# CRA Insights: Credit Crisis


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## In this issue

Starting in late 2006, numerous subprime mortgage lenders have experienced severe financial distress. Rising interest rates, slower house price appreciation, and increasing delinquencies and defaults by borrowers form the backdrop. These difficulties have led to investigations by regulators, bankruptcy filings, and litigation from securities holders.

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INTERNATIONAL

## Subprime mortgages: A primer on economic issues in litigation

### Background

The US residential mortgage market is often divided into three categories based on loan characteristics and the credit quality of borrowers: prime, near-prime, and subprime. Mortgages made to borrowers with poor credit histories and mortgages with high loan-to-value ratios are classified as subprime. To compensate for the higher default risk and for higher losses on defaulted loans, lenders charge higher interest rates on subprime mortgages.

Over the past decade, subprime mortgages have become an increasingly large part of the US mortgage market. In 2003, subprime mortgages represented approximately 9 percent of the mortgage market. By 2006, subprime mortgages accounted for 20 percent of the market—an increase of more than 100 percent.

The growth of the subprime loan industry has led to more choices for consumers. Borrowers previously unable to access credit now have myriad mortgage alternatives. Changes were made to lengthen amortization terms, to decrease payments in the early years of a mortgage (e.g., short-term, adjustable-rate mortgages), and to provide a variety of choices in terms of documentation of income, assets, and employment.

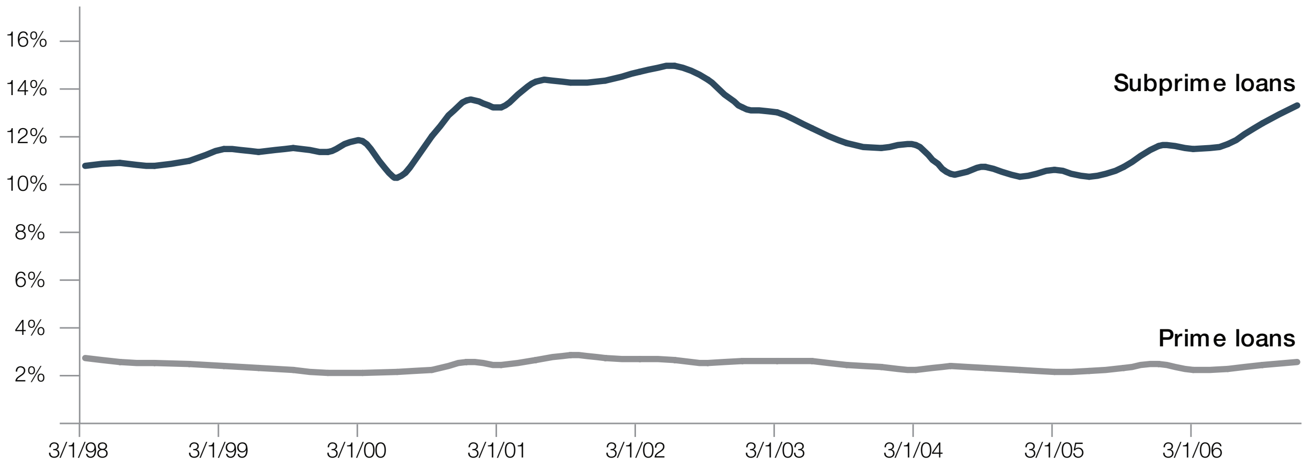
Many lenders also offer high loan-to-value products or combinations of first and second lien loans. This provides borrowers with limited cash reserves with a means of becoming homeowners. Indeed, one of the initial inquiries of regulatory investigations will be the issue of whether lenders took advantage of these borrowers by selling them inappropriately structured loans. Borrower class actions alleging predatory lending practices have already been launched against subprime lenders.

As interest rates have increased, so have default rates of subprime borrowers. Delinquency and default rates on subprime mortgages are higher than on other mortgages. What is more important, however, is the fact that higher loan-to-value ratios increase the losses on defaulted loans.

The inability of subprime lenders to access capital markets, for whole loans and for securitizations, has been one of the most significant problems. As investors have fled, fearing higher default and delinquency rates, capital markets have dried up for lenders. Short-term credit facilities often require borrowers to replace collateral that stops performing. This has imposed additional strain on subprime lenders because they are unable to borrow against many of their more recent loans. The deterioration in loan quality and the liquidity squeeze have led to lower valuations for the loans that lenders still hold, and this has raised doubts about the viability of some lenders.

Some perspective is in order. While attention may be drawn to recent defaults, the subprime market, like many credit markets, is prone to cyclical ups and downs. Figure 1 illustrates that the subprime default rate was higher in 2002 than 2006. In view of these circumstances, it takes careful economic analysis to separate normal market fluctuations from improper practices.

Figure 1: Subprime and prime delinquency rates over time




Source: Bloomberg, Mortgage Bankers Association

## Economic litigation issues

The valuation of subprime mortgage loans will be the main economic issue in litigation that results from the financial difficulties experienced by lenders. Allegations of improper practices, such as providing loans to borrowers who did not meet the stated criteria or restructuring loans and issuing new loans to help delinquent borrowers, will complicate the analysis. The question of valuation will be raised in many contexts for different participants. We discuss some of these below.

### Subprime lenders

Subprime lenders are the obvious target for litigation. Investors, shareholders, and bondholders in many subprime lenders have seen the value of their investments decline substantially. Many of these investors will participate in securities class actions. Because financially distressed subprime lenders will not have the resources to pay large settlements or damages, plaintiff attorneys will likely file suit against the firms' auditors and investment banks.

### Auditors

Table A lists the auditors during the 2000-2006 time period for the largest mortgage lenders as of 2005. Suits against auditors will likely allege that subprime lenders lacked sufficient internal controls, that their balance sheets inaccurately valued mortgage loans, and that the auditors' inaction allowed lenders to misstate financials. These allegations may come in three forms:

A finding that the firms had been loosening credit standards, an event that is likely due to the fact that the industry as a whole was making more and more credit available to an ever-larger group of borrowers, will be used to support allegations of weak/insufficient internal controls.

In instances where the assumed default rates used to value loans were not rising as the firms started lending to more marginal borrowers, auditors will face allegations of having helped company executives overstate profitability.

As delinquency and default rates rise, the value of recently issued loans has fallen due to the increased likelihood of losses and the lower price that buyers are willing to pay for them. At the same time, the value of the residual and servicing interests in older, securitized loans is falling due to the lower likelihood that the cash flows will be realized. A plaintiff may allege that current losses are the result of overoptimistic past valuations that auditors signed off on.

### Investment banks

Many of the subprime lenders that are now in trouble have grown substantially in recent years. As they have grown, they have raised new equity and debt capital. Table B lists the lead underwriters for public offerings between January 2000 and June 2007 for the largest mortgage lenders.

The underwriters, who helped subprime lenders sell mortgage-backed securities, will be the target of a more interesting set of allegations. Stock and bondholders in similar situations have alleged that but for the underwriters help in selling "problem" loans, many of the subprime lenders would have been forced to shut their doors a long time ago, limiting losses to investors.

CRA staff has extensive expertise in:

- Determining the quality of a pool of mortgages
- Estimating the size of losses from "problem" loans
- Calculating the losses attributable to the servicer's financial difficulties versus those resulting from the initial quality of the morgage pool

It is conceivable that plaintiffs will allege (1) that underwriters were or should have been aware of the improper application of credit standards by lenders; (2) that obtaining repayment on the short-term credit facilities was the underwriters' motivation for helping subprime lenders sell low-quality loans; and (3) that underwriters were aware of the precarious financial position of the subprime lenders and should have warned investors that it would affect their ability to service the loans.

Table A: Publicly traded subprime lenders in 2005

| Lender | 2005 Origination Volume (Billions) | Auditors |
|---|---|---|
| New Century Financial Corp. | $56.10 | KPMG LLP (2004–2005) |
| Countrywide Financial Corp. | $44.64 | KPMG LLP (2004–2006); Grant Thornton LLP (2000–2003) |
| Wells Fargo Home Mortgage (Wells Fargo & Co.) | $42.35 | KPMG LLP (2000–2006) |
| Option One Mortgage (Previously a subsidiary of H&R Block) | $40.05 | KPMG LLP (2004–2006); Pricewater-houseCoopers (2000–2003) |
| Fremont Investment & Loan (Fremont General) | $36.24 | Ernst & Young LLP (2000–2005) |
| Washington Mutual | $36.10 | Deloitte & Touche LLP (2000–2006) |
| First Franklin Financial Corp. (Previously a subsidiary of National City Corp.) | $29.33 | Ernst & Young LLP (2000–2006) |
| GMAC-RFC (GMAC) | $25.26 | PricewaterhouseCoopers (2005–2006); Deloitte & Touche (2000–2004) |
| HSBC Mortgage Services (HSBC Holdings) | $25.08 | KPMG LLP (2001–2006); Arthur Andersen (2000) |
| WMC Mortgage (General Electric Co.) | $24.03 | KPMG LLP (2004–2006) |
| CitiFinancial (Citigroup) | $20.51 | KPMG LLP (2000–2006) |
| Decision One (HSBC Holdings) | $16.87 | KPMG LLP (2001–2006); Arthur Andersen (2000 |
| HSBC Consumer Lending (HSBC Holdings) | $16.65 | KPMG LLP (2001–2006); Arthur Andersen (2000) |
| Accredited Home Lenders | $16.58 | Grant Thornton LLP (2005); Deloitte & Touche LLP (2002–2004) |
| BNC Mortgage (Lehman Brothers) | $15.57 | Ernst & Young LLP (2000–2006) |
| ECC Capital Corp. | $14.02 | Grant Thornton LLP (2004–2006) |
| Finance America (Lehman Brothers) | $10.30* | Ernst & Young LLP (2000–2006) |
| American General Finance (AIG) | $9.90* | PricewaterhouseCoopers (2000–2006) |
| Chase Home Finance (JPMorgan Chase) | $9.65 | PricewaterhouseCoopers (2000–2006) |
| NovaStar Financial Inc. | $9.28 | Deloitte & Touche LLP (2001–2006); KPMG LLP (2000) |
| Equifirst (Previously a subsidiary of Regions Financial Corp.) | $8.84 | Ernst & Young LLP (2000–2006) |
| IndyMac Bancorp Inc. | $7.40 | Ernst & Young LLP (2001–2006); Grant Thornton LLP (2000) |

Source: Origination volumes are from The 2007 Mortgage Market Statistical Annual, Volume 1, page 211 (published by Inside Mortgage Finance).
Notes: Auditors for current or previous parent companies are listed where applicable. * Indicates value is an Inside Mortgage Finance estimate.

Table B: Lead underwriters for public offerings of top subprime lenders

| Issuer | Total Transaction Value (Billions) | Lead Underwriters |
|---|---|---|
| HSBC Finance Corp. | $29.96 | HSBC Securities (USA) Inc.; Merrill Lynch & Co., Inc.; A.G. Edwards & Sons Inc.; UBS Investment Bank; Prudential Securities Incorporated; Morgan Stanley; Goldman, Sachs & Co.; Citigroup; Wachovia Securities; Banc of America Securities LLC; JPMorgan Securities Inc. |
| Countrywide Financial Corp. | $4.64 | Citigroup; JPMorgan Securities Inc.; Merrill Lynch & Co. Inc.; Morgan Stanley; UBS Investment Bank; Wachovia Securities; Lehman Brothers Inc.; Banc of America Securities LLC; Countrywide Securities Corporation |
| New Century Financial Corp. | $.98 | UBS Investment Bank; Friedman, Billings, Ramsey & Co. Inc.; Bear, Stearns & Co. Inc.; Morgan Stanley |
| ECC Capital Corp. | $.39 | Friedman, Billings, Ramsey & Co. Inc. |
| IndyMac Bancorp Inc. | $.28 | Lehman Brothers Inc.; Morgan Stanley |
| Novastar Financial Inc. | $.25 | JMP Securities LLC; Friedman, Billings, Ramsey & Co. Inc. |
| Accredited Home Lenders Holding Co. | $.18 | Bear, Stearns & Co. Inc.; Friedman, Billings, Ramsey & Co. Inc. |

Source: Source: Capital IQ, Company Prospectus Form 424B.
Note: Data as of 6/27/2007.

## Credit Crisis Task Force

The full magnitude and impact of the current economic crisis are not yet known. But undoubtedly, the effects on both financial institutions and global business will be profound and lasting. To provide insight into the complex issues raised by the current crisis, CRA has formed a multi-disciplinary Credit Crisis Task Force. We have the expertise to help you both understand the issues and advise you on how best to address them.

## CRA International

CRA International is a leading global consulting firm that offers economic, financial, and business management expertise to major law firms, industries, accounting firms, and governments around the world.

With proven skills and exceptional strength in analytics, CRA consultants provide astute guidance in complex cases. We have helped clients achieve successful outcomes in thousands of engagements involving litigation and regulatory support, business strategy and planning, policy analysis, and risk management consulting.

Our success stems from the outstanding capabilities of our consultants, many of whom are recognized as experts in their respective fields; our close relationships with a select group of respected academic and industry experts; and our corporate philosophy, which stresses interdisciplinary collaboration and responsive service.

CRA's consultants combine uncommon intellectual acumen with practical experience and in-depth understanding of industries and markets. We are adept at handling tough assignments with pivotal and high-stakes outcomes. Our analytical strength enables us to reach objective, factual conclusions that help our clients make important business and policy decisions and resolve critical disputes.

Founded in 1965, CRA has headquarters in Boston and 26 offices across North America, Europe, Asia Pacific, and the Middle East.

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