

Horizontal Review of CRE Governance Practices

Federal Reserve Bank of Richmond
Bank Supervision & Regulation



5th District

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THE FEDERAL RESERVE BANK OF RICHMOND

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EXECUTIVE SUMMARY

Project Mission

Conduct a horizontal review of CRE governance practices of the top 12 District SMBs that exceed Board surveillance thresholds. At the end of the review, prepare a report summarizing overall findings, make recommendations for an effective community of practice examination review of CRE concentration risk, and share findings with SMB stakeholders through outreach opportunities.

Project Objectives

The primary purpose of the review was to evaluate how outlier community banks assess, monitor, and manage overall exposure to CRE concentration risk at the portfolio level and to a lesser degree at the individual loan level. Major emphasis was placed on understanding the risk management framework in place at these institutions and on the effectiveness of risk management practices.

Project Scope

In order to fulfill our objectives, the scope of the review included an onsite review of risk management practices both inside and outside of the examination process and included a number of conversations with senior bank management as well as a review of overall governance practices. Existing practices were evaluated against the risk management framework delineated in the December 6, 2006 interagency guidance which consists of the following components:

- Board and management oversight
- Portfolio management
- Management information systems
- Market analysis
- Policy guidelines regarding credit underwriting standards
- Portfolio stress testing and sensitivity analysis
- Credit risk review function
- Capital planning

Selection Criteria

Organizations selected for review were those whose construction and land development loans (C&LD) exceeded 200% of capital (well above the 100% defined level) at the Sept 07 and Dec 07 Call Report dates. Banks selected for review were located in Maryland, Virginia, North Carolina and South Carolina. The size of the institutions ranged from \$146 million to \$3.1 billion. C&LD concentration levels averaged 277% of tier 1 capital and reserves and ranged from 202% to 525%.

Summary of Findings

Our review revealed a number of weaknesses associated with CRE risk and the processes in place at banks to identify, monitor, and manage the level of risk. The key findings are summarized below and discussed in more detail in the body of the report:

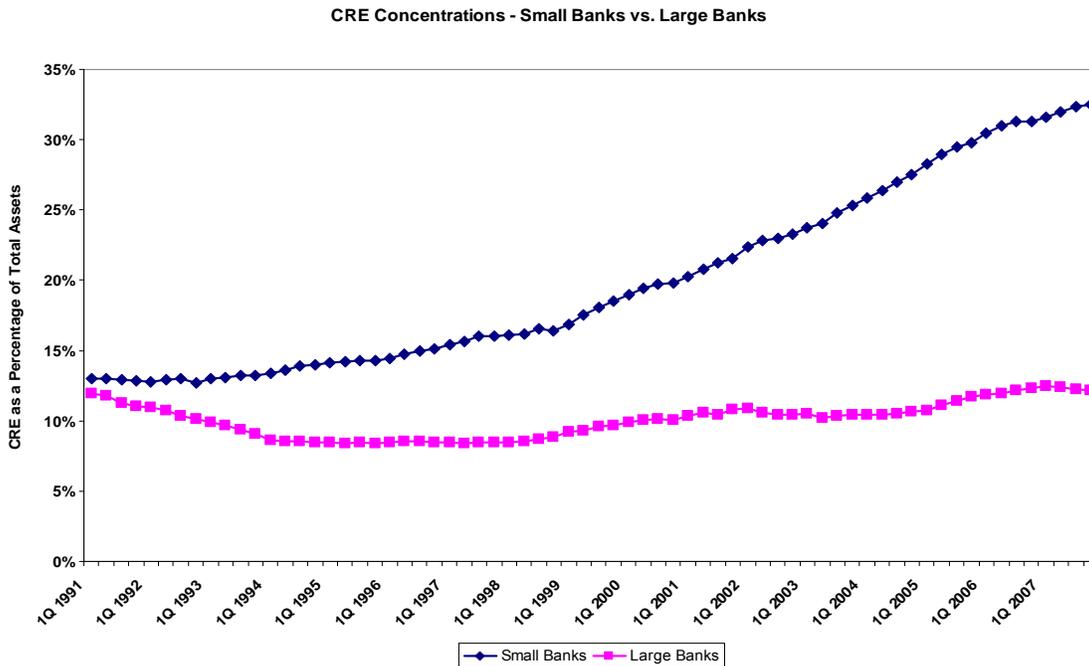
- Board and management oversight and the existing community of practice are often not commensurate with the level of CRE concentration risk.
- Few of the banks adequately manage portfolio-wide concentration risk. Many have not developed management reports that give them a portfolio-wide perspective of aggregate risk.
- Management information systems (MIS) typically lack sufficient sophistication to identify and measure CRE portfolio characteristics and information flows to the directorate are not particularly robust. As such, these organizations may not have the ability to readily analyze and respond to market events that could affect the CRE loan portfolio.
- There is limited documentation to indicate that members of senior management and the directorate have an understanding of the economic and business factors influencing the organization's lending markets.
- Banks primarily manage credit risk at the transaction level through traditional underwriting and credit administration practices. Although generally effective, opportunities for improvement exist in a variety of areas and these are discussed in the body of the report.

- The majority of organizations are not conducting stress tests or sensitivity analysis on the more vulnerable segments of the CRE portfolio. There is minimal documented evidence to suggest that the organizations evaluate or fully understand the impact changing economic and localized market conditions will have on asset quality, earnings levels, and capital.
- All banks utilized a risk-rating system to provide a foundation to assess credit quality and identify problem loans. Not all organizations, however, have implemented an effective formal internal or external credit risk review function to validate the risk rating system and/or opine on the overall effectiveness of underwriting standards and compliance with policy guidelines. The absence of a strong credit risk review function may compromise the organization's awareness of emerging risks and minimize the effectiveness of any self-assessment programs or efforts.
- Most banks have not developed well supported CRE concentration limits and despite a heightened exposure to CRE lending management and the board do not formally reference CRE lending or consider concentration risk in their capital planning process.

INTRODUCTION

Background

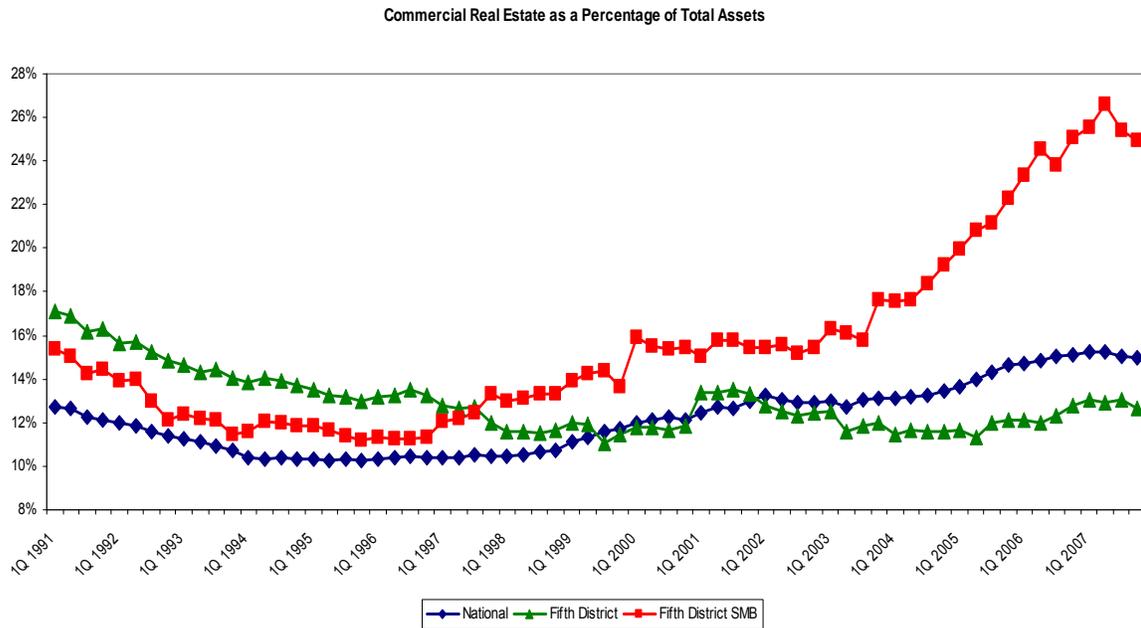
Much has been written of late about the increase in commercial real estate (CRE) lending by community banks in the U.S. As indicated in the table below, CRE concentration levels, particularly in those organizations with assets below \$1 billion, have increased significantly since 1991. In 1991, the ratio of CRE to assets was roughly the same for both large banks and small banks. Since that time, the ratio at small banks more than doubled and now approximates 33 percent of assets, while the level at larger organizations has remained relatively flat.



Source: Commercial Bank Consolidated Reports of Condition and Income

Fifth District analytics have also mirrored the national trend, both collectively and individually, as organizations have reported an up-tick in the level of CRE lending. Over the past 10 years, the level of CRE lending has increased from 10.2 to 14.5 percent of assets for the banking system as a whole. On the surface, it appears that the Fifth District's increase was less pronounced than the national averages as the collective volume of CRE activity increased only 100 basis points to 12.2 percent. Fifth District numbers however are heavily skewed by the activities of Bank of

America and Wachovia. There has been a dramatic increase in CRE lending in District state member banks (SMBs) where levels have nearly doubled over the decade and now approach 25 percent of assets.



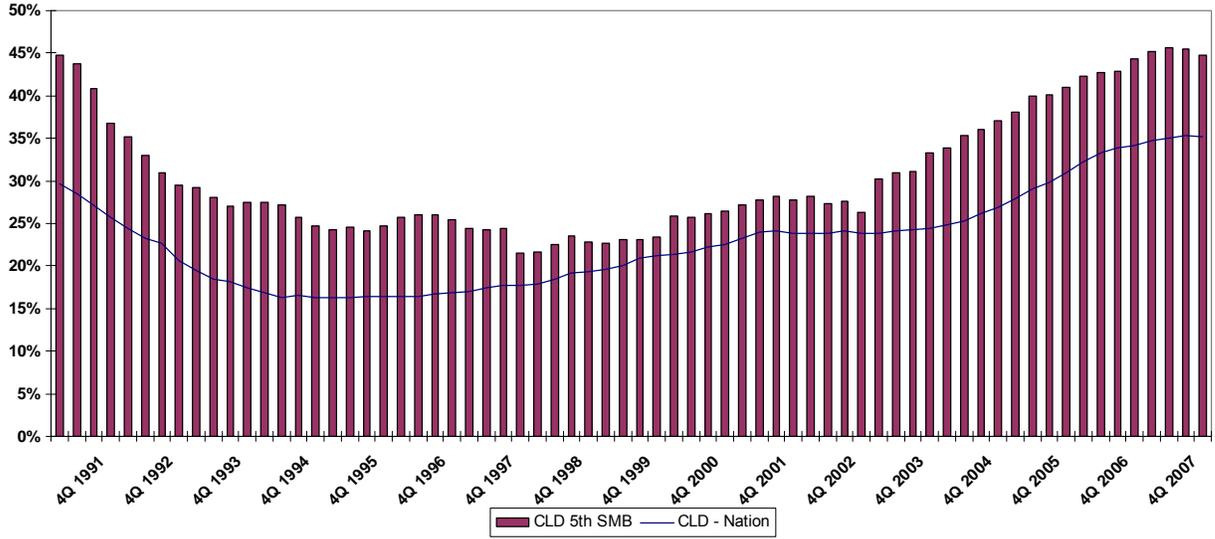
Source: Commercial Bank Consolidated Reports of Condition and Income

Community banks continue to grow in this lending sector as they have lost market share of residential mortgages, credit cards and consumer loans to larger financial institutions and other market participants. As such, community bank management views CRE lending as the last bastion of opportunity. Not only has the collective level of CRE lending increased, but the composition of the CRE portfolio has changed dramatically as well.

From 1991 through 2007, construction and land development (C&LD) lending has significantly altered the composition of bank assets. There are several points of interest during this time frame:

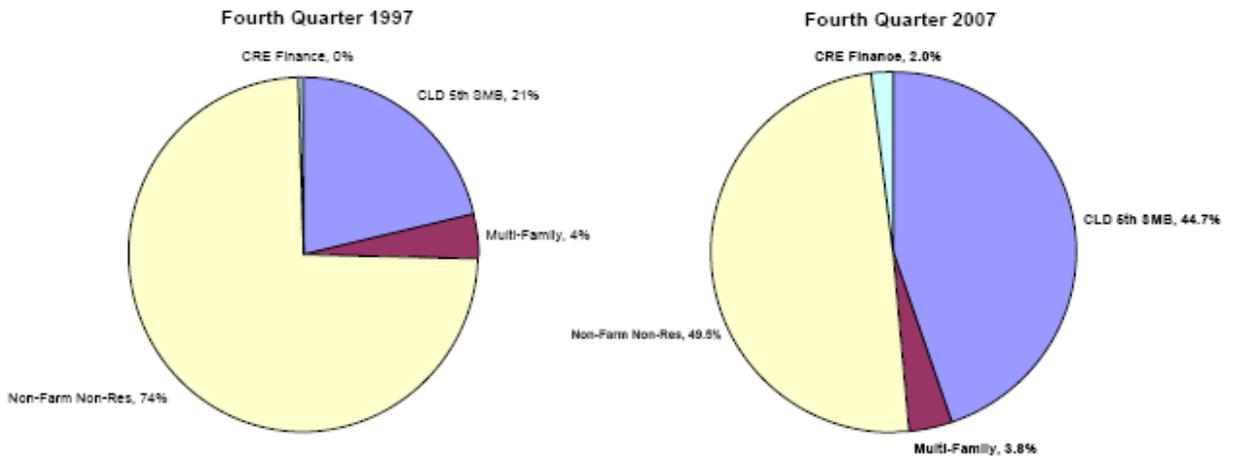
1. C&LD levels declined significantly after the last CRE crisis in the late 1980's and early 1990's.
2. C&LD lending has dramatically regained balance sheet space since the mid-1990's.
3. District SMBs have consistently held a higher percentage of C&LD loans on their balance sheet than banks have nationally.

Construction and Land Development Grows as a Portion of CRE



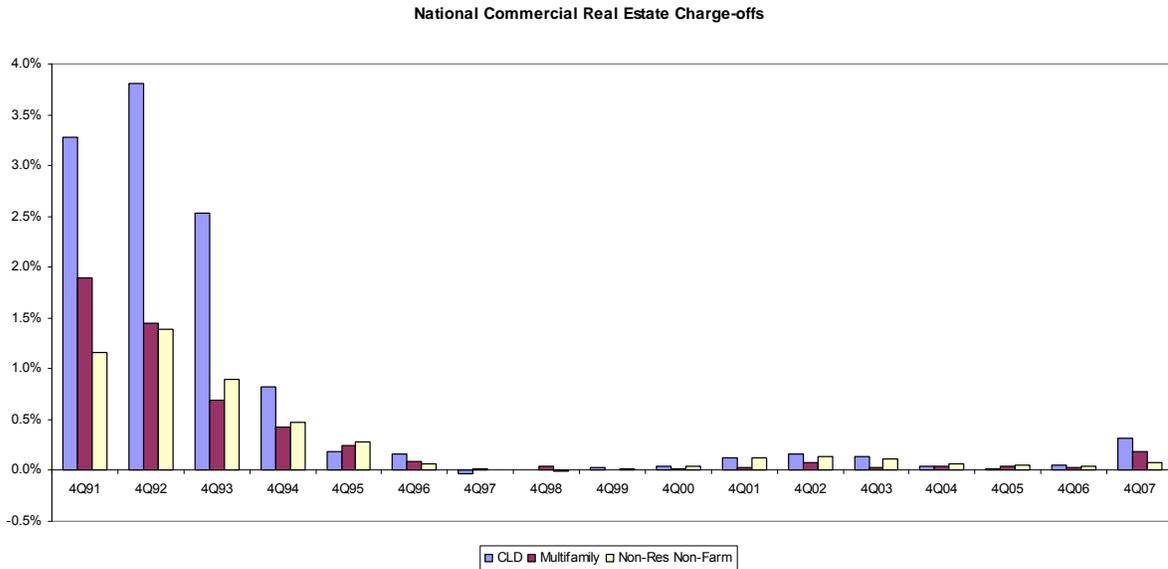
Source: Commercial Bank Consolidated Reports of Condition and Income

A closer look at Fifth District institutions indicates that C&LD outstandings accounted for just under half of member banks' CRE assets at the end of 2007, up from 21 percent of CRE assets at the end of 1997.



Source: Commercial Bank Consolidated Reports of Condition and Income

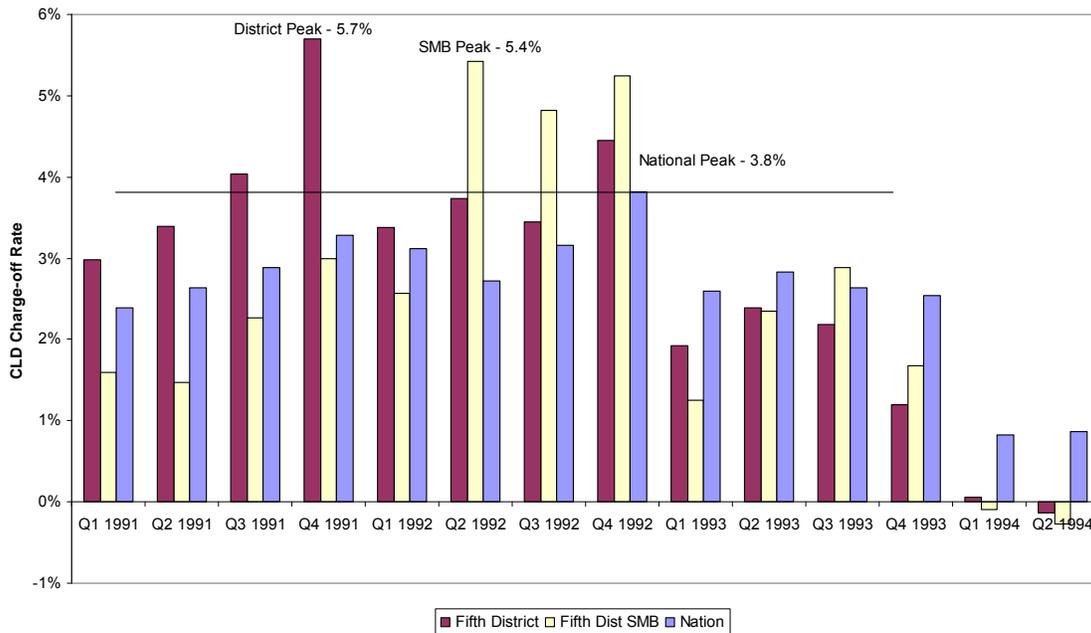
C&LD growth has certainly altered the risk profile of District member banks as this form of lending is generally more risky than other forms of CRE. Loan repayment is heavily dependent on the improvement and subsequent sale of the underlying properties and this form of lending is also heavily influenced by changes in local market conditions. During the banking environment of the early 90's, C&LD losses outpaced that of other CRE categories. The national peak charge-off rate of C&LD loans during this period, at 3.8%, was twice that for the next worst category.



Source: Commercial Bank Consolidated Reports of Condition and Income

Fifth District losses within the C&LD sector were substantially higher than those for the nation. District losses peaked at 5.7% at year-end 1991, while District SMB losses peaked at 5.4% two quarters later.

CLD Charge-off Rates During the Last Crisis



Source: Commercial Bank Consolidated Reports of Condition and Income

Bank management indicates that they can effectively compete in this space because of their knowledge of local markets and borrowers. Examiner perspective however indicates that many of these organizations have increased their exposure to CRE lending without a formal/structured monitoring system or adequate consideration of concentration risk. It is against this backdrop that additional FFIEC Guidance has been promulgated. This Guidance, which was issued in December 2006, reminds institutions that strong risk management practices and appropriate levels of capital are important elements of a sound CRE program.

Project Overview

An effective risk management program can serve as an important cornerstone in directing the level of risk assumed by banking organizations and thereby enabling them to continue to pursue CRE lending in a safe and sound manner. It is this fundamental belief, coupled with the potential downside risk highlighted by the current economic and market environments, which drives the focus of this Horizontal Review project. Banks selected for review were those whose C&LD portfolios far exceed current screening criteria. Banks were located in Maryland, Virginia, North Carolina and South Carolina and the size of the institutions ranged from \$146 million to \$3.1

billion. C&LD concentration levels averaged 277% of tier 1 capital and reserves and ranged from 202% to 525%. The following table summarizes this information:

Bank	Assets (MM)	C&LD%	Total CRE%
1	146	525	555
2	707	374	551
3	1,861	335	660
4	507	273	497
5	352	262	506
6	2,338	242	638
7	799	241	504
8	3,036	223	449
9	937	219	501
10	563	217	420
11	541	212	492
12	308	202	480
	<i>Average</i>	277	521

Project Scope

A critical part of this project included onsite review at the twelve organizations. Where feasible this was done as part of a scheduled examination event and in other cases the review was conducted outside of the examination process. Emphasis was placed on the level and effectiveness of overall governance practices. The scope included a number of conversations with senior bank management as well as an assessment of information flows and a review of bank records, including the following:

- credit policies and guidelines
- internal watch lists and criticized asset reports
- internal concentration reports as well as portfolio stratification/composition reports
- reports provided to senior management and the BOD
- existing analytics regarding economic and market data
- internal analysis regarding assessment of the adequacy of the allowance for loan and lease losses
- portfolio stress testing and sensitivity analysis (where existent)
- strategic business plans and capital plans (where existent)

KEY FINDINGS

The review revealed a number of important issues associated with CRE concentration risk and the processes and practices employed by banking organizations to monitor and manage risk at the portfolio level as well as the individual level. This section outlines our overall conclusions and a summary of key findings is presented below:

Finding # 1

Most institutions are reporting some level of commercial real estate data to the board of directors. In general, information is presented on a general ledger and/or Call Report format and structure. Limits and sub-limits of acceptable CRE concentration risk are typically not well defined and in most instances are not delineated in policy guidelines or ultimately monitored or reported to the directorate.

Current guidance indicates that the board and senior management should establish limits and sub-limits that define an acceptable level of CRE concentration exposure. Only two banks in the review established overall limits and sub-limits of CRE concentration risk. Three other banks established some limits, though the limits were not comprehensive based on the number and types of products offered. The remaining banks in our sample had no explicit board approved limits established for CRE exposures, although some purportedly had an internal sense of limits. In those instances, bank management used a “gut feel” for pulling back on or expanding certain sectors of the loan portfolio.

The interagency guidance further states that effective controls need to be implemented to ensure that management adheres to the lending policy and strategic direction guidelines. One of the banks that had established limits for various sectors of CRE loans had reasonably effective controls for measuring, monitoring, and ensuring adherence to bank’s strategy. Two of the banks that had established some degree of CRE limits only monitored overall exposure with no consideration to sub-limits or sector analysis. However, the lack of stringent controls resulted in more exposure than intended at one of the banks. The remainder banks had not established appropriate limits to ensure compliance with the guidance or monitor adherence to strategic guidelines. In several instances, the lack of controls ultimately resulted in an unfettered environment in which loan production significantly surpassed the support capabilities of the organization and resulted in a deteriorated level of credit quality.

Although high levels of CRE exposure occasionally reflected a board's risk appetite and fell within established policy limits, most organizations had not developed a comprehensive and well documented program for CRE concentration risk management. The high levels of CRE loans were reflective to some degree to a lack of management concern as much as policy limits which were not well defined. In several instances, management indicated that CRE lending was the "only game in town" and suggested that loans secured by CRE were, in general, less risky than other types of loans such as C&I loans. In some instances, there was modest appetite to devote already scarce resources to enhancing risk management practices in this area. Many of the bankers, however, held the belief that if they were conducting appropriate underwriting at the transaction level that excessive loan problems would not develop and as such high concentration levels were not a significant consideration. Unfortunately, even when individual loans are prudently underwritten, concentrations of loans that are similarly affected by cyclical changes in market conditions can expose an organization to unacceptable levels of risk. It should be noted that there was some change in philosophy as we progressed through the review, particularly for the banks that were reviewed in the July, August, and September time period.

Finding # 2

Portfolio-wide concentration risk seems to be a concept not readily understood and, in many instances, not adequately evaluated. Risk reduction strategies tend to be very borrower centric and processes are more reactionary rather than proactive.

Given the changing environmental landscape, many of the banks in the review sample are currently working to reduce or mitigate CRE exposures. The community of practice, which has traditionally been managed on a transactional basis through loan sales and loan participations, has changed during the year. One of the banks in the sample indicated that they felt a downturn was coming so they began developing exit strategies for specific ADC borrowers in early 2007. Other organizations remained in growth mode until it was readily apparent that the housing construction industry was already in trouble and then simply reacted by "putting on the brakes" as a portfolio management tool.

While these practices are effective in curbing individual loan exposure, the missing link in portfolio management is truly a lack of understanding by bank management and the directorate as to what level of risk is on the books. Very few of the banks have done a sufficient job in stratifying the loan portfolio thereby gleaning a more granular understanding of portfolio composition and potential risk exposures in the portfolio at large. Institutions have generally focused on individual

transactions without considering the impact of market changes on specific sectors of the loan portfolio. As such, board and management reports generally do not focus on or provide a portfolio-wide perspective on concentration risks.

This cyclical characteristic of real estate values and the resultant impact on real estate financing and portfolio quality is precisely what the December 2006 guidance hoped to head off. Rather than implementing a defensive risk management practice it would be far better to maintain an ongoing awareness of portfolio composition and production trends and link those elements to changes in market conditions and the organization's overall risk tolerance. A proactive approach to portfolio management, including contingency plans to reduce or minimize exposure in the event of adverse CRE market conditions, would minimize the need for an entirely reactionary or defensive approach to risk management.

Finding # 3

Management information systems are often transactional rather than portfolio based. While transactional reports are effective for overseeing individual borrowers, these reports are not sufficient to determine if the composition of the loan portfolio remains within the board's defined level of risk.

Management information systems (MIS) are expected to capture and provide sufficient information to identify, measure, monitor, and manage CRE concentration risk. Reports should be able to shed light on the need to refocus the bank's lending strategy, underwriting standards, or risk tolerances. Only four banks in the review generate sufficient reports on a macro basis that enable management and the board to effectively oversee CRE concentration risk. Of the four banks, two were not effectively using the information as the reports were primarily used as a snapshot of where the bank was as of a particular date. Reports appear to be primarily quantitative in nature and rarely included any qualitative analysis or summary for the board to evaluate whether to alter the risk profile or change strategic direction of the organization.

Most of the banks collect and maintain a variety of information such as loan purpose, loan-to-value, collateral type, volume of spec homes, loans subject to interest only payments, etc. Much of this information is contained primarily in the credit file and is not captured and stored in a form in which it can be extracted for reporting purposes. For several of those organizations that capture some of this data centrally, we found inaccuracies in the underlying data which calls into question the accuracy and usefulness of reports that are being generated.

Acceptable MIS should capture sufficient information to permit robust stratification of the CRE portfolio by type, industry, geography, tenants, developers, fixed rate versus variable rate, purpose, loan-to-value, and other salient segments. Approximately half of the banks segment the portfolio by various categories such as geography, type of loan, purpose, and collateral; however, most banks are not yet using the information to actively manage their portfolios as evidenced by the lack of established concentration sub-limits in place. The other half of the banks that do not segment their CRE exposures typically monitor only their overall level of CRE and C&LD exposure relative to size of the overall loan portfolio and more recently to capital levels.

Reports to management and to the board must be timely and able to identify trends and changes in an organization's risk profile. While all of the banks were able to generate timely reporting and have the capacity to produce various ad hoc reports, most stick to a structured set of borrower based reports. This usually includes looking at borrowers on overdraft, past due, documentation exception, and watch list reports. These reports are good for identifying specific borrowers that make up the totals and allowing management to make decisions on a borrower-by-borrower basis.

Overall, current data capture practices and portfolio-wide management tools are not sufficiently robust at many of the banks. While some banks are moving in that direction and practices and processes for the most part are developing and on-going, current portfolio level reports remain disjointed and generally do not provide a comprehensive analysis and assessment that can easily be used by the board of directors to assess overall risk identification, risk mitigation, and enhance the strategic planning process.

Finding # 4

In most cases, market analysis is not being documented, or is not being completed in a manner that provides adequate information for the board and senior management to make changes in lending strategy.

Market analysis should be conducted for the bank's various geographic markets and also for the different property types the institution is financing. Two banks within the sample conduct market analysis for their major markets and periodically report the information to the directorate. Two other banks prepare market analyses which are used by management but the information is not part of the board packet. The remaining banks do not document formal market analysis for their lending footprint. That said, management of each of the banks in the sample reportedly have

ongoing discussions with relevant persons knowledgeable of local markets such as realtors, appraisers, and leasing agents, thus mitigating some of the risk.

A market analysis should be performed periodically and management and the board should use the results to determine whether the CRE lending strategy is appropriate in light of changes in market conditions. In each bank in our sample, management appeared generally familiar with the markets in which the bank operates. However, other than the four banks mentioned above, management had not taken the time to document trends in real estate conditions that would either substantiate the bank's lending activity or point to the need for change in strategic lending decisions. A more structured approach to evaluating market trends and considering the results in the underwriting stage as well as linking results to overall portfolio composition and analytics would allow management and the directorate to make better decisions and adjust overall strategies when necessary.

Finding # 5

Evidence suggests that during the recent favorable economic cycle, credit underwriting standards were often eased to encourage asset growth, often at the expense of asset quality.

Discussions with management of many of the sampled institutions indicate that for the past several years there has been significant focus on portfolio growth, often at the sacrifice of quality. Credit underwriting standards have been relaxed, and in many cases, the CRE portfolios have been expanded with more speculative properties and transactions. Inasmuch, underwriting standards have not always included an assessment of the borrower's global cash flow requirements, total credit exposure, or project specific considerations, but in many instances were often based primarily on initial collateral value assessments.

A bank's underwriting standards are a foremost factor in the level of risk in the loan portfolio, and one of management's best opportunities to mitigate risk. Most of the banks in the review sample have loan policies that are general in nature. However, given the increased risk associated with significant concentrations in CRE loans, enhanced guidelines and more stringent standards are warranted. In very few cases did we find that loan policies have been updated to reflect and address the migration to CRE lending, particularly ADC lending, and the resultant change in risk profile of the loan portfolio. Rarely did policies contain specific limits for maximum loan amounts, acceptable terms, pricing, valuation requirements, LTV by property types, requirements for sensitivity analyses, minimum equity requirements, or minimum debt service coverage/cash flow.

Furthermore, it was infrequent that we saw ongoing identification, tracking, and reporting of policy exceptions.

Finding # 6

In most cases, portfolio stress testing and sensitivity analysis was not being conducted in accordance with the interagency guidance.

Of the twelve banks in the review sample, only one was conducting stress testing of the CRE portfolio in an adequate manner or in accordance with the interagency guidance, and most have not implemented any stress testing or sensitivity analysis. Interagency guidance requires that banks with CRE concentrations perform portfolio-level stress tests to quantify the impact of changing economic conditions on asset quality, earnings, and capital. Guidance further indicates that stress testing does not require the use of a sophisticated model, but should be commensurate with the complexity of the bank's portfolio.

Several of the review banks have attempted compliance with the spirit of the interagency guidance. One bank has acquired a tool used to assist in the initial loan approval process, and the model has the ability to perform stress tests for income dependent loans based on changes in interest rates and vacancy rates. However, this test is only conducted in the initial review process, is not used after the loan is made to monitor risk changes, and results are not consistently presented to the board of directors for analysis. Another bank in the sample is performing a rudimentary stress test which measures borrowing capacity given changes in interest rates. While this information is useful for management and the board to begin to assess risk, it is only a starting point. The one institution that is performing stress tests at a portfolio level does so for a sample of income producing property loans, and then extrapolates the results across the portfolio to determine portfolio risk. While the bank has not yet begun stressing the ADC portfolio, management is in the process of adding that portfolio segment to current practices.

Developing an effective stress test for the CRE **portfolio** may involve considerable resources (time, data integrity, dollars) given the non-homogeneity of portfolio sectors and real estate markets. Nevertheless, stress testing of **individual** loans for changing market conditions and underwriting scenarios requires very little resource and time commitment and can be done using commonly available spreadsheet software. The results can then be extrapolated to a wider section of the portfolio.

Despite this, few of the banks in our review have adopted stress testing as an additional tool to further assess potential CRE exposures. Without such an approach, the directorate and management have compromised their ability to make decisions on when to exit or pull back from high risk markets.

Finding # 7

Only half of the institutions included in the review have an effective credit review function. The level of review and analysis performed on the commercial real estate portfolio should be strengthened to include more focus on CRE concentrations.

All banks in the review sample have either an internal loan review function, an outsourced loan review to an external specialized vendor, or a combination of both internal and external elements. However, the effectiveness of these programs is not sufficiently robust in terms of staff experience, portfolio coverage or independence from operating management.

Weaknesses noted in credit review functions were varied, but all were substantial enough to encumber acceptable risk management practices. Throughout our review, we observed functions with inadequate coverage, sometimes as low as 30% of the commercial portfolio including only the largest borrowers, risk rating deficiencies that resulted in management not being able to accurately identify risk in the portfolio, and inadequate portfolio stratifications to aid in the identification of concentrations of credit in the CRE portfolio or the portfolio at large. We also observed situations where review staff expertise was deficient, resulting in a relatively ineffective review and we also noted that on occasion the internal loan review function and ongoing practices were not sufficiently independent of line management, thereby compromising overall effectiveness of the review program. As previously noted, identification is the first step in the risk management process, and risk levels cannot be measured, monitored, or controlled if never identified. Given that each of the banks in the sample maintains significant concentrations in CLD loans, as well as CRE loans, the lack of personnel expertise, the lack of coverage and overall level of review, and lack of independence may have compromised the awareness of emerging risk at some of the organizations.

Finding # 8

While formalized capital planning was observed at several of the institutions, considerations of the level of CRE concentrations are not included in most capital plans.

The interagency guidance reminds institutions with CRE concentrations that capital levels should be commensurate with the risk profile of their CRE portfolios. In addition, those organizations with inadequate capital to serve as a buffer against unexpected losses from a CRE concentration are required to develop a plan for reducing CRE concentrations or for maintaining capital appropriate to the level and nature of its CRE concentration risk. Although the majority of the banks in the review sample have sufficient levels of regulatory capital, capital ratios have declined in general over the past few years. Several of the banks in the sample do not have formalized capital plans, and most of the banks do not include considerations of the level of CRE concentrations in capital planning.

Bank management and the directorate typically rely solely on PCA capital guidelines to determine the adequacy of capital for their institutions. Most institutions conduct an analysis that evaluates projected revenue and asset growth for varying time horizons and under different growth scenarios and calculates necessary capital levels to maintain a “well capitalized” position. Management generally establishes targets for capital growth that coincides with asset growth projections and management’s analysis is based on a top down approach rather than being based on a product specific or product concentration analysis.

Most of the institutions have done little if any analysis to correlate capital limits to perceived or actual risk profiles. For those institutions that maintain a capital cushion in excess of “well capitalized” there is modest analysis to support the *cushion* and generally no linkage to the overall risk profile of the entity.

BEST PRACTICES

Board and Management Oversight

The bank's board of directors has ultimate responsibility to establish and approve an overall CRE strategy, to set risk tolerance levels, and to communicate the overall risk appetite acceptable for the institution. If the choice is made to maintain significant levels of CRE, strategic plans should address the rationale for the levels in relation to overall growth objectives, financial targets, and a capital plan. Additionally, management should define a process by which the concentration risk will be identified, measured, monitored, and controlled, including opportunities to mitigate overall exposures relative to changing conditions. A dynamic process is fundamental to ensure adequate measures have been taken to minimize risk to the extent possible.

Once a strategy has been approved, it is the responsibility of senior management and the board of directors to monitor progress and policy compliance. Management is responsible for implementing the CRE strategy on a day-to-day basis in compliance with board approved policies. Policies and procedures should be designed to allow the identification, measurement, monitoring, and control of CRE risks and the directorate should be provided appropriate reports to ensure compliance.

On at least a quarterly basis, management should determine the extent of concentrations in CLD loans and total CRE loans. These levels, along with an in-depth analysis should be presented to the board of directors to ensure members are adequately informed regarding the extent of CRE exposure in the bank. Quarterly analysis of concentrations in CRE lending should be presented in a timely manner and in a format that clearly indicates changes in the portfolio's risk profile, including risk-rating migrations.

In addition to reviewing CRE exposure, the board of directors should review information that identifies and quantifies the nature and level of risk presented by CRE concentrations, including assessment reports that describe changes in CRE market conditions in which the bank lends. Board members should be knowledgeable of sectors of the portfolio which are more susceptible to risk as well as exposure to particular borrowers. Furthermore, results of stress testing and

sensitivity analysis should be included in information presented to the directorate to ensure board members have a complete view of the amount of risk CRE lending poses to the bank.

Portfolio Management

When an institution has a significant concentration in CLD loans and CRE loans, it is imperative that management and the board of directors put in place strong portfolio risk management practices to mitigate risk as much as possible. Internal lending guidelines and concentration limits that control overall risk exposure are key. Management should develop policies and procedures that allow for the management of the risks associated, not only with individual loans or borrowing relationships, but also the risk in the portfolio as a whole. Risk diversification is a basic tenet of portfolio management. Concentrations of credit risk can occur within a portfolio when otherwise unrelated loans are linked by a common characteristic. If this common characteristic becomes a common source of weakness, the affected loans could pose considerable risk to earnings performance as well as capital cushions.

Managing the loan portfolio requires a robust assessment of concentration risk. By segmenting the portfolio into pools of loans with similar characteristics, management can evaluate them in terms of established portfolio objectives and risk tolerances. For many banks, portfolio segmentation has traditionally meant dividing the portfolio into broad categories of loan types such as commercial and industrial, real estate, and consumer loans, which are primarily general ledger or Call Report based. Although these divisions are appropriate starting points, the full benefit of portfolio segmentation can only be realized if the bank is able to establish a broader array of risk characteristics. Because loans have multiple characteristics, it would not be unusual for a loan to be included in more than one portfolio segment. A construction loan, for example, may be included in a real estate concentration report as well as a geographic location concentration report, or a developer concentration report. Examples of various portfolio segmentation profiles that can be utilized are presented in Attachment 1 of this report.

As previously mentioned, the board of directors and senior management must quantify the risk appetite for the institution. Once these parameters have been established, internal lending guidelines and concentration limits that control overall risk exposure must be developed. Portfolio evaluations should incorporate not only thorough monitoring and assessment of borrower risks, but also an evaluation of the degree of correlation between related real estate sectors. When necessary, management and the board should develop strategies for reducing, diversifying, or mitigating identified risk.

Institutions with CRE concentrations should maintain recent borrower financial statements, including property cash flow statements, rent rolls, guarantor personal statements, tax return data, global builder and other income property performance information. Global financial analysis of obligors should be emphasized, as well as the concentration of individual builders or developers in a loan portfolio. As real estate market conditions change, management should consider the relevance of appraisals performed during high growth periods and update appraisal reports as necessary.

The board of directors and management should also develop a contingency plan to reduce or mitigate CRE concentrations in the event of adverse CRE market conditions or should the risk appetite of the institution decrease. An adequate contingency plan would include an analysis of the bank's ability to access secondary markets for loan participations, whole loan sales, or loan securitizations, including comparisons of the bank's underwriting standards with the norm in the secondary market.

Management Information Systems

Management information systems (MIS) encompass the process and methodologies used by the bank to collect, maintain, and update data as well as the utilization of that data through the timeliness and functionality of reports generated from those systems. As indicated previously, many banks capture a variety of traditional data points and provide an abundance of reports to management and the directorate. These reports, however, remain primarily borrower focused and many banks are frustrated and impeded in their efforts to expand portfolio risk management by the limitations of their MIS. Over the past decade, some organizations have been adopting more active portfolio management practices. This has required a more comprehensive MIS and this investment has resulted in expanded MIS capabilities and strengthened credit risk management practices.

The effectiveness of an organization's loan portfolio management practices and processes depends heavily on the quality of its MIS capabilities. Many of the advances in current portfolio management thinking are the direct result of more robust MIS that is available today. More effective credit related MIS will allow management and the board to fulfill their respective oversight roles. As such, bank management and the directorate should be active proponents and champions for continued improvement in credit related MIS.

It is the responsibility of the board of directors to ensure that policies and procedures are in place to make certain that all relevant data is collected at the inception of a loan and also updated as

circumstances warrant. Furthermore, it is essential that management ensure that data is accurate, including the internal system coding methodology. Insufficient and inaccurate data is most often the roadblock that impedes the organization's ability to understand its true risk profile and develop strategies for reducing, diversifying, or mitigating the associated risks.

While the management team is responsible for identifying key data elements relevant to the portfolio, they should ensure that data capture within the systems is sufficiently robust to facilitate the needs and requirements for risk identification, measurement, and monitoring. Once management has determined that information is accurate and systems have sufficient capacity portfolio stratification is key in the ongoing monitoring of CRE concentrations. Until management can identify when risks are present, it is difficult to mitigate them.

Internal systems should be sufficiently robust to produce meaningful reports that are relevant to board and management strategy and policy implementation. Reports provided to the board should include useful stratifications, including loan type, property type, geographic location, risk trade, delinquency status, and rating migrations. All reports should provide for a systematic review and evaluation of the portfolio risk levels and changes, including changes in local CRE market conditions and resulting market values. Managerial reports should be comprehensive, providing information on an individual customer basis as well as a portfolio basis, segmented by areas such as industry, NACIS code, collateral type, geographic location, developer/builder concentrations, tenant concentrations, individual customers, risk ratings, or other areas of susceptibility. Information provided to senior management and the board of directors should be adequate, accurate, and timely and should include or convey information in sufficient detail given the size and complexity of the bank's CRE activities and overall lending strategy, underwriting standards, and risk tolerances. Adequate systems allow for the generation of reports which will enable senior management and the board of directors to monitor increasing concentrations and minimize portfolio vulnerabilities and will also facilitate portfolio level stress testing of alternative scenarios.

In addition to having an enhanced awareness of composition and makeup of the bank's CRE portfolio, market analysis reports and tools should be used to evaluate conditions in the bank's defined lending regions. Market analysis reports should be timely and specific to market segments in which the bank conducts business and should be solicited and obtained from a variety of information sources to avoid conflicts of interest or inaccurate information.

Market Analysis

Many banks in our District are vulnerable to the inherent risk associated with high levels of CRE concentrations. The cyclical nature of real estate markets, combined with the current economic environment and deterioration in localized CRE markets has exacerbated this concentration risk.

In order for management and the board of directors to be able to adequately assess the risk in the CRE portfolio, it is crucial for them to be acutely aware of the composition of the portfolio, stratified into segments that will expose areas of vulnerability. It is equally important for them to have a keen understanding of the markets in which the bank lends, and the unique economic and environmental details about those regions. Since banks do not normally have the expertise to extensively assess market conditions within the bank's lending footprint, it may be appropriate/necessary to engage outside resources to provide information. In many instances, banks lend in more than one region or area, and often those areas have dissimilar economic conditions and trends. Management must ensure that information sources are able to provide sufficient details on current market conditions and factors that could influence those conditions in the future. Furthermore, management should be able to incorporate data and anecdotal information to develop a reasoned view of market conditions and prospects.

When available, a bank should utilize multiple sources of information for a balanced view. Types and sources of information will vary depending on the composition of the portfolio and markets served. However, sources may range from national, regional, or local economic companies, local or regional governmental offices, or local appraisers. Market analysis information should not only be utilized in conjunction with monitoring of current and potential risk in the CRE portfolio, but should also be integrated into the strategic plan development and overall risk management of the institution, and used as variables in stress testing analysis. Frequency of market analysis updates is dependent on size, scope, and complexity of the portfolio, and on the stability of market conditions.

Examples of various *Economic and Market Indicators* that can be utilized are presented in Attachment 2 of this report.

Credit Underwriting Standards

Bank management should maintain prudent, time tested lending policies and understand CLD and CRE concentrations. When a CRE concentration exists, the establishment of sound lending policies with clear and measurable underwriting standards that allow lending staff to evaluate all

relevant credit factors becomes even more critical. While lending policies should reflect the level of risk acceptable to the board of directors, there are minimum criterion that should be delineated with approved limits and clear courses of action to remedy any policy exceptions.

Consistent with the interagency real estate lending guidelines, CRE lending policies should, at a minimum, address the following underwriting standards:

- Maximum loan amount by type of property
- Loan terms
- Pricing structures
- LTV limits
- Collateral valuation
- Requirements for feasibility studies
- Minimum requirements for initial investment and maintenance of hard equity by the borrower
- Standards for borrower net worth, property cash flow and debt service coverage

Policies should consider both internal and external factors, such as market position, historical experience, present and prospective trade area, probable future loan and funding trends, staff capabilities, and technology resources. Furthermore, given the ever changing economic and regulatory environments, management and the board of directors should review and amend lending policies and standards as needed, based on the results of market analysis of their lending footprint.

Policy exceptions should be permitted only on a limited basis and should be approved by appropriate management. Furthermore, all exceptions to lending standards should be reported to the board of directors and monitored to ensure that deviance from policy does not result in deterioration of the credit and exception trends should be analyzed to ensure risk remains within the bank's established risk tolerance limits.

Portfolio Stress Testing and Sensitivity Analysis

The interagency guidance states that "an institution with CRE concentrations should perform portfolio-level stress tests of sensitivity analysis to quantify the impact of changing economic conditions on asset quality, earnings, and capital. Despite this guidance being in place since December 2006, many banking organizations have not taken the plunge and moved forward with any form of implementation. There seems to be a genuine uncertainty regarding what to do and how to proceed, and a preconceived notion that sophisticated financial models are needed.

The model and methodology employed, however, is not the substantive issue; rather the issue is asking the appropriate “what if” questions and incorporating the resulting answers into the risk management process. Stress testing is a risk management concept and can be accomplished through the use of sophisticated models with their unique set of MIS requirements or with a “back of the envelope” analysis.

Because banks can evaluate credit risk of individual loans using little technical support, they generally do so during the initial or ongoing credit assessment. At this time, it would also be appropriate to alter various financial variables to assess the impact on the borrowing relationship. These results can be rolled up or extrapolated to the sector and portfolio level to further evaluate the impact on portfolio credit quality. For example, rent rolls on office space can be altered to evaluate the impact on cash flow and debt service capacity and property values could be reduced to assess new loan-to-value thresholds. These tests could then be used to identify what percent of the portfolio is vulnerable to a hypothetical percent decrease in rental rates or property value decline.

The stress testing process, results, and analysis would assist management and the board of directors in understanding how changes in relevant economic or market factors could affect the portfolio or key portfolio segments. While the sophistication of the process will vary depending on the complexity of the respective portfolio, there are minimum data points that can/should be stressed regardless of the model or methodology used.

In order to ensure data used for the stress testing or sensitivity analysis is accurate and adequate, management must make certain that data capture within MIS systems is sufficiently robust to facilitate the implementation of stress testing. An adequate database of loan information is the key to successful stress testing, and it is critical that the data be appropriate and accurate. Data used for stress testing might include:

- Original appraised value, including capitalization rate and date.
- NOI used in the appraisal.
- Original loan to value.
- Original debt service coverage.
- Updated client/tenant operating income.
- Current interest rate data.

Once data integrity and sufficiency has been confirmed, management must select a sample of loans or loan groups from the CRE portfolio to be stressed. The stress testing and sensitivity

analysis should focus on the more vulnerable segments of the CRE portfolio, taking into consideration the prevailing market environment and the bank's business strategy. If a sample is used, results may be extrapolated to indicate overall risk within the portfolio or a segment thereof. At a minimum, testing should include estimates of the portfolio's susceptibility to deteriorating economic, market, and business conditions and revised DSC and LTV ratios should be evaluated. It should be conservative and include "shock" testing of basic assumptions such as:

- Increase in interest rates
- Overall changes in property values
- Changes in property vacancy rates
- Declines in NOI
- Changes in capitalization rates

The results of the stress testing should measure not only the potential effects on portfolio quality, but also the resultant impact on earnings and capital. Management should consider the results of the analysis in the bank's strategic planning and risk management practices, as well as in the evaluation of the bank's capital adequacy and the ALLL analysis. Furthermore, results should be updated periodically depending on economic, borrower, or facility changes or when updated information is received, and results should be shared in writing with management and the board of directors.

Credit Risk Review System

Sound risk management practices include a strong credit risk review function that allows for a self-assessment of the bank's risk profile and emerging risks. The credit risk review function should not be merely an after-the-fact, loan-by-loan review, but a process to detect weaknesses in all levels of the institution's credit approval and monitoring system. The function is an essential element in the identification, measurement, monitoring, and control of credit risk not only on an individual loan basis, but on a portfolio-wide basis.

While the nature and structure of loan review systems may vary based on the bank's size, complexity, and management practices, banks with significant concentrations of CRE loans require a much more thorough review of this portfolio segment. Whether the function is internal, outsourced, or a combination of both, management and the board of directors should take appropriate steps to ensure the function has review coverage which is commensurate with the portfolio risk, and that all reviews are independent of the lending function and conducted in a timely manner.

In addition to review of credits in the CRE portfolio, the loan review function should have the responsibility of assigning and changing credit grades as needed, and ensuring the efficacy of information necessary to assess the ALLL adequacy. Regardless of the structure of the loan review function, an effective system should ensure consistent application of the credit grading system, promptly and accurately identify loans with potential or well-defined credit weaknesses, provide management and the board of directors with an objective and timely assessment of the overall quality of the loan portfolio, and ensure that essential information is available to determine the adequacy of the ALLL.

Capital Planning

Capital provides institutions with protection against unexpected losses, particularly in stressed markets. Banks with significant CRE exposures generally require more capital because of uncertainty about market conditions. While the interagency guidance does not imply that banks will necessarily need to increase capital levels because a concentration of CRE loans exists, it does require that institutions consider the level of capital support necessary for those concentrations in their strategic, financial and capital planning.

Portfolio stratification enables management to more accurately identify areas of increased vulnerability, whether it is by borrower, loan type, property type, business, etc. Once stratification has been completed, it should be utilized in the analysis of the ALLL, as well as overall capital adequacy.

Management and the board of directors should ensure that a capital planning assessment has been conducted to make certain CRE concentration levels and CRE portfolio growth objectives have been considered in the overall methodology, and that all assumptions are well documented and reasonable. Since capital is a primary line of defense against unexpected losses in the loan portfolio, management should ensure that capital levels are sufficient to support current and future CRE concentration risk. If capital levels are inadequate to serve as a proper buffer against losses, a plan to either reduce the CRE concentration or maintain appropriate capital levels to the level and nature of the concentration risk is essential.

CONCLUSION

The current lending environment, exacerbated by declining market conditions, has certainly showcased and underscored the importance of the tenets of the December 2006 Interagency guidance. Although conditions in the Fifth District are less severe than in other areas of the country, discussions with bank management teams indicate that they have been surprised by how fast lending conditions have changed and the resultant impact to their organizations. While generally favorable underwriting practices have mitigated significant exposure, several of the organizations are in a lock down mode trying to serve existing customers and keep their powder dry until market conditions improve, while others have seen an increase in the volume of internally classified assets and are in a defensive posture and a repair mode.

Call Report data from December 2006, the time of the introduction of the CRE guidance, through June 2008 reflects a worsening condition. On a composite basis, leverage ratios have declined for the population of banks in this review. Total past due loans and the level of non-current loans has also increased as well as the volume of OREO. The level of charge-offs has increased over this time horizon as well. Unfortunately, ALLL levels, while increasing, appear to have not kept pace with the overall level of decline in market conditions. Summary data showcasing these changing conditions is highlighted in Attachments 3 thru 6. While some of the banks in the review have fared better than others, a correlation between risk management and governance practices and the condition of CRE loan portfolios, based solely on call report data, is difficult to distinguish given the significant differences in geographic markets served, existing market conditions, and effectiveness of regulatory reporting.

Much work needs to be done on the part of the banking industry in adopting and implementing the tenets of the December 2006 Interagency guidance. Lessons learned from recent events will most certainly serve as a beacon for change and as organizations move beyond the current trough, management teams will hopefully improve and enhance their level of and commitment to effective portfolio-wide risk management practices.

Attachment 1

PORTFOLIO MONITORING

Robust **STRATIFICATION** provides the best opportunity for the Board and Senior Management to see the complete picture and assess inherent and enterprise wide credit exposures.

- Call Report codes have limited usefulness.
- Multiple sorts provide best picture
 - By NAICS
 - By product/property type of collateral/pools
 - Retail
 - Apartment
 - Office
 - Warehouse/industrial
 - R&D properties
 - Hotels/motels
 - Mobile home parks
 - Housing projects
 - C&D loans
 - Other
 - By repayment source, or borrower type
 - Major/single industry
 - By owner occupied vs. non-owner occupied
 - By geographic area
 - By Zip code
 - By average LTV
 - By terms
 - Tenant mix
- Many of the product/property types may have their own subset of analytics:
 - Construction Loans
 - “Spec” vs. non-“spec”
 - By LTV, or equity in project
 - By geographic area
 - By Zip code
 - By borrower type
 - By project/subdivision
 - By builder
 - By percentage of completion
 - By inventory, and/or size of project
- What are the concentration levels when total commitments are included?

Attachment 2

ECONOMIC AND MARKET INDICATORS

- Impact of National and regional factors on local market
- Economic Growth trends
- Employment trends
- Population growth trends
- Demographic changes

- Vacancy rates
- Tenant lease incentives
- Absorption rates
- Construction permits
- Price of new construction
- Real estate broker and builder feedback

- Frequency of assessment?
- By whom?
- Does the bank have sufficient knowledge of its market area?

Attachment 3

Leverage				
Bank	Dec-06	Jun-07	Dec-07	Jun-08
1	14.55	12.74	8.79	7.43
2	9.31	9.06	8.85	8.22
3	10.62	10.00	11.50	11.31
4	9.30	8.76	8.53	7.78
5	8.50	11.55	10.12	8.73
6	7.18	7.29	7.12	6.81
7	7.85	7.90	8.11	8.12
8	8.32	6.85	7.22	7.33
9	8.17	8.54	8.74	9.02
10	14.69	13.62	13.05	12.26
11	8.56	9.07	8.87	8.32
12	9.60	9.09	9.21	8.90
Ave	9.72	9.54	9.18	8.69

ALLL/Total Loans				
Bank	Dec-06	Jun-07	Dec-07	Jun-08
1	1.17	1.01	2.10	2.29
2	1.21	1.21	1.22	1.20
3	0.95	0.99	1.01	1.04
4	1.54	1.64	1.49	1.36
5	0.91	0.90	0.84	0.93
6	1.09	1.06	1.14	1.18
7	1.08	1.04	1.05	1.53
8	1.07	1.09	1.10	1.37
9	0.94	0.96	0.95	0.95
10	1.04	1.02	1.06	1.12
11	1.10	1.25	1.60	1.47
12	0.98	0.97	0.99	0.89
Ave	1.09	1.10	1.21	1.28

Attachment 4

Past Due				
Bank	Dec-06	Jun-07	Dec-07	Jun-08
1	1.09	1.43	3.32	7.14
2	1.07	1.52	0.81	1.73
3	0.49	0.23	0.51	0.54
4	1.35	1.13	2.31	2.54
5	0.07	0.54	0.00	0.02
6	0.34	0.62	0.36	3.56
7	0.60	0.56	0.84	3.02
8	0.73	2.09	2.58	3.57
9	0.51	0.63	0.56	0.54
10	0.46	0.58	0.81	0.64
11	1.50	3.41	4.82	1.77
12	0.19	0.18	0.40	1.33
Ave	0.70	1.08	1.54	2.20

Non-Current				
Bank	Dec-06	Jun-07	Dec-07	Jun-08
1	0.88	0.76	1.06	4.87
2	0.22	0.36	0.24	0.66
3	0.33	0.06	0.22	0.40
4	0.48	0.39	1.15	2.14
5	0.06	0.00	0.02	0.02
6	0.24	0.21	0.23	1.71
7	0.38	0.30	0.39	2.70
8	0.21	1.02	1.57	2.58
9	0.18	0.24	0.14	0.21
10	0.43	0.37	0.55	0.56
11	0.05	0.85	4.27	0.76
12	0.05	0.00	0.00	0.00
Ave	0.29	0.38	0.82	1.38

Attachment 5

Non-Current/LLR				
Bank	Dec-06	Jun-07	Dec-07	Jun-08
1	75.05	31.09	50.67	213.01
2	17.97	29.49	19.63	55.24
3	34.45	6.51	22.21	38.76
4	31.11	23.64	76.88	157.45
5	6.54	0.00	2.01	2.59
6	21.66	19.82	19.79	145.29
7	35.55	28.73	37.55	176.83
8	19.15	93.68	142.33	188.15
9	18.93	24.65	14.32	21.85
10	41.68	35.82	52.45	50.13
11	4.18	68.42	266.43	51.51
12	4.78	0.00	0.00	0.00
Ave	27.84	30.15	58.69	91.73

Net Charge-offs				
Bank	Dec-06	Jun-07	Dec-07	Jun-08
1	(2)	130	1,501	1,014
2	272	130	275	769
3	278	737	1,086	938
4	548	(247)	(114)	245
5	30	24	21	(5)
6	126	24	181	3,925
7	1,263	96	466	1,383
8	189	248	1,272	513
9	473	129	448	62
10	(134)	2	100	(8)
11	65	363	3,790	2,069
12	28	(15)	(13)	5
Ave	261	135	751	909

Attachment 6

OREO				
Bank	Dec-06	Jun-07	Dec-07	Jun-08
1	0	440	440	585
2	327	1,038	1,688	1,691
3	0	0	0	2,985
4	0	0	0	0
5	0	154	0	0
6	0	0	0	6,091
7	134	152	173	1,255
8	182	0	461	1,352
9	204	1,950	1,800	2,000
10	0	78	0	355
11	0	367	4,277	14,495
12	596	596	596	596
Ave	120	398	786	2,617

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