

[Home](#) > [Economic Research](#) > [Publications](#) > [Economic Letter](#) > Concentrations in Commercial Real Estate Lending



## FRBSF ECONOMIC LETTER

2007-01 | January 5, 2007



[Subscribe](#)



[RSS Feed](#)



[Share](#)

[« More Economic Letters](#)

# Concentrations in Commercial Real Estate Lending

Jose A. Lopez

- [Supervisory guidance on CRE lending concentrations](#)
- [Historical analysis of CRE concentration](#)
- [Measuring the effects of CRE concentration](#)
- [Conclusion](#)
- [Reference](#)

Commercial real estate (CRE), such as office towers, shopping centers, and apartment buildings, makes up approximately one-third of the total value of U.S. real estate. Not surprisingly, CRE-related loans account for a significant portion of total bank lending—about 22% as of 2005. Given its size and prominent role in past episodes of large loan losses, CRE lending is monitored closely by bank supervisors. Recently, the federal banking regulatory agencies issued guidelines regarding the management of risks arising from CRE lending concentrations (Board of Governors 2006).

This *Economic Letter* examines the rise in CRE lending concentration at commercial banks and the performance of CRE loans since the early 1990s. The analysis shows that while concentration in CRE lending has increased substantially at many banks, for those banks with CRE concentrations, the subsequent performance of their CRE loan portfolios, as well as their overall loan portfolios, has not been notably different from other banks. In terms of capital, CRE-concentrated banks have slightly lower capital ratios, although they also have exhibited higher capital growth rates. On balance, the evidence suggests that, in what has been a relatively benign economic environment, banks focusing on CRE lending have been as effective as other banks in managing their lending risks. However, more analysis is needed to understand the differences in levels of capitalization.

### Supervisory guidance on CRE lending concentrations

In December 2006, the federal banking regulatory agencies issued new guidance on sound risk management in response to recent increases in CRE loan concentrations. The guidance focuses on CRE loans for which cash flows from the real estate are the primary source of repayment. CRE loans are defined to include land development and construction loans as well as loans secured by multifamily

property or nonfarm nonresidential property where the primary source of repayment is derived from rental income or the proceeds of a sale or financing. Importantly, the guidance does not apply to CRE loans for nonfarm nonresidential properties where the primary source of repayment comes from cash flows generated by the borrower's business operations, since repayment of these loans is less influenced by the general CRE market.

Although the guidance does not provide a formal definition of CRE concentration, the agencies intend to use two numerical criteria to begin identifying banks with potential CRE concentration risk. The first criterion is when total loans for construction, development, and other land exceed 100% of total risk-weighted capital. The second criterion is two-pronged: when total CRE lending—defined as loans secured by multifamily and nonfarm nonresidential properties, CRE-related commercial loans, and loans identified under the first criterion—exceeds 300% of total risk-weighted capital, and when the CRE loan portfolio has grown by more than 50% over the prior 36 months. The agencies also intend to consider other factors in evaluating CRE concentrations, such as the geographic dispersion of the loans. Banks with CRE concentrations are reminded that their risk management practices and capital levels should be commensurate with the level and nature of their lending risks.

### **Historical analysis of CRE concentration**

The historical analysis of CRE concentration is based on annual bank-level data on total CRE lending (i.e., the second criterion) from year-end regulatory reports filed in 1991 through 2005. The number of banks exceeding the 300% threshold was 531 in 1991, accounting for about 5% of banks and 21% of bank CRE lending. In 2005, 2,177 banks exceeded the threshold, encompassing 29% of banks and 44% of bank CRE lending.

To examine the activities of individual banks, the distributions of total CRE concentration ratios across all reporting banks were calculated. Figure 1 summarizes these annual distributions using three percentiles. The median value, which is representative of the typical bank, has risen steadily from 70% in 1991 to 180% in 2005. Note that the distance between the 25th and the 75th percentiles, has expanded greatly from 125 percentage points in 1991 to 264 percentage points in 2005. This increased dispersion among banks is due mainly to sharp increases in CRE lending by banks that already had relatively large CRE portfolios.

### **Measuring the effects of CRE concentration**

Policy concerns about high CRE lending concentrations are based in part on historical precedent. For example, the percentage of aggregate bank CRE lending that is nonperforming averaged about 6% from 1984 to 1988 and then rose dramatically to 14% in 1990. These CRE loan losses adversely affected the performance and capital levels of many banks, which, combined with changes in capital regulation, helped to precipitate the bank "credit crunch" of the early 1990s. This percentage declined to 6% in 1993 and continued to decline through 2000. Since then, it has averaged 1.5%. The early 1990s episode has raised general concerns about the overall riskiness of CRE lending and the CRE concentrations observed recently, although changes in economic conditions, bank risk management and supervisory practices over the past decade should have lessened these concerns.

To determine the effect of CRE concentration on banks since 1991, certain measures of bank performance were examined over a period of five years after bank-level CRE concentrations were identified. Focusing on banks with more than five years of available data, the analysis here uses the top decile of banks based on the CRE concentration ratio for each year in the sample period. For 1991, the sample consists of 944 banks making up 33% of aggregate CRE lending, while for 2005, 735 banks making up 18% of CRE lending are included. About 95% of these banks have less than \$1 billion in assets.

The mechanism used to perform the analysis is to compare the rank ordering of the concentrated CRE

banks in certain performance categories to the rank ordering of all banks. In particular, I examine whether CRE-concentrated banks tend to have high CRE nonperforming loan (NPL) growth rate rankings in the years ahead. The empirical results show that for all five years after a bank's CRE concentration is identified, only about 25% of the CRE-concentrated banks have CRE NPL growth rates higher than the median bank. These results suggest that most banks with CRE concentrations have experienced relatively low CRE NPL growth up to five years after the CRE concentration was identified. A similar result was found for their overall NPL growth.


Capital positions provide a way to assess bank performance that can shed light on the impact of risk-management practices. The ranking analysis was conducted on banks' total risk-based capital ratios, the broadest measure of capital adequacy. The median capital ratio for all banks is relatively high at 14.7%, much above the 10% threshold for well-capitalized banks under federal requirements. The median ratio for CRE-concentrated banks is lower at 11.5% for up to five years hence. In contrast, the ranking analysis shows that risk-based capital at CRE-concentrated banks grew more rapidly than at the median bank; roughly 75% of them had higher capital growth rates than the median bank for up to five years ahead. These results suggest that CRE-concentrated banks have been increasing their capital actively, albeit from lower levels and probably in part due to their concentration risks.

## Conclusion

This *Economic Letter* examines the historical behavior of banks with CRE concentrations. These banks were shown to have slightly lower CRE NPL growth rates than a typical bank and to have grown their risk-based capital at a faster rate. A possible explanation for these performance results is that most CRE-concentrated banks have managed these exposures prudently over the sample period. However, the relatively favorable economic conditions prevalent during much of the period could overstate the success of their risk-management practices.

Jose A. Lopez  
Senior Economist

## Reference

Board of Governors of the Federal Reserve System, Joint Press Release, December 6, 2006.  
"Concentrations in Commercial Real Estate Lending, Sound Management Practices." 

  [Subscribe](#)  [RSS Feed](#)  [Share](#)

More [Economic Letters](#)

Opinions expressed in FRBSF Economic Letter do not necessarily reflect the views of the management of the Federal Reserve Bank of San Francisco or of the Board of Governors of the Federal Reserve System. This publication is edited by Sam Zuckerman and Anita Todd. Permission to reprint must be obtained in writing.

Please send editorial comments and requests for reprint permission to

Research Library  
Attn: Research publications, MS 1140  
Federal Reserve Bank of San Francisco  
P.O. Box 7702  
San Francisco, CA 94120

[Site Policies](#) | [Privacy](#) | [Contact Us](#) | [Work for Us](#)

Federal Reserve Bank of San Francisco © 2015