

Q1 2023 Capital Markets Review

April 24, 2023

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Capital Markets

The quarter began with surprisingly strong employment and economic data.

Following surprisingly robust US employment and retail sales data in January, US Treasury yields spiked sharply. Through early March 2023, investors were increasingly focused on higher-than-expected inflation and the potential for higher-than-expected peak rates. Since the beginning of the year, two-year US treasury yields rose by 65bps to 5.2% and 10-Year US treasury yields rose by 25bps to 4.1%.

Market expectations for peak Fed Funds rates rose to 5.5% vs. the 5.1% median projected by Fed officials.

The swift collapse of Silicon Valley Bank and Signature Bank on March 10th significantly altered investor expectations regarding interest rate trajectory and economic growth.

Both suffered from classic bank-runs driven by mismatched duration of assets and liabilities. Specifically, these banks held significant amounts of long-duration Treasury and mortgage-backed securities which had declined on a mark-to-market basis (as interest rates rose sharply in 2022) while having a large portion of less sticky non-retail deposits. In SVB's case, a large portion of these deposits were those of venture capital portfolio companies (many of whom needed cash to fund business operations as valuations declined and the fund-raising market dried up).

SVB's demise started when it flagged the need for equity capital as it faced rising deposit outflows and incurred realized losses on its bond portfolio upon sales undertaken to raise liquidity. SVB's largely corporate depositors panicked and quickly withdrew funds setting off the bank run that ultimately led to SVB's failure and takeover by the Federal Deposit Insurance Corporation (FDIC).

After SVB collapsed, investors and depositors focused on banks' \$620 billion of unrealized losses (which they would not need to realize unless they were forced to sell). Regional banks were especially exposed as they had less oversight from regulators than the larger systemically critical banks.

Investors became increasingly concerned that other regional banks may also suffer swift deposit flight and that they may be forced to sell their bond portfolios at large losses which would wipe out their equity. The FDIC and Fed swiftly took proactive measures to make all depositors at SVB and Signature whole and created lending facilities so other banks could stave off any potential customer runs.

Capital Markets (Continued)

If the FDIC and regulators had not swiftly acted, the risk of a broad-based financial market panic would have intensified, and significant economic damage may have resulted.

While shares of regional banks remain sharply lower YTD (despite having rallied significantly from lows), the banking situation stabilized and additional bank failures appear unlikely. Bank lending initially declined by record levels in the weeks post-SVB, and customers were rapidly reducing deposit levels (and shifting them from smaller to larger banks). However, in recent weeks, bank lending has stabilized with a resumption in growth, and deposit outflows have stabilized as well.

The unrealized mark-to-market losses on held-to-maturity securities have also declined meaningfully from YE2022 levels as interest rates have fallen swiftly over the past month.

Capital markets have had varied reactions to these banking events

The Treasury market swiftly reversed course with interest rates falling quickly and bond market participants pricing in Fed Fund rate cuts by H2 2023 vs. the Fed's expectation of holding rates slightly above 5% through early 2024. The Treasury market is pricing in a scenario in which a deeper recession takes hold sooner than expected. The equity market has actually rallied 5.7% since the SVB news as equity investors have cheered prospects for a sooner-thanexpected end to rate hikes followed by possible pivots to interest rate cuts. Equity markets appear to be pricing in a softlanding scenario with limited declines in corporate earnings.

Equity markets rallied sharply in USD terms by 8.7% YTD through April 14th (ACWI Index) and are now 20% above early October 2022 lows.

The YTD rally was primarily driven by US (+8.2%) and developed international markets (+11.4%). The strong S&P 500 index performance was largely driven by large gains in technology and internet stocks which benefitted from swiftly falling interest rates. International developed markets' strong performance was driven by extremely mild European weather (leading to no energy crisis) and optimism surrounding China's reopening (beneficial to European cyclical and luxury exporters).

Inflation reports were mixed during the quarter. In the US, headline inflation has receded sharply while core inflation still remains stubbornly high (although leading indicators are signaling a deceleration). In Europe, headline inflation has plunged due to falling energy prices. However, core inflation remains at record levels.

Capital Markets (Continued)

The range of forecast outcomes for public equities performance in 2023 remains unusually high given the uncertainties regarding prospects for economic slowdown or recession, magnitude of potential corporate earnings declines, and ultimate trajectory of inflation and interest rates.

Government and investment-grade bonds have appreciated sharply YTD.

The Barclays US Aggregate Index has appreciated by 3.0% YTD as interest rates swiftly fell following the collapse of SVB and Signature Bank as investors increasingly priced in potential for higher recession probabilities.

With inflation having peaked and many leading indicators demonstrating slowing conditions, it appears increasingly likely that central banks are close to ending interest rate hikes. US Treasury bond yields already reflect these expectations to some degree as 2-Year Treasuries have declined by over 100bps and 10-Year Treasuries have declined by over 65bps from early March peak levels.

We see better value among shorter-term maturities (6 month-to-2 years) than mid-tolonger term Treasuries presently.

High-yield bonds and leveraged loans (riskier corporate credit) have performed well YTD.

High yield bonds and leveraged loans are up 4.4% and 4.0% respectively YTD.

Strong high-yield bond performance was largely driven by declines in Treasury base rates whereas strong leveraged loan performance was driven by high current income associated with rising SOFR shortterm base rates.

Absolute yields are presently attractive (driven by high base rates) and enhance the prospect for positive returns in 2023 and above-average mid-term returns.

Interestingly, high-yield and leveraged loan markets largely shrugged off the collapse of SVB and Signature Banks and the resultant turmoil among regional bank equities whereas US Treasury yields experienced rapid significant declines as Treasury markets increased bets for an earlier than expected recession followed by faster-thanexpected rate cuts.

Hedge funds were flat to up low-singledigits (depending on the index) in Q1.

Credit and convertible arbitrage strategies performed best (+2% to +3%) whereas global macro strategies performed worst (-2.5%).

Private equity buyout fund performance was more resilient than public equities and was down mid-single digits YTD through Q3 2022 (latest data available).

Capital Markets (Continued)

However, venture capital funds were down 15.2% YTD during the same time frame.

Private equity and venture capital strategies report performance with a one-quarter lag (as such, latest data is of 9/30/22 valuations). Based on preliminary 12/31 data, PE fund returns were flat to modestly up vs. Q3 2022.

Private credit performed well through Q4 2022 (latest data available given lagged reporting)

The Cliffwater Private Credit Index was up 2.0% in Q4 and 6.2% for full-year 2022 as floating rate loans benefitted from rising rates offset somewhat by valuation markdowns.

The near-term outlook for existing funds is relatively positive. Increases in SOFR base rates has led to unlevered current yields of north of 10%. However, defaults and markdowns may increase and offset some of this return.

Private real estate pricing began to decline in late 2022.

The NCREIF Index was down 3.5% in Q4 2022 but up 5.5% for full-year 2022. Property value declined due to higher cap-rates, driven by surging debt financing costs rather than underlying fundamental NOI weakness. Transaction volume has declined significantly as cap-rates and borrowing costs have increased and property valuations have declined over the last several months.

Underlying property fundamentals remain strong across industrial and most multifamily sectors but are weaker across office and certain retail property types.

Investors are closely assessing commercial real estate debt maturities (over \$1.3 trillion maturing by YE 2024) and potential for elevated loan losses and resultant pullbacks in bank lending over the next 12-18 months.

The outlook for new private investment funds (currently raising money for 2023 vintage) is bright as valuations and leverage utilized in deals are both lower, and in certain cases like private credit, there is less capital chasing opportunities.

We are incorporating these views into portfolio positioning by:

- Cash management via allocation to short-term US Treasuries and US investmentgrade bonds
- Continued allocations to new private strategies especially private equity secondaries.

Strategic Asset Allocation View (7-years)

We consider the following factors when developing our 7-year forecasts.

The era of ultra-low interest rates is likely over with interest rates remaining elevated for longer.

Labor shortages persist in service-oriented industries and may constrain margin expansion.

Energy prices are likely to be higher vs. the prior cycle given structural supply shortages.

Geopolitical uncertainty is increasing with regards to the US-China relationship and potential for episodic military conflicts.

With equity valuations having declined significantly in 2022, we now expect mid-to-high single digit nominal pre-tax annual equity returns (6.5%-7.5%) over a seven-year forecast period.

We continue to expect greater convergence between US and International equity market returns.

While we expect quality and growth stocks to outperform value stocks over the forecast period, the rate of outperformance is likely to be lower than in recent years. We still anticipate significant volatility over the next 6-12 months as interest rates are yet to peak and many economic indicators appear to be slowing rapidly. However, inflation clearly seems to be in retreat and China's reopening should lend support to global growth.

The effects of the recent US bank failures and potential wider spillover to US regional banks remain to be seen. A swift pullback in bank lending would result in credit contraction and likely lead to a faster and potentially more severe recession (although this is not our base case).

"Safe" fixed income remains attractive, especially for shorter-term maturities

US and Canadian 1-year Treasury bond yields are still yielding 4.4% to 4.6% while shorterterm (6 month) yields are even higher at 4.6% to 4.9%. However, mid-term (7-to10year maturities) bond yields have dropped swiftly over the past month and now only yield 2.8% to 3.4%.

We still expect mid-single digit returns for US government debt and investment grade bonds over the forecast period.

On a risk-adjusted pre-tax basis, safe fixed income is still quite attractive relative to equities.

Strategic Asset Allocation View (7-years)

Riskier credit assets (high-yield bonds and leveraged loans) are also attractive over a mid-term time frame (and on a relative basis to equities)

US high-yield bonds are now yielding 8.2% with 7-year forecasted annual returns of 7.0% (inline with US equities). Leveraged loans are currently yielding 10.1% (based on 3-year takeout convention) with expected mid-term annualized returns in the 7.0% range.

However, on a nearer-term basis (next 12 months), high yield bonds and leveraged loans may experience declines and heightened volatility if credit spreads widen further were a deeper than expected recession to occur.

For new private market strategies (i.e., private equity, private credit, real asset funds) we continue to forecast higher returns relative to public markets (over a multi-year timeframe).

	Negative Neutral Positive	Average Annual Return
EQUITIES		
US Large Cap (S&P 500)		Mid Single-Digit
US Small Cap (Russell 2000)		Mid Single-Digit
MSCI Europe	+	Mid Single-Digit
Japan Topix	+	Mid-Single-Digit
MSCI Emerging Markets		Mid Single-Digit
FIXED INCOME		
US Treasury		Mid-Single-Digit
US Corp Investment Grade		Mid-Siligie-Digit
US Corp High Yield		Mid-to-Upper-Mid SD
US Corp Levered Loans	+	Mid-to-opper-Mid 3D
ALTERNATIVES, PRIVATE EQUITY, & REAL ESTATE		
Real Estate (Private) - Unlevered		Mid Single Digit
Alternatives (Hedge Funds)	+	Mid Single Digit
Private Credit (New Funds)		Low DD – Low Teens
Private Equity (New Funds)		Mid-Teens

Asset Class: Strategic Outlook (7-Year Timeframe)

Inflation and Labor Markets

In the US, inflation data has been mixed thus far in 2023.

On a YOY basis, US headline CPI growth declined to 5.0% in March vs. the 9.1% peak experienced in June. On a MOM basis, US CPI increased by 0.1%.

The sharp declines in headline CPI have primarily been driven by sharply lower food and energy costs. The decline in energy prices may prove transitory as oil prices have recently increased and may surge as the summer months and peak driving season nears.

Core CPI inflation has proven stickier and increased by 5.5% YOY in March (down from a 6.6% peak in September) and 0.4% MOM. The Fed's preferred Core CPE inflation gauge increased by 4.6% YOY in February (down from a 5.6% peak) and increased 0.3% MOM.

Over the last four months, core CPI has averaged 0.4% MOM or 4.8% annually (still well higher than the Fed's 2.0% target levels) Services inflation remains high at 0.8% MOM in February and 8.1% YOY. However, 80% of services inflation was driven by shelter costs (lagging indicator as these do not reflect new in place leases).

Encouragingly, several leading indicators such as new rental lease rates, commodity prices and producer prices paid are all showing swiftly decelerating inflation rates.

In Europe, the inflation data is also mixed.

Headline CPI has declined to 8.5% YOY in February (down from 10.7% peak in October) but Core CPI continues to trend upwards and has reached a peak of 5.6% in February.

Canada's inflation data is trending positively.

Headline CPI declined to 4.3% YOY in March (down from 8.1% peak in June 2022). Core CPI declined to 4.5% YOY and has averaged 0.3% MOM for the past several months.

Labor markets are showing signs of loosening in the US although remain very tight in Canada.

The US added 236K jobs in March (still very strong although lower than the 472K and 326K gains in January and February).

However, the ADP private employment survey was weaker than expected and the unfilled job vacancies fell to below 10 million for the first time since May 2021.

Wage growth declined to 4.3% YOY and has averaged 0.3% MOM (3.6% annualized) for the past three months. This level is largely consistent with the 3.5% annual wage growth targeted by the Fed (consistent with 2% overall inflation).

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Inflation and Labor Markets (Continued)

Layoffs have been relatively limited thus far to predominantly white-collar jobs at technology companies and some financial institutions. Labor continues to be much tighter across service industries such as hospitality, restaurants, and health care.

Canada's unemployment rate declined to a historically low 5.0% with a still high level of unfilled job vacancies.

While inflation is decelerating, its pace of deceleration and ultimate trajectory remain highly uncertain.

The Fed is currently forecasting Core PCE to decelerate from 4.7% YOY currently to 3.6% for 2023 and 2.4% for 2024 (vs. its 2% long-term target).

There remains a large divergence between Fed forecast and bond market investor forecasts regarding interest rates at YE2023.

The Fed has forecast peak rates of 5.1% in 2023 and anticipates maintaining that level for several quarters.

Conversely, financial markets are presently forecasting that the Fed will raise rates to 5.0% in May 2023, but then cut rates shortly thereafter with Fed Fund rates ending the year at 4.1%.

We see two likely scenarios:

A mild US recession (if any) occurs later in 2023. Core inflation remains higher than Fed targets and the Fed maintains higher short-term rates into 2024.

This scenario is somewhat negative for equity markets as multiples compress driven by higher rates and investor fears regarding ultimate deeper economic stress from some dislocation.

Lending at regional banks to consumers and small businesses slows sharply, leading to a faster than expected contraction in economic activity.

This scenario is more negative for equity markets as corporate earnings forecasts would likely be significantly reduced. While faster than expected rate cuts may lend support to multiples, generally equity markets do not trough until earnings expectations stop declining.

Inflation expectations are mixed.

Consumer perceptions for 1-year inflation increased by almost 100bps to 4.6% in March.

However, long-term inflation expectations remain well anchored. US 5-year and 10year break-evens (inflation forecasts) have declined and are now at 2.4% and 2.3% respectively.

Macroeconomic Conditions

US economic growth is decelerating and may contract faster if regional bank lending slows significantly.

The ISM Manufacturing and Services Index surveys came in well lower than expected for March. Manufacturing has already been weak for several months (below 50 for the last four months), but the services growth slowdown was more unexpected (index reading of 51.2 vs. 55+ over the prior two months). Both manufacturing and services surveys showed developing weakness in new orders.

Most economists are presently forecasting a mild recession to begin in H2 2023 or early 2024 (although this prediction has consistently been pushed back over the past six months).

Economists are concerned about rising risks for a severe credit crunch if lending is sharply constrained at regional and community banks, driven by higher deposit outflows or increasing loan losses (especially commercial real estate loans).

Encouragingly, confidence in the US regional banking system is stabilizing as borrowings from Fed facilities have steadily declined over the past couple of weeks (vs. the initial flurry post the SVB collapse) and deposit outflows have abated. Commercial bank lending dropped by \$105 billion in the last two weeks of March, the largest drop since 1973. The pullback in lending was relatively broad across both real estate and commercial and industrial lending. However, loan issuance stabilized in early April.

Thus far, banks have reported strong Q1 earnings. Large banks have increased their outlook for net interest income while regional banks are expecting modest net interest income contraction. Credit quality remains very strong although banks are increasing loan loss provisions to account for potential increases in defaults should economic conditions worsen.

Large banks have gained deposits since Q4 2022 - while the smaller banks have experienced deposit reductions (both in terms of customers switching deposits to larger banks or seeking out higher-yielding investment options). Fortunately, deposit outflows for regional banks have stabilized in April and have been generally in line with analyst expectations.

Several questions arise regarding the true level of regional and small community banks' exposure to commercial real estate, especially the office sector (covered in more detail in the Special Topic section later).

Macroeconomic Conditions (Continued)

Per Moody's, US banks are estimated to hold roughly 30% of the \$4.5 trillion of US CRE debt outstanding.

Presently real estate defaults are very low. However, with a large wall of real estate debt maturing in 2023 and 2024, investors expect CRE defaults to increase and are concerned that could cause to banks to become more cautious, reducing new lending (both to CRE and more broadly across the economy).

Over \$1.3 trillion of the \$4.5 trillion of outstanding CRE Debt is maturing through 2024 (\$700bln of this maturing debt is held at banks). While defaults are expected to increase and many properties will be unable to refinance and secure new loans, actual losses for banks are forecast to be quite low. Lending standards were much more conservative after the GFC, with lower loan-to-value limits and substantial equity cushion behind the loans. With most properties having experienced strong NOI growth over the last 5-7 years, property values are likely to have appreciated for most property types (except for challenged office buildings and certain retail properties). As such, with realized losses expected to be quite low from commercial real estate, banks are unlikely to experience material balance sheet stress and thus are less likely to severely curtail lending activities.

Consumer spending sill remains strong with consumer balance sheets were still estimated to hold over \$1 trillion of excess pandemic-driven savings (relative to \$2.5 trillion at the peak).

However, most economists forecast this savings buffer to be depleted by H2 2023, or early 2024, and savings rates are at all time lows while credit card balances are at all time highs.

While consumer credit quality remains very strong, delinquincies are increasing steadily and defaults could quickly pick up if layoffs intensify.

Canada is expected to deliver very modest growth in 2023.

Economists are expecting a more pronounced slowdown in residential investment and goods consumption, with demand for services dropping as the year goes on.

A potential downturn will impact different regions unevenly. Economies more dependent on residential real estate, construction, and the sale of durable goods (Ontario and British Columbia) could see harsher impacts whereas provinces producing commodities should fare better (Saskatchewan, Alberta, and Newfoundland).

Macroeconomic Conditions (Continued)

The labor market remains very tight with record-low unemployment and over 1 million unfilled vacancies. Given the current labor shortages, an economic downturn may result in slower hiring and fewer hours worked rather than wholesale layoffs.

Europe has thus far avoided a recession with growth much better than feared. However, headwinds and a mild recession (base case) loom ahead.

The combination of mild winter weather (energy crisis averted), household and business support by governments, and tailwinds from China's reopening have all contributed to better-than expectedperformance in 2022 and thus far in 2023.

Furthermore, Europe benefitted from a catch-up in Industrial production during 2022 as pandemic restrictions were lifted and firms were able to fill backlogged orders.

However, new orders have declined significantly thus far in 2023.

Increasing core inflation is likely to result in continued interest rate increases (deposit facility rate expected to peak at 3.5% or higher in summer 2023) which will manifest themselves through curtailed economic activity with a lag as we progress through 2023 and into 2024.

China is well positioned for above-trend growth in 2023

China GDP growth for Q1 at 4.6% comfortably eclipsed analyst forecasts of 3.5%.

Demand for services has increased rapidly with the Caixin Service PMI registering 57.8 in March (up from 55.0 the prior month and the highest reading in over two years).

This rapid services growth and uptick in domestic demand will be partially offset by slowing export growth driven by lower external demand.

Government stimulus is expected to increase post QI 2023 which should help support the critically important property development sector.

Finally, government regulatory posture towards the internet, technology, and ecommerce sectors is becoming more friendly. This should benefit major large-cap companies such as Alibaba and Tencent.

Shorter-term View

After a sharp rally to start the year, the trajectory of equity markets will be determined by a) path of interest rates, b) economic growth and outlook for corporate earnings and c) potential for large sustained financial system disruptions or "accidents".

For the first time since late 2021, risks regarding inflation vs. economic growth appear two-sided.

It is clear that the Fed is close to ending its rate hike campaign. What is not clear is when the Fed begins cutting rates. Across previous rate hike cycles, the Fed has typically cut rates shortly after the last rate hike. Historically, these rate cuts have generally been large in magnitude and swiftly implemented over a six-to-twelvemonth period. However, elevated inflation levels are a key difference between this cycle and prior cycles.

On the one hand, a pause in interest rate hikes followed by rate cuts is clearly positive for equity markets. However, investors appear too optimistic regarding rate cuts and not pessimistic enough regarding the potential for recession and the resultant decline in corporate earnings.

US and European manufacturing indexes have been below 50 (indicating contraction) for several months and new orders are declining at faster rates.

As seen in the chart below, historically, when the ISM new orders declines into the mid-40s, earnings have tended to decline between 10%-20% (higher in the GFC).



Sources: BoA Global Investment Strategy, Bloomberg

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Shorter-term View (Continued)

In the first couple of weeks post-SVB, commercial and industrial loan issuance declined significantly before stabilizing over the past few weeks. If credit curtailment to small-and-mid-sized businesses intensifies, there will likely be ripple effects felt throughout the economy.

Tougher credit availability coupled with dimmer views on sales and expansion plans has helped drive the NIFB's small-business optimism index down to its lowest levels in three months and well below pre-pandemic levels.

Thus far, corporate earnings have largely been resilient as end demand has remained reasonably strong across many sectors. In 2022, S&P 500 companies experienced modest margin compression (especially in Q4 2022). Given top-line revenue strength, S&P earnings still expanded by 5% for the full year but declined by 3% YOY in Q4 2022.

Analysts expect 2023 S&P 500 earnings to be relatively flat vs. 2022 with YOY declines in H1 followed by YOY gains in H2.

We believe that these projections remain optimistic as the economy has yet to feel sustained effects on demand from the Fed's 2022 interest rate hikes. In 2023 and 2024, the unknown is to what degree corporate earnings fall. In prior recessions, earnings have declined between 10% to 30% from peak to trough.

In prior downturns, equity markets typically did not trough until forward earnings estimates stopped declining.

While S&P 500 forward earnings estimates have declined modestly from \$240 to \$225, should a deeper-than-expected recession emerge, these forward estimates would need to be revised downward substantially.

As seen in the collapses of SVB and Signature Bank, sharp increases in interest rates can have unexpected and unintended consequences that emerge seemingly out of the blue. Risks for financial market instability or accidents have certainly increased in recent months.

The sharpest and swiftest equity market downturns typically occur when these accidents do happen with fears of financial instability and lack of liquidity becoming widespread.

Shorter-term View (Continued)

We continue to see multiple potential paths for equity returns over the next 6-12 months (with reference to the S&P 500 which stands at 4,138 as of April 14, 2023).

Scenario A: (Optimistic Case) – Inflation moderates much faster than expected with a soft landing and a mild earnings recession. Fed pauses rate hikes by May and cuts rates by year-end 2023.

Under this scenario, we see goods inflation reaching firmly negative territory and services inflation starting to decelerate. The S&P 500 displays earnings resiliency and investors price in that 2023 earnings represent trough earnings (with ~5% S&P 500 earnings declines vs. 2022) and look forward to resumption of earnings growth in 2024 with interest rates remaining stable / gradually declining. Equity markets may decline moderately (5% or so) from present levels before rallying to end 2023 in the 4,200-4,500 range.

Investors are already pricing in a decent probability of this case occurring.

Scenario B: (Base Case) - Moderating inflation and rate hikes in line with Fed expectations coupled with a modest corporate earnings recession.

Under this scenario, goods inflation declines or moves to deflation while services and shelter inflation remain higher than desired. The Fed hikes once or twice more with a terminal Fed Funds rate slightly north of 5%. However, the Fed then keeps rates at this level for the next 9-12 months. The US economy enters a moderate recession with 2023 S&P 500 corporate earnings down 10%-15% vs. 2022. Under this scenario, the S&P 500 could likely decline 10%-15% from present levels. We expect markets to remain relatively range bound with periodic bouts of rallies and sell-offs as the ultimate path of rate hikes remains unclear. In this scenario, the market may end 2023 in the 3,800-4,200 range.

Given that the S&P 500 is presently at 4,138, investors have assigned the highest probability of this case occurring.

Scenario C: (Pessimistic Case) – Core inflation remains higher for longer leading central banks to maintain peak rates for longer. The economy slows faster than expected followed by a financial market crisis which leads to severe global recession. This scenario leads to faster and deeper equity market declines followed by a sharp rebound once Fed policy pivots.

Under this scenario, investors begin to reprice Fed Funds terminal rates north of 5%. The chances of a global shock and severe recession increases. Under this scenario, S&P 500 earnings may decline 15%-20% and equity markets may decline by 20%+ from current levels over the next 6-9 months.

Shorter-term View (Continued)

However, such events also increase the chance for an ultimate swift Fed pivot with declining interest rates which would ultimately lead to sharp equity rallies. It is very conceivable under this scenario for the S&P 500 to fall to 3,200-3,500 level over the next 6-9 months.

At this stage, outcomes remain highly uncertain and may be influenced by a large number of external variables that are difficult to predict.

With regards to legging into equities, for investors with a mid-term (5-year+ framework), we would continue looking to begin adding to equities around the 3,600-3,700 S&P 500 level while becoming more constructive at the 3,300 range.

Equity Markets – Performance

Equity markets (MSCI ACWI Index) appreciated by 8.7% YTD through April 14th.

Equity market gains have been broad-based across all major regions with international developed markets (primarily Europe) demonstrating the largest gains at +11.5% YTD in USD through April 14th.

Growth stocks (+14.5%) materially outperformed value stocks YTD (+3.3%) as US interest rates declined swiftly in March.

Technology, consumer discretionary, and communication services (largely internet) stocks outperformed YTD.

Energy, industrials and materials sectors significantly outperformed during Q4 (up 16.0%-17.7%) while consumer discretionary, communication services, and technology sectors underperformed (down 0.5% to +5.2%).

US large-cap equities (S&P 500) are up 8.1% YTD and 16.2% since October 2022 trough levels.

The YTD rally has been very narrow, led by a few large cap technology, consumer discretionary and internet companies.

The average stock in the S&P 500 is only up 3% YTD. As such, the index may retreat significantly if some of these large cap companies were to experience share price declines post Q1 earnings.

US small-cap equities (Russell 2000) have underperformed and are only up 1.7% YTD.

Small caps have been hit hard by greater weakness among financial companies (15% of index weight) and by increased recessionary fears as investors believe that small caps are more susceptible to demand reductions and wage pressures.

European equities are up 11% YTD and have rallied 23% from September 2022 trough levels.

Thus far, macroeconomic conditions have held up much better than expected in Europe (warm winter and generous government subsidies). Additionally, European exporters and luxury goods companies have benefitted from China's reopening.

However, macro conditions may become more difficult as the impact from the ECB's rapid rate hikes is yet to be fully felt by businesses and consumers. Additionally, core inflation remains at peak levels which may lead to the ECB maintaining higher interest rates for longer relative to other regions.

Equity Markets - Performance (Continued)

Chinese equities are up 12% YTD and have rallied 34% from September 2022 trough levels.

While the easy money has been made already, we still expect that Chinese equities may outperform over the next 12 months as China continues to benefit from increased domestic consumption post COVID reopening, increased governmental stimulus (as the government aims to meet its 5% real GDP growth targets), and a more constructive regulatory posture especially with regards to large-cap internet and e-commerce companies.

QI corporate earnings season kicks off in earnest over the next few weeks. 2023 guidance will be heavily scrutinized in terms of a) revenue growth assumptions and demand outlooks and b) margins – input and labor cost outlooks.

Thus far, the big banks reported very robust earnings and their stock prices appreciated following results.

Regional banks quarterly reports will be highly scrutinized. Investors will assess banks' deposit trends (what level of outflows were experienced post SVB collapse), the level of unrealized bond losses, changes in provisions for loan losses, and commentary regarding the lending environment and any potential tightening of credit or pullback in lending. Large-cap technology and internet companies may face a challenging earnings season. These stocks have rallied substantially with the NASDAQ up 20% YTD.

These gains have been driven by a combination of falling interest rates and investor rotation away from bank and other cyclical stocks as recession fears have mounted.

However, valuations for mega-cap technology and internet stocks have risen and the shares are susceptible to pullbacks from any earnings disappointments. Fundamentals in the sector could weaken if macroeconomic pressures intensify.

For investors with a mid-term time frame, we continue to believe that stocks of highquality companies will outperform given their strong business models, superior earnings growth and strong returns on capital.

YTD, quality and growth stocks have materially outperformed value stocks. However, value stocks may outperform post QI earnings season if a) interest rates rise again or b) earnings reports for large-cap quality and growth stocks disappoint lofty expectations.

Equity Markets - Performance (Continued)

Equity Indices (as of 4/14/2023)

Total Returns (%) – USD

	YTD March-2		Annualized Return			
	4/14/2023	Qtr	1Y	3Y	5Y	7Y
US Large Cap (S&P 500)	8.2%	7.4%	-4.7%	14.6%	10.7%	11.7%
US Small Cap (Russell 2000)	1.6%	2.8%	-9.8%	14.3%	4.2%	8.1%
MSCI EAFE	11.4%	8.5%	4.1%	12.3%	3.7%	6.3%
MSCI Emerging Markets	5.1%	4.0%	-7.9%	6.2%	-0.7%	4.9%
MSCI ACWI	8.7%	7.3%	-3.5%	12.9%	7.0%	9.1%
<u>US Style Factors</u>						
MSCI US Quality	11.3%	9.2%	-1.7%	12.7%	12.0%	13.0%
Russell 1000 Growth	14.3%	2.2%	-5.7%	14.6%	13.5%	14.8%
Russell 1000 Value	2.3%	12.4%	-4.3%	14.9%	7.6%	9.0%

Equity Markets - Valuation

Equity markets are generally fairly valued to modestly overvalued relative to historical averages.

The S&P 500's forward P/E multiple has compressed from 21.5x at the beginning of 2022 to 18.4x today (modestly above historical averages).

International developed markets are trading at 13.4x forward earnings (roughly 7% below historical averages) while emerging markets are trading at 11.9x forward earnings (inline with historical averages).

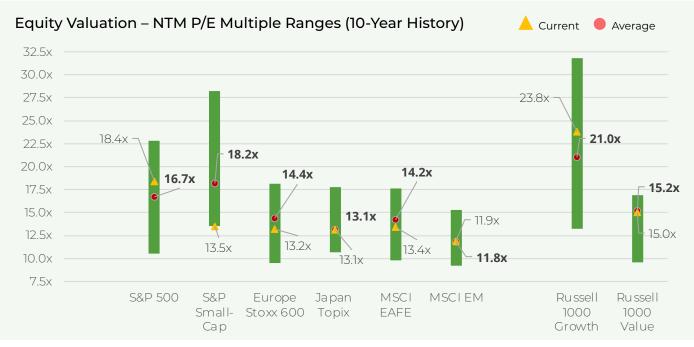
However, confidence in forward earnings is much lower than normal given the backdrop of still high interest rates and inflation, China reopening, geopolitical tensions, and higher potential for recession in the US and Europe.

Equity market valuations are no longer cheap compared to bonds.

The S&P 500 presently trades at 18.4x consensus NTM earnings (which may be too high)

Historically, the S&P 500 earnings yield (inverse of multiple) has averaged 200-300bps over 10-Year Treasuries. Based on that metric, a 15x-18x forward EPS multiple is "fair" for the S&P 500.

Additionally, our mid-term return outlook for credit (high yield bonds and leveraged loans) is similar to that for equities, with lower risk.



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Fixed Income Markets - Performance

Safe fixed income (government bonds and corporate investment grade bonds) appreciated sharply YTD as interest rates swiftly declined during March.

After interest rates peaked in early March following surprisingly robust US January employment figures and higher than expected inflation, rates swiftly declined throughout March following the collapse of SVB and Signature Bank on March 10th. These banking collapses triggered broader concerns surrounding the stability of US regional banks and the potential for pullbacks in credit and lending. 2-Year Treasury yields pulled back from 5.1% to 4.2% presently and 10-years yields have pulled back from 4.1% to 3.5% as of 4/14. Additionally, inflation data for March was generally inline or lower than expectations with a sharp slowdown in YOY wage growth and pullbacks in terms of producer prices paid.

Both high yield bonds and leveraged loans have appreciated YTD.

HY bonds primarily benefitted from the decline in Treasury base rates while leveraged loans benefitted from high current income and modest price appreciation from tightening spreads.

	% Ret YTD 4/14/23	% Ret Mar-23 Qtr.	١Y	Annualize 3Y	ed Returns 5Y	7Y	Duration (yrs)
US Treasury	2.9%	3.0%	-2.2%	-4.2%	0.8%	0.4%	6.3
US Corp. IG	3.6%	3.5%	-1.8%	-1.9%	1.7%	1.9%	7.3
US Corp HY	4.4%	3.6%	-0.7%	4.2%	3.2%	4.9%	3.7
US Corp Lev. Loans	4.0%	3.3%	2.7%	7.0%	3.7%	4.6%	NA
Barclays US Aggregate	3.0%	3.0%	-2.1%	-3.3%	1.0%	0.9%	6.4
Barclays Canada Agg. *	2.4%	3.1%	-0.3%	-2.2%	0.9%	0.9%	7.3

* Barclays Canada Aggregate Index returns in CAD

Fixed Income Indices – Characteristics and Performance in USD

(as of 4/14/2023)

Fixed Income Markets - Valuation

Safe fixed income (government bonds and investment grade corporate bonds) yields remain at attractive levels but have pulled back meaningfully from early March highs

US Treasuries are yielding roughly 4.0%-4.6% for 1-to-2-year maturities and 3.6% for 10-year maturities.

US corporate investment grade bonds are now yielding 5.0% (with risk of default very low).

Corporate spreads (investment grade and high yield) have remained relatively flat YTD.

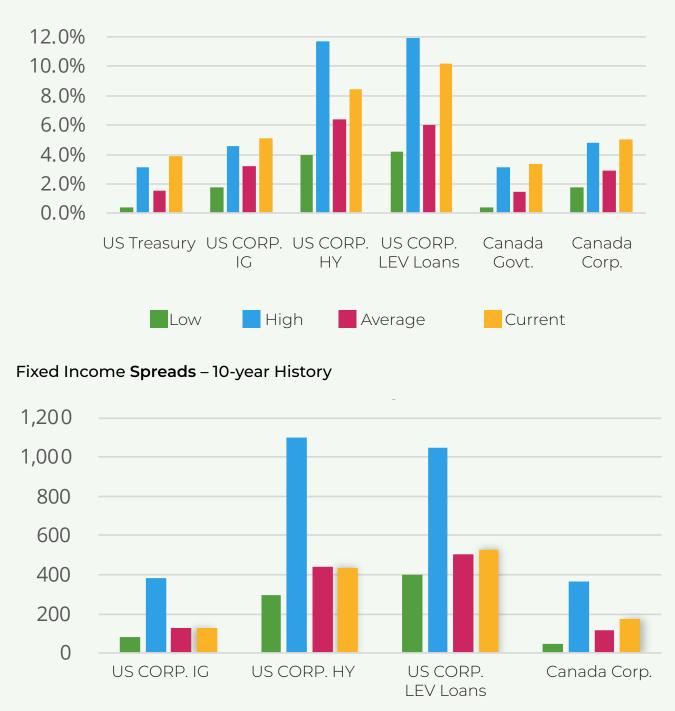
IG spreads are presently at 132bps and HY spreads are at 440bps (inline with longer-term averages).

Spreads have generally widened further during recessionary periods (200bps for corporate bonds and 800bps for HY bonds).

However, the quality of the high yield index is much stronger now than in previous periods. When coupled with today's high base rates, it is unlikely that spreads will widen to those experienced in previous recessions (even if economic activity slows substantially). Credit performance remains generally strong with default rates well below historical levels. However, signs of stress are starting to emerge with default rates and bankruptcy filings increasing (off very low base levels).

Defaults are likely to increase in 2023 and 2024 as economic growth slows, corporate earnings decline, and companies with weak balance sheets or nearer-term refinancing obligations face capital raising challenges. We expect that the default severity will be much lower than that experienced during the GFC.

Fixed Income Markets - Valuation (Continued)



Current

Fixed Income Yields – 10-year History

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Low

High

Average

Alternatives and Private Investments

The HFRX Hedge Fund Index was flat during Q1 2023.

Convertible arbitrage and credit strategies performed best in Q1 (+3.1% and +1.7%) while global macro / trend following strategies performed worst (-2.5%).

Private real estate operating fundamentals are mixed in terms of operating fundamentals and transaction prices.

On a YOY basis., multi-family new lease rents are still higher than in-place rents by midsingle digits. However, new lease rents have started to decline on a sequential basis. As such, YOY rental growth should slow to the low-to-mid-SD range for 2023. Industrial properties are still experiencing 20%+ rental growth increases for new leases. However, industrial lease terms are longer at 4-5 years and provide multi-year visibility of mid-SD rental growth for industrial portfolios.

Cap-rates have risen, given the sharp increase in debt funding costs

In many cases, debt dilutes equity returns as the cost of funding is higher than the caprate.

Pricing was negative for the first time in several years with the NCREIF index down 3.5% in Q4 2022 (latest data available) Sales volumes are down materially as cap rates rose and property valuations declined. The bid / ask spread remains high.

Refinancing risk is an area to closely monitor as substantial commercial real estate debt matures over the next few years.

The office sector and some pockets of retail are clearly under pressure and may see defaults pick up considerably over the next 18 months.

Private equity 2022 performance (on a pooled basis for existing funds) remained relatively resilient and was down mid-SD YTD (through Q3 2022, the latest data available). Preliminary data through Q4 indicates flattish performance vs. Q3.

According to Pitchbook, US buyout deal activity declined 9% for QI 2023 from Q4 2022 levels in terms of deal count but increased 11% in terms of deal value. Exit activity continued to decline with QI 2023 exits projected at \$56bln, down 14% from Q4 2022 and 33% from QI 2022.

On average, middle market deal valuations have modestly compressed (although sponsors remain willing to pay higher multiples for high-quality, recessionresistant businesses).

Alternatives and Private Investments (Cont.)

Leverage levels on deals have reduced by 1.0x-1.5x turns thus far and, on occasion, sponsors are completing deals on an allequity basis.

US PE dry powder remains robust at \$1 trillion which should support deal valuations.

Fundraising in 2023 got off to a slow start with \$67 billion raised in Q1, well off the \$360 billion+ annual levels raised in 2021 and 2022.

Several institutional investors are overallocated to private investments (denominator effect) as private investments performance were more resilient during 2022 relative to public equities and fixed income.

Existing venture capital funds (pooled returns) have delivered a -15% YTD decline through Q3 2022 (latest date available). Venture capital deal activity declined significantly in Q4 2022 with exit activity plunging. Thus far, valuation declines have been limited to public positions mark-to-market and write downs of later stage assets. Valuations for earlier stage (Seed through Series B) have remained relatively flat as most of these companies are well funded, still growing robustly, and are able to utilize last funding round valuations.

2022 Q4 deal value declined 36% YOY to \$36 billion while exit activity in Q4 plunged 97% YOY to \$5 billion.

Actionable Investment Opportunities

Short-term US and Canadian government debt

4%+ yields to maturity for US and Canadian Treasury bonds (for short maturities of up to one year)

Public market high-yield bonds and leveraged loans.

7-year annualized expected returns of 7.0% which are favorable relative to equities. However, high-yield bond and leveraged loan spreads may widen further in a recession, which may make short-term performance more volatile.

Private credit strategies are also highly appealing (offering potential returns from low double-digits to mid-to-high teens).

Preferred and structured equity demand is increasingly sharply. Sponsors are increasingly dependent on M&A acquisitions to drive portfolio company growth and cannot add senior debt to their capitalization stacks (either syndicated or through private direct lenders). Preferred equity providers can add 1x-2x turns of leverage at mid-teens+ IRRs.

Opportunistic credit funds should benefit from a wider range of higher-returning potential investments including a) dislocated publicly-traded bonds and loans and b) opportunities to provide bespoke bi-laterally negotiated credit solutions such as rescue financing or balance sheet restructuring to corporations.

Venture debt is increasingly interesting especially post the SVB collapse. The borrower universe has expanded (larger, more-established borrowers), expected yields have increased, and terms have become tighter and stricter. The loans also have an attractive amortization component which leads to an attractive de-risking element.

New allocations to private equity are also becoming more interesting (especially across PE Secondaries)

Activity in the secondary market has picked up significantly during Ql driven by institutions selling existing LP positions either to a) bring allocations to PE more inline with their targeted ranges or b) facing liquidity issues as distributions are delayed given current market conditions while capital calls are continuing

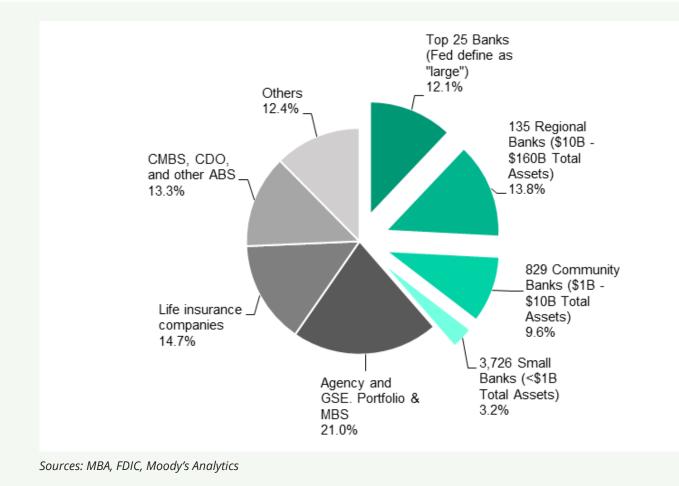
Potential deal volume during Q1 2023 is 3x-4x greater this time last year.

Discounts have widened significantly for LP transactions with average deals done in the low-to-mid 80% range of stated NAV vs. low-to-mid-90%s last year. For the first time in several years, modest discounts are even available for best-in-class GP led continuation vehicle single asset deals.

CRE Debt Outstanding & Banks Exposure

Following the collapse of SVB and Signature Bank, investors are now increasingly scrutinizing regional banks' commercial real estate ("CRE") exposure. Several financial press articles have posited that US CRE is the next shoe to drop and may lead to a significant credit crunch and potentially additional bank failures.

We aim to quantify banks' exposure to CRE and assess the potential for realized loan losses. Including multi-family properties, US CRE debt outstanding is estimated at \$4.5 trillion as of March 2023. Banks hold roughly 40% of CRE debt with the majority of that held at regional and community banks.



CRE Debt Outstanding & Banks Exposure

Direct CRE loans account for 9.4% of total bank assets. However, this share is much higher at regional and community banks (16.5% to 24.3%).

Bank Category	Multifamily CR Loans	E Commercial CRE Loans	Funded CRE Construction Loans	Total Direct CRE Exposure	Indirect CRE Exposure*	Total CRE Exposure
Fed "Large" Banks (25 banks, >\$160B total assets)	1.4%	2.2%	0.8%	4.3%	2.5%	6.8%
Regional Banks (135 banks, \$10-160B total assets)	4.7%	8.3%	3.5%	16.5%	9.8%	26.3%
Community Banks (829 banks, \$1-10B total assets)	5.5%	13.3%	5.4%	24.3%	13.5%	37.7%
Small Banks (2,965 banks, \$100mm-1B total assets)	2.9%	10.1%	5.2%	18.3%	12.5%	30.7%
Small Banks (761 banks, <\$100mm total assets)	0.9%	3.9%	2.5%	7.2%	5.4%	12.6%
Total (4,715 banks)	2.5%	4.9%	2.0%	9.4%	5.5%	14.9%

Sources: FDIC, Moody's Analytics. Sources: FDIC, Moody's Analytics. *Note: "Indirect" includes unfunded portion of construction loans and corporate loans on owner-occupied real estate. Unfunded construction loan funding is only guaranteed by the banks contractually if developers hit their funding triggers, indicating some degree of managed future potential CRE risk. Owner-occupied CRE loans are generally C&I loans, which is debt serviced by the borrowing company revenue rather than CRE rent, but the loans are collateralized by the CRE, resulting in indirect CRE exposure in the case of loan default.

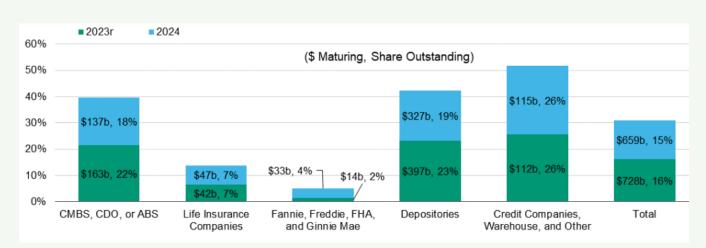
CRE Debt Maturities

While the average share of CRE loans as a percentage of total assets at regional and community banks suggests manageable exposures, there is wide distribution around that average.

For instance, 33% of regional banks and 44% of community banks have CRE loan exposure at 25%-50% of total assets.

Given that these banks are levered at roughly 8x-10x equity, significant writedowns of CRE loans could substantially reduce these banks' equity positions.

\$1.3 trillion of outstanding CRE debt (roughly 30%) is maturing by year-end 2024 with roughly an additional \$500mm per year maturing through 2027. Most of the near-term maturing debt was originated in the 2013 through 2018 timeframe. Given the significant rise in interest rates since then, analysts are worried that properties in troubled sectors (predominantly office and some areas of retail) may not be able to refinance maturing debt without significant additional sponsor equity contributions and may therefore default.



Source: Mortgage Bankers Association, as of March 2023

CRE Leverage and Rent Growth

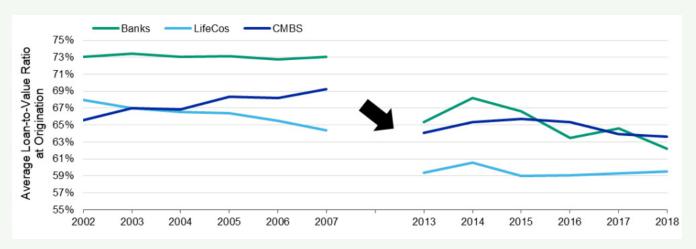
CRE property values are beginning to decline and loan defaults are likely to increase.

According to Green Street Advisors, property prices across CRE have declined by 15% from 2022 peaks with office experiencing the largest decline at 25%. Green Street bases its commercial property index on transaction prices vs. appraisal data.

The NCREIF Index was down 3.5% in Q4 2022, the first meaningful quarterly decline since 2009. The NCREIF index is based upon appraisal data which tends to be lagging and less volatile than transactionbased data. Real estate professionals expect the NCREIF Index to decline 5.3% in 2023 but rise 4.5% in 2024 and 6.4% in 2025. Office is expected to be the worst performing asset class in 2023 at -9.1% followed by industrial and apartments at -5.1% each.

However, relative to the GFC, there are several credit mitigants for lenders.

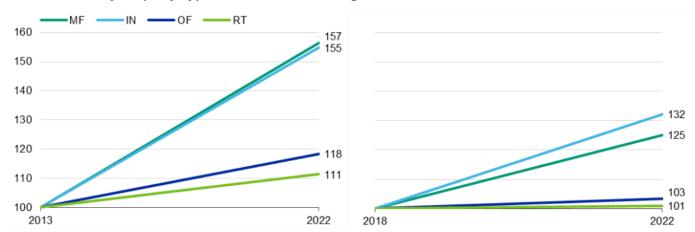
Loans were originated at lower LTVs (on average 5%-10% lower than those originated prior to the GFC).



Sources: American Council of Life Insurers, Moody's Analytics Sources: American Council of Life Insurers, Moody's Analytics

CRE Leverage and Rent Growth

Most CRE has benefitted from strong rent growth over the past several years (especially for multi-family and industrial properties). This should support higher values upon loan refinance in 2023 and 2024 despite increased cap-rates.



Rent Growth by Property Type, 2013 and 2018 through Q4 2022

Source: Moody's Analytics CREMoody's Analytics

CRE Loss Scenarios

With lower leverage levels and generally strong rent growth over the past several years, the potential risk to banks from a CRE downturn should be much lower than during the GFC.

According to Moody's, even under a draconian scenario where rents were to decline 20% from 2013-2018 levels (at the time of loan origination) and cap-rates were to expand 200bps vs. those at loan origination, asset values would fall 42%. This level of asset value decline would result in only a 2%-5% loss for lenders.

		Typical Growth Scenario	Flat Scenario	Negative Scenario	
	2013-2018 Era Terms	Post-2022 (20% rent growth since origination)	Post-2022 (no rent growth)	Post-2022 (20% rent decline, 100bps higher cap rate)	
NOI (\$ million)	10	12	10	8	
Cap Rate	5.5%	6.5%	6.5%	7.5%	
Treasury	2.0%	3.5%	3.5%	3.5%	
Spread	3.5%	3.0%	3.0%	4.0%	
Value	181.8	184.6	153.8	106.7	
Loan	109.1	109.1	109.1	109.1	
LTV	60%	59%	71%	102%	
Value Decline		1.5%	-15.4%	-41.3%	
Original Equity (\$ mil)	72.7				
Possible New Equity Required (\$	\$ mil)	-2.8	28.0	75.2	
Possible New Equity Required (%)	-3.8%	38.5%	103.3%	
Lender Recovery Rate Given De	fault	169%	141%	98%	

Refinance Scenarios of Value, LTV, New Equity and Recovery Rate Given Default

Source: Moody's Analytics

CRE Loss Scenarios

As seen in the table below, roughly \$730bln of near-term maturing CRE debt is held by banks. Of this amount, roughly \$156bln is office debt which faces the highest refinancing risk given secular challenges from post-pandemic workfrom-home dynamics coupled with rising cap-rates.

While we certainly expect office defaults to significantly increase over the next couple of years, it is unclear what level of losses lenders will ultimately experience (given the low loan-to-value ratios mentioned earlier).

Even if 20% of office loans were to default with only 80% recovery rate, the implied level of loan losses is less than \$6bln (a small fraction of banks equity).

Expected defaults and losses across other property types are substantially lower.

As such, while we expect volatile headlines as office defaults increase and certain regional and community banks may have higher levels of office loan exposure, the effect on the overall banking system should remain relatively muted and not pose a systemic threat.

As regional banks experience losses from office defaults, we expect some tightening of credit. However, we do not presently expect a massive credit crunch stemming from outsized CRE losses.

BCA believes that attractive opportunities may emerge for creative debt financing situations in certain situations for quality assets. We are researching real estate private equity and debt firms that have strong track records across opportunistic credit solutions.



Bank Loan Maturities, by Property Type, through 2024

Source: Mortgage Bankers Association, as of March 2023