



Issues

Credit Is Overdue for Subprime Mortgage Lending

Subprime mortgage lending is a good example of how our competitive market economy works to improve overall living standards.

In recent years, subprime mortgage lending, which makes funds available to borrowers with less-than-perfect credit, has become the fastest rising component of the mortgage industry. The subprime market is changing rapidly, and, like many other financial activities, it entails significant risks. In this regard, many observers have watched the recent rise in subprime mortgage lending with alarm, concerned with the potential for unscrupulous lending practices and for an overextension of consumer credit.

But what has been largely overlooked is the positive role of technological and market forces in boosting subprime lending and thereby increasing the financing alternatives available to consumers seeking a mortgage. People who previously had difficulty obtaining mortgage financing now have greater access to mortgage credit. Viewed in this way, subprime mortgage lending is a good example of how our competitive market economy works to improve overall living standards.

So what exactly is subprime mortgage lending? Who is making these types of loans, and what segment of the population do these loans serve? Are rates charged for subprime mortgage loans excessive? In this article we shed light on subprime mortgage lending and address some of the questions often asked about it, with an emphasis on what we believe are the overlooked positive aspects of this rapidly growing industry.

What's in a Name?

Subprime mortgage loans are also known as less-than-A-quality; B+C; or marginal, non-

conforming or nonprime loans. No matter what it's called, a subprime loan is one made to a borrower with impaired credit or little or no credit history who may not be able to obtain conventional financing. The types of loans most commonly associated with subprime mortgage lending are first-lien purchase and refinance mortgage loans, and second-lien home equity and home improvement loans.

Subprime mortgage loans are generally categorized into four risk grades: A-, B, C and D. The parameters for each category are established by the individual lender's underwriting guidelines. Although each risk grade can vary from lender to lender, the farther away from A quality (or prime) the loan, the greater the deterioration in the borrower's credit history and the higher the risk of delinquency, default and loss. Chart 1 shows the relationship between the risk grade of subprime mortgages and the percentage of delinquencies, based on a survey of subprime mortgage lenders as of year-end 1997.

What Subprime Lending Isn't

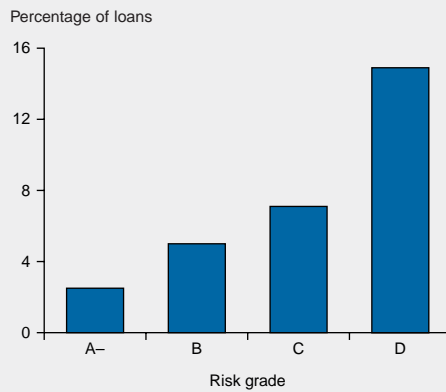
If a mortgage loan is nonconforming with regard to its sale in the secondary market, is it a subprime mortgage loan? Are the new, popular high-loan-to-value mortgage loans commonly known as "125s"—loans that are for more than the market value of the underlying collateral—considered subprime mortgage loans?

The answer to both questions is no. Whether a mortgage loan is regarded as subprime is based on the credit quality of

Mortgage brokers and other specialty lenders saw an opportunity to increase production and boost profit margins by lending to people with less-than-perfect credit.

**Chart 1
Risk Grade Delinquencies**

(December 31, 1997)



DATA SOURCE: *Inside B&C Lending, Inside Mortgage Finance Publications, Washington, D.C.*

the borrower, not the structure of the loan. In fact, just the opposite is true for the classification of 125s, as these loans are normally made to borrowers with prime credit quality. Nevertheless, with all the various names and definitions for subprime mortgage loans, it seems inevitable that some mortgages made to prime borrowers might be incorrectly referred to as subprime and vice versa.

Small in Size but Rapid in Growth

To gain some perspective on the relative size of the subprime mortgage market, consider first the overall debt picture for households. From 1990 through 1997, total household debt grew at approximately 8 percent per year. The largest component of household debt is mortgage debt, which includes subprime mortgages and accounts for about two-thirds of total household debt.

The lack of a standard definition, the wide variety of lenders and the lack of specific reporting requirements have hindered a determination of the subprime mortgage industry's exact size. Nevertheless, the data that are available indicate that the subprime market has made significant inroads into the overall mortgage market. Total mortgage loans outstanding have increased 15 percent over the past two years. But total subprime mortgage loans outstanding increased 36 percent during the same two-year period.

The subprime mortgage market's share of origination activity has also increased steadily over the past few years, as shown in Chart 2. In 1995 subprime mortgage

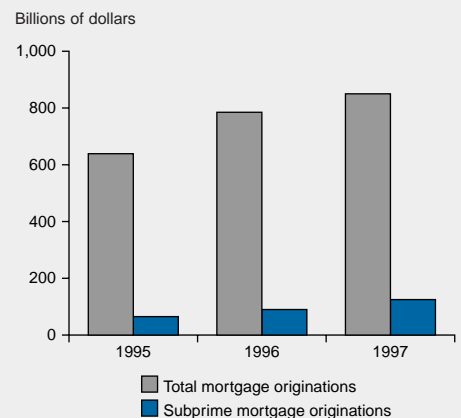
loans made up about 10 percent of mortgage loan originations, and by year-end 1997 they accounted for approximately 15 percent. Total subprime mortgage originations increased 38 percent in 1996 and 39 percent in 1997—far surpassing growth rates of 23 percent in 1996 and 8 percent in 1997 for total mortgage originations.

Why Now?

Subprime mortgage lending is not new. In the past, it was dominated by finance companies that did little advertising or marketing. The general impression among both borrowers and lenders was that subprime mortgage borrowers were a more or less captive segment of the market and that there was a limited amount of competition for this type of lending. This all changed when the refinancing boom of the early 1990s ended and many mortgage companies were left with large staffs, high production expectations, shrinking margins and increased competition in the conventional mortgage market.¹ Mortgage brokers and other specialty lenders saw an opportunity to increase production and boost profit margins by lending to people with less-than-perfect credit.

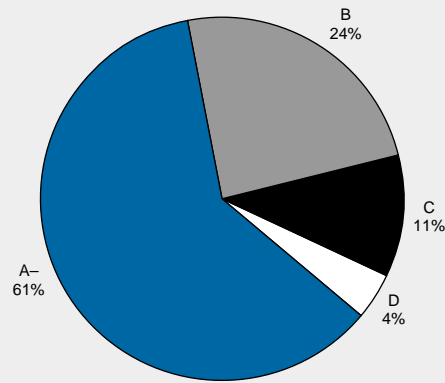
These specialized lenders realized much earlier than most banks and prime lenders that the so-called subprime mortgage market consisted primarily of A- and B quality borrowers, and that these borrowers were willing to pay higher rates for mortgage-related loans. Currently, more than

**Chart 2
Total Subprime Mortgage Originations Compared With Total Mortgage Originations**



DATA SOURCE: *The Mortgage Market Statistical Annual for 1998, Inside Mortgage Finance Publications, Washington D.C.*

Chart 3
Total Subprime Mortgage
Loans by Risk Grade
 (March 31, 1998)



DATA SOURCE: *Inside B&C Lending*, *Inside Mortgage Finance Publications*, Washington, D.C.

half of the subprime market consists of borrowers rated just below prime, or in the A- category (*Chart 3*). Realizing the potential for increased profitability that subprime lending could bring, large mainstream lenders—banks, thrifts and government-sponsored enterprises (GSEs) such as Fannie Mae and Freddie Mac—began to enter this market. As a result, competition and consolidation among lenders have become major issues for the subprime mortgage market.

Two additional factors driving the subprime mortgage lending boom have been the reduction in interest rates and increased access to capital markets and liquidity. First and foremost, the drop in mortgage rates has made it possible for borrowers with high levels of outstanding consumer debt or with credit problems to access the mortgage market for home ownership. It also has allowed them to consolidate debt by refinancing their existing mortgage loans.

Second, funding has become easier for most subprime lenders as technological advancements, such as automated underwriting, have resulted in the ability to securitize subprime mortgage loans. Securitization has provided greater liquidity and better access to capital markets. Subprime mortgage security production more than tripled over the past two years, increasing from \$18 billion in 1995 to \$66 billion in 1997 (*Chart 4*). The percentage of subprime mortgages being financed by securitization is rising: approximately 53 percent of all subprime mortgage loans originated in 1997 were sold in the securities market, com-

pared with 28 percent in 1995. Indications are that the use of securitization by subprime mortgage lenders will continue to be a driving force behind the growth of this market.

In with the New

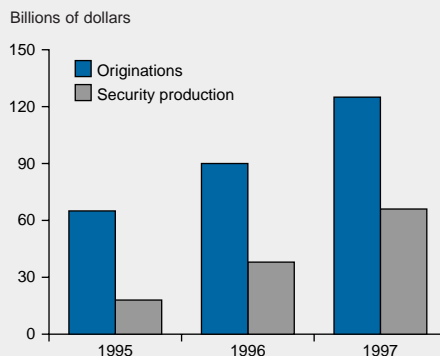
Even though large mainstream lenders have increased their presence in the subprime mortgage lending market, these “traditional” lenders accounted for less than 10 percent of all subprime mortgage loans originated in 1997. This situation is sure to change because banks and other traditional lenders are entering the market at an increasing rate. In addition, the GSEs are now offering lenders easier access to the A- portion of the subprime market via their automated underwriting systems (see box entitled “Automation and Subprime Lending”). Freddie Mac feels that it can use its system to adequately price the risk of subprime mortgage loans while helping customers navigate an array of rates that can vary significantly from lender to lender.

With regard to the GSEs’ entry into the less-than-prime market, Leland Brendsel, chairman and chief executive officer of Freddie Mac, commented, “The key message is that [there] is going to be one mortgage market in the future, with the distinction between prime and subprime only being a matter of grading.” When Congress expressed concern that the agency would be taking on riskier loans, Brendsel responded, “Freddie Mac was chartered to make home ownership available to all.”²

On a related topic, a Freddie Mac

The use of securitization by subprime mortgage lenders will continue to be a driving force behind the growth of this market.

Chart 4
Subprime Mortgage Security
Production Relative to Total
Subprime Mortgage Originations



DATA SOURCE: *The Mortgage Market Statistical Annual for 1998*, *Inside Mortgage Finance Publications*, Washington, D.C.

*Underwriting guidelines
for subprime loans vary
from lender to lender
and rely on many
different characteristics.*

spokesperson stated, “The subprime market disproportionately serves the low-income borrowers we’re interested in.”³ According to the Federal Reserve’s most recent Survey of Consumer Finances, about half (47.3 percent) of families with incomes between \$25,000 and \$49,999 had mortgage debt. In contrast, slightly less than one-fourth of families with incomes between \$10,000 and \$24,999 had mortgage debt.⁴ Although some of the families in the survey may have owned their homes outright, these data suggest that subprime mortgage lenders may help to increase the rate of home ownership for low-income families.

If the Price Is Right

The key to successful subprime lending is pricing loans at a rate that adequately addresses the level of risk associated with each borrower. To successfully price a subprime mortgage loan, therefore, each borrower must first be categorized according to

Automation and Subprime Lending

New technology has provided the mortgage markets with electronic risk assessments in the form of automated underwriting (automated analysis and pricing) and mortgage scoring (a numerical score similar to a FICO score for consumer debt, but for mortgage debt).

Freddie Mac, for example, has developed an automated underwriting system known as Loan Prospector, which allows conventional mortgage lenders to predict borrowers’ behavior more accurately. Freddie Mac expects that by expanding its automated underwriting system for use in the subprime market, greater efficiencies can be realized in the underwriting process, reducing subprime lenders’ costs and making them more competitive.

It is possible that as these systems progress, the use of automated analysis in the subprime mortgage sector will allow the actual mortgage rate charged to the borrower to be based on an automated risk assessment. Accurately determining the proper risk-based mortgage rate for borrowers who are less likely to repay is imperative given the greater level of risk. Price-to-risk matching could decrease the influence of external personal factors and might reduce underwriting costs and minimize losses to lenders and investors.

These developments would allow lenders to serve more borrowers. However, many experts feel that even if automated underwriting is successful in the conventional market, it will not be as easily adapted to the subprime market because each borrower’s financial situation is different and must be addressed on a case-by-case basis.

the lender’s guidelines. Underwriting guidelines for subprime loans vary from lender to lender and rely on many different characteristics, such as the number and severity of prior delinquencies, mortgage payment history (if applicable), loan-to-value levels, debt-to-income ratios, prior bankruptcies and credit bureau scores.

Table 1 gives an example of the four basic subprime classifications based on a compilation of primary ranking criteria used by a cross section of subprime lenders. Correctly slotting each borrower dictates the risk-based pricing strategy and helps to project delinquencies, defaults and loss percentages based on the lender’s historical information for that risk category. This classification process is similar, but on a much smaller scale, to what Freddie Mac is doing. However, there is no industry standard for determining the degree to which a borrower is considered subprime.

Since this underwriting classification system is not uniformly applied among subprime mortgage lenders, the example in Table 1 should be viewed as a heuristic device only. For example, a borrower rated C by one lender could be rated B by another. In Table 1, borrowers are graded by the number of late payments for both consumer credit card debt and mortgage debt and whether they have ever filed for bankruptcy. However, since no borrower fits perfectly into any one category, it is the underwriter’s responsibility to accurately grade borrowers by using credit reports, financial statements and discussions with the borrower.

The maximum loan-to-value ratio for the borrower slotted in the A– category could be 85 percent, indicating a 15 percent down payment. This borrower’s mortgage rate would likely be 1 to 3 percentage points above the rate on a conventional mortgage, given this borrower’s greater risk profile. At present, underwriter discretion plays a much larger role in subprime mortgage lending than it does in prime mortgage lending.

Some Rough Spots

The profitability of subprime mortgage lenders has attracted the attention of many analysts and conventional mortgage lenders. In fact, earnings for the top (in terms of originations) publicly traded subprime lenders grew more than 22 percent in 1997.⁵

But the subprime mortgage industry encountered some rough spots during the fourth quarter of 1997. A significant reduc-

Table 1

Classification/Underwriting Guidelines for Subprime Mortgage Loans*

Grade	A-	B	C†	D
Characteristics	Below average credit	Fair credit	Poor credit	Problem credit
Mortgage credit late payments	2 beyond 30 days, 0 beyond 60 days	3 beyond 30 days, 0 beyond 60 days	4 beyond 30 days, 1 beyond 60 days	Case by case
Consumer credit card late payments	Minimum 30 days, 1 beyond 60 days	Minimum 30 and 60 days, 1 beyond 90 days	Any 30, 60 and 90 days	Satisfactory explanation for credit problems
Bankruptcy filing	Yes, 5-year discharge with 24-month reestablished credit	Yes, 2-year discharge with 18-month reestablished credit	Yes, 2-year discharge with 12-month reestablished credit	None active
Maximum loan to value (percent)	85	80	75	70
Quality spread‡ (percentage points)	1-3	2-4	3-5	6+

* Combined average industry guidelines.

† All borrowers with no established credit history are graded C.

‡ Number of percentage points above conventional A credit quality 30-year mortgage rate.

DATA SOURCE: Author's compilation.

tion in mortgage rates resulted in increased prepayment speeds on many of the securitized loan pools. The higher prepayment speeds, combined with a higher-than-expected level of delinquencies and defaults, resulted in a write-down of assets, the need for increased reserves and, consequently, a reduction in income. As a further consequence, the earnings for many subprime lenders were lower than projected, which, in turn, led to lower stock prices, reduced access to capital markets and concerns about the quality and quantity of future earnings.

Subprime mortgage lenders then faced the challenge of regaining investor confidence and restoring the industry's image and profitability. Most subprime mortgage lenders took immediate action by restating their financial statements using much more conservative accounting assumptions.⁶

The subprime sector has also been subject to lawsuits relating to the payment of yield-spread premiums. As a result, most lenders are making more information available to potential borrowers to increase their awareness of fees, administrative costs and interest rates associated with obtaining a subprime mortgage loan.

Another area of concern frequently expressed in any discussion of consumer credit is the rising level of bankruptcies. Personal bankruptcies have been on an

upward trend since the late 1970s and increased sharply in the mid-1980s. In fiscal-year 1997, bankruptcy filings totaled a record 1.37 million, up 23 percent from the previous year. A number of factors have been cited for this rise, including changes in the legal framework, household credit practices and changing social attitudes toward declaring bankruptcy.⁷ The bankruptcy issue, while important, is beyond the scope of this article. However, we can say that in a free enterprise economy, the decision of how much debt both to extend and to incur should be left to the individual choices of the lender and borrower, respectively. Appropriately priced to reflect the risks involved, the voluntary exchange that occurs between lender and borrower presumably fulfills a demand that exists in credit markets.

Despite the rough spots, the industry received a boost during the first quarter of 1998 when several large mainstream lenders entered the subprime mortgage market by acquiring existing subprime lenders. In addition, volume of originations and servicing of subprime mortgages continued to grow. Securitization of these loans also increased during the first quarter of 1998.

Conclusion

The use of modern marketing tools and celebrity spokespeople has contributed to

Most subprime lenders are making more information available to potential borrowers to increase their awareness of fees, administrative costs and interest rates associated with obtaining a subprime mortgage loan.

Some Subprime Mortgage Lending Terminology

Loan to value	Mortgage loan amount divided by the appraised value of the property.
FICO score	Fair, Isaac Co. credit bureau score. A numerical ranking of potential borrowers based on the likelihood they will pay their debt as agreed.
Prepayment speed	How fast a mortgage loan is paid off before maturity (including refinancings and sale of property). Prepayment speed is one of the critical assumptions used in gain on sale accounting. If prepayment speeds exceed management assumptions, the result is earnings write-downs and loss of investor confidence.
Gain on sale accounting	An accounting method that allows companies that securitize mortgages to book the gains from the sale of those securities when the securities are issued rather than when the income is actually recognized.
Yield spread premiums	A form of compensation paid to mortgage brokers by wholesale lenders, based on the interest rate and points charged on a given mortgage loan.
Securitization	Pooling or bundling groups of subprime mortgages into a mortgage-backed security that is then sold to investors.
125 loan	Generic term to describe a category of second mortgages in which the loan amount exceeds the value of the property. Despite the name, the total loan to value can range from 100 percent to 150 percent.

Increased visibility and competition have given the subprime borrower the option of shopping for a lower rate and receiving a higher level of customer service.

increasing consumer awareness of subprime mortgage lenders and their products. Subprime customers are neither limited to a single lender nor compelled to settle for the first lender that will provide credit. Increased visibility and competition have given the subprime borrower the option of shopping for a lower rate and receiving a higher level of customer service. These changes have allowed many subprime mortgage borrowers the opportunity to gain credit that might not have been available before the recent expansion of the subprime market, obtain a more competitive interest rate and improve their credit history by successfully meeting the terms of the loan.

In addition, technological advances have begun to provide lenders with automated underwriting and scoring tools that, although new to the subprime sector, may help in pricing loans and predicting defaults. These advances, combined with reactions to changes in economic conditions, may represent the beginning of a financial revolution that will create a much broader and more unified mortgage lending industry. In this respect, the subprime market provides another example of our free enterprise system's "democracy of consumption" with respect to financial services as well as physical goods.

— Robert F. Mahalik
Kenneth J. Robinson

Notes

- ¹ Refinancing, as a percentage of total mortgage applications, reached a peak of almost 70 percent in early 1992.
- ² O'Sullivan (1997), p. 77.
- ³ Grant (1998), p. 20.
- ⁴ Kennickell, Starr-McCluer and Sundén (1997), p. 19.
- ⁵ This group of 18 firms accounted for about half of all subprime originations in 1996 and 1997.
- ⁶ These changes, involving the use of gain on sale accounting, refer to assumptions made by subprime mortgage lenders at the time the loans were sold regarding expected profits. See New Century Financial Corp. at <www.ncen.com/analyst-gainonsale.html> for issues related to gain on sale accounting.
- ⁷ For more on bankruptcies, see Ellis (1998) and National Bankruptcy Review Commission (1997).

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11K Bank Notes

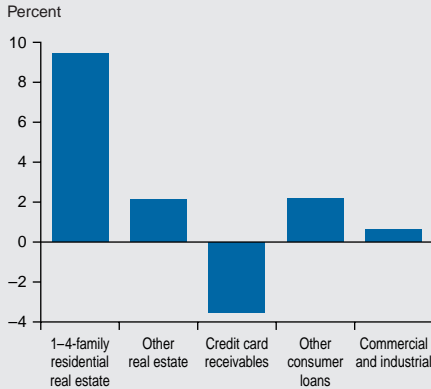
Eleventh District commercial banks added \$2.5 billion to their real estate loan portfolios in the first quarter of 1998. Loans secured by one- to four-family residential property accounted for \$2 billion of this increase. Gross loans outstanding were unchanged from year-end 1997 at \$126 billion.

Home equity lending, available in Texas since the first of the year, appeared to have a big impact on the surge in one- to four-family residential loans. This sector grew by 9.42 percent during the first quarter of 1998, far exceeding the 5.6 percent increase registered for all of 1997. In contrast, at banks outside the Eleventh District, one- to four-family residential loans increased 2.31 percent during the first quarter of 1998. Residential real estate loan data are aggregated on regulatory financial reports filed by commercial banks, precluding a more precise analysis of home equity loans outstanding.

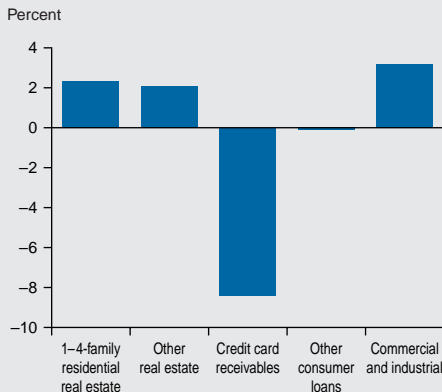
Outside the Eleventh District, banks increasingly shifted their focus to the commercial and industrial sector. Commercial loans outstanding grew 3.16 percent during the first quarter, following a 12.51 percent rise in 1997.

Throughout the United States, the industry began to pare credit card receivables from its balance sheet. During the first quarter of 1998, credit card receivables declined by 3.55 percent at Eleventh District banks and 8.4 percent at banks in the rest of the United States.

First Quarter 1998 Loan Growth, Eleventh District



First Quarter 1998 Loan Growth, Rest of United States



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Online *Trends* Tracks Southwest Financial Industry

Financial Industry Trends, the Dallas Fed's annual overview of the regional financial industry's structure and performance, is now available online. This report focuses on commercial banks, bank holding companies, foreign banking operations, credit unions and thrifts in the Eleventh Federal Reserve District, which comprises Texas, northern Louisiana and southern New Mexico. The report is based on 1997 data collected by federal regulatory agencies.

The latest *Trends* report illustrates that the Southwest financial industry remains generally strong and prosperous, thanks largely to increased efficiencies and a strong regional economy. The regional financial industry comprises a growing number of organizations with a national or super-regional scope, yet retains a sizable number of smaller organizations with a local base. Consolidation continues across the board, driven by intensifying competition, advances in information technology and the liberalization of regulatory restrictions.

This year the Dallas Fed has published an electronic version, rather than a print edition, of *Financial Industry Trends*. You can access the online *Trends* on the Dallas Fed's Web site at:

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