

Evolution of CRE& Credit

Recent Stories from a Loan Review Backpackers Journey



Monday, April 22, 2024

Presenter



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Agenda

1

Current credit risk industry is facing

2

Commercial real estate

3 Agriculture

4

Strategies to monitor and mitigate risks







Where are we at today...

Long Strange Trip Continues

Interest Rates

- Refinance / Rate Reset
- Exit options remain tight
- Rebalancing / Restructures are happening
- Expensive to access equity

Credit/Loan Review Activities

- · Risk rating migrations continue
- Foreclosures & hand backs have picked up & spreading
- Continue to have concern for 2017 2022 vintage
- Staffing & experience are key at this point in a cycle
- Being critical of problem loan activities
- Being critical of timely financial collection

Credit Demand Down

- Credit box remains tight
- Private debt/capital available at what price?
- CRE Lenders & those near large Urban taking hard look
 - Some Banks looking to sell participations (may be asked)
 - Some selling assets and / or portfolios

Bank Liquidity

- Stability of funding / funding costs
- Yield curve inversion = expense cuts continue
- Banks looking hard at smartest use of capital (don't make loan)



Recent articles

How banks can plan for commercial property insurance costs



Giulio Camerini, Scott Muyskens 1/16/2024 <

Banks can take steps now to address changing property insurance costs to mitigate portfolio and problem loan risks.

• https://www.crowe.com/insights/how-banks-can-plan-for-commercial-property-insurance-costs

Managing CRE concentration risk through change



Giulio Camerini, Ben Cayson 3/19/2024

While the economic environment might change, needing a plan for managing commercial real estate concentration risk does not.

• https://www.crowe.com/insights/managing-cre-concentration-risk-through-change



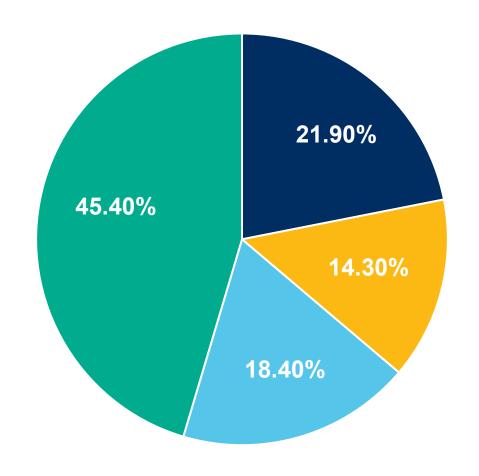
Headlines

U.S. GDP update boost U.S. fourth-quarter economic S&P 500 closes at a fresh record; Dow closes just points growth rate to 3.4% away from 40,000 Tech layoffs continue unabated in March 2024: Apple, IBM, U.S. labor market cooling; unemployment rate rises to two Dell among IT majors that cut jobs year high of 3.9% U.S. inflection ticked higher last month, reversing some recent progress February U.S. inflation means families are spending \$709 more per A Warning About the Nation's Fiscal Health month than two years ago U.S. interest payments on its debt are set to exceed How to succeed in digital and Al transformation defense spending. Should we be worried? Credit card delinquencies surged in 2023, indicating "financial stress", New York Fed says tumble Little change in mortgage application volume, despite Home prices reach new high in January, Case-Shiller says. Case-Shiller Index: Home Prices on the rise again. lower rates Auto Loan Delinquencies Hit 13-Year High As Monthly Car Existing Homes Sales Jump to Highest Level in a Year Payments Get Bigger



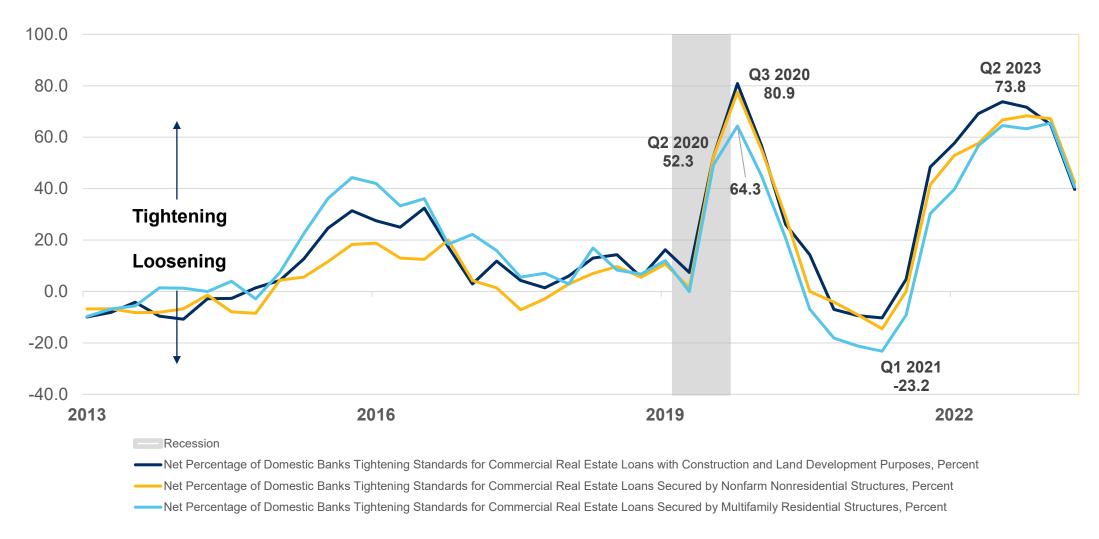
Recent Polling Results

What is your largest loan portfolio concern today heading into a period with higher uncertainty?



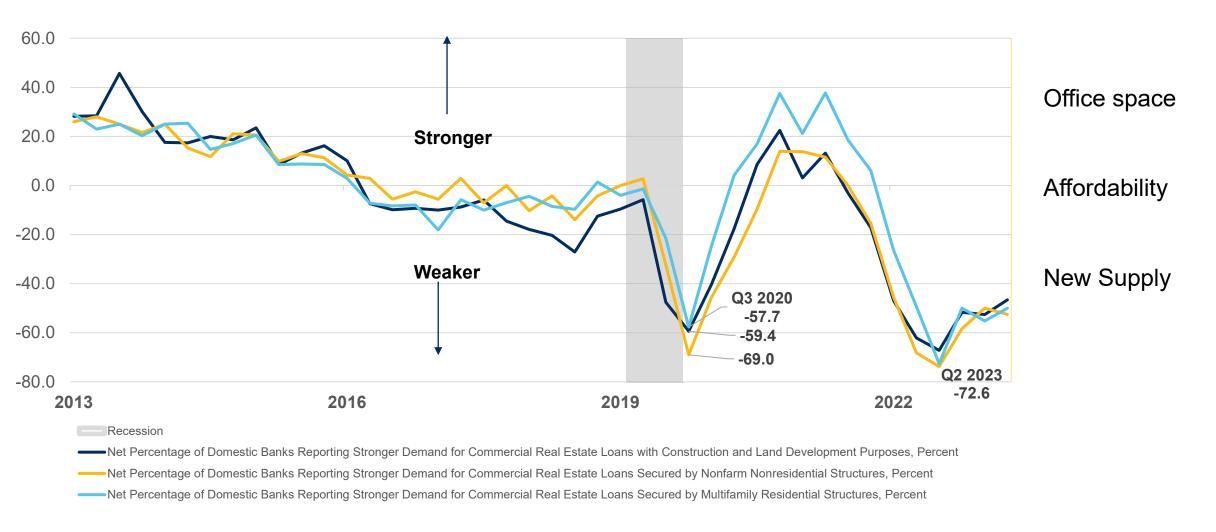
- Are Risk Ratings Accurate
- Do We Have the Right People to Mange Through Uncertainty
- Loan Concentrations
- Interest Rate / Repricing Risk





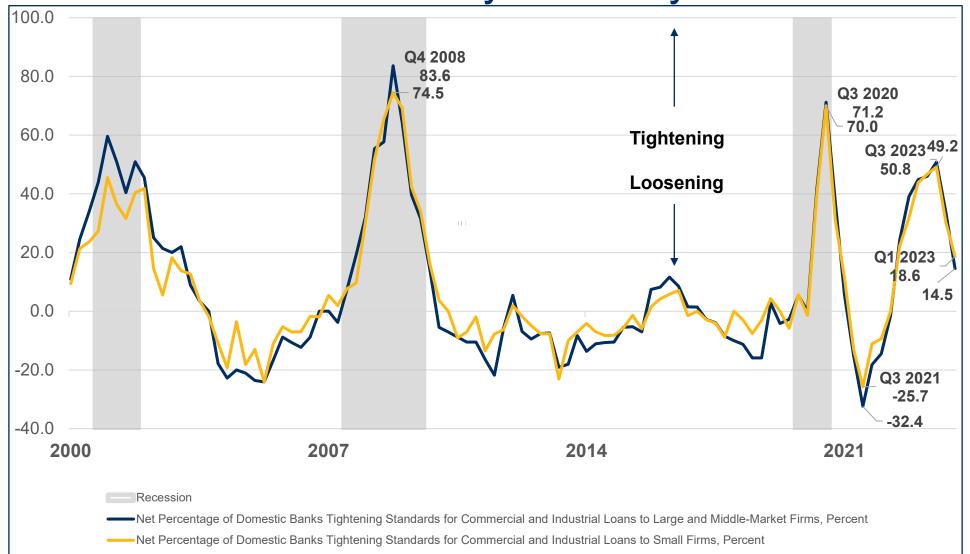
Prior to 2014, data was compiled as All Commercial Real Estate Loans





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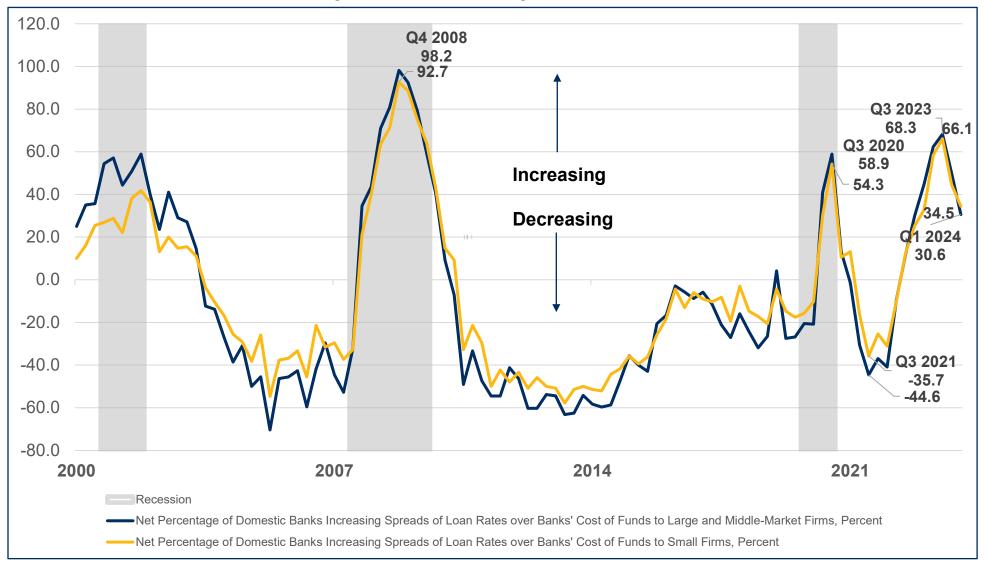
Less favorable / more uncertain economic outlook

Less aggressive competition (banks and nonbank lenders)

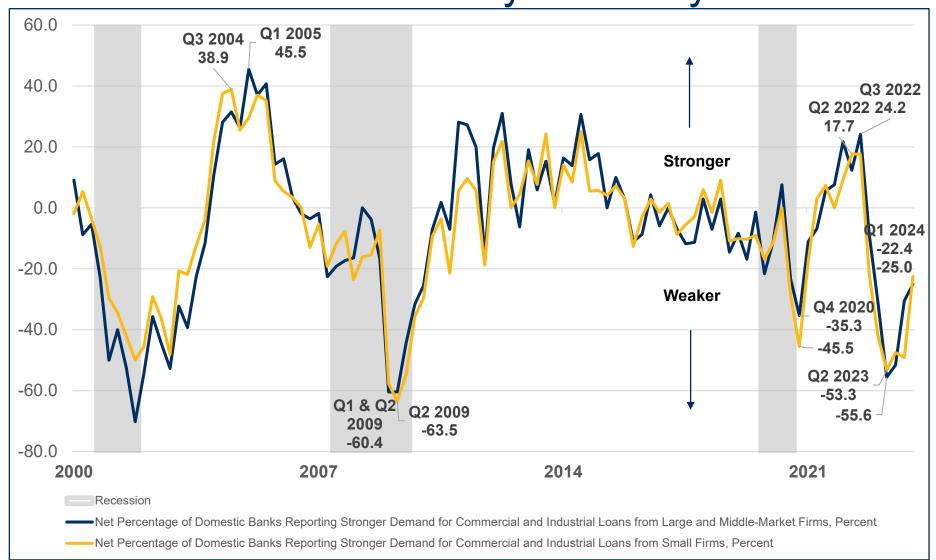
Deterioration in current or expected liquidity position

Decreased liquidity in the secondary market

Worsening of industry-specific problems







Increase in interest rates

Lower spending and investment needs

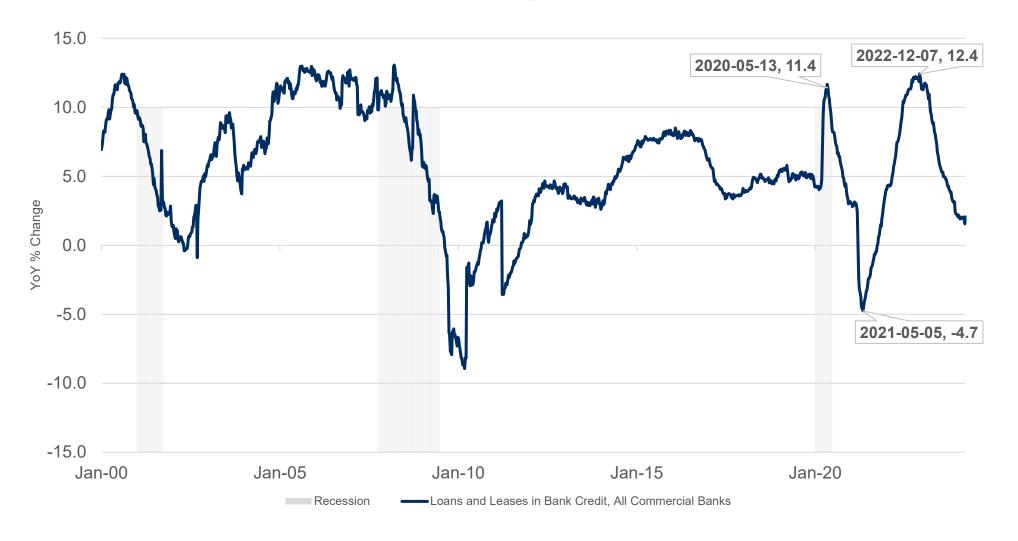
Easing in supply chain disruptions

Less M&A

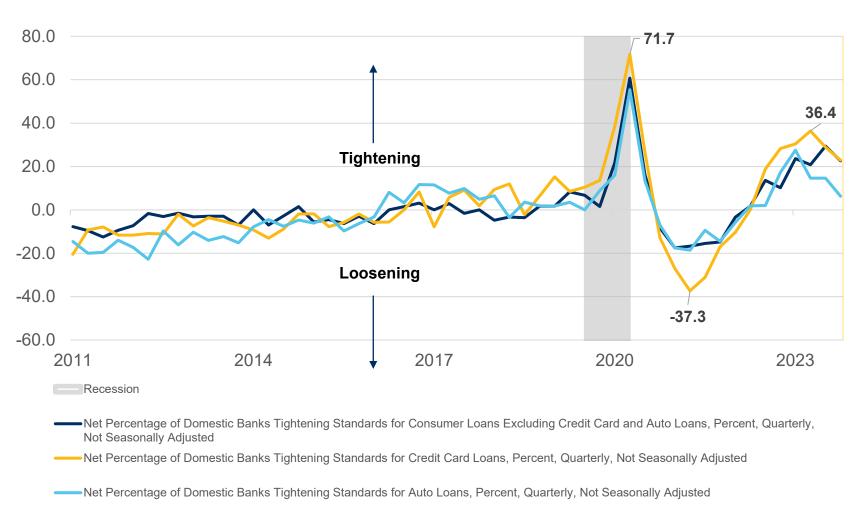
Demand expected to pickup in 2024 because of lower interest rates



Loans and Leases in Bank Credit, All Commercial Banks







Expected deterioration in credit quality

Reduction in risk tolerance

Deterioration in the bank's liquidity position

Increase in funding costs

Data series started in 2011



Shared National Credits – 1st and 3rd Qtr. Reviews

Results - \$6.4 trillion portfolio

Moderate Risk

- Higher Interest Rates
- Compressed margins in some industries
- Declining quality in Technology, Telecom, Media, Health Care and Pharma
- Office weakness changes in the workplace
- Improving quality in Transportation Services and Entertainment/Recreation (pandemic affected)



Shared National Credits – 1st and 3rd Qtr. Reviews

Go-Forward

- Manage interest rates
- Leverage Lending Risk is High may lack financial flexibility
 - Approx. 46% of total SNC commitments
 - Disproportionate percentage of special mention (86%) and classified (85%) exposures
 - Risk layering: high leverage, aggressive repayment assumptions, weak covenants, terms that allow borrowers to increase debt (e.g. draw on incremental facilities)
 - Previously strong investor demand led to less restrictive covenants
 - Have not been tested through typical economic cycle
 - Need to stress test and understand potential losses and impact to capital and earnings



Fed Funds Effective Rate



Market Expectations: six rate changes to three to two

> Last Increase: July 2023





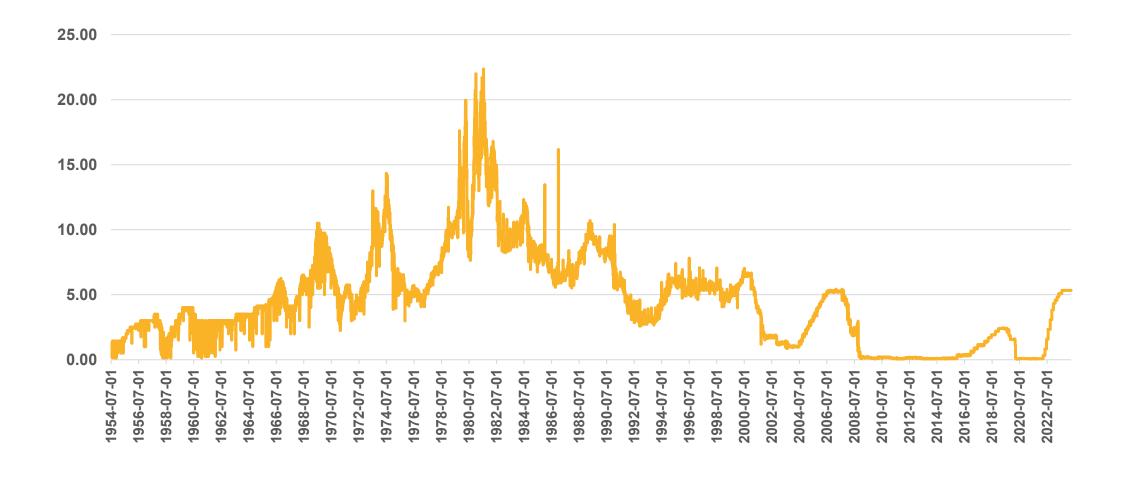
Fed Meeting Date

May 1, 2024

June 12, 2024

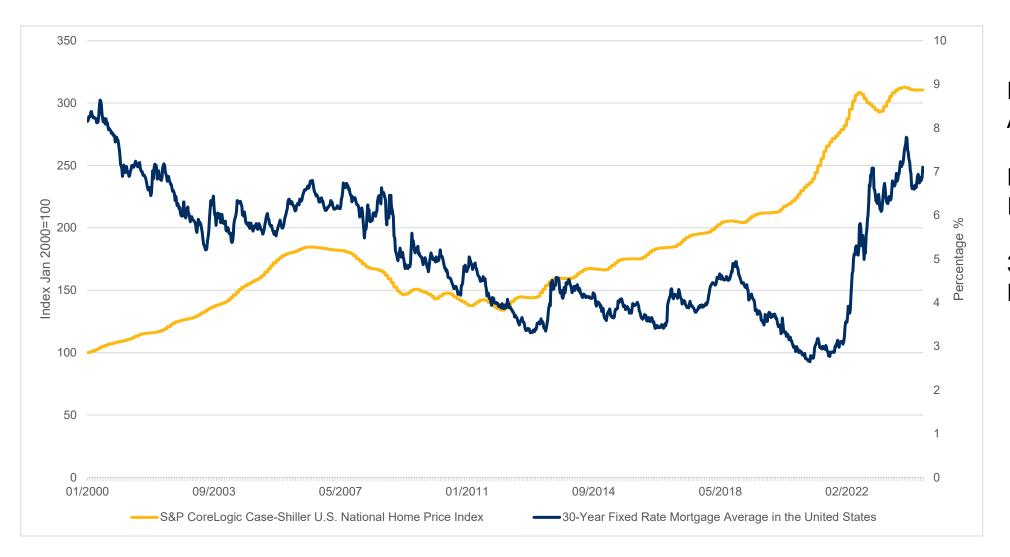
July 31, 2024

Fed Funds Effective Rate





Home Values and Mortgage Rates



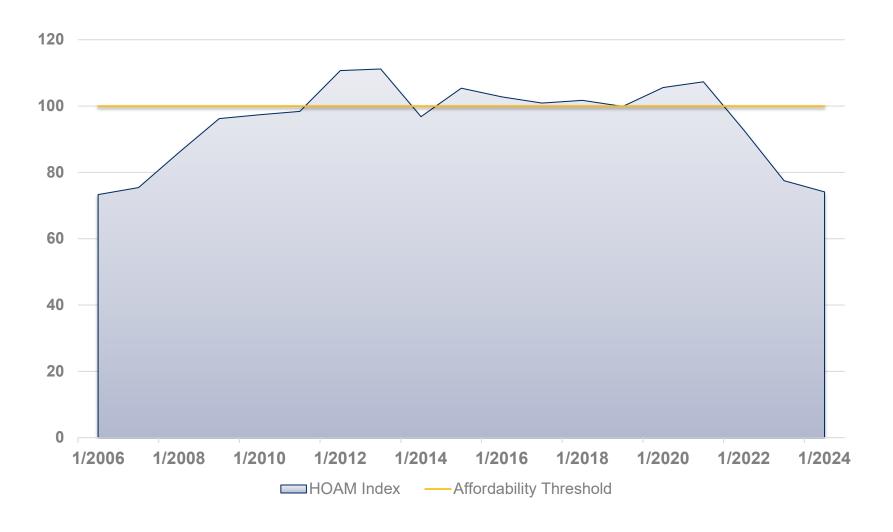
Home Affordability

Housing Inventory

3-4% Fixed Rates



Atlanta Fed: Home Ownership Affordability Index



Factors

- -Income
- -Prices
- -Interest rates
- -Taxes
- -Insurance

Metro-County Index

Fresno 65.5

LA 35.9

Sacramento 61.5

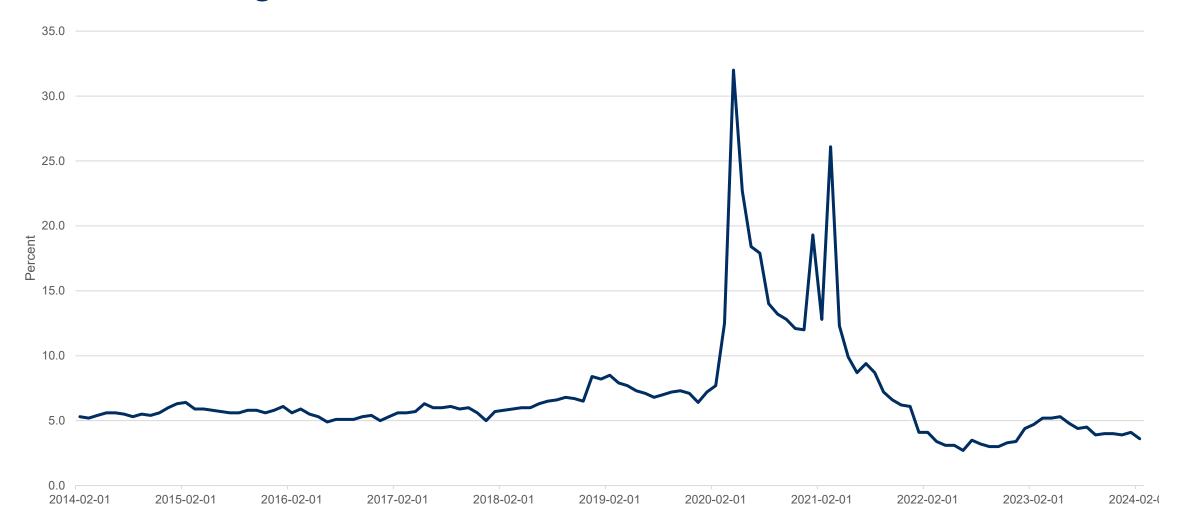
San Diego 44.0

San Fran. 40.4

San Jose 42.7

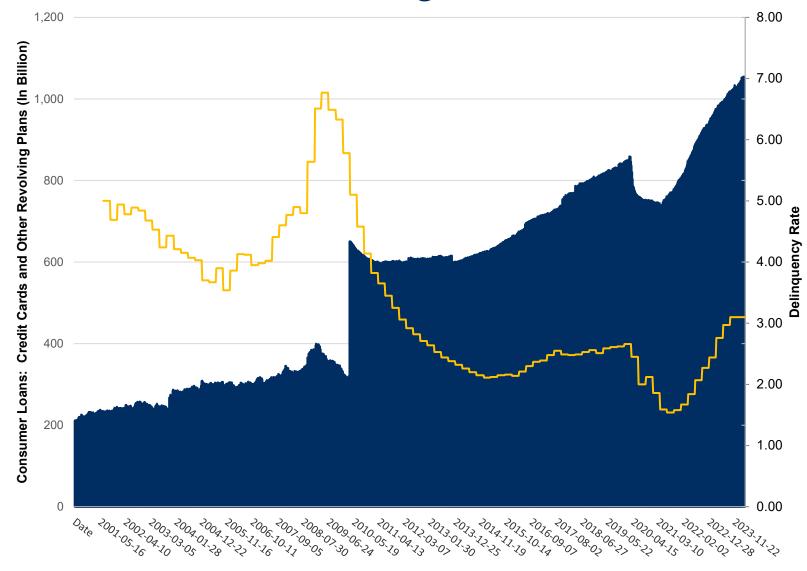


Personal Savings Rate





Credit Card and Other Revolving Debt









Cap Rates – Office Downtown, Class A Stabilized

Market	H1 2021	H1 2023	H2 2023
Atlanta	5.5% - 6.5%	6.5% - 7.5%	7.25% - 8.5%
Chicago	5.5% - 6.25%	7.75% - 8.5%	8% - 9%
Houston	6.5% - 6.75%	7.25 – 8.25%	7.75% - 8.5%
Los Angles	4.25% - 5.25%	7% - 7.5%	7.5% - 8.5%
New York	4.5% - 4.75%	5.5% - 6.25%	6% - 6.5%
Oakland	4.5% - 5.5%	7% - 9%	8.5% - 10.5%
Philadelphia	6.5% - 7%	7.5% - 8.5%	8.25% - 9.25%
Sacramento	6.5% - 7%	7% - 7.75%	7% - 8%
San Diego	3.75% - 4.25%	7% - 7.5%	-
San Francisco	4.75% - 5.25%	6.5% - 7.5%	6.75% - 7.75%
San Jose	5.5% - 6.5%	6.5% - 7.5%	-
Seattle	4.5% - 5%	6.25% - 7%	7.75% - 9%

Moody's

"Office section set a new vacancy record at 19.8%, up from 19.6% in prior quarter and beating two historic peaks of 19.3% at 1986 and 1991."

\$500,000 NOI

Value at 5% Cap Rate \$10,000,000

Value at 7.0% Rate \$7,142,857

% Change -28.57%



Cap Rates – Multifamily Infill, Class A Stabilized

Market	H1 2021	H1 2023	H2 2023
Atlanta	3.5% - 3.75%	4.5% - 5%	5% - 5.5%
CA – Inland Empire	4.5% - 5%	4.5% - 5%	5% - 5.5%
Chicago	4% - 4.75%	5 – 5.5%	5.5% - 6%
Houston	3.5% - 4%	4.25% - 4.75%	5.25% - 5.75%
Los Angles	4% - 4.25%	4.25% - 4.5%	5% - 5.5%
New York	4.5% - 5%	4.5% - 4.75%	5% - 5.5%
Oakland	4.0% - 4.5%	-	5.5% - 6.5%
Philadelphia	4.75% - 5.25%	5% - 5.5%	5.25% - 5.5%
Sacramento	4.5% - 5%	-	-
San Diego	3.75% 4.25%	4.5% - 4.75%	4.75% - 5.25%
San Francisco	3.5% - 4%	4.5% - 5%	4.5% - 5.5%
San Jose	3.75% - 4.25%	4.75% - 5.25%	5% - 5.5%
Seattle	4% - 4.25%	4% - 4.5%	4.75% - 5.25%

Moody's

National vacancy rate of 5.5%

Asking and effective rents are down 1.2% and 1.8% form peak last summer



Cap Rates – Industrial, Class A Stabilized

Moody's
"...a steady decline in
completions, dropping from nearly
58 million square feet in the fourth
quarter of last year to just 20.3
million square fee in the first

Vacancy rate of 6.0%, below prepandemic rate of 10%+

quarter of 2024..."

Market	H1 2021	H1 2023	H2 2023
Atlanta	3.25% - 3.75%	5% - 5.5%	5.25% - 5.75%
Chicago	4% - 4.25%	5.5% - 5.75%	5.5% - 6%
CA – Inland Empire	2.8% - 3.5%	4.75% - 5.75%	5.5% - 6.%
Houston	3.9% - 4.5%	5% - 5.25%	5.5% - 6%
Los Angles	2.8% - 3.5%	4.75% - 5.25%	5.25% - 5.75%
New York	2.9% - 3.25%	4.5% - 5%	5.25% - 5.5%
Oakland	2.8% - 3.5%	4.75% - 5.25%	5.25% - 5.75%
Philadelphia	3% - 3.35%	4.75% - 5.25%	5.5% - 6%
Sacramento	4.0% - 4.5%	5% - 5.5%	5.5% - 6%
San Diego	3.5% - 4%	4.75% - 5.25%	5.25% - 5.75%
San Francisco	2.8% - 3.5%	-	-
San Jose	3.75% - 4.25%	-	-
Seattle	3.5% - 4%	4.5% - 5%	5.25% - 5.75%



Three Stories: Same Loan

One of Largest Issues Facing Portfolios

1.) 2014 – Actual

Loan Date: <u>4/18/2014</u>

Purpose: \$4,515M to purchase retail strip center.

Terms: **4.20%: 20 Yr. Am**

Purchase Date: 4/18/2014
Purchase Price: \$6,025M

Appraisal Date: 2/22/2014

Hard Cash In: \$1,510M

Appraisal Value: \$6,125M

Appraisal Cap Rate: **9%**

Appraisal As is NOI: \$551M

Loan to Original Cost: **74.9**%

LTV: **73.7%**

Original Debt Yield: 12.20%

Original DSCR: 1.65x

Guaranties, Covenants, etc. not part of exercise

Note the speed of decision

Note Hard Cash Fully Extracted

This Org "is and always has been Conservative won't go over 75%"

Note they stayed true to under 75%, but this transaction was much riskier in 2019

2.) 2019 – Actual

Loan Date: <u>10/20/2019</u>

Purpose: \$5,440M Cash out (\$1.5MM) refi same

Terms: 5.86%: 20 Yr. Am

Purchase Date: 4/18/2014
Purchase Price: \$6,025M

Appraisal Date: 10/15/2019

Hard Cash In: \$10M

Appraisal Value: \$7,775M

Appraisal Cap Rate: 7.25%

Appraisal As is NOI: \$562M

Loan to Original Cost: 90.3%

LTV: **70%**

Original Debt Yield: 10.3%

Original DSCR: 1.22x

Guaranties, Covenants, etc. not part of exercise

No Policy Exceptions These Two Scenarios



Third Story – Today

3.) 2024 – Mock

What 2024 (5Yr) maturity looks like

Loan Date: <u>8/1/2024</u>

Purpose: Now Maturing \$4,608,000

Terms: 8.70%: 1 20 Yr. Am

Purchase Date: 4/18/2014

Purchase Price: \$6,025M

Current Appraisal Cap Rate: 8.75%

Last Appraisal As is NOI: \$562M

2023 NOI (100% Lease): \$521M •

Implied Updated Value: \$5,954M \$\rightarrow\$ (2023 NOI / CAP):

Implied LTV (Maturing / Implied): 77.39% 🎓 🚫

Updated Annual Debt Service: \$487M 1

Updated DSCR New Terms: 1.07x •• ••

Updated Debt Yield: 11.31%

Paydown needed to get LTV in policy (75%): ~\frac{\$142,500}{}

Paydown needed to get DSCR in policy (1.2x): ~\$508,000

- Cap rate up from 7.25% in 2019 to 8.75%.
- NOI is down due to higher expenses on property (same 100% occupancy).
- If reset to 20-year amortization, DSCR and LTV exception exist without additional paydown.
- If Bank wanted both LTV and DSCR to be in policy \$508M paydown would be needed.



Third Story – What If

Below scenario looks at:
What if bank had a 25-year amortization in 2019 and reset to 25-year in 2024?



Loan Date: 8/1/2024

Purpose: \$4,882,000 Now Maturing

Terms: 8.70%: 1 25 Yr. Am

Purchase Date: 4/18/2014

Purchase Price: \$6,025M

Current Appraisal Cap Rate: 8.75%

Last Appraisal As is NOI: \$562M

2023 NOI (100% Lease): \$521M -

Implied Updated Value: \$5,954M \checkmark (2023 NOI / CAP):

Updated Annual Debt Service: \$480M 1

Updated DSCR New Terms: 1.09x -

Updated Debt Yield: 10.67

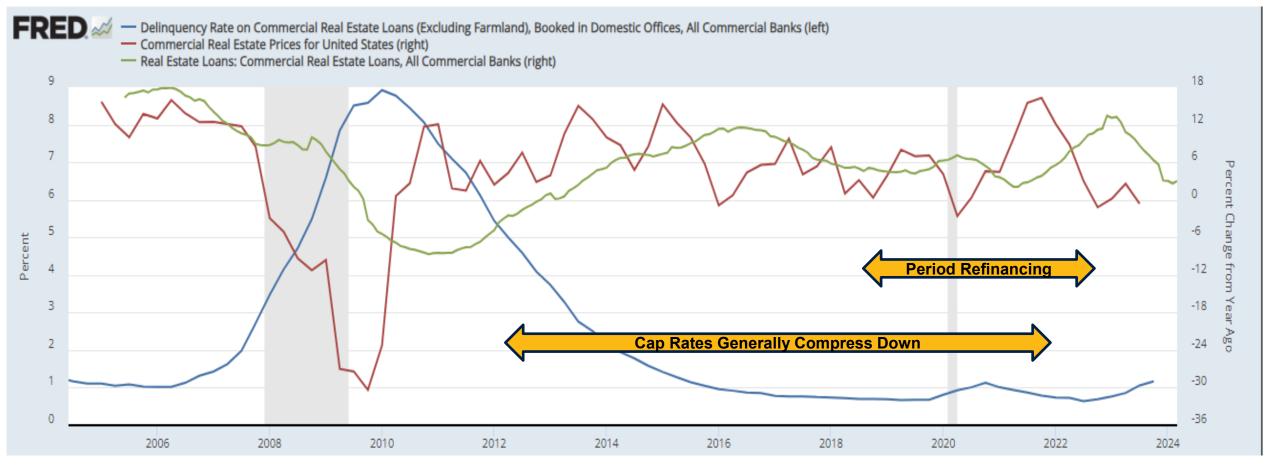
Paydown needed to get LTV in policy (75%): ~\$416,500

Paydown needed to get DSCR in policy (1.2x): ~\$462,000

- This shows what happens if the Bank had a 25-year amortization in 2019 instead of 20.
- Also assumes amortization reset at 25 years.
- LTV is of course out of balance more but spreading payments to 25 years makes the DSCR exception less dramatic.



Few Themes to Consider



- Were you lending in rising CRE value environment?
- Were you doing cash outs non-recourse?

Assess your approved exceptions.



Multifamily – Key Concerns In One Chart

Loan Date 8/20/2021 8/20/2024 Amortization Years 30					
*Source: CBRE Cap Rate Survey 3.75% 5% 5.50% TBD 8/10/2021 12/31/2022 12/31/2023 12/31/2024 Revenue \$438,000 \$394,000 \$436,000 \$443,000 Expenses \$154,000 \$164,488 \$159,695 \$180,433 NOI \$284,000 \$229,512 \$276,305 \$262,567 Actual Debt Service (4.5% 30) \$267,528 \$267,528 \$267,528 \$267,528 Actual DSCR Amortizing \$1.06 \$0.86 \$1.03 \$0.98 Actual Interest Coverage 4.5% \$1.43 \$1.16 \$1.40 \$1.33 Debt Service (Remaining Balance) Stressed to 7.50%;30 \$369,000 \$363,000 \$357,000 \$351,000 Stressed DSCR Using Rate Reset \$0.77\$ \$0.63 \$0.77 \$0.75 Cash Flow Shortfall at Stressed Rate \$(\$85,000)\$ \$(\$133,488)\$ \$(\$80,695)\$ \$(\$88,433)\$ First Mortgage Debt Remaining \$4,400,000 \$4,329,000 \$4,255,000 \$4,177,000 Actual Debt Yield \$6.45% \$5.30% \$6.49% \$6.29% Actual Valuation \$7,000,000 \$7,000,000 \$7,000,000 \$7,000,000 Actual Cap Rate \$4.00% \$4.00% \$4.00% \$4.00% \$6.29% Actual LTV \$62.86% \$61.84% \$60.79% \$59.67% Implied Value Using 5.50 Cap \$5,163,636 \$4,172,945 \$5,023,727 \$4,773,945 Implied Value Using 5.50 Cap \$5,163,636 \$4,172,945 \$5,023,727 \$4,773,945 Implied Decline \$(\$1,836,364) \$(\$2,827,055) \$(\$1,976,273) \$(\$2,226,055)	Market	Los Angeles	What		
*Source: CBRE Cap Rate Survey	Loan Date		UpA		
*Source: CBRE Cap Rate Survey	Maturity	8/20/2024		gains	
*Source: CBRE Cap Rate Survey	Amortization Years	30		2024/0	
*Source: CBRE Cap Rate Survey	Original Fixed Interest	4.50%		7/2025	
Revenue \$438,000 \$394,000 \$436,000 \$443,000 Expenses \$154,000 \$164,488 \$159,695 \$180,433 NOI \$284,000 \$229,512 \$276,305 \$262,567 Actual Debt Service (4.5% 30) \$267,528 \$267,528 \$267,528 \$267,528 Actual DSCR Amortizing 1.06 0.86 1.03 0.98 Actual Interest Coverage 4.5% 1.43 1.16 1.40 1.33 Debt Service (Remaining Balance) Stressed to 7.50%;30 \$369,000 \$363,000 \$357,000 \$351,000 Stressed DSCR Using Rate Reset 0.77 0.63 0.77 0.75 Cash Flow Shortfall at Stressed Rate (\$85,000) (\$133,488) (\$80,695) (\$88,433) First Mortgage Debt Remaining \$4,400,000 \$4,329,000 \$4,255,000 \$4,177,000 Actual Debt Yield 6.45% 5.30% 6.49% 6.29% Actual Valuation \$7,000,000 \$7,000,000 \$7,000,000 \$7,000,000 \$7,000,000 \$7,000,000 \$7,000,000 \$7,000,000 \$7,000,000 \$7,000,000 \$7,000,000 \$7,000,000 \$7,000,000 <td>Loan Amount</td> <td>\$4,400,000</td> <td></td> <td></td> <td></td>	Loan Amount	\$4,400,000			
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NOI \$284,000 \$229,512 \$276,305 \$262,567 Actual Debt Service (4.5% 30) \$267,528 \$267,528 \$267,528 \$267,528 Actual DSCR Amortizing 1.06 0.86 1.03 0.98 Actual Interest Coverage 4.5% 1.43 1.16 1.40 1.33 Debt Service (Remaining Balance) Stressed to 7.50%;30 \$369,000 \$363,000 \$357,000 \$351,000 Stressed DSCR Using Rate Reset 0.77 0.63 0.77 0.75 Cash Flow Shortfall at Stressed Rate (\$85,000) (\$133,488) (\$80,695) (\$88,433) First Mortgage Debt Remaining \$4,400,000 \$4,329,000 \$4,255,000 \$4,177,000 Actual Debt Yield 6.45% 5.30% 6.49% 6.29% Actual Valuation \$7,000,000 \$7,000,000 \$7,000,000 \$7,000,000 Actual Cap Rate 4.00% 4.00% 4.00% 4.00% Actual LTV 62.86% 61.84% 60.79% 59.67% Implied Value Using 5.50 Cap \$5,163,636 \$4,172,945 <td< td=""><td>Revenue</td><td>\$438,000</td><td>\$394,000</td><td>\$436,000</td><td>\$443,000</td></td<>	Revenue	\$438,000	\$394,000	\$436,000	\$443,000
Actual Debt Service (4.5% 30) \$267,528 \$267,528 \$267,528 \$267,528 Actual DSCR Amortizing 1.06 0.86 1.03 0.98 Actual Interest Coverage 4.5% 1.43 1.16 1.40 1.33 Debt Service (Remaining Balance) Stressed to 7.50%;30 \$369,000 \$363,000 \$357,000 \$351,000 Stressed DSCR Using Rate Reset 0.77 0.63 0.77 0.75 Cash Flow Shortfall at Stressed Rate (\$85,000) (\$133,488) (\$80,695) (\$88,433) First Mortgage Debt Remaining \$4,400,000 \$4,329,000 \$4,255,000 \$4,177,000 Actual Debt Yield 6.45% 5.30% 6.49% 6.29% Actual Valuation \$7,000,000 \$7,000,000 \$7,000,000 \$7,000,000 Actual Cap Rate 4.00% 4.00% 4.00% 4.00% 4.00% Actual LTV 62.86% 61.84% 60.79% 59.67% Implied Value Using 5.50 Cap \$5,163,636 \$4,172,945 \$5,023,727 \$4,773,945 Implied Decline (\$1,836,364) (\$2,827,055) (\$1,976,273) (\$2,226,055)	Expenses	\$154,000	\$164,488	\$159,695	\$180,433
Actual DSCR Amortizing 1.06 0.86 1.03 0.98 Actual Interest Coverage 4.5% 1.43 1.16 1.40 1.33 Debt Service (Remaining Balance) Stressed to 7.50%;30 \$369,000 \$363,000 \$357,000 \$351,000 Stressed DSCR Using Rate Reset 0.77 0.63 0.77 0.75 Cash Flow Shortfall at Stressed Rate (\$85,000) (\$133,488) (\$80,695) (\$88,433) First Mortgage Debt Remaining \$4,400,000 \$4,329,000 \$4,255,000 \$4,177,000 Actual Debt Yield 6.45% 5.30% 6.49% 6.29% Actual Valuation \$7,000,000 \$7,000,000 \$7,000,000 Actual Cap Rate 4.00% 4.00% 4.00% 4.00% Actual LTV 62.86% 61.84% 60.79% 59.67% Implied Value Using 5.50 Cap \$5,163,636 \$4,172,945 \$5,023,727 \$4,773,945 Implied Value Using 5.50 Cap (\$1,836,364) (\$2,827,055) (\$1,976,273) (\$2,226,055)	NOI	\$284,000	\$229,512	\$276,305	\$262,567
Actual Interest Coverage 4.5% 1.43 1.16 1.40 1.33 Debt Service (Remaining Balance) Stressed to 7.50%;30 Stressed DSCR Using Rate Reset 0.77 0.63 Cash Flow Shortfall at Stressed Rate (\$85,000) First Mortgage Debt Remaining \$4,400,000 \$4,329,000 \$4,255,000 \$4,177,000 Actual Debt Yield 6.45% 5.30% 6.49% 6.29% Actual Valuation \$7,000,000 \$7,000,000 \$7,000,000 \$7,000,000 \$7,000,000 Actual Cap Rate 4.00% 4.00% 4.00% 4.00% 4.00% 59.67% Implied Value Using 5.50 Cap \$5,163,636 \$4,172,945 \$5,023,727 \$4,773,945 Implied Decline (\$1,836,364) \$2,827,055) \$4,177,050 \$4,177,050 \$4,177,000 \$4,177,000 \$4,177,000 \$4,177,000 \$4,177,000 \$4,177,000 \$4,177,000 \$4,177,000 \$4,177,000 \$5,000,000 \$7,000,000 \$7,000,000 \$7,000,000 \$7,000,000 \$7,000,000 \$7,000,000 \$7,000,000 \$7,000,000 \$7,000,000 \$1,007 \$4,177,000 \$4,177,00	Actual Debt Service (4.5% 30)	\$267,528	\$267,528	\$267,528	\$267,528
Debt Service (Remaining Balance) Stressed to 7.50%;30 \$369,000 \$363,000 \$357,000 \$351,000 Stressed DSCR Using Rate Reset 0.77 0.63 0.77 0.75 Cash Flow Shortfall at Stressed Rate (\$85,000) (\$133,488) (\$80,695) (\$88,433) First Mortgage Debt Remaining \$4,400,000 \$4,329,000 \$4,255,000 \$4,177,000 Actual Debt Yield 6.45% 5.30% 6.49% 6.29% Actual Valuation \$7,000,000 \$7,000,000 \$7,000,000 \$7,000,000 Actual Cap Rate 4.00% 4.00% 4.00% 4.00% Actual LTV 62.86% 61.84% 60.79% 59.67% Implied Value Using 5.50 Cap \$5,163,636 \$4,172,945 \$5,023,727 \$4,773,945 Implied Decline (\$1,836,364) (\$2,827,055) (\$1,976,273) (\$2,226,055)	Actual DSCR Amortizing	1.06	0.86	1.03	0.98
Stressed DSCR Using Rate Reset 0.77 0.63 0.77 0.75 Cash Flow Shortfall at Stressed Rate (\$85,000) (\$133,488) (\$80,695) (\$88,433) First Mortgage Debt Remaining \$4,400,000 \$4,329,000 \$4,255,000 \$4,177,000 Actual Debt Yield 6.45% 5.30% 6.49% 6.29% Actual Valuation \$7,000,000 \$7,000,000 \$7,000,000 \$7,000,000 \$7,000,000 Actual Cap Rate 4.00% 4.00% 4.00% 4.00% 4.00% Actual LTV 62.86% 61.84% 60.79% 59.67% Implied Value Using 5.50 Cap \$5,163,636 \$4,172,945 \$5,023,727 \$4,773,945 Implied Decline (\$1,836,364) (\$2,827,055) (\$1,976,273) (\$2,226,055)	Actual Interest Coverage 4.5%	1.43	1.16	1.40	1.33
Cash Flow Shortfall at Stressed Rate (\$85,000) (\$133,488) (\$80,695) (\$88,433) First Mortgage Debt Remaining \$4,400,000 \$4,329,000 \$4,255,000 \$4,177,000 Actual Debt Yield 6.45% 5.30% 6.49% 6.29% Actual Valuation \$7,000,000 \$7,000,000 \$7,000,000 \$7,000,000 Actual Cap Rate 4.00% 4.00% 4.00% 4.00% Actual LTV 62.86% 61.84% 60.79% 59.67% Implied Value Using 5.50 Cap \$5,163,636 \$4,172,945 \$5,023,727 \$4,773,945 Implied Decline (\$1,836,364) (\$2,827,055) (\$1,976,273) (\$2,226,055)	Debt Service (Remaining Balance) Stressed to 7.50%;30	\$369,000	\$363,000	\$357,000	\$351,000
First Mortgage Debt Remaining \$4,400,000 \$4,329,000 \$4,255,000 \$4,177,000 Actual Debt Yield 6.45% 5.30% 6.49% 6.29% Actual Valuation \$7,000,000 \$7,000,000 \$7,000,000 \$7,000,000 Actual Cap Rate 4.00% 4.00% 4.00% 4.00% 4.00% Actual LTV 62.86% 61.84% 60.79% 59.67% Implied Value Using 5.50 Cap \$5,163,636 \$4,172,945 \$5,023,727 \$4,773,945 Implied Decline (\$1,836,364) (\$2,827,055) (\$1,976,273) (\$2,226,055)	Stressed DSCR Using Rate Reset	0.77	0.63	0.77	0.75
Actual Debt Yield 6.45% 5.30% 6.49% 6.29% Actual Valuation \$7,000,000 \$7,000,000 \$7,000,000 \$7,000,000 Actual Cap Rate 4.00% 4.00% 4.00% 4.00% Actual LTV 62.86% 61.84% 60.79% 59.67% Implied Value Using 5.50 Cap \$5,163,636 \$4,172,945 \$5,023,727 \$4,773,945 Implied Decline (\$1,836,364) (\$2,827,055) (\$1,976,273) (\$2,226,055)	Cash Flow Shortfall at Stressed Rate	(\$85,000)	(\$133,488)	(\$80,695)	(\$88,433)
Actual Debt Yield 6.45% 5.30% 6.49% 6.29% Actual Valuation \$7,000,000 \$7,000,000 \$7,000,000 \$7,000,000 Actual Cap Rate 4.00% 4.00% 4.00% 4.00% Actual LTV 62.86% 61.84% 60.79% 59.67% Implied Value Using 5.50 Cap \$5,163,636 \$4,172,945 \$5,023,727 \$4,773,945 Implied Decline (\$1,836,364) (\$2,827,055) (\$1,976,273) (\$2,226,055)					
Actual Valuation \$7,000,000 \$7,000,000 \$7,000,000 Actual Cap Rate 4.00% 4.00% 4.00% 4.00% Actual LTV 62.86% 61.84% 60.79% 59.67% Implied Value Using 5.50 Cap \$5,163,636 \$4,172,945 \$5,023,727 \$4,773,945 Implied Decline (\$1,836,364) (\$2,827,055) (\$1,976,273) (\$2,226,055)	First Mortgage Debt Remaining	\$4,400,000	\$4,329,000	\$4,255,000	\$4,177,000
Actual Cap Rate 4.00% 4.00% 4.00% 4.00% Actual LTV 62.86% 61.84% 60.79% 59.67% Implied Value Using 5.50 Cap \$5,163,636 \$4,172,945 \$5,023,727 \$4,773,945 Implied Decline (\$1,836,364) (\$2,827,055) (\$1,976,273) (\$2,226,055)	Actual Debt Yield	6.45%	5.30%	6.49%	6.29%
Actual LTV 62.86% 61.84% 60.79% 59.67% Implied Value Using 5.50 Cap \$5,163,636 \$4,172,945 \$5,023,727 \$4,773,945 Implied Decline (\$1,836,364) (\$2,827,055) (\$1,976,273) (\$2,226,055)	Actual Valuation	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000
Implied Value Using 5.50 Cap \$5,163,636 \$4,172,945 \$5,023,727 \$4,773,945 Implied Decline (\$1,836,364) (\$2,827,055) (\$1,976,273) (\$2,226,055)	Actual Cap Rate	4.00%	4.00%	4.00%	4.00%
Implied Decline (\$1,836,364) (\$2,827,055) (\$1,976,273) (\$2,226,055)	Actual LTV	62.86%	61.84%	60.79%	59.67%
Implied Decline (\$1,836,364) (\$2,827,055) (\$1,976,273) (\$2,226,055)					
	Implied Value Using 5.50 Cap	\$5,163,636	\$4,172,945	\$5,023,727	\$4,773,945
	Implied Decline	(\$1,836,364)	(\$2,827,055)	(\$1,976,273)	(\$2,226,055)
→	Implied LTV Using 5.50 Cap	85.21%	103.74%	84.70%	87.50%

Items to Consider

- Competition in 2017 through early 2022 led to some pockets of aggressive behavior.
- Many have operated with lower perceived risk compared to other products.
- Nonbank activity has helped to increase activity.
- IO periods for already stabilized properties was / is happening.
- Layered risks: Nonrecourse + DSCR below 1.15x.
- Type of units (luxury, mid-luxury, affordable) need to be considered rather than generalizing with housing shortage comment.
- Think how quickly rental payments evolve (late pay, partial pay, abatement, etc.) in recessions.



Multifamily – Did You Size Deals or did Borrower?

Market				What if Deal Was
Loan Date	8/20/2021	What if Deal Was		Sized to 8% Debt
		Sized to 8% Debt		Yield at
Maturity	8/20/2024	Yield at Origination		Origination
Amortization Years	30	30		30
Original Fixed Interest	4.50%	4.50%		4.50%
Loan Amount	\$4,400,000	\$3,550,000		\$3,550,000
Loan Amount	φ4,400,000			φ3,330,000
Source	Appraisal	Mock Scenario	Proforma	Mock Proforma
Date	8/10/2021	8/10/2021	12/31/2024	12/31/2024
Revenue	\$438,000	\$438,000	\$443,000	\$443,000
Expenses	\$154,000	\$154,000	\$180,433	\$180,433
NOI	\$284,000	\$284,000	\$262,567	\$262,567
Actual Debt Service (4.5% 30)	\$267,528	\$216,000	\$267,528	\$216,000
DSCR Amortizing Balance @ 4.5% 30 Years	1.06	1.31	0.98	1.22
Actual Interest Coverage 4.5%	1.43	1.78	1.33	1.64
Debt Service (Remaining Balance) Stressed to 7.50%;	¢260,000	¢200 000	¢254.000	¢202.000
30 Stressed DSCR Using Rate Reset	\$369,000 0.77	\$298,000 0.95	\$351,000 0.75	\$283,000 0.93
Cash Flow Shortfall at Stressed Rate	(\$85,000)	0.95 (\$14,000)	(\$88,433)	(\$20,433)
Casii i low Gilortiali at Gilessed Nate	(\$00,000)	(ψ14,000)	(\$00,433)	(ψ20,433)
Occupancy	98%	98%	93%	93%
First Mortgage Debt Remaining	\$4,400,000	\$3,550,000	\$4,177,000	\$3,370,000
Actual Debt Yield	6.45%	8.00%	6.29%	7.79%
Actual Valuation	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000
Actual Cap Rate	4.00%	4.00%	4.00%	4.00%
Actual LTV	62.86%	50.71%	59.67%	48.14%
Implied Value Using 5.50 Cap	\$5,163,636	\$5,163,636	\$4,773,945	\$4,773,945
Implied Decline	(\$1,836,364)	(\$1,836,364)	(\$2,226,055)	(\$2,226,055)
Implied LTV Using 5.50 Cap	85.21%	68.75%	87.50%	70.59%

Items to Consider

- Chart shows how deal sized in a more conservative way will refinance cleaner.
- Illustrates the benefit of using debt yield.
- Illustrates why LTV is not a good metric sizing deals especially in higher cost markets.
- Illustrates how those who might have been more aggressive have larger challenges today.

Realities

Rent Acceleration Flat Expense Hurts

Importance of Sizing

Still not in policy at rate but more manageable

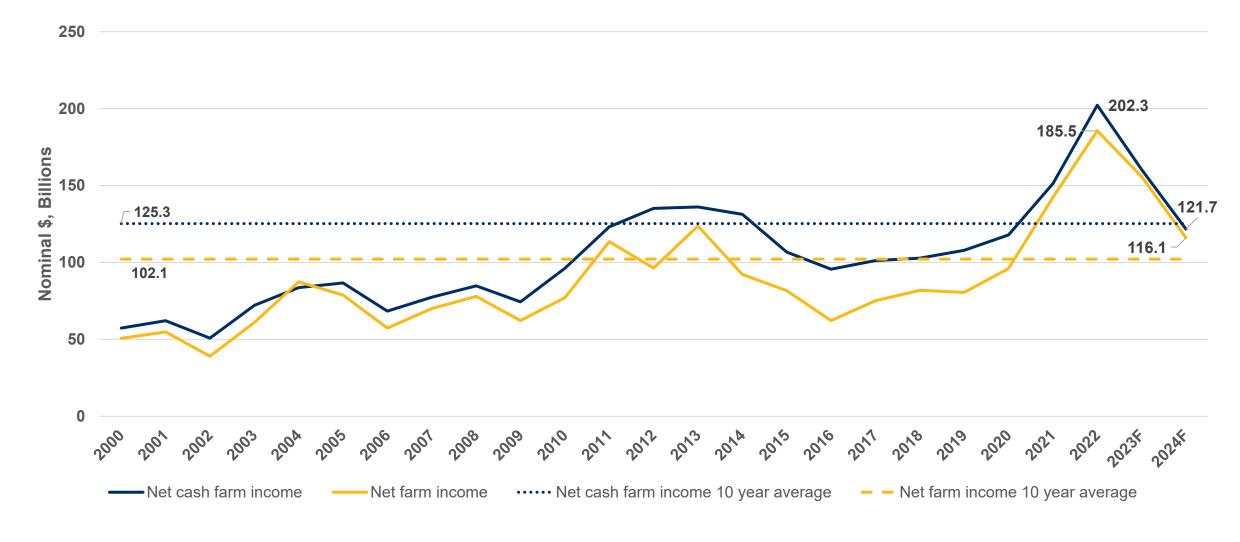
LTV Still in Policy





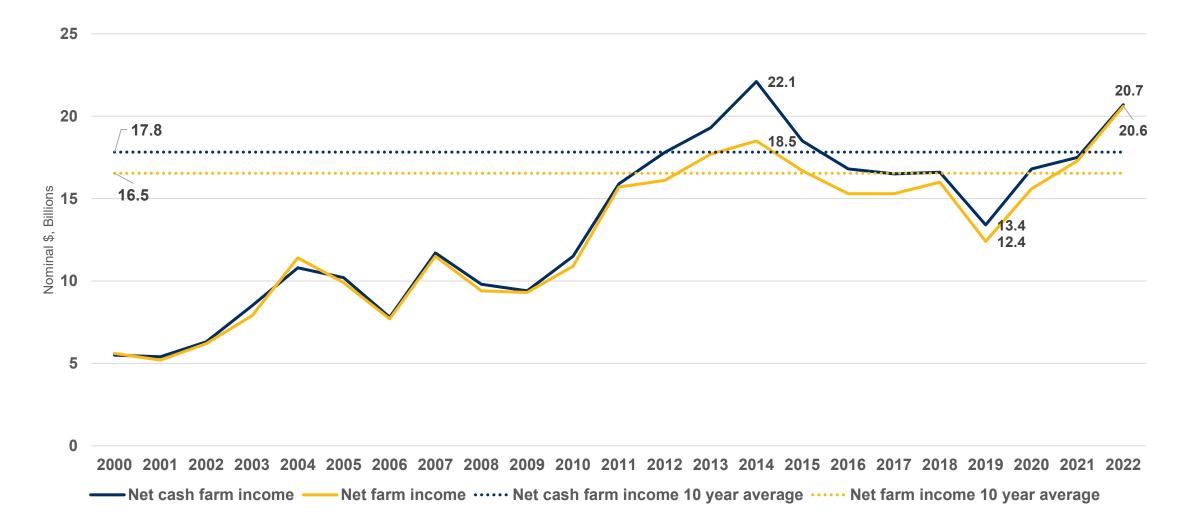


Farm Sector Profits – U.S.





Farm Sector Profits – California





Farm Sector Profits – U.S.

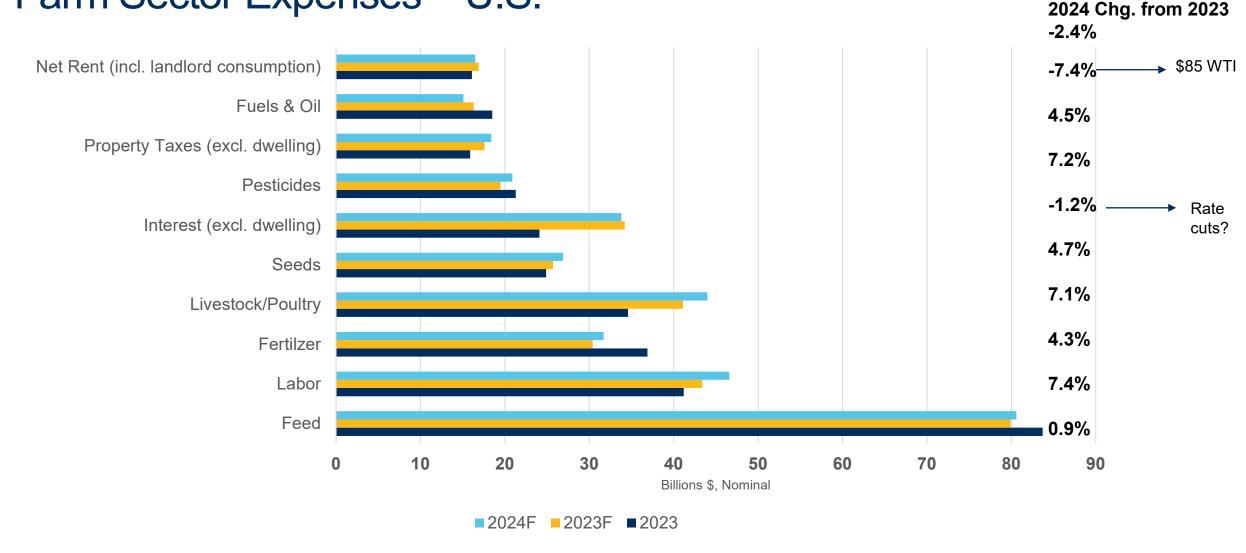
	2023F	2024F	Change
Cash income statement			
a. Cash receipts	506.8	485.5	-21.2
Crops 1/	262.4	245.7	-16.7
Animals and products	244.4	239.8	-4.6
b. Federal Government direct farm program			
payments 2/	12.2	10.2	-1.9
c. Cash farm-related income 3/	54.1	54.0	-0.1
d. Gross cash farm income (a+b+c)	573.0	549.8	-23.3
e. Cash expenses 4/, 5/	412.6	428.0	15.4
f. Net cash farm income (d-e)	160.4	121.7	-38.7
Farm income statement			
g. Gross cash farm income (a+b+c)	573.0	549.8	-23.3
h. Nonmoney income 6/	24.6	25.5	0.8
i. Value of inventory adjustment	-3.5	-4.0	-0.5
j. Total gross farm income (g+h+i)	594.2	571.2	-23.0
k. Total expenses	438.3	455.1	16.7
I. Net farm income (j-k)	155.9	116.1	-39.8

Cash Receipts by Select Commodities

			PY %		PY %		PY %
	2021	2022	Chg.	2023 F	Chg.	2024 F	Chg.
Cattle & Calves	72.7	86.1	18.4%	99.4	15.4%	97.9	-1.5%
Dairy Products,							
Milk	41.8	57.3	37.1%	46.4	-19.0%	45.5	-1.9%
Chicken Eggs	8.7	19.4	123.0%	14.1	-27.3%	12.4	-12.1%
Corn	71.7	87.1	21.5%	78.6	-9.8%	67.4	-14.2%
Hay	8.6	10	16.3%	9.6	-4.0%	8.8	-8.3%
Soybeans	49.1	61.4	25.1%	57.6	-6.2%	51.7	-10.2%
Fruit & Nuts	30.6	26.9	- 12.1%	26.8	-0.4%	27.6	3.0%

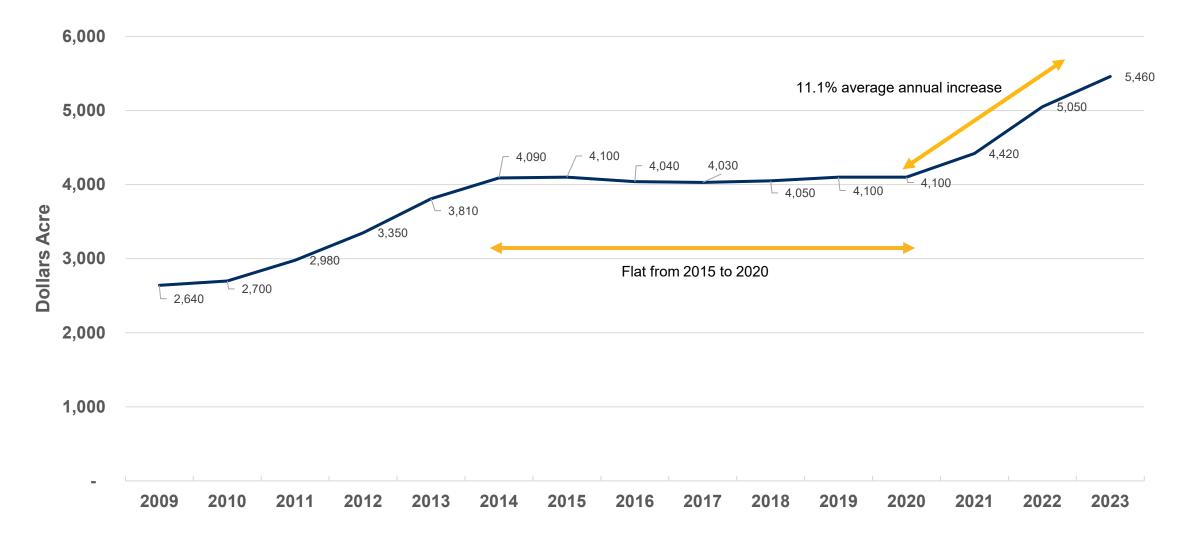


Farm Sector Expenses – U.S.



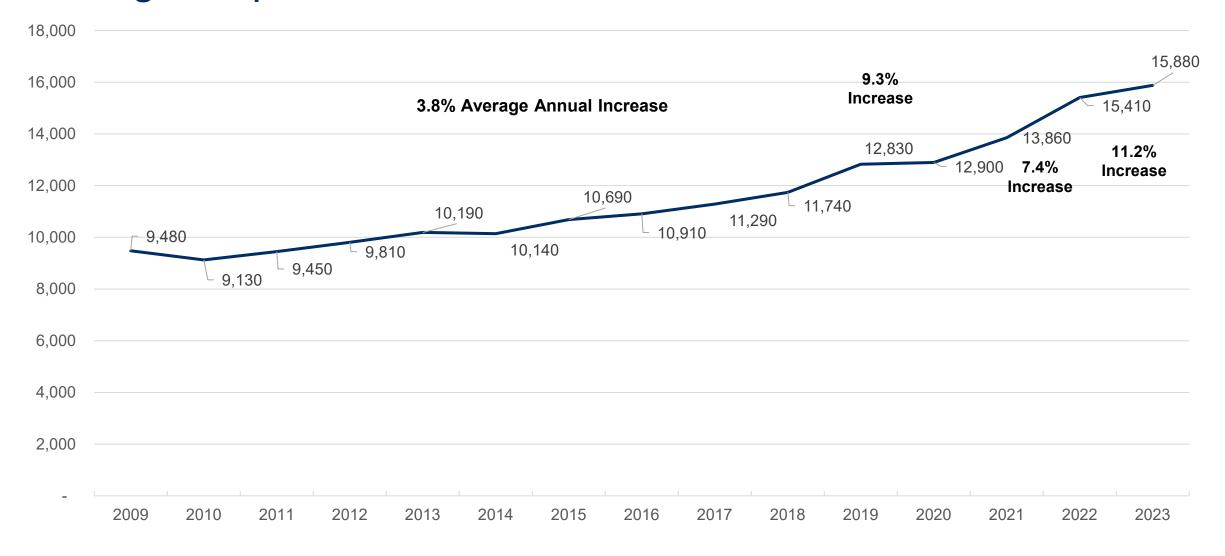


Average Cropland Values – U.S.





Average Cropland Values – California









OCC Semiannual Risk Perspective Fall 2023

Credit risk is listed first...

Key risk themes



CREDIT RISK is increasing due to higher interest rates, increasing risk in commercial real estate lending, prolonged inflation, declining corporate profitability, and potential for slower economic growth. Key performance indicators are beginning to show signs of borrower stress across asset classes.

Banks should continue to guard against complacency to ensure they maintain the ability to withstand potential future economic challenges.

Commercial Credit

- Commercial credit risk remains moderate and increasing
- Slowing growth is anticipated
- Elevated interest rates continue to have adverse impact on some
- Heightened risk environment could strain the resources of credit risk review and loan workout functions
- Retirements coupled with extended benign credit period has reduced number of bankers with problem loan identification/mitigation experience
- Accurate and timely risk ratings are key factor in successful credit risk management
- CRE Office sector challenges spreading beyond urban
- CRE Multifamily sector is under pressure as well



Things for Committees to Consider

What Are Some Items Committee Can Reflect On?

Independent Loan Review

- Now is great time to consider upping game
 - Talk through depth of review (not just grading focus)
 - Ask if you are getting value add comments
 - Are you seeing challenge on grades?
 - What is scoping / risk assessment process?
 - If one visit, is multiple more prudent (fast moving times)
 - Are you getting feedback on problem loans / process?
- Next level process is important if you have a heightened CRE concentration
- Are visual analytics part of the process?

Independent Loan Review (Internal Department)

- Good time for an internal audit (or assessment) of loan review function
- Is staffing right considering how the organization has evolved?

Board / Committee Involvement

- Make sure board / committee of board is allocating proper amount of time to discuss credit metrics, trends, appetite, and other data
- · If gaps exist, consider credit risk committee of board

Reporting: Concentration & Other Credit Reports

- MIS should be fluid (ad hoc or new items)
- Now is good time to sit back and reflect on data being presented to committee / board for any gaps
- Get outsider thoughts if needed
- Is the correct amount of economic data being presented
- Any additional policy exception, portfolio metrics, trends, forwardlooking items to add

Management

• Do we have right expertise in place for an evolving environment (been through it before, etc.)?



Things for Committees to Consider

What Are Some Items Committee Can Discuss w/ Management?

Portfolio Stress Testing

- If you are not seeing any portfolio stress testing, ask management what they are doing in this area
- If there is none happening, ask how can start to better understand how stress will impact your portfolio
- Is important to get loan level data to observe some good scenarios
- Interest rate is not the only item should stress
- This is an area loan review function might be able to assist as looking thru large sets of data (but this will take more time)
- If have heightened concentrations (compared to peers) should continue to assess / evolve portfolio stress testing

Loan Level Stress / Sensitivity

- Have we reflected on the scenarios we stress at loan level?
- Are we only stressing interest rate?

Liquidity / Deposits

• How is lending / credit helping to increase or stabilize?

Rank Order

- A concept to think about for your largest loans and / or those have higher concern (vintage, exceptions, maturity)
- Organized data is needed and a process

Grading Approach

- Grading approach definitions, scorecards, models, etc. are important in this environment to reduce subjectivity – ask management how process has evolved over time.
- Given shift in environment, procedures for grading may need to be refreshed frequency, type of info used, proper consistency, etc.

What Seeing With Valuations

- Talk with management about what they are observing with valuation trends
- If have internal appraisal area, ask them for regular updates on trends specific to your core markets
- Obtain market studies





Thank you

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