Denmark's simple model for the securitisation of mortgage-backed securities provides a low-risk alternative to other systems and offers low-cost, fixed-rate and adjustablerate mortgages to consumers. Dan Barnes asks whether it could work in the UK

## examp

IN DENMARK'S 200-YEAR-OLD securitised mortgage market, lenders issue matching bonds to finance the mortgages they issue. As a result, the mortgage lenders are exposed only to credit risk and so are encouraged to enforce strict credit standards. According to the Association of Danish Mortgage Banks, there has not been a bond default since the system was established, and no Danish mortgage bank has ever been declared bankrupt. The returns have been equally impressive. The Nykredit Danish Mortgage Bond Index, comprising the most liquid mortgage bonds listed on the Copenhagen Stock Exchange, hit record levels in January. The Index is up 29% since 2007, gaining almost as much since the US sub-prime collapse as in the previous five years, beating even US Treasuries. Foreign investment has surged, growing 28% (Kr365bn) last year to November, bringing this share of the market to 13%, according to central bank data. In the event that a mortgage bond did default, bondholders' claims would be covered first. During the financial crisis, Danish mortgage banks were not exposed to the interest-rate, foreign-exchange, liquidity and option risks

countries to look at the model's potential for supporting their own housing markets where they have stalled. "In the UK we've had a huge tightening in regulation, which has made mortgage lending much more expensive," observes Brandon Davies, Senior Non-executive Director at Gatehouse Bank and formerly Treasurer of Barclays and Head of Financial Engineering at investment bank BZW.

A version of the Danish system was launched in Mexico in 2007 (see box). In addition, in 2012, the Dubai International Financial Centre (DIFC) published a feasibility study for developing a UAE market, prepared with the help of Absalon Project, a joint venture between affiliates of Denmark's VP Securities and Soros Fund Management and including prominent investor George Soros. Absalon Project supports implementation of the Danish mortgage model in other markets worldwide. Its UK Managing Director is Kathleen Tyson-Quah, formerly of the Securities and Investment Board (the UK's precursor to its current regulator the Financial Services Authority) and the designer of Iraq's banking network and

payments system. She says that talks are taking place with UK authorities to assess the feasibility of a similar model in the Bernard Clarke, Communications Manager at the UK's

Council of Mortgage Lenders, says that the model has appeal, as it removes interest-rate risk for lenders and makes an assessment of the credit risk, which is the key decision for the lender.

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that their overseas counterparts faced, and experienced no loss of liquidity. In Denmark, total loans outstanding for commercial banks declined from about Kr1.5tn at the start of 2009 to Kr1.25tn by the end of 2011, while loans from mortgage banks grew at an uninterrupted pace from Kr2.2tn to Kr2.4tn over the same period, according to the Danish Central Bank. In contrast to banking systems dependent on residential mortgage-backed securities, there has been no need for government guarantees or bailouts in the Danish mortgage system. This track record has led market practitioners and regulators in other

## Hitting a wall

But Clarke notes that there could be some difficulty attracting UK consumers to long-term credit at fixed rates of interest - especially now. The model might be more useful in stabilising access to wholesale finance for the existing variable-rate mortgage market through issue of matched-maturity variable-rate or trackerrate mortgage bonds. "The role of brokers in the UK market and the structuring of many mortgage products by lenders reinforce the appetite for churning products over the shorter term," he says. "Over the last ten years or so, UK consumers have enjoyed very low borrowing costs as a result of these features of our national mortgage market. With short-term interest rates at the current low levels, it will be difficult to offer a long-term loan rate for a period of 25 years or more that will be attractive to the borrower." Brandon Davies is also cautious about the appetite for interestrate risk from pension and investment funds. "The head of one of the biggest funds in Denmark has told me that they are very worried by the level of interest rates at which

## Mexico's model

HiTo, a mortgage-servicing company inspired by the Danish mortgage trust Totalkredit, launched in Mexico in 2007.

The participating originators would not accept joint liability as the banks that had formed Totalkredit did, so a twolayer structure was developed. Within the issuing trust, each originator has its own segregated sub-trust that issues private notes corresponding to the mortgages. Each subtrust must be sufficiently capitalised to make the private notes locally AAA-rated.

However, the financial crisis has resulted in a limited use of the multi-originator model; today, a labour-market pension fund, Infonavit, is the main originator of HiTo mortgage loans.

says Davies. Casper Andersen, Associate Director, European covered bonds, at Standard & Poor's, warns of resistance from existing holders of bank bonds. "The assets that are currently backing unsecured bank bonds would be segregated for the benefit of covered bond holders; unsecured bank-bond holders may feel that their security is being diluted," he says. Existing UK mortgage players would resist the commercial threat. "I'd be amazed if retail banks wanted to see this model implemented," said one banker who wished not to be named. "Under the current FSA regime, the business is rather lucrative, with high barriers to entry. It's an insider's game." Retail banks, believes Davies, would avoid the new scheme because remortgaging would be too complicated for customers to understand: "They are scared of another misselling scandal," he warns.

Could the challenges be overcome? Sir Adam Ridley, former Director General of the London Investment Banking Association and a backer of the UK scheme, believes they could.

Marketing would help convince pension funds of the appeal of the long-term interest-rate risk. "Other long-term assets won't perform any better," he notes.

And the system would be cheap to implement, lowering barriers to entry. "You don't need an enormous apparatus to do this: it's not an expensive or complex business for smaller institutions," he says. "You can get a group of local housing bodies into one family of covered bonds."

The EU believes that the LIK needs a more competitive banking market.

UK needs a more competitive banking market.
A new mortgage model that could bypass
the retail banks would be likely to win the
support of Brussels.

## How the Danish model works

The existing Danish model was set up following the Copenhagen Fire of 1795, which left 6,000 citizens homeless. It was intended to provide low-cost financing of residential homes, rather than using a commercial lending model.

Mortgage banks can issue three types of bonds: mortgage bonds, covered mortgage bonds and covered bonds. Mortgages were traditionally fixed rate, but in 1996 variable and floating-rate loans were introduced.

The system operates on the 'balance principle'. This is enshrined in market rules that say that the outstanding principal of bonds must always be equal to the outstanding principal of mortgages, and must be issued on the same terms.

"What's critical about the balance principle is that it protects the whole chain of stakeholders," says Kathleen Tyson-Quah, Managing Director, UK, for the Absalon Project. "Whether fixed or variable rate, the borrower is getting near-wholesale interest rates. The bank has no interest-rate risk or refinancing risk — the latter being a major reason for bank failure in the crisis. And bond holders have both a claim on the bank and on the underlying mortgage loans."

Unlike other mortgage markets, the interest rates in the Danish market are not negotiated between the mortgage bank and the borrower; instead, they are determined by supply and demand on the bond market.

The bond holder receives a long-term investment with a transparent exposure to an

underlying asset. Under a principle called 'match funding', if a potential homeowner wanted to take out a mortgage, the mortgage bank raises finance by selling mortgage bonds of the same value, with the same repayment and interest-rate terms as the mortgage. When the bank receives the principal and interest payments from the borrower, the money is used to meet principal and interest obligations to the bond holders.

Refinancing is crucial to the model's value for retail investors. According to Danish asset manager Sparinvest, about 50% of mortgage bonds are 'callable' bonds, meaning that if interest rates decline, borrowers on a high fixed rate are able to repay their loan early and take out a new mortgage at a lower rate. If rates rise, they either benefit from the lower cost of their fixed-rate payments or they can effectively remortgage by buying bonds at the lower market price and swapping a capital gain for higher repayments in the future.

"The market is transparent, and the available information so detailed, that you can follow which bonds have been issued on your mortgage," says Casper Andersen at Standard & Poor's. "Most borrowers actively follow the market and look for the right time to convert."

Mortgage banks cannot accept deposits and can only finance loans with bonds on the balance principle. You sense that Sir John Vickers and the Independent Commission on Banking would approve.