken place regarding regulation and supervision.** As explained in the rest of this subsection, requirements have become more stringent and supervision more intrusive. While similar overhauls have taken place in many other jurisdictions since the Great Financial Crisis, few have been as systematic and comprehensive. Audits conducted in 2011 and 2014 assessed the FME's compliance with the Core Principles for effective banking supervision and underline how urgently the "sea change" was needed. Both audits showed that the FME was non-compliant with at least half of the Core Principles.[78] Accordingly, the core piece of legislation regarding credit institutions and investment firms (Act on Financial Undertakings (No 161/2002)) has been amended close to 40 times since 2008, which gives a sense of the scope and the extent of changes made. After the crisis, the FME prioritised investigations related to activities and business conduct at the banks in the run-up to the crisis (FME (2009, 2012)). This led to a considerable number of indictments and sentences for various infringements, as discussed in Box 7.

89. **Four features of the Icelandic crisis largely explain the scope of the overhaul.** These were excessive credit growth at the three largest banks, their disproportionate size when compared with the state's resources, the high share of foreign currency-denominated assets and liabilities on bank balance sheets and the authorities' inability to determine whether the banks were temporarily illiquid or insolvent when the crisis struck. Financial systems in a number of countries also exhibited excessive credit growth and their size had by 2008 also become a multiple of their GDPs. However, Iceland was in a league of its own, in that the combined assets of its big three banks were 10 times larger than the country's GDP. As a result, the CBI and the Ministry of Finance lacked the resources to provide sufficient foreign currency liquidity or absorb the banks' losses.

Enhanced resources and improved coordination across authorities

90. **Since the crisis, supervisory resources have more than doubled and the FME's discretionary powers have become stronger.** Up to 2007, the FME lacked resources and discretionary powers, was insufficiently proactive, and its supervision was generally weak.[79] It had limited scope for interpreting regulations and a tendency to apply regulations literally, especially in cases where the burden of proof lay with it. It also had limited powers to sanction, particularly with regard to disciplinary fines. Since 2007, staff numbers have roughly doubled, to 114 full-time equivalents (FME 2007, 2019)). Significant efforts have been made to develop IT and analytical tools to increase efficiency. Supervisory powers have been increased, with the FME able to impose fines of up to ISK 800 million (up to 16 times the pre-crisis level) or up to 10% of the financial institution's turnover.

[76] CBI (2018) discusses the liberalisation of the capital account at the end of 2017. Following the further liberalisation of the capital account in April 2019, some form of capital controls remain in place. These exceptions are presented in CBI (2019c).

[77] See Jännäri (2009), SIC (2010) and Bingham et al (2012) for more details.

[78] The 2011 audit was conducted by a consultant hired by the Icelandic government and assessed the regulation and supervision in Iceland against the 2006 version of the Core Principles (Promontory Financial Group (2011)). It showed that the Iceland was materially non-compliant with 13 Core Principles out of 25. The 2014 audit was conducted by the IMF with Iceland's compliance being assessed against the Core Principles as revised in 2012. Iceland was materially non-compliant with 13 Principles and largely compliant with nine others (out of a total of 29). See FME (2014, 2015).

[79] For a more general discussion of the consequences of weak supervision, see Viñals and Fiechter (2010).

91. **The FME merged with the CBI in January 2020 under the latter's name.** Suggested originally in the Jännäri Report (Jännäri (2009)),[80] the merger is viewed as an additional step towards increasing the efficiency of the financial authorities. The aim is to strengthen and streamline macroprudential policies and improve information transmission and coordination between the different functions. It also aims to limit conflicts of interest by allocating the decision powers to three policy committees, on monetary policy, financial stability and financial supervision.

92. **Since 2014, the Financial Stability Council (FSC) is the forum for financial stability governance.** The FSC is responsible for formulating financial stability policy, assessing economic imbalances and system-wide risks, and defining the measures, other than monetary policy instruments, that are considered necessary to ensure financial stability (Government of Iceland (2020)). It was established to better coordinate financial stability monitoring. Up to the financial crisis, five public administrative bodies, including three ministries and two financial authorities, had been involved in regulation and financial stability.[81] As part of the reform, the number of ministries in the FSC was reduced to one, ie the Ministry of Finance and Economic Affairs, whose minister chairs the FSC. Following the merger of the CBI and the FME, the institutional structure concerning financial stability was again changed. Responsibility for financial stability policy lies with the CBI's Financial Stability Committee, which includes the governor, three deputy governors and three external members appointed by the Minister of Finance and Economic Affairs (CBI (2020)).

Stronger capital and liquidity regulation

93. **Regulation has been strengthened by introducing reforms based on international standards and through domestic initiatives**. Since 2015, European legislation (most of the CRD IV Directive and of the CRR regulation) has been implemented and it includes elements of super-equivalence.[82] Capital requirements for Icelandic banks are high, especially for the three largest banks, as shown in Graph 5. Minimum capital requirements (Pillar 1 + Pillar 2) range between 10.2% and 12% of risk weighted assets (RWAs) while total capital adequacy requirements (capital buffers included), range from 18.8% to 20.5%. At end-2018, the capital level of each bank exceeded 22% with the highest at 24.9%. In addition, Icelandic banks have leverage ratios around 14%, so that the minimum requirement of 3% is not a constraint.

94. **All banks operate under the standardised approaches.** To date, banks headquartered in Iceland use only the standardised approaches for measuring credit, market and operational risk because no bank has yet been authorised to use its internal models for regulatory capital requirement purposes. Standardised approaches generally deliver higher risk weights than those based on internal models. The composition of Icelandic bank loan portfolios, which include a relatively lower proportion of residential mortgages[83] than in many other countries, also explains the higher Pillar 1 risk weights.

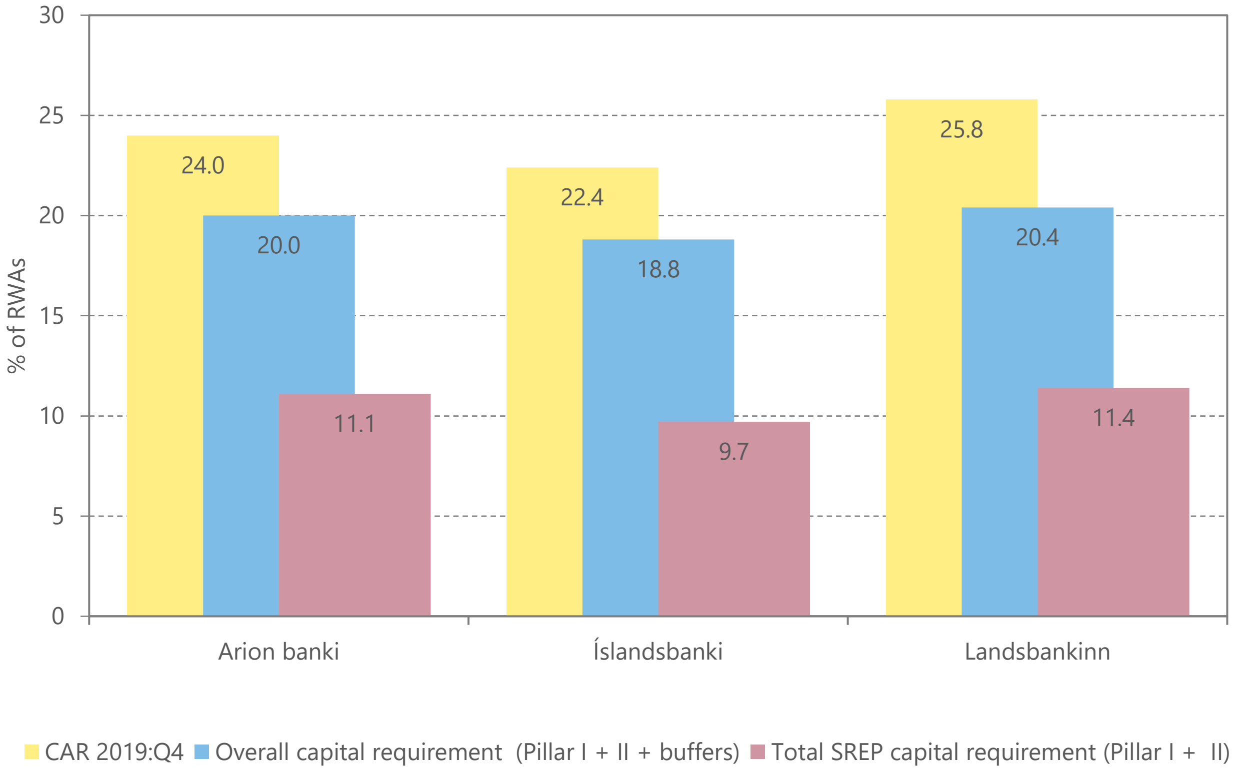
[80] In addition to this report, the merger was recommended in the "Group of Three" in 2012 (see Bingham et al (2012)) and by the IMF in the context of the programme.

[81] These included the Prime Minister's Office, responsible for legislation on the central bank, the Ministry of Business Affairs, responsible for financial sector legislation, the Ministry of Finance, the CBI and the FME. In 2017, the portfolio of the central bank moved again from the Ministry of Finance And Economic Affairs to the prime minister, while financial regulation and financial stability issues remained at the Ministry of Finance.

[82] The international capital requirements are based on the three pillars, with Pillar 1 referring to the minimum capital requirements, Pillar 2 including the process for assessing and setting additional and firm-specific capital requirements and Pillar 3, which includes public disclosure requirements. In addition, the Basel III framework includes capital buffers, capital backstops and two liquidity standards: the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Requirement (NSFR).

[83] Residential mortgage exposures, if conservatively underwritten and subject to specific conditions, can attract lower risk weights than other types of exposure under the standardised approach. Unlike other European countries, where commercial banks dominate residential mortgage lending, in Iceland both pension funds and the Housing Finance Fund also extend mortgages to households and have a significant market share.

Graph 5: Capital requirements for the three largest "new" Icelandic banks (end of 2019)



Arion banki is the new bank originating from Kaupthing, Íslandsbanki is the new bank from Glitnir and Landsbankinn is the new bank from Landsbanki Íslands.

Source: FME; bank financial reports.

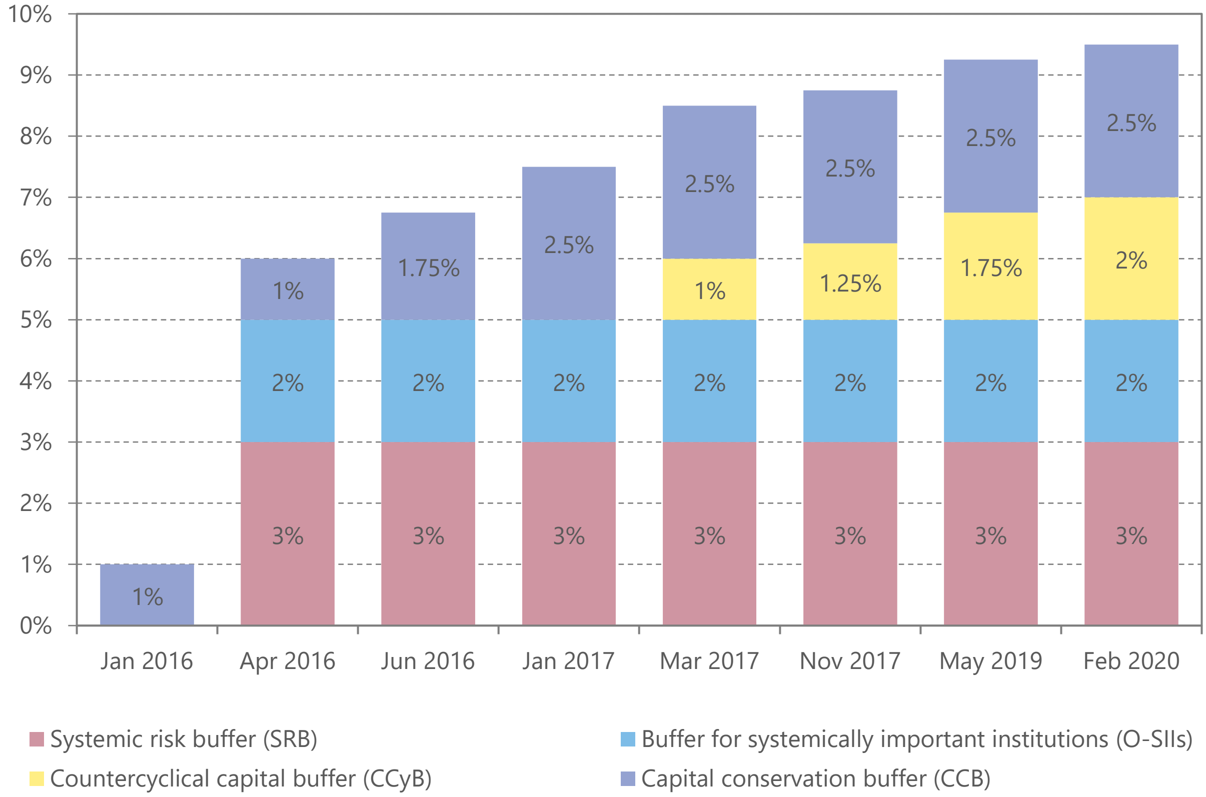
95. **Pillar 2 minimum requirements also explain the high capital requirements.** The Pillar 2 requirements are bank-specific and are added to the 8% Pillar 1 minimum capital requirement, with each bank's additional capital requirement reflecting its risk profile (see Graph 5). The Pillar 2 minimum requirements range between 2.2 and 4% of risk-weighted assets for the three largest Icelandic banks, all of which are commercial banks.[84] As in the EU, these requirements are determined on a yearly basis and are one of the outcomes of the Supervisory Review and Evaluation Process (SREP). The Pillar 2 requirement of each bank is publicly disclosed by the FME.

96. **Four capital buffers address macroprudential issues.** The capital conservation buffer (CCB) has been set at 2.5% since January 2017. The three other buffers have been determined by the FME based on recommendations by the Financial Stability Council.[85] Currently, these include a 3% systemic risk buffer (SRB) and a 2% buffer for the three Icelandic domestic banks that are systemically important (O-SIIs). The SRB applies to the domestic exposures of all deposit-taking institutions. Since March 2017, a countercyclical capital buffer (CCyB) is also required and has gradually been increased since then. In February 2020 the CCyB stood at 2% (FME (2019)). Graph 6 summarises the buffers for the three systemically important banks.

[84] However, Pillar 2 requirements can be significantly higher depending on the bank's risk profile and especially if the bank is specialised, operates in capital markets and has income that may be more volatile as a consequence.

[85] As of January 2020, the Financial Stability Committee of the CBI determines the buffer rates.

Graph 6: Capital buffers for systemically important banks



Source: FME.

97. **Two liquidity and funding ratios derived from the international standards have also been introduced.** These are the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR).[86] In order to limit FX risks on the balance sheets of the banks that played an important in the build-up to the financial crisis the banks also have to fulfil LCR and NSFR requirements in foreign currency. In both cases the requirements apply to the total of foreign currency positions. Icelandic banks have largely exceeded these minimum requirements since these have been implemented.

98. **Further regulatory changes are planned or under way.** These cover mainly the transposition into Icelandic legislation and regulation of EU legislation. This includes elements of the Capital Requirements Directive (CRD IV), in particular those on consolidated supervision and passport notification and transposition of the Bank Recovery and Resolution Directive (BRRD), including the minimum requirement for own funds and eligible liabilities (MREL), and the Deposit Guarantee Directive (DSG).

Licensing, bank governance and large exposures reforms

99. **Requirements regarding licensing and bank ownership have been strengthened.** Up to 2008, the FME had limited powers to identify the real owners of a bank, and whether they were fit and proper. There were cases where, despite its doubts, licenses could not be denied. Since the crisis, full transparency of ownership has become a prerequisite for authorisations or to retain existing licenses, with the FME also

[86] The LCR requires a bank to maintain a buffer or liquidity reserve of highly liquid assets to survive a 30-day period of stressed outflows. The NSFR sets a minimum standard for stable funding with a one-year horizon.

assessing the eligibility of entities that intend to acquire qualifying holdings[87] in regulated entities (see for instance FME (2016, 2018)). Moreover, all banks must publicly disclose the names of the shareholders and beneficial owners, and the size of their holdings when these exceed 1% of the credit institution's capital.[88]

100. **Fit-and-proper requirements for board members and chief executive officers (CEO) have been tightened.** Since the crisis, CEOs are explicitly responsible for ensuring that senior management also satisfies fit-and-proper requirements. Specific requirements and restrictions apply to boards. For instance, the chair of the board of directors cannot be an employee of the institution, while the board as a whole must have sufficient knowledge, expertise and experience to fully understand all of the firm's operations. A further step towards ensuring the implementation of fit-and-proper requirements was taken in 2017, whereby the FME requires the boards of regulated entities to conduct self-assessments (FME (2018)). Since 2010, Iceland has capped variable compensation at 25% of an employee's fixed compensation (as opposed to 100% in EU legislation). Neither board members nor staff working in control functions may receive variable compensation.

101. **Finally, certain lending practices have been regulated or prohibited and a credit register introduced.** Loans secured by banks' shares and banks' ownership of own shares are prohibited while connected lending is limited and controlled.[89] Moreover, any preferential treatment, such as lower interest rates, and loans backed by mortgages or capital issue guarantees secured by the banks' own shares are no longer allowed. Since 2010, financial undertakings are required to send to the FME an updated register of all aggregated exposures to firms that exceed ISK 300 million.[90] The information, included in the National Credit Register, is used to assess connected lending, monitor compliance with large exposures regulation and to analyse system-wide risk concentrations (FME (2009b)).

Risk-based, forward-looking and more intrusive supervision

102. **A formal risk-based methodology has been introduced.** With regard to banks, the methodology is derived from – and similar to – the ECB's SREP, which is typically carried out annually for the largest institutions but less frequently for smaller firms (see FME (2016)).

103. **Onsite inspections have become more targeted and more intrusive.**[91] Onsite inspection teams have become more specialised. Teams spend more time on-site and procedures have been clarified. Taken together, these changes allow on-site inspections to be more effective and shorter (FME (2019)).

104. **A policy of transparency and accountability has been introduced.** Since 2009, the FME has published the results of its inquiries, with its annual report presenting the main findings of on-site inspections. The report also includes a specific section with all cases concluding with administrative fines or settlement agreements, as well as all court cases regarding sanctions (see for instance FME (2017)).

87 A qualifying holding is a direct or indirect participation in a regulated entity that represents at least 10% or more of its equity capital or of its voting rights.

88 In addition, the law now prohibits cross-board membership. That is, no member of management or of the board of a supervised entity may sit on the board of another supervised entity. Managers and board members of banks also need to complete an extensive oral examination.

89 All types of connected lending are limited in aggregate to ISK 200 million (about EUR 1.47 million as of November 2019).

90 This corresponds to about EUR 2.2 million as of end-2019. The credit exposures include all forms of credit and must be itemised by borrower.

91 The general purpose of an on-site inspection is to analyse and assess at the firm's premises (on-site) its risks, its capital adequacy, the quality of its risk management, its internal control systems, its governance and the sustainability of its business model.

Box 7

Investigations, prosecutions and sentences following the financial crisis

Immediately after the collapse of the Icelandic banks in October 2008, the FME started investigating securities trading and other activities of financial institutions, in particular lending practices prior to the crisis.① The scope and number of suspicious transactions turned out to be well beyond initial expectations. Special investigative teams were established with up to 17 full-time legal and financial experts with varied backgrounds. The focus was on trading by the three large banks and several investment companies.

The investigative teams worked in close cooperation with the office of the Special Prosecutor (now District Prosecutor), which was established in 2008 in the wake of the crisis. The last crisis-related cases were closed in 2013, at which time FME had completed 205 cases, of which 103 were lodged or referred to the Economic Crime Division of the National Commissioner of Police or to the Office of the Special Prosecutor. The remainder were either closed without further action or by imposing administrative fines. These cases span the entire range of financial crimes, including market abuse, breach of fiduciary duty, insider trading, false disclosures, embezzlement, forgery, accounting irregularities, theft, money laundering and fraud. Many of the investigations extended across borders and the investigative teams collaborated with FME's international sister organisations, eg in the United Kingdom and Luxembourg.② The investigations also established that, in many instances, the conduct of supervised entities in the period leading to the crisis did not comply with legislation, rules and regulations promulgated by the FME.③

At the time of writing, charges have been made in 23 separate cases, in many instances with multiple defendants. Final judgment has been reached in 19 of these cases, with convictions in 14 and acquittal in five. So far, over 40 persons have been convicted of crimes related to the 2008 crises and 27 of these have received a prison sentence. The most severe sentence is six years in prison, equal to the maximum statutory sentence for most economic crimes in Iceland.

① See FME (2009). Market manipulation and related crimes are perhaps the most widespread criminal practice detected in this process. Top management and, in some cases, key owners were found guilty of market manipulation and breach of fiduciary duty by executing an elaborate scheme of stock price maintenance. In short, all three adopted the practise of purchasing own shares in the stock market and reselling them to selected customers with 100% funding and no additional collateral. According to court rulings, this practice was common at least since early 2007 and continued until the collapse of the banks (Olafsdottir et al (2019)). ② See FME (2011). ③ See FME (2011, 2012, 2013).

Section 4 – Some general lessons from the crisis

105. **The management of the Icelandic crisis provides several lessons for other countries.** Without attempting to assess the adequacy of the response to the financial crisis, this section presents some broad lessons that can be drawn from it. These are presented by reference to the main challenges that confronted the Icelandic authorities when selecting and implementing the tools needed to address the crisis.

106. **At the risk of stating the obvious, ELA measures can only be effective when the receiving banks are still solvent and only experiencing temporary liquidity strains.** By the time the Icelandic banks applied for ELA, it was no longer clear that the banks were facing a liquidity crisis only, as their solvency had started to be questioned. Clearly, separating solvency and liquidity issues is especially difficult in a crisis. However, by 2008, there were some indications that the banks were likely to be already insolvent (Flannery (2009), Benediktsdottir et al (2017)) rather than merely illiquid, with this increasingly implying that ELA was no longer the appropriate intervention tool.

107. **A related lesson is the need for the authorities to base crisis response decisions on reliable and sufficient information about the banks' financial positions.** In any banking crisis, assessing a bank's viability becomes more difficult, and it is therefore even more important for financial authorities to

be able to determine whether a bank is insolvent or only illiquid. In the case of Iceland, for the reasons discussed above, the CBI and the FME were unable to assess the banks' problems in a timely manner and thus the information provided to the government was inadequate.

108. **The applicability and effectiveness of resolution tools that are part of the post-crisis toolkit in several jurisdictions, including Iceland, are subject to limits.** Purchase and assumption (P&A) transactions[92] are not truly available during a systemic crisis, when all the major domestic banks are failing or about to fail. In Iceland, P&A transactions between domestic banks would have been impracticable, since all the large banks had failed or were about to do so.[93] Bail-in, which was applied to equity holders and (mostly foreign) creditors, excluding foreign depositors, reduced the cost of the crisis to the public sector, but proved to be controversial. Creditors attempted to challenge key decisions in court. In the event, creditors were induced to accept the terms proposed by the Icelandic authorities by the offer of financial instruments that would allow them to share in any potential recovery in value once conditions returned to normal. This shows that the success of a bail-in strategy largely depends in practice on the existence of sufficient incentives for creditors to ensure that the bail-in measures are proportionate and reasonably acceptable.

109. **Splitting failing banks into "new" and "old" parts in order to preserve basic banking customer services raises a number of operational challenges.** Even when authorities have the legal powers to carve out a new bank from the failing entity, legal challenges may complicate the allocation of assets and liabilities between the "new" and "old" banking institutions. Moreover, a separation strategy by which some positions remain in the old bank while others are transferred into the newly created entity may not be easy to define precisely and implement systematically. Authorities also need to decide how to organise the management of the assets. Depending on circumstances, this might be best organised through a single asset management company, to cover the whole banking sector, or through individual entities – one for each of the failing banks. In some cases, such as Iceland, the separation of assets was mainly based not on their relative quality ("good" versus "bad" assets) but rather on their domicile (foreign versus domestic). Finally, asset valuation determines creditors' recovery rates, whether or not they are secured exposures, and regardless of their seniority. At times of high uncertainty, as during a financial crisis, precise valuations can be hard to determine.[94]

110. **In an economy where credit is inflation-indexed or linked to a foreign currency, prompt restructuring of loans to households and corporates may be a prerequisite for successful crisis management.** In its absence, basic banking services and the ability to finance the economy would be compromised. Achieving this in Iceland implied that the "new banks" also had to bear significant losses when writing down their outstanding claims on customers who could no longer afford to repay them. Relatively prudent valuation of transferred loan portfolios facilitated this process.

111. **The protection of depositors is essential and needs to be ensured in advance.** In Iceland, depositor preference was introduced only during the crisis and was challenged in court since its introduction significantly altered the creditor hierarchy and triggered heavy losses for all other creditors.

92 In a purchase and assumption transaction (P&A), a healthy financial institution or a group of investors assume some or all of the obligations (including all insured deposits) and purchase some or all of the assets of the failed bank.

93 However, later in the process, this was possible for the smaller institutions because they could be taken over by the three new commercial banks.

94 Notwithstanding the high haircuts applied when the split between "old" and "new" banks took place, the assets were assessed on a going-concern basis. This implied a much higher value than could be expected in a transaction at the time of the crisis but it was deemed to be the only viable option given the existing legislation. A legal basis for an asset valuation based on stressed conditions, as can now be done under the Icelandic transposition of the EU BRRD, would have simplified and sped up the process, but this option was not available at the time. A lengthy legal dispute about the value of most of the banks' assets would have undermined their stability, viability and credibility for several years.

Establishing depositor preference when conditions are normal can help to reduce uncertainty by providing all participants with clear and well understood "rules of the game" while also reducing the risk of bank runs. Credible deposit protection also calls for a credible backstop arrangement[95] to the deposit guarantee fund, not least because the deposit guarantee fund on its own is unlikely to have sufficient resources to respond to the failure of a major bank in any country, let alone a complete systemic collapse.

112. **Even when bail-in is applied, some form of public sector support may be inevitable.** Even when there is a bail-in, public funds are necessary in a systemic crisis to provide initial capital to the newly created banks because market resources are unlikely to be forthcoming. This is what happened in Iceland. This approach may be repeated in similar cases elsewhere. Resources drawn from a resolution fund, which did not exist in Iceland at the time of the crisis, can compensate at least in part for the need to draw on public funds, depending on the severity of the banking crisis.

113. **Capital controls can stop capital flows but involve long-term costs, so that a balance needs to be struck.** Managing capital outflows in a crisis can give the authorities more time to deal with failing banks. However, such controls generate risks, also creating an uneven playing field between domestic and foreign investors. They may damage a country's reputation, jeopardising future flows of inward investment, and invite legal challenges by creditors. That Iceland regained access to international financial markets relatively quickly may be atypical. In this case, capital controls were supported by the IMF, which introduced them as part of its programme. They were imposed to address the balance of payments crisis arising from the insolvency of private sector entities, not that of the sovereign. Operationally, their management was also facilitated by the fact that the banking sector had a relatively simple structure (Gudmundsson (2012)) and was dominated by three large banks. From 2016 to 2019, a capital flow management tool on the inflow side was active.[96] This was an ex ante tool that affected the rate of return rather than a quantitative constraint imposed ex post in the middle of a crisis.

114. **As the payment system is essential for the economy, keeping it fully operational is a prerequisite for the success of a resolution strategy.** Without a fully functioning payment system, the banking sector cannot process transactions, and the same applies to payments via credit and debit cards. In Iceland, the risk of a freeze of the payment infrastructure was especially severe given that all three major banks collapsed at the same time and Iceland risked being cut off from the international settlement process. Bank resolution would have not been effective, irrespective of the approach taken, if the payment system had not continued operating. This shows the importance of coordinating resolution measures with the management and oversight of the payment system. The Icelandic crisis also illustrates the importance of an electronic payment system that can withstand international pressures during periods of financial stress.

[95] The International Association of Deposit Insurers (IADI) recommends, in its Core Principle 9, that "emergency funding arrangements for the deposit insurance system, including pre-arranged and assured sources of liquidity funding, are explicitly set out (or permitted) in law or regulation" (IADI (2014)).

[96] Iceland maintains a special reserve requirement on liquid capital inflows, such as in the form of government bonds and sight deposits. Non-resident investors in such instruments are required to deposit a special reserve ratio (SRR) of their investment in a non-interest bearing account at the central bank for a holding period of one year. Its stated objective is to temper and affect the composition of capital flows and limit the incentives for carry trade. See CBI (2019a) and OECD (2019) for more details. The reserve requirement ratio was lowered to zero in March 2019 (see CBI (2019a)) but the regulatory framework remains in place and can be implemented without delay should the need for it arise again.

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Annex – Timeline of the crisis and recovery in Iceland

Table 2

Date	Event
1994	Iceland becomes member of the European Economic Area (EEA). Icelandic banks benefit from "EU-passport" rules, giving them full access to the EU market.
Autumn 1998	Privatisation of Icelandic banks followed by mergers. Up to the end of 2003, the banking system is dominated by three large banks: Glitnir, Kaupthing and Landsbanki.
Year-end 2003	Fitch Ratings revises the outlook of Iceland from stable to negative.
21 February 2006	Danske Bank issues its "Iceland: Geyser Crisis" report about the substantial risk of a financial crisis developing.
22 March 2006	Landsbanki begins offering the Icesave deposit account in the United Kingdom.
October 2006	Kaupthing begins offering the Edge deposit account in the United Kingdom, Belgium, Finland, Norway and Sweden.
January 2008	Landsbanki begins offering the Icesave deposit account in the Netherlands.
May 2008	All Icelandic banks pass the stress test of the Financial Supervisory Authority (FME).
August 2008	Lehman Brothers files for bankruptcy.
15 Sept 2008	Glitnir requests emergency liquidity assistance (ELA) from the Central Bank of Iceland (CBI). The CBI rejects the offer. Proposes instead that the government acquires 75% of Glitnir for the same amount (EUR 600 million).
25 Sept 2008	Meetings between the FME and the CEOs of the largest Icelandic banks to discuss merger scenarios.
26 Sept 2008	The government announces that it will take-over 75% of Glitnir. The Republic of Iceland is downgraded. Glitnir downgraded by three notches. Credit lines to Icelandic banks are cut or subject to margin calls.
29 Sept 2008	The UK FSA requires GBP 200 million in additional cash liquidity reserves for Landsbanki Icesave accounts.
3 October 2008	The CBI and the government refuse to lend the money to Landsbanki.
6 October 2008	Run on the three banks intensifies.
6 October 2008	Kaupthing requests and receives ELA amounting to EUR 500 million from the CBI.
7 October 2008	Iceland's prime minister announces blanket guarantee from the Treasury for all deposits in domestic banks and local branches regardless of size or holder.
8 October 2008	Parliament passes the Emergency Act.
9 October 2008	The FME takes over Glitnir and Landsbanki.
24 October 2008	UK authorities freeze assets related to Landsbanki in the United Kingdom, on the basis of the Anti-Terrorism, Crime and Security Act of 2001.
16 Nov 2008	The UK FSA closes Kaupthing's subsidiary, triggering cross-default loan covenants at Kaupthing.
19 Nov 2008	The FME takes over Kaupthing.
24 Nov 2008	The IMF announces a two-year stand-by arrangement supported by a USD 2.1 billion loan.
28 Nov 2008	First outline agreement reached on Icesave deposits (Icelandic government accepts to guarantee them.
11 Dec 2008	Approval of Iceland's programme by the IMF's board and loan application with the IMF.
12 Dec 2008	Icelandic Supreme Court authorises moratorium for the failed banks, allowing them to keep their banking licenses and preventing asset fire sales.

February 2009	Prime minister resigns. New centre-left coalition government wins April 2009 elections.
July 2009	Agreement in principle reached with Glitnir and Kaupthing estates whereby the old banks receive a majority share in the respective new banks.
October 2009	Agreement in principle with Landsbanki estate whereby the old bank receives a contingency bond from the new bank.
March 2010	First bill guaranteeing the liabilities of the Deposit Insurance Fund for Icesave depositors is rejected in national referendum.
April 2010	The SIC releases its report on the circumstances leading to the collapse of the three main banks in Iceland.
June 2010	Initial Supreme Court rulings finding currency-linking of loans to corporates and households to be a breach of the law on interest and indexation and therefore illegal.
September 2010	Supreme Court ruling that interest rate clauses of currency-indexed loans are invalid and that the loans should bear a variable interest rate. The principles established by the June and September 2010 rulings were translated into law by year-end.
December 2010	EFTA Surveillance Authority (ESA) reviews the Emergency Act and concludes that the priority claim given to deposits does not constitute an unlawful discrimination that breaches the EEA Agreement.
9 April 2011	Second Icesave bill rejected by second national referendum. UK and Dutch authorities subsequently appeal to the EFTA Court.
June 2011	First currency auction conducted by the CBI to address the offshore króna market. The last such auction was held in June 2015.
February 2012	Supreme Court ruling stating in effect that, by derogation to the law, the lender could no longer require higher interest payments than those mentioned in the loan contracts.
March 2012	Bill passed in Parliament revoking the exemption from capital controls for the three main banks' estates. As a result, the estates can no longer repay foreign creditors or make distributions to domestic creditors in foreign currency without explicit authorisation from the CBI.
January 2013	EFTA Court ruling clearing Iceland of all Icesave claims. British and Dutch governments left with a priority claim on the Landsbanki estate.
April 2013	Centre-right coalition wins absolute majority in Parliamentary elections on the basis of a programme to ensure general household debt relief.
2014	Implementation of the new government's debt relief programme.
November 2014	Supreme Court rules that although all claims of insolvent Icelandic estates must be calculated in króna, there is no obligation to pay them in the same currency.
April 2015	Speech by Prime Minister announcing the "stability levy".
June 2015	Introduction of the 39% "stability levy" (or stability tax) to be paid as of 2016 on all of the estates' 'assets if no composition agreement complying with CBI conditions is reached by the end of 2015.
November 2015	Composition agreements reached with creditors of the failed estates.
January 2016	Landsbanki estate pays its last priority claim instalment, therefore closing the Icesave claim.
April 2016	Prime minister resigns after revelations in the Panama Papers about his own and his wife's financial dealings.
May 2016	The CBI starts implementing its exit strategy for investors holding offshore króna positions.
March 2017	Lifting of the capital controls after agreement with most remaining investors allowing the CBI to purchase outstanding offshore króna assets subject to a 15% haircut.
January 2020	Merger of the financial supervisory authority (FME) with the CBI.