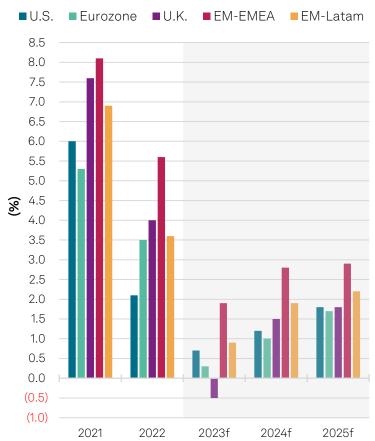
Global Credit Markets Update | Q2 2023 Riding Out Higher Rates

May 1, 2023



Rating Actions | Higher Rates Could Break More Than The Bank

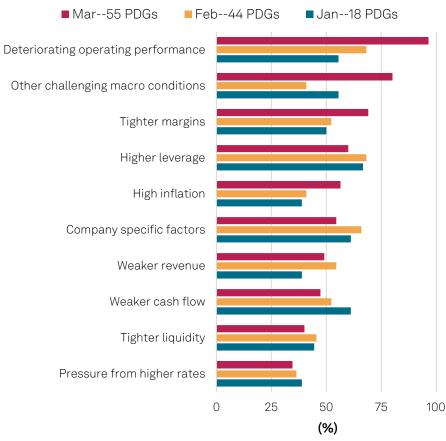
Outside of Asia, restrictive policy is expected to sharply slow GDP growth



As of March 31, 2023. Chart shows annual real GDP growth and forecasts. Source: S&P Global Ratings' Economists.

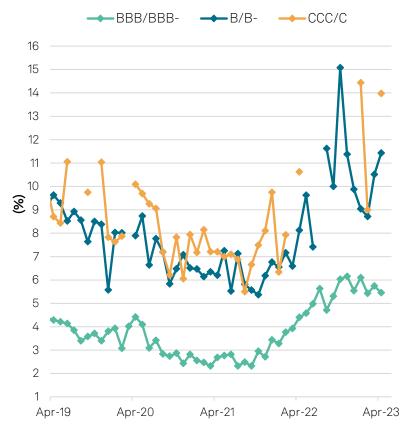
S&P GlobalRatings

PDGs picked up in Q1 with operating performance deteriorating amid challenging macro conditions



Data as of March 31, 2023. Chart shows top 10 potential downgrade reasons. We take stock of main risks outlined in new potential downgrade and upgrade rating reports and group them in different qualitative factors as shown in the chart. Note: One rating action can have multiple qualitative factors. PDG--Potential downgrades. PDGs are rated issuers with either a negative outlook or on CreditWatch negative. Source: S&P Global Ratings Credit Research & Insights.

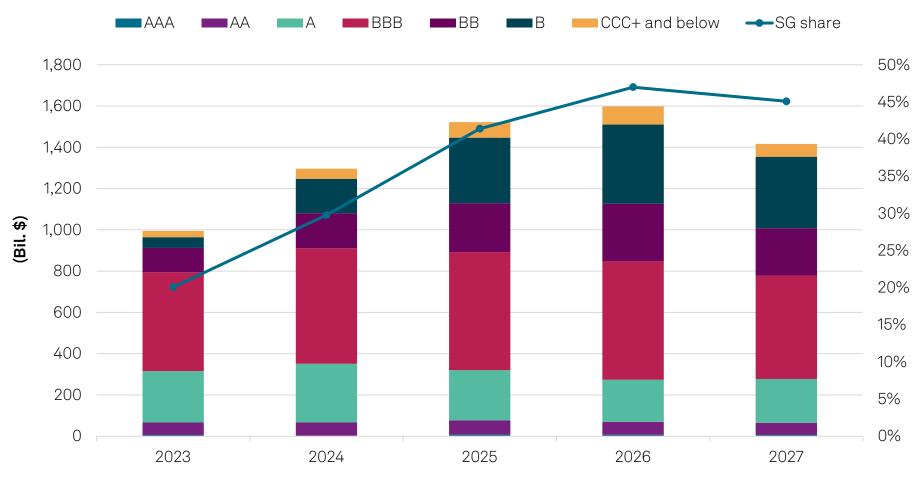
Speculative-grade issuers are grappling with restrictive costs of capital



Data as of April 19, 2023. Chart shows the average yield-to-maturity on all fixed-rate bond deals from nonfinancials issued in U.S. dollars. Sources: S&P Global Ratings Credit Research & Insights and Refinitiv.

Financing Conditions | Rising Maturities In 2024 And 2025 Are Coming Into Focus

Global nonfinancial maturities rise through 2026



- After pushing out maturities in earlier years, just 20% of the nonfinancial corporate debt scheduled to mature in 2023 is speculative grade.
- As borrowers tend to refinance debt 12-24 months in advance, 2024 and 2025 debt maturities are already coming into focus.
- Spec-grade maturities grow to \$385 billion in 2024 and \$630 billion in 2025,so companies could soon feel the squeeze.

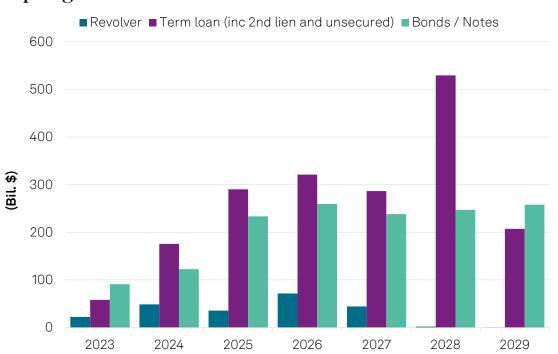
Data as of Jan. 1, 2023. Includes bonds, loans, and revolving credit facilities that are rated by S&P Global Ratings from nonfinancial issuers. Source: S&P Global Ratings Credit Research & Insights.



Financing Conditions | Leveraged Loan Maturities Are Beginning To Escalate

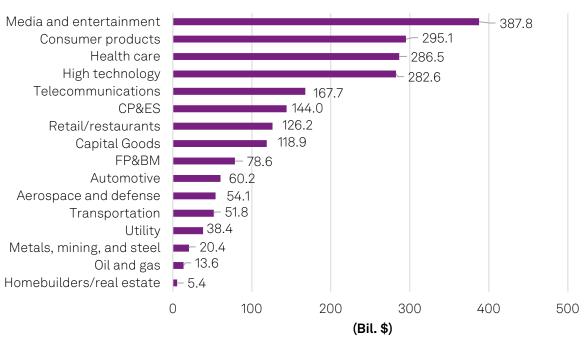
- Speculative-grade debt is highly concentrated in floating-rate loans, and these borrowers are already feeling the
 pressure of rising funding costs.
- The media and entertainment sector has notably more floating-rate leveraged loans and revolvers than other nonfinancial sectors.

Spec-grade term loan maturities more than double in 2024



Includes bonds, loans, and revolving credit facilities that are rated 'BB+' and below by S&P Global Ratings from nonfinancial issuers in the U.S. and Europe. Data as of Jan. 1, 2023. Source: S&P Global Ratings Credit Research & Insights

Par value of loan and revolver debt by nonfinancial sector

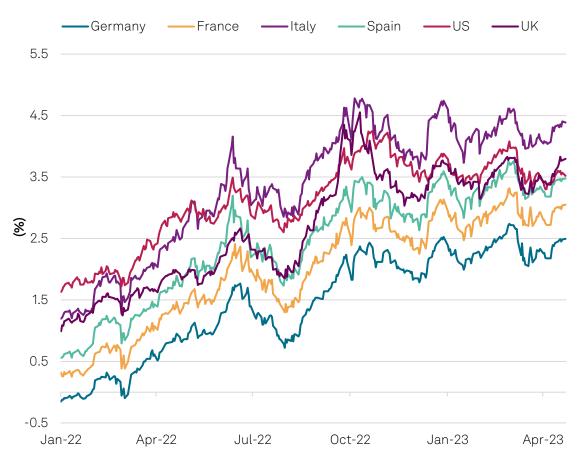


Includes loans and revolving credit facilities that are rated 'BB+' and below by S&P Global Ratings from nonfinancial issuers in the U.S. and Europe. Includes instruments maturing after 2029. Data as of Jan. 1, 2023. Source: S&P Global Ratings Credit Research & Insights.

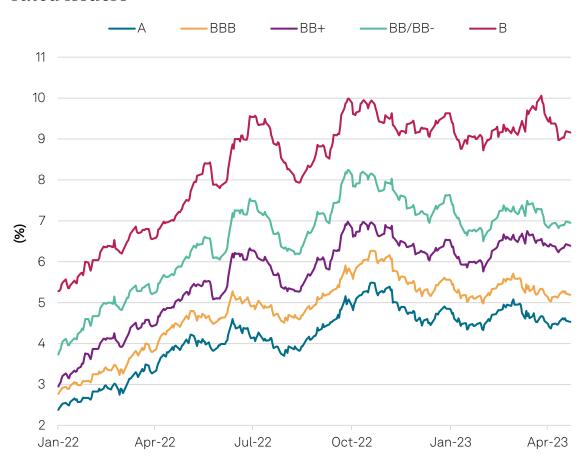


Financing Conditions | Volatility May Remain A Strong Undercurrent

Benchmark yields may remain higher for longer amid central banks' resolve to reign in inflation



Higher corporate yields will be felt more acutely by lowerrated issuers



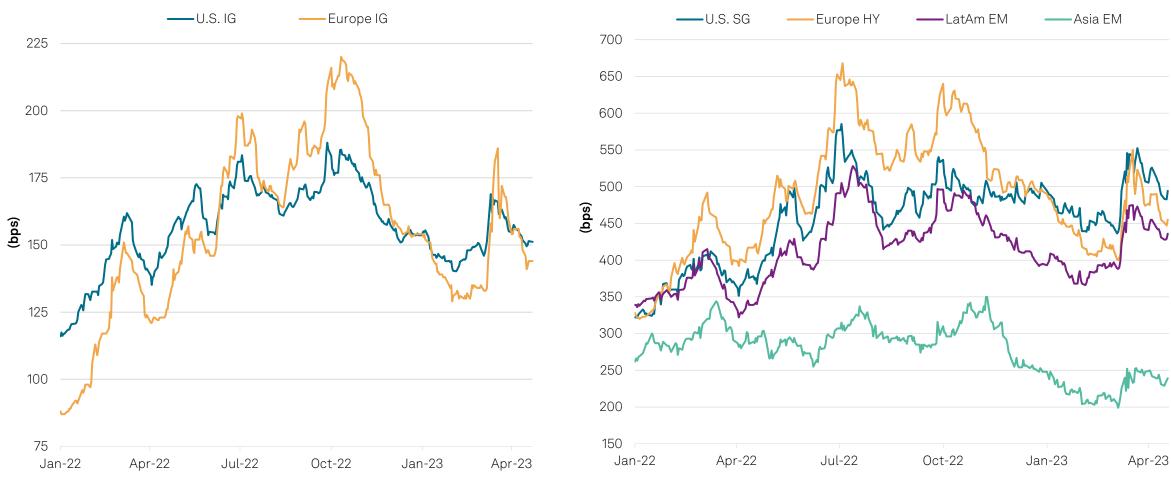
Data as of April 24, 2023. Sources: S&P Global Ratings Credit Research & Insights, Economics & Country Risk from IHS Markit, and Refinitiv.



Financing Conditions | No Evidence Of Contagion In Credit Markets

Spreads are falling, but are more volatile in Europe

Spreads are materially tighter than 2022 peaks

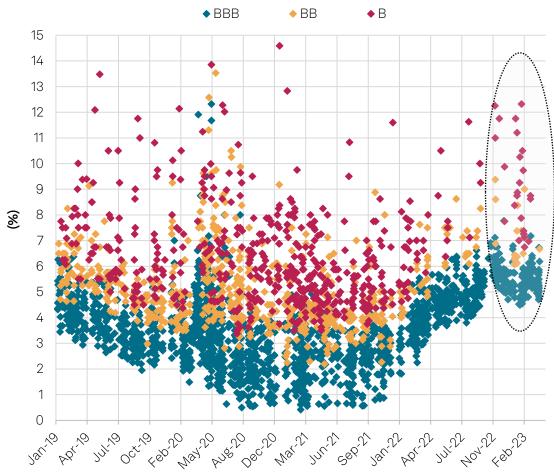


IG spreads as of April 24, 2023. SG and EM spreads as of April 20, 2023. IG--Investment grade. SG--Speculative grade. HY--High yield. Sources: S&P Global Ratings Credit Research & Insights, Federal Reserve Bank of St. Louis, Refinitiv, S&P Dow Jones Indices, U.S. Federal Reserve Bank of St. Louis, Bank of America Merrill Lynch, Bloomberg-Barclays Indices. ICE Benchmark Administration Limited (IBA), 'ICE BofAMLAsia Emerging Markets Corporate Plus Sub-Index Option-Adjusted Spread', spreads from Bloomberg-Barclays are secondary market pricing.



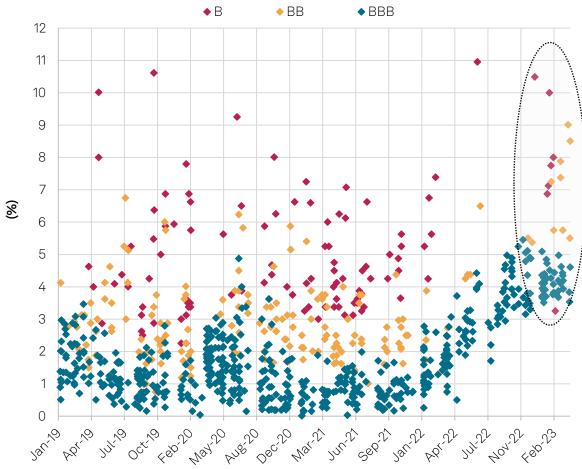
Financing Conditions | Spec-Grade Primary Markets Remain Challenged

First-quarter issuance was weak in the U.S.



Data as of March 30, 2023. Chart shows the yield-to-maturity on all fixed-rate bond deals from nonfinancial U.S. issuers that were issued in USD. Sources: S&P Global Ratings Credit Research & Insights and Refinitiv.

First-quarter issuance was sparse in Europe

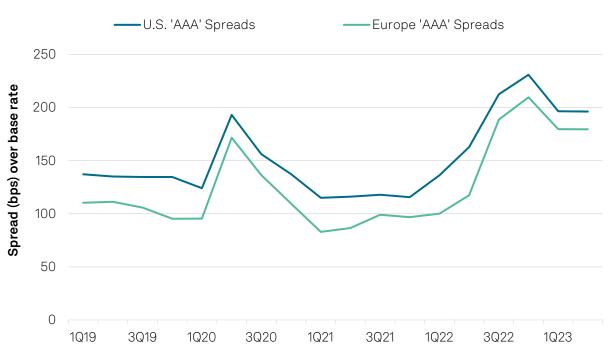


Data as of March 30, 2023. Chart shows the yield-to-maturity on all fixed-rate bond deals from nonfinancial European issuers that were issued in EUR. Sources: S&P Global Ratings Credit Research & Insights and Refinitiv.

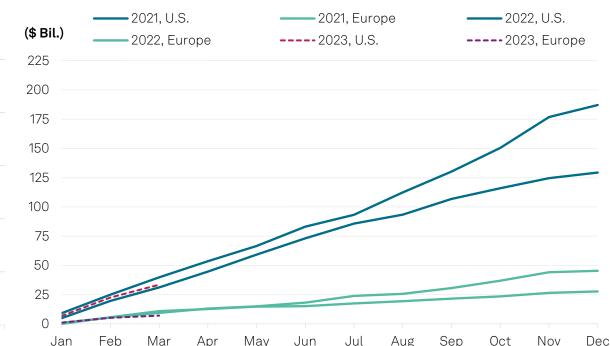
Financing Conditions | New Issue CLO Economics Are Challenging

- Global CLO issuance was down 3% year over year in the first quarter on mixed regional volume. U.S. volume was up 8% while Europe was down 35%.
- CLO 'AAA' spreads have tightened but remain well above pre-pandemic levels, reflecting tightening financing conditions, a risk-off tone in the broader market, and technical pressure.
- We expect both new and refi/reset issuance to land shy of 2022 levels amid unattractive CLO economics, a lack of 'AAA' buyers, and limited loan supply.

U.S. and Europe 'AAA' primary CLO spreads



U.S. and Europe annual CLO volume

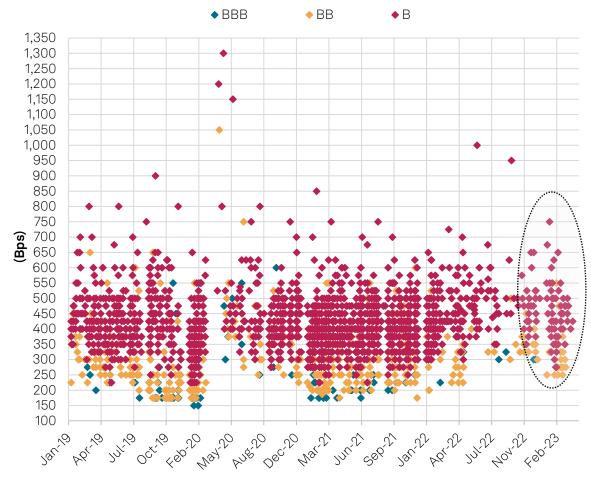


Data as of March 31, 2023. CLO—Collateralized loan obligation. Sources: S&P Global Ratings Research and S&P Global Market Intelligence. Leveraged loan data source: Leveraged Commentary and Data (LCD) from PitchBook, a Morningstar company; and Morningstar European Leveraged Loan Index (ELLI).



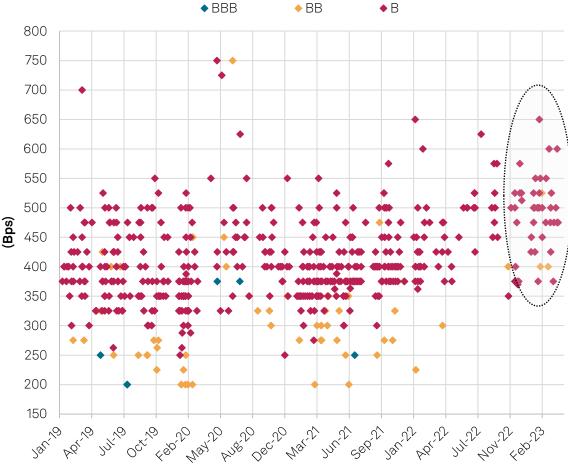
Financing Conditions | Volume Remains Low In Loan Primary Markets

U.S. first-quarter volume was the lowest since 2010



Data as of March 30, 2023. Chart shows TLB spreads on all deals from U.S. issuers. Sources: S&P Global Ratings Credit Research & Insights, Leveraged Commentary and Data (LCD) from PitchBook, a Morningstar company.

European first-quarter volume was the lowest since 2012

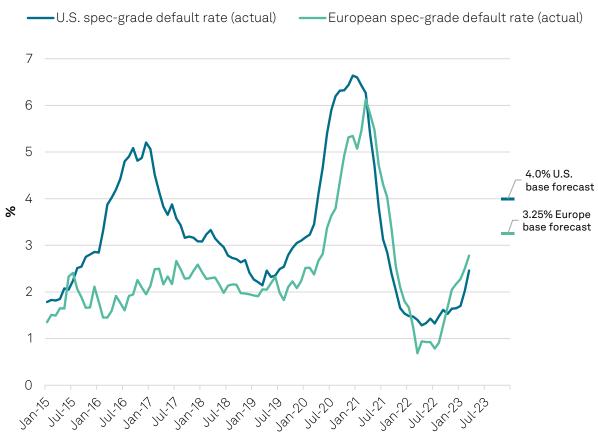


Data as of March 30, 2023. Chart shows TLB spreads on all deals from European issuers. Sources: S&P Global Ratings Credit Research & Insights, Leveraged Commentary and Data (LCD) from PitchBook, a Morningstar company.



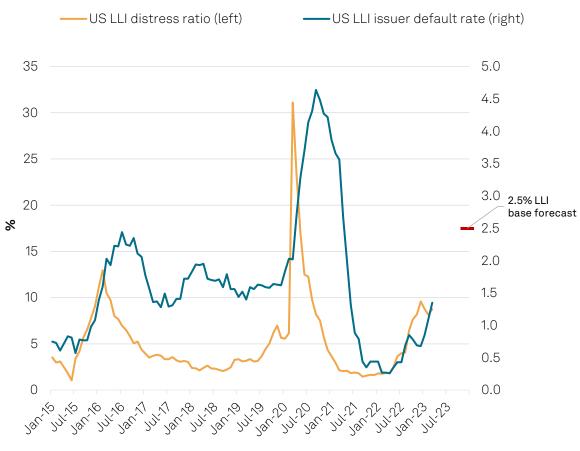
Rating Actions | Default Rates Are On The Rise

The U.S. and European speculative-grade default rates are expected to continue to rise



Data as of March 31, 2023. Sources: S&P Global Ratings Credit Research & Insights and S&P Global Market Intelligence's CreditPro®.

The U.S. leveraged-loan default rate is expected to climb as costs catch up with leveraged credit



Data as of March 31, 2023. Distress ratio is by number of issuers. Sources: Leveraged Commentary & Data (LCD) and S&P Global Ratings Credit Research & Insights.

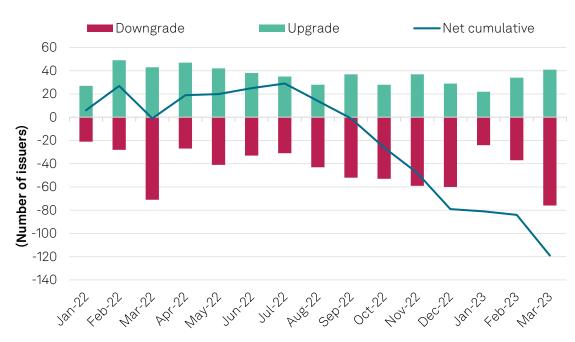
Credit Rating Trends



Credit Trends | First-Quarter Rating Actions Show Some Resilience Despite Macro Pressures

- Rating actions were less negative in the first quarter, although downgrades still outpaced upgrades.
- The health care and retail sectors had the largest net downgrades (downgrades minus upgrades), driven by the North American region.
- The downgrade ratio fell across regions in the first quarter compared with the previous quarter.

Global monthly rating actions



Data as of March 31, 2023. Net: Upgrades minus downgrades. Downgrades shown as a negative number. Rating actions for nonfinancials. Excludes sovereigns. Source: S&P Global Ratings Credit Research & Insights.

Quarterly downgrade ratio



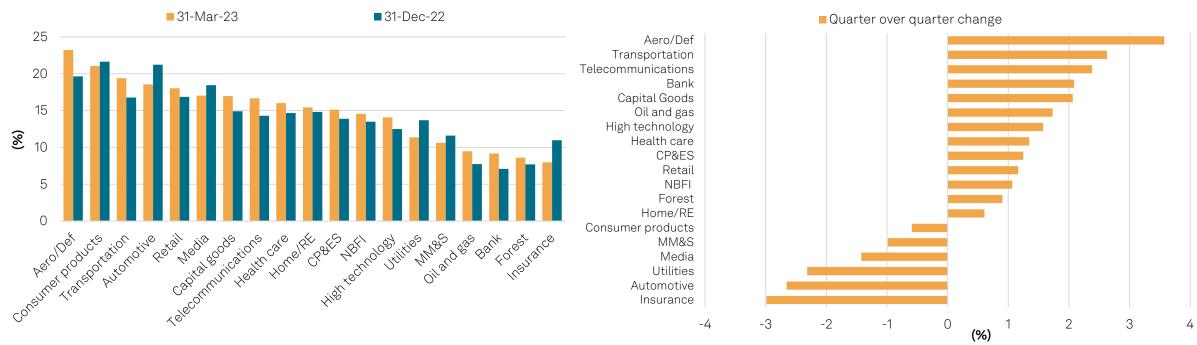
Data as of March 31, 2023. Chart shows downgrades as a percent of rating actions. Excludes sovereign and defaults. EM--Emerging markets. Source: S&P Global Ratings Credit Research & Insights.

Credit Trends | Divergence Clearly Evident Across Sectors

- Aerospace and defense, telecom, capital goods, and high tech had the greatest quarter-over-quarter increases in negative bias in first-quarter 2023.
- Consumer products has the highest total number of issuers with negative outlooks or ratings on CreditWatch negative.

Aerospace and defense sector leads negative bias in 2023

Most sectors negative bias increased in March

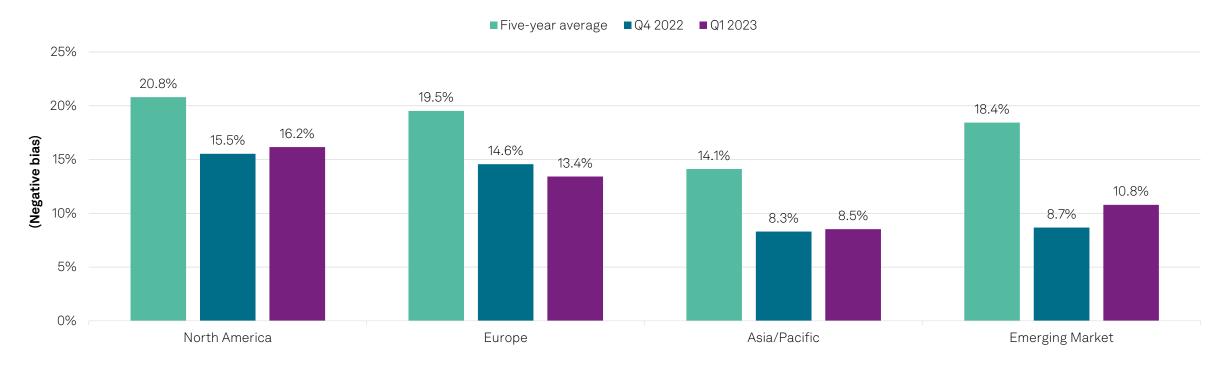


Data as of March 31, 2023, includes financials, and nonfinancial corporates. Note: Negative bias is the share of issuers with ratings that either have negative outlooks or are on CreditWatch with negative implications. CP&ES--Chemicals, packaging, and environmental services. Retail--Retail/restaurants. FPBM--Forest products and building materials. Home/RE--Homebuilders/real estate companies. Med&Ent--Media and entertainment sector includes leisure and lodging. MM&S—Metals, mining, and steel. Chart on the right shows quarter-over-quarter percentage point change in negative bias. Source: S&P Global Ratings Credit Research & Insights.

Credit Trends | Regional Divergences Continue

- The drop in European negative bias may only be temporary as rates move higher and financing conditions continue to tighten.
- The pickup in negative bias across emerging markets is largely attributable to Latin America.

Regional rating pressure remains well below five-year averages

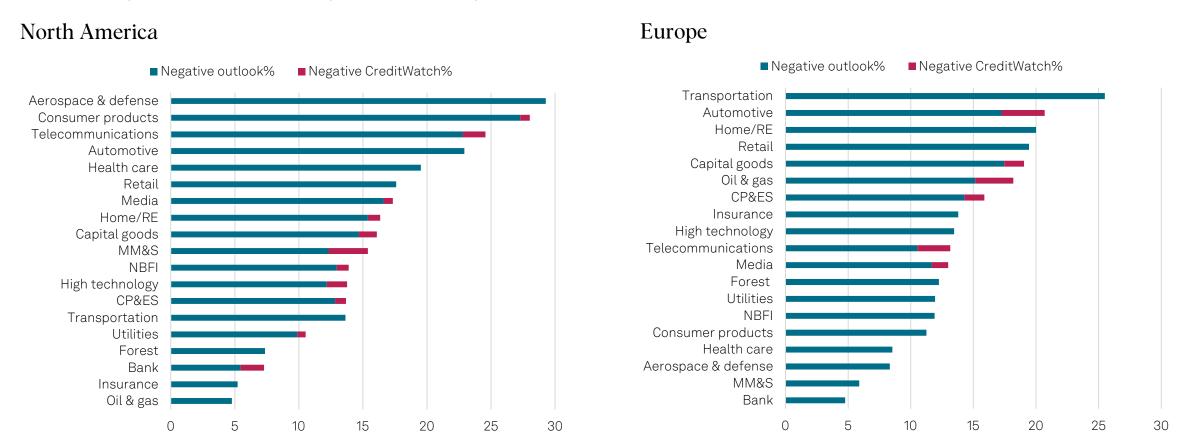


Data as of March 31, 2023, and excludes sovereign. Note: Negative bias is the share of issuers with ratings that either have negative outlooks or are on CreditWatch with negative implications. Source: S&P Global Ratings Credit Research & Insights.



Credit Trends | Downgrade Risk: Consumer Products Remain Front And Center

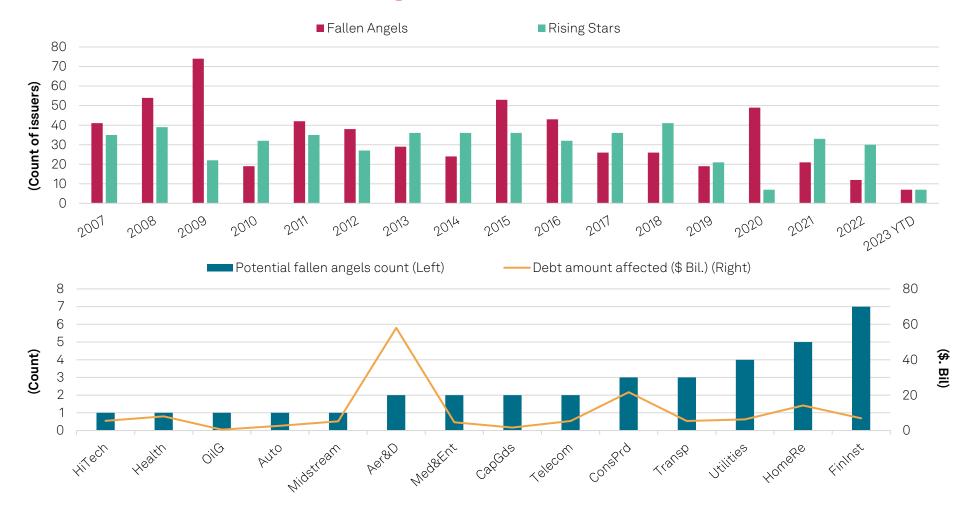
- Consumer products contributes the most potential downgrades in aggregate across North America and Europe.
- The transportation sector in Europe stands in sharp contrast to North America.



Data as of March 31, 2023, and excludes sovereign. Note: Europe region excludes the insurance sector. CP&ES--Chemicals, packaging, and environmental services. NBFI--Nonbank financial institutions (excluding insurance). MM&S--Metals, mining, and steel. Retail--Retail/restaurants. Forest--Forest products and building materials, Home/RE--Homebuilders/real estate companies. Media--Media and entertainment sector includes leisure and lodging.. Source: S&P Global Ratings Credit Research & Insights.



Credit Trends | Fallen Angels Rebound With An Increase In IG Downgrades

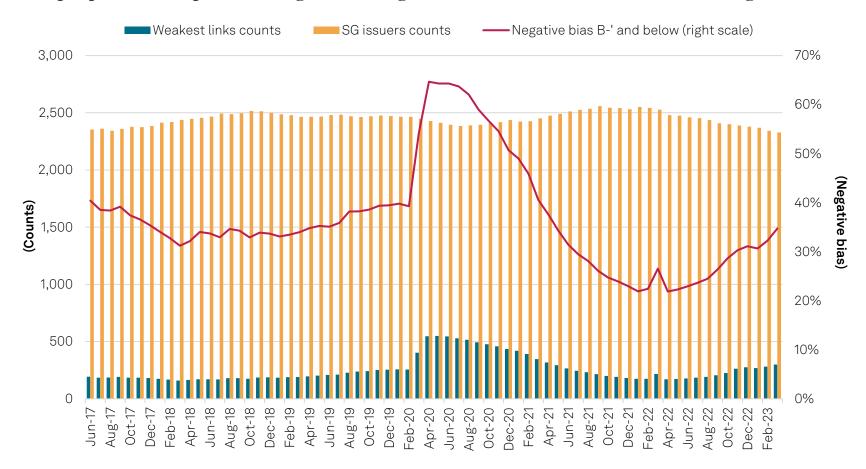


- Fallen angels rebounded in March--with a total of seven as investmentgrade rating actions pick up.
- Despite banking sector stress, nonfinancial corporates account for most of the year's total.
- Sector exposures show concentrations among financial institutions and homebuilders/real estate companies.

Data as of March 31, 2023. Note: Excludes 11 Russian, or Russia-related, entities that were fallen angels in March 2022, whose ratings were subsequently withdrawn in compliance with EU sanctions. Aer&D--Aerospace and defense, CapGds--Capital goods. ConsPrd--Consumer products, FinInst--Financial institutions, HomeRe--Homebuilders/real estate cos. Med&Ent--Media and entertainment, OilG--Oil and gas. Ret/Res--Retail/restaurants. Transp--Transportation. Excludes sovereign. Source: S&P Global Ratings Credit Research & Insights.

Credit Trends | Weakest Links Signal Default Risk Is Growing

The proportion of speculative-grade ratings that are weakest links continues to grow



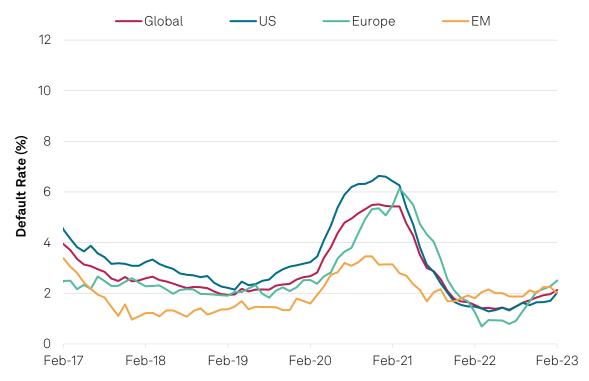
- The number of weakest links (issuers rated 'B-' or lower with either a negative outlook or CreditWatch) increased in Q1 to a two-year high, adding to default pressure.
- The rise in weakest links globally signals further default pressure as weakest links are roughly 8x more likely to default than other speculative-grade entities.

Weakest links and speculative-grade data as of March 31, 2023. Note: Weakest links are issuers rated 'B-' and lower with negative outlooks or on CreditWatch negative. Sources: S&P Global Ratings Credit Research & Insights and S&P Global Market Intelligence's CreditPro®.

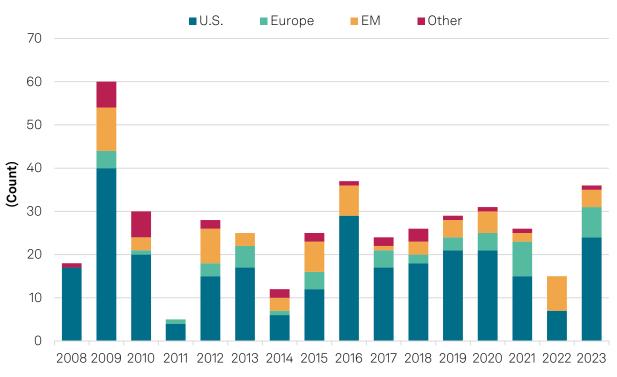
Credit Trends | Default Rates Show Signs Of Acceleration

- There were 37 corporate defaults in first-quarter 2023--tied with 2016 for the highest year-to-date default tally since 2009.
- By sector, first-quarter defaults were led by media and entertainment, consumer products, and retail.

Default rates are rising from lows Trailing-12-month speculative-grade default rate



Default activity has increased--particularly in the U.S. Global monthly defaults by region



Default tally data as of March 31, 2023. Default rates as of February 2023. Sources: S&P Global Ratings Credit Research & Insights and S&P Global Market Intelligence's CreditPro®.



Regional Issuance

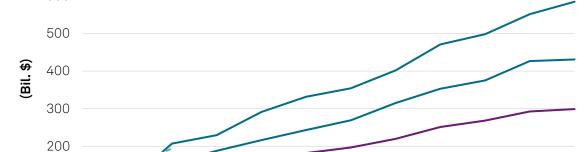


U.S. | Speculative-Grade Issuance Emerges From The Depths

- First-quarter U.S. speculative-grade nonfinancial issuance more than tripled compared with the last quarter of 2022--but volumes remained weak relative to typical first-quarter issuance levels.
- Yields fell slightly in Q1 but remain elevated. SG nonfinancial yields on new issuance fell to 8.2%, down from 9.7% last quarter as the number of issues more than quadrupled--led by 'BB' debt, with 6.4% yields on 14 issues compared to 8.3% on three issues last quarter.
- The leading sectors in SG issuance were financial institutions and media & entertainment, which together accounted for just under 25%.

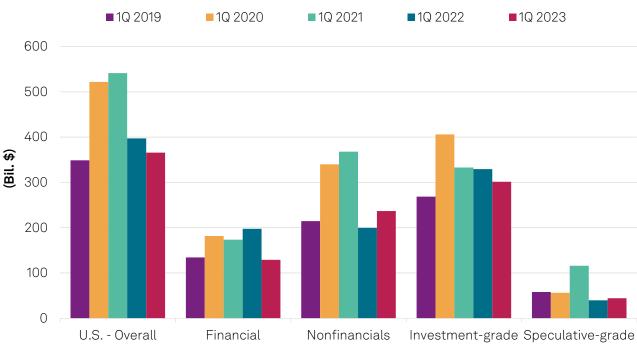
New nonfinancial bond issuance (cumulative)





Data as of March 31, 2023. Sources: S&P Global Ratings Credit Research & Insights and Refinitiv.

U.S. new bond issuance by category



*Denotes year-to-date data as of (Jan. 1–March 31, 2023). Data including both financial and nonfinancial corporates. Overall, financials, nonfinancial includes unrated issuances. Sources: S&P Global Ratings Credit Research & Insights and Refinitiv.

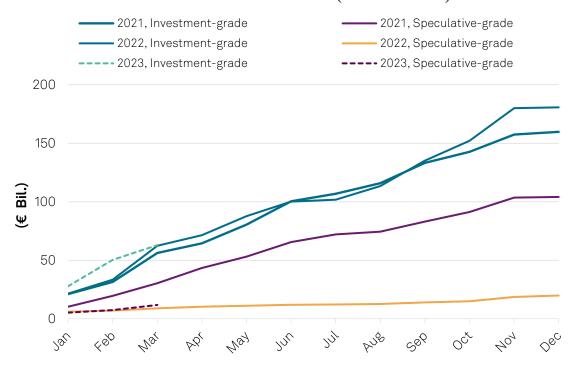


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Europe | Speculative-Grade Issuance Continues To Struggle

- Q1 new issuance was marginally better than last year but still well below prior years.
- Headwinds are likely to continue owing to a confluence of challenging economic and market conditions.
- Market activity largely focuses on refinancings with amend-and-extend transactions common.

New nonfinancial bond issuance (cumulative)

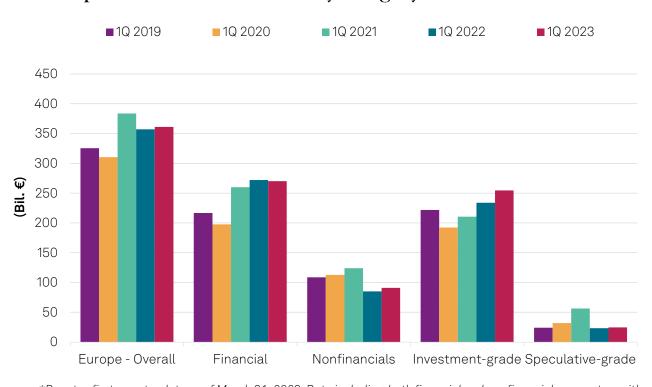


Data as of March 31, 2023. Sources: S&P Global Ratings Credit Research & Insights and Refinitiv.

S&P Global

Ratings

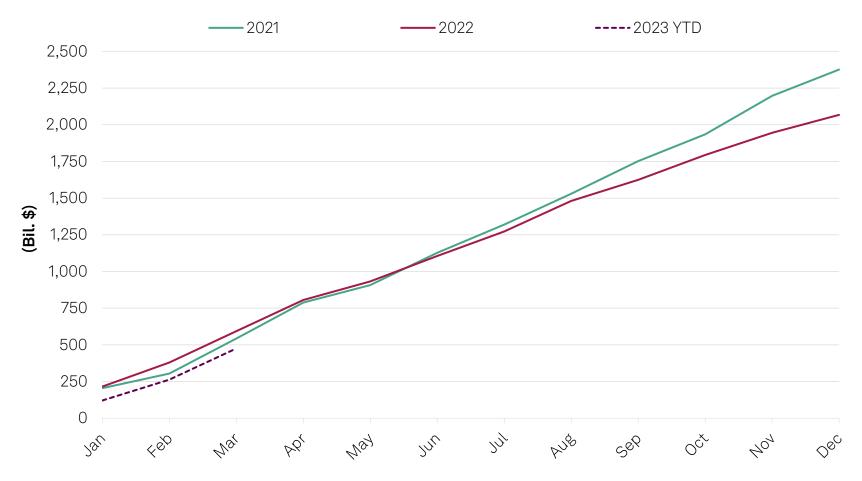
European new bond issuance by category



^{*}Denotes first-quarter data as of March 31, 2023. Data including both financial and nonfinancial corporates, with rated and unrated debt. Overall, financials, nonfinancial includes unrated issuances. Sources: S&P Global Ratings Credit Research & Insights and Refinitiv.

APAC | Volatile Markets Keep Bond Market Access Restricted

Asia-Pacific cumulative corporate (financial and nonfinancial) new bond issuance



- Yields and spreads were volatile in the first quarter of 2023.
- Despite the bank turmoil, Asian dollar bond yields remain far below recent peaks seen in early November 2022.
- Strong policymaker responses to the bank crises in the U.S. and Europe contributed to a rebound in issuance in March following muted volumes in early Q1.
- Issuance has been restricted to issuers with relatively high credit quality.
- There has been no major specgrade issuance since early February.

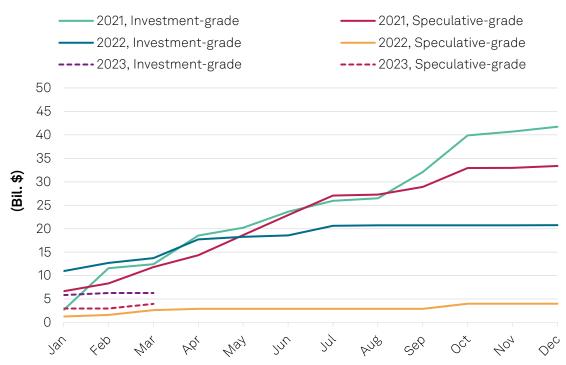
Data as of March 31, 2023. Note: Issuance volumes include financial and nonfinancial corporate issuers of rated and unrated b onds. Sources: S&P Global Ratings Credit Research & Insights and Refinitiv.



Emerging Markets | Weakest Issuance Volume Since 2019

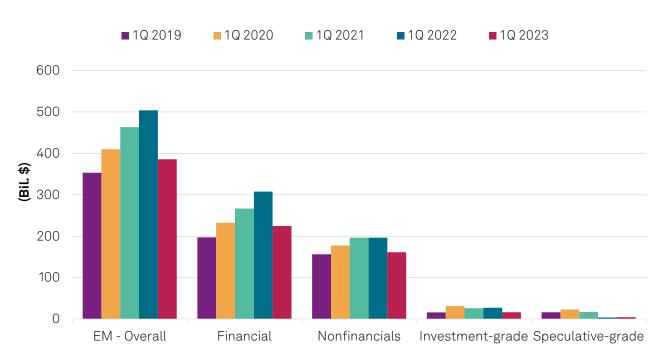
- Unlike Asia-Pacific, EM issuance broadly remains weak. Speculative-grade deals have been few and far between. But even investment-grade issuance has been weaker than its typical Q1 pace in recent years.
- Overall issuance volumes year to date are at their weakest since 2019. This is despite the record volume of sovereign issuance from emerging markets in January, which so far has not translated into a pickup in activity in corporate bond primary markets.

New nonfinancial bond issuance (cumulative)



Data as of March 31, 2023. Sources: S&P Global Ratings Credit Research & Insights and Refinitiv.

Emerging market new bond issuance by category



*Denotes data as of Jan. 1–March 31, 2023. Data including both financial and nonfinancial corporates. Overall, financials, nonfinancial includes unrated issuances. EM--Emerging markets. Sources: S&P Global Ratings Credit Research & Insights and Refinitiv.



Related Research



Credit Markets And Ratings Performance | Latest Research

- This Month In Credit: Downgrades Are Back, With Divergence Across Regions (April 2023), April 27, 2023
- Global Financing Conditions: Tumultuous March Cuts Into Full-Year Issuance Projections, April 26, 2023
- <u>2022 Annual Global Corporate Default And Rating Transition Study</u>, April 25, 2023
- This Week In Credit: Prospects Dim For Rating Performance (April 24, 2023), April 24, 2023
- Ratings Performance Insights: Q1 2023, April 21, 2023
- <u>2022 Annual Global Structured Finance Default And Rating Transition Study</u>, April 20, 2023
- ESG In Credit Ratings April 2023, April 19, 2023
- <u>Distressed Exchanges Spur A Sharp Rise In Corporate Defaults</u>, April 13, 2023
- Credit Cycle Indicator Q2 2023: Peak In Early 2021 Highlights Credit Risks Now, March 30, 2023
- <u>2022 Annual U.S. Public Finance Default And Rating Transition Study</u>, March 30, 2023
- 2022 Annual Japanese Structured Finance Default And Rating Transition Study, March 27, 2023
- 2022 Annual Japanese Corporate And Public Finance Default And Rating Transition Study, March 27, 2023



Credit Markets And Ratings Performance | Latest Research

- Regional Refinancing: Overhang Of Pandemic-Era Debt And Higher Interest Rates Present Regional Challenges, March 24, 2023
- Risk Reshuffle: Loans Could Become Riskier While Bond Investors May Be Too Optimistic, March 9, 2023
- The U.S. Leveraged Loan Default Rate Could Reach 2.5% By December 2023 As High Costs Catch Leveraged Credit,
 March 2, 2023
- Growing Strains Could Push The U.S. Speculative-Grade Corporate Default Rate To 4% By December 2023, Feb. 16,
 2023
- <u>The European Speculative-Grade Corporate Default Rate Could Rise To 3.25% By December 2023, Amid Uncertain Backdrop</u>, Feb. 16, 2023
- Global Refinancing--Pandemic-Era Debt Overhang Will Add To Financing Pressure In The Coming Years, Feb. 7, 2023

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