## Box I-1

# Capital controls and their role in the economic recovery

When Iceland suddenly lost access to foreign liquidity to finance its current account deficit early in 2008, the value of the Icelandic króna plummeted. This abrupt decline turned from bad to worse as the global financial crisis escalated, culminating in the collapse of Iceland's banking system. By the end of October 2008, the exchange rate of the króna had fallen by over 50% since the beginning of the year.

The plunge in the exchange rate wreaked havoc on indebted Icelandic households and businesses and drove inflation to nearly 20% at the end of 2008. The central goal of the economic programme drafted by the Icelandic Government and the International Monetary Fund (IMF) in the early days of the crisis was therefore to prevent further depreciation of the currency in an attempt to provide some shelter while households and businesses restructured and rebuilt their balance sheets. Panic among domestic and foreign investors alike was considered highly likely and threatened widespread flight from króna-denominated assets, further undermining the currency and thus amplifying the blow sustained by domestic balance sheets.

Supporting the currency through conventional measures – interest rates and foreign exchange market intervention – would have required steep interest rate hikes and a dramatic expansion of the Central Bank's foreign exchange reserves.[1] Because of the negative side effects of such actions and the persistent doubt that they alone would suffice, it was deemed necessary to impose temporary restrictions on movement of capital to and from Iceland. Such capital controls would provide private entities the shelter to restructure their finances while giving the authorities the scope to revive the financial system and regain control over public sector finances. The capital controls have also given monetary policy the scope to lower interest rates significantly without undermining exchange rate stability. It is therefore clear that the capital controls have played a key role in revitalising the economy in the wake of the currency and banking crisis.

### Without capital controls, the króna would have fallen still further ...

Although it appears clear that the króna would have depreciated still further without the imposition of capital controls, it is extremely difficult to estimate exactly how much the exchange rate could have fallen. A rough estimate using the Central Bank's macroeconomic model indicates, however, that the EURISK exchange rate could easily have dropped to 260-300, and even farther, under certain circumstances, which is close to the offshore exchange rate at its lowest (see Chart III-10). The results of such simulations are highly dependent on how quickly monetary policy is assumed to respond by raising interest rates, and how long investors expect high interest to persist into the future. Furthermore, it is possible to argue that the exchange rate could have fallen even more than these model-generated simulations indicate, as they do not take sufficiently into account the possible effects of Iceland's small foreign exchange market, nor do they take into account the possible development of a spiral of falling exchange rate and rising risk premia on Icelandic financial assets. Such a vicious cycle can easily develop, as a large currency depreciation could lead to a wave of domestic bankruptcy, social and political instability, elevated inflation, and rising risk premia, which can trigger further depreciation of the currency.

1. This is line, for example, with experience from the currency crises in South Korea and Thailand in the late 1990s, when short-term market interest rates soared to well over 20%, even though the currency depreciation in those instances was considerably more modest than the depreciation of the Icelandic króna in 2008.

**… but the controls are costly in the long run**
The capital controls have played an important role in establishing exchange rate stability, particularly after they began to hold as intended towards the end of 2009. They are controversial, however, and are not without their drawbacks.

Among the disadvantages associated with the capital controls are the economic costs that accompany any type of barrier on trade, not to mention the economic waste that results when individuals and firms devote their resources to finding ways to circumvent them and the authorities dedicate their efforts towards preventing violations of them. All of these resources could be far better used elsewhere, for far greater benefit to society and the economy. Furthermore, domestic parties are faced with great difficulty in hedging against foreign exchange risk via swap agreements. The hope of profiting by circumventing the capital controls also tends to undermine business ethics and compliance with the law and, other things being equal, could undermine the economy's long-term growth potential. The competitive position of those who violate the controls is distorted vis-à-vis those who abide by the law. Finally, it is likely that the existence of capital controls somewhat deters international investors from bringing capital into Iceland, for fear that new rules may be adopted, preventing them from moving their investments back out of the country. Fear that the króna will collapse once the capital controls are relaxed could also discourage foreign investors.

This cost of the controls is not as visible as the shelter that they provide the króna, but it is every bit as real. On the other hand, it is probable that the cost hitherto has been less than it could have been, as other factors have hindered foreign capital inflows to the country. Yet the cost of the capital controls will grow as time passes, and enforcing them will become ever more difficult as individuals and firms find loopholes in their quest for quick profits. As a result, it is important that the capital controls be lifted as soon as possible, but liberalisation efforts may not be allowed to undermine the exchange rate and jeopardise economic recovery.

**Temporary restrictions due to a currency and balance of payments crisis are allowed**
The international agreements to which Iceland is a party – for example, the EEA Agreement, Organisation for Economic Co-operation and Development (OECD) membership, and Article 8 of the Treaty establishing the European Union – authorise temporary, limited restrictions on movement of capital in currency and balance of payments crises. The international community has therefore not commented on the restrictions placed on capital movement in Iceland, and their implementation has been approved by the Executive Board of the IMF. However, it will clearly be difficult to maintain such broad-based controls without their eventually being considered a violation of these international agreements once the crisis is over.

**Capital controls are widely known in some form**
Capital controls as comprehensive as those imposed in Iceland after the crisis are not common, at least not among developed countries. But they have been adopted in a number of emerging and developing economies, such as China and India, which have long maintained comprehensive restrictions on foreign exchange transactions and movement of capital.

As Table 1 shows, however, restrictions on movement of capital are widely known in some form, even among developed industrial countries. In industrial countries, such controls usually involve restrictions on foreign direct investment. Restrictions on inflows of capital are often used to stem the tide of excessive inflows result ing from a positive interest rate differential with abroad. Recent examples include Brazil and Taiwan, as well as Chile in the 1990s, Thailand (2006-2008) and Colombia (2007-2008). These countries implemented market-based controls; that is, taxes on foreign exchange transactions (Brazil) or unremunerated reserve requirements (Chile, Thailand and Colombia).[2] Restrictions on outflows, however, are typically used to prevent capital flight. Examples of such controls following financial crises in recent decades include Spain (1992), Rumania (1996), and Russia and Malaysia (1998).[3]

## Table I Capital controls in IMF member countries 2008[1]

| | *Share of capital transactions that are controlled (%)* | | |
|---|---|---|---|
| *Countries* | *Capital controls* | *Outflow controls* | *Inflow controls* |
| Emerging and developing countries | 45 | 47 | 42 |
| Advanced economies | 15 | 19 | 10 |
| OECD countries | 20 | 24 | 14 |
| All reporting economies | 39 | 42 | 36 |
| Iceland[2] | 75 | 74 | 82 |

1. Simple average of controlled transactions as a share of all capital transactions. 2. Does not include the liberalisation of inward capital transactions as of November 2009.

*Source:* International Monetary Fund (2009), *Annual Report on Exchange Arrangements and Exchange Restrictions.*

2. In this instance, non-residents are required to deposit, for a fixed period, a portion of the inflow (in domestic or foreign currency) to an interest-free account with the central bank. This measure works as a tax on capital inflows, where the tax rate is determined by the length of time the capital remains in the country: the longer the investment, the lower the actual tax rate.
3. See, for example, International Monetary Fund (2010), Global Financial Stability Report, April 2010; N. Magud and C. M. Reinhart (2006), “Capital controls: An evaluation”, NBER Working Paper Series, no. 11973; and Ariyoshi, A., K. Habermeier, B. Laurens, I. Ötker-Robe, J. I. Canales-Kriljenko and A. Kirilenko, (2000). “Capital controls: Country experiences with their use and liberalization”, IMF Occasional Paper no. 190.