

# Managing Commercial Real Estate Concentrations

Commercial real estate (CRE) loans comprise a major portion of many banks' loan portfolios. Demand for CRE lending—a traditional core business for many community banks—has been very strong in recent years, and a growing number of banks have CRE concentrations that are high by historical standards and rising. Growth in land acquisition, development, and construction (ADC) lending has been especially pronounced. Many de novo banks in areas with significant job and population growth (predominately in East and West Coast states) have used ADC loans as the primary asset class to drive growth and meet pre-opening projections. The rapid growth in CRE exposures in recent years presents additional challenges for bank management as it monitors and controls risks it may not have faced in the past.

In response to rapid growth in CRE loan concentrations and observed weaknesses in risk management practices at some institutions, the Federal Deposit Insurance Corporation (FDIC), the Board of Governors of the Federal Reserve System (FRB), and the Office of the Comptroller of the Currency (OCC) (collectively, the federal banking agencies) published *Joint Guidance on Concentrations in Commercial Real Estate Lending, Sound Risk Management Practices* (CRE guidance) in December 2006.<sup>1</sup> This article provides additional information and context to some of the topics discussed in the CRE guidance, drawn from the authors' firsthand observation of the risk management practices of both large and small banks. It covers market monitoring and analysis, credit underwriting and administration, portfolio management, credit risk rating and review, and stress testing.

## Background

According to *History of the Eighties—Lessons for the Future*, the high number of bank and savings institution failures during the 1980s and early 1990s can be attributed primarily to overinvestment in CRE loans.<sup>2</sup> Weak underwriting standards and portfolio management techniques during this time contributed to a significant oversupply of CRE properties that weakened the entire CRE market, leaving borrowers unable to repay their loans and collateral that provided far less support than originally thought. Other factors that contributed to the CRE losses included:

- Lack of market information
- Highly leveraged transactions
- Relatively low borrowing costs and the easy availability of credit
- Government policy, including income tax benefits
- Long gestation periods that allowed supply-and-demand dynamics to change before a project's completion
- Nonrecourse lending and legal structures that shielded project sponsors from risk
- Out-of-area lending, including the purchase of loan participations from out-of-area lenders
- An unregulated real estate appraisal industry that often used inflated assumptions and relied on inexperienced appraisers

Today, many lenders, directors, and senior officers have not experienced a CRE downturn in their careers. They may never have learned the lessons of

<sup>1</sup> *Concentrations in Commercial Real Estate Lending, Sound Risk Management Practices*, Federal Register, Vol. 71, No. 238, December 12, 2006, pp. 74580–74588 (CRE Guidance). Also see FDIC FIL-104-2005 at [www.fdic.gov/news/news/financial/2006/fil06104.html](http://www.fdic.gov/news/news/financial/2006/fil06104.html).

<sup>2</sup> See FDIC's *History of the Eighties—Lessons for the Future*, December 1997, at [www.fdic.gov/bank/historical/history/contents.html](http://www.fdic.gov/bank/historical/history/contents.html).

the 1980s or may view them as distant history that “can’t happen again.” Industry and regulatory changes that arose from the tumult of the 1980s remain intact and are intended to prevent a re-occurrence of the ill-conceived practices of the past. For example, the appraisal industry is now regulated, and appraisal quality is far superior to what it was in the 1980s. Banks and thrifts must now follow federal appraisal regulations, and regulators require banks to establish an effective real estate appraisal and evaluation program to ensure independence and improve quality.<sup>3,4</sup>

In addition to the changes regarding appraisals, the federal banking agencies, along with the Office of Thrift Supervision (OTS), have established underwriting and risk management requirements.<sup>5</sup> A pillar of these requirements is loan-to-value (LTV) limits for different CRE property types. Adhering to these regulatory LTV limits should make institutions less vulnerable to downturns in CRE markets, as borrowers will have more tangible equity in the collateral real estate to cushion against declining values. Conversely, institutions that ignore these LTV limits and have substantial volumes of high LTV loans are more susceptible to the adverse affects of CRE downturns.

CRE loan growth recently prompted regulators to issue guidance to address concerns about CRE concentrations and to provide expectations for managing a concentrated portfolio. The CRE guidance recognizes that diversification can be achieved within CRE portfolios and differentiates risk in different types of

CRE loans. The guidance “focuses on those CRE loans for which the cash flow from the real estate is the primary source of repayment rather than loans to a borrower for which real estate collateral is taken as a secondary source of repayment or through abundance of caution.”<sup>6</sup> The target of the guidance, then, generally would include development and construction loans for which repayment is dependent upon the sale of the property as well as properties for which repayment is dependent upon rental income.

The CRE guidance also identifies institutions that are potentially exposed to significant CRE concentration risk as those that have experienced rapid growth in CRE lending, have notable exposures to a specific type of CRE, or are approaching or exceed the following supervisory criteria:

- Total loans reported on the Report of Condition for construction, land development, and other land represent 100 percent or more of the institution’s total capital; or
- Total CRE loans as defined in the CRE guidance represent 300 percent or more of the institution’s total capital, and the outstanding balance of the institution’s CRE loan portfolio has increased by 50 percent or more during the prior 36 months.

These criteria are not limits and are viewed neither negatively nor as a safe haven. A bank can have significant diversification within its CRE portfolio or have a concentration within a specific CRE category. If a bank’s portfolio goes

<sup>3</sup> The federal bank and thrift regulatory agencies have adopted substantially similar appraisal regulations. See 12 CFR 323 (FDIC); 12 CFR Part 34, subpart C (OCC); 12 CFR 208.18 and 12 CFR 225, subpart G (FRB); and, 12 CFR 564 (OTS).

<sup>4</sup> FIL-74-94, *Interagency Appraisal and Evaluation Guidelines*, November 11, 1994, [www.fdic.gov/news/news/financial/2003/fil0384b.htm](http://www.fdic.gov/news/news/financial/2003/fil0384b.htm).

<sup>5</sup> See *Interagency Guidelines for Real Estate Lending Policies*: 12 CFR 365 and appendix A (FDIC); 12 CFR 34, subpart D and appendix A (OCC); 12 CFR 208, subpart E and appendix C (FRB); and 12 CFR 545 and 563 (OTS). See also *Interagency Guidelines Establishing Standards for Safety and Soundness*: 12 CFR 364, appendix A (FDIC); 12 CFR 30, appendix A (OCC); 12 CFR 208, appendix D-1 (FRB); and 12 CFR 570, appendix A (OTS).

<sup>6</sup> CRE Guidance, p. 74585.

outside of these general guidelines, as many do, the bank will not automatically be criticized, but heightened risk management practices may be needed. Different CRE types may have different risk characteristics. Risk management practices should be commensurate with the complexity of the bank and its portfolio. The guidance states, “in evaluating CRE concentrations, the Agencies will consider the institution’s own analysis of its CRE portfolio, including consideration of factors such as:

- Portfolio diversification across property types.
- Geographic dispersion of CRE loans.
- Underwriting standards.
- Level of pre-sold units or other types of take-out commitments on construction loans.
- Portfolio liquidity (ability to sell or securitize exposures on the secondary market).<sup>7</sup>

These factors could mitigate the risk posed by the concentration. Additionally, banks that have experienced recent, significant growth in CRE lending will receive closer regulatory review than those that have demonstrated a successful track record of managing the risks of CRE concentrations.

The remainder of this article provides context and additional information for some of the topics addressed in the CRE guidance.

## Market Monitoring and Analysis

A bank’s ability to monitor developments in its CRE market area is a critical element of successful CRE lending. Various tools may be available to monitor CRE markets, depending on the size of the market. In many larger metropolitan statistical areas (MSAs), institutions can

obtain market data for CRE other than single-family residential properties from national providers such as Property & Portfolio Research, Real Estate Investment Services, and Torto-Wheaton Research. Residential market information is also available from a number of national and regional providers. Outside of large MSAs, vendor data are often unavailable. In these areas, in-house knowledge and communication with local builders, developers, real estate agents, and civic leaders may be the primary tools for gathering information on market activity and gauging market conditions.

The level of CRE monitoring required can differ among institutions depending on exposure level or perceived risk in a product type or geographic area. Institutions involved in construction and development lending have a greater need to monitor CRE markets, as conditions can change dramatically between the time an institution makes a loan commitment and the time a project is completed. Monitoring speculative single-family housing development can be especially challenging. Institutions must have a clear understanding of the demand for housing within geographic areas, submarkets, or specific projects, as well as price points within markets or projects. Institutions should track available inventory and their own levels of exposure at a level of granularity sufficient to allow management to determine if the institution should curtail lending for specific products or in locations of concern, even if other products or locations continue to perform well. The granularity warranted may be product-by-product, location-by-location or some other degree (e.g., price point, speculative versus presold), depending upon the institution’s markets and product types.

Markets may be monitored by staff or management, but ultimately both must understand what is being monitored and why. The monitoring function can be organized in a variety of ways. For exam-

<sup>7</sup> CRE Guidance, p. 74587.

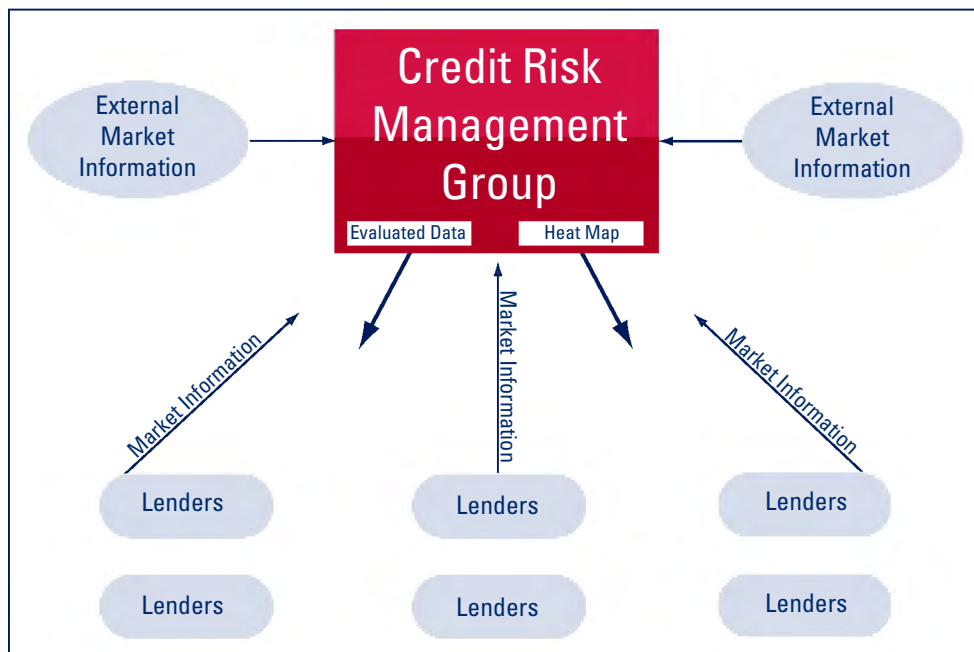
Risk management staff should provide its analysis of market data to senior management in a manner they can use to develop a comprehensive lending and risk mitigation strategy. A common delivery method is to provide lenders with a “heat map” that details management’s view of the demand for product types in each geographic market and directs lenders’ degree of aggressiveness for those products. A heat map can serve as a quick

reference to identify whether the strategy for a particular market or product type is to grow, maintain, or reduce exposure. In markets where demand is very strong, management may instruct lending staff to pursue additional opportunities and adjust pricing and other terms to attract additional business. In areas where management deems risks to be higher, lenders may be instructed to curtail or discontinue lending activities altogether.

No matter the form of the market analysis, management must convey its strategy to lending staff in a timely manner and maintain sufficient oversight of lending activity to ensure that the loans being originated are consistent with management's strategy. Reporting systems should be sufficiently detailed to identify situations where the strategy is not being followed.

A CRE concentration increases the importance of sound lending policies. An institution's lending policies should

Figure 1. Communication must occur between lending and risk management functions.



communicate the level of risk acceptable to its board of directors. The policies should provide clear and measurable underwriting standards that enable lending staff to evaluate all relevant credit and market factors. The CRE guidance provides several internal and external factors that should be considered when establishing policies, such as market position, historical experience, present and prospective trade area, probable future loan and funding trends, staff capabilities, and technology resources.

Institutions should also consider the following items with regard to managing construction loans:

- Independent property inspections—There should be initial site visits and ongoing inspections during the construction phase.
- Loan disbursement practices—They should be based on engineering or inspection reports, requirements for lien waivers from subcontractors, etc.
- Sponsor/developer experience level—Institutions should establish standards to ensure that the sponsor/developer as well as the underlying contractor has a proven track record and sufficient experience in the market and in the property type being developed to complete the proposed project.
- Loan agreements, collateral documentation, and appraisal practices—Robust loan agreements and collateral documentation are expected. Plans and budgets are also needed to establish disbursement/draw schedules. Loan agreements should clearly communicate draw schedules, release provisions, and repayment requirements.
- Debt service coverage analysis—Debt service coverage thresholds as well as presold or preleased standards are useful tools to control the risks in a CRE transaction.
- Sponsor or guarantor financial analysis, if applicable.

An institution's lending policies should permit only limited exceptions to underwriting standards. When an institution permits an exception, it should document how the transaction does not conform to the institution's policy or underwriting standards and why the exception is in the best interest of the bank. The institution should also ensure that appropriate management approvals are obtained. Robust risk management systems can also track the number of exceptions by type and amount to help point out areas of policy that may need permanent amendment or that need to be reinforced by the institution's board of directors.

## Portfolio Management

The bank should have a management information system (MIS) that provides sufficient information to measure, monitor, and control CRE concentration risk. This includes meaningful information on CRE portfolio characteristics relevant to the institution's lending strategy, underwriting standards, and risk tolerances. Many institutions will want to expand the level of information captured to specifically include underwriting characteristics, such as LTVs, debt service coverage levels, speculative versus presold units, etc., to allow for more enhanced reporting and analysis. Information can be captured on mainframe systems or other systems—including the use of simple spreadsheets—but should be retained in a form that can be readily accessed for analysis purposes.

MIS reports may include:

- CRE loan segmentations (to determine diversification within a portfolio)
- Established concentration limits (for CRE in aggregate as well as by subcategory)
- Concentration reports by property type



- Presold (considered lowest risk, but purchaser deposit amounts should be considered)
  - Speculative (no sales contract or prelease agreement exists)
  - Portfolio or borrower aging (age of CRE inventory by portfolio or borrower)
  - Aggregate by market (CRE inventory broken down by market or submarket)
  - Aggregate by price range (CRE inventory broken down by price range)
- Borrower concentration reports, including guidance line (informal, uncommitted) limits
  - Loan underwriting exception reports (CRE loans requiring loan policy exception approvals)
    - Number and volume of exceptions by nature, justification, and trends
    - Performance of exception loans compared with loans underwritten within guidelines
  - Supervisory LTV exception reports<sup>8</sup>
  - Typical loan production and performance reports by type, region, officer, etc.

Many banks fail to collect the data necessary to produce the reports listed above. They may have separate legacy systems that do not aggregate data efficiently, if at all. In addition, many banks do not have the resources to search hard copy files and backfill data into their systems. Management first needs to identify the drivers that will affect segmentation at origination and then capture those data fields on the system. These drivers could be LTV, rate type (fixed versus floating), debt coverage ratios, or large tenants that could create concentrations when aggregated.

CRE markets are typically cyclical. Strong markets promote additional building, which can result in oversupply followed by weakened market fundamentals. Consequently, the real benefit of implementing systems to identify and control CRE concentrations lies in limiting the level of risk brought on by those concentrations when markets begin to falter. While it may be easy to manage a concentration during the good times, managing one once market demand has slowed is much more challenging.

Good risk management starts with setting reasonable concentration limits for different products and markets. Adjusting those limits when market fundamentals change is also a prudent risk management tool. After all, how beneficial can market monitoring and analysis be if concentration limits and exposures are not adjusted when that market information indicates a change in market conditions? Listed below are some examples of possible indicators that particular markets are at or near a peak. The specific numerical examples are not intended to represent triggers we believe bankers should use, but merely to illustrate that management may wish to consider a number of concrete numerical indicators in forming a judgment about the risks in a particular market:

- Loan pricing becomes too thin for the underlying risk (e.g., construction loan pricing has fallen almost 150 basis points in recent years owing to competition).
- Underwriting weakens to unreasonable levels or to levels banks previously would not have approved (e.g., deposits for qualifying presold condominium units are reduced by half to entice enough preconstruction buyers to demonstrate demand for a project).

<sup>8</sup> Appendix A to 12 CFR 365—Interagency Guidelines for Real Estate Lending Policies—states that loans exceeding the supervisory LTV guidelines should be recorded in the institution's records and reported to the board at least quarterly. See section titled "Loans in Excess of the Supervisory Loan-to-Value Limits."

- Inventory and planned production are excessive relative to market dynamics (e.g., office space in the pipeline exceeds several years' absorption rate without any significant increase in employment expectations; condominium units in the pipeline exceed the level of several prior years' sales).
- Speculators drive prices to unwarranted levels (e.g., home prices increase by 30 percent year-over-year for an extended period, while inventory is expected to grow to unprecedented levels).
- The regional or national economy shows signs of stress.

If CRE lending is a substantial source of revenue, the decision to reduce exposure levels will likely be met with significant resistance from managers and loan officers concerned about short-term earnings performance. If CRE lending is the primary earnings driver, the institution should be prepared to diversify into other areas of lending or wait for CRE markets to return. The failure to control exposure levels when warning signs are evident can result in excessive loan losses. The level of losses will generally depend on the quality of loan underwriting and the breadth and depth of the CRE market downturn.

Unfortunately, the importance of CRE portfolio management and appropriate concentration limits becomes most apparent only when the bank's market enters a downturn. As loan quality deteriorates, banks must expend significant resources, both human and monetary, for collection and, in some cases, foreclosure on the underlying collateral. While the direct costs of these actions are apparent, there are often other costs that bear mention. If market conditions deteriorate severely, sponsors or developers may simply abandon a project, especially if they have insufficient capital invested and there is no recourse to the principals. In many instances during the 1980s

and early 1990s, developers walked away from partially finished properties, and some lenders were forced to complete projects to salvage their investment. In many of these instances, costs escalated dramatically as lenders were forced to restart projects and remediate shoddy workmanship, adopt engineering and architectural changes to make the project viable, pay off subcontractor liens, and pursue zoning or other legal issues.

Another major expense often overlooked is the opportunity cost of holding a large volume of nonearning assets. Lenders often severely underestimate the length of time necessary for the sale of foreclosed assets in a distressed market. Additional costs accrue during the holding period, including property taxes and the cost of sales, maintenance, and security. Many lenders found during the CRE downturn of the 1980s and early 1990s that the "first loss is the best loss," meaning that it would have been cheaper in the long run to have disposed of distressed CRE assets earlier rather than later.

## Credit Risk Rating and Review

Risk rating systems can vary greatly between community and large banks. One solution does not and should not fit all banks—the risk rating and review process should be commensurate with the bank's size and complexity. A small, noncomplex bank may need only a one-dimensional rating system with a small number of rating grades, while a large or complex organization may require a rating system with more grades to measure risk levels adequately. Larger banks often use rating systems that assign separate ratings for default risk and loss severity. This type of system has the added benefit of delineating credit risk, which should aid lenders in mitigating those risks.

In addition to being used to determine capital levels, adequacy of the allowance

for loan and lease losses, and loan pricing strategy, risk ratings can be used as a parameter for setting concentration limits and sublimits. Risk ratings should be accurate and uniformly applied across product lines and geographic areas. Banks identified as having CRE concentrations possess an additional level of risk and complexity that should be considered when evaluating the risk rating and review system. Risk rating and review processes should have the following characteristics:

- Transparency
- Granularity
- Independence

Transparency is critical for any risk rating system. Account officers, loan review personnel, and regulatory examination staff should be able to review rating guidelines and reach the same conclusion on the rating grade assigned to individual credits. This becomes increasingly important as the bank grows and more people are involved in the risk rating process. Specific, objective rating criteria rather than broad, subjective criteria promote consistency in the rating process. Transparency is generally evaluated by reading the bank's rating policy guidelines and conducting transaction testing. The key is to have someone other than the original credit analyst attempt to come to the same conclusion using the tools provided by policy. If agreement with a high percentage of assigned credit ratings cannot be achieved, the rating guidelines may need further clarification.

Granularity is also necessary to provide an accurate assessment of portfolio risk. At a minimum, the risk rating system should rank order risk in the portfolio and provide enough grades so that the vast majority of loans do not fall into just one grade. A granular rating system that effectively rank orders risk should aid management in identifying the exposures that should be reduced or

eliminated if a CRE downturn appears to be on the horizon.

Independence in the validation process is the third leg to any successful rating system. Individuals outside the lending process should evaluate and validate the entire process. Banks with limited staffing resources can use external audit staff or consulting firms to conduct the validation. As banks grow, this process is typically brought in-house. The review and validation personnel will generally be the best resource for identifying problems in the rating system. Credit review personnel should provide the board and senior management with periodic feedback regarding the effectiveness of the rating system and any recommended changes for improving transparency and granularity.

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## Portfolio Stress Testing and Sensitivity Analysis

Most geographic locations in the United States have not experienced serious declines in CRE markets for a number of years. Much has changed in CRE lending since the last downturn. Some analysts suggest that a major sea change has occurred in the form of greater transparency and liquidity that acts as a cushion against the deep losses of the 1980s and 1990s. Banks may tend to believe that the losses during that time were much more severe than they would ever again encounter. Yet, while the CRE credit market has been influenced by excess liquidity for a number of years, recent events in the credit markets for housing and leveraged finance demonstrate that liquidity can evaporate quickly if lenders' and investors' perceptions of the level of risk inherent in those loan products change.

In light of the possibility of significant losses in CRE portfolios, banks with concentrations in CRE can use stress testing to assess the extent of their exposure to a downturn in CRE markets. Stress testing can also inform



management of the institution's specific vulnerabilities to CRE markets and indicate where actions should be taken to mitigate those risks.

The CRE guidance includes a general expectation that an institution with CRE concentrations will conduct portfolio stress testing consistent with the size, complexity, and risk characteristics of its CRE loan portfolio. However, the guidance does not provide specific minimum expectations. Following are examples of the types of stress tests commonly used in banks.

## Transactional Sensitivity Analysis

Most institutions that specialize in CRE lending, and especially ADC lending, are accustomed to running analyses to determine loan and project exposure as part of the underwriting process. Before making a commitment for financing, an institution will analyze sponsor and lender assumptions to determine the degree to which a project can withstand market fluctuations and still repay the loan. Analysis covers testing the common assumptions and combinations of assumptions shown in Table 1.

Table 1

Assumptions to be tested for CRE lending		
Properties for Sale	Properties for Lease	Loan Variables
Absorption rates	Absorption rates	Interest rates
Sales prices	Rent rates	LTV ratios
Contingency reserves	Vacancy rates	Amortization term
	Rollover risk	
	Reserves for maintenance and improvements	

Given that some of the assumptions interact with other assumptions, a range of outcomes may be used to determine if the loan meets the institution's under-

writing criteria and lending standards. Along with project assumptions, loan-specific variables, such as interest rates and LTV ratios inferred from capitalization rates, are commonly analyzed.

While loan-level sensitivity analysis is a valuable tool for all banks originating CRE loans, this type of analysis could be performed on a portfolio-wide basis. Such an analysis would measure the depth and breadth of the portfolio's vulnerability to changes in real estate markets and interest rates. These analyses can be conducted on a scheduled basis or when market fundamentals dictate. Systematically aggregating the results of individual transactional stress tests could involve:

- Determining market fundamentals for each product type and geographic market where the bank has funds committed. (For practical purposes, it may be necessary to establish a materiality threshold.)
- Developing sensitivity analysis forecasts, such as increased vacancy rates in the market by product type, slower absorption rates, reduced sales prices, higher capitalization rates, or higher interest rates.
- Testing each credit in the portfolio, considering the current status of each project against the impact of the sensitivity analysis forecasts.
- Aggregating the impact of each tested credit to determine the vulnerability within the portfolio.

For income-producing properties with long-term, fixed-rate loans and long-term tenants, the analysis may reveal little or no additional exposure unless capitalization rates are expected to increase on the specific property type. However, the analysis of loans granted for speculative lot development projects with slower absorption rates could reveal substantial additional exposure, suggesting that the bank should consider limiting its expo-

sure in certain geographic markets or product types.

## Stressed Loss Rates

Stressed loss rate testing entails determining loss rates at levels that could be expected during CRE market downturns and forecasting the ultimate effect of these losses on capital. The stressed loss rates would be developed through an analysis akin to the following:

- Obtain historical loss rates on CRE loans (the “reference portfolio”) at the most granular level available. (Available data will often be fairly general in nature—losses on hotels, retail buildings, office buildings, etc.—rather than for more specific product types—suburban hotels versus downtown hotels, multitenant office buildings versus owner-occupied office buildings, etc.) In banks with more limited CRE lending experience, the data may be at higher levels, such as all types of ADC loans or even all CRE loans. Generally, the longer a bank has been a CRE lender, the more granular the loss data.
- Identify loss rates that occurred as a result of previous market downturns, generally the highest loss rates experienced in the reference portfolio. Loss rates may lag the downturn by a number of months or years.
- Identify the similarities or differences between the bank’s current portfolio and the historical reference portfolio, and adjust the loss rates appropriately.
  - In general, the loss rates from the reference portfolio will be a good starting point. The historical loss rates are applied at the same granular level as the reference portfolio.
  - Adjustments to the historical loss rates may be necessary to account for differences in the current portfolio. This is especially true if the data for the reference portfolio lack

granularity. For example, the ADC loss history on the reference portfolio is for a geographically diverse group of loans, but the current portfolio is largely concentrated in one location. In this case, an upward adjustment in loss rates would seem necessary to address the additional concentration risk.

- Calculate the losses that would be expected in a market downturn by applying the adjusted historical loss rates to the current portfolio.

If the bank has not previously experienced significant CRE downturns, using external data may be more appropriate than using internal data. The FDIC has historical CRE data that could be used to construct loss rates, although the FDIC data lacks much granularity.<sup>9</sup>

Like an aggregate transactional sensitivity analysis, stressed loss rate testing can provide useful input to a bank’s capital, earnings, and liquidity planning. While not providing specific information for managing CRE concentrations, it should inform management of the possible level of the bank’s exposure if a CRE downturn were to occur. The usefulness of this type of test relies heavily on the reference portfolio selected to conduct the test. In institutions with limited or only recent experience in CRE lending, the historical perspective required to conduct this sort of stress analysis would be based on external data that may or may not be applicable. In these institutions, the type and level of adjustments to historical loan loss rates are critical elements to developing a useful outcome.

## Scenario Analysis

Thus far, the examples cited have not necessarily been related to a particular, perhaps local, event. For risk management purposes, a bank may develop stress scenarios customized to its circumstances to make assumptions about how its CRE

<sup>9</sup> See Statistics on Depository Institutions at [www7.fdic.gov/sdi/index.asp](http://www7.fdic.gov/sdi/index.asp).

portfolio would react. For example, a community bank might assume layoffs at a major employer and measure the anticipated results on new housing demand and other CRE property performance. The trickle-down effect of the layoffs could spread across CRE property types if local businesses' revenues slowed and tenants were unable to make their lease payments.

The results of the scenario might affect the bank's other credit portfolios and lines of business, in addition to CRE loans. Although most banks do not perform bankwide scenario stress testing, the process of developing such stress tests may be useful for planning purposes and to identify potential vulnerabilities. (See, for example, the discussion of planning for contingencies in "Liquidity Analysis: Decades of Change" in this issue of *Supervisory Insights*.)

## Ratings Migration Analysis

Another technique used by some banks with larger portfolios and more sophisti-

cated internal data is to stress ratings migrations. This process requires a review of prior years' migrations to determine the typical migration experience. Each year a percentage of credits (obligors in cases of banks with two-dimensional rating systems) improves, remains the same, or declines. If sufficient data exist to capture a CRE downturn, the bank could select the year with the highest percentage of downgrades as the stress year. Alternatively, the bank could develop a relationship between economic variables and ratings migrations. If these data are not available, a bank might choose to apply conservative estimates of migrations to establish a stress year.

The bank would use the results of the stress year migration to move the appropriate volume of exposures in each current rating grade to the grades reflected in the stress year ratings matrix. The new volumes in each grade would then be processed through the bank's allowance for loan and lease loss model to determine what provisions might be needed to value the CRE portfolio and the

Table 2

Effects of a market downturn								
Average Annual Migration Rate								
	1	2	3	4	5	6	7	8
1	92.08	7.09	0.63	0.15	0.06	0.00	0.00	0.00
2	0.62	90.83	7.76	0.59	0.06	0.10	0.02	0.01
3	0.05	2.09	91.37	5.79	0.44	0.16	0.04	0.05
4	0.03	0.21	4.10	89.38	4.82	0.86	0.24	0.37
5	0.03	0.08	0.40	5.53	83.25	8.15	1.11	1.45
6	0.00	0.08	0.27	0.34	5.39	82.41	4.92	6.59
7	0.10	0.00	0.29	0.58	1.55	10.54	52.80	34.14
Stress Scenario—Annual Migration Rate is Double the Average Rate								
	1	2	3	4	5	6	7	8
1	84.14	14.18	1.26	0.30	0.12	0.00	0.00	0.00
2	0.31	82.61	15.52	1.18	0.12	0.20	0.04	0.02
3	0.03	1.05	85.97	11.58	0.88	0.32	0.08	0.10
4	0.02	0.11	2.05	85.25	9.64	1.72	0.48	0.74
5	0.02	0.04	0.20	2.77	75.76	16.30	2.22	2.90
6	0.00	0.04	0.14	0.17	2.70	73.94	9.84	13.18
7	0.05	0.00	0.15	0.29	0.78	5.27	25.19	68.2

effect of these provisions on earnings and capital. When compared to the current ratings, the effect of a market downturn could be measured (see Table 2).

## Conclusion

History has clearly demonstrated that CRE can experience cyclical changes in which supply and demand get out of balance, resulting in significant losses for financial institutions. To reduce potential losses in the future, banks must have strong board and management oversight as well as robust risk management processes for their CRE loan portfolios to recognize and control risk through all phases of the economic cycle. Bank management should also be willing to forego potential CRE income when the risk exceeds the reward.

A well-diversified bank is, in general, better insulated against market downturns. However, investing in assets that management does not understand can also carry significant risks. When prudent diversification across a variety of asset classes is difficult to achieve, it becomes even more important for management to deploy tools and implement strategies similar to those outlined here to recognize and control the risk

taken. The CRE guidance provides a good framework to assist banks in addressing the concentration risk and also helps establish the federal banking agencies' expectations during subsequent risk management examinations.

Regulators and bank management must not become complacent or static in their approach to risk management; they must continually evolve and change as the environment changes and new risks appear. With the risk management tools listed in the CRE guidance and further supported by other regulatory guidance, there is no reason CRE loans cannot continue to be a favored asset class for banks.

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## CRE Regulations and Guidance Applicable to FDIC-Supervised Institutions

To assist and encourage banks to recognize and control CRE lending risks, bank regulators have developed a significant body of regulatory guidance for CRE transactions. Much of this guidance is based on lessons learned in downturns of the past, especially the banking crisis of the late 1980s and the early 1990s.

- FIL-104-2005, Joint Guidance on Concentrations in Commercial Real Estate Lending, Sound Risk Management Practices ([www.fdic.gov/news/financial-institution-letters/2006/fil06104.html](http://www.fdic.gov/news/financial-institution-letters/2006/fil06104.html))
- 12 CFR 365, Real Estate Lending Standards and Interagency Guidelines for Real Estate Lending Policies ([www.fdic.gov/regulations/laws/rules/2000-8700.html](http://www.fdic.gov/regulations/laws/rules/2000-8700.html))
- 12 CFR 323, Appraisals ([www.fdic.gov/regulations/laws/rules/2000-4300.html](http://www.fdic.gov/regulations/laws/rules/2000-4300.html))
- Interagency Appraisal and Evaluation Guidelines ([www.fdic.gov/news/inactive-financial-institution-letters/2003/fil0384b.html](http://www.fdic.gov/news/inactive-financial-institution-letters/2003/fil0384b.html))
- FIL-90-2005, Residential Tract Development Lending ([www.fdic.gov/news/financial-institution-letters/2005/fil9005.html](http://www.fdic.gov/news/financial-institution-letters/2005/fil9005.html))
- FIL-94-1999, Interagency Guidance on High Loan-to-Value Residential Real Estate Lending ([www.fdic.gov/news/financial-institution-letters/1999/fil9994.html](http://www.fdic.gov/news/financial-institution-letters/1999/fil9994.html))