



Commercial Real Estate Investment Webinar

15 June 2023

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Compliance and Regulation

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Business Services

Unique insights, data and technology
Providing foresight clients need to create
an enduring competitive advantage

6,500 professionals worldwide
Continuing the firm's nearly 100-year
history of trusted expertise

Today's Agenda

1. Introduction
2. Commercial Real Estate Market Update
3. Commercial Real Estate Loan Market Update
4. Commercial Real Estate Distressed Valuation
5. Commercial Real Estate Investing in Funds
6. Kroll Overview

1. Introduction



John Ward



Robert Maxim



Steven Chod

John S. Ward



**Managing Director,
Alternative Asset Advisory**

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John Ward is a managing director in the New York office and is a member of the Alternative Asset Advisory Group. He has more than 30 years of financial and investment management experience.

John specializes in the evaluation of operational risks of hedge funds, crypto funds, private equity funds, venture capital funds, real estate funds, and fund of funds. He has performed operational risk assessments on some of the largest and most complex funds, management companies, and alternatives industry counterparties and service providers. John has extensive experience in a wide variety of investment strategies, and in both large institutional investment advisors as well as emerging managers.

John works with endowments, foundations, pensions, sovereign wealth funds, and family offices to undertake investment and operational due diligence projects and supports their efforts to implement processes for institutional monitoring and oversight of their investment portfolios.

Prior to joining Kroll, John was a managing director and Head of Operational Due Diligence for Gottex Fund Management and its predecessor firm EIM Investment Management where he was a member of the Global Investment, Risk, and Counterparty Credit Committees. Previously he was chief operating officer and executive director of Nomura Funds Research & Technologies America, Inc., the alternative asset investment management affiliate of Nomura Securities.

John started his career with Shearson Lehman Brothers working in a wide variety of operations departments, as well as the financial consulting division where he worked on the divestiture of Lehman Brothers and later the merger of Smith Barney and Shearson's operations and financial controls departments. He later joined W.P. Stewart & Co. Inc. as head of trading, and principal of their broker dealer.

John received his B.S. in finance and marketing from the University of Florida. He is also a Certified Due Diligence Analyst (CDDA)

Robert Maxim



**Managing Director,
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Robert Maxim is a managing director in the San Francisco office of Kroll and is part of the Complex Asset Solutions Practice. Robert currently leads the CAS team focused on commercial real estate related securities. He has extensive experience working with performing and non-performing Senior, Mezzanine, Equity, Bridge and Construction loans, as well as structured products collateralized by CRE investments such as Commercial Mortgage-Backed Securities (CMBS) and CRE-CLOs/CDOs. Commercial Real Estate clients include Systemically Important Financial Institutions, Investment Banks, REITs, Hedge Funds, Private Equity Investors, Administrators, Insurers and Fund Managers.

Robert has advised clients in the valuation of structured products, including CMBS, CRE-CLOs/CDOs, Municipal and Student Loan Auction Rate Securities, the debt issued by credit derivative product companies, the debt issued by insurance companies under Regulation XXX, Collateralized Debt Obligations, Credit Linked Certificates, Structured Investment Vehicles and derivatives based on these securities. He has experience working with clients in Real Estate, Private Equity, Banking, Biotechnology and Pharmaceuticals, Chemical Manufacturing, Computer Networks and Services, Energy, Financial Services, Insurance, Investment Management, Litigation, Mining, Personal & Household Products and Semiconductors.

Robert assisted the Bankruptcy Examiner in the investigation of the Lehman Brothers bankruptcy, focusing on risk management and the valuation of derivatives and structured products. He also designed and implemented models to value credit linked certificates and the debt of credit derivative product companies; performed the valuation of preferred stock and employee stock options; advised Investment Managers, Hedge Funds, and Proprietary Trading Desks in the design and implementation of investment strategies, portfolio construction and return attribution; developed and implemented global equity, fixed income and credit risk models to provide global cross asset class risk modeling capability; and created and implemented the ability to view portfolio risk according to user defined explicit model characteristics, including both time series and cross sectional factors.

Robert received a Master in Financial Engineering degree from the Haas School of Business at the University of California, Berkeley and a BA in Economics from the University of California, Irvine.

Steven Chod



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Real Estate Advisory Group**

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Steven Chod Managing Director Real Estate Advisory Group Chicago Steven is a managing director in the Chicago office and is part of the Real Estate Advisory Group. Steven has more than 17 years of real estate valuation and consulting experience.

Steven is primarily focused on real estate valuation and consulting for institutional owners/operators of real estate around the world. He specializes in valuations for purchase price accounting, financial reporting, portfolio valuations, positive assurance of real estate investments, feasibility studies and acquisition due diligence.

His extensive range of experience includes the analysis of restaurants, office buildings, shopping malls, retail centers, apartments, self-storage facilities, industrial and manufacturing facilities, healthcare facilities, casinos and hotels. Steven has performed work across the United States as well as Europe, Canada, Mexico and South America.

Steven received his bachelor of science in Real Estate and Urban Land Economics from the University of Wisconsin.

He is a Member of the Appraisal Institute and is a state-certified general real estate appraiser in Illinois, Indiana, Michigan, Minnesota and a Member of the Appraisal Institute (MAI designation).

2. Commercial Real Estate Market Update

Recent Headlines



Home Depot Earnings



The Fed



Tech Layoffs



Regional Bank Failures

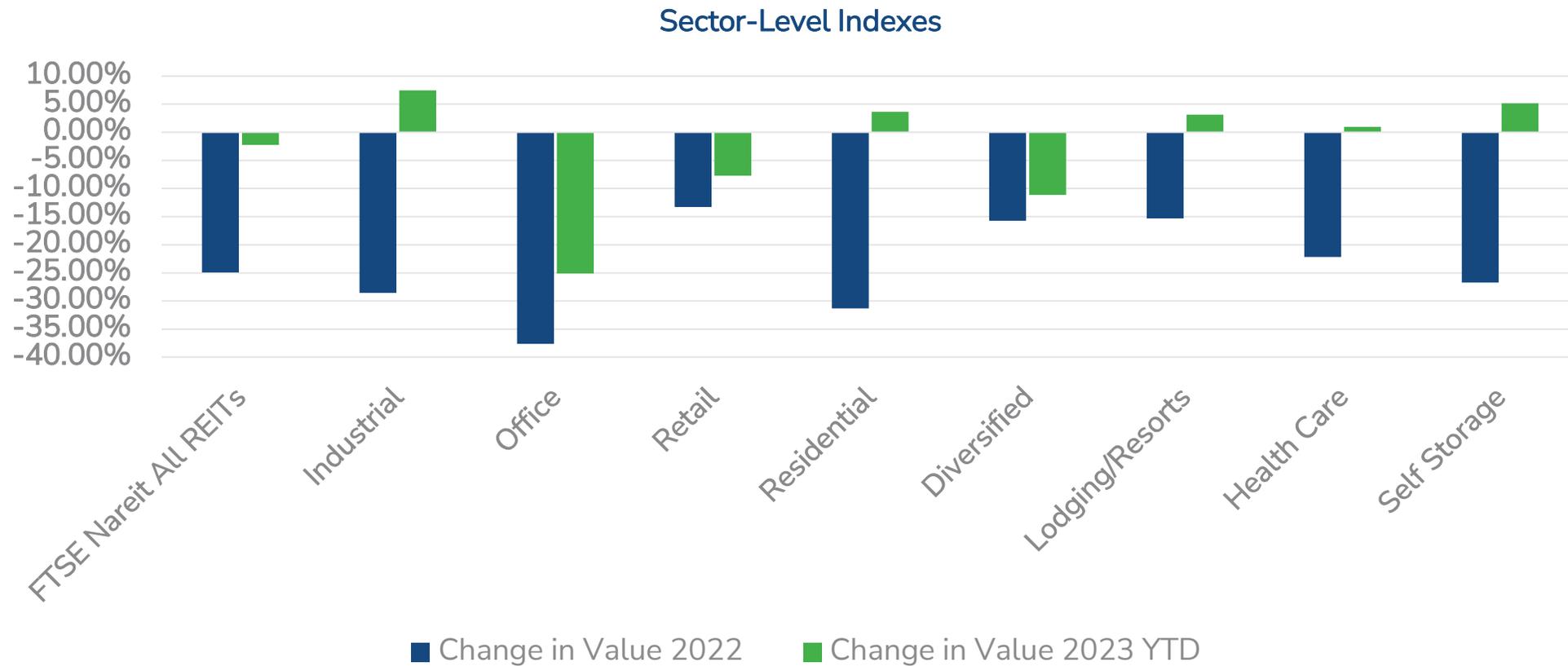


Retail Bankruptcies



WFH/Hybrid Work

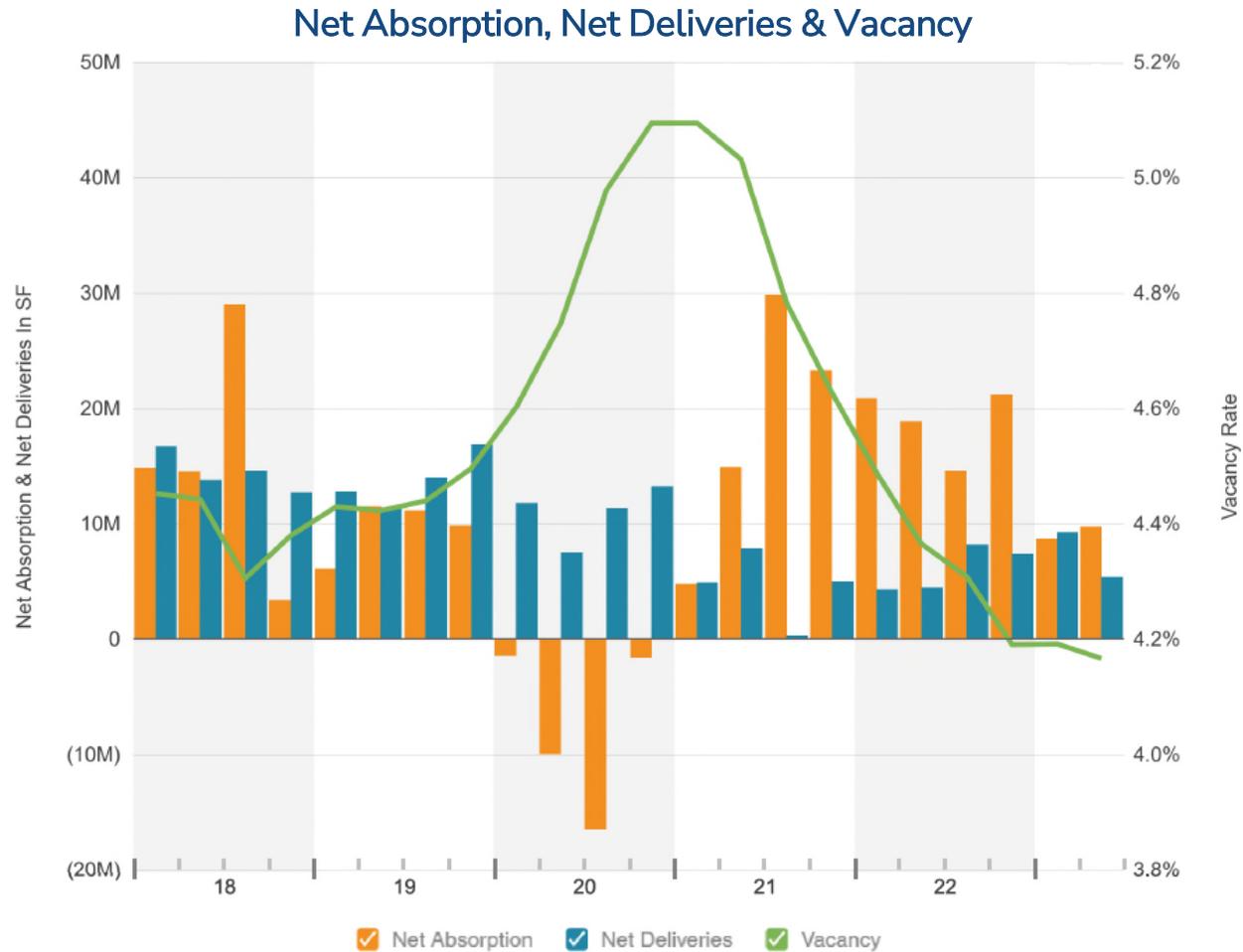
US REIT Property Returns – 6-1-2023



Source: FTSE™, Factset, Nareit®.

Retail

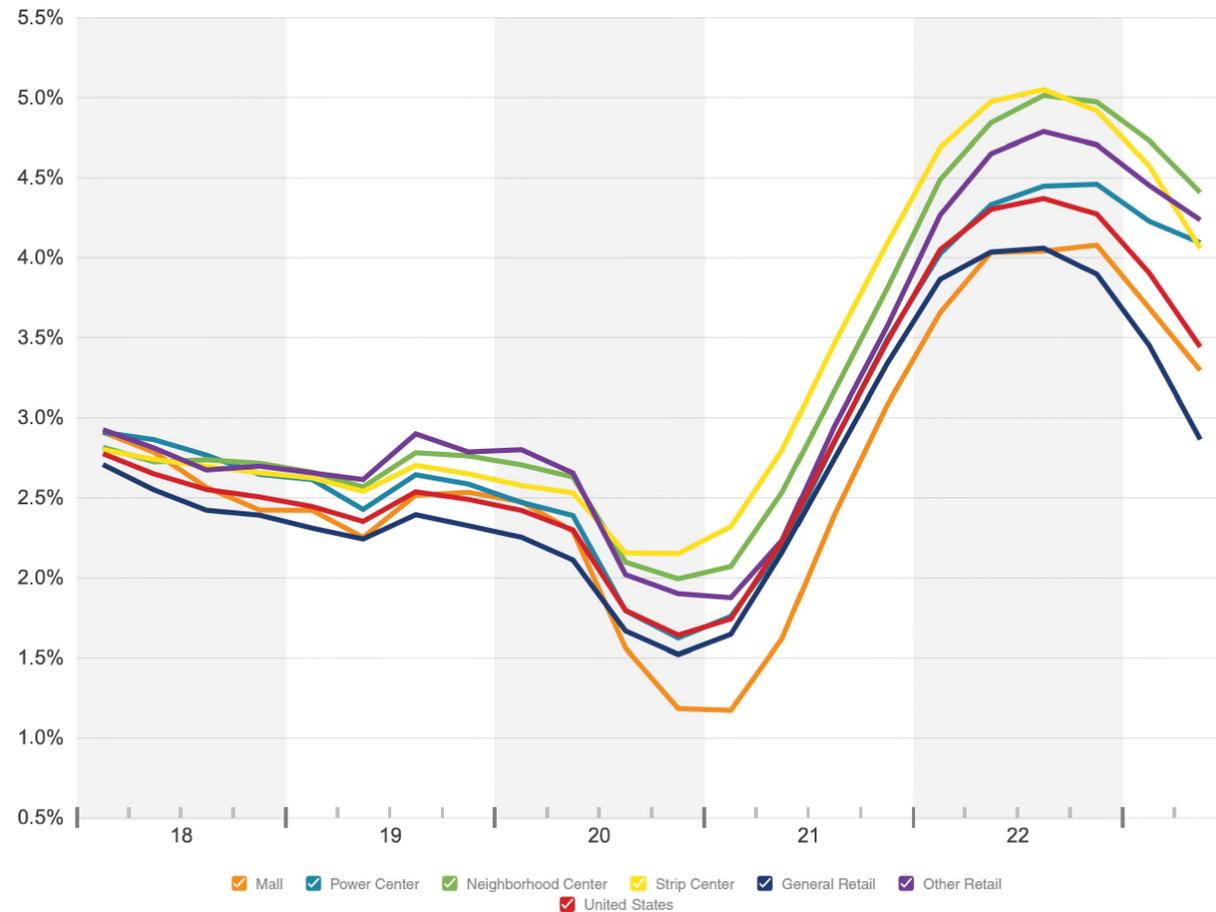
Fundamentals – Supply & Demand (2018-2023 YTD)



Retail

Fundamentals – Supply & Demand

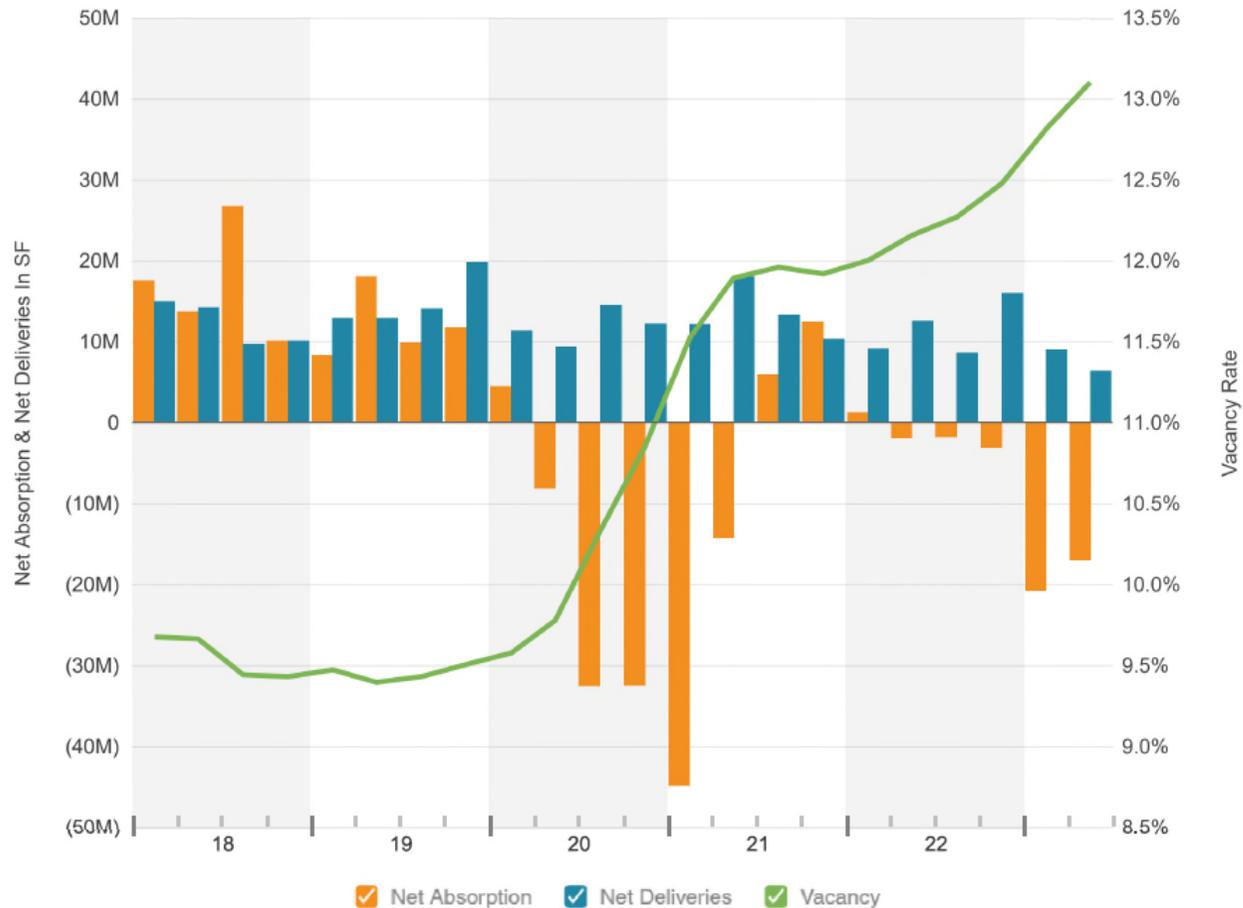
Market Rent Growth (YOY)



Office Sector

Fundamentals – Supply & Demand (2018-2023 YTD)

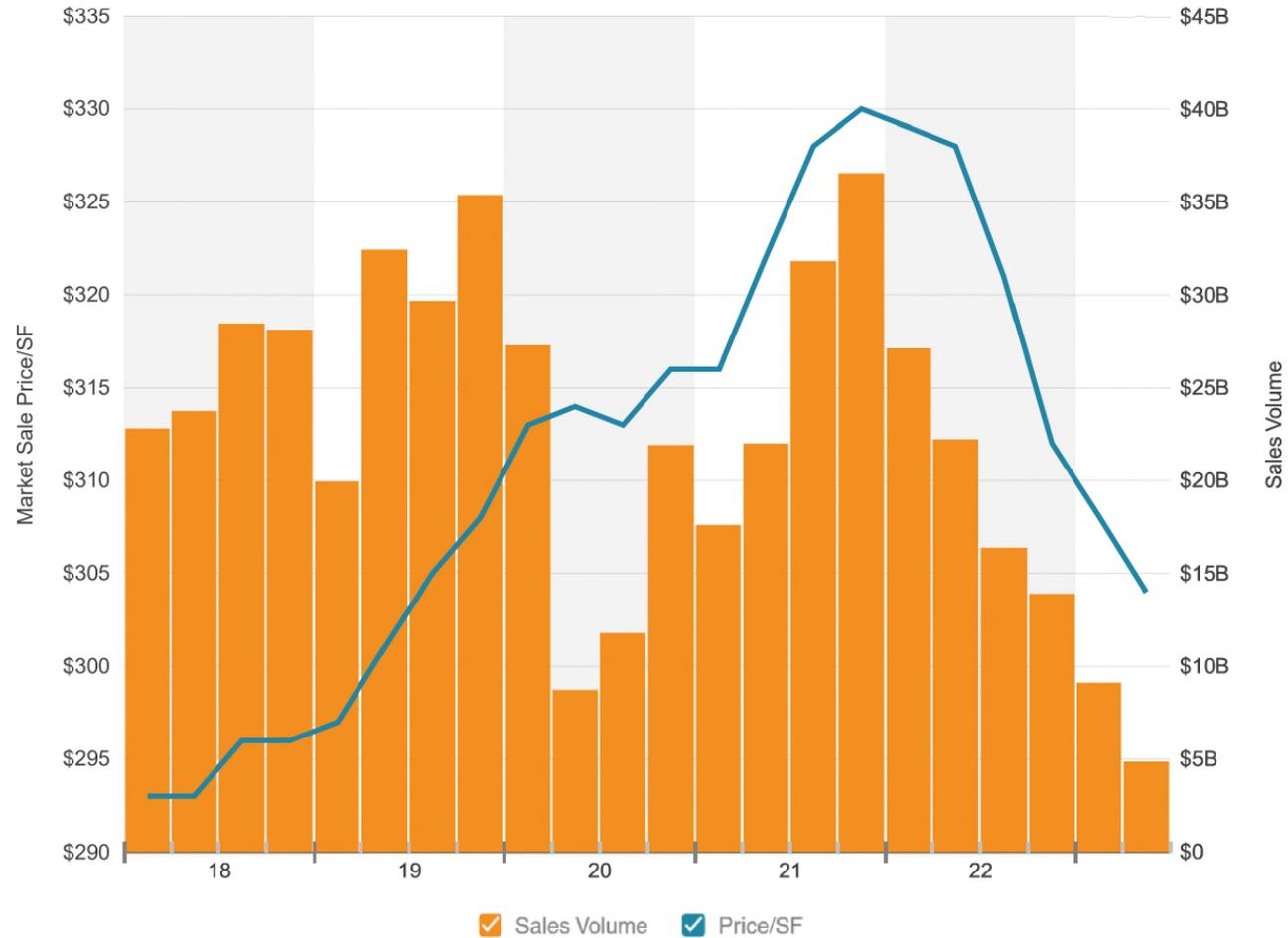
Net Absorption, Net Deliveries & Vacancy



Office Sector

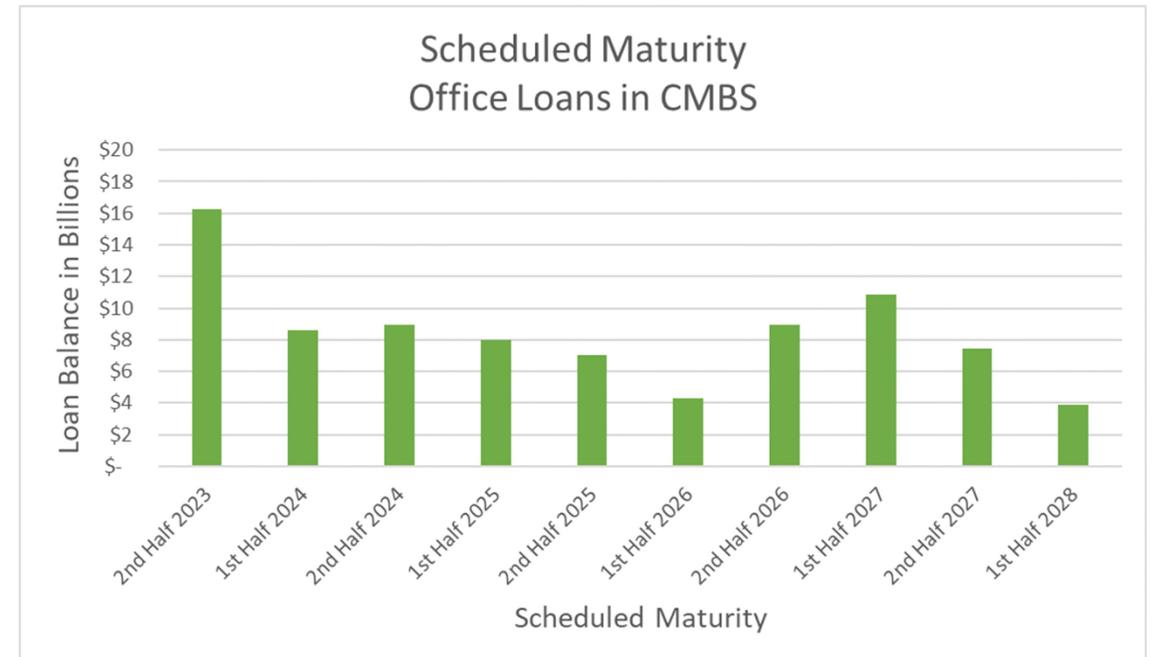
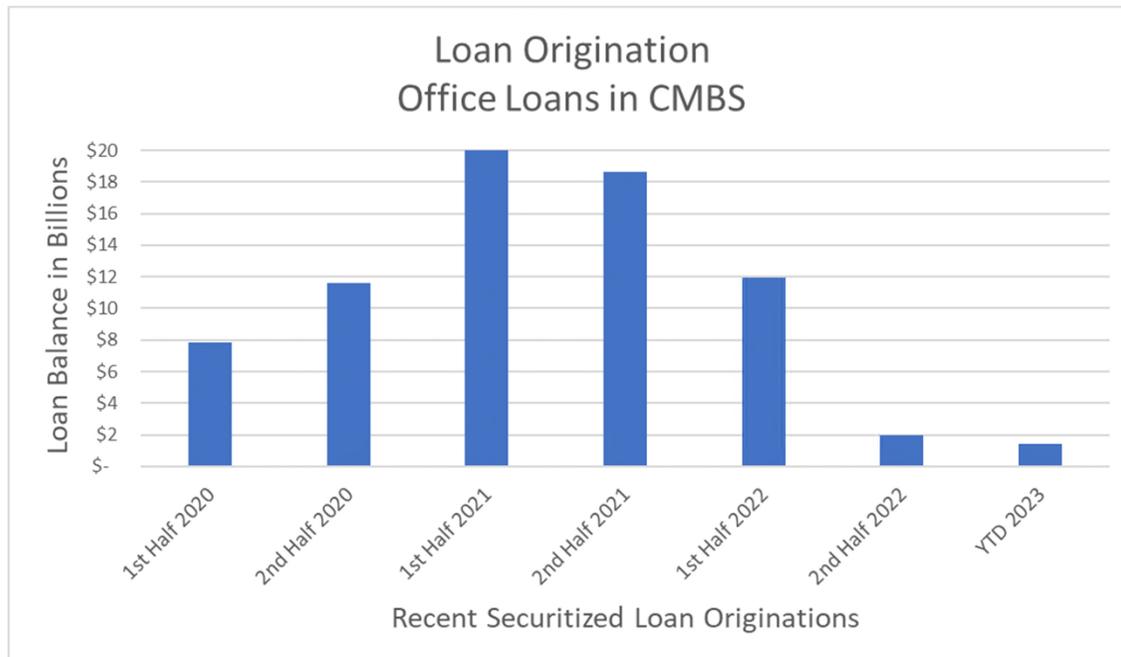
Fundamentals – Volume and Price

Sales Volume & Market Sale Price Per SF



3. Commercial Real Estate Loan Market Update

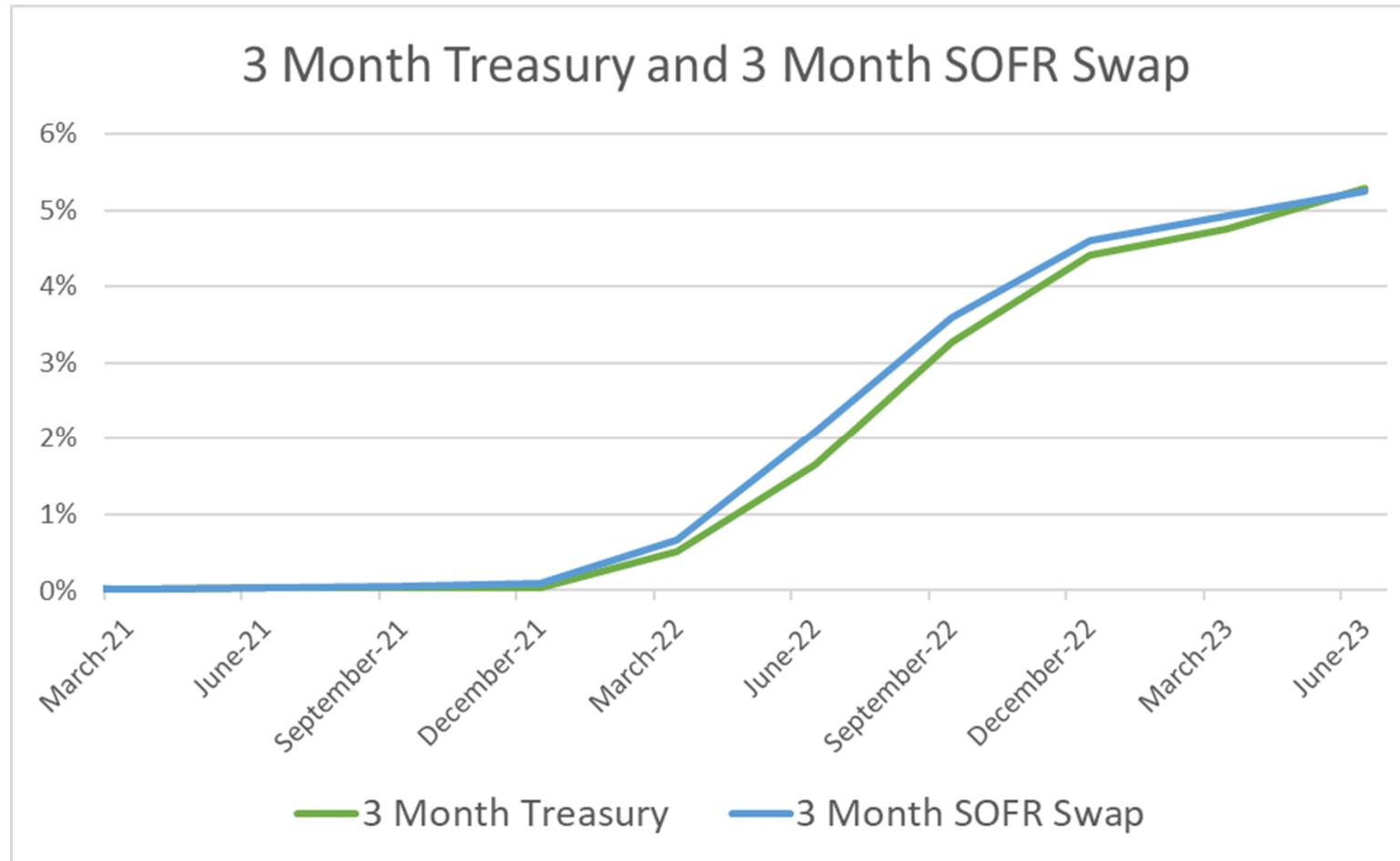
Recent Loan Origination and Scheduled Maturity of Office Loans Securitized in CMBS



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- Recent Origination Levels are Below Scheduled Maturities
- Loan Performance Metrics Surrounding Loans in Newly Originated CMBS are Representative of New Issue Loan Criteria

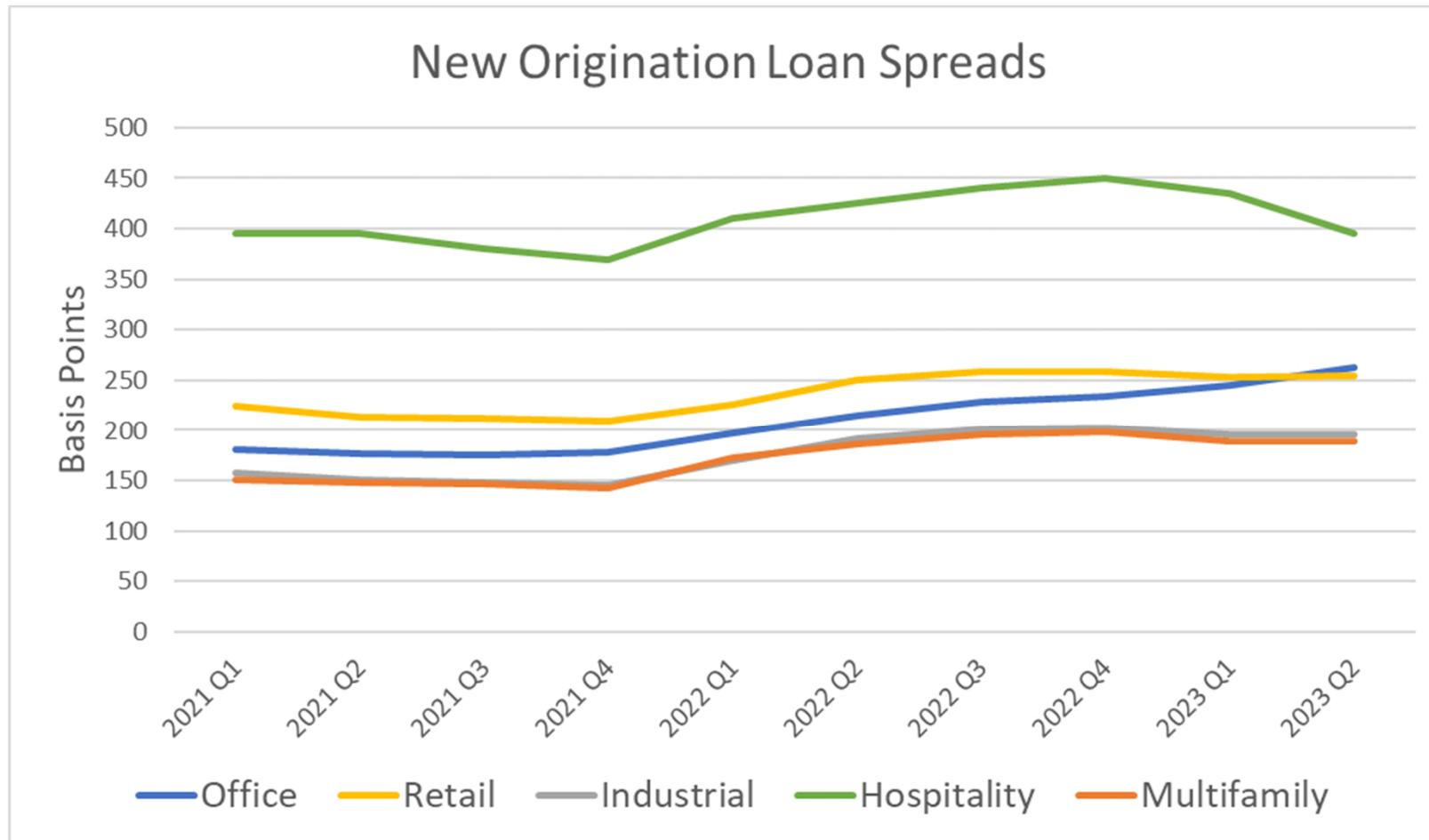
Historical Treasury and SOFR Rates



Increases in Interest Rates Increase:

- Floating Rate Coupons
- New Issue Fixed Rate Coupons

Historical Newly Originated Loan Spreads 10 Year Fixed Rate Standing Loans



Generic new issuance loan spreads aggregated from a broad range of proprietary new issuance loan data.

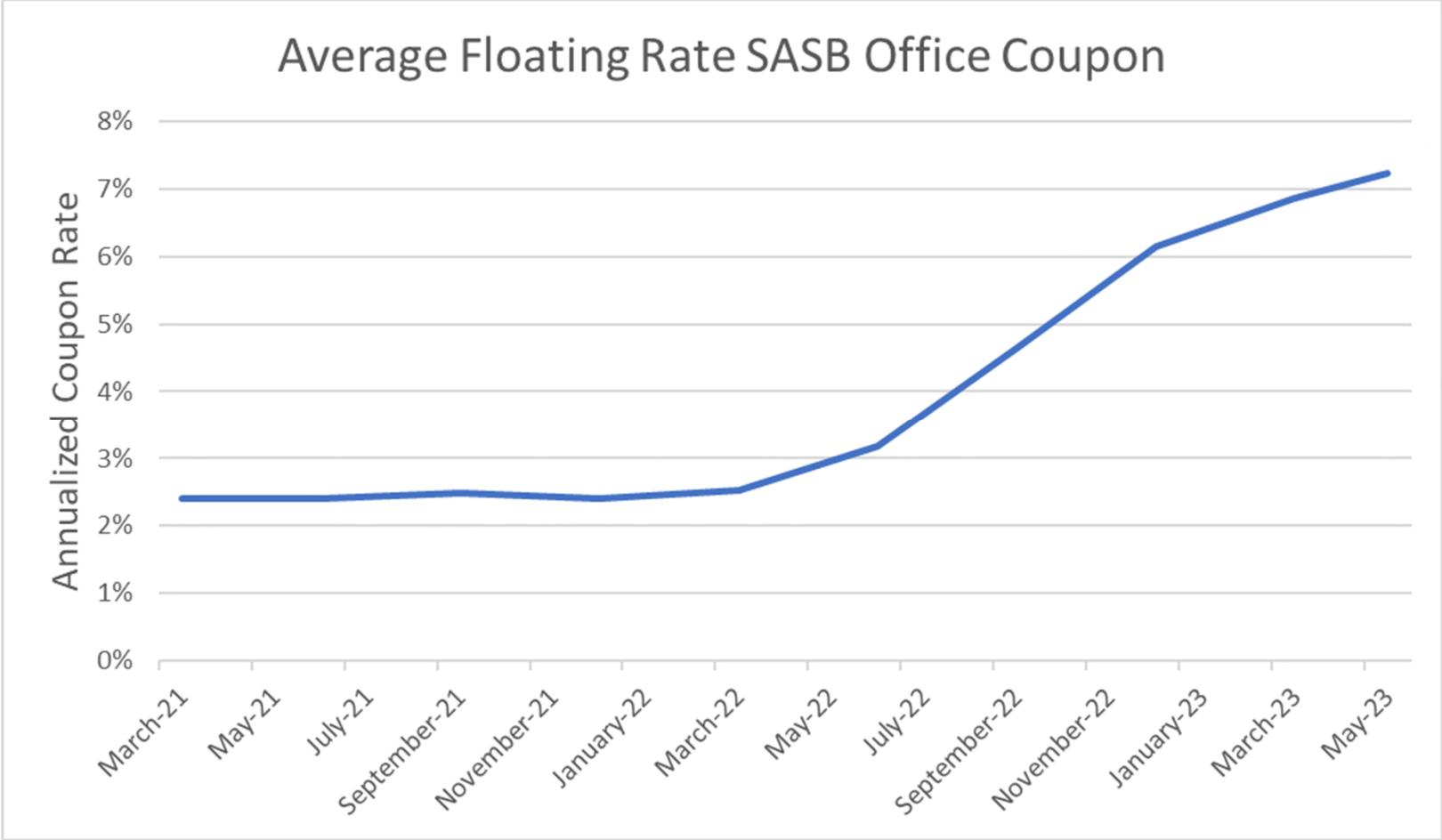
Floating Rate Office Loans Example

To examine the issues discussed on the previous slides in greater detail, let's take a closer look at a portfolio of loans:

- Focus on a portfolio of floating rate office loans securitized in Single Asset, Single Borrower CMBS (38 total loans)
- Loan portfolio characteristics:
 - Last Appraisal LTV of **61.7%**
 - Last Reported Occupancy of **87%**
 - Last Reported DSCR of **2.2**
 - **6 of 38** Loans in Special Servicing

Floating Rate SASB Collateralized by Office Properties

Average Coupon



Change in Loan to Value

- We estimated the current LTVs based on the latest reported NOI and the change in city specific office cap rates from Green Street.
- On average:
 - Cap rates increased **2.5%**
 - NOIs decreased **14%**
- The balance weighted LTV increased from **.62** to **1.12**

Special Servicing

- 6 of 38 loans are in special servicing:
 - Half of the loans are in special servicing due to maturity default
 - A loan is in default because the sponsor elected to miss payments
 - A loan is in default for failing a debt yield threshold covenant, and has a DSCR of **.58**
 - A loan was transferred to special servicing for imminent monetary default due to a DSCR below **1**

4. Commercial Real Estate Distressed Valuation

Distressed Property and Loan Workouts

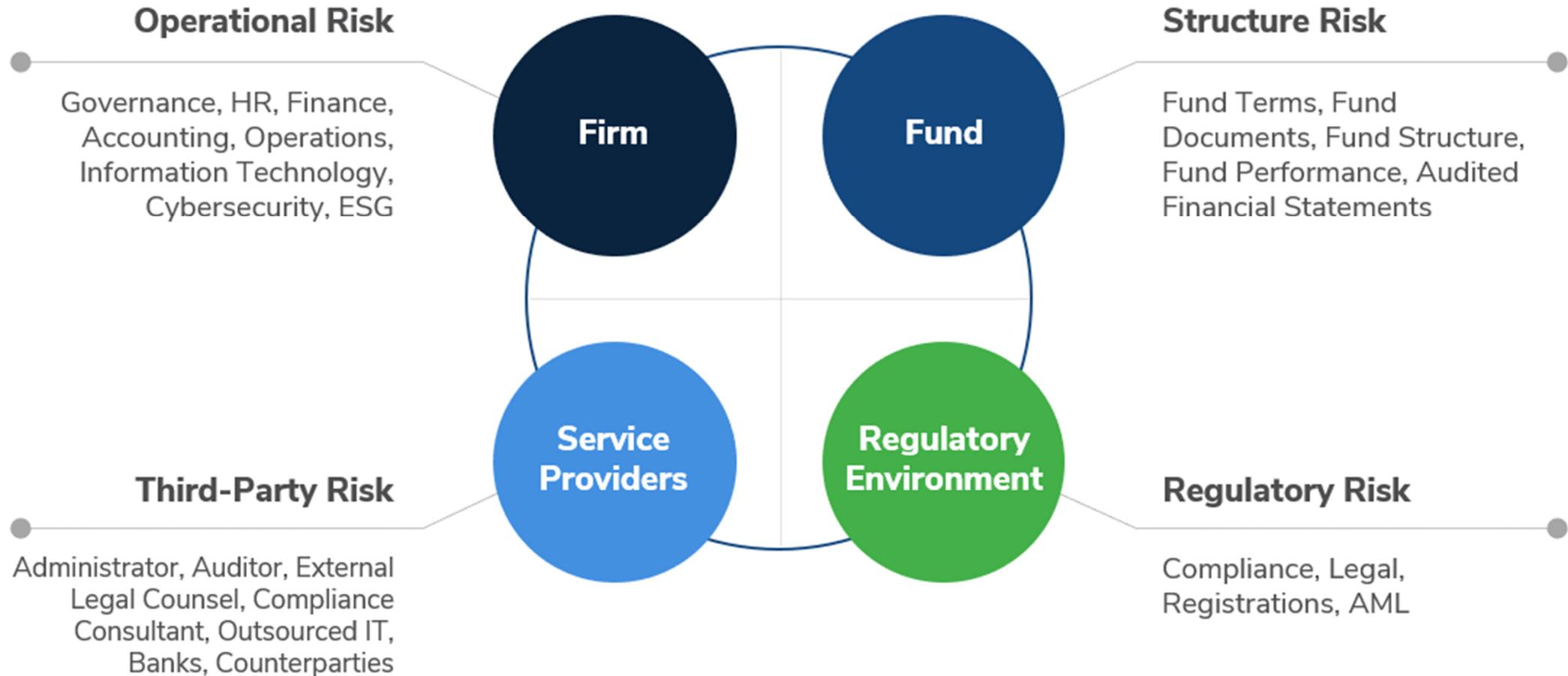
Workouts can have uncertain outcomes. Often valuation involves determining alternative scenarios and assessing the likelihood of various outcomes.

- Factors influencing the outcome can be diverse. A few factors that often impact the outcomes include:
 - Type of Distress
 - Value of Building
 - Building Cash Flows
 - Type of Loan
 - Number of Parties Involved (Intercreditor Agreements, etc.)
 - Lender Capability

5. Commercial Real Estate Investing in Funds

Kroll's Operational Due Diligence Scope

We believe preparation is key. We request and review a range of data and documentation prior to each on-site visit or discussion to identify areas of potential risk for further analysis.



Investing Recommendations

Workouts can have uncertain outcomes. Often valuation involves determining alternative scenarios and assessing the likelihood of various outcomes.

- What questions should investors and/or LP's in funds invested in CRE be asking?
- How can Operational Due Diligence help investors in funds invested in CRE?
- What are best practices for investors in CRE funds?
- How can investors in CRE or CRE funds position themselves for success?

KROLL

Learn More About Kroll

Valuation Advisory Services

| Financial Reporting | Tax | Alternative Asset Advisory | Real Estate Services | Fixed Asset Advisory Services |
|--|---|--|---|---|
| <ul style="list-style-type: none">Purchase Price AllocationGoodwill and Asset ImpairmentIntellectual Property ValuationFresh Start AccountingDerivative Valuation and Share-Based CompensationBusiness ValuationStrategic Value Advisory | <ul style="list-style-type: none">Tax ValuationTransfer PricingLegal Entity ValuationPurchase Price AllocationEstate and Gift TaxInterest Expense AllocationProperty Tax ConsultingSales and Use Tax ServicesSite Selection and Incentives Advisory | <ul style="list-style-type: none">Portfolio ValuationValuation Policy and Procedures ConsultingFund Manager ValuationsCreated Value AttributionSecondary TransfersValuation of Illiquid and Complex SecuritiesDerivatives and Structured Credit Products Valuation | <ul style="list-style-type: none">Real Estate Valuation and ConsultingReal Estate Financing ValuationsHospitality Advisory ServicesRight of Way AppraisalCost SegregationReal Estate Investment AdvisoryReal Estate Transaction AdvisoryProperty Asset Management and Optimization | <ul style="list-style-type: none">Fixed Asset ManagementInsurance Valuation ServicesMachinery and Equipment Valuation |

Our Evolution

In Operation for
Nearly 100 Years

STORIED BRAND 1932-2004

- Duff & Phelps founded as investment research firm

NEW FIRM, EXPANDING CAPABILITIES 2005-2020

- Started as valuation and corporate finance advisor
- Rapid growth into other governance, risk, compliance and complementary solutions
- Acquired 30+ businesses, including Kroll

ONE TEAM, ONE KROLL 2021-present

- Duff & Phelps rebrands as Kroll and completes brand unification
- Full business life cycle capabilities across risk, governance and growth
- Serving clients in 140 markets across nearly every industry and sector
- Acquired Crisp and Resolver risk companies
- Acquires AVC Ltd. to create dedicated energy team within FAAS practice

Our Values

Our six values are at the core of who we are and how we interact with our people, clients and partners at work and within every community we serve. They describe the expectations our clients should have of us, guide how we work with each other, and hold us accountable to consistently deliver.

Excellence

Excellence is a mindset – we do challenging work and pursue extraordinary results. We relentlessly focus on excellence – for our clients and colleagues.

Ambition

We are energized to learn, to teach, to grow. We constantly seek to do better – comfort and excellence rarely co-exist.

Courage

We make bold decisions, not just the easy ones. We find, reveal and tell the truth. Integrity is the foundation of everything we do.

Inclusion

We embrace and cultivate diversity – we respect, include and value one another. We support and care about the communities where we live and work.

Innovation

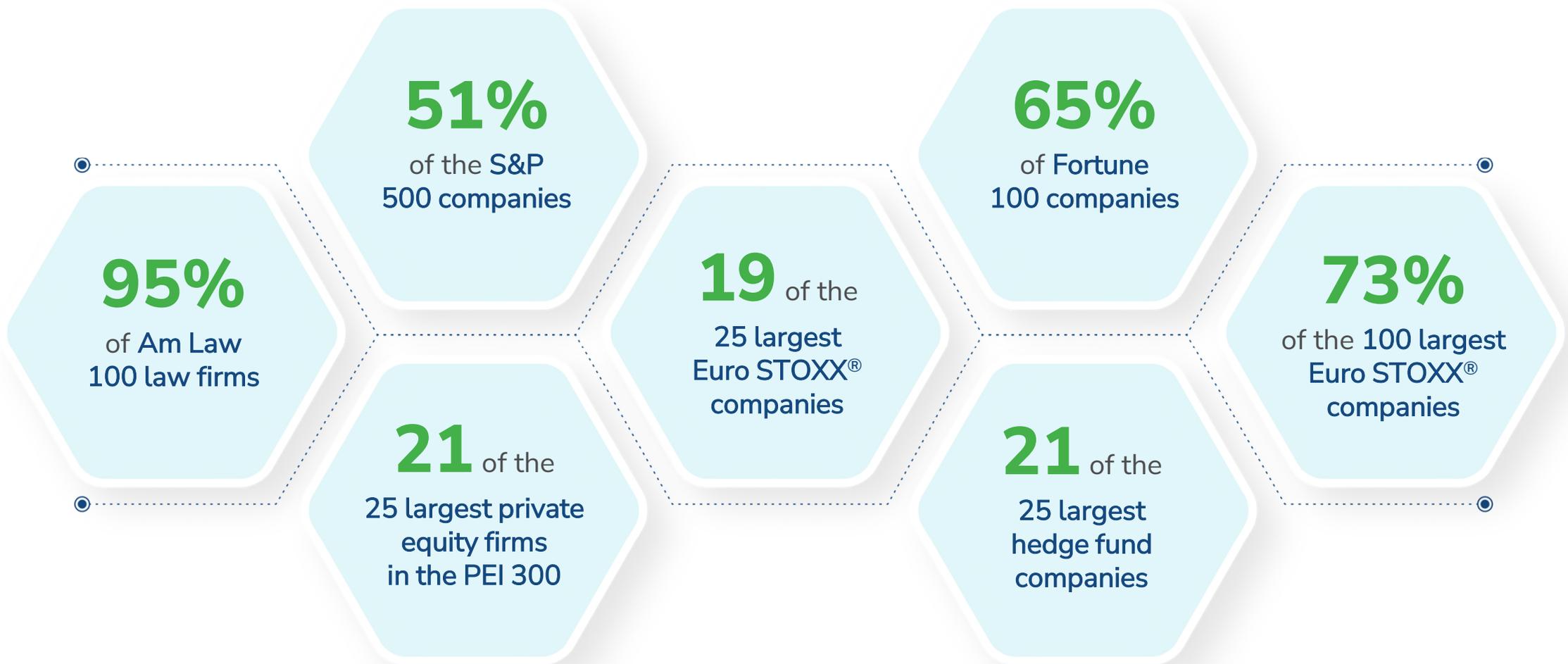
We challenge ourselves to discover new ways to create value. We harness the power of smart data with technology to enable faster decisions and always anticipate what's next for our clients.

One Team, One Kroll

We are stronger together – always focused on solutions, not silos. We collaborate across borders and disciplines in pursuit of excellence.



We are proud to work with



Our Awards and Rankings

Financial Advisory Recognition



REFINITIV 
Refinitiv Global M&A
Review 2022
Ranked #1
for Global Announced Fairness
Opinions for Full Year 2022¹
¹Based on 51 Credited Deals per Refinitiv's
Global Mergers & Acquisitions
Review Full Year 2022




Private Equity Wire US
Awards 2022
Kroll Wins Best Regulatory
and Compliance Firm of the
Year




Forensic Accountants 2022
LEXOLOGY Client Choice
Awards 2022 - Exclusive Winner
of Forensic Accountants



 **TURNAROUND,
RESTRUCTURING
AND INSOLVENCY**
Turnaround, Restructuring
& Insolvency Awards 2021
Winner - Turnaround Firm
of the Year

Our Awards and Rankings

Risk Advisory Recognition



WWL
Who's Who Legal (WWL) 2022
Experts recognized in WWL Asset Recovery, Construction – Quantum Delay & Technical, Forensic Accountants Quantum of Damages



GAR Global Arbitration Review
Global Arbitration Review's GAR 100 Expert Witness Firms Power Index - 2022
Ranked fifth on the annual list of top expert firms globally.



GIR Global Investigations Review
Global Investigations Review (GIR) 100 2021
Named as one of the top 100 cross-border investigations practices



FORRESTER
Forrester Wave™ 2022
Kroll named a Strong Performer in the Forrester Wave™ Cybersecurity Incident Response Services Q1 2022



SC 2022 awards EUROPE
SC Awards Europe 2022
Winner - Managed Detection and Response Solution
Finalist - Best Incident Response Solution



IDC
IDC MarketScape 2021
Named a Global Leader in Incident Response Readiness



Best Support SUMMER 2022
G2 Awards 2022
G2 Best Support 2022

Our locations

Across 32 countries and territories worldwide

The Americas

- | | | |
|--------------|---------------|------------------------|
| Atlanta | Los Angeles | Seattle |
| Austin | Mexico City | Secaucus |
| Bermuda | Miami | Silicon Valley |
| Bogota | Minneapolis | Toronto |
| Boston | Morristown | Washington, D.C. |
| Buenos Aires | Nashville | Waterbury |
| Chicago | New York | |
| Dallas | Philadelphia | Caribbean |
| Diamond Bar | Richardson | British Virgin Islands |
| Ellensburg | San Francisco | Cayman Islands |
| Houston | Sao Paulo | |

Europe, Middle East and Africa

- | | | | |
|----------------|-----------------|------------|----------|
| Abu Dhabi | Channel Islands | London | Paris |
| Agrate Brianza | Dubai | Longford | Pesaro |
| Amsterdam | Dublin | Luxembourg | Riyadh |
| Barcelona | Frankfurt | Madrid | Rome |
| Berlin | Gibraltar | Manchester | Tel Aviv |
| Bilbao | Guernsey | Milano | Turin |
| Birmingham | Johannesburg | Munich | Zurich |
| Brussels | Lisbon | Padua | |

Asia Pacific

- | | |
|--------------|-----------|
| Beijing | Mumbai |
| Guangzhou | New Delhi |
| Hanoi | Shanghai |
| Hong Kong | Shenzhen |
| Hyderabad | Singapore |
| Jakarta | Sydney |
| Kuala Lumpur | Taipei |
| Manila | Tokyo |



Real Estate Advisory Group

Real Estate Advisory Group Overview

We provide comprehensive real estate valuation and consulting services for various purposes.



Global practice

Our Real Estate Advisory Group uses its market presence in North America, Asia, South America and Europe to coordinate resources and databases across the firm. Our team of over 300 professionals are focused on completing complex, diverse real estate services globally, on a regular basis.

Industry experts

The Real Estate Advisory Group has specific experts working in different industry segments including, but not limited to, retail, office, hospitality, real estate investment trusts, hedge funds, pension funds, structured finance, CMBS securitization, insurance and banking, corporate real estate, railroad & utilities and franchise real estate.

Local Expertise

Each office is responsible for local market expertise. Each group compiles and analyzes data on the major markets within their region periodically to ensure that we closely monitor the dynamic marketplace.

Real Estate Advisory Group Services

Real Estate Valuation & Consulting

- MAI Appraisals
- Financial & Tax Reporting Valuations
- REIT & Real Estate Operating Company Valuations
- Debt Valuation
- Financing Appraisals
- Portfolio Valuation – Positive Assurance
- Cost Segregation & Construction Tax Planning

Real Estate Advisory Services

- Operational & Process Improvements
- Technical Advisory/Property Condition Reports
- Market Feasibility Studies
- Loan Services
- Debt Advisory
- Construction Project & Program Management



Real Estate Investment Banking

- Equity & Debt Placement Services
- Sell Side Advisory Services
- Buy Side Consulting Services
- Real Estate Transaction Opinions
- Solvency Opinions
- Fairness Opinions
- Independent Fiduciary Opinions

Real Estate Transaction Due Diligence

- Lease Abstraction and Analysis
- Site/Market Due Diligence
- Estoppels' Certificate Preparation & Review
- NOI Trend Analysis
- Tenant Reimbursement Analysis
- Argus & Dyna Modeling/Auditing
- REIT Income Analysis

Thank You



For more information, please contact:



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About Kroll

As the leading independent provider of risk and financial advisory solutions, Kroll leverages our unique insights, data and technology to help clients stay ahead of complex demands. Kroll's global team continues the firm's nearly 100-year history of trusted expertise spanning risk, governance, transactions and valuation. Our advanced solutions and intelligence provide clients the foresight they need to create an enduring competitive advantage. At Kroll, our values define who we are and how we partner with clients and communities. Learn more at www.kroll.com.

M&A advisory, capital raising and secondary market advisory services in the United States are provided by Kroll Securities, LLC (member FINRA/SIPC). M&A advisory, capital raising and secondary market advisory services in the United Kingdom are provided by Kroll Securities Ltd., which is authorized and regulated by the Financial Conduct Authority (FCA). Valuation Advisory Services in India are provided by Kroll Advisory Private Limited (formerly, Duff & Phelps India Private Limited), under a category 1 merchant banker license issued by the Securities and Exchange Board of India.