

# ECONOMIC COMMENTARY

Federal Reserve Bank of Cleveland

## Securitization: More than Just a Regulatory Artifact

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**C**ompetitive and regulatory pressures have prompted banks and other financial intermediaries to participate in credit markets in ways that are not directly reflected on their balance sheets. This poses a problem for regulators, who must assess the risks of these off-balance-sheet lending activities. One such activity is the packaging of loans into marketable securities, which is known as asset-backed lending or securitization.

For example, banks and other loan originators often sell fixed-rate mortgages to government-sponsored agencies, which in turn package these loans with those acquired from other institutions into mortgage pools. The agency sells securities that are claims to these pools to investors in the bond market. In the past several years, securitization has spread beyond government-sponsored activity to private asset-backed pools that fund a wide range of loans.

The recent proliferation of asset-backed lending has raised questions about its impact on the performance of banks. This concern reflects the fact that banks are involved in many aspects of the securitization process, such as packaging, servicing, or enhancing the creditworthiness of these securities. Regulators must determine what risks securitization poses to the participating institutions and how these risks should be reflected in the assessment of bank capital requirements.

This *Economic Commentary* explores banks' incentives to engage in securitization. Part of the dramatic increase in this activity can be traced to banking regulations that raise the cost of funding loans with deposits. However, another important factor driving asset-backed lending by banks is the improvement in information technology that has made securitization cost effective. Indeed, the proliferation of asset-backed lending to nonbank firms indicates that this mode of funding has become efficient for firms not subject to these regulatory costs.

From this perspective, we contend that securitization itself is not undesirable, and in fact is an efficient response by banks to their changing financial environment. Securitization serves as a vehicle for institutions to mitigate both credit and interest-rate risks, while generating fee income for participating banks. Moreover, the securitization process enables banks to attract investors who would otherwise not hold bank liabilities. Nevertheless, securitization poses a challenge to regulators, as they must assess how this activity affects risk in the banking industry.

### ■ Securitization and Diversification

As their name suggests, depository institutions, such as commercial banks and savings and loans (thrifts), have traditionally funded their lending activities by attracting deposits. However, until 1986, deposit-rate ceilings

The recent surge in the volume of asset-backed lending has prompted regulators to scrutinize its effects on the banking industry. Although popular wisdom holds that securitization has been regulatory driven, much of the boom in this funding process has been the result of improvements in information technology, which have made securitization highly cost effective for banks and nonbanks alike.

limited the ability of these institutions to attract funds when market rates rose above regulated maximums. Banks and thrifts also tended to operate in fairly localized markets because of information costs and regulations limiting the scale and scope of banking activities. Depositories were therefore vulnerable to local credit-market conditions, such as the health of the local real-estate market. This was particularly true of thrifts, which were required to hold a certain fraction of their portfolios as residential mortgages.

Indeed, asset-backed lending began as an outgrowth of the government's effort to increase the flow of funds to the mortgage market. In the late 1960s, government-sponsored credit agencies such as the Federal National Mortgage Association (Fannie Mae) and the Government National Mortgage Association (Ginnie Mae) were established to create a secondary market in which

existing mortgages could be sold. These agencies operated as intermediaries, buying government-guaranteed mortgages and funding these acquisitions by issuing securities. In 1970, Ginnie Mae issued a new type of credit-market instrument: the mortgage "pass-through," which was a claim to the return on a specified pool of mortgages. Hence, securitization was born.<sup>1</sup>

Today, the asset-backed market is a viable entity in its own right. Pools of securitized mortgages currently fund nearly 40 percent of home mortgages outstanding (see figure 1). Although government-sponsored mortgage-backed securities account for the largest share of this market, the past decade has witnessed the growth of securitization by private firms packaging mortgages as well as other loans such as credit-card and auto receivables. Depository institutions and nonbank firms are now able to originate and sell a wide variety of loans to asset-backed pools, rather than funding them on their balance sheets.

Asset pooling increases the liquidity of the underlying loans to the point where they can be sold to investors who are willing to hold direct claims on a diversified portfolio (see box). Because these claims increase the diversification and liquidity of loan portfolios, the associated securities are often bought by banks as well as by other investors.

Securitization allows banks to avoid the risks associated with deposit funding. When depository institutions fund loans with deposits, the liabilities they are issuing (deposits) have very different characteristics from the assets they are acquiring (loans). Individual loans, such as mortgages, are illiquid: They have a relatively long term to maturity and are generally not individually marketable to investors. Alternatively, deposit liabilities, such as checking and savings accounts, are short-term, liquid assets.

The differences in the maturity of banks' assets and liabilities cause depository institutions to be vulnerable to interest-rate risk. When interest rates rise, banks must pay higher deposit rates while being

effectively locked into the return on their existing portfolios.<sup>2</sup> An unexpected increase in interest rates will therefore reduce their net income. This risk is asymmetric, however: When interest rates drop unexpectedly, banks do not gain by an equal amount. In this case, banks are not as locked into the return on their loan portfolios, because borrowers can often refinance their terms of credit.

Securitization in effect allows depository institutions to mitigate both the credit risks and the funding risks associated with lending, especially in the case of fixed-rate mortgages.<sup>3</sup> Indeed, an increasingly large number of home mortgages are being earmarked for sale into mortgage pools (see figure 1).

#### ■ Regulatory Motives for Asset Securitization

Although securitization can help banks to manage both credit risk and interest-rate risk, the recent surge in asset-backed lending has been more commonly attributed to the regulatory costs of traditional bank funding.

Capital requirements, which stipulate that depository institutions must back a certain fraction of their loans with equity capital, are an important regulatory incentive for securitization. Because they increase the amount of losses that equity holders can bear, capital requirements tend to reduce the risk of bank failure. Alternatively, nonbank lenders (such as finance companies) are not subject to regulated capital requirements. Instead, they evaluate the inherent risk of borrowers to determine the terms at which they are willing to extend credit.

The growth in asset-backed lending by banks can therefore be viewed as a response to increased competition from nonbank lenders. If the regulatory capital requirement on a particular class of loans is greater than merited by the inherent risk of the claims, then in order to compete with nonbank lenders, banks must securitize these loans—that is, move them off their balance sheets, where they are not subject to capital

## CREDIT ENHANCEMENT OF ASSET-BACKED POOLS

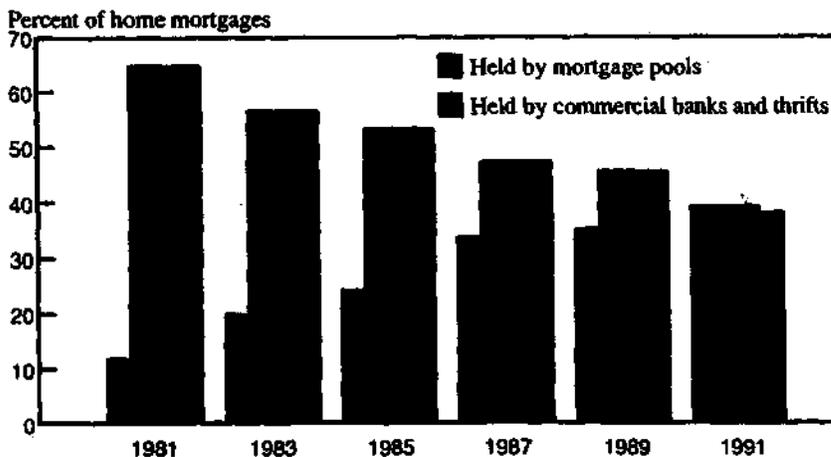
The growth of asset-backed lending other than government-backed mortgages raises the question of how securitization is able to market illiquid loans. Asset securitization involves the issuance of higher-rated (asset-backed) securities to claims against a pool of assets held in a trust. In addition to relying on cash flows of the underlying assets to pay investors, the credit rating of the asset-backed pools is enhanced in any of several ways.

One such enhancement is a bank transfer letter of credit (LTC). For a regulated bank will issue an LTC, in which they promise to insure the purchasing pool up to a designated amount for any losses incurred on the securitized loans. However, before loans are securitized, both the loans and the bank issuing the LTC are rated. Because the rating of a pool can be affected by the rating of the bank guaranteeing the loans, this form of enhancement has become somewhat less widespread.

An increasingly popular enhancement, the cash-collateral account method, has the borrowers covering potential losses with cash placed in an escrow account.<sup>a</sup> Another method is for these securities to be overcollateralized. That is, extra loans are added to the pools so that the value of the loans exceeds the value of the securities that are claims to the pool.

a. See Suzanne Wittebort, "Asset-Backeds Come of Age," *Institutional Investor*, December 1991, pp. 77-80.

**FIGURE 1 HOME MORTGAGES HELD BY MORTGAGE POOLS VS. COMMERCIAL BANKS AND THRIFTS**



NOTE: All data are for the fourth quarter. The two categories do not add to 100 percent because other institutions, such as finance companies, also hold home mortgages.

SOURCE: Board of Governors of the Federal Reserve System.

requirements. An unavoidable consequence, however, is that the loans which remain on bank balance sheets are likely to be those for which the market's assessment of risk premiums is greater than the regulated assessment.

Two other regulatory taxes that have been cited as potential inducements for asset-backed lending by depository institutions are fractional reserve requirements and flat-rate FDIC insurance premiums on deposit liabilities. These assessments are viewed as raising the cost of deposit funding, thus encouraging depository institutions to fund loans off-balance-sheet. However, securitization has continued to expand in spite of decreases in the reserve requirements set by the Board of Governors of the Federal Reserve System. In addition, deposit insurance is subsidized to the extent that flat-rate deposit insurance premiums are unlikely to be a major factor in the growth of securitization. But, since deposit insurance premiums are currently not risk based, they may still have the undesirable effect of causing banks to securitize their safest and most liquid loans.

It has also been argued that deposit insurance may increase the incentive for banks to issue standby letters of credit

(SLCs) to enhance securitized loans, because SLCs are senior claims in the event of bank failure (see box).<sup>4</sup> This incentive to shift risk to the FDIC, however, may not be too important. Because the creditworthiness of both the loans being securitized and the bank issuing the credit-enhancing SLC affects the credit rating of the pool, banks that issue SLCs are generally lower-risk institutions.<sup>5</sup> Thus, it is doubtful that the current deposit insurance scheme is a major reason why banks issue SLCs, because the seniority of claims is important only in the event of bank failure.

#### ■ Securitization and Loan Financing

While regulatory costs and portfolio risks associated with deposit funding may help to explain asset-backed lending by banks, the increase in securitization by nonbank firms is evidence that this financing method has become a viable alternative to other sources of credit—including bank finance. Indeed, nonbank securitization is just one example of the growing competition banks face from nonbank suppliers of credit.

A prominent factor underlying the evolution of the financial sector, especially that of asset-backed securities markets, has been the improvement in technology for

producing information. This has enabled firms to transfer information about individual accounts, making securitization much more cost effective.

These innovations provide another important rationale for the growth of securitization, since asset-backed lending may reduce the costs associated with monitoring certain types of credit. The basic intuition is as follows. The cost of funding a portfolio is related to the costs of monitoring its performance. By issuing asset-backed securities through a separate subsidiary (called a special-purpose vehicle), a firm can separate these claims from other claims on its balance sheet. Investors, therefore, need assess only the performance of the asset pool rather than the general creditworthiness of the borrowing firm. If the assessment of the pool is less costly to monitor than that of the entire firm, the ability to separate these claims from the remainder of the firm's balance sheet enables the firm to obtain better credit terms on the pool.

For example, when Macy's extends consumer installment credit to its customers, it obtains credit-card receivables that it must finance. If the store funds these receivables on its overall balance sheet, the funding costs will reflect Macy's general creditworthiness. Alternatively, if Macy's securitizes its credit-card receivables through a special-purpose vehicle, it may be able to obtain lower financing costs, as the credit quality of these receivables alone may be less costly to assess.

#### ■ Conclusion

The proliferation of asset-backed lending is merely one indication of how the financial scene is changing. As evidenced by the involvement of nonbanks in this market, securitization is clearly more than an artifact of banking regulations. Although off-balance-sheet lending by depository institutions may be more efficient than traditional bank intermediation for some types of loans, these activities may also impact the risk of banks' balance sheets. Because of the potential for increased FDIC exposure to bank failures, policymakers are understandably concerned about the rapid growth of this practice.

In its role as an insurer, the government aims to maintain the solvency of the insurance fund by setting deposit insurance premiums and capital requirements. But it is precisely these assessments that can affect the risks undertaken by depository institutions. Such regulatory taxes create incentives for banks to shrink their balance sheets through securitization.

Unfortunately, when regulated capital requirements and deposit insurance premiums do not reflect the riskiness of a bank's portfolio, they create the incentive for banks to securitize their safest loans and to hold the riskier ones. Thus, risk is shifted to the FDIC (and ultimately to taxpayers). Regulatory changes that more accurately price an institution's risk will tend to diminish the adverse incentives for bank asset securitization.

The risk-based capital guidelines currently being implemented, as well as the risk-based deposit insurance premiums recently legislated by Congress, are attempts to link regulatory costs to an institution's risk. Risk-based capital standards will be phased in by year-end. Banks will then be charged different deposit insurance premiums depending on the overall quality of their asset portfolios.

Because the new risk-based guidelines stipulate higher capital requirements on all bank loans other than home mortgages, they may actually increase the volume of securitization.<sup>6</sup> However, the trend toward asset-backed lending is not entirely adverse for the FDIC. Depository institutions can earn fee income for participating in various dimensions of the securitization process, such as by enhancing asset-backed pools. Moreover, with appropriate regulatory supervision of banks' off-balance-sheet activities, asset-backed lending can mitigate the rising costs of the federal safety net as it reduces the share of credit funded on the balance sheets of depository institutions. Thus, securitization is better viewed as an important innovation in the financial sector—one that allows new suppliers of credit to enter the market and existing ones to intermediate credit more efficiently.

#### ■ Footnotes

1. See Christine Pavel, "Securitization," Federal Reserve Bank of Chicago, *Economic Perspectives*, vol. 10, no. 4 (July/August 1986), pp. 16-31.
2. The growth of variable-rate mortgages has also helped to reduce the dangers of interest-rate variability.
3. Consider the role of interest-rate volatility during the 1980s in the thrift crisis. The interest-rate increases in the early part of the decade, and the subsequent sharp drop in rates in the mid-1980s, severely weakened the position of thrifts and, to a lesser extent,

banks. This volatility was further aggravated by interest-rate ceilings, such as Regulation Q.

4. Current banking regulations do not allow a bank to issue any claims senior to those of the FDIC. When a bank fails, no individual or institution can receive its funds ahead of the federal insurance agency. However, the SLCs used as credit enhancements in effect give asset-backed security holders a senior claim on the bank's assets, thus maximizing the subsidy that banks receive from deposit insurance. See Lawrence M. Benveniste and Allen N. Berger, "Securitization with Recourse: An Instrument that Offers Uninsured Bank Depositors Sequential Claims," *Journal of Banking and Finance*, vol. 11, no. 3 (September 1987), pp. 403-24.

5. See Robert B. Avery and Allen N. Berger, "Loan Commitments and Bank Risk Exposure," Federal Reserve Bank of Cleveland, Working Paper 9015, December 1990.

6. See Howard W. Albert, "Asset Securitization: Benefits for All Banks," *The Bankers Magazine*, vol. 174, no. 6 (November/December 1991), pp. 16-20.

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