Capital Markets Strategy
Essential inCights for the C-Suite

Investment Grade Credit Markets in 2024

Key Themes for the Year Ahead

JAN 2024

Bond Returns Turned Positive in 2023

We expect positive total returns for investment grade bonds, once again, in 2024

Annual relative total returns, USD markets

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
S&P 500 32.4%	S&P 500 13.7%	Munis 3.6%	High Yield 17.5%	S&P 500 22.3%	Munis 1.0%	S&P 500 31.5%	S&P 500 18.4%	S&P 500 28.7%	Loans (-0.6%)	**S&P 500 26.3%**
High Yield 7.4%	Munis 9.8%	Mortgages 1.5%	S&P 500 12.0%	EM Sov 10.0%	Mortgages 1.0%	High Yield 14.4%	High Grade 9.8%	Loans 5.4%	Munis (-9.0%)	**Loans 13.7%**
Loans 5.4%	High Grade 7.5%	S&P 500 1.4%	Loans 10.4%	High Yield 7.5%	US Gov't 0.8%	EM Sov 14.3%	US Gov't 8.2%	High Yield 5.4%	High Yield (-11.2%)	**High Yield 13.4%**
Mortgages (-1.4%)	EM Sov 7.3%	US Gov't 0.8%	EM Sov 9.5%	High Grade 6.5%	Loans 0.6%	High Grade 14.2%	High Yield 6.2%	Munis 1.8%	Mortgages (-11.9%)	**EM Sov 13.2%**
High Grade (-1.5%)	Mortgages 6.1%	EM Sov 0.6%	High Grade 6.0%	Munis 5.4%	High Grade (-2.2%)	Loans 8.7%	Munis 5.3%	High Grade (-1.0%)	US Gov't (-12.9%)	**High Grade 8.4%**
Munis (-2.9%)	US Gov't 6.0%	Loans 0.1%	Mortgages 1.7%	Loans 4.6%	High Yield (-2.3%)	Munis 7.7%	EM Sov 4.8%	Mortgages (-1.2%)	High Grade (-15.4%)	**Munis 6.5%**
US Gov't (-3.3%)	High Yield 2.%	High Grade (-0.6%)	US Gov't 1.1%	Mortgages 2.4%	S&P 500 (4.4%)	US Gov't 7.0%	Mortgages 4.1%	US Gov't (-2.4%)	S&P 500 (-18.1%)	**Mortgages 5.0%**
EM Sov (-5.8%)	Loans 1.8%	High Yield (-4.6%)	Munis 0.4%	US Gov't 2.4%	EM Sov (-4.6%)	Mortgages 6.5%	Loans 3.5%	EM Sov (-2.6%)	EM Sov (-18.3%)	**US Gov't 3.9%**

Source: (1) CreditSights. Bloomberg. Data as of December 31, 2023. BAML, S&P LSTA. Bloomberg EM Sov is USD EM Sovereign BBB & lower index.

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GCIB Capital Markets Strategy

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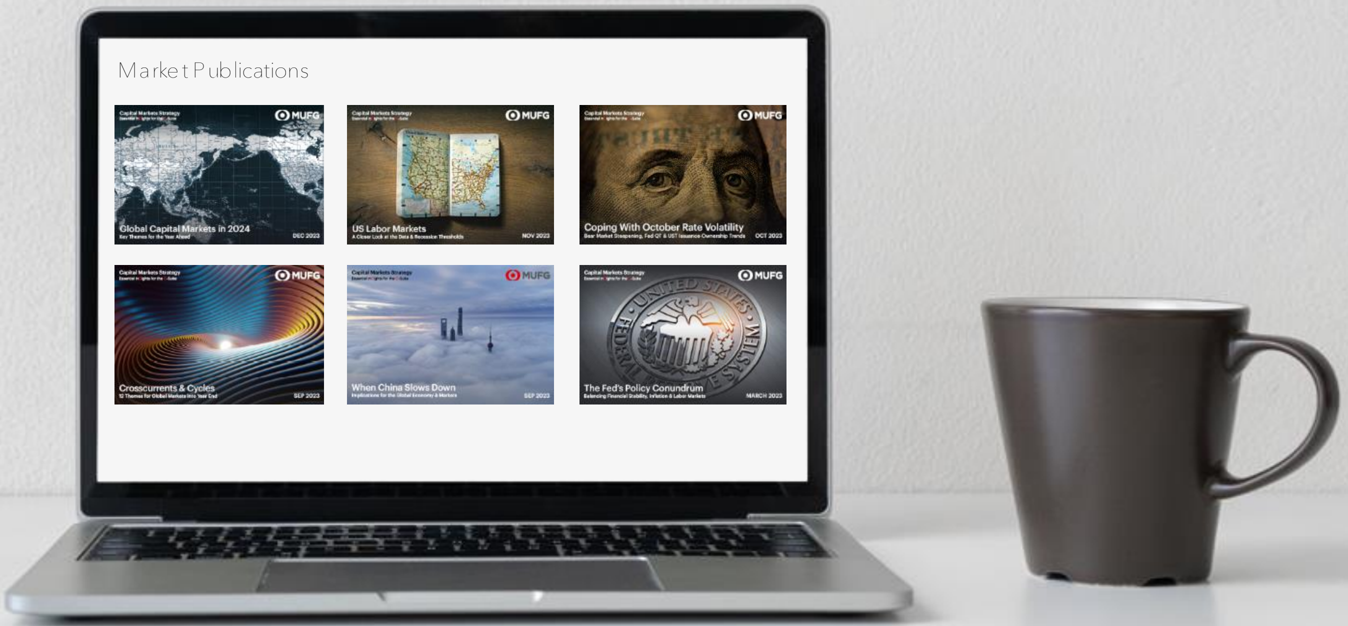

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2024 Global Market Themes

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5. US economy "still" late cycle
6. Inflation normalizing
7. Resilient USD credit markets
8. Neutral to bullish energy prices
9. Dollar depreciation
10. Higher deal activity (M&A, financing)

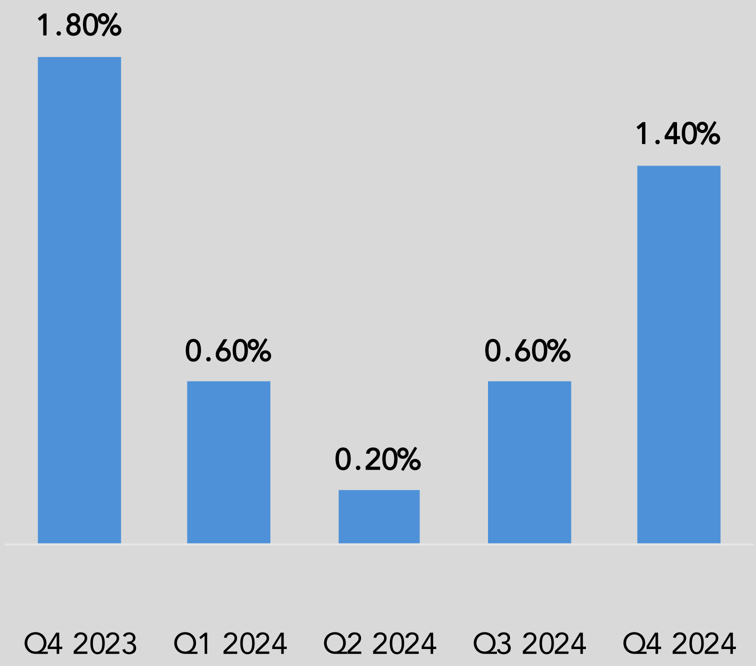
2024 USD Credit Market Themes

1. Cyclically bullish bond yields
2. US debt & deficit-induced rate volatility
3. Moderately bearish credit spreads
4. Fed easing driving higher fund flows to IG corporate credit
5. 2024-25 maturity wall driving new issue volumes
6. Global M&A to rebound from 2023 lows
7. Increased differentiation by industry sector (recession resilience)
8. Increased differentiation by credit quality (balance sheet, ratings)
9. Expanding pockets of weakness (CRE, retail, consumer)
10. "Longer but lower" default cycle

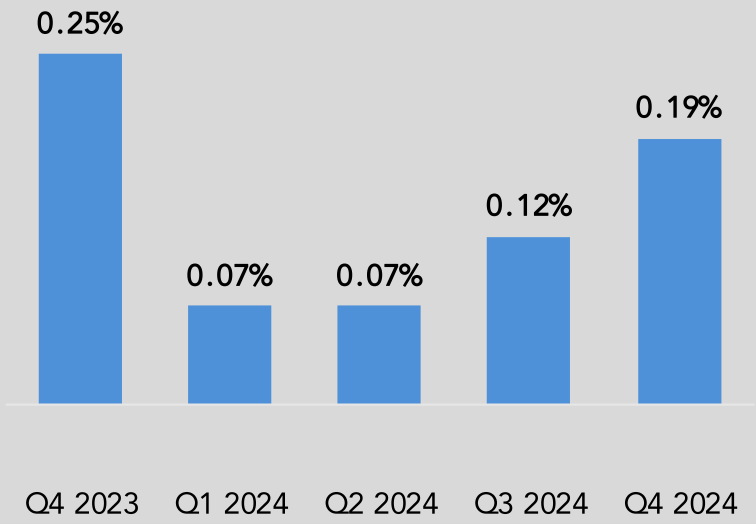
US Deceleration & Recovery

While the US economy and consumer were far more resilient in 2023 than anticipated, dozens of economic and market metrics point to a 2024 slowdown. Given the pace of Fed tightening, impact of depleting savings and inflation on the consumer, and tighter bank lending standards, the US and global economy are poised to decelerate in 2024.

US GDP, Q/Q Annualized



US GDP, Q/Q

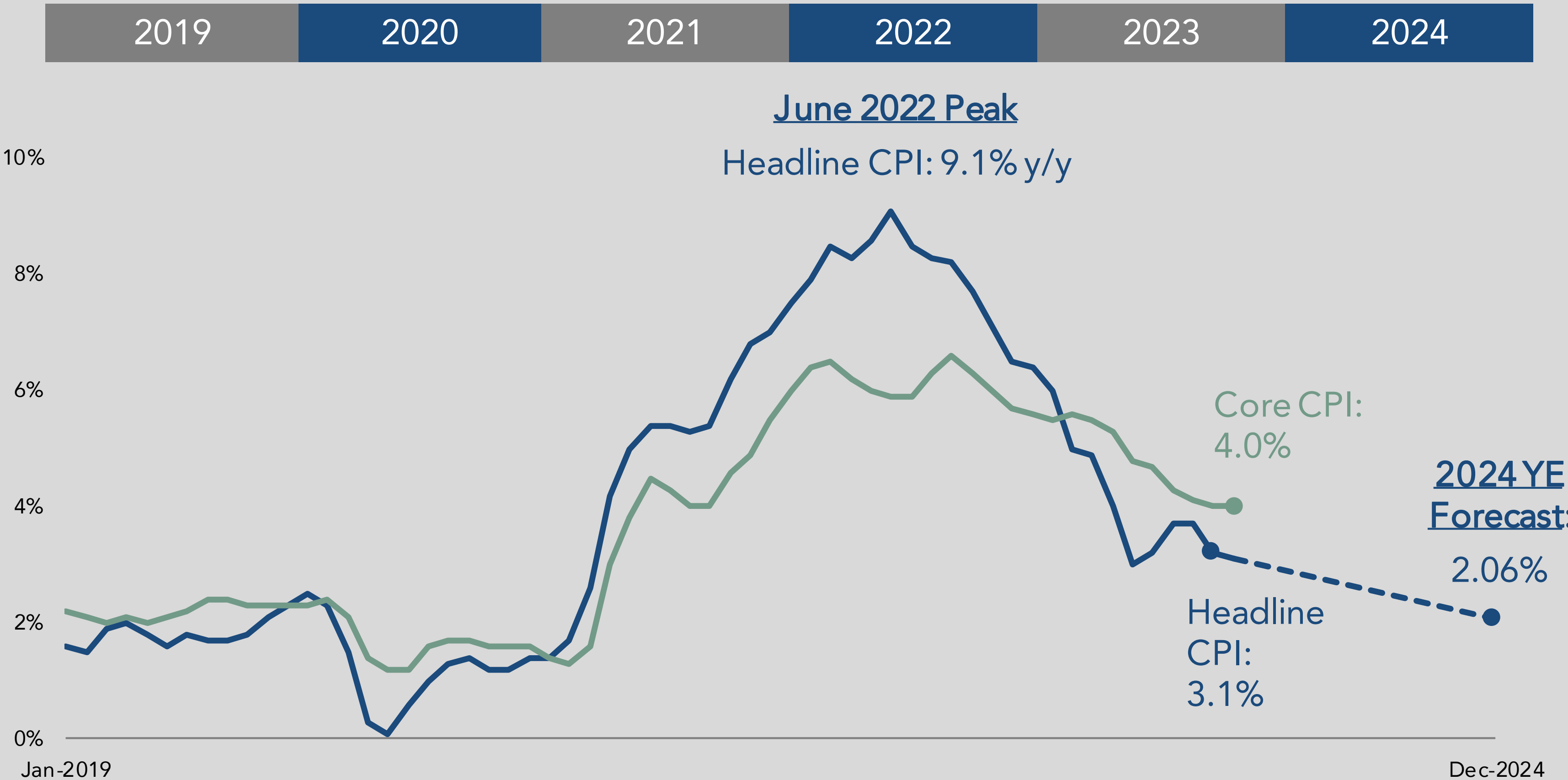


Source: (1) Q/Q annualized forecasts are Bloomberg Consensus SAAR. US GDP Q/Q is Oxford Economics. Data as of December 31, 2023.

Inflation Normalizing

Due largely to COVID related imbalances (excess stimulus & savings, consumer behavior changes, supply chain bottlenecks), inflation rose to 40 year highs in 2022-23. Looking ahead to 2024, one year-breakevens suggest that markets believe inflation will drop close to the Fed's 2% target by year-end. Fed forecasts for PCE inflation, by comparison, are slightly less benign at 2.4% by year-end 2024.

US headline and core CPI, y/y



Source: (1) Bloomberg. Data as of December 31, 2023. 2024 forecast is US 1 year breakeven rate.

G10 Monetary Tightening Cycle Nearly Complete

As we enter 2024, the G10 tightening cycle of 2022-23 is complete, with most central banks expected to pivot toward a synchronized easing of policy in 2024.

G10 Central Bank policy rate decisions in 2023

Central Banks	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Fed		Hike	Hike		Hike	Pause	Hike		Pause		Pause	Pause
ECB		Hike	Hike		Hike	Hike	Hike		Hike	Pause		Pause
BOJ	Pause		Pause	Pause		Pause	Pause		Pause	Pause		Pause
BOE		Hike	Hike		Hike	Hike		Hike	Pause		Pause	Pause
BOC	Hike		Pause	Pause		Hike	Hike		Pause	Pause	Pause	
RBA		Hike	Hike	Pause	Hike	Hike	Pause	Pause	Pause	Pause	Hike	Pause
SNB			Hike			Hike			Pause			Pause
Riksbank		Hike		Hike		Hike			Hike		Pause	
Norges Bank	Pause		Hike		Hike	Hike		Hike	Hike		Pause	Hike
RBNZ		Hike		Hike	Hike		Pause	Pause		Pause	Pause	

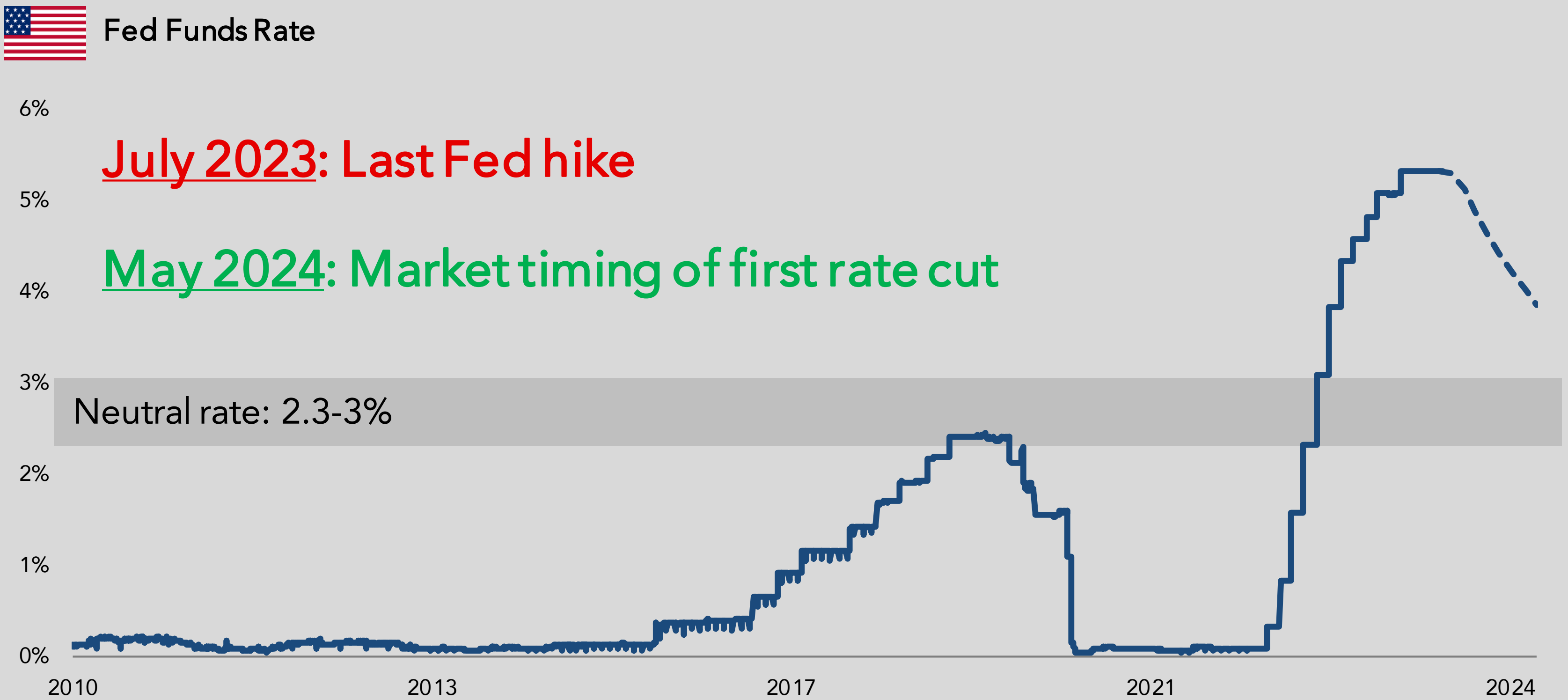
No meeting

Most G10 Central Banks paused in Q4 2023

Source: (1) Bloomberg. Data as of December 31, 2023.

Fed Pivot To Monetary Easing in 2024

While the Fed is forecasting three rate cuts (75 bps) in 2024, the market is currently expecting easing in 2024 at over double the pace (~150 bps). The Fed has indicated that it plans to continue its balance sheet reduction program in 2024 (QT), even as easing commences.



As the Fed pivots toward easing by mid-year, look for lower UST yields to drive a higher pace of fund flows into corporate credit

Source: (1) Bloomberg. Data as of December 31, 2023.

Markets During Fed Easing Cycles

Looking at monetary easing cycles since 1980, the Fed has historically begun its next easing cycle approximately 7 months after its last rate increase. Though subject to "corrections" if the economy dips into recession, markets generally perform well during easing cycles, with the 10 year UST rallying an average of 90 bps and equities up +16% in the 12 months immediately following the last Fed rate hike.

Federal Reserve Easing Cycles Since 1980

				Performance in the 12 months following the end of Fed tightening cycle	
Date of Last Rate Hike	Time Between Last Rate Hike & First Rate Cut	Total Rate Cuts in 12 months After Last Rate Hike	Total Rate Cuts Over Entire Easing Cycle	10 Year UST	S&P 500
1981	5 months	200 bps	550 bps	+47 bps	(-16%)
1984	6 months	119 bps	350 bps	(-154 bps)	+10%
1989	3 months	150 bps	675 bps	(-84 bps)	+13%
1995	5 months	75 bps	75 bps	(-206 bps)	+36%
1997	18 months	0 bps	75 bps	(-113 bps)	+40%
2000	8 months	250 bps	550 bps	(-98 bps)	(-12%)
2006	15 months	0 bps	500 bps	(-17 bps)	+18%
2018	7 months	75 bps	225 bps	(-83 bps)	+28%
Median	**7 months**	**97 bps**	**425 bps**	**(-91 bps)**	**+16%**

Source: (1) Bloomberg. Fred Economic Data St. Louis Fed. Note: Discount rate used before 1988. Fed Fund based on upper bound.

Summary Conclusions for 2024

Global Economy in 2024	
Global GDP growth	↓
Global inflation	↓
US GDP growth	↓
US inflation	↓
US unemployment	↑
China GDP growth	↓
Japan GDP growth	↓
EU GDP growth	↓
India GDP growth	↓
Global trade volumes	↑

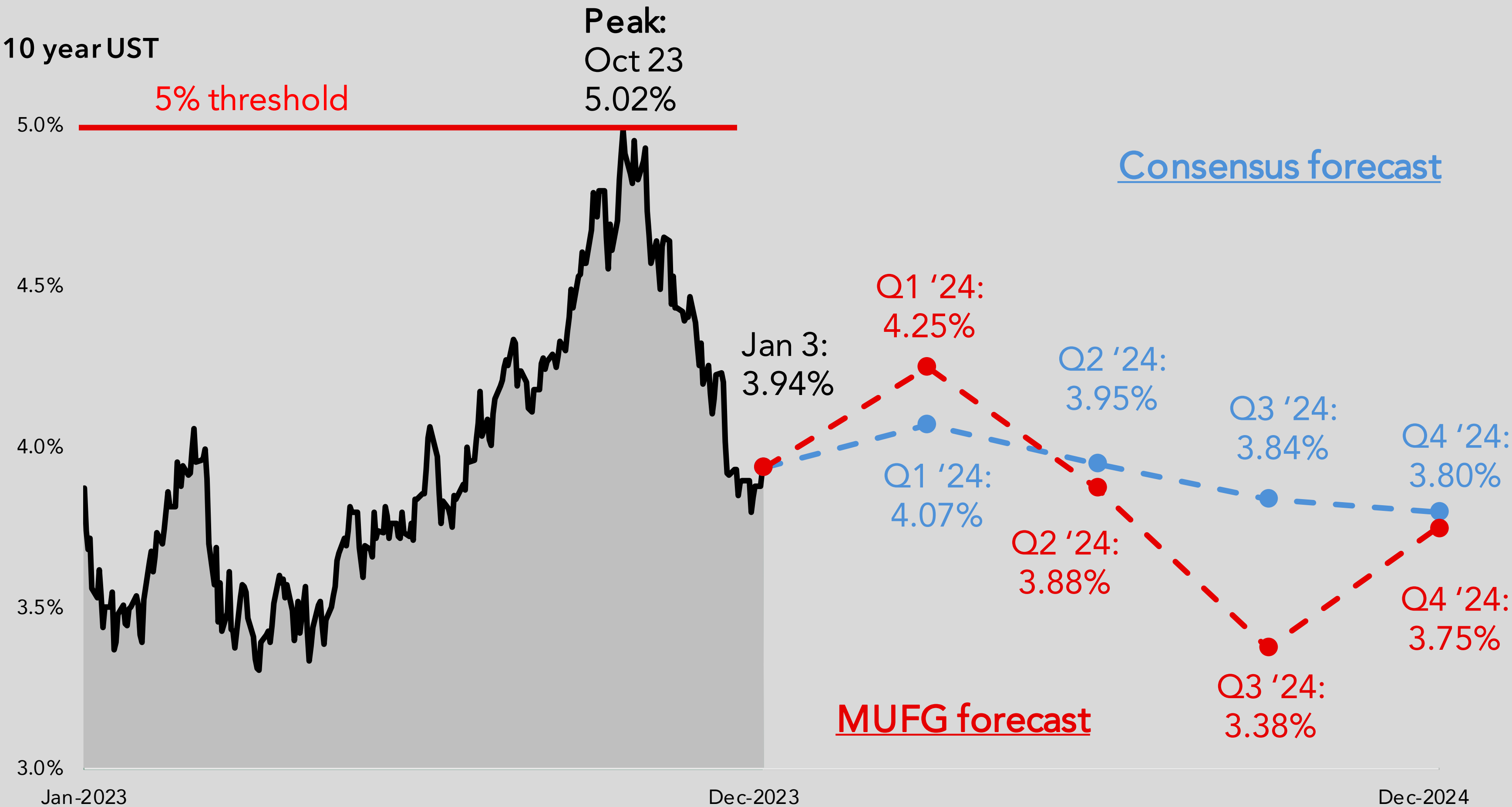
Earnings & Deal Activity in 2024	
S&P 500 earnings	↑
Global M&A volumes	↑
USD IG issuance	↑
USD HY issuance	↑
Equity & IPO volumes	↑

Global Markets in 2024	
UST rates	↓
IG credit spreads	↑
HY credit spreads	↑
US Dollar	↓
Oil prices	↓ ↑

2 Expectations for US Rates & Credit Spreads

Cyclically Bullish UST Yields

MUFG's US Rates Strategist George Goncalves is forecasting 10 year UST yields below consensus forecasts in 2024. Following a sell-off in Q1, MUFG expects rates to resume their rally to new cycle lows by Q3 2024.



Source: (1) Bloomberg. Data as of January 3, 2023. MUFG (George Goncalves).

Moderately Bearish Corporate Credit Spreads

A rising chorus of Wall Street consensus, including CreditSights research, remains optimistic around a "soft landing" in 2024. Due to the lagging impact of an historic Fed tightening cycle, and a weakening consumer, MUFG's Macro Strategy team and credit desk analysts believe a "bumpy" landing and "mild" US recession is more likely. While our base case scenario for USD IG and HY spreads point to modest widening in 2024, MUFG's outlook for corporate credit spreads remains very constructive by the standards of US recessions historically.

Scenario analysis for 2024 credit spreads

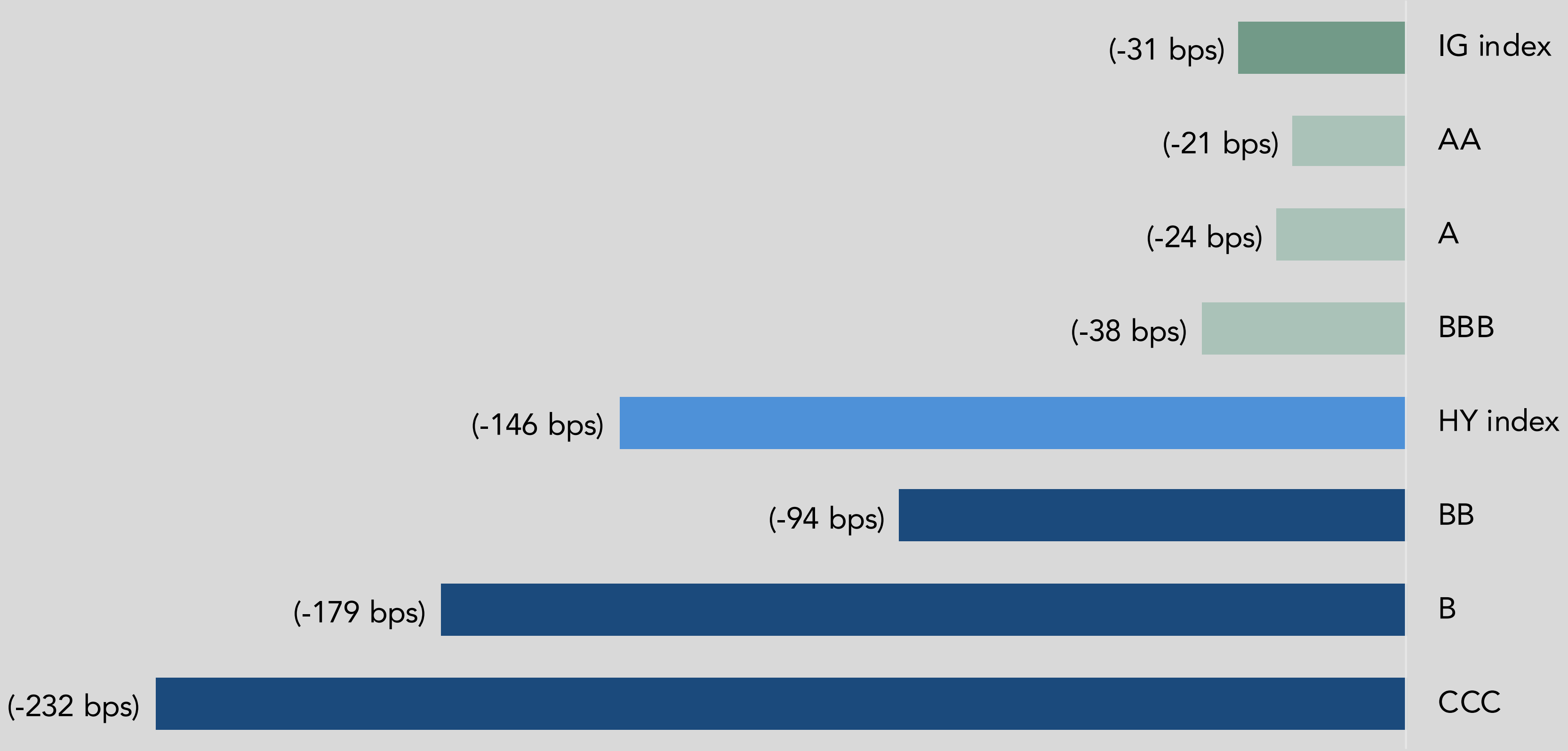
		Spot (Dec 31)	Soft Landing	Mild Recession/ Stagflation	Hard Landing
IG Index	MUFG	99 bps *(Bloomberg OAS)*	85 - 120 bps	**95 - 140 bps** *Base case*	100 - 180 bps
IG Index	CreditSights	104 bps *(ICE BofA OAS)*	**100 bps** *Base case*	150 bps	200 bps
HY Index	MUFG	323 bps *(Bloomberg OAS)*	315 - 415 bps	**340 - 490 bps** *Base case*	340 - 640 bps
HY Index	CreditSights	339 bps *(ICE BofA OAS)*	**350 bps** *Base case*	500 bps	750 bps

Source: (1) George Goncalves (Head of MUFG US Macro Strategy), Andrew Myers & Bill Matthews (MUFG credit desk analysts), Glenn Schultz (MUFG quant analytics team). CreditSights, "US IG & Crossover 2024 Outlook: Hurry Up & Wait." Bloomberg. Data as of December 31, 2023.

USD Credit Spreads Currently Not Pricing Recession

USD credit spreads are currently not pricing a recession, tightening sharply on the year vs. consensus expectations at the beginning of the year for widening. In 2023, IG and HY spreads had tightened ~30 bps and ~145 bps YTD, respectively.

Change in spreads (2023)

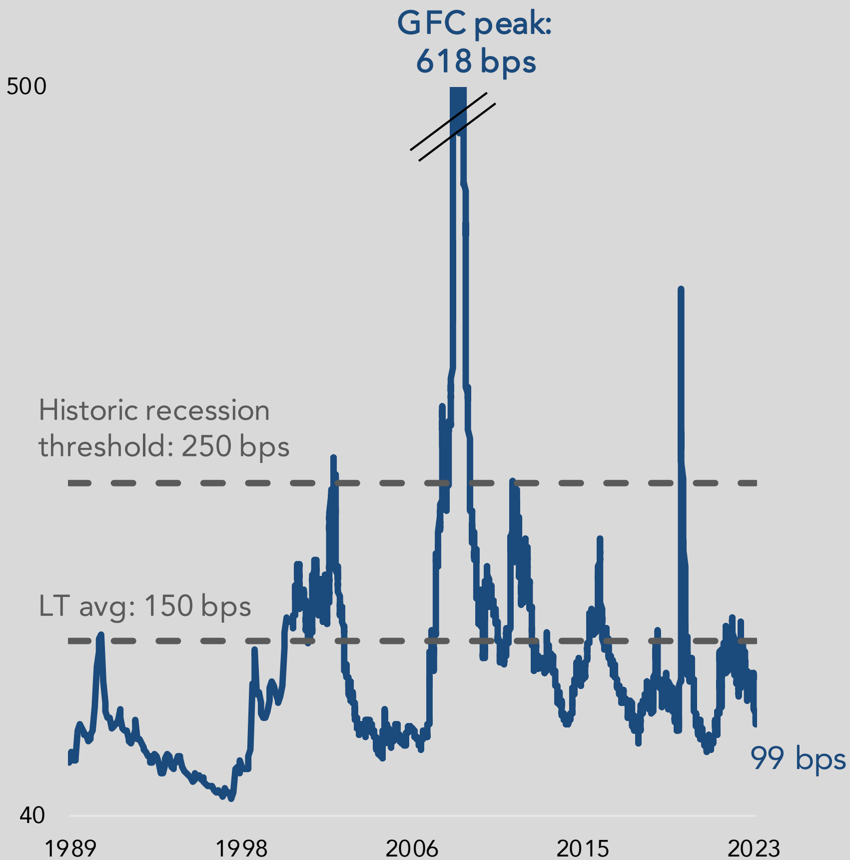


Source: (1) Bloomberg. Data as of December 31, 2023.

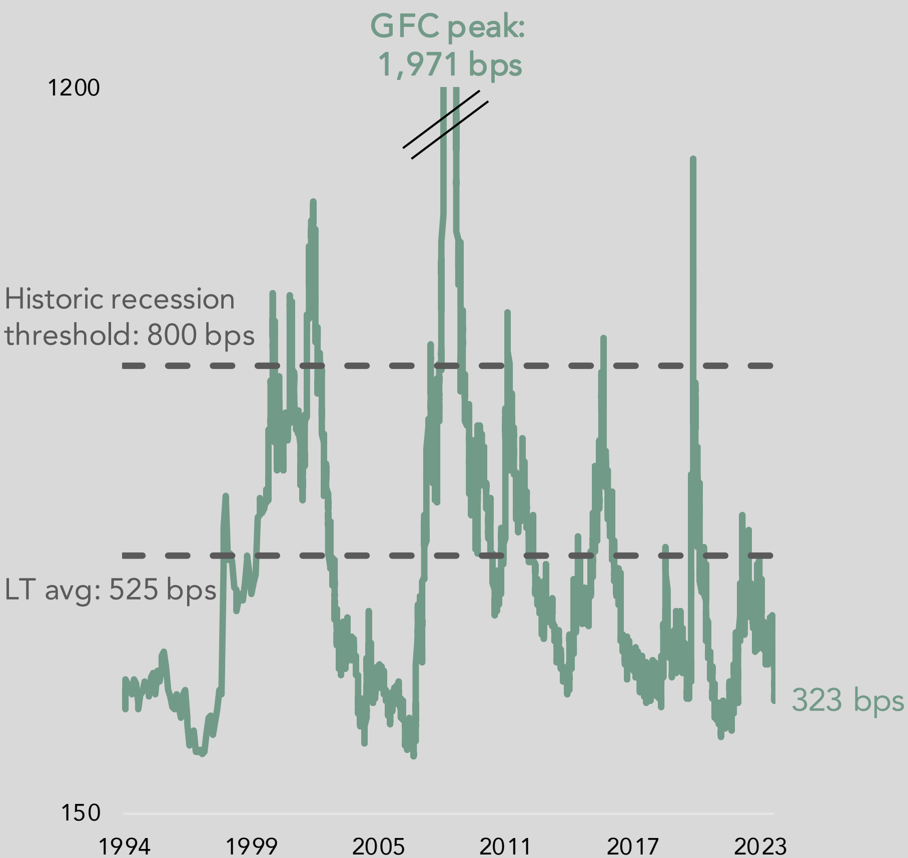
IG and HY Credit Spreads Below LT Average

Despite Fed tightening, bank sector stress, and concerns over economic slowdown, IG and HY spreads tightened sharply in 2023 (contrary to consensus expectations for widening one year ago), and are currently trading below long-term averages.

USD IG OAS



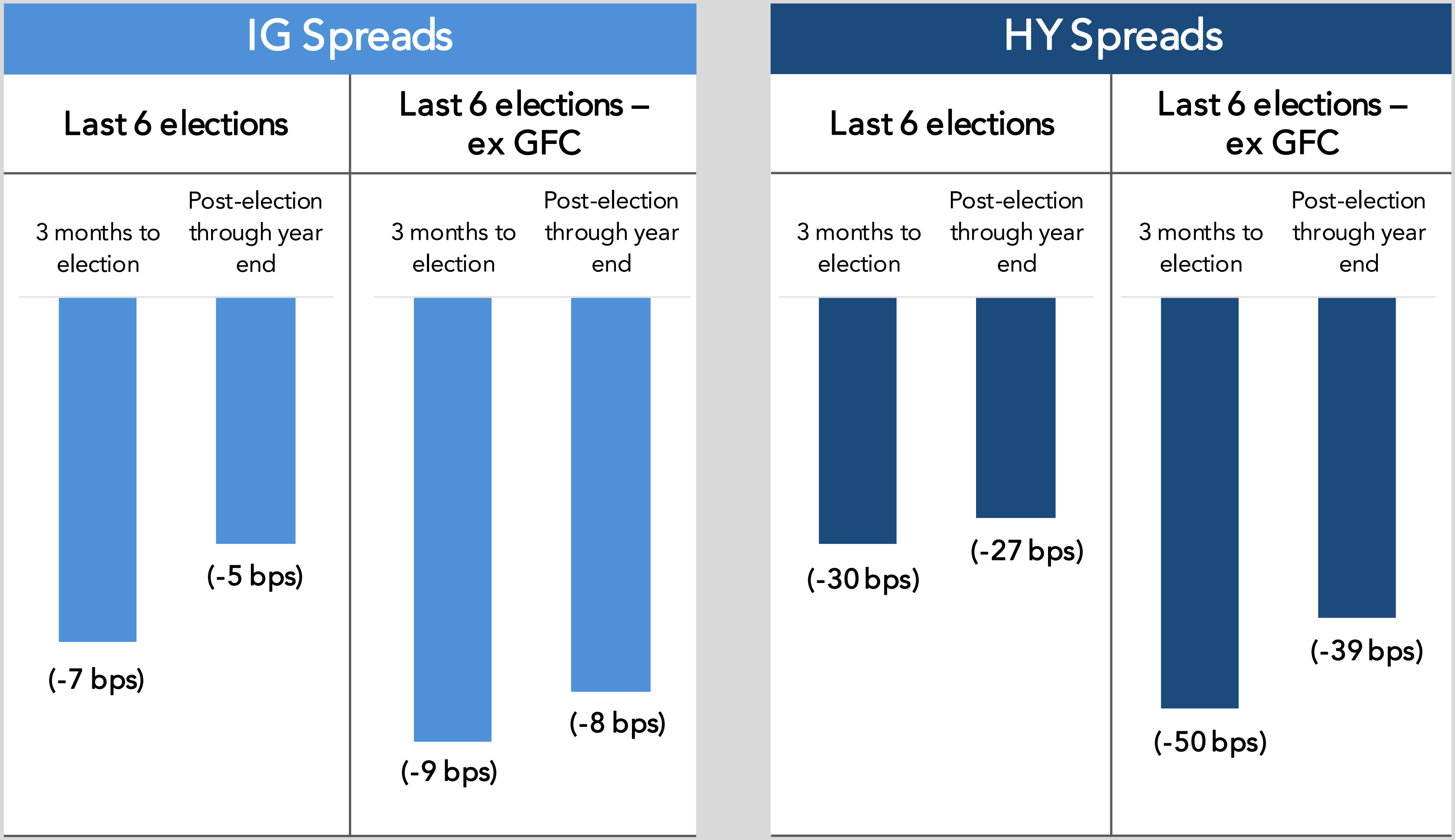
USD HY OAS



Source: (1-2) Bloomberg. Data as of December 31, 2023.

Credit Spreads & US Elections

Looking back at the last six elections, there is not a clearly discernible pattern pre and post US Presidential elections. Rather, credit spreads are driven more by economic conditions and the credit cycle than by Washington.



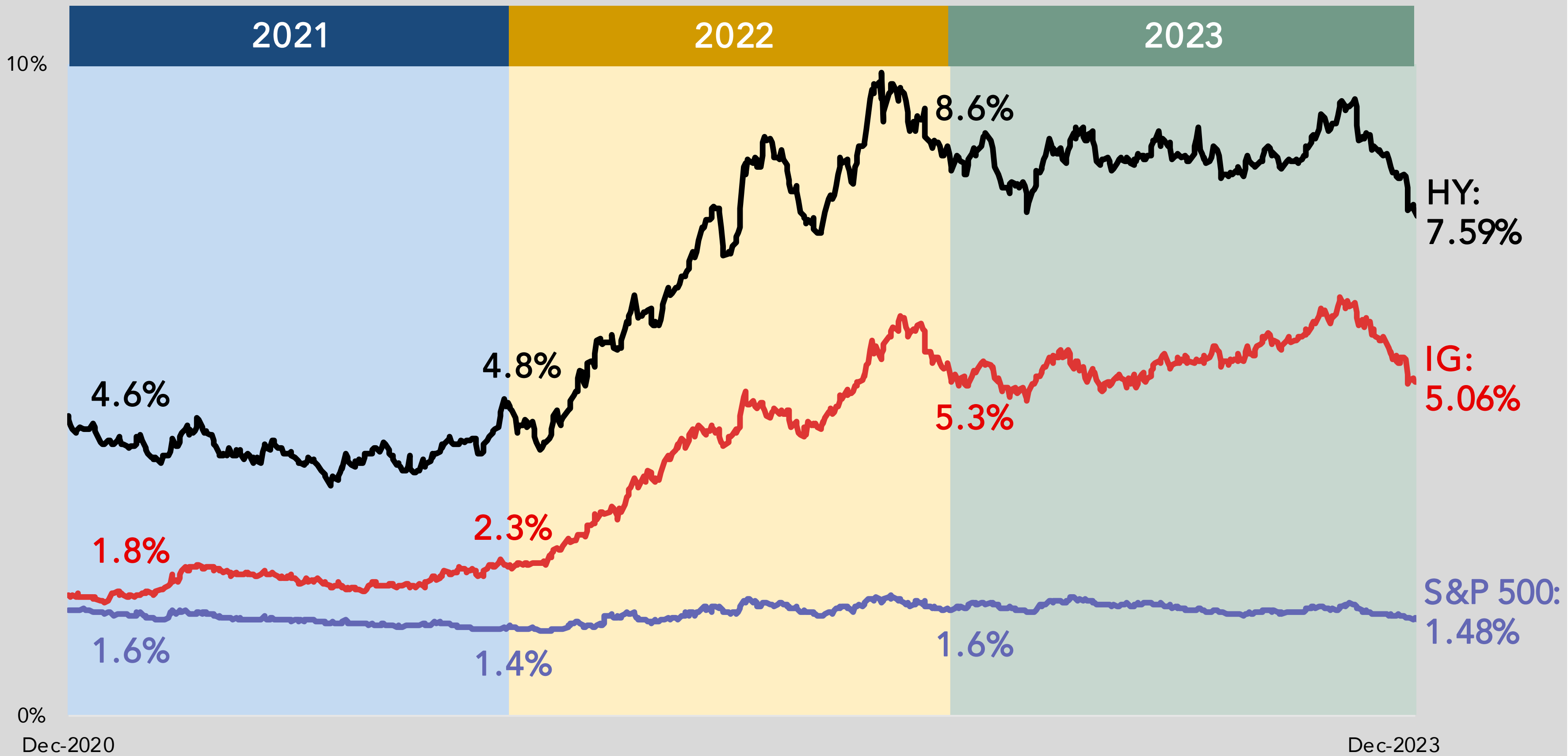
Source: (1-2) CreditSights, "US IG & Leveraged Finance 2024 Outlook." Spreads based on ICE BofA index OAS.

3 Favorable Technical Backdrop for Issuance

Attractive Entry Point for High Quality Credit

Corporate bond yields above 5% today remain meaningfully more attractive than the 5 year average below 3.5%, and stand well above the current earnings yield for stocks. As the Fed pivots toward easing by mid-year, look for lower UST yields to drive a higher pace of fund flows into corporate credit. As we enter 2024, we expect a stronger reallocation into corporate credit as the year progresses.

USD IG & HY index yield to worst and S&P 500 dividend yield



Source: (1) Bloomberg. Data through December 31, 2023.

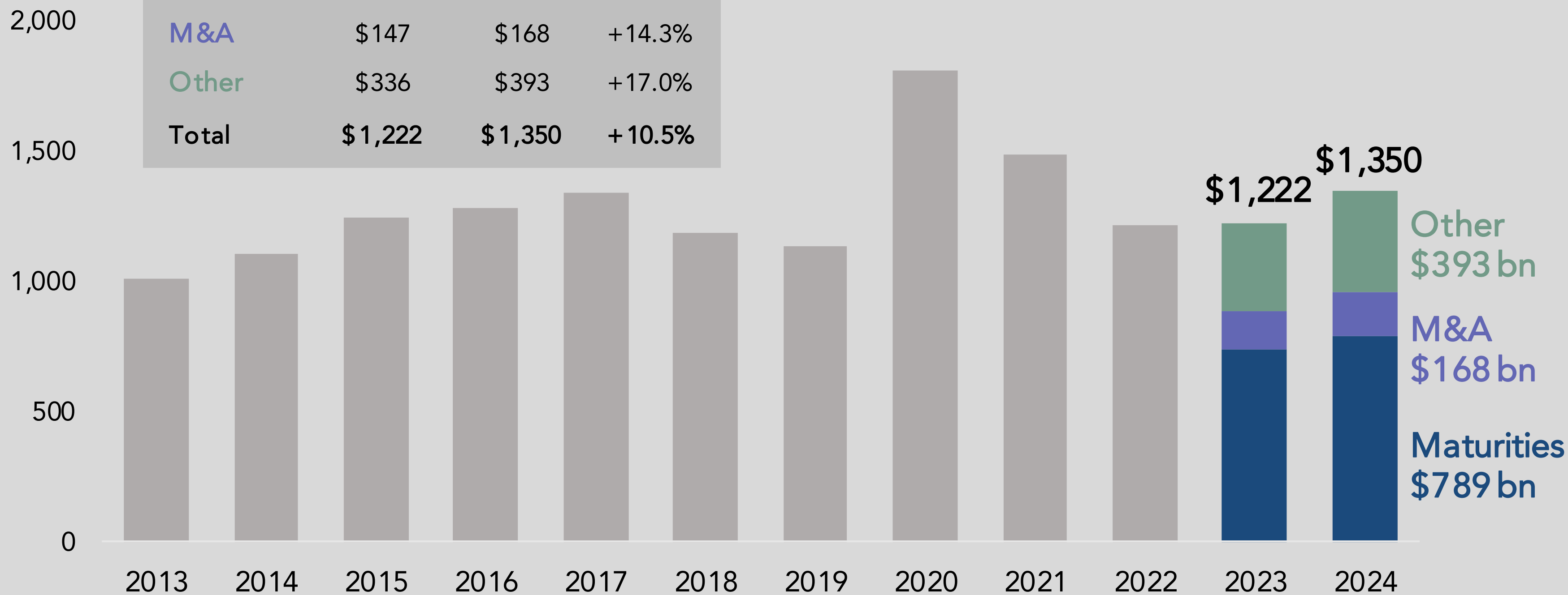
2024 IG Issuance Should Increase 10%

MUFG expects a 10% uptick in 2024 volumes, relative to 2023. A more stable rate environment, better business confidence and pent-up demand are likely to drive marginally higher M&A financing volumes. While the 2024 maturity wall is manageable, expect corporates to opportunistically pre-finance large maturities in 2025 and 2026.

Investment grade issuance, USD bn

2024 IG Forecasts

	2023	2024	
Maturities	$739	$789	+6.8%
M&A	$147	$168	+14.3%
Other	$336	$393	+17.0%
Total	**$1,222**	**$1,350**	**+10.5%**

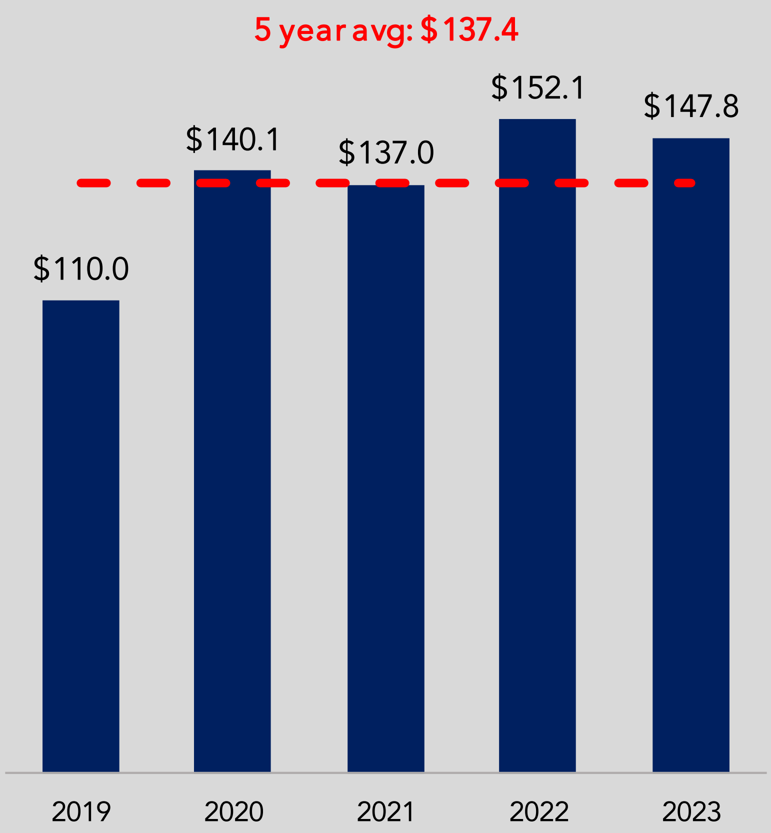


Source: (1) Bloomberg. Data as of December 31, 2023. MUFG.

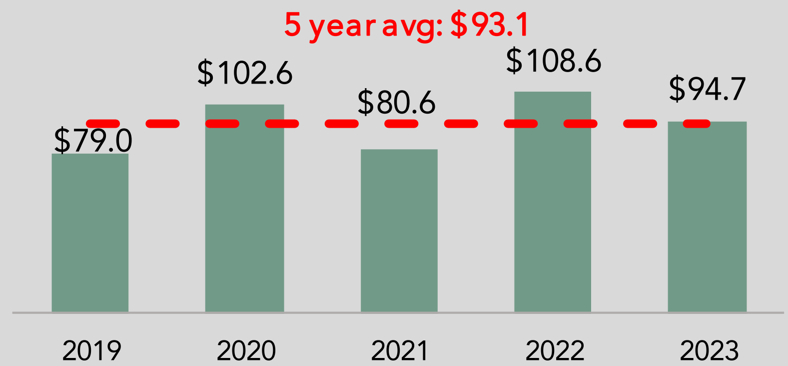
The Pre MLK January Financing Onslaught

Over the last five years, January issuance in the USD investment grade market has averaged $137 billion. Over the last two years, the January average has been closer to $150 billion. Of that monthly total, an average of $93 billion, or 68%, has been issued in the first two weeks of January, prior to the MLK holiday weekend.

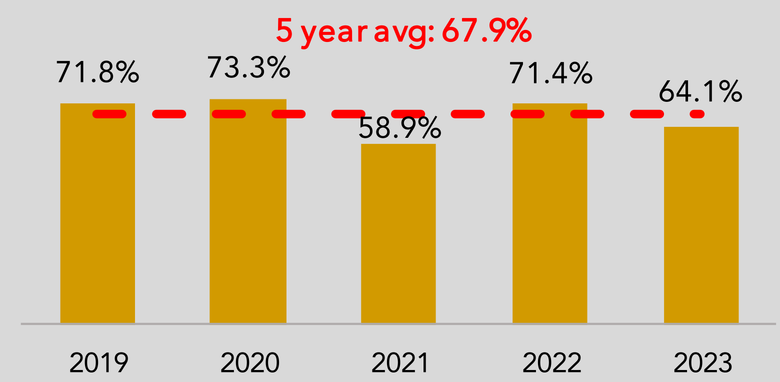
IG bond issuance in full month of January, USD bn



IG bond issuance in 1H of January (Pre-MLK Holiday), USD bn



Pre MLK January issuance as % of January total issuance

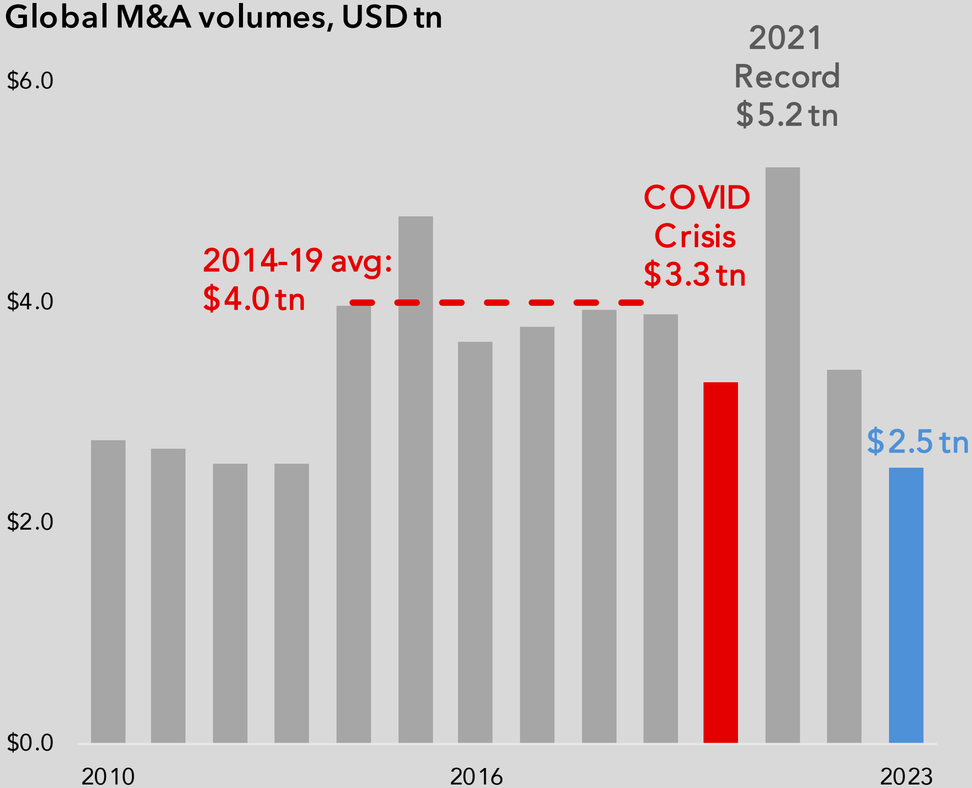


Source: (1-3) Credit Flow Research (CFR). Data as of December 31, 2023.

Modest Global M&A Recovery in 2024

Global M&A volumes in 2023 slowed to the lowest levels in more than a decade ($2.5 trillion), less than half the record volumes of just two years ago. Key contributors to the decline included access and cost of capital, as well as a challenging regulatory environment. Even with rising recession risk in 2024, we expect global M&A volumes to improve in anticipation of the recovery, though not likely to the level of deal activity in the five years preceding COVID.

Global M&A volumes, USD tn

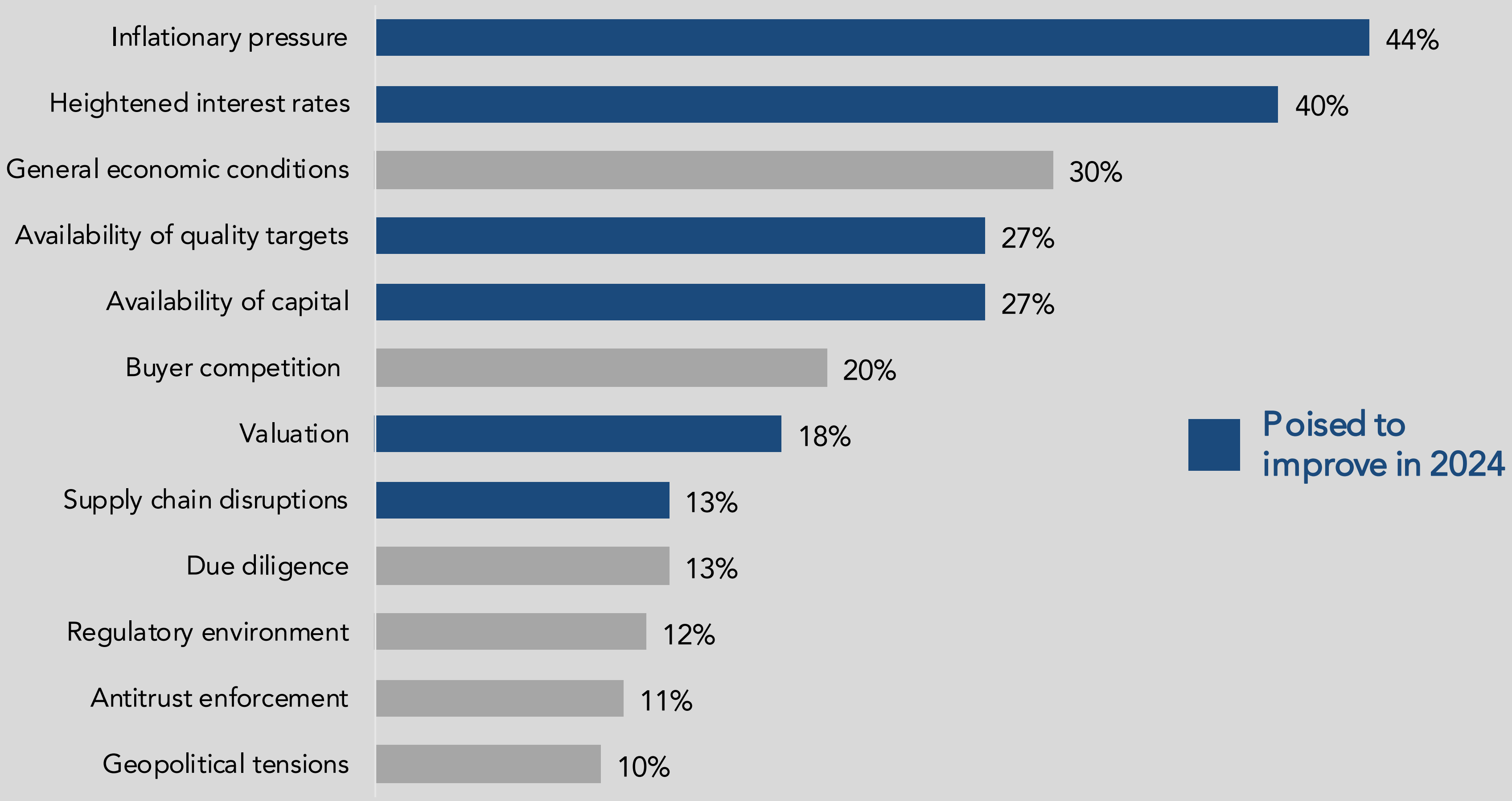


Catalysts for 2024 Deal Activity
• Moderating inflation; lower rates
• Earnings recovery; equity market strength
• Resilience & depth of IG financing markets
• Generate growth > organic alternatives
• Strong, cash-rich balance sheets
• Record PE dry powder ($2.5 trillion)
• Converging buyer / seller price expectations
• Access to technology, innovation (digital, AI, fintech)
• Higher energy prices; energy transition; infrastructure
• Pent up demand following low 2023 M&A

Source: (1) Bloomberg. Data as December 31, 2023. Institute for Mergers, Acquisitions & Alliances. 2023 data through November 30, 2023. SP Global "End of rate hikes can trigger M&A turnaround". PWC "US Deals 2024 Outlook".

Dampened 2023 M&A Should Rebound in 2024

Question: Which of the following were the top obstacles to M&A over the past 12 months?

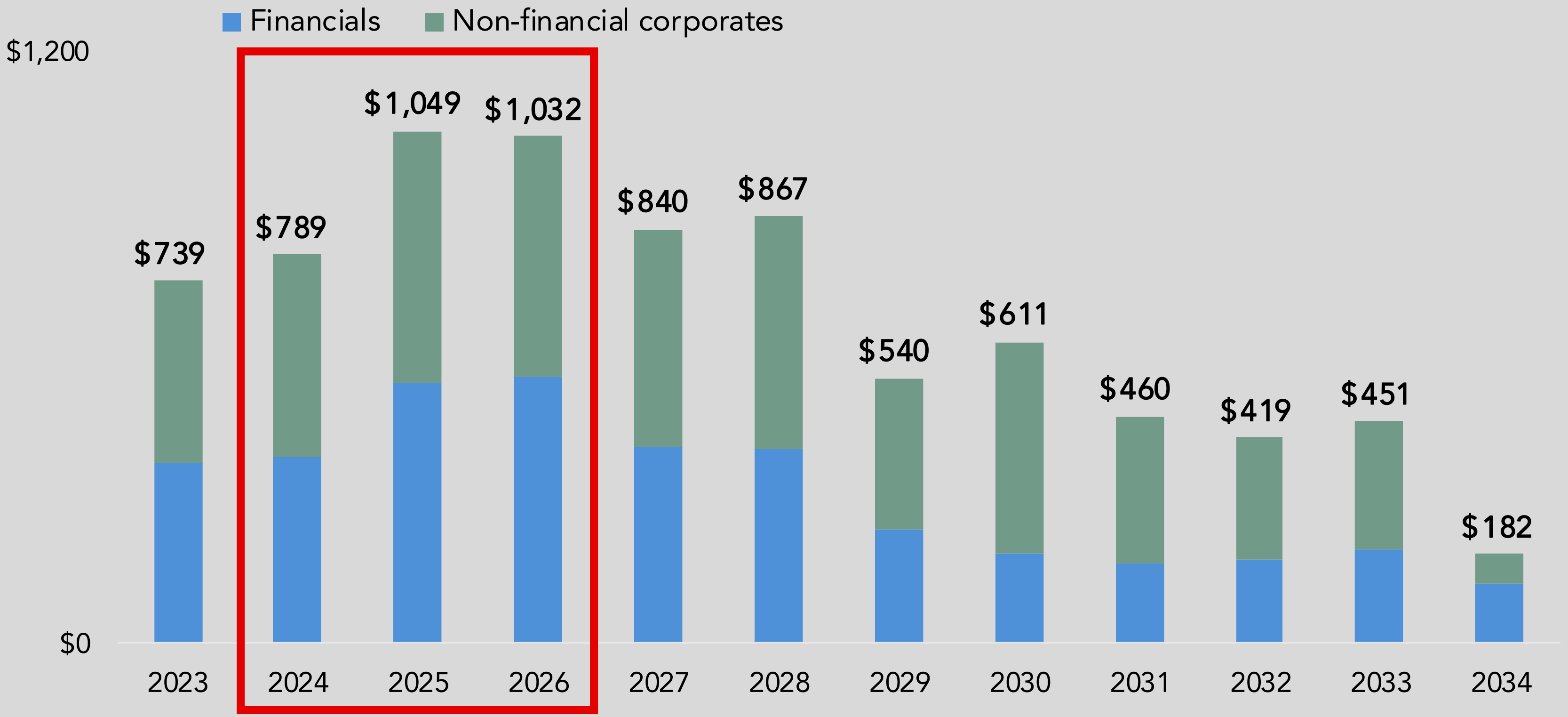


Source: (1) Dykema, "M&A 19th Annual Mergers & Acquisitions Outlook Survey." 2023 Gossett PLLC. Survey of group of 263 CEOs, CFOs, and other senior company officers and executives, as well as professional advisors engaged in the M&A industry. Represents a cross section of executives and M&A advisors engaged in more than a doze sectors representing companies with annual revenues from less than $1 million to more than $1 billion.

Elevated Maturity Wall Will Drive 2024 Issuance

US investment grade issuers have roughly $790 bn of maturities coming due in 2024, +7% from 2023's roughly $740 bn. While 48% of 2024 maturities are in the financial sector, over $120 bn of maturities are coming due in the consumer sector (including the highly rate-sensitive auto sector). Beyond 2024, US IG corporates face a formidable $1 tn of refinancing needs in both 2025 and 2026. Look for corporates to opportunistically pull forward issuance into 2024.

IG maturity profile, USD bn

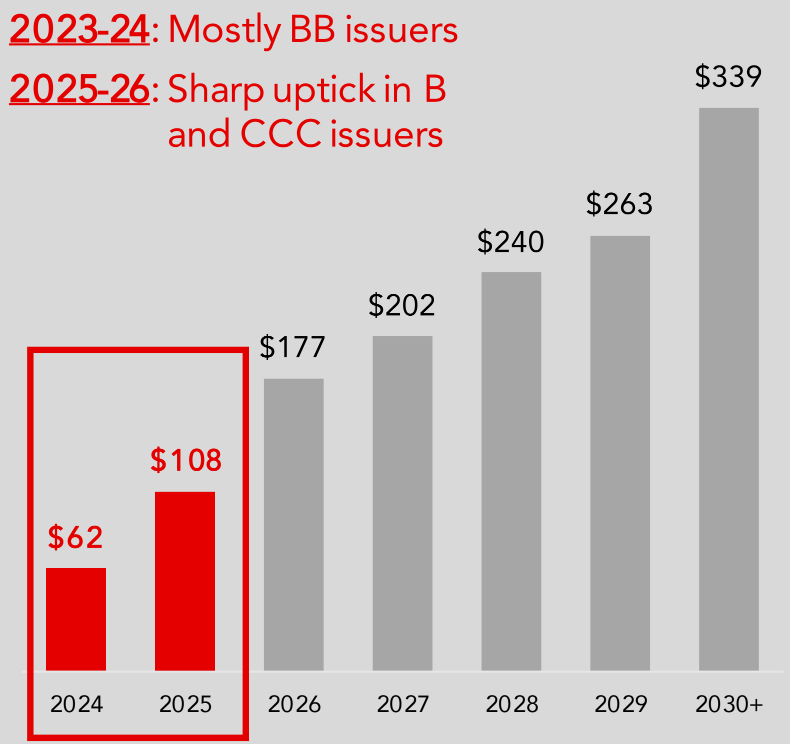


Source: (1) Bloomberg.

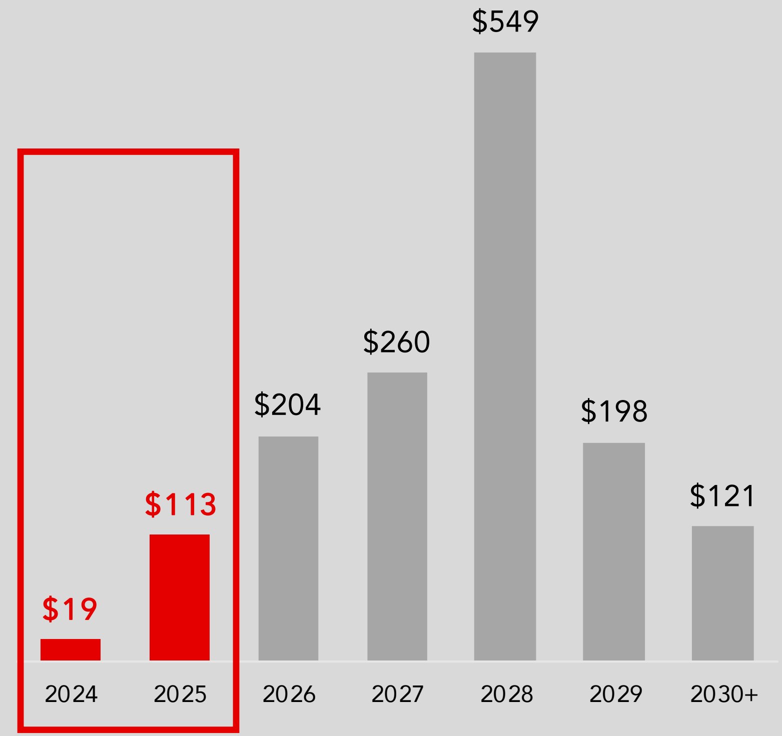
HY Maturity Wall Looms Larger in 2025

Over the last two years, the average duration on high yield bonds has dropped precipitously. Today, the "life to maturity" for the USD high yield index is at multi-decade lows. While the 2024 maturity wall is relatively low and composed mostly of BB issuers, the 2025 and 2026 composition is more challenging. A study by LPL Research highlights nearly 30% of debt issued by CCC-rated companies is coming due in the next few years. More challenged issuers may look to the private credit market to fund maturities up to 18 months out.

HY maturity profile, USD bn



Leveraged loan maturity profile, USD bn

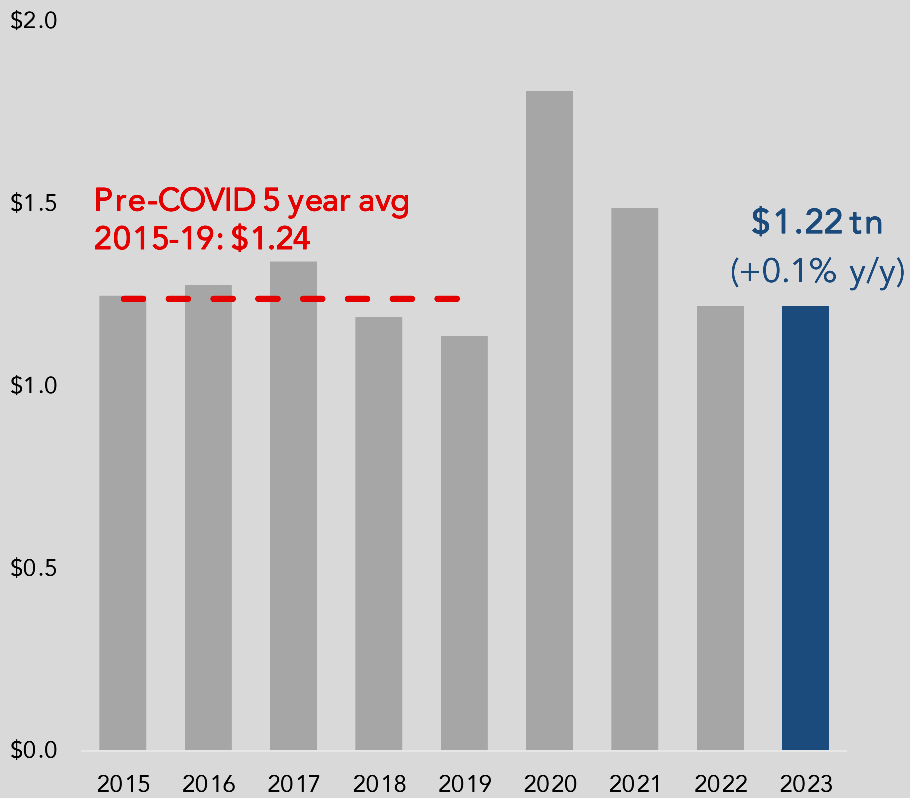


Source: (1-2) CreditSights, "US HY New Issues for '23 and a First Look at '24." LPL Research "Rating Downgrades are Picking Up: What That Means for Corporate Bonds".

Notable Milestones in 2023 IG Issuance

Despite notable macro headwinds (bank sector, inflation, rate volatility, Gaza), 2023 was the 6th largest USD IG issuance year on record, and in-line with the pre-COVID 5 year average. While lackluster M&A volumes and bank sector stress dampened the pace of issuance, the year began with record Jan-Feb volumes, and the 2H finished above expectations.

USD IG new issue, tn



Notable Milestones in 2023 IG Issuance

- 6th largest issuance year on record
- 6 months with volumes >$100 bn
- 786 deals priced
- Record January – February issuance ($299bn)
- 2H 2024 issuance > expectations
- Latest issuance finish (Dec 18) since 2016
- 26 non-Friday zero-issuance days

Source: (1) CFR, CreditSights, IFR. Zero-issuance days are CFR "goose egg" days which are defined as zero issuance days up until the December FOMC decision das. A zero Fed Day only counts as a goose if issuance takes place after that day.

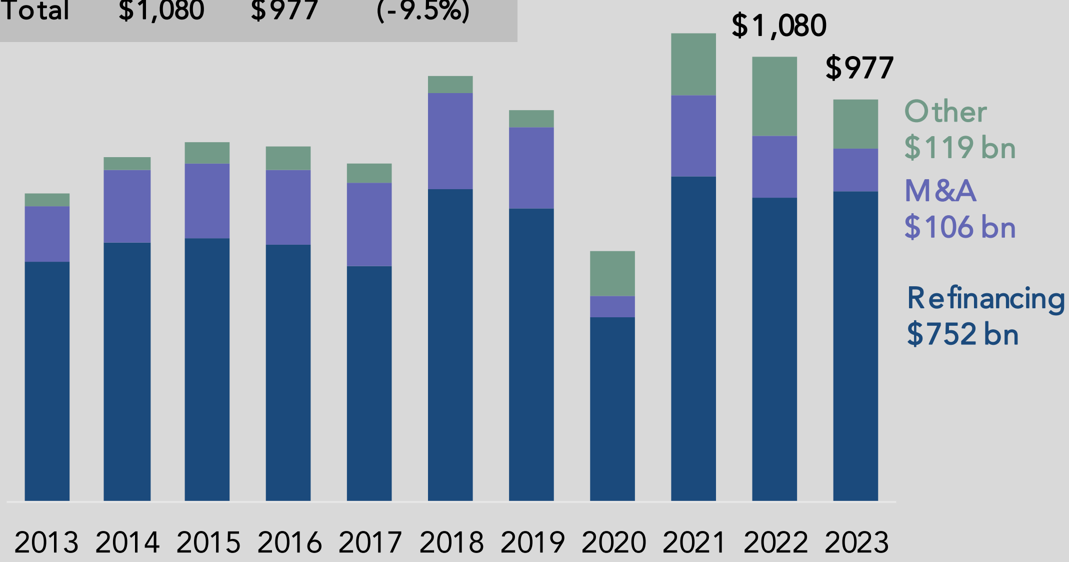
4 IG Loan Market Outlook

Disciplined Demand for IG Loan Market in 2023

In 2023, Basel III regulation, economic concerns and US regional bank stress weighed on overall IG syndicated loan volumes. While relationship driven banks remained supportive, refinancings and incremental term loan requests faced syndicate volatility. Overall, banks looked to manage capital by reducing tenor and extending unfunded revolvers rather than funded term loans.

Investment grade loan volume, USD bn

	2022	2023	
Refi	$737	$752	+2.0%
M&A	$151	$106	(-29.8%)
Other	$192	$119	(-38.0%)
Total	**$1,080**	**$977**	**(-9.5%)**



Key drivers of lower 2023 IG loan volume

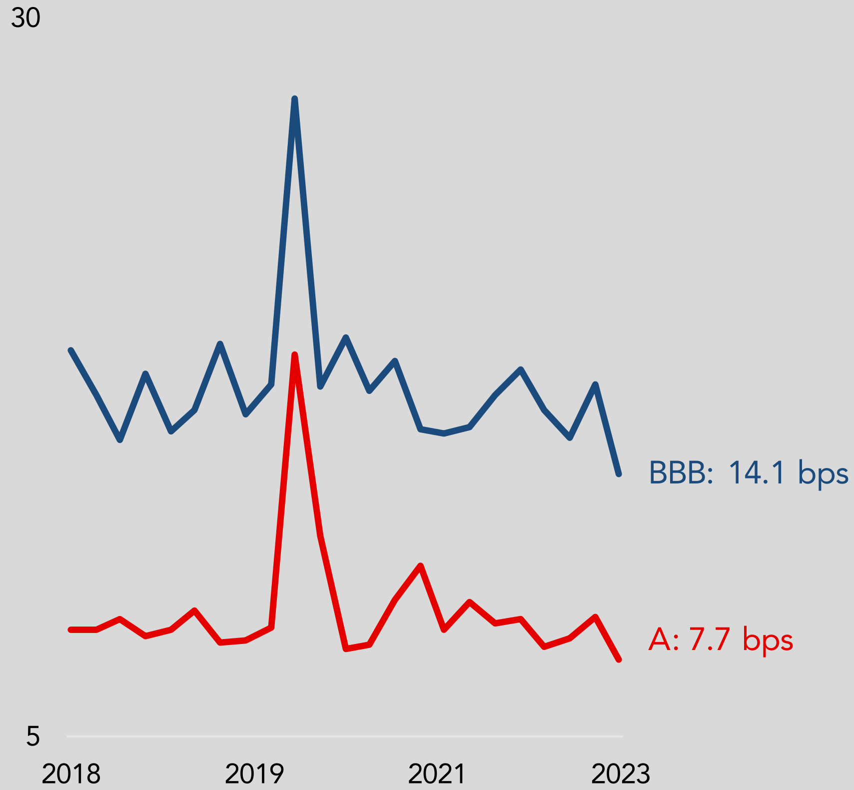
- Capital and loan return hurdles
- Lower debt financed M&A volumes
- Issuer focus on extending maturities

Source: (1) Refinitiv. Data as of November 30, 2023.

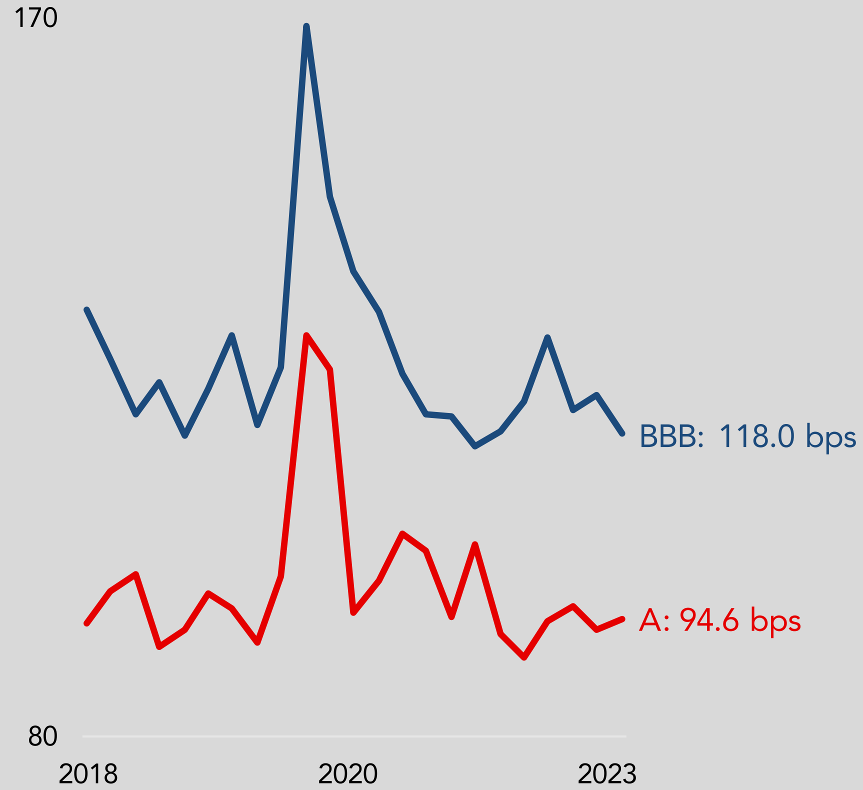
Stable IG Loan Pricing

While there were marginal changes in average pricing quarter over quarter, pricing remained in line with historical levels. However, given rising costs of funds for banks, incremental credit was priced at a premium.

Average undrawn pricing, bps



Average drawn pricing, bps



Source: (1-2) Refinitiv. Average drawn pricing not inclusive of SOFR credit spread adjustments.

2024 Syndicated Loan Market Outlook

The market will be available but challenged with shifting economic and investor dynamics

Anticipated economic slowdown will keep banks focused on credit quality and require higher pricing and tighter structures for incremental credit

Corporate IG M&A volumes will improve and lenders have ample capacity to support M&A financings

Due to the potential increase in ratings downgrades and defaults, risk appetite will remain weak for cyclical credits and sectors

While bank appetite is challenged for term loans and incremental credit, banks are largely supportive in M&A scenarios with near term identifiable event economics

Relationships and cross-sell will be important as balance sheet optimization influences selectivity around capital deployment

Banks will continue to be supportive for investment grade and structured finance deals as the Inflation Reduction Act (IRA) drives heavy project and infrastructure / data center financing needs

Greater importance on selecting a lead bank for distribution strategies to ensure successful syndication

Continued pressure on capital and demand will raise the need to adjust syndicate composition and maintain pulse of the market

Basel III Headwinds for Loan Markets

In 2024, Basel III regulation may continue to weigh on IG Loan market volumes due to: i) potentially higher pricing by syndicated lenders; ii) higher focus on ancillary business; iii) pressure on facility sizes; and iv) more uncertainty in bank syndicate processes.

Base III: Main Features

Increase the level and quality of capital

Banks required to maintain more capital of higher quality to cover unexpected losses. Minimum Tier 1 capital rises from 4% to 6%, of which at least three quarters must be the highest quality (common shares and retained earnings). Global systemically important banks (G-SIBs) are subject to additional capital requirements.

Enhance risk capture

Capital requirements for market risk rise significantly. Requirements are calculated based on 12 months of market stress. Credit Valuation Adjustment risk is now included in the framework.

Revisions to the standardized approaches for calculating credit risk, market risk, Credit Valuation Adjustment and operational risk mean greater risk sensitivity and comparability. Constraints on using internal models aim to reduce unwarranted variability in banks' calculations of RWAs.

An output floor limits the benefits that banks can derive from using internal models to calculate minimum capital requirements.

Constrain bank leverage

A leverage ratio constrains the build-up of debt to fund banks' investment and activities (bank leverage), reducing the risk of a deleveraging spiral during downturns.

Global systemically important banks (G-SIBs) are subject to higher leverage ratio requirements.

Improve bank liquidity

The Liquidity Coverage Ratio requires banks to hold sufficient liquid assets to sustain them for 30 days during times of stress. The Net Stable Funding Ratio encourages banks to better match the duration of their assets and liabilities.

Limit procyclicality

Banks retain earnings to build up capital buffers during periods of high economic growth so that they can draw them down during periods of economic stress.

Source: Bank for International Settlements.

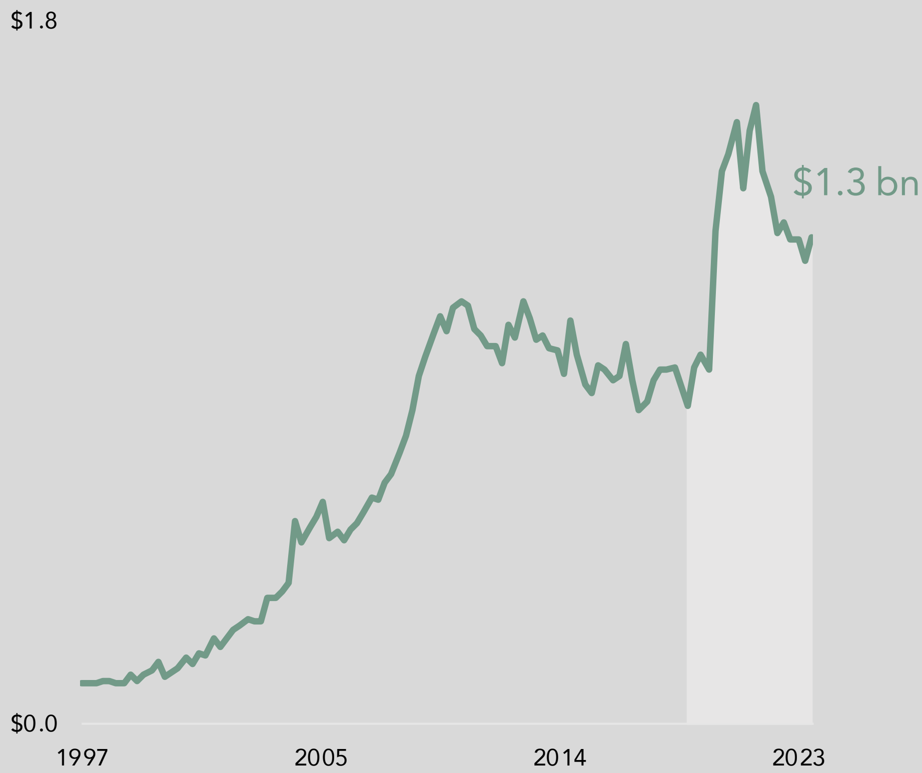
5 Resilient Credit Fundamentals

Strong Corporate Balance Sheets

Record profits and robust capital markets issuance allowed investment grade corporates to build record cash balances and reduce leverage. While leverage levels are largely back in-line with long term averages, corporate cash balances remain elevated.

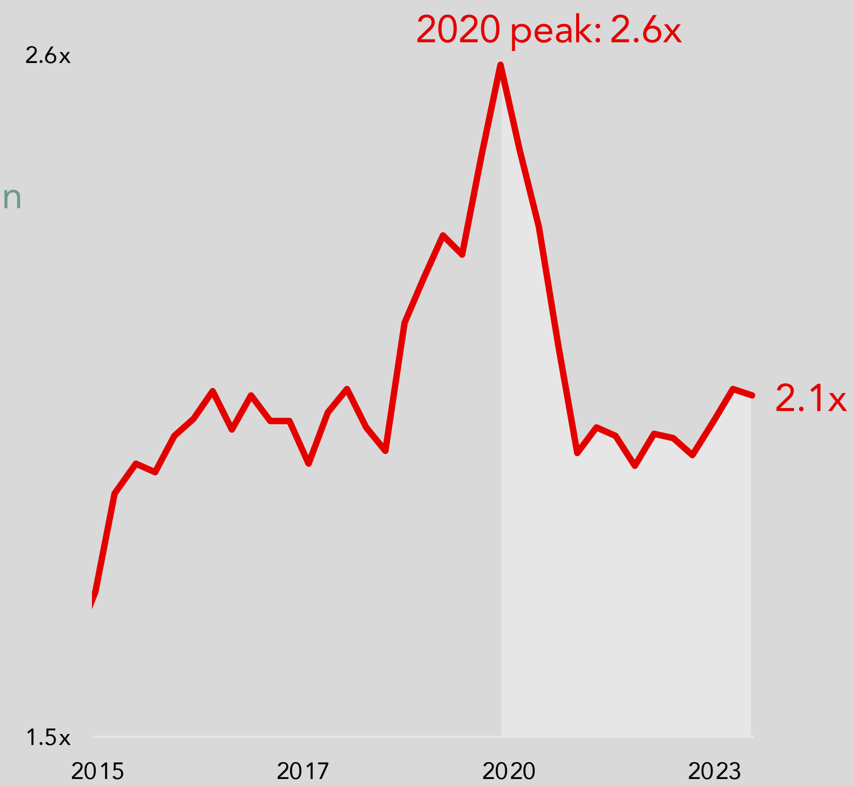
IG Corporate Cash Balances

Median IG corporate cash balances, USD bn



IG Corporate Leverage

US IG median net leverage

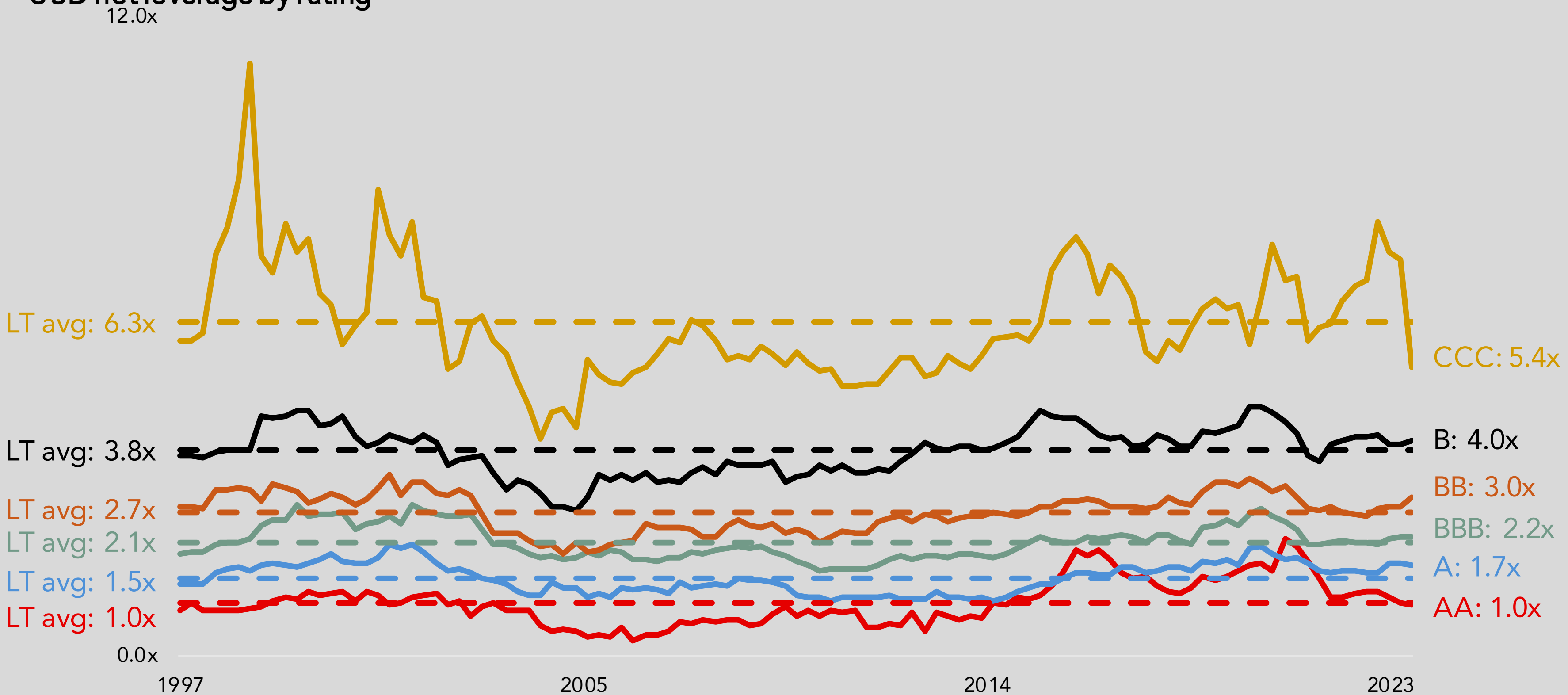


Source: (1-2) CreditSights. BAML Index. Data through Q3 2023.

Balance Sheets Strong by Historic Standards

Corporate balance sheets in the multi-trillion USD bond markets have remained strong by historic standards, with variance starting to emerge by sector. In high yield, net leverage has been relatively stable with the exception of the CCC space. After a significant run-up in leverage between Q2 2021 and year end 2022, leverage declined to well below average over the course of 2023. In Q3 2023, CCC margins expanded by 275 bps, driving a two turn decrease in net leverage. Notably, the CCC index is quite small and fundamentals were aided by defaults in higher leveraged names.

USD net leverage by rating

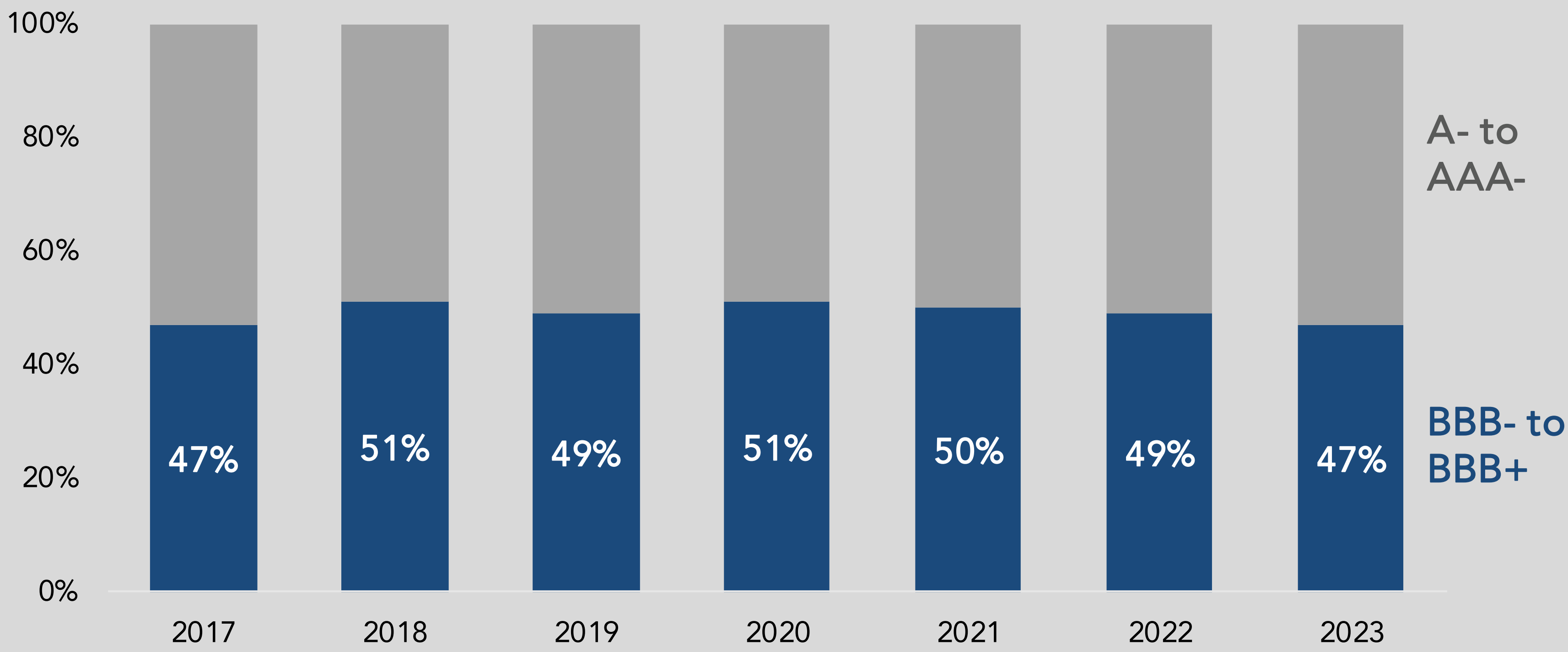


Source: (1) CreditSights, "US IG & Crossover 2024 Outlook: Hurry Up & Wait". "US Strategy: HY Leverage Report (3Q23)"

Higher Rated IG Credit Market

Following multiple years of strong earnings growth, balance sheet strengthening and ratings upgrades ("rising stars"), the BBB share of the USD investment grade bond market currently stands at a 7 year low. A number of "credit friendly" trends in the post COVID period have contributed to the ratings upgrade, including: effective business strategy adjustments during COVID, higher cash balances, declining payout ratios during the Fed tightening and effective pre-funding and extension of maturities during the record low rates of 2020-21.

Annual ratings breakdown of the USD IG bond market

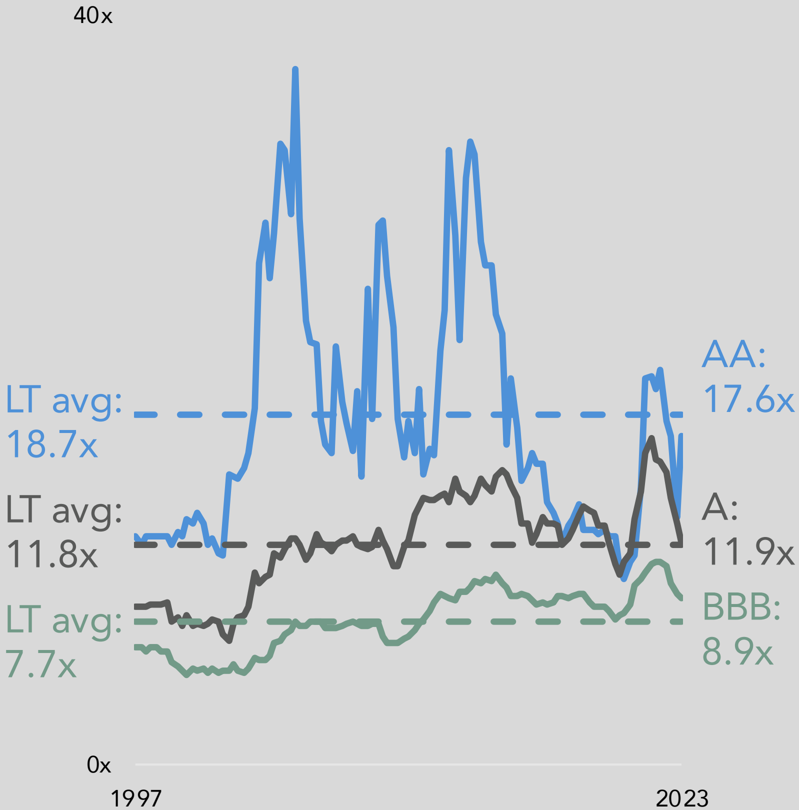


Source: (1) CreditSights. CFR. IFR.

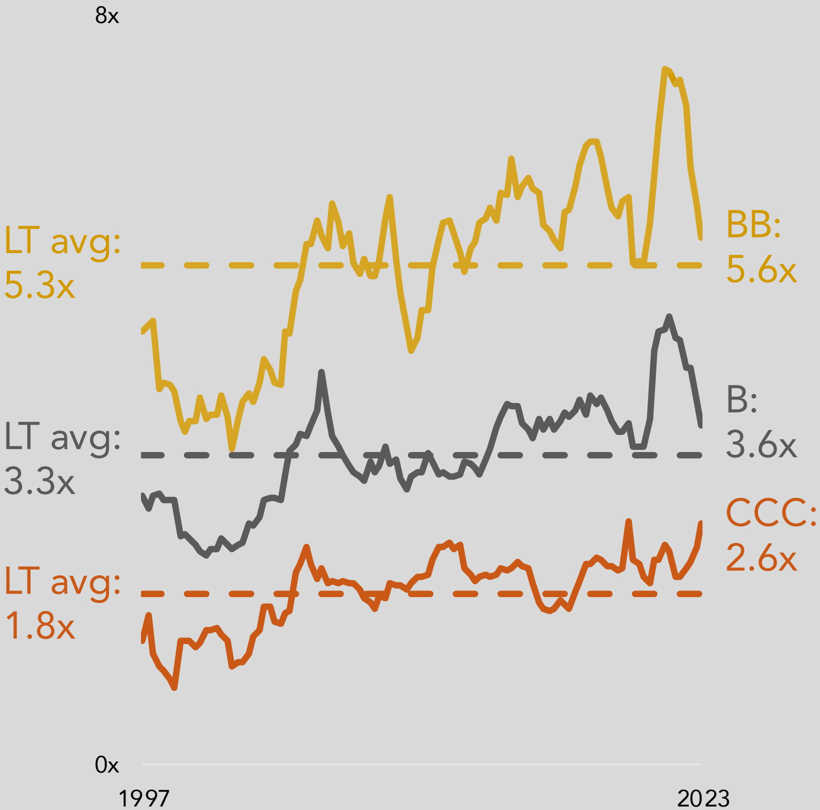
Structurally Lower Interest Coverage Ratios

Globalization, higher profit margins and low interest rates drove a 40 year cyclical uptrend in corporate interest coverage ratios. Looking ahead, coverage ratios are likely to decline modestly on structurally higher inflation and interest rates. The expected S&P 500 earnings recovery in 2024 should help mitigate the pace of decline in coverage ratios over the prior year.

USD IG interest coverage ratio, by rating



USD HY interest coverage ratio, by rating

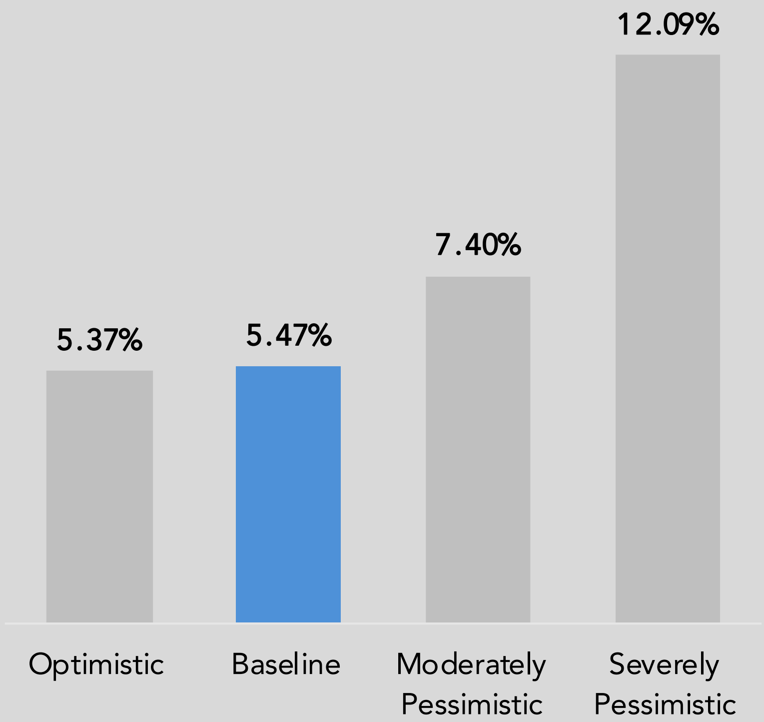


Source: (1-2) CreditSights. Data through Q3 2023. S&P Global Ratings "Interest-cover risks are growing for vulnerable corporate credit" (October 26, 2023).

“Longer But Lower” 2024 Default Cycle

Corporate default rates for the market, in aggregate, are expected to peak mid-year below the double digit levels of prior cycles. However, with visibility “low” in many parts of the US and global economy, risks skew towards potentially higher defaults. As rate cuts accelerate in the 2H 2024, the pace of defaults should slow accordingly.

Moody’s speculative grade peak default rate forecast scenarios



Drivers of Lower Peak Defaults in Current Cycle

- Potentially mild recession or soft landing
- Prevalence of covenant-light (fewer triggers)
- Potential Fed rate cuts by mid-2024
- Corporate earnings recovery
- High cash balances, strong interest coverage ratios
- Strong, well capitalized banking system

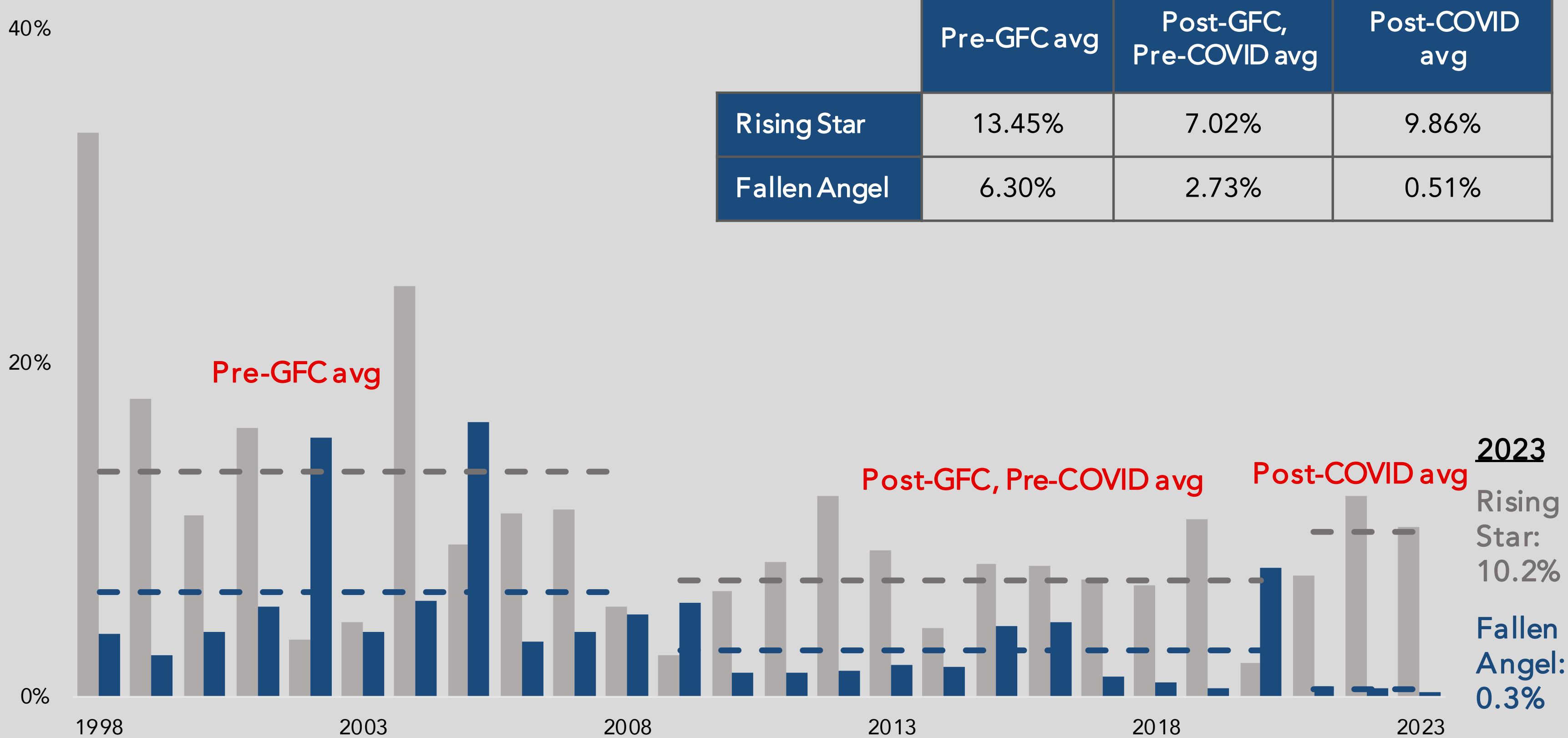
Source: (1) Moody’s, “Default Trends Global Report – Nov 2023.” Peak default rate for Baseline and Optimistic scenarios is January 2024. Peak default rate for Moderately Pessimistic and Severely Pessimistic scenarios is November 2024.

“Rising Stars” Outpaced “Fallen Angels” in 2023

“Rising star” volume reached cyclical highs in 2022 and remained elevated in 2023 while “falling angel” volume declined for three consecutive years. While default rates are expected to rise from here, post-COVID rating migrations, as well as more limited high yield issuance volumes in the past two years, point to a higher quality high yield market backdrop.

Rising star and fallen angel volumes, % US Face Value

	Pre-GFC avg	Post-GFC, Pre-COVID avg	Post-COVID avg
Rising Star	13.45%	7.02%	9.86%
Fallen Angel	6.30%	2.73%	0.51%

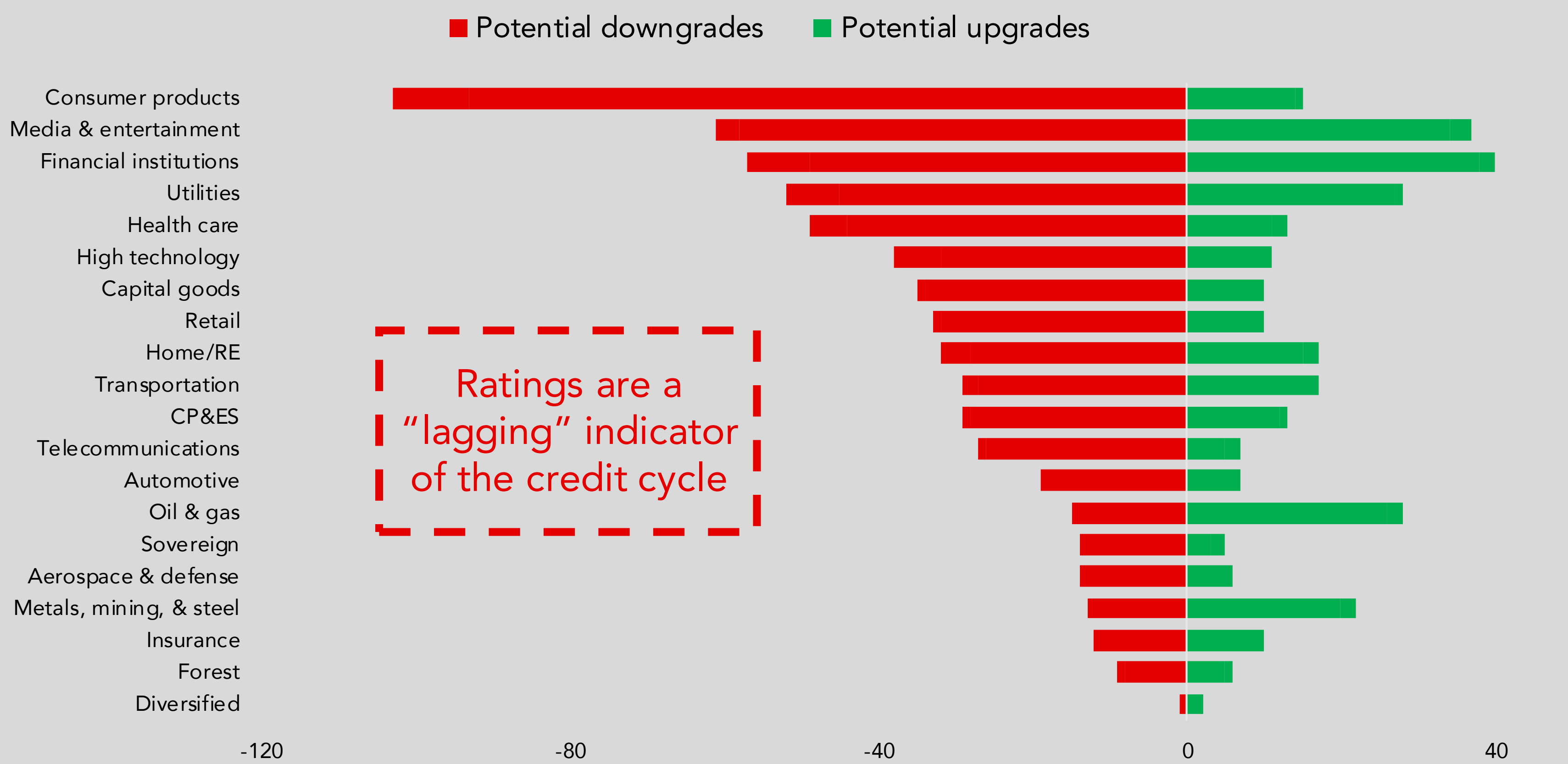


Source: (1) CreditSights. “Outlook for Defaults in 2024: The Quant Perspective”.

Downgrades Outpacing Upgrades Going into 2024

Following a year (2023) in which ratings upgrades outpaced downgrades by a ratio of 4:1, the rating agencies are expecting downgrades to modestly outpace upgrades in 2024 (with consumer products, media and financial institutions most vulnerable). Nonetheless, relative to prior cycles, a large downgrade wave is not expected.

Global potential downgrades and upgrades



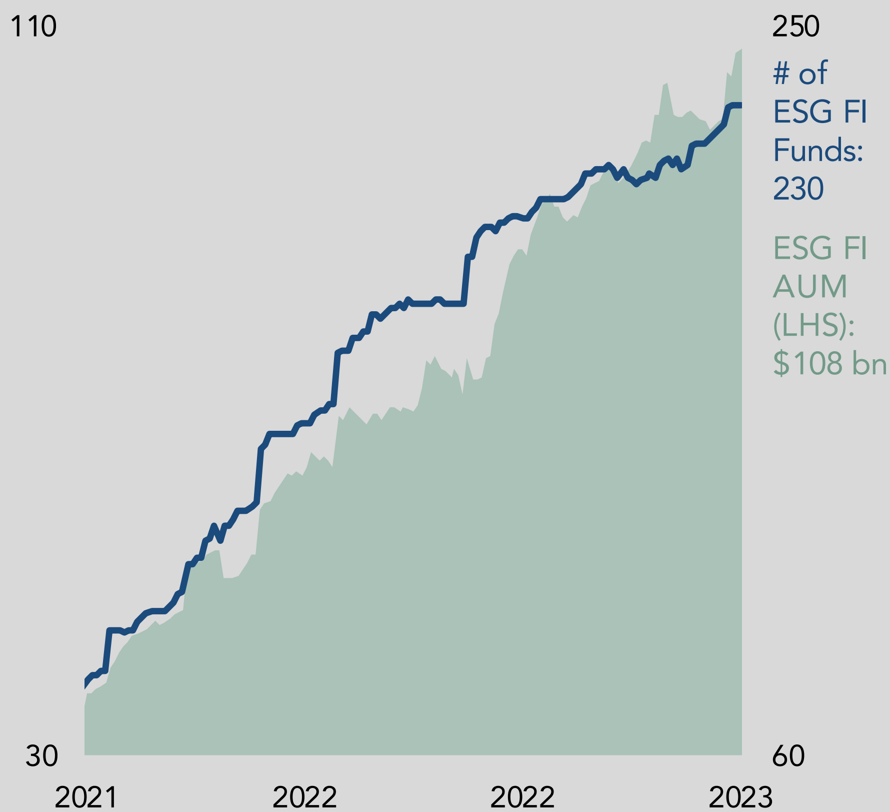
Source: (1) S&P, "Credit Conditions North America Q3 2023: Risks vs. Resilience" (June 27, 2023).

6 ESG Market Themes

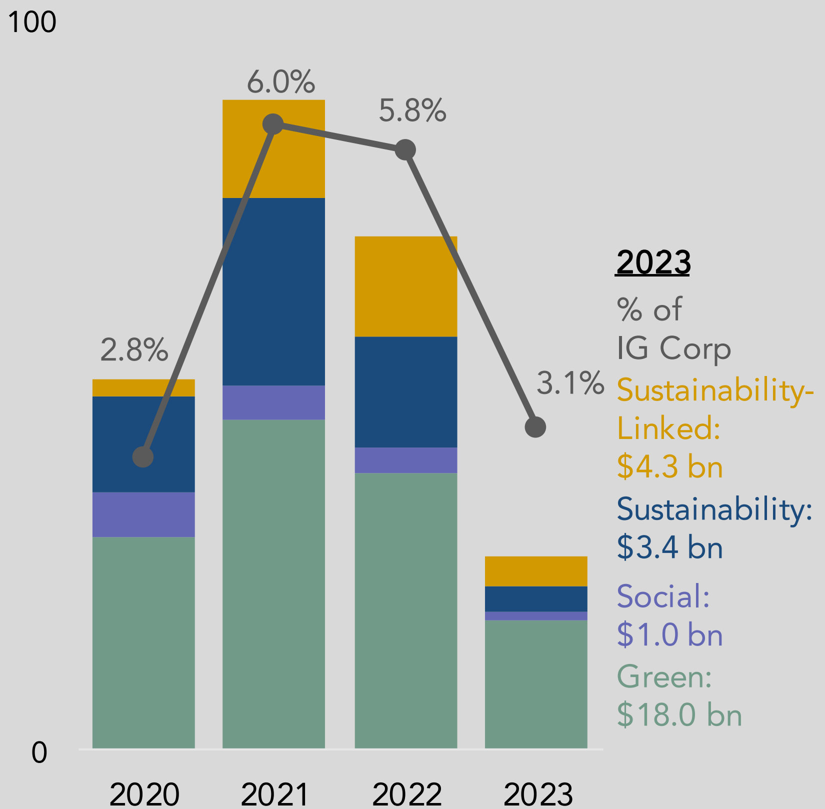
Sustainable Finance – 2023 Recap

ESG investing continues to attract capital; yet, only ~3% of IG issuance was labeled in 2023, though 'quality' has arguably improved. Select deals from issuers with strong sustainability commitments have received large orders from ESG funds, achieving more efficient pricing.

ESG fixed income ETF AUM, USD bn



USD IG corporate issuance by ESG Label, USD bn



Source: Bloomberg. Data as of November 30, 2023. MUFG.

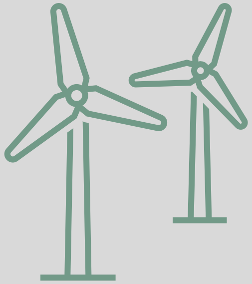
Key Themes in ESG & Sustainable Financing for 2024

Sustainable Finance	ESG investor preference for 'labeled' bonds will continue to be 'use of proceeds', and investors are calling for greater variety. Sustainability-linked loan volumes in the U.S. will languish, given economic benefits are small and bank relationships are ultimately return driven.
Reporting	Corporates will prepare for mandatory reporting requirements, improving governance and instituting reporting processes to allow data verification. With this, sustainability reporting will become more substantive, removing superfluous content and commitments. Next topics of focus (after climate) to include nature, human capital and human rights.
Policy	Major shifts in policies – in either direction – are possible. 2024 is one of the biggest election years globally, and geopolitical events and other disruptions could de-emphasize sustainability for more pressing issues.

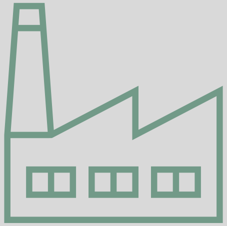
Sustainable Finance Outlook

MUFG expects ESG funds to continue to be supportive of well-structured "sustainable labeled" bonds, with investors calling for greater variety of issuance – both from an industry and impact perspective.

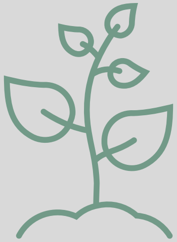
Key project categories for corporate sustainable debt in 2024



Renewables will still dominate as a use of proceeds due to the amount of capital being invested; we should see more clean energy categories as technologies scale.



Receptivity to impactful 'light green' energy transition opportunities will improve. Issuers and investors to bear in mind the local context.



Issuances earmarked for projects supporting **areas of growing interest** may be particularly well-received: i.e., sustainable agriculture, climate adaptation, biodiversity, water, and healthcare access.

Overview of Key Sustainability Disclosure Regulations

As reporting mandates go into effect, investors and business partners will ask for more information to meet their own reporting needs. Despite the convergence of standards, corporates must navigate regional differences, and peer comparisons will be imperfect due to disparities in business models, reporting boundaries and assumptions.

	California Senate Bill 261: Climate-Related Financial Risk Act	California Senate Bill 253: Climate Corporate Data Accountability Act	*(Proposed)* SEC Enhancement & Standardization of Climate-Related Disclosures	EU Corporate Sustainability Reporting Directive (CSRD)
Focus	Climate Change Risk	GHG Emissions	Climate Change Risk	Sustainability
Materiality	Financial	n/a	Financial	Financial and Impact
Applicability	Public and private U.S. entities "doing business in California" subject to revenue thresholds of: $500MM for SB 261	$1Bn for SB 253	Domestic and foreign registrants	Companies: in EU, with EU-listed securities, and/or with EU subsidiaries/branches, subject to size thresholds
Scope of Disclosures	Climate-related financial risks and management of these risks	Full carbon footprint, increasing in scope and assurance requirements over time	Broad climate-related topics, focused on risks and material impact on the business	Sustainability impact on company performance and company impact on sustainability
Reporting Standards Referenced	TCFD / ISSB (IFRS S2)	Greenhouse Gas Protocol; reporting platform TBD	n/a	European Sustainability Reporting Standards (ESRS); some commonality with ISSB
Emissions Disclosures	Not explicitly mandated	Scopes 1, 2 & 3	Scopes 1 & 2 required; Scope 3 if material or if registrant has targets	Scopes 1 & 2 required; Scope 3 if material
Finalized	2023	2023	*expected April 2024*	2022

Source: TCFD 2023 Status Report (September 2023). EFRAG. California legislature. SEC. MUFG

Timeline for Key Sustainability Disclosure Regulations

Corporates will improve data collection, governance and risk management to meet sweeping disclosure requirements going into effect over the coming years.

California and EU CSRD mandates will be phased in, with reporting the following year

SB 261

*Companies with **revenues of $500MM+** to publish **climate risk reports** biennially*

- **2026:** **Climate risk report** shall be posted on the company's website by January 1, 2026
- **2028:** Climate risk report updated every two years

~10,000 entities will be covered under SB 261

SB 253

*Companies with **revenues of $1Bn+** to disclose full **carbon footprint** annually*

- **2025:** **Scopes 1 & 2** reporting – with limited assurance
- **2026:** **Scope 3** reporting – with safe harbors
- **2030:** Reasonable assurance for Scopes 1 & 2; Limited assurance for Scope 3

~5,300 entities will be covered under SB 253

EU CSRD

*Management commentary and data on a **wide range of sustainability topics**, with limited assurance and digital tags*

- **2024:** Companies **currently covered under EU's Non-Financial Reporting Directive (NFRD)**, includes entities with EU-listed securities and 500+ employees

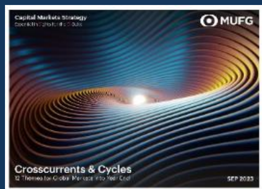
  ~11,700 entities currently covered under NFRD
- **2025:** **EU-based "large undertakings"*** regardless of listed status

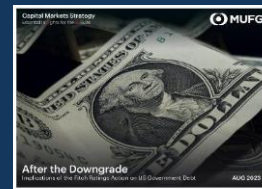
  "Large"* non-EU companies with EU-listed securities
- **2026:** **SMEs listed on an EU-regulated exchange** meeting certain size criteria

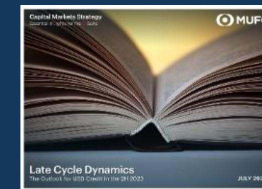
  Small and non-complex **credit institutions** and **captive insurance** undertakings
- **2027**
- **2028:** **Non-EU country companies**** with:
  - €150MM EU net turnover, and
  - a subsidiary or branch in the EU meeting certain size criteria

  ~50,000 entities will be covered under CSRD

*Source: European Commission. California Legislature. Grant Thornton. White & Case. Deloitte. Bloomberg. MUFG. * "Large" meets two of: 250+ average employees, €50MM net turnover, and €25MM assets; criteria to be met on two most recent years, thresholds reflective of EU Commissions October 2023 proposed amendment to size classes in the EU Accounting Directive; ** Reporting for this group may be delayed by two years, per a proposal from the European Commission in October 2023*







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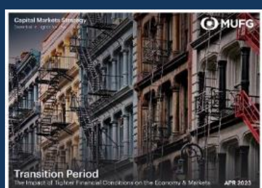

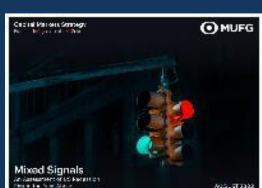

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