Box 1

Structure of króna-denominated Eurobond issues[1]

The following is a brief account of the structure of króna-denominated Eurobond issues. The process is broken down into a number of steps, but it should be noted that certain stages of the transactions may entail several steps at once.

Step 1

The international issuer issues Eurobonds denominated in Icelandic currency. All issues hitherto have been coupon bonds in which the principal is paid in a lump sum on maturity and interest is paid at intervals of, for example, six months. These bonds carry a lower yield than is available to the Icelandic Treasury on comparable issues in the domestic markets, based on the nominal yield curve. When foreign investors purchase the bonds they must convert foreign currency into Icelandic krónur in the domestic FX market.

Outcome:

International issuer: Has a fixed-interest liability in Icelandic currency and receives the amount of the issue in Icelandic currency.

International investor: Holds an asset in the form of a fixed-interest liability in Icelandic currency. Bears the currency risk.

Step 2

An international broker makes a currency swap with the international issuer converting the latter's króna-denominated liability to a liability denominated in foreign currency. The broker receives the amount of the bond issue in Icelandic currency and presents the issuer with the equivalent amount in foreign currency. At the same time the broker pays the issuer fixed interest in Icelandic currency in return for floating interest (based on LIBOR rates), plus/minus a fixed margin, from the issuer.

Outcome:

International issuer: Has a liability denominated in foreign currency on which it pays a variable LIBOR interest rate, and receives the issue amount in foreign currency.

International broker: Holds a fixed-interest liability denominated in Icelandic currency and a foreign currency-denominated claim at variable interest plus/minus a fixed margin. Retains the equivalent amount of the issue in Icelandic currency.

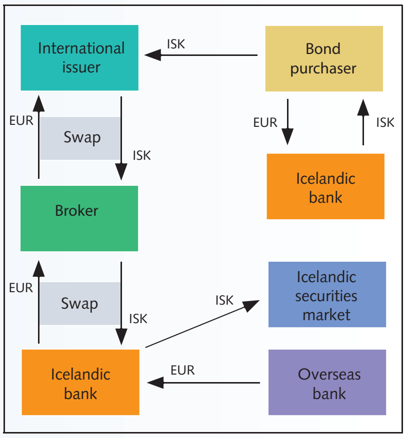
Step 3

The international broker makes a reverse currency swap with an Icelandic bank, matching the swap with the foreign issuer. However, the broker does not need to hedge his position in full, i.e. he can opt to retain part of the exposure on his books.

Chart 1

Króna Eurobond issue

Payment flow on issuance

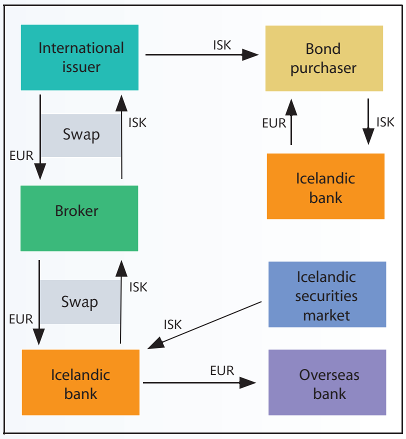


Source: Central Bank of Iceland.

Chart 2

Króna Eurobond issue

Payment flow on maturity



Source: Central Bank of Iceland.

1. This Box on the structure of króna-denominated Eurobond issues was written by Haukur Benediktsson, economist at the Central Bank of Iceland's International Department and lecturer at the University of Iceland Faculty of Economics and Business Studies.

Outcome:

International broker: If he makes a full hedge, his net exposure is zero, i.e. the currency swaps with the international issuer and Icelandic bank balance each other.

Icelandic bank: Holds a fixed-interest liability denominated in krónur and a foreign currency-denominated claim at variable interest plus/minus a fixed margin. Retains the equivalent amount of the issue in Icelandic currency.

Step 4

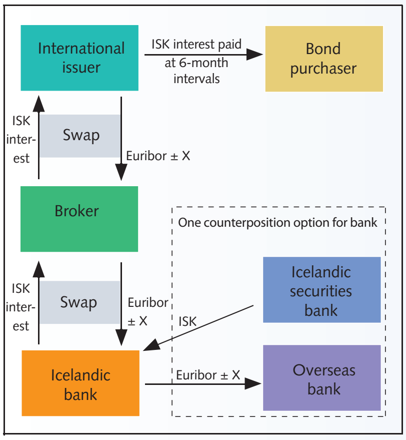
The Icelandic bank borrows foreign currency at variable interest rates plus a fixed margin, thereby creating a foreign currency-denominated liability against its claim on the international broker under the swap agreement. This minimises the Icelandic bank's currency risk. Under the swap agreement, the Icelandic bank holds a fixed-interest liability denominated in krónur and retains the equivalent amount of the issue in that currency. To hedge that risk, the Icelandic bank can purchase Treasury notes in the domestic securities market (i.e. create a króna-denominated asset) and use the interbank króna market to fine-tune the króna cash flow. The structure of the domestic bond market and interbank króna market make it virtually impossible for the Icelandic bank to hedge the deal in full, i.e. it assumes some interest rate risk. Also, the Icelandic bank may simply regard the króna-denominated liability which it holds under the swap agreement as a cheap source of funding in krónur – certainly cheaper than would be available by a direct issue of króna bonds in the domestic bond market. In other words, the Icelandic bank lends the equivalent of the issue in krónur on fixed interest terms.[2]

Outcome:

Icelandic bank: The currency risk is minimised because the bank holds counterpositions in the foreign currency. The Icelandic bank can opt to hedge its króna-denominated liability to some or a large extent, but some interest rate risk could develop.

2. In fact, the bank could lend krónur on variable interest terms and offer other customers an interest rate swap under which they would be paid variable interest in Icelandic currency but pay fixed interest. This could be a worthwhile risk in a climate of rising interest rates.

Chart 3
Króna Eurobond issue
Interest payments



Source: Central Bank of Iceland.