Securitization: What Is Different About the USA?

by Adrian Coles

INTRODUCTION

Over the years there has been much expectation that the system of mortgage securitization common in the United States would be extended to the rest of the world. Indeed, there is a common assumption that the U.S. system represents an advanced method of financing residential mortgages, one to which other countries should aspire. This article seeks to take a more balanced view, drawing attention to a range of factors that distinguish the U.S. market from other countries, while describing and acknowledging some of the universal benefits of the securitization process.

Indeed, the article begins with a brief summary of these benefits before moving on to a discussion of the differences between the United States system of housing finance and the system with which the author is most familiar—that in the United Kingdom. The article concludes with an assessment of the prospects for the future growth of securitization in the U.K.

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SECURITIZATION

One of the fundamental differences between mortgage markets in the United States and in the U.K. and the rest of Europe concerns the role of securitization. This process involves the packaging together of bundles of mortgages and their resale, so that they are tradeable on the capital markets. In the USA about 50% of all outstanding residential mortgages at the end of 1997 were securitized. This amounted to about $2 trillion out of a total market of $4.1 trillion.

The key advantage of securitization is that it enables an unbundling of the mortgage processing function to take place. There are seven key functions in mortgage lending:

1. The design of the mortgage product.
2. The selling, or marketing, of the loan. This involves drawing to the attention of potential customers the advantages of the particular product on sale and completing the sales process.
3. Packaging the loan. This involves the research that is necessary in order to enable the paper work—or increasingly the electronic work—to be undertaken. The term includes obtaining references from employers, undertaking a valuation of the property, and generally obtaining reassurance that the borrower will be able to repay the loan and interest as it falls due.
4. Administration. This involves the collection of interest and principal payments as they fall due and dealing with relations with the customer during the term of the mortgage.
5. Funding. This involves the provision of the funds which are necessary in order to create the loan.
6. The assumption of risk. This involves taking the risk that the loan or interest will not be repaid or that the value of the loan will change. In a non-securitized system the lender normally bears this risk. In a securitized system this risk can be traded.
7. Delinquency management. This involves debt collection, the management of loans in arrears and possibly the sale of repossessed properties, although in some cases this could become a separate function.

There is no particular reason why a single institution should undertake all of these processes. Rather, the unbundling of the mortgage process enables institutions to concentrate on those areas in which they have the greatest comparative advantage. In the United Kingdom, typically, banks and building societies have undertaken most of the functions mentioned, although this is changing. Currently, for example, about 50% of new loans are arranged through intermediaries, rather than directly with the lender, and a range of packaging companies with varying functions has been established.

In the United States companies, typically, concentrate on just one part of the process. Moreover, there is evidence that the extent of specialization has been increasing. One of the most interesting trends has been the rapidly rising market share held by mortgage banks. In 1990 the mortgage banks were responsible for around 35% of residential mortgage originations; by 1996 the figure had risen to around 55%. These institutions are quite different from the organizations of the same name in Europe. In the USA they originate and package mortgage loans, holding them on balance sheet for a short period of time before selling them into the secondary market; in Europe they are portfolio lenders, funding their mortgage assets with mortgage bonds.

As well as increasing the specialization and, arguably therefore, the efficiency with which the mortgage lending process is undertaken, securitization has at least four further advantages:

1. It enables the more efficient use of capital during the lifetime of a mortgage. A mortgage lending institution which has sufficient capital to take on the risks involved in initially making the mortgage loan must make the assumption, in a non-securitized system, that it will have sufficient capital available for the lifetime of the loan. A system involving securitization allows an institution to vary the level of mortgage holdings which it has in line with available capital.

2. Higher liquidity. The arguments here are very similar. An institution making a mortgage loan in a non-securitized system must have sufficient funding for the lifetime of the loan, if it wishes to continue to hold it. In a securitized system a lender does not need to be successful in the funding market in order to create the conditions necessary to be successful in the lending market. Indeed, a non-securitized system requires an institution to move in and out of the new mortgage market as its funding varies. Securitization offers additional flexibility and therefore arguably is more likely to encourage a steadier, and more widely based, flow of funds into the mortgage market.

3. The third point is related to the previous one. U.K. institutions especially are particularly reliant on retail funding for mortgage finance. If, however, the world really is moving into a period of very low interest rates, retail deposit funding may be increasingly difficult to attract. In this case, retail-funded institutions may be encouraged to look at alternative sources of funding, including securitization.

4. The fourth point relates to risk. Organizations operating within a securitized market are able to constantly reassess the risk/reward relationship involved in holding mortgages and alter their portfolio behavior accordingly. For example, securitization offers local mortgage lending institutions the opportunity to reduce the geographic concentration risk which they might otherwise face, by selling loans which they had originated in the local area and purchasing a more diversified portfolio on the secondary market.

Given the obvious benefits of specialization, capital management, provision of liquidity and more attractive funding opportunities, it may be surprising that the securitization market in the United Kingdom, and indeed in the rest of Europe, has not grown as quickly as was predicted in the mid- to late 1980s. Indeed, a measure of the lack of interest in securitization is provided by the fact that the trade body for mortgage lenders in the United Kingdom, the Council of Mortgage Lenders, has not prepared a publication on the U.K. secondary mortgage markets since October 1995 (although its quarterly economics journal, *Housing Finance,* did include an article on the subject in November 1998).

Similarly, the Building Societies Commission, the body responsible for the prudential regulation of building societies, issued a draft prudential note, drawing building societies' attention to the risks involved in becoming active in the secondary market either as an issuer or purchaser of securities, in June 1994. A finalized version of the prudential note was never issued. A further consultation draft is promised for 1999. (It should be acknowledged that the Bank of England, which until recently was responsible for regulating banks, did issue policy notices on the subject in 1989, 1992 and 1996.)

The next section of the paper turns to analyze the reasons behind the rapid growth in the market in the United States, where an additional range of factors, over and above those described above, has been present

GROWTH IN THE USA

The advantages outlined above explain some of the growth in the market in the USA. However, the American market has been characterized by a range of unusual factors which have encouraged further growth in the securitization process.

Role of the Federal Agencies

A key difference between the situation in the USA and that in the U.K. is the role of federal agencies. There are three such agencies active in the secondary mortgage market in the U.S. These institutions buy individual packages of mortgage loans from lending institutions and either hold them on balance sheet or securitize them, selling them into the secondary market. In many cases it can be advantageous for a lending institution to sell loans to one of the federal agencies and repurchase credit-enhanced securities backed by the original loans.

There are three agencies. The Government National Mortgage Association, otherwise known as GNMA or Ginnie Mae, guarantees pools of loans originated by mortgage banks. The loans are insured by the Federal Housing Administration (FHA) and are targeted toward lower and moderate-income home buyers. Ginnie Mae is backed by the full faith and credit of the U.S. government, which guarantees the timely receipt of principal and interest. U.S. institutions buying Ginnie Mae mortgage securities do not need to allocate capital to back these purchases, as Ginnie Mae paper enjoys a zero percent risk weighting, the same as U.S. Treasury bills.

There are two other federal agencies active in the market, the Federal Home Loan Mortgage Corporation, or FHLMC, or Freddie Mac, and the Federal National Mortgage Association, FNMA, or Fannie Mae. These institutions enjoy an implicit U.S. government guarantee; there is a belief, so far untested, that if the agencies failed they would be bailed out, in one way or another, by the U.S. government. (Evidence of the governmental link is provided by the fact that, for example, five members of Fannie Mae's board of 17 are appointed by the U.S. President.)

They are, however, in other respects, conventional shareholder-owned institutions, with widely traded equity. Bonds and mortgage-backed securities issued by Freddie Mac and Fannie Mae carry only a 20% risk weighting for U.S. banks, compared to the internationally agreed 50% weighting for conventional residential mortgages; this reflects the guarantees which these agencies offer.

Fannie Mae holds about 17% of all outstanding mortgages (and therefore about 34% of securitized mortgages), Freddie Mac holds 14% (28%), and Ginnie Mae, about 13% (26%). About 8% of outstanding mortgages (20% of securitized loans) are in pools issued by private conduits, not backed by the federal agencies.

This gives us some idea of why the secondary market in the United States is so large and attractive. In effect, the secondary market is government backed, enjoys implicit government guarantees and therefore provides cheaper sources of funding than other mechanisms. Informal estimates suggest that the federal backing for Fannie Mae and Freddie Mac, for example, reduces their funding costs by about 50 basis points. Moreover, the sheer size of the institutions allow them to develop significant scale economies. Also, the agencies are allowed to operate with significantly lower capital-to-assets ratios than banks or savings and loans. They did not become subject to specific capital adequacy regulation until the mid-1990s.

The federal agencies are important, not only because of their implicit U.S. government guarantee (explicit in the case of Ginnie Mae), but also because their size enables them to impose a homogeneity on the market. Fannie Mae, for example, has developed standardized software to assist lenders in underwriting processes; and the federal agencies can insist on loans having particular characteristics before they purchase. Moreover, the federal agencies are able to publish uniform, widely available mortgage rate benchmarks in order to facilitate comparison shopping by borrowers. No such standardization process exists in the U.K. Indeed, the ambition of many institutions' marketing departments is to ensure that their loans are quite unlike any others on the market!

Dominance of Fixed-Rate Loans

A further crucial difference between the U.K. and U.S. markets, although not between continental European markets and the U.S., is the dominance of fixed-rate mortgages. Almost two-thirds (65%) of loans held by the federal agencies are 30-year fixed-rate loans and a further 15% are 15-year fixed rates. Just 10% of the loans are adjustable-rate mortgages. Even on these mortgages, the rate charged by the mortgage lending institution is linked to an index.

The position in the United Kingdom is quite different. In the U.K. about 80% of outstanding loans are variable rate, with variations in the rate determined by the lender, generally without reference to any external indicator. Such loans are clearly more difficult to securitize if there are no objective indicators of the likely return to be received by the holders of the securities. The return depends on the interest rate policy pursued by the originator. Fixed-rate loans have become more popular in recent years, accounting for over half of new lending in 1998; but in 1998 the average original length of the fixed period of a fixed-rate loan advanced by building societies was around 3.75 years—still extremely low compared to those countries where fixed rates are the norm.

Prepayment Risk

A further key difference between the American and the U.K. and European markets is the overwhelming importance of pre-payment risk in the United States and its relative absence in the U.K. and elsewhere. In the USA borrowers typically take out 30-year fixed-rate mortgages, but there are no, or very small, redemption penalties. This means that, in the event of a substantial fall in interest rates, consumers can refinance in order to obtain the benefit of the lower rate of interest, repaying their higher cost loan at effectively no charge. The institution holding the loan in the secondary market clearly operates under a risk of not receiving the expected return from the borrower if the borrower pre-pays. The secondary mortgage market offers an effective mechanism for pricing that risk.

In the U.K. and much of Europe, however, pre-payment risk effectively does not exist. On U.K. fixed-rate mortgages, redemption penalties are levied which entirely compensate the lender in the event the borrower redeems the mortgage loan. Even on variable-rate loans where the first few years' payments are discounted, the standard contractual arrangements involve the repayment of at least part of the discount, or the cashback (the lump sum given on some mortgage products by the lender to the borrower at completion, as an incentive to use that particular institution), in the event of early redemption.

Pressure on the Savings and Loan System

A further important factor in the development of the secondary mortgage market in America was the pressure on the savings and loan associations, or "thrifts," during the 1980s. The thrifts were subject to a classic squeeze resulting from the cardinal banking sin of borrowing short and lending long. Between the 1930s and 1970s the thrifts funded long-term fixed-rate mortgage loans on the basis of variable rate deposits. This system worked well in a time of stable interest rates but broke down from late 1979 onwards, following the very sharp increase in interest rates that occurred then. It rapidly became clear that the traditional thrift system could not continue at a time of high and fluctuating interest rates.

Those thrifts that survived the squeeze on interest margins and liquidity resulting from pressure to pay increased rates on deposits while holding a portfolio of fixed-rate loans, quickly realized that fixed-rate loans which they made in the future should not be held on the balance sheet but instead sold into the secondary market. Accordingly, one of the main types of portfolio lenders (that is, lenders holding mortgage loans on their balance sheet) instead, to some extent, took on the characteristics of the U.S. mortgage banks, merely warehousing loans for a short period before reselling them. As noted earlier, such transactions also offered a more efficient use of what had become very limited capital.

Lack of Capital

A further pressure in the USA, which applied particularly to thrifts but also to some other institutions, was a lack of capital. Indeed, much capital held by the savings and loan institutions was wiped out at the time of very high interest rates between 1979 and 1981. This created a clear incentive to move loans off the balance sheet and to enable other adequately capitalized institutions to purchase the loans. In the United Kingdom institutions have not generally suffered a lack of capital. Indeed, the current issue relates in many cases to the over capitalization of institutions. It is possible, however, that over capitalization means that capital is not used as efficiently in the United Kingdom as it is in the U.S., where lack of capital among traditional housing finance lenders has been a greater issue.

Geographical Restrictions on the Primary Market

A further factor likely to have encouraged the use of the secondary market in its early development in the 1980s was the restriction (since largely eased) on interstate banking. In the U.K. a national banking system has meant that funds raised in parts of the country with a capital surplus can be transferred to those parts of the country with an excess of borrowing demand, within institutions rather than through markets. In the U.S. one of the main ways of transferring funds from capital-rich (surplus of savings) areas to capital deficit (surplus of borrowing) areas has been through the secondary market—an obvious solution, given the government-imposed restrictions on the development of the primary market.

THE POSITION IN THE UNITED KINGDOM

None of the above is to deny that securitization has occurred in the United Kingdom. The original proponents of securitization were the mortgage companies which were formed during the housing market boom of the late 1980s. It is generally acknowledged that some of these organizations paid insufficient attention to underwriting during the buoyant conditions of that period and, as a result, suffered more than other mortgage lenders during the recessionary years of the early 1990s.

The CML publication, *The U.K. Secondary Mortgage Market - Securitization and Portfolio Sales,* published in October 1995, includes a table showing that between their date of issue and July 1995 more than half of the secondary market issues which occurred in the United Kingdom suffered from a downgrade by the credit rating agency, Standard and Poors. Perhaps more important, the institutions which were the most important proponents of the creation of a secondary mortgage market in the United Kingdom have, with one exception, become subsidiaries of much stronger institutions with less interest in securitization.

A number of mainstream lenders have, however, been involved in securitization in the United Kingdom. During 1994/95 two large building societies, since merged with other institutions, Leeds Permanent and

National and Provincial, used securitization via privately placed sub-participations to raise £100 million and £250 million respectively. Birmingham Midshires Building Society, soon to be taken over by Halifax plc, more recently (in 1997) securitized much of a mortgage book which it purchased from a European institution keen to exit the U.K. market.

More recently Bank of Scotland has securitized its Shared Appreciation Mortgage lending, and a number of sub-prime lenders, often subsidiaries of U.S. institutions, have been successful in securitizing their loan books. "Perhaps most significant of all, however, was Abbey National's £247.5 million issue backed by mainstream mortgages in February [1998]. This was Abbey's first securitization and could be looked back on as a breakthrough by securitization into mainstream British mortgage lending." (CML, *Housing Finance,* November 1998). In January 1999 Northern Rock plc announced that it was considering securitizing new lending in the light of intense competition for retail deposit funding.

Significant activity has also been seen in the United Kingdom in the purchase and sale of existing mortgage books from one portfolio institution to another. This has been a more popular method than securitization for those institutions wishing to exit the market. In the ten years from March 1987 well over 50 portfolios changed hands. In addition, one or two mortgage servicing companies have also been created, which now service perhaps £5 billion (out of a total U.K. mortgage market of £450 billion) of mortgage assets, which they do not hold on their own balance sheets. Again, however, this is a relatively small, although growing, part of the market.

The key factors driving the demand of U.K. mortgage institutions for securitization will be as follows:

a. The growth of the sub-prime market, where the market leaders are generally backed by American institutions well familiar with securitization techniques, but without well-established U.K. deposit-taking franchises.

b. Possible erosion of low retail savings rates, leading to retail-funded institutions seeking to experiment with alternative funding techniques if retail savers act adversely to low interest rates.

c. Rapid growth in the balance sheets of some lending institutions. In general terms U.K. mortgage lenders are overcapitalized and lend into a market growing only slowly. Nevertheless, some institutions are increasing their market share and growing rapidly, and could conceivably hit a capital constraint. These institutions will look to widen their balance sheet management options well before hitting a constraint.

d. The costs of securitization, including credit enhancement, investment banking fees, taxes, legal fees and administration.

e. The willingness of lenders to make available information on the performance of their portfolios, so as to aid efficient pricing of securities by the market.

If, on the other hand, deposit funding continues to be made available (perhaps in reaction to a stock market correction) and attractively priced, if rapidly growing institutions can raise additional capital, if the quality of the remaining on-balance-sheet mortgage assets is lower than the average quality before securitization takes place, if the capital freed-up by securitization cannot be reinvested in activities yielding a higher return on equity, or if lenders are reluctant to open their books, the demand for securitization will be more limited. Activity will also be influenced by conditions in the supply side of the market. The Russian default in the summer of 1998, for example, led to margins widening to such an extent that securitization became an unattractive option for pricing reasons.

CONCLUSION

Overall, the question of securitization in the U.K. is one that has not been uppermost in many lender's minds. Experiments in securitization in the past have generally not led to the growth of activity anticipated. In some instances there has been both an overly enthusiastic belief that the products and techniques which operate in the U.S. market are transferable to the U.K. market and a lack of recognition of the differences between the two markets, not least the role of the federal agencies.

However, conditions in the U.K.'s markets are changing rapidly. Intense competition, greater focus on the need to use capital efficiently, changing funding conditions created by historically low inflation and interest rates, and an acceleration of already existing trends towards specialization may drive the creation of a much larger secondary market than has been seen so far in the U.K., although it will still be very much smaller than in the USA.