FINANCIAL SERVICES RESEARCH REPORT

Navigating Concentration Risk and Regulatory Expectations.

Authors

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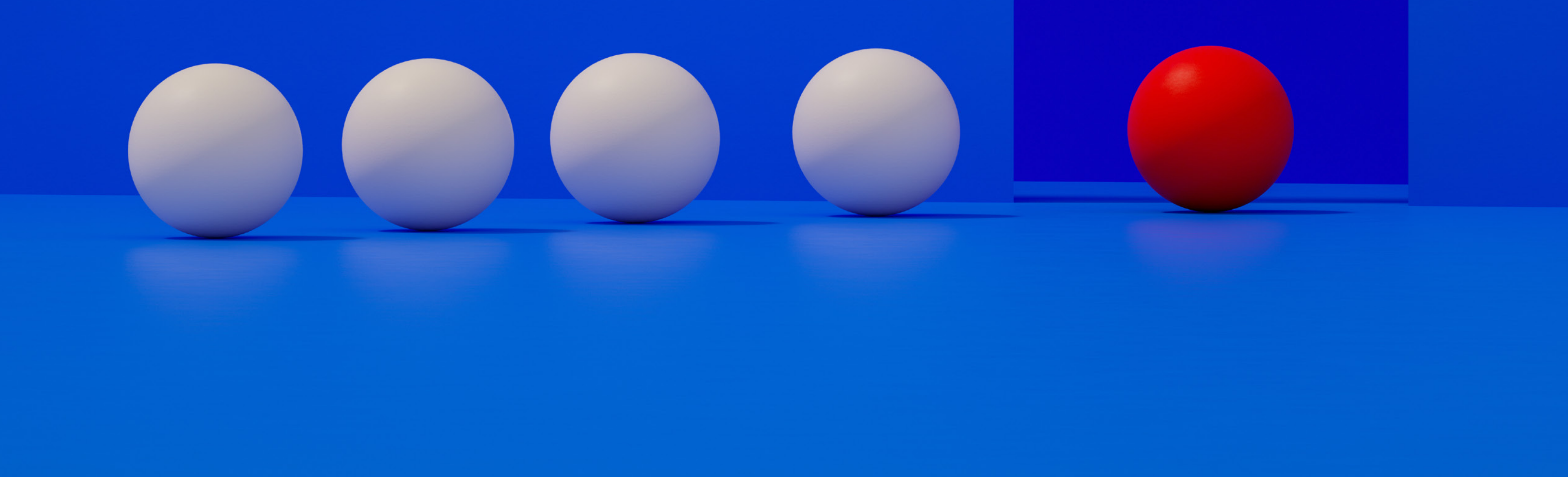
Developed by Reference Point, now operating as part of RGP



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Introduction

Banks, like businesses in any competitive market, face a familiar trade-off: broaden the offering to reduce reliance on a single product, or specialize to deepen capability and execution. In banking, this tension especially surfaces in loan portfolio management, where concentration is often treated as inherently riskier than diversification. This treatment is expressed through supervisory guidance and occasionally through consent orders requiring that banks implement risk diversification measures to mitigate concentrations of credit. Yet specialization can confer meaningful advantages - stronger sector-level insight, more focused underwriting discipline, more targeted stress testing, and closer borrower monitoring - that diversified lenders may struggle to replicate.

To evaluate whether concentration reliably translates into weaker credit outcomes, we analyzed FDIC BankFind data across two distinct environments: 2007–2012, encompassing the 2008 Financial Crisis, and 2019–2024, a comparatively stable period. The results challenge static assumptions. We find that while concentrated exposures can amplify loss potential during systemic shocks, the relationship between concentration and realized credit outcomes is neither uniform nor constant across economic cycles. In fact, under non-stress conditions, specialized lenders generally exhibited lower real estate charge-off rates than their more diversified peers.

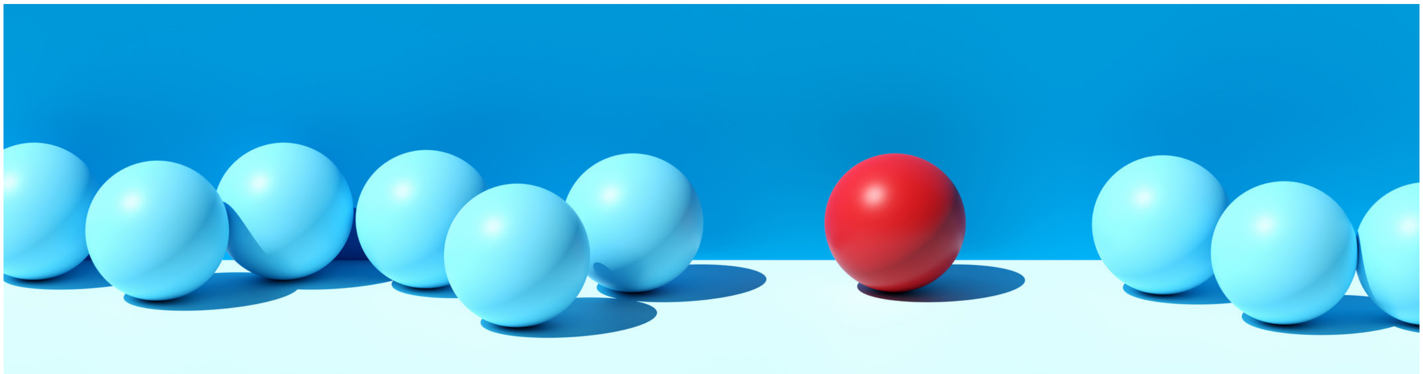
> Mitigating concentration risk is not simply about lowering exposure but about aligning portfolio management with institutional strengths.

Taken together, this means concentration is not inherently unsafe, and diversification is not a guaranteed path to resilience. Risk outcomes hinge more on credit discipline and governance quality than on concentration alone. A more nuanced approach to concentration risk is needed that balances regulatory compliance with the strategic advantages of specialization.

Concentration Risk Regulatory Landscape

The Office of the Comptroller of the Currency (OCC) describes concentration as clustered exposures across products, business lines, geographic areas, or legal entities that can amplify overall risk and the potential for significant adverse impacts on a bank's financial condition and resilience.[2] While all lending carries inherent risk, concentrated portfolios are especially vulnerable to external shocks that can trigger correlated defaults. Adverse events in segments like commercial real estate (CRE) or regional economies can rapidly precipitate credit deterioration and capital erosion. Such vulnerabilities extend beyond individual institutions, posing risks to the broader financial system.

This perspective is shaped by hard lessons from history. The Savings and Loan Crisis of the 1980s and the 2008 Financial Crisis both illustrate how excessive exposure to a single sector can escalate systemic risk. In 2008, widespread defaults exposed critical gaps in risk management practices, reinforcing the need for stronger regulatory safeguards.[3]



In response to the 2008 Financial Crisis, U.S. financial regulation underwent sweeping reforms to address systemic vulnerabilities, including those related to concentration risk. The Dodd-Frank Act of 2010 introduced enhanced capital and liquidity requirements, mandatory stress testing, and heightened supervisory expectations for risk governance and oversight across institutions.[4]

These broad reforms were accompanied by more targeted measures in CRE. Supervisors tightened the CRE "screens" first introduced via 2006 inter-agency guidance. The guidance flagged banks for heightened scrutiny if their construction-land development loans equaled 100% of capital or if their non-owner-occupied CRE portfolio exceeded 300% of capital and had grown by 50% in three years.[5] Post-crisis examinations, Government Accountability Office (GAO) reviews, and subsequent policy guidance highlighted the need for agencies to apply these benchmarks more consistently and embed forward-looking stress tests into CRE oversight.[6] Regulators revisited the issue in a December 2015 joint statement, warning that examiners would pay "special attention" to renewed CRE growth going forward.[7] In March 2020, regulators recalibrated concentration ratios to ensure community-bank leverage-ratio adopters remained subject to comparable standards.[8] Collectively, these actions transformed pre-crisis guidance into an enforceable, stress-tested framework linking elevated portfolio concentrations with higher capital expectations and closer supervisory scrutiny.

Concentration Risk Regulatory Landscape Cont.

For larger, more complex firms, regulators introduced additional guardrails. To curb bilateral linkages that had magnified losses in 2008, the Federal Reserve's 2018 Single-Counterparty Credit Limits rule capped exposures of the largest bank holding companies at 25% of Tier 1 capital, or 15% when the counterparty is another global systemically important bank.[9] The OCC's "heightened standards" guidelines (2014) required banks above $50 billion in average total consolidated assets to maintain a board-approved risk governance framework with explicit concentration limits.[10] Meanwhile, the FDIC re-engineered its risk-based insurance assessments. Since 2011, following reforms developed in 2009, banks reliant on volatile funding have faced higher premiums, while those issuing long-term unsecured debt have received fewer assessments, thereby pricing the liquidity-concentration externality that amplified failures during the crisis.[11]

These regulations have embedded concentration risk oversight into institution-level capital planning and broader regulatory frameworks. They combine quantitative thresholds (such as CRE concentration ratios and single-counterparty limits) with governance standards and economic incentives. This layered approach aims to prevent systemic risk tied to any single sector, borrower group, or funding source.

Risk ≠ Concentration Alone

- Loan performance is influenced by factors such as underwriting quality, governance, and market familiarity, rather than concentration levels alone. Poor credit practices, rapid growth, and entry into unfamiliar markets may contribute more significantly to risk than exposure itself.

Diversification Is Not a Guaranteed Shield

- Diversified portfolios did not consistently outperform specialized ones. Some moderately concentrated banks performed equally or better, suggesting that blind diversification may dilute focus and increase risk.

Cyclical Nature of Concentration Risk

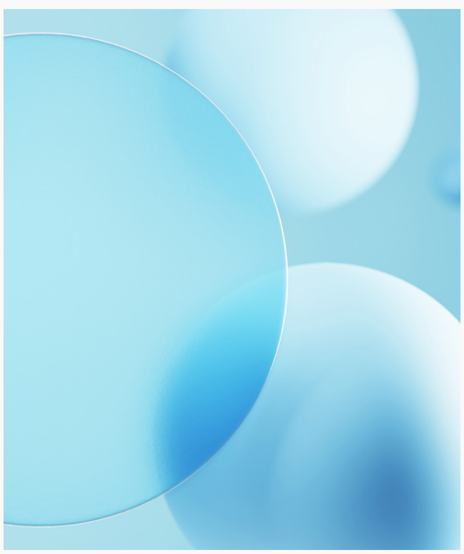
- Concentration risk can manifest differently over the economic cycle, with risks becoming more apparent during periods of stress. Fixed concentration limits may not always reflect these changing conditions, indicating that a more flexible framework could be better suited to these dynamics.

OUR POV: Mitigating concentration risk is not simply about lowering exposure but about aligning portfolio management with institutional strengths.

Critical Reflections and Evolving Approaches to Concentration Risk

Despite significant regulatory advancements, managing concentration risk remains a challenging and dynamic issue for financial institutions and policymakers. Accurately forecasting emerging threats is inherently difficult, and past crises have exposed the limitations of models, oversight mechanisms, and the conventional belief that diversification always reduces risk. Traditional models and historical data often fail to capture structural shifts, financial innovation, and behavioral dynamics like investor overconfidence or herd behavior. Crises driven by abrupt changes in market sentiment, rather than clear mechanical triggers, highlight the fragility of predictive tools.

For example, a 2017 GAO model[12] that forecasted losses based on property prices, lending growth, and underwriting standards underestimated market resilience and misjudged the timing of stress events. It projected CRE charge-offs would rise from near-zero in 2017 to roughly 0.2% in 2018, triple in 2019, and exceed 0.8% by early 2020. In actuality, the simple average CRE charge-off rate for all U.S. commercial banks was 0.01% in 2018, 0.03% in 2019, and 0.09% in 2020.[13] This underscores the challenge of translating complex, dynamic markets into predictive indicators.



GAO 2017 forecast vs actual CRE charge-off rates:

Forecasted:

- 2018: ~0.20%
- 2019: ~0.60%
- 2020: 0.80%

Actual:

- 2018: 0.01%
- 2019: 0.03%
- 2020: 0.09%

Model accuracy and forecasting are also challenged by new stressors including hybrid work trends, changing interest rates, and property market uncertainties, which complicate risk management, particularly for smaller banks with concentrated exposures. Further, as institutions expand into new or evolving real estate markets, the lack of historical data and market benchmarks makes it increasingly difficult to price credit risk with confidence. These realities highlight the limitations of relying solely on static concentration thresholds or rigid diversification mandates.

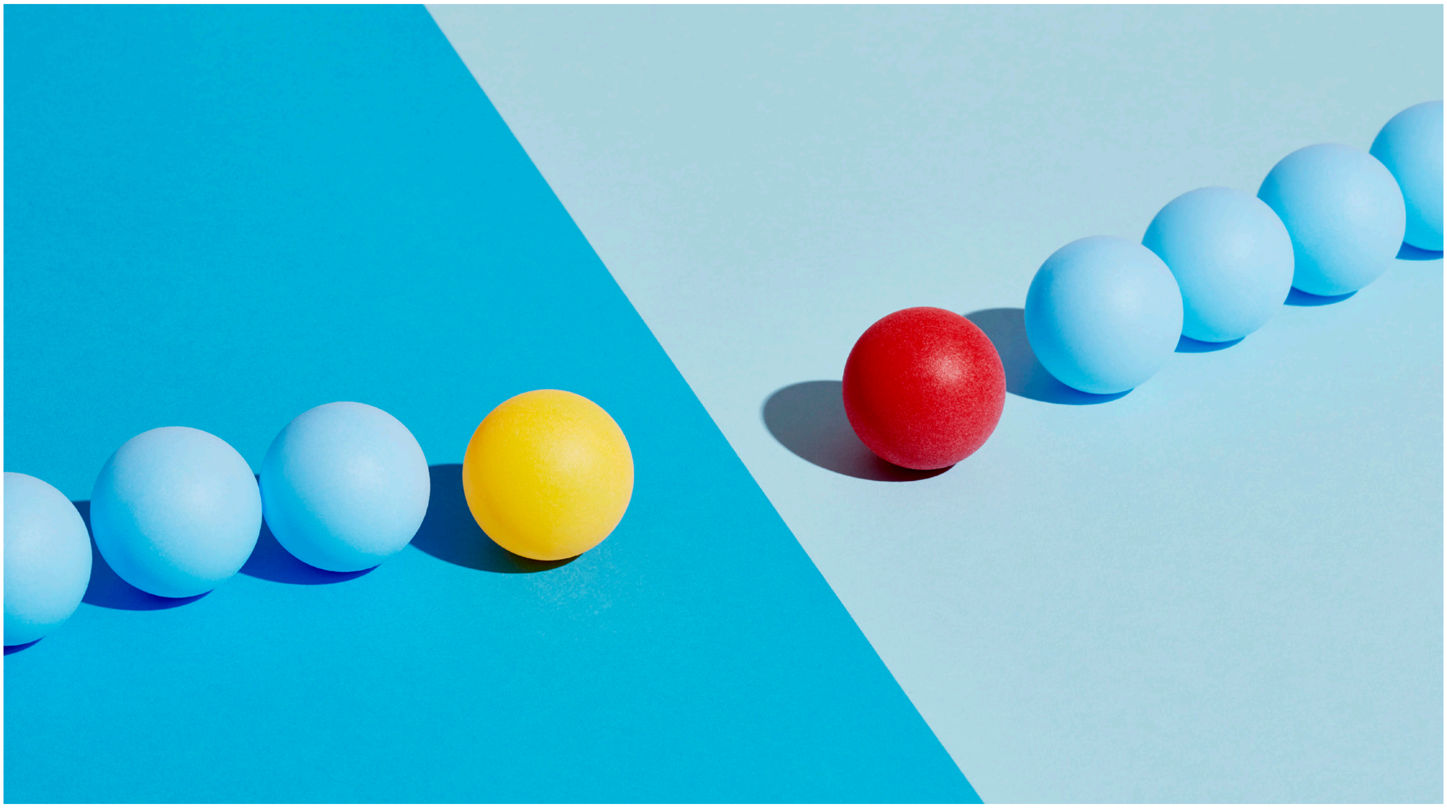
Critical Reflections and Evolving Approaches to Concentration Risk Cont.

In practice, a robust framework integrates quantitative models with expert judgment and operational flexibility.

Key components include:

- Operating within areas of expertise to preserve the benefits of specialized knowledge.
- Adhering to underwriting standards and loan administration practices that are tailored to the institution's scale and risk profile.[14]
- Performing continuous scenario planning and stress testing to prepare for market volatility and unforeseen shocks.
- Utilizing risk models as decision-support tools while preserving expert oversight and proactive risk mitigation.

OUR POV: By placing greater emphasis on specialization and adaptability, rather than strict reliance on concentration limits alone, banks can be better positioned to manage concentration risk and support lasting institutional resilience.



Illustrative Analysis

To contextualize these qualitative insights, we examined the relationship between real estate loan concentration and loan performance among FDIC-insured banks, using data from the FDIC's BankFind Suite to identify directional trends in charge-off behavior across both stress and non-stress periods.[15]

4.1 Overview of Methodology

The key measure of loan performance in this analysis is calculated as follows:

$$\frac{\textit{Gross Real Estate Charge-Offs}}{\textit{Total Real Estate Loans}}$$

Loan portfolio concentration is calculated as follows:

$$\frac{\textit{Total Real Estate Loans}}{\textit{Tier 1 Capital + Allowance for Credit Losses (T1C + ACL)}}$$

Concentration is measured in terms of total real estate loan exposure, encompassing both residential and commercial lending.

To evaluate the relationship between real estate loan concentration and loan performance, this analysis segments the population across bank size and portfolio concentration.

Bank Size Tranches

Banks are classified into three asset-based tiers, allowing for meaningful comparisons among institutions of similar scale. By acknowledging that size shapes risk-management strategies and influences diversification capacity, this approach enables the analysis to examine how concentration risk varies with an institution's size and complexity.

$200M–500M

Small community and regional banks, often operating in localized markets with narrower product lines.

$500M–$3B

Mid-sized institutions that may employ a mix of specialized and diversified strategies, often with moderate exposure to market volatility.

$3B–$50B

Large banks with broader geographic footprints, more diversified loan portfolios, and deeper capital reserves.

Real Estate Concentration Segments

Within each size tranche, banks are further segmented based on their real estate loan exposure relative to combined Tier 1 Capital and Allowance for Credit Losses (T1C + ACL). This ratio serves as a proxy for loan portfolio concentration, enabling meaningful comparisons across institutions regardless of absolute portfolio size.

By observing charge-off rates within and across these segments, the analysis examines whether higher concentration is linked to weaker loan performance under varying economic conditions.

4.2 Non-Stress Periods Showed Lower Charge-Off Rates, but Recent Years Hint at Risk

The analysis begins with the "non-stress" period spanning 2019 to 2024. During this time, real estate charge-off rates remained relatively low across all three bank tranches, indicating minimal systemic pressure on loan performance. During this time, specialized lenders consistently recorded lower charge-off rates than their more diversified peers, suggesting that real estate specialization does not inherently lead to higher credit losses under stable macroeconomic conditions.

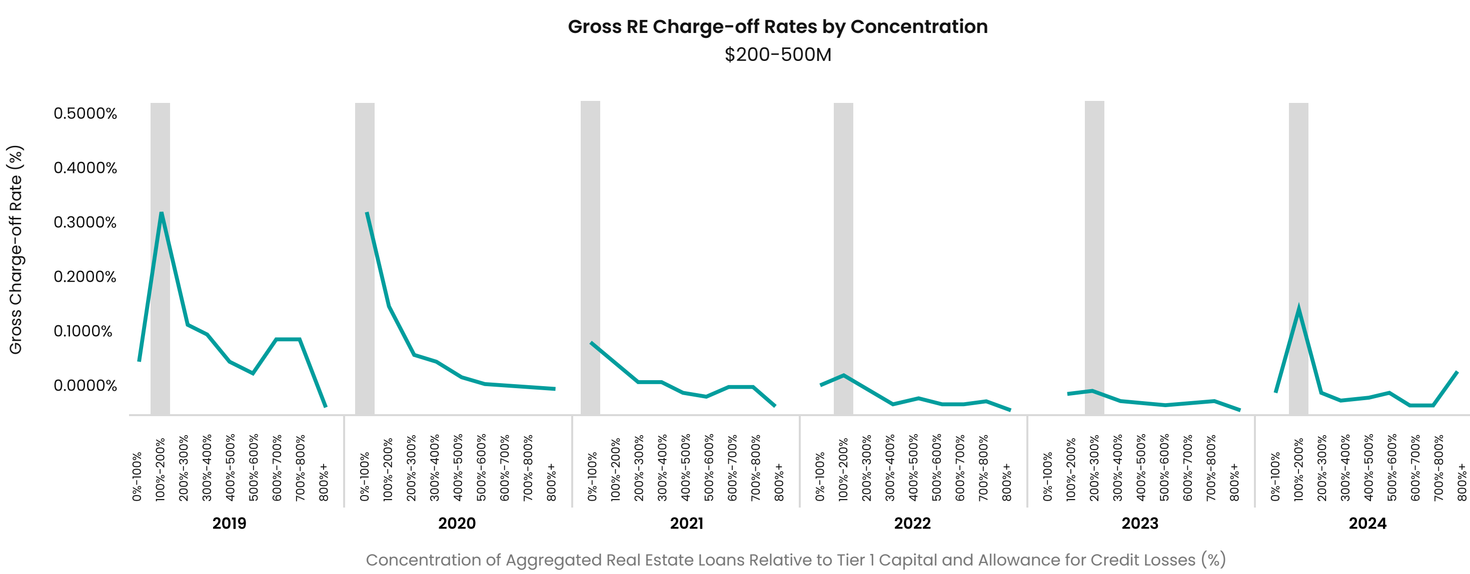


Figure 1: Gross Real Estate Loan Charge-off Rates (2019-2024), $200M-$500M Tranche

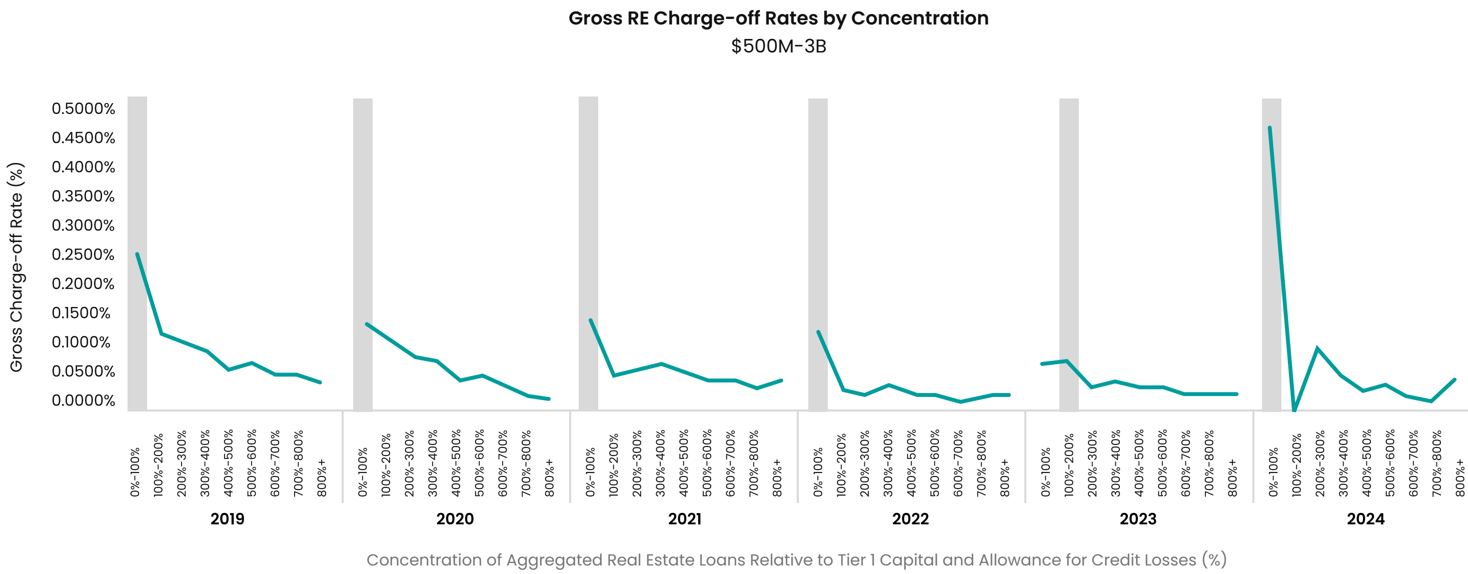


Figure 2: Gross Real Estate Loan Charge-off Rates (2019-2024), $500M-$3B Tranche

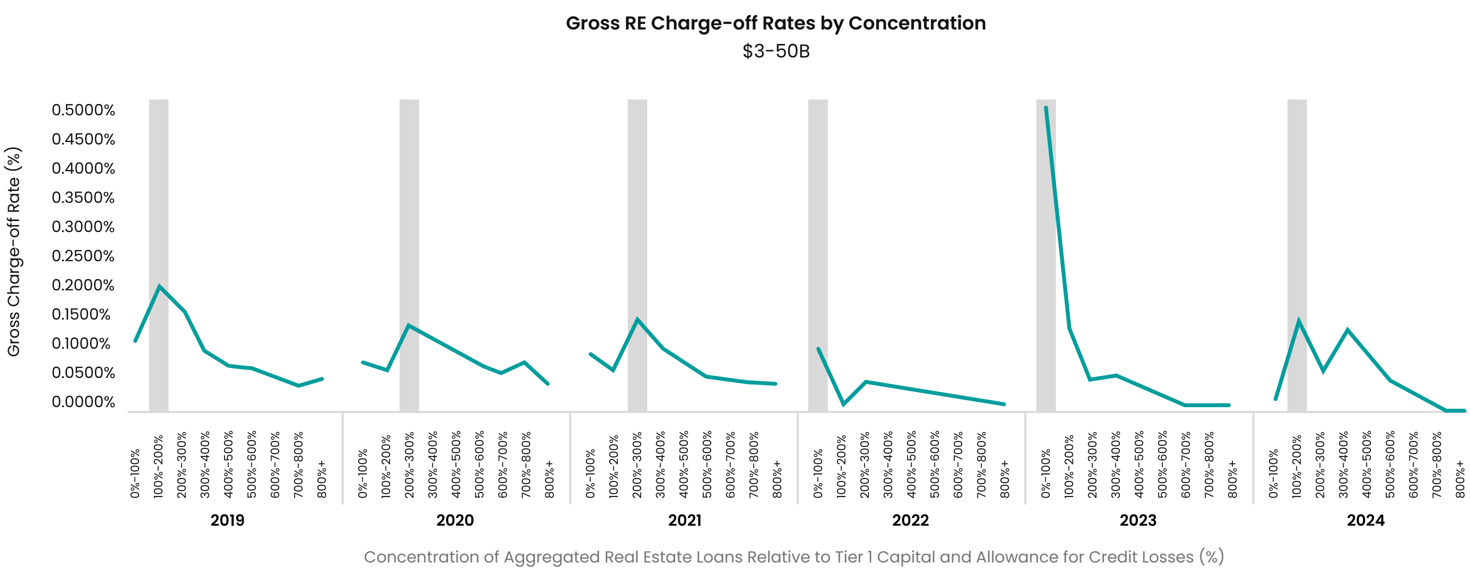


Figure 3: Gross Real Estate Loan Charge-off Rates (2019-2024), $3B-$50B Tranche

> Specialized lenders consistently recorded lower charge-off rates than their more diversified peers.

The inverse relationship between concentration and charge-off rate was most pronounced in the $500M-$3B tranche (**Figure 2**), where the most concentrated institutions often delivered the strongest performance. These findings challenge the conventional assumption that greater exposure equates to greater risk. Instead, they highlight the potential advantages of focused expertise: deeper borrower insight, more disciplined underwriting, and refined servicing strategies tailored to a specific asset class.

While institutions in the $200M-$500M and $3B-$50B tranches exhibited greater variability in outcomes, there was no clear evidence that higher concentration led to higher charge-offs (**Figures 1 and 3**). In most cases, concentrated lenders even appeared to perform as well as (or better than) their more diversified peers. This pattern suggests that concentrated lenders were not only managing risk effectively but often outperforming generalists, reinforcing the view that specialized domain expertise and strong risk management can offset the perceived risks of portfolio concentration in stable economic conditions.

Importantly, across all asset tiers, segments with concentration ratios above the 100–200% band never yielded the highest charge-off rate.

4.3 Charge-Off Rates Were Substantially Higher During the Stress Period

In contrast to the non-stress period, the 2005 to 2012 timeframe presented a different picture. Real estate charge-off rates surged during the 2008 Financial Crisis, particularly between 2008 and 2010, as institutions across all size tranches absorbed widespread losses stemming from the housing market collapse and broader credit contraction.

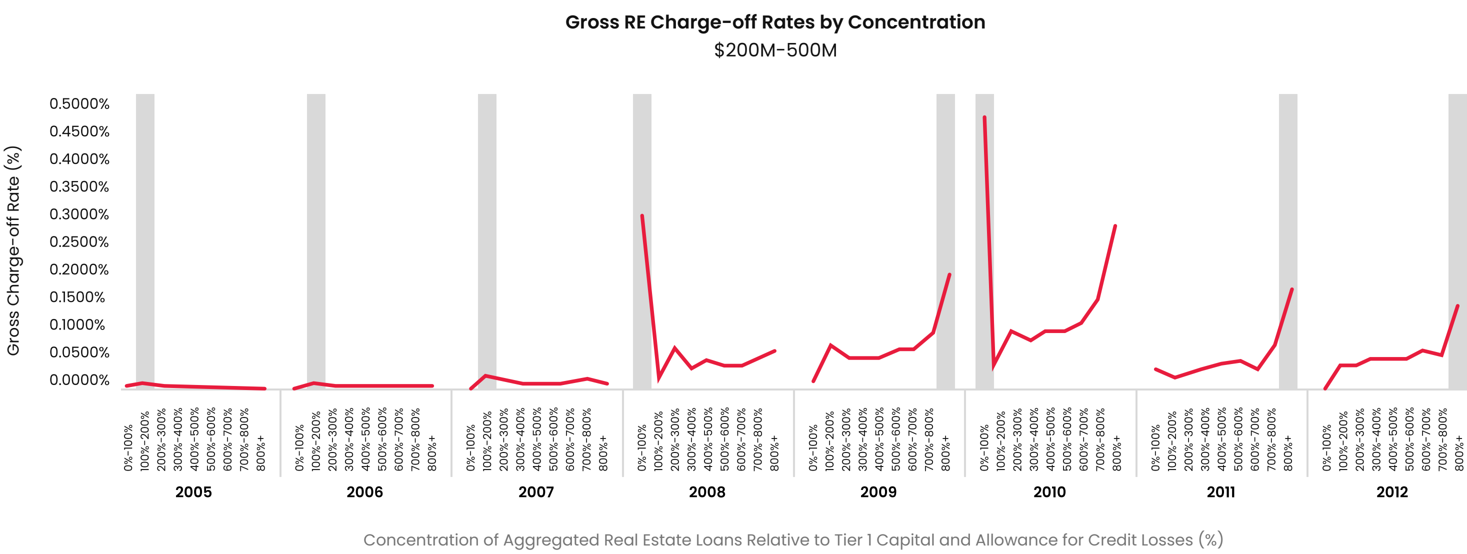


Figure 4: Gross Real Estate Loan Charge-off Rates (2005-2012), $200M-$500M Tranche

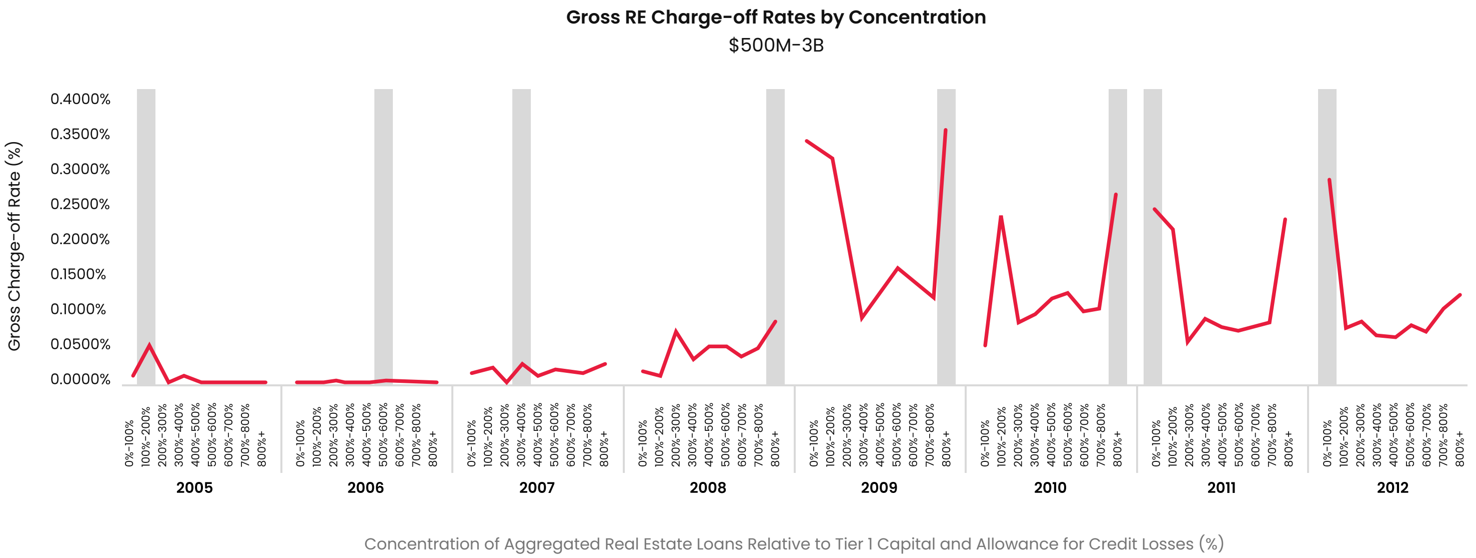


Figure 5: Gross Real Estate Loan Charge-off Rates (2005-2012), $500M-$3B Tranche

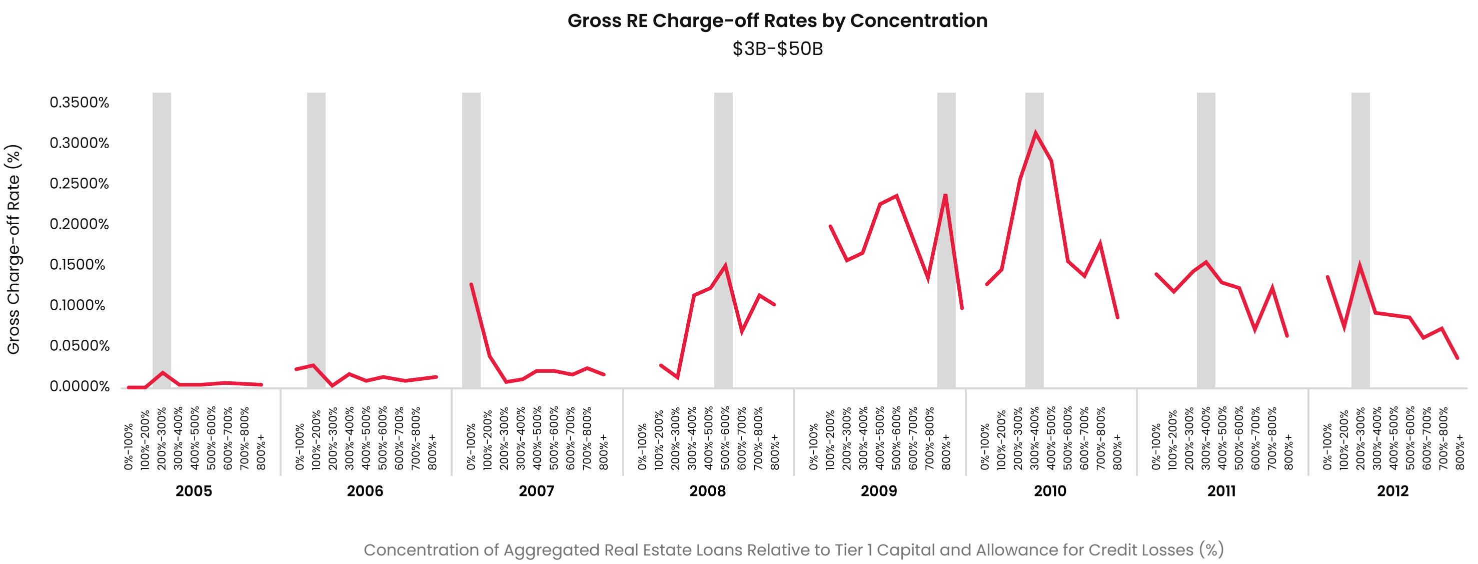


Figure 6: Gross Real Estate Loan Charge-off Rates (2005-2012), $3B-$50B Tranche

Common thinking suggests that mid-and small-sized institutions with substantial sector exposure were more vulnerable to economic shocks, supporting regulatory concerns that concentration can amplify risk during periods of stress, especially for banks without the balance sheet depth of larger peers. While banks with higher real estate concentrations consistently reported elevated charge-off rates in 2008 in the $500M-$3B tranche (**Figure 5**), this trend is not as evident across other years or tranches. Unlike the consistent inverse relationship observed during the non-stress period, the connection between concentration and charge-off rates during this period was less uniform. While charge-off rates peaked among banks with extreme concentrations in 2009, the second-highest rate occurred in the 0-100% segment for the $200M-$500M tranche. A similar pattern appeared in 2010, when the 100-200% segment recorded the second-highest charge-off rate. These variations indicate that, although concentration posed heightened risk during stress, the relationship was not strictly linear or predictable.

Among the smallest banks ($200M-$500M), the pattern was even more mixed (**Figure 4**). While some highly concentrated institutions experienced substantial losses, others demonstrated resilience. Notably, in 2008, banks in the 0-100% concentration segment exhibited the highest charge-off rate. This variability suggests that other factors such as underwriting quality, regional exposure, and portfolio composition played a significant role in loan performance.

Larger banks ($3B-$50B) generally fared better in managing real estate charge-offs during the crisis, even at higher concentration levels (**Figure 6**). This may reflect stronger institutional capacity to absorb losses, greater access to liquidity, and more sophisticated risk management infrastructure. However, the relationship between concentration and charge-off rates was not consistently linear. From 2008-2012, mid-range concentration segments (300-400% in 2008, 300-500% in 2009, and 300-400% in 2010) exhibited high, if not the highest, charge-off rates.

Our Findings:

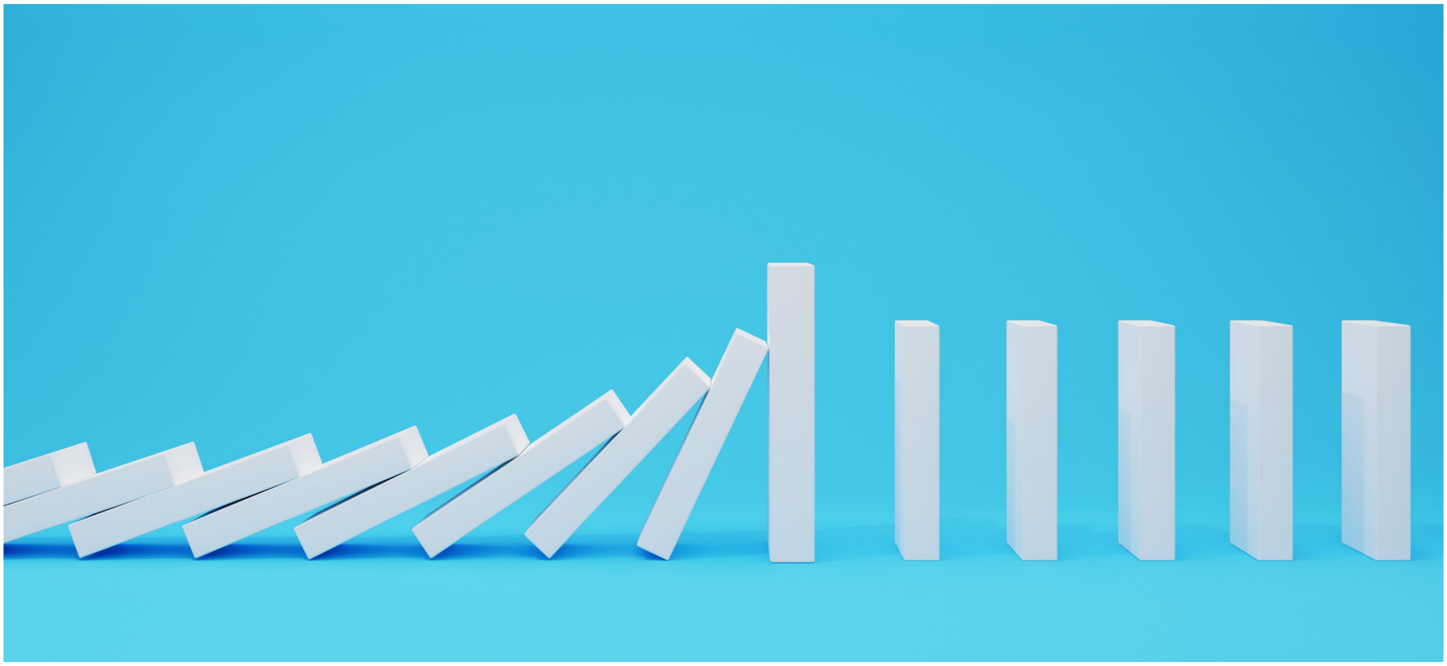
- Small banks ($200M–$500M) showed mixed patterns; some highly concentrated banks remained resilient.
- Large banks ($3B–$50B) generally managed losses better due to stronger liquidity and risk infrastructure.
- Highest losses often appeared in mid-range concentration bands, not always the highest ones.

4.4 Limitations and Areas for Further Exploration

The limitations of this analysis, including the lack of differentiation between commercial and residential real estate loans, should be considered when interpreting its findings. Different property types carry unique risk profiles and may perform differently across credit cycles. The current blended approach could mask patterns potentially visible in a more granular view.

Additionally, a broader view of concentration risk could yield deeper insights, as this analysis focuses solely on real estate loan concentration. Geographic footprint, borrower segments, connected-counterparty concentration, and industry exposure are all additional forms of concentration that may influence loan performance. An exploration of these dimensions could provide a more comprehensive view of concentration's impact on risk. The analysis is also limited in temporal and institutional scope. It is based on two discrete time periods and focuses exclusively on FDIC-insured commercial banks. As such, it does not capture the experiences of other institution types, such as credit unions or banks with nontraditional lending models, which could offer additional insight into how concentration risk unfolds across different business structures.

In addition, depositor base composition, such as reliance on wholesale funding or concentrated deposit sources, is not captured. These structural factors can significantly influence a bank's stability and may interact with concentration risk in important ways. Including a broader range of funding profiles could provide a more nuanced view of how liquidity and funding dynamics shape institutional outcomes.



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This analysis relies on charge-off rates as the sole indicator of loan portfolio performance. While charge-offs offer a clear, standardized measure of credit losses, they represent a lagging indicator, often reflecting distress only after a loan has gone through extended delinquency, restructuring, or foreclosure. As such, they may understate emerging risks, especially in periods of relative stability or when loss recognition is delayed. Complementary metrics such as Other Real Estate Owned (OREO) (which captures foreclosed properties held on the balance sheet) could provide earlier signals of deterioration. Ratios like OREO-to-assets or OREO-to-capital may be particularly useful in identifying mounting risk in concentrated real estate portfolios before losses are formally realized.

Additional variables could further enrich the analysis. Bank-level characteristics like growth rate, return on assets (ROA), net interest margin, efficiency ratio, capital adequacy, and liquidity could help distinguish whether certain institutions are better equipped to manage concentration through stronger governance and operational discipline. Future research incorporating these dimensions could provide a more comprehensive understanding of how different metrics interact with both risk and institutional performance.

Taken together, these areas present meaningful opportunities to refine and expand this work and offer a fuller picture of how concentration risk develops – and what drives resilience.

Implications for Concentration Risk

The results of this analysis, contextualized by industry research and conversations with industry practitioners, yield six primary insights regarding real estate loan concentration and its relationship to loan performance across economic cycles:

- **Focused lenders often outperform in stable conditions.** Between 2019 and 2024, banks with higher exposure to real estate lending consistently exhibited lower charge-off rates than more diversified peers. This suggests that domain expertise supports not only strategic focus but also disciplined underwriting, informed loan structuring, and strong borrower relationships that enhance credit monitoring and responsiveness.

- **Heavy concentration amplifies downside exposure during crisis periods.** During the 2008 Financial Crisis years (2005-2012), institutions with elevated real estate exposures exhibited notably higher charge-off rates, particularly among mid-sized banks. This reinforces concerns that excessive exposure to a single sector can amplify losses during market-wide stress.

- **Risk outcomes depend more on credit discipline than concentration alone.** While high concentration levels have drawn supervisory concern, outcomes often reflect underwriting quality, collateral strength, and risk governance more than exposure levels. The greatest risks typically stem from weak credit practices or expansion into high-risk or unfamiliar markets. Well-structured real estate loans, backed by strong collateral and domain expertise, can offer a durable foundation even within concentrated portfolios.

- **Diversification alone does not guarantee better outcomes.** The assumption that risk declines with diversification does not always hold. Several moderately concentrated lenders performed as well as or better than their broadly diversified counterparts, both in stable and volatile conditions.

- **The effect of concentration is cyclical.** High exposure may carry limited downside during calm periods but can significantly elevate vulnerability during systemic shocks. This cyclical nature means that static limits or one-size-fits-all guidance may not capture the true risk dynamics at play.

These findings are further supported by research from the Federal Reserve Bank of New York, which found that banks specializing in a borrower's industry tended to charge off fewer loans and earn more stable returns, even through the early stages of COVID-19: "...most importantly, we find better ex-post loan performance of loans issued by banks specialized in the borrower's industry. This holds even when controlling for the ex-ante bank-internal loan risk rating that is unobservable to the market... During the period of our sample, which covers 2011q3-2020q2, we find that specialized banks earn more stable, though slightly lower, returns and charge-off fewer loans on aggregate. Loans originated by banks specialized in an industry even perform better in the first half of 2020, which saw significant economic disruptions due to the spread of COVID-19."[16]

Overall, the results underscore that concentration risk must be assessed in context – evaluating not only exposure levels but also timing, underwriting quality, and the institution's own expertise. In stable markets, specialization may be a strength. In downturns, the same focus must be paired with sufficient capital and nimble risk governance.

Managing Concentration Risk: What Can Institutions Do?

Regulatory guidance often suggests reducing loan concentrations or increasing capital reserves, particularly in CRE lending, as primary strategies to mitigate concentration risk. While these measures align with supervisory expectations, their effectiveness depends heavily on an institution's credit discipline and expertise. High concentrations within well-managed portfolios do not inherently increase risk when supported by strong underwriting standards, collateral quality, and experienced leadership.

Conversely, efforts to reduce concentration by expanding into unfamiliar lending sectors may inadvertently increase risk if the institution lacks sufficient expertise in those markets. This underscores a critical point: **mitigating concentration risk is not simply about lowering exposure but about aligning portfolio management with institutional strengths.**

Thoughtful diversification within a familiar asset class (by geography, product type, or borrower segment) can provide meaningful risk mitigation without sacrificing core competencies. However, strong credit practices remain the most effective defense against risk, regardless of concentration levels. Conservative loan structuring, rigorous underwriting, ongoing portfolio monitoring, and stress testing help maintain loan quality and identify emerging vulnerabilities early.

Ultimately, it is not concentration itself that raises risk, but weak underwriting and poor credit governance.[17] As regulatory expectations evolve, institutions face the challenge of balancing compliance with concentration guidelines while maintaining robust credit oversight and leveraging their specialized expertise. Sustainable growth and resilience depend on this nuanced approach to managing concentration risk.

Our Findings:

- Concentration is not inherently risky; its impact depends on the quality of underwriting, the strength of governance, and the depth of institutional expertise.
- The path to resilience lies in mastering rather than avoiding focus.
- Through expertise and discipline, specialization can become strength.

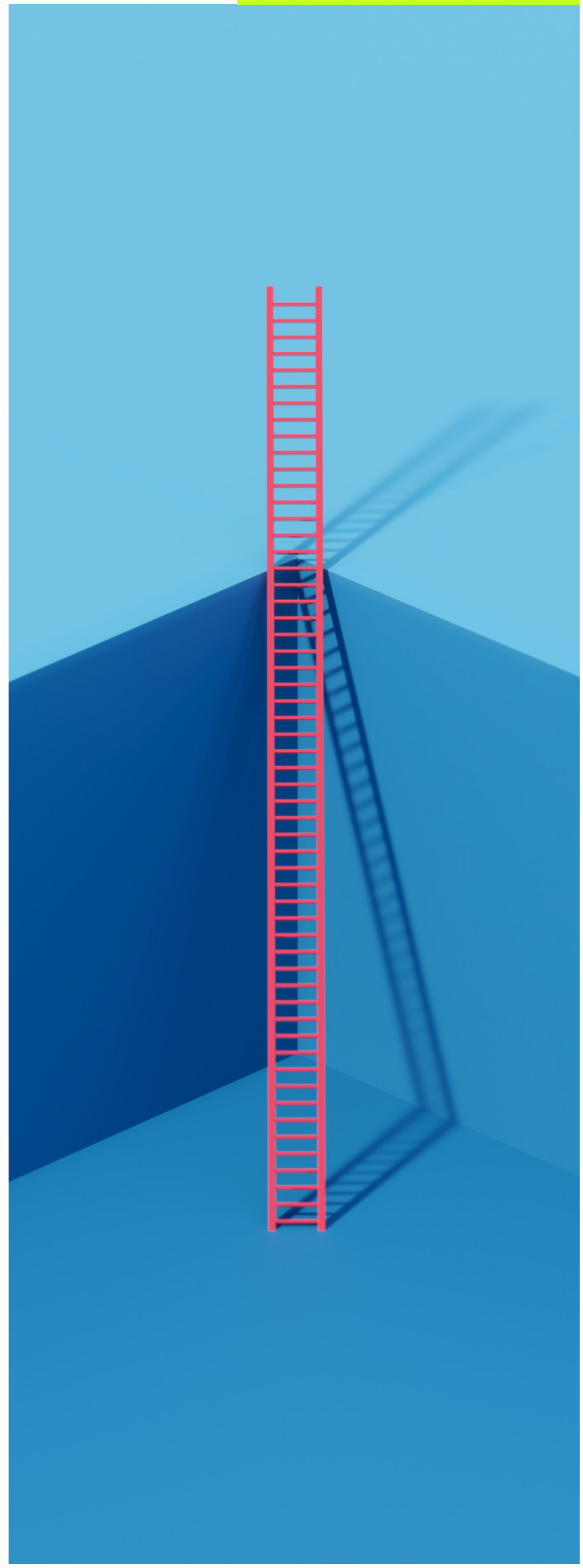
Conclusion

This paper returns to the central question posed at the outset: does loan portfolio concentration inherently increase risk, or can specialization serve as a strategic advantage? The evidence supports a more nuanced answer: concentration is not inherently risky; its impact depends on the quality of underwriting, the strength of governance, and the depth of institutional expertise.

Effective specialization is not a vulnerability to avoid, but a capability to harness. Just as a gourmet restaurant succeeds by refining a focused menu, banks that apply rigorous credit discipline and concentrate on sectors they understand deeply are often better positioned to manage risk than those diversifying into unfamiliar territory.

As regulatory expectations continue to evolve, it becomes increasingly clear that concentration risk cannot be understood through exposure levels alone. The path to resilience lies in mastering rather than avoiding focus. Through expertise and discipline, specialization can become strength.

> Effective specialization is not a vulnerability to avoid, but a capability to harness.



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