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# ABSTRACT

## Capital controls and the resolution of failed cross-border banks: the case of Iceland*

We examine Iceland's capital controls, which were imposed in October 2008 in order to prevent massive capital flight and a complete collapse of the exchange rate. The controls have not been lifted yet, primarily because of the risk of outflows of domestic holdings of the failed cross-border Icelandic banks. A substantial restructuring of domestic holdings of foreign creditors of the old banks is required before capital controls can be lifted. We argue that even if the controls are damaging, the gains from lifting them are likely to be much lower than the costs associated with a potential currency crisis following a premature liberalisation of capital outflows. The case of Iceland illustrates the difficulty of resolving large cross-border banks situated in a small currency area.

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Keywords: capital controls, cross-border banking, Icelandic banks, resolution of failed banks

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## 1. Introduction

Iceland has come a long way since the dark days of October 2008 when the country's banking system collapsed almost in its entirety. After a deep recession in 2009-2010, Iceland is enjoying steady, if modest, economic growth of about 2% per annum. Inflation, which peaked at 19% after the collapse of its currency, the *krona*, is now at 4% and the unemployment rate, even if high by historical Icelandic standards at 5.5%, is among the lowest in Europe. The underlying current account surplus and the net international investment position are approximately 3% and -60% of GDP, respectively.[1] Surely, this is better than could be expected only five years after the 'perfect storm'.[2]

Formidable problems do remain. Government debt is 110% of GDP, and many firms and households are also burdened by excessive debt. The government has successfully issued bonds in international markets, but the markets are still virtually closed to Icelandic enterprises.[3] The capital controls that were imposed in Iceland during the banking crisis of October 2008 are still in place and there seems to be increased pessimism about lifting them in the near future.

Here we consider the current state of affairs regarding the capital controls and their connection to the resolution of the failed cross-border Icelandic banks. We shall also suggest some ways out of the current stalemate. The paper is organised as follows: we begin by describing the capital controls and how they were imposed as a response to the banking crisis in Iceland to prevent massive outflows, in particular of carry trade funds. We explain why the controls have not been lifted yet, even if the amount of

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[1] Both the current account and the external position of Iceland need to be corrected for the impact of the old banks' estates  and other failed international investments which are still on the country's balance sheet.

[2] This was a phrase used by IMF staff in November 2008 to describe the Icelandic banking crisis. IMF, 'Iceland: Request for Stand-By Arrangement—Staff Report' (2008) *IMF Country Report No. 08/362*, November.

[3] In February 2013 Arion Bank – a new bank based on the domestic operations of Kaupthing Bank – issued a small amount of bonds in Norway ($ 90 mn) with a margin of 5% over Nibor (the Norwegian counterpart to Libor). This is the first time after the crisis that an Icelandic bank issued bonds in international markets.

carry trade funds has been substantially reduced, *viz.* because of the risk of outflows of domestic holdings of the failed Icelandic banks. We then suggest what restructuring of these holdings is required to lift the controls and the risks this will involve. The paper concludes following a short discussion of possible lessons for the case of Cyprus.

## 2. The capital controls

International capital movements – indeed foreign exchange transactions in general – were severely restricted in Iceland for most of the twentieth century until it became a member of the European Economic Area in 1994. Following EEA rules, Iceland then opened all markets with EU member states: capital flows, as well as those of labour, goods, and services. Full capital mobility between Iceland and other market economies followed.

The Central Bank of Iceland (CBI) has been on an inflation target since 2001, albeit with limited success – inflation has remained stubbornly above target for most of the period.[4] As is the norm in inflation targeting regimes, the krona (ISK) was freely floating, although from mid-2006 the CBI did give guidance to the markets that it would not accept a significant depreciation. In the boom leading up to the crisis of October 2008 the CBI attempted to stem inflation and underpin the exchange rate by raising its policy rate of interest. During the two years before the crisis the difference between interest rates on the krona and low-yielding currencies such as the Swiss franc and the Japanese yen was over 10 percent, and it reached 15 percent in May 2008. This attracted a (proportionately) large amount of carry trade funds. Indeed, Iceland has been described as a 'poster child'[5] of the damaging effects of carry trade.[6]

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[4] After opening up for capital movements the exchange rate was pegged to a trade-weighted basket of currencies. The peg was abandoned for a floating rate when it came under serious pressure in early 2001.

[5] G Plantin and HS Shin 'Carry trades, monetary policy and speculative dynamics' (2011) *CEPR Discussion Paper DP8224*.

[6] A comprehensive account of the carry trade in Iceland before the crisis and, more generally, the Icelandic banking crisis, is given in FM Baldursson and R Portes, 'Gambling for resurrection in Iceland: the rise and fall of the banks' (2013) *CEPR Discussion Paper DP9664*. For a wide-ranging

As pressure mounted on the Icelandic banks in the run-up to the crisis, investors increasingly chose to exit the krona, which depreciated by 25% during the week before the banks collapsed. As the banks went down, the krona depreciated even further.[7] The capital controls were then imposed in order to prevent further massive capital flight and a complete collapse of the exchange rate. The widespread use of foreign currency in domestic lending – two-thirds of corporate debt was foreign-currency-linked – made stabilizing the exchange rate imperative. Furthermore, due to the extensive indexation of household debt and the historically rapid pass-through from the exchange rate to domestic prices, further substantial depreciation of the krona would have had a disastrous impact on household balance sheets and the price level.[8]

*Prima facie*, the capital controls would appear to breach the EEA Agreement which stipulates free movement of capital between EEA countries. The EFTA Court has, however, ruled that in the circumstances, the controls are compatible with the EEA Agreement.[9]

Although a substantial portion of the carry trade stock had already left by the time of the crisis, *remaining carry trade funds amounting to 40% of GDP* were locked inside Iceland by the controls. These funds are now usually referred to as *offshore krona holdings*.

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empirical study of carry trade and its determinants, see A Anzuini and F Fornari, 'Macroeconomic determinants of carry trade activity' (2012) *Review of International Economics*, Vol. 20, pp. 468-488. For a macroeconomic analysis of the effects of carry trade in a small open economy with a 'minor' currency see K Truempler, *The carry trade, monetary policy, and the real economy* (2013), London Business School, mimeo, June.

[7] The krona began depreciating in early 2008 – as rising risk premia placed on the banks were increasingly shifted onto the sovereign – and lost almost 50% of its value against the euro during 2008.

[8] Even with the controls and exchange-rate stabilization, the consumer price index rose by 18.6% from January 2008 to January 2009..

[9] EFTA Court Case E-3/11 [2011].

The capital controls were intended as a short-term measure to be removed as soon as possible.[10,11] In March 2011 the CBI issued a plan for lifting them.[12] The plan is in two stages: in the first stage, offshore holdings of kronas would be reduced to a level the CBI "deems manageable in terms of external reserves, and when the offshore exchange rate has approached the onshore rate".[13] In the second stage, outflows of onshore (i.e. residents') krona holdings are to be liberalized. The plan made it clear that the CBI is unwilling to take on the exchange rate risk of financing the purchases of offshore kronas; the reason for this is probably that Icelandic currency reserves – now approximately €3 bn, the equivalent of 26% of GDP, are almost fully borrowed.[14]

The first phase of the CBI's plan is still ongoing and has been executed so far by letting out offshore kronas by a scheme of auctions, held approximately every six weeks, where the CBI matches investors, *i.e.* those wanting to sell euros and those who want to sell kronas, respectively.[15]

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[10] The Letter of Intent from the Icelandic authorities to the IMF, published as an attachment to the IMF Staff Report of November 2008 (IMF 2008, n 2), states that the controls were to be removed during the two-year program period, *i.e*. before November 2010.

[11] While the foreign exchange act was changed so capital movements were restricted, it leaves current account movements free, at least in principle. Hence imports of goods and services are unrestricted. Factor payments (*i.e.* wages, interest and dividends) to non-residents are also allowed. The 'man on the street' in Iceland notices the capital controls primarily due to a limitation on spending during travels abroad – this is limited to €1,500 per person per month. For investors, however, the controls represent a severe limitation on investment options.

[12] Central Bank of Iceland, *Capital account liberalisation strategy: Report to the minister of economic affairs* (2011), 25 March.

[13] *Ibid.*

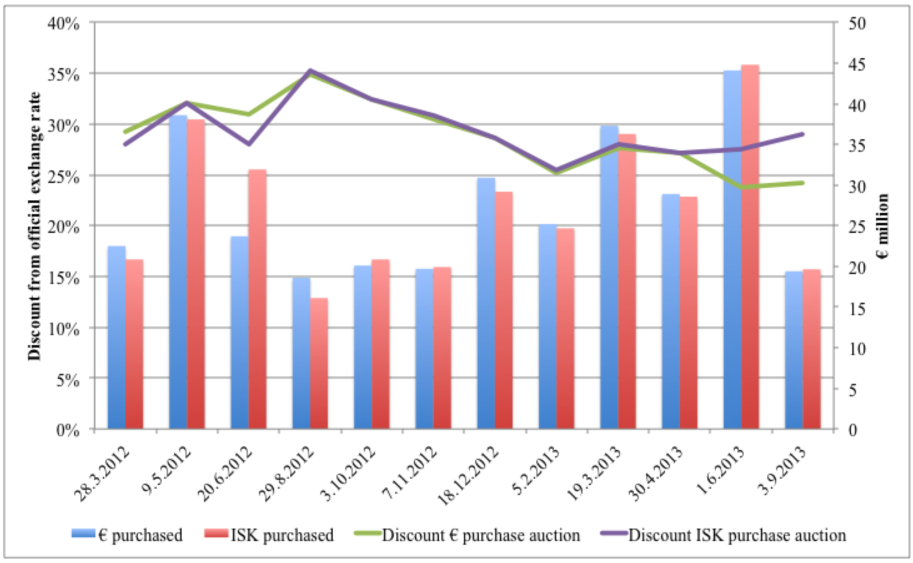
[14] Here and elsewhere in this paper, current amounts denominated in Icelandic kronas are converted to euros at the rate of 160 ISK/€ - the average official exchange rate for the period August 14 to September 13 2013. Projected GDP in 2013 converted to euros at this rate is €11.25 bn.

[15] This is implemented by a pair of sealed-bid single-price auctions held simultaneously. In one auction the CBI purchases offshore kronas for euros. In the other it buys euros for kronas which are to be invested either in long-term government bonds or are to be used for "long-term investment in the Icelandic economy" as the CBI rules stipulate; assets classified as long-term include equity, bonds, real estate and certain mutual funds.

This first phase has proceeded slowly, however, and 19% of GDP (€2.1 bn) of offshore kronas still remain.[16] Even if the exchange rate in the auctions has been considerably weaker than the official exchange rate, domestic investors in possession of foreign currency – mainly pension funds – have been reluctant to reduce their foreign holdings in favour of Icelandic assets.[17] Conversely, foreign investors have been reluctant to sell their Icelandic kronas at a rate much lower than the official exchange rate.

**Figure 1. Foreign exchange auctions**

Columns show amounts traded (right-hand axis). Lines show discount from the official €/ISK exchange rate (left-hand axis).




Data source: Central Bank of Iceland

Figure 1 shows the turnover in recent CBI foreign exchange auctions as well as the discount from the official exchange rate of the krona against the euro. It will take

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[16] Almost half of the total drop in offshore krona holdings came through a single negotiated trade in 2010, engineered by the CBI and outside the auctions, where Icelandic pension funds bought Icelandic bonds which had been posted as collateral in repo transactions with the Central Bank of Luxembourg by Landsbanki.

[17] The share of foreign assets in the pension funds portfolio rose from zero in the mid-1990s to 28% in 2006-2007. The current share of foreign assets (23%) is not far below that level. However, IMF, 'Iceland: 2013 Article IV Consultation and Third Post-Program Monitoring Discussions: Selected Issues' (2013) *IMF Country Report No. 13/257*, August, predicts that pension funds would want to allocate an additional 18% of GDP to foreign assets if they were free to do so.

approximately 7 years to release the remaining offshore kronas at the rate observed over the last year. And even if the discount to the official exchange rate has come down somewhat, it is still substantial at 25%.[18] If the CBI's strategy is taken at face value there is therefore still a long way to go before residents can expect to have access to international capital markets.[19] Moreover, as we shall see below, there is a substantial amount of additional funds that may add to the present overhang of offshore kronas, as well as other foreign exchange commitments. So the challenge of lifting the capital controls is even more formidable than these data suggest.

## 3. Why no removal of capital controls yet?

Pension funds have hitherto been behind the bulk of turnover in the CBI's euro purchase auctions. This implies that they have substituted Icelandic assets for some of their foreign holdings. As of July 2013 foreign holdings of pension funds were €3.6 bn, constituting 23% of their total holdings and 31% of GDP. With expectations of a stable exchange rate and a benign economic environment, it seems likely that there would be some other investors interested in entering into Icelandic assets at a favourable exchange rate. Given the offshore krona amount of €2.1 bn,[20] lifting the capital controls, perhaps with partial support by the CBI, would then seem to be within reach. That the Icelandic government successfully issued bonds in international markets in 2011 and 2012 - $1 bn (€.75 bn) in each offering – should also facilitate the lifting of controls.

Alas, matters are not so simple. The main reason is that offshore kronas of the same order of magnitude as those already in circulation are waiting to be freed up out of the estates of the old banks once winding-up boards begin paying out money to creditors. If this were allowed, then the total amount of offshore kronas would be brought up to

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[18] The discount in the most recent ISK purchase auctions has been higher than in their euro counterparts. Also, the share of pension funds in the auctions fell from 91% in early 2012 to 81% by the end of 2012. This suggests that investors other than pension funds may be becoming more interested in investing in Iceland.

[19] The euro purchase auctions have been criticized for distorting asset markets in Iceland by allowing Icelandic entrepreneurs with access to foreign funding to invest at a substantial discount. Investors without such access do not have the same opportunity to do so.

[20] Icelandic kronas converted to euros at the exchange rate 160 ISK/€, cf. n 14.

a level similar to that observed directly after the crisis. That decision lies with the CBI. We shall return to this issue below.

An additional difficulty is created by the failed Landsbanki, perhaps familiar to some readers from the so-called *Icesave dispute*.[21] A new bank – also called Landsbanki – was set up on the basis of the domestic operations of the failed bank (see below). To compensate for assets in excess of liabilities when the new bank was created, a foreign-currency denominated bond amounting to €1.8 bn, 16% of GDP, was issued by the new bank and is now held by the old bank. The bond is scheduled to be redeemed in the period 2015-2018. It represents a substantial portion (23%) of the assets that are supposed to finance payments to deposit insurance funds in the UK and Netherlands; these funds took responsibility for paying out insured deposits in Icesave accounts and are now the main priority claimants on the old Landsbanki. Since the new Landsbanki does not have foreign currency holdings or revenues sufficient to meet those payments, it must either access international funding or buy much of the currency out of official reserves. International capital markets are for all practical purposes still shut to Icelandic banks,[22] so the latter option is at present the only realistic one. The CBI has indicated it is unwilling to provide the necessary funding out of official reserves and has said that the terms of this bond must be renegotiated and the maturity lengthened.

## 4. The old banks and the offshore krona overhang

When the three large Icelandic banks – Landsbanki, Glitnir and Kaupthing – collapsed in October 2008, the Icelandic parliament quickly passed legislation in an

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[21] 'Icesave' was a scheme of internet-based retail deposit accounts marketed by Landsbanki through its branches in the UK and Netherlands in 2007-2008. When Landsbanki collapsed the deposit insurance funds of the UK and Netherlands paid depositors the insured amounts including the share of deposit insurance that the Icelandic deposit insurance fund was obligated, but unable, to pay. The British and Dutch governments demanded that the Icelandic state refund these payments. After a prolonged dispute, negotiations and two Icelandic referenda which rejected proposed agreements on repayment, the EFTA court denied the British and Dutch claims (E-16/11 [2013]). The assets of Landsbanki are expected, however, to cover fully the principal of the deposit insurance claim.

[22] Cf. n 3.

attempt to limit the damage to the Icelandic economy. The new Act – often referred to as the Emergency Legislation[23] – gave deposits and deposit insurance priority over other claims on the banks and gave the Icelandic Financial Surveillance Authority powers to ring-fence the domestic part of distressed banks by transferring domestic assets and liabilities into new banks. This was then done as the banks fell. All deposits in Icelandic branches went into the newly created banks. Deposits in foreign branches got priority status as claims on the old banks. Bondholders of the banks – mostly foreign parties but also Icelandic pension funds and the Central Bank of Iceland – were left with claims to assets remaining in the old banks, second in line after deposits and deposit insurance.[24] Figure 2 shows the separation schematically.

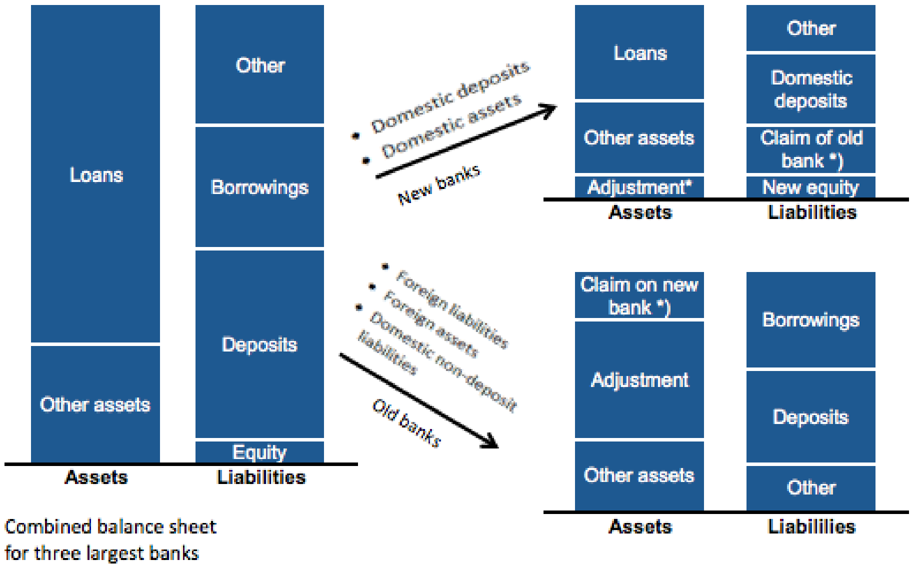
In all three new banks, there was a substantial excess of assets over liabilities, even after significant writedowns of the former. This margin became a claim of the old bank on the new. In the case of Kaupthing and Glitnir this claim was eventually turned into a majority equity share of the old bank. In the case of Landsbanki most of the claim was covered by a bond now held by the old bank, as explained above. The Icelandic state supplied most of the new equity for New Landsbanki, but took a minority share in New Glitnir (now Islandsbanki) and New Kaupthing (now Arion Bank). Foreign creditors are now, indirectly, majority shareholders in the two latter banks, while New Landsbanki is fully owned by the Icelandic state.[25]

[23] See Baldursson and Portes (n 6) for a further account of the Emergency Legislation and the circumstances which led to it.

[24] In October 2011 Iceland's Supreme Court confirmed the constitutionality of the Emergency Legislation (Case 340/2011). The EFTA Surveillance Authority had determined earlier that the split did not violate EEA law (Dec. No. 501/10/COL). The basis for both these findings is that the split and the remedies used were within the government's legal room to manoeuver under these circumstances and proportionate to their aims. For further discussion see R Helgadottir, 'Economic crises and emergency powers in Europe' (2012) *Harvard Business Law Review Online*, 130-139, March 10.

[25] The Icelandic state also provided funding for the new banks in the form of subordinate loans.

**Figure 2. Split of banks into 'new' and 'old'**




*) The claim of an old bank on the new bank can take the form of a bond (in the case of Landsbanki) or equity (in the case of Kaupthing and Glitnir)

Source: Icelandic Chamber of Commerce, amended by authors

The old banks still formally exist as companies in bankruptcy process, each bank under the control of a separate winding-up board. Approximately €5 bn has already been paid out to creditors, most of this by the old Landsbanki to priority creditors (deposit insurance funds in the UK and Netherlands). Creditors of the banks have been pushing for further payments to be made, and winding-up boards have applied to the CBI for permission to do so. At Landsbanki these payments would be made directly out of the estate; Glitnir and Kaupthing would first enter into composition. The creditors of these banks would then have a large proportion of their nominal claims converted into equity in each failed bank, thereby becoming direct owners of the bank (Kaupthing or Glitnir). The old bank in each case would in effect become an asset management company – much like a closed-end fund – under the direct control of the former creditors, now shareholders.

Foreign creditors hold by far the largest share of claims on the banks, approximately 95%. Foreign assets are €10.6 bn, or 65% of the old banks' total assets (Table 1), and could be distributed to creditors without pressure on the exchange rate.

**Table 1. Failed banks’ assets**

End 2012. Amounts in € bn

| | Glitnir | Kaupthing | Landsbanki | Total |
|---|---|---|---|---|
| **Domestic assets in ISK** | 1.6 | 0.9 | 0.3 | 2.8 |
| **thereof equity in new banks** | 0.7 | 0.7 | 0.0 | 1.4 |
| **Domestic FX assets** | 0.2 | 0.4 | 2.4 | 3.0 |
| **Foreign assets** | 4.0 | 3.8 | 2.7 | 10.6 |
| **Total** | 5.8 | 5.1 | 5.4 | 16.4 |

Source: Central Bank of Iceland, Financial Stability Report (2013)

Allowing Glitnir and Kaupthing to enter into composition and Landsbanki to pay out the remainder of its assets to creditors would free up not only their foreign assets, but also Icelandic krona denominated assets. These amount to 23% of GDP, half of that constituted by equity in the new banks. If that equity were sold at book value to Icelandic investors then these funds would be added to the 19% of GDP of offshore kronas already in circulation.

In addition to the ISK-denominated assets, the old banks hold a substantial amount (€3 bn) of foreign-exchange-denominated claims on domestic parties, the largest of which is the aforementioned Landsbanki bond of €1.8 bn (16% of GDP). The CBI estimates that when claims against parties with foreign assets or recourse to foreign financing are netted out of this sum, then €1.7 bn (15% of GDP) remain.[26] For simplification we shall equate this amount with the Landsbanki bond in what follows below.

The “old” carry trade overhang (19% of GDP) and the potential addition from the release of Icelandic krona denominated assets (23% of GDP) amount in total to 42% of GDP. This overhang could be realized if payments out of the old banks’ estates were allowed to go forward.[27] In addition the Landsbanki bond (16% of GDP) is a

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[26] Central Bank of Iceland, *Financial Stability Report 2013/1* (2013), 30 April.

[27] This is admittedly an upper limit. Winding-up boards have been looking for international investors that could buy the new banks. Recently there have been reports that an international consortium of investors has expressed interest in purchasing Islandsbanki (Morgunbladid, ‘Vilja borga 115 milljarða’

foreign exchange obligation already in place. This brings the total of foreign exchange that would be required over the next few years were this scenario to be realised to 58% of GDP. International capital markets are still closed to Iceland, except for the sovereign, and the underlying current account surplus is too small for Iceland to be able to finance transfers of this magnitude out of current income. The CBI has been very clear that it sees this situation as a major obstacle for lifting the capital controls: allowing composition of Glitnir and Kaupthing to proceed nowwould double the current offshore krona overhang; the Landsbanki bond constitutes, in and of itself, a substantial balance of payments problem. It is hard to disagree with this assessment – allowing the winding-up process to proceed without intervention would make it impossible to lift the capital controls.

## 5. What will it take to solve the offshore krona problem?

The CBI has signalled that a substantial reduction in the Icelandic krona holdings of Glitnir and Kaupthing and a restructuring of the Landsbanki bond are necessary preconditions for lifting the capital controls.[28] Indeed, if these two conditions were met, then the offshore krona overhang would probably be manageable: given a reduction of 75% in the Icelandic krona holdings the overhang would be reduced to approximately 25% of GDP. By extending maturity of the Landsbanki bond by 12 years as the new Landsbanki has requested,[29] payments on its bond would initially amount to about 1.5% of GDP per year instead of 4-5% per year now scheduled for

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[‘Willing to pay 115 billion’] (2013) 8 August). Such an investment would lower the potential overhang by a corresponding amount.

[28] M Gudmundsson, *Speech delivered at the 52nd Annual General Meeting of the Central Bank of Iceland* (2013), 21 March.

[29] In May 2013 the winding-up board of old Landsbanki requested permission to pay creditors €1 bn. Since this was to be paid out of foreign currency holdings it would not have created any balance of payments difficulty. The CBI, however, blocked this payment. Subsequently, in June 2013 the new Landsbanki requested a restructuring of the bond held by old Landsbanki. The restructuring requested *inter alia* involves extending maturity by 12 years (to 2030 rather than 2018), abandoning a contractual rise in the interest margin by 1.15% in January 2014, and lowering margin requirements on collateral (Morgunbladid, ‘Lenging forsenda undanþágu’ [‘Extension a condition for exemption’] (2013) June 4). The creditors in this case are in effect authorities in the UK and the Netherlands, and there have been no reports on their reaction to this request.

2015-2018. Given enough confidence about future economic policies and growth in Iceland the pension funds, private investors and the CBI should be able to deal with a funding requirement of this magnitude.

It is unclear whether these two conditions can be met. The claims in question are on private parties – not the government or the CBI[30] – so the Icelandic authorities are not in the position of a debtor negotiating for a restructuring with its creditors.[31] The banks are in formal bankruptcy proceedings under Icelandic law, which in ordinary circumstances would be left to the winding-up boards and the creditors.

## 6. Strategic positions

At present the CBI does have considerable legal powers to influence the resolution of the failed banks: provisions of the Foreign Exchange Act allow it to block payments out of the banks' estates, indefinitely. Icelandic authorities are keen to lift the capital controls and complete the resolution of the failed banks. But as soon as payments in foreign currency out of the estates are allowed to go forward, the CBI will lose whatever power it had to influence the resolution process so as to aid in the lifting of controls, or at least not to exacerbate the already difficult situation. Iceland would face the hopeless task of converting kronas worth almost 60% of GDP to foreign currency in a short period of time.[32] It should therefore not come as a surprise that the CBI has denied Glitnir and Kaupthing permission to enter into composition and has denied requests of the winding-up board of Landsbanki to make further payments to creditors.

It is difficult for Icelandic authorities to take the initiative in this situation: Iceland must in some sense be neutral and avoid being seen to apply coercive force to realize what has been signalled to be the necessary outcome. The role of the authorities is

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[30] In fact the CBI is one of the main domestic creditors of the failed banks.

[31] The Icelandic state is, however, the sole owner of New Landsbanki.

[32] The situation is similar to the hold-up problem of the incomplete contracting literature; O Hart and J Moore, 'Property Rights and the Nature of the Firm' (1990), *Journal of Political Economy*, Vol. 98, 1119–1158; I Segal and MD Whinston, 'Property Rights' (2012), in R Gibbons and J Roberts (Eds.), *Handbook of Organizational Economics*, 100–158.

first and foremost to look out for legitimate Icelandic interests; this includes both safeguarding financial stability and the solvency of Iceland and working towards the lifting of capital controls.

The CBI can, however, signal what it sees as necessary and has already done so. Creditors of the old banks can then voluntarily suggest solutions to the current stalemate.[33] Indeed, there have been reports of interest on their behalf.[34] One can conjecture, however, that a binding agreement between the different parties – *i.e.* the creditors, the winding-up boards and the CBI – would be necessary before the Icelandic authorities would agree to composition of Glitnir and Kaupthing. Such an agreement would probably involve a reduction in krona holdings of the estates of the order of magnitude indicated earlier. Such a reduction could, for example, be implemented through an *exit tax*, i.e. a tax imposed when Icelandic kronas are exchanged for foreign currency. Alternatively, government bonds denominated in foreign currency could be exchanged for the Icelandic krona assets of the failed banks; with sufficiently low interest rates and extended maturities such a bond could allow for a feasible flow of payments in foreign currency.[35]

Whatever solution is chosen it must in practice involve a large haircut on Icelandic krona assets of the failed banks in return for being allowed to exchange them for foreign currency and, even more importantly, to distribute the foreign assets of the estates. Foreign assets constitute 70-80% of the book value of assets at Glitnir and Kaupthing (cf. Table 1) so – given a 75% reduction in krona holdings – the overall payments would be 80-85% of the book value of assets.

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[33] We use 'voluntary' here much in the same sense as the recent restructuring of Greek government bonds was voluntary. See M Gulati, C Trebesch, and J Zettelmeyer, 'The Greek debt restructuring: an autopsy' (2013) *Economic Policy,* issue no. 75, 513-563.

[34] Frettabladid, 'Erlendum eignum haldið í gíslingu' ['Foreign assets held hostage'] (2013) September 14.

[35] The drawback of this is that the government would take on additional liabilities. Official currency reserves are, however, at present fully debt-financed, so with the right combination of interest rates and maturities on the bonds these two approaches can be made near-equivalent. Issuing bonds has the benefit of automatically providing long-term financing of the foreign currency commitments.

This might be an acceptable compromise for the majority of creditors, many of whom are distressed debt funds – colloquially often referred to as *vulture funds* – who purchased their claims at heavily discounted prices and would make a handsome profit, a haircut on Icelandic assets notwithstanding.[36] For those creditors who have held on to their claims since before the crisis and have lost about 70% of their investment already, such a deal would add insult to injury, although it could still be their best option. Clearly, some creditors might challenge in court a settlement involving haircuts on Icelandic krona holdings.

As soon as New Landsbanki would reach an agreement with its ancestor on restructuring the problematic bond, the CBI might allow payments to priority claimants. Landsbanki, however, constitutes a very different strategic case from that of Glitnir and Kaupthing for three main reasons. First, a contract is already in place for payments to priority claimants, *i.e.* the oft-mentioned bond.[37] Although a restructuring would make matters easier for Iceland, the bond is already a part of the country's balance of payments problem, so it is difficult to argue that financial stability and the goal of lifting the capital controls would be further endangered by allowing payments to go forward. Second, the creditors, *viz.* the British and Dutch authorities, are of a very different type from those at Glitnir and Kaupthing. Third, the Icelandic state is the sole owner of New Landsbanki.

It is therefore unlikely that the British and Dutch deposit insurance funds see themselves as being in a difficult bargaining position vis-à-vis the new Landsbanki. The amounts involved are hardly of a size to create financial difficulties for these institutions. In fact they may already have undertaken measures to cover possible

[36] Estimated recovery of the bonds of Landsbanki, Glitnir and Kaupthing in closure of CDS contracts in November 2008 was 1.25%, 3% and 6.625%, respectively. This should give an indication of market values of these bonds at the time. In December 2012 market values of the bonds were 6.25, 27% and 25.5% of face value, respectively (Frettabladid, 'Ætlaðar endurheimtir margfaldast' ['Expected recovery multiplied'] (2012) December 5). Trading in these bonds has been active, however, so many of the present bondholders will not have achieved the spectacular returns these numbers suggest.

[37] Priority claims at Glitnir and Kaupthing have already been fully settled.

losses.[38] If they refuse to restructure and if the CBI refuses to grant Landsbanki the required foreign exchange, then Landsbanki will be in default. Apart from wider-ranging concerns – financial stability, the credit rating of the sovereign, etc. – this is hardly something the Icelandic authorities will want to see happen to a bank fully owned by the state.

Possibly complicating matters, there is a new two-party coalition government, which came into power in May 2013. It has directly linked possible government revenues created by the winding-up of the old banks to the financing of debt relief for Icelandic households. As the coalition agreement has it:

> …it is appropriate to take advantage of the leeway which in all probability will develop in tandem with settlement of the insolvent estates, to address the needs of borrowers and persons who placed their savings in their homes.[39]

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[38] In September 2013 the UK deposit insurance fund – the Financial Services Compensation Scheme (FSCS) – imposed a levy of £1.1 bn on British banks in order to cover the FSCS's losses on deposit insurance relating to failed Icelandic banks (British Bankers' Association, 'UK Banks pay £1 billion to compensate Icelandic savers' (2013) 1 September, www.bba.org.uk, accessed on September 22). The losses related to Heritable Bank and KSF are estimated at £ 400-500 mn. (cf. table p. 52 of FSCS, *Annual Report and accounts 2012/2013* (2013)). The FSCS therefore appears to expect a loss of £ 600-700 mn due to Icesave. Additional payments of £ 700 mn are needed to cover the FSCS's Icesave claim in full. Hence, the FSCS seems to be largely discounting further payments out of the Landsbanki estate – in particular those depending on the bond. The FSCS has apparently not seen the need to impose a corresponding levy due to the losses on deposit insurance relating to failed British banks. In particular, the FSCS paid out £15.6 bn in compensation to customers of Bradford & Bingley (B&B) in 2008 – this is 77% of the total compensation paid by the FSCS due to the 'major banking failures of 2008/09'. Five years later, FSCS has received no dividends out of the B&B estate. The FSCS notes that '[B&B] management continues to forecast a full repayment of the amount of FSCS's claim … precise timing of the recovery remains uncertain, and could be over many years' (FSCS 2013, p. 54).

[39] SD Gunnlaugsson and B Benediktsson, *Platform of the Coalition Government formed by the Progressive Party and the Independence Party* (2012) 22 May, http://www.government.is/government/coalition-platform/ accessed on September 16 2013.

Indeed, debt relief on price-indexed housing mortgage loans was the most prominent election promise of the new Prime Minister's party. It is not quite clear how this will affect the outcome. On the one hand, this connection has put the CBI under pressure to achieve a large reduction in Icelandic krona holdings. On the other hand, the government is under pressure from a part of the electorate to live up to its promise as soon as possible. That indicates impatience in achieving resolution, which weakens the position of the Icelandic authorities. There is also a risk that the Icelandic authorities would be seen to be motivated by the desire to profit in an illegitimate way from the winding-up of the old banks, rather than by the legitimate concerns mentioned earlier.

It may be noted here that a 75% reduction in the Icelandic krona holdings of Glitnir and Kaupthing would imply an improvement of Iceland's international investment position by 18% of GDP. Were this reduction to accrue to the state, it could lower government debt by a corresponding amount, i.e. from 110% of GDP to 92%.

## 7. Other risks

We have focused on the difficulty of lifting capital controls due to the risk of massive outflows of offshore kronas. But it is also very likely that after several years of being restricted to domestic investments, Icelandic residents will want to diversify their holdings out of Iceland as the controls are lifted. The IMF has estimated that to reach an efficient portfolio allocation "Icelandic residents would seek to move between 30 and 45 percent of GDP from domestic to foreign portfolio investment assets".[40] Approximately half of this amount is predicted to originate from pension funds. A disorderly lifting of controls could trigger even bigger outflows with self-fulfilling expectations of a rapidly depreciating krona and a destabilized banking system. This risk can be controlled by gradually lifting restrictions on capital movements in combination with sensible economic policies. Iceland has experience from the mid-1990s of implementing such measures successfully as international capital movements were liberalized.

[40] IMF 2013 (n 17).

The capital controls have lent support to domestic asset prices since they were imposed. This applies to virtually all asset classes, including housing, equity and bonds. The lifting of controls is therefore likely to put downward pressure on the prices of these assets. One consequence of this is that yields on government bonds will in all probability rise from current levels.[41] Interest payments on government debt, now 5% of GDP per annum, would then increase. A rise in yields by 2%, say, would imply a corresponding rise in overall interest expenditures over time as government debt matures and the treasury goes to the market to refinance.[42] Furthermore, there are forces that could easily push interest rates well above these historical levels: for example, government debt is much higher now and there is a risk of downgrades to non-investment grade by rating agencies.[43]

An important fiscal risk factor is that of the state taking on additional debt in relation to the aforementioned election promise of a flat reduction of housing mortgage debt.[44] In contradistinction to such a scenario, revenues from a reduction of krona holdings of the old banks could be used to lower government debt by a significant amount. Apart from benefitting tax payers this would lower the risk premium on the sovereign, support the process of lifting capital controls and reduce fiscal risks related to interest rate payments.

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[41] Real rates on long-term government debt were 4.5% on average in 2001-2005, but have been 2.3% on average for the last three years. External factors seem to balance each other out: while there has been a similar change in the real rate on US 10 year government bonds as in Iceland (a drop by 1.6%) the risk premium (CDS spread) on the Icelandic sovereign has risen by a corresponding amount.

[42] At present, the average maturity of central government debt is seven years with the bulk of scheduled payments roughly evenly spread over the period 2013-2022.

[43] See Standard and Poor's, *Republic Of Iceland outlook revised to negative on fiscal risk* (2013) July 26.

[44] This is the main risk factor cited by Standard and Poor's (n 43). The state budget proposal for 2014 does not include expenditures related to debt relief. This may, however change in the parliamentary process. Fiscal costs could also be indirect, *e.g.* as a consequence of writedowns of mortgage loans held by state-owned financial institutions such as the Housing Financing Fund .and (new) Landsbanki.

## 8. Lessons for Cyprus?

Capital controls have in most recent cases been imposed to prevent excessive inflows rather than outflows.[45] Apart from Iceland, Malaysia, Argentina, Ukraine and, most recently, Cyprus are notable exceptions. In Cyprus, as in Iceland, capital controls were imposed to prevent excessive outflows following a collapse of major cross-border banks.[46] Of countries imposing 'broad-based measures' (not including Cyprus) only the Icelandic controls appear to have been effective.[47] Geography – being a remote island – may be one of the reasons why this is so.

The present regime of capital controls in Iceland is not at an end, but it is nevertheless important to consider whether there are already some lessons to be learnt. Perhaps the main – and rather obvious – lesson from the Icelandic capital controls is that it can be much harder to lift capital controls than expected at the time they are introduced as a temporary measure: Iceland is already three years behind the originally envisaged schedule for removing the controls.[48]

There are strong similarities between Iceland and Cyprus: both countries are small islands and adopted a strategy of building an international financial centre; in both countries the banking sector became very large in proportion to the domestic economy (about eightfold GDP); and in both countries capital controls were imposed

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[45] N Magud, CM Reinhart, and KS Rogoff , 'Capital controls: myth and reality: a portfolio balance approach' (2011) *NBER Working Paper No. 16805*; MW Klein, 'Capital controls: gates versus walls' (2012) *Brookings Papers on Economic Activity*, Fall 2012, 317-67; IMF, 'Liberalizing Capital Flows and Managing Outflows' (2012) Staff Paper, March 13.

[46] For an account of the Cypriot banking crisis see A Apostolides, 'Beware of German gifts near elections: how Cyprus got here and why it is currently more out than in the Eurozone' (2013) *Capital Markets Law Journal*, Vol. 8 (3): 300-318.

[47] IMF 2012 (n 45).

[48] Miscalculations in IMF and other official programs regarding timing and other issues are inevitable. It is an important question for future research whether there is a systematic bias towards optimism (time to lift controls, economic growth, speed of implementing reform, etc.) in such programs. In Iceland's case the original program was based on incomplete information, *inter alia* about the amount of carry trade money still left in Iceland. A deviation was therefore to be expected. The additional problem posed by the Icelandic krona assets of the old banks was, however, overlooked by both the IMF and Icelandic authorities until early 2012.

as major banks collapsed. What makes the Cypriot situation very different is that Cyprus has the euro as its currency. Moreover, in response to the crisis the authorities imposed substantial haircuts on bank deposits over € 100,000, after a chaotic decision-making process that initially threatened losses for smaller deposits too. The capital controls were therefore introduced as a measure to prevent a massive run on the intervened banks in Cyprus rather than to stem a currency crisis. In Cyprus it was necessary to impose stringent restrictions on domestic financial transactions as well as cross-border flows to safeguard financial stability. This would seem to make the Cypriot controls in many ways even more onerous than the Icelandic ones. But as soon as there is confidence in the solvency of the Cypriot banks and assurance that they will be backed up by the Central Bank of Cyprus (as a part of the European System of Central Banks), and that depositors will suffer no further losses, it should be possible to lift the capital controls in Cyprus.[49] From this perspective the Cypriot situation appears easier to handle than the Icelandic one.[50] There are other factors, however, that may thwart plans to lift controls in Cyprus, especially the high and rapidly increasing public debt and a somber outlook for growth, which weighs on bank solvency. If confidence is not restored, the authorities may with good reason fear a further flight of deposits abroad.[51]

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[49] The Cypriot authorities have announced their intention to do so in early 2014 (Financial Times, ‘Cyprus plans to complete end of all capital controls in January’ (2013), September 18).

[50] Iceland applied for membership of the EU in 2009. Subsequent to accession to the EU, capital controls would have to be lifted prior to participation in ERM II, and, eventually, adoption of the Euro. This difference between the two countries would then have been eliminated. The current government has, however, suspended the accession negotiations. In any case, it was not clear whether Iceland would get support from EU institutions – *e.g.* the ECB – in lifting the controls prior to participation in ERM II. Without such support, the challenge of lifting the controls would not have been materially lessened by Iceland’s EU accession.

[51] The authorities have said they intend to begin lifting the capital controls at the beginning of 2014. But the chair of the government’s Council of Economic Advisers has expressed concern about the continuing outflow of deposits from the remaining large bank. "There has been an enormous loss of liquidity at the Bank of Cyprus…If this carries on, the Bank of Cyprus will go the way of Laiki and that will lead to a disaster scenario." (Wall Street Journal, ‘Cypriots Try Getting By Without Credit’ (2013) 28 August.)

The similarities between Iceland and Cyprus are therefore rather deceptive. The case of Iceland is certainly instructive, but with its failed large banks that are still unresolved and still pose a threat to financial stability within the very small Icelandic currency area, it is unique.

## 9. Conclusion

Iceland faces a difficult, but not insurmountable, problem in resolving its failed banks and lifting capital controls. The stakes are high: it is important for the country's future economic prosperity to reach the ultimate goal of lifting the capital controls. This must, however, be done without endangering financial stability and national solvency: even if the controls are damaging the gains from lifting them are likely to be much lower than the costs associated with a potential currency crisis following a premature liberalisation of capital outflows.[52,53] So patience is of the utmost importance on the Icelandic side.

In the cases of Glitnir and Kaupthing, a satisfactory outcome can probably be implemented by agreements with creditors and winding-up boards that involve foreign currency payment out of the failed banks' estates combined with an exit tax on Icelandic krona assets. Alternatively, there could be an exchange of assets in which

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[52] Attempts at measuring the gains associated with international financial integration indicate that such gains are in general rather limited. P-O Gourinchas and O Jeanne, 'The elusive gains from international financial integration' (2006) *Review of Economic Studies*, 73, 715-741, and N Coeurdacier, H Rey and P Winant, *Financial Integration and Growth in a Risky World* (2013) manuscript, London Business School and SciencesPo, calibrate general equilibrium growth models and find gains from financial integration of less than one percent of permanent consumption. Econometric evidence points in the same direction; for a recent review of that literature see M Obstfeld, 'International Finance and Growth in Developing Countries: What Have We Learned?' *(2009) NBER Working Paper No. 14691*. For an analysis of the impact of cross-border financial flows on national economic policies and a discussion of the overall evidence see H Rey, 'Dilemma not Trilemma: The Global Financial Cycle and Monetary Policy Independence' (2013) Paper for Federal Reserve Bank of Kansas Jackson Hole symposium, August, forthcoming in proceedings. Caution should of course be exercised in generalizing these results to Iceland.

[53] The IMF recently adopted a more positive stance on the imposition of capital controls: IMF, 'The liberalization and management of capital flows: an institutional view' (2012) November 14.

long-dated low-interest bonds, denominated in foreign currency, would be exchanged for Icelandic krona assets.

Regardless of the implementation chosen it is extremely important to avoid the temptation of overreaching in this process. Iceland is in a select group of countries perceived as being among the world's foremost in upholding the rule of law.[54] It is no less important for Iceland's interests to safeguard that reputation than to speed up the lifting of capital controls.

As for the Landsbanki bond one can only hope that even if the Icelandic, British and Dutch authorities were at loggerheads over the Icesave issue[55] there is willingness to find a solution that does not compromise financial stability or sovereign solvency in Iceland. This requires goodwill at the highest political level.

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[54] Iceland is in the top 7% of countries on the World Bank "Rule of Law" indicator for 2011, above the UK, Germany and the United States; *World Bank Governance Indicators*, http://info.worldbank.org/governance/wgi/index.aspx#home, accessed 28 September 2013.

[55] See n 21.