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The Icelandic bond market

Iceland's financial markets have undergone major changes in recent decades. Active markets are in place today where the exchange rate of the króna, securities prices and interest rates are determined. The largest section of the Icelandic financial market is the bond market. In recent years the domestic bond market has witnessed large-scale and rapid development. Issues and sales of bonds in the market have been built up in such a way as to serve both borrowers and investors well. The public, corporate and household sectors all procure credit in this market: central and local government authorities for their regular operations or major development projects, businesses for investment purposes and individuals for such reasons as housing purchases. This article presents a brief survey of the history of the Icelandic bond market, examining how trading practices and working procedures have changed in the course of time, with an account of the technical structure of the market today.

The start of bond trading in Iceland

Around 1900 and the following years, occasional Icelanders were prominent in securities trading, but this was mostly conducted on foreign exchanges. Shares in the old (Danish-owned) Íslandsbanki and prospective hydropower ventures were listed on exchanges overseas.

Between 1930 and 1940 people began to meet and exchange securities in Iceland. It is not known for certain when such transactions began, but they gradually developed and grew in scale until there was a basis for housing this securities trading in separate premises.

Kauphöllin hf., established in 1934, operated in various fields relating to securities trading and management, mainly with bonds but with some share dealing too. In effect, Kauphöll's activities marked the start of securities trading in Iceland.

In December 1942, Landsbanki Íslands' stock exchange started operation, largely modelled on

Copenhagen Stock Exchange. Initial trading was fairly brisk and Kauphöllin was a party to half of the transactions. In 1944 the exchange was discontinued after a sharp fall in trading, and virtually no securities transactions were made for the next few decades.

In 1964 the first indexed government bonds were issued in Iceland, redeemable after 3 years and subsequently once a year until the end of their 10-year maturity. At the time when T-bond issues began there were no stockbrokers, so owners had to find buyers for themselves if they wanted to liquidate these assets before maturity. Price formation on these T-bonds was weak to begin with, and it did not help that only one price, calculated on the basis of the month of redemption, applied for the whole year. This meant that holders of bonds who wanted to redeem them at other times than the month of redemption received only the price in effect for that month. Sellers of bonds after the redemption date received neither indexation nor interest for the time that had elapsed since then. It is fair to say that ignorance about investment options, the bonds' long lifetimes and illiquid sales caused securities sales to get off to a slow start in Iceland.

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In 1976 the specialised securities market of Fjárfestingarfélag Íslands set up operations. With it the first stockbrokers arrived on the scene, bringing buyers and sellers of securities together. Great advances were made as a result which enabled the general public to trade securities before maturity, for a fair price determined by supply and demand. More players emerged, such as Kaupthing and the securities divisions of the commercial banks Idnadarbanki and Útvegsbanki. A number of independent stockbrokers also operated for a while.

Something of a turning point was reached in 1979 when legislation on the indexation of financial obligations went into effect. General authorisation for indexation reduced negative real interest rates, encouraged financial saving and laid the foundation for financial transactions in the non-banking sector.

Iceland Stock Exchange established – a milestone in the financial market

Iceland Stock Exchange (ICEX) was established in mid-1985, set up by the Central Bank of Iceland in collaboration with commercial banks and securities houses. The Central Bank was authorised to take part in such activities by its legislation from 1961. Initially, the Stock Exchange was located at the Central Bank's premises and the Bank handled, for example, all its office administration. Rules on the Stock Exchange were set by the Central Bank and ratified by the Minister of Commerce on June 28, 1985. Besides the Central Bank the four other founding members of Iceland Stock Exchange were Fjárfestingarfélag Íslands hf., Idnadarbanki Íslands hf., Kaupthing hf. and Landsbanki Íslands.

There is no question that the establishment of ICEX marked a turning point for the Icelandic financial markets. A system was set up whereby participants specified two-way prices on which trading was based. ICEX members could buy or sell securities within the system at listed price, without consulting the counterparty to the transaction.² The Central Bank was a member but, unlike the others, did not provide services for the public, apart from primary sales of treasury bonds. However, the Central Bank

Development of the Icelandic bond market

- 1934: Kauphöllin hf. begins sales of securities to individuals and businesses
- 1942: Landsbanki Íslands' stock exchange begins operations, but closes two years later
- 1964: First indexed treasury bonds issued
- 1976: Establishment of first dedicated securities house, Fjárfestingarfélag Íslands. Others followed, including Kaupthing and securities divisions of Idnadarbanki and Útvegsbanki
- 1979: Banking institutions authorised to index their lending and, a year later, deposits
- 1984: Treasury bills sold by monthly auction from March to November. Deregulation of interest rates phased in from 1984-1986
- 1985: Iceland Stock Exchange (ICEX) established
- 1986: Central Bank of Iceland becomes market maker for treasury bonds
- 1987: Treasury bills listed on ICEX, with the Central Bank as market maker for them
- 1989: Electronic trading system launched at ICEX. First housing bonds issued and listed on ICEX, with Landsbréf Securities as market maker. Establishment of the Treasury Bonds Service Centre, later National Debt Management Agency
- 1990: Deregulation of capital movements phased in from 1990-1995
- 1992: Auctions of treasury instruments begin
- 1996: Central Bank ceases to act as market maker, except for treasury bills
- 1999: The Icelandic Securities Depository (ISD) established
- 2000: Electronic registration of securities begins at ISD. ICEX introduces the Saxess trading system and joins NOREX (Nordic exchanges' cooperation framework). End to the geographical isolation of the Icelandic market. Primary dealers system set up, the Central Bank ceases to act as market maker.

2. Computer technology has been used in trading at ICEX ever since its establishment, so the floor trading familiar from most other exchanges has never taken place.

in effect served as a kind of backbone for the Stock Exchange.

Treasury involvement

The treasury has a double aim with its participation in the loan market: to procure credit, and to strive to create a stronger and more mature market in the interest of the economy as a whole. While these are not conflicting aims in the long run, in the short term the treasury may need to absorb costs in order to catalyse progress or clear the way for innovations. On a longer-term view the treasury benefits from a higher-quality and more efficient market, just like other borrowers there. Most countries' treasuries are net borrowers in loan markets, and interest rates on treasury bonds form the base for each country's interest rate spectrum. In order to optimise cooperation with market participants and encourage them to play an active part in public debt management, the treasury has emphasised transparency, announcing its plans well in advance and working according to a clearly formulated and pre-announced policy guided by the aim of ensuring as effective a market as possible. Unexpected policy shifts create uncertainty and all uncertainty pushes up borrowing costs.

In Iceland, treasury bonds and other securities carrying treasury guarantees have been the mainstay and basis for pricing of other bonds from other issuers. Significant reforms have been made to arrangements for treasury bond issues in recent years. Most crucially, the number of issued categories has been systematically reduced. As a result, the outstanding categories have expanded, which has increased the bonds' liquidity and reduced the rates of interest on them. These categories are designated as benchmark bonds.

Participation by state players in the secondary market has diminished sharply, contributing to healthier and more active interest rate formation in the market. Monetary policy has been increasingly liberalised, with market forces replacing direct official intervention.

Primary sales of bonds³

The origin of treasury borrowing in the domestic financial market in its present form goes back to the sale of indexed treasury bonds ("savings certificates") in 1964, as pointed out above. From 1964 to 1975 the treasury held the exclusive right to issue indexed securities. These bonds were sold on an agency basis by commercial banks, savings banks and a number of recognised brokers. The main seller from this time until 1989 was the Central Bank. In 1975 investment credit funds launched issues of indexed bonds and the advent of the first securities funds in 1985 provided more competition with government bonds.

In 1988 an attempt was made to underwrite government bond sales through an agreement with commercial banks, savings banks and securities houses. The treasury paid advertising costs plus a 1.5% commission to sellers. In turn, sellers undertook to sell bonds to a fixed amount over a specific period based on a given real rate of interest. However, this arrangement only remained in effect until the end of 1988.

The Treasury Bonds Service Centre, later the National Debt Management Agency (NDMA), began operation in spring 1989 with functions including supervision of the treasury's domestic borrowing, which had been handled by the Central Bank. From 1992, primary sales were conducted on an auctions basis and the Service Centre, as an independent entity within the NDMA, was able to participate in them on the same basis as other financial companies. The Service Centre's market share was around 20%. This arrangement came under considerable criticism from financial companies for allegedly distorting competition, and in 1995 the Centre ceased its involvement in auctions. The establishment of the Centre in 1989 also marked the beginning of sales of government bond subscriptions to the general public.

In 1990 and 1991 a subscription agreement with institutional investors was in effect, based on a specified required yield which increased according to the amount involved. The first auction of government instruments was held in June 1992 when 6-month

3. Primary sales are when bonds are sold for the first time after being issued. When these bonds are resold and on each subsequent occasion, the secondary market is involved. ICEX, for example, is exclusively a secondary market.

non-indexed notes were sold. Later the same year, government bonds and T-bills were sold under the same format. Auctions were initially confined to financial companies but since 1995 they have been open to all parties, conditional on a minimum bid amount. Financial companies have taken part in auctions almost exclusively in recent years and this appears likely to continue, since auction participants are now required to place their bids in the Bloomberg trading system. T-bill auctions since 2000 have been under a primary dealers system involving only certain financial companies.

Current primary sales arrangements

Various options for primary sales techniques are possible.

1. Fixed price public subscription techniques.
2. Tap issue techniques.
3. Auction techniques.
4. Private placement.
5. A combination of the above techniques.

The cornerstone in the current format for sales of government instruments in Iceland is regular auctions which are aimed in particular at banks, securities funds and other institutional investors, but are open to other parties and individuals. This is one of the most commonly employed sales techniques in countries with active financial markets. There is a choice of two main channels for access to primary sales of government paper by auction: designated primary dealers (like the current format for T-bills) and open access with minimum bid amounts, where other parties than financial companies may present bids based on the average rates of interest on rival bids that are accepted. Alongside regular auctions, swaps and refinancing are offered at certain times.

Treasury borrowing plans are announced once a year, in two separate ways. The NDMA publishes a calendar presenting details of planned auctions and the bond categories that the treasury intends to sell on certain days. A schedule is also published showing the proposed scope of treasury borrowing during the year and the planned proportion of the total to be raised domestically. Details of individual auctions, both the categories on offer and the proposed amount, are issued 3 to 4 days in advance.

Secondary market

As pointed out above, the secondary market format has changed significantly. A lot of water has gone under the bridge since the old pre-war days of bond trading. The first stockbrokers came into being, and later an organised trading system with the establishment of Iceland Stock Exchange.

Under the Act on Securities Transactions, only financial institutions with the appropriate authorisation may act as intermediaries in securities transactions (brokerage, sale and counselling). Employees responsible for securities transactions must have passed an examination in securities brokerage, which is held under the auspices of an examining board appointed by the Ministry of Commerce.⁴ Foreign undertakings must be authorised stockbrokers in their home states in order to qualify for authorisation to operate in Iceland. At present, 21 financial institutions in Iceland act as intermediaries in securities transactions. The Financial Supervisory Authority supervises their activities. All banks in Iceland (commercial banks, savings banks and investment banks) are authorised to conduct securities transactions.

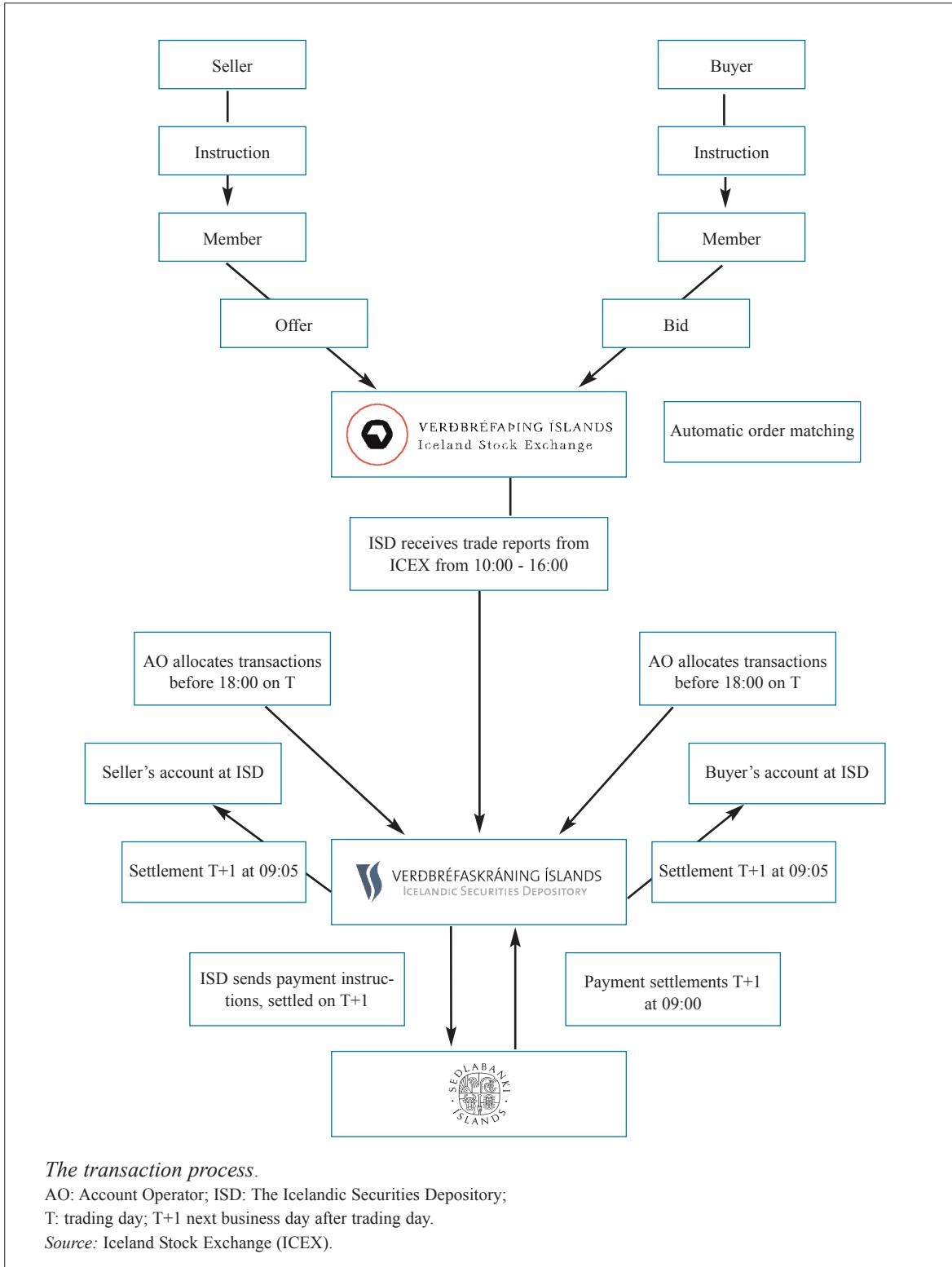
An investor intending to use the ICEX trading system to trade in listed securities must do so through a member of the exchange.⁵ On behalf of an investor, a member may enter a bid in the trading system. Bids and offers are made for nominal price⁶ with details of the price of securities that it is planned to buy or sell. Trading takes place electronically and can be made at any time during business hours. The great majority of transactions takes place "in the market," i.e. a bid or an offer is accepted in the secondary market. ICEX is open from 10:00 to 16:00 on weekdays.

ICEX is a member of the NOREX the cooperative framework for Nordic stock exchanges. NOREX is unique insofar as it is the first framework to adopt a collective exchange system for equities trading and

4. According to Ministry of Commerce figures, 303 people in Iceland completed the stockbrokers' examination from 1991 to 2001.

5. Conditions for membership of the exchange are based on the requirements in various EU Directives. These are described in the membership rules set by ICEX. Membership is open to credit institutions, securities houses and stockbrokers who are licensed by the Ministry of Commerce, on approval by the Financial Supervisory Authority. At the end of 2001 there were 21 members of the exchange.

6. All bonds are issued at a specific nominal price which need not indicate their market value.



The transaction process.

AO: Account Operator; ISD: The Icelandic Securities Depository;
 T: trading day; T+1 next business day after trading day.

Source: Iceland Stock Exchange (ICEX).

harmonise trading and membership rules and requirements between exchanges. ICEX implemented the SAXESS trading system on October 30, 2000. SAXESS is a powerful trading system capable of processing more than 2,000 transactions per second. It grants members access to a range of functions that support and facilitate securities trading, including combination orders, average price matching, etc. The system manages the liquidity of each security, depending on its currency and market, in a single bids folder. Likewise it allows automatic bid registration whereby investors can place bids in the system for themselves, through the intermediation of an exchange member. Real-time information is displayed on brokers' monitors as orderbook, trading information and a variety of reports. Besides ICEX, the stock exchanges in Copenhagen, Stockholm and Oslo are currently members of NOREX.

The Central Bank of Iceland has not taken advantage of its membership of ICEX to undertake open market operations in recent years. However, the option is always at hand for the Central Bank to influence money supply through open market operations, including buying and selling of T-bills for example. Sterilisation of the securities market after intervention in the foreign exchange market, for example, is a familiar technique that other central banks use to balance money supply. If the Central Bank bought Icelandic currency in the foreign exchange market it could resell it in the bond market to buy securities, which would be one way to sterilise the impact on liquidity. Hitherto the Central Bank has used other methods, namely repos with credit institutions.

Market makers

The role of a market maker is to be consistently ready to buy and sell the categories of securities that he has undertaken to handle at an advertised price. A market maker buys the securities he has taken on even if no other buyers can be found in the market. He also sells from his own stock when no other seller can be found. By doing so a market maker levels out swings that might occur in the secondary market. Market makers earn revenues by buying securities themselves at a certain price and reselling them at a higher one.

Every year, the NDMA and Housing Financing Fund review their separate market making agreements with domestic financial institutions. Contractual market making for treasury paper covers three categories of bonds and two of notes. Housing Financing Fund market making agreements cover five categories of housing bonds and two categories of housing authority bonds.⁷ The aim of the agreement is to enhance the bonds' liquidity in the secondary market. Market makers' obligations apply during opening hours of ICEX, from 10:00 to 16:00.

Rights and obligations of market makers for benchmark treasury instruments, housing bonds and housing authority bonds

Agreements with approved market makers are aimed at enhancing price formation and ensuring liquidity of the largest categories of instruments issued by the treasury and Housing Financing Fund. Market making agreements are in effect for one year at a time. The main obligations stated in the agreements are shown in a table overleaf.

Rights and obligations of primary dealers in T-bills

Agreements with primary dealers for the sale of T-bills are aimed at ensuring their issue and boosting their price formation in the secondary market. Smoother T-bill price formation ought also to improve that of other short-term paper, such as bank bills, as well as have a positive effect on the interbank market for domestic currency. The main obligations of primary dealers are as follows:

A primary dealer must buy T-bills in three auctions over a six-month period for a total of 3 b.kr. nominal. At the same time, the market maker undertakes to place buying and selling bids on ICEX in the categories covered by the agreement, for a minimum of 100 m.kr. nominal per bid.

Furthermore, a primary dealer is obliged to renew bids within 10 minutes of one being accepted, until total trading in the relevant category has reached 400 m.kr. over the day. The spread between buying and selling bids must not exceed 0.03%.

7. Búnadarbanki, Icebank, Landsbanki and Kaupthing are currently market makers for treasury instruments. Íslandsbanki, Kaupthing, Landsbanki and SPRON (Reykjavík Savings Bank) are market makers for housing bonds and housing authority bonds. Icebank, Landsbanki and Íslandsbanki are primary dealers in T-bills.

| | <i>Treasury instruments</i> | <i>Housing bonds and housing authority bonds</i> |
|---|--|--|
| Bid placement | Obligation to place buying and selling bids to a minimum market value of 50 m.kr. in the category covered by the market making agreement. If bids are accepted they must be renewed within 10 minutes. | Obligation to place buying and selling bids to a minimum market value of 40 m.kr. in the category covered by the market making agreement. If bids are accepted they must be renewed within 10 minutes. |
| Trading ceiling | If market value of trading reaches 400 m.kr. in a given category in a single day, placement of bids in that category may be discontinued for that day. | If market value of trading reaches 400 m.kr. in a given category in a single day, placement of bids in that category may be discontinued for that day. |
| Spread between buying and selling bids | The spread between buying and selling bids shall be kept within a specified range (0.15%-0.50%). | The spread between buying and selling bids shall be kept within a specified range (0.45%-0.60%). |
| Commission | A turnover commission amounting to 0.10% of the amount of monthly trading in the respective category on ICEX. The maximum commission payable to each market maker is 35 m.kr. for the duration of the contract, which is one year. | A turnover commission amounting to 0.08% of the amount of monthly trading in the respective category on ICEX. The maximum commission payable to each market maker for each month is 3,833,333 kr., and the total commission is cut back for market makers who fail to reach their maximum commission each month. |

The NDMA pays primary dealers a negotiated commission of 0.39% of the nominal value of accepted bids. If a primary dealer's accepted bids do not reach the minimum that he is obliged to buy, his commission is cut proportionally. Primary dealers also have exclusive entitlement to buy T-bills in NDMA auctions.

Transaction settlement

The Icelandic Securities Depository (ISD) is the centre for the electronic issue and registration of titles to securities. ISD operates a centralised registry and depository for securities in dematerialised (electronic) format. Electronic registration of all main securities listed on ICEX is nearing completion. All transactions with electronic securities made with automatic pairing on ICEX are automatically transferred to ISD. ISD then sends a payment order to the Central Bank, which is an intermediary in the netting process when securities are traded. Only settlement banks can take part in netting on account of securities transactions. The settlement process takes one trading day (T+1), i.e. all transactions are cleared and

titles are registered before trading opens the following day.

ISD is monitored by the Financial Supervisory Authority and has been certificated by overseas custodian banks as fulfilling the conditions of the US Securities and Exchange Commission. Portfolio account arrangements are possible.

Market structure and main benchmark bond categories

Treasury benchmark instruments

Several years ago there were 46 categories of treasury bonds and treasury notes. This wide range of categories, many of them small, led to sluggish trading with individual ones and significant incongruities in their prices. In order to consolidate interest rate formation in the secondary market and increase their liquidity, it was decided to reduce the number of categories. After these reforms there are now eight categories, each larger than 1 b.kr. Five are benchmark categories and three buyback categories. The five benchmarks are:

Treasury bonds⁸

RIKS 03 0210
RIKS 05 0410
RIKS 15 1001

Treasury notes⁹

RIKB 03 1010
RIKB 07 0209
New category
pending in 2002

RIKS stands for indexed treasury bonds and RIKB for non-indexed treasury notes. The digits stand for the date of maturity of the respective category, in reverse (American) notation, whereby RIKS 15 1001 signifies an indexed treasury bond category with a maturity on October 1, 2015. The NDMA ensures liquidity and market formation for the benchmarks with market making agreements for them in the secondary market, as described above. Buyers and sellers can therefore always take these bonds' prices for granted, i.e. there is always a living market for treasury benchmark instruments on ICEX.

Significant benefits have resulted from these reforms. By reducing and expanding the categories, those that remain become more liquid. The market deepens and prices become less volatile in reflecting trading. An active market with treasury benchmark instruments then strengthens price formation for other securities and markets, e.g. corporate bonds and pricing of forward contracts. The direct benefit for the treasury lies in more favourable interest rate terms, since in a more active market investors are prepared to pay higher prices for bonds in auctions than before. Some 95% of treasury benchmark instruments are now electronically registered.

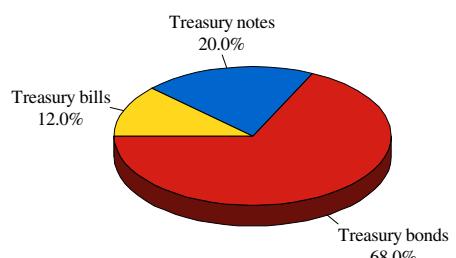
Treasury domestic market instruments are divided into three categories. Indexed treasury bonds accounted for 67.7% of its instruments in the domestic market at the end of 2001, non-indexed treasury notes for 20.2% and T-bills for 12.1%.¹⁰

The Central Bank ceased acting as a market maker with treasury notes in 1996. The treasury has

- 8. Treasury bonds are index-linked long-term bonds issued by the NDMA on behalf of the treasury. They are fixed-interest bullet bonds, with the increase in Consumer Price Index or Credit-Terms Index over the period of maturity added to the principal on redemption.
- 9. Treasury Notes are non-indexed and issued by the NDMA on behalf of the treasury, generally with a maturity of several years. They do not carry interest and are zero-coupon.
- 10. Maturity of treasury bonds is in the range 3 to 15 years in primary sale, treasury notes 1 to 7 years and T-bills 6 to 7 months.

Chart 1

Treasury securities December 31, 2001
(breakdown by type)



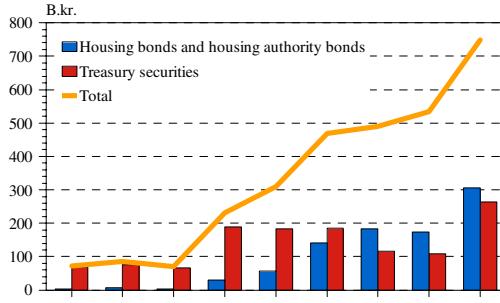
Source: National Debt Management Agency.

also issued T-bills, which are issued by the NDMA on its behalf for a shorter lifetime than one year. They do not carry interest and are zero-coupon. The Central Bank acted as market maker for T-bills until 2000 when a primary dealer system for them was set up, as outlined above.

Auctions of bonds from other issuers than the treasury have grown considerably in recent years, adding to the range in the market. Housing bonds and housing authority bonds are issued by the Housing Financing Fund (formerly the State Housing Fund) and carry a treasury guarantee. These issues have grown greatly and turnover in them has increased enormously in recent years. Other instruments are auctions of bonds by commercial banks, savings banks and other deposit money banks, corporations and local authorities. By far the greatest part of bond turnover on ICEX is with treasury benchmark instru-

Chart 2

Turnover on Iceland Stock Exchange
1993-2001



ments and the benchmark categories of housing bonds and housing authority bonds.

Benchmark categories of housing bonds and housing authority bonds

General mortgage loans from the Housing Financing Fund go by the name of housing bond loans, under a system which was launched in 1989. Housing bonds are market securities with a treasury guarantee and are freely tradable in the ordinary securities market. Housing bonds are issued by the Housing Financing Fund and indexed against the CPI. A buyer or builder of residential accommodation is entitled to apply for housing bonds in exchange for a mortgage bond secured with a mortgage in the property in question. Mortgage bonds currently bear an interest rate of 5.1% but housing bonds 4.75%. The spread of 0.35% between them is the Housing Financing Fund's commission.

Interest is compounded to the principal at 12-month intervals. Housing bonds and housing authority bonds are issued in many categories. Each has 3 to 4 subcategories with nominal amounts. There are in fact too many categories and market price formation in many of them is extremely sluggish. Since 2001 housing bonds have been electronically registered.

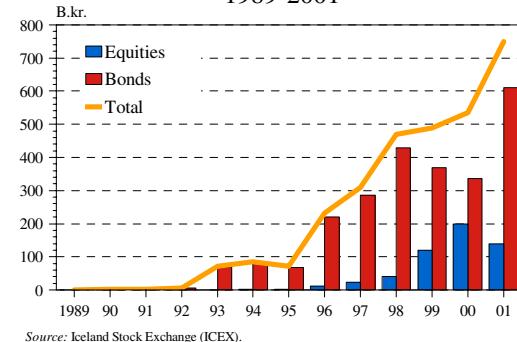
The benchmark categories of housing bonds and housing authority bonds are:

| <i>Housing bonds housing authority bonds</i> | |
|--|-------------|
| IBH 21 0115 | IBN 20 0101 |
| IBH 22 1215 | IBN 38 0101 |
| IBH 26 0315 | |
| IBH 37 1215 | |
| IBH 41 0315 | |

Four times a year a specific number of housing bonds are drawn out from the total issue of each subcategory and repaid. Before such a draw is made, the number in each subcategory which have not been redeemed is calculated, and a predetermined number of them are then drawn out. The numbers of the bonds that are drawn out are then redeemed just over two months later. On redemption date the housing bonds are paid out at adjusted price, i.e. their nominal value plus accrued interest and indexation from the date of issue until the redemption date. The

Chart 3

Turnover on Iceland Stock Exchange 1989-2001



amount drawn out at any time is determined by roughly approximating the total value of redeemable bonds to the amount that would have been paid on all the category if it had been repaid as an annuity loan. Bonds which are not drawn out in this way come up for redemption on the final redemption date for the category in question.

Bond buyers are pension funds, insurance companies, various institutions, individuals and businesses, both short- and long-term investors.

Turnover and international comparison

The market worth of bonds on ICEX grew by more than 100 b.kr. last year and amounted to more than 500 b.kr. at the end of 2001. It is interesting to examine other countries in Europe to gain some sense of the scope of the Icelandic bond market.

| Market | Market value in 2000 | |
|----------------|----------------------|----------|
| | Million US\$ | % of GDP |
| Belgium | 205,958 | 88% |
| United Kingdom | 1,423,663 | 99% |
| Denmark | 253,761 | 146% |
| France | 731,450 | 54% |
| Netherlands | 248,698 | 67% |
| Iceland | 5,328 | 63% |
| Luxembourg | 3,155,766 | 17,358% |
| Malta | 1,950 | 54% |
| Norway | 42,171 | 28% |
| Switzerland | 246,307 | 95% |
| Germany | 2,076,465 | 105% |

In terms of market worth as a proportion of GDP, the Icelandic bond market is not exceptional. Luxembourg occupies a fairly unique position, with the strong profile given to its tax environment in recent years expressly to attract the interest of foreign issuers and investors. Denmark also ranks highly, with its long tradition of bond issues.

Although the Icelandic bond market only relatively recently took on the form we know today, it is obviously not small in terms of GDP, although nominal figures are low. Iceland has still not managed to appeal to foreign investors on any scale; the small market, indexation, non-standard procedures for calculating bond value (e.g. the housing bonds draw) and some unrest in the Icelandic foreign exchange market in recent times are all factors at work. In a nutshell, the market in Iceland can be described as relatively developed, despite its short history, with a framework that ought to encourage an active market.

Conclusion

The market value of listed bonds on ICEX amounted to more than 500 b.kr. at the end of 2001. The largest issuers are the treasury and the Housing Financing Fund with more than 65% of the market value of all listed bonds. Issued categories of housing bonds, treasury bonds and treasury notes are large enough to make them the most liquid of all securities in Iceland. However, the number of issued categories has fallen in recent years, largely as a result of treasury buybacks. The market share of housing bonds, bank bonds and bank bills has increased in recent years.

In the space of just over a decade the Icelandic bond market has advanced by leaps and bounds. Trading has burgeoned in both primary and secondary markets. An enormous growth in turnover has taken place on Iceland Stock Exchange, not least in trading with treasury benchmark instruments and housing authority bonds. At the same time, the insti-

tutions and corporations operating in the market have grown in strength and their assets of market securities have multiplied in value. More active asset management by investors such as pension funds, credit institutions and securities funds has spurred trading and consolidated price formation for market bonds. Although it is not long since an organised bond market formed in Iceland, it can be said to play a significant role now both in credit intermediation and interest rate formation.

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