

Global Credit Outlook 2024

New Risks, New Playbook

Dec. 4, 2023

This report does not constitute a rating action.



Foreword

Dear reader,

Looking ahead at 2024 and after, it's clear that the events since the COVID-19 pandemic have brought on a profound transformation for the global economy and financial markets. While some of the same challenges remain, other risks have emerged—all of which require a new playbook for issuers and investors in the debt markets.

We are back to an environment of higher real interest rates, concluding an era of cheap money that started in the wake of the Great Financial Crisis. With a durably higher cost of debt, a rampup in maturities, and slowing economic activity in the cards for 2024, the focus comes back to credit fundamentals and liquidity analysis. While still-robust employment levels and supportive fiscal conditions should continue to underpin the resilience of stronger credits, we expect 2024 to come with additional credit deterioration and defaults for more vulnerable corporate and government issuers.

Geopolitical risks have returned to center stage, with the war between Israel and Hamas, the prolonged Russia-Ukraine conflict, and the ongoing U.S.-China tensions. This increased geopolitical fragmentation affects corporates and governments in their strategies for supply chain and energy security, with potential broader implications on food prices, global trade, and inflation—while increasing the potential for event risk. New challenges are also emerging from the necessity to accelerate the world's transition to a low-carbon economy to limit the potential dramatic consequences of climate change. At the same time, generative artificial intelligence (AI) and an accelerating technological transformation, along with heightened risks from cyber attacks, are forcing corporate and government entities to adapt their playbooks.

Against this backdrop, S&P Global Ratings' Global Credit Outlook 2024 presents our credit and macroeconomic outlooks for the year ahead, including our base-case forecasts, assumptions, and key risks for what promises to be yet another challenging period for the global economy and markets. Aligned with these risks, we address the questions that will shape 2024—about credit headwinds; capital flows; geopolitical uncertainty; energy and climate resilience; and crypto, cyber, and tech disruption—collected through our interactions with market participants.

This report harnesses the power of our regional and global Credit Conditions Committees (CCC), which meet quarterly to review conditions in Asia-Pacific, Emerging Markets, Europe, and North America, cascading into our global coverage. At the CCCs, we evaluate the trends affecting economies, industries, and credit markets—to identify the base case and downside scenarios and rank the exogenous risks that underpin our credit ratings and inform potential rating changes across various asset classes. This publication also highlights the depth and breadth of S&P Global Ratings' analysts and the Credit Research & Insights team's expertise on credit markets.



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Key Takeaways

- Borrowers across all asset classes will need to adjust to tighter financing conditions and softer economic growth. While long-term yields will likely peak around midyear, financing conditions will likely stay tight in real terms in 2024. Borrowers have reduced near-term maturities, but the share of speculative-grade debt coming due rises significantly in 2025, making 2024 a pivotal year. Defaults will likely rise further, to 5% in the U.S. and 3.75% in Europe, above their long-term historical trends.
- We expect additional credit deterioration in 2024, largely at the lower end of the ratings scale, where close to 40% of credits are at risk of downgrades. Sectors exposed to a decline in consumer spending are most vulnerable. Meanwhile, investment-grade credits should generally continue to show resilience despite some margin compression—with the exception of the real estate sector.
- The main risks that could derail our baseline expectations, leading to further credit deterioration, include persistent tight financing conditions amid entrenched inflation; a sharper-than-expected slowdown in global growth; elevated input-cost inflation and high energy prices that squeeze corporate profits and pressure governments' fiscal balances; vulnerable commercial real estate; and amplifying geopolitical tensions.
- Looking ahead, heightened geopolitical risks, the need to accelerate the decarbonization of the economy to address the rise in climate-related risks, and the technology revolution will increasingly shape the future of credit.

An environment of increasingly rapid change, which began with the onset of the global COVID-19 pandemic, requires financial market participants to adapt their playbooks. Conditions that borrowers and investors could safely take for granted for a decade or more have been pushed aside. Most importantly, perhaps, is that markets can no longer expect ultra-accommodative monetary policy and low inflation will be the norm.

S&P Global Economics expects real interest rates to remain elevated through 2024, with the Federal Reserve unlikely to begin a cycle of policy-rate cuts before June, assuming core inflation approaches the central bank's target. We expect a series of four quarter-point cuts, which would bring the federal funds target rate to around 4.6% by the end of the year and 2.9% by end of 2025.

Similarly, eurozone key rates may have peaked, but could take a long time to come down. We forecast the European Central Bank will gradually lower its policy rate starting in June—with three quarter-point moves in the year before easing further toward neutral levels in 2025.

The Fed will influence the magnitude of easing by emerging market (EM) central banks. Disinflation will likely continue across most EMs in the coming quarters, which we expect will encourage central banks to start lowering interest rates or continue doing so for those that have already started. However, swings in the Fed's policy expectations will matter. If the Fed's policy is more hawkish than what is implied by the market, EM interest rate curves are likely to adjust

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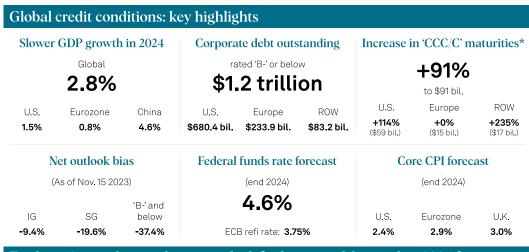
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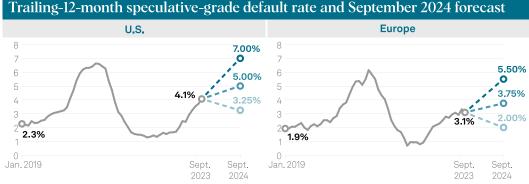
Molly Mintz

New York molly.mintz @spglobal.com upward, and central banks will likely proceed more cautiously with easing to prevent disorderly capital outflows.

Global GDP growth is likely to slow significantly in 2024, to 2.8%, after a surprising resilience in 2023 fueled by strong employment, healthy consumer spending, and post-COVID tailwinds. As the lagging effects of tighter monetary policy and diminished consumer purchasing power work through major economies, we expect the U.S. to slip into a period of below-trend growth, with Europe bordering on recession, and pain in China's property sector (along with high leverage on corporate and local government balance sheets) dragging on economic activity. Given the resultant hit to business and household confidence, we now expect China real GDP growth next year of just 4.6%, and we think that could fall below 3% if the property crisis further deteriorates. Overall, our base case is for a soft landing, but the risk of recession remains elevated (30%-35% in the U.S.).

Chart 1



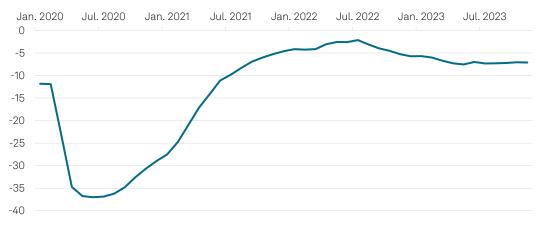


^{*}Growth in debt due in 2025 as of Jul. 1, vs debt due in 2024 a year earlier. ECB--European Central Bank. IG--Investment grade. ROW--Rest of world. SG--Speculative grade. Source: S&P Global Ratings.

On the back of a slowing economy and the high cost of debt, we expect further credit deterioration in 2024, continuing the diverging trends of resilience at the investment-grade level and downgrades largely at the lower end of the ratings scale. This is reflected in the 9.4% of investment-grade credits with negative outlooks or on CreditWatch with negative implications (below the historical average), and negative outlooks on speculative-grade (rated 'BB+' or lower) and 'B-' and below credits, in particular, at 19.6% and 37.4%, respectively—indicating significant downgrade risk ahead. For global nonfinancial corporate debt, the net outlook bias, which indicates potential rating trends, is at negative 8.4%, back to pre-COVID levels (see chart 2).

Chart 2

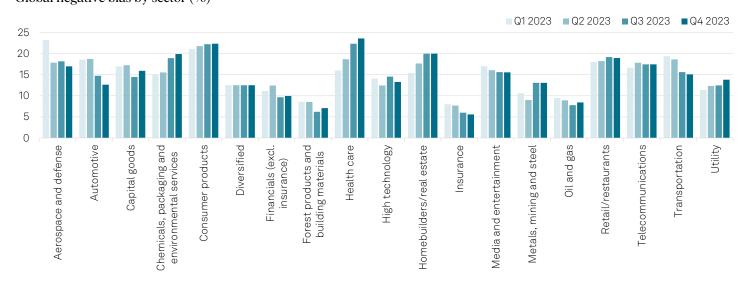
Global financial and nonfinancial corporate net bias (%)



Net bias--The difference between ratings with a positive outlook or on CreditWatch with positive implications and those with a negative outlook or on CreditWatch negative. Source: S&P Global Ratings.

Sectors most exposed to a decline in consumer spending face higher risk of downgrades. The consumer products sector has the highest negative bias—with 22.3% of issuers having a negative outlook or on CreditWatch with negative implications. Two sectors, health care, and homebuilders and real estate, suffered the highest deterioration in terms of increased negative bias in 2023 (see chart 3). On the other side, the oil and gas sector has the highest positive bias, at 17.5%, as energy cash flows remain strong despite geopolitical challenges and weaker prices.

Chart 3
Global negative bias by sector (%)



Q4 data as of Nov. 15, 2023. Source: S&P Global Ratings.

Defaults are poised to rise. Defaults have already picked up to above historical averages in the U.S. and Europe, and are poised to increase further in 2024 as debt maturities ramp up and competition for funding intensifies. S&P Global Ratings now expects the trailing-12-month speculative-grade default rates in the U.S. and Europe to reach 5% and 3.75%, respectively, by September, under our base case for a soft landing. In the U.S., the proportion of 'CCC/C' ratings among all corporate borrowers is historically large, at 7%, with many of these firms suffering

negative cash flows and large maturities due in 2024 and 2025. This signals a high level of sensitivity to a drop in growth or a further rise in interest rates, which could push the default rate to our pessimistic scenario of 7%. In Europe, too, debt coming due in 2024-2025 will force many lower-rated borrowers to refinance at much higher rates than they enjoyed over the past five years. This would further strain cash flows and could keep the default rate elevated into late-2024 or beyond.

With no clear signs that long-term yields will fall materially any time soon, financing conditions will likely continue to tighten in real terms in 2024, particularly given the steeper maturity wall beginning in 2025. While borrowers globally have reduced near-term maturities—trimming speculative-grade corporate debt due in 2024 by 34% in the past year—the share of speculative-grade debt coming due rises in coming years, reaching a peak in 2028 (see chart 4). The U.S. accounts for the bulk of upcoming debt maturities rated 'B-' and below (see chart 5).

For emerging markets, maturities start to ramp up in 2024 and increase further in 2026-2027. U.S. dollar strength is compounding the pressures on many, given the \$46 billion of rated dollar-denominated debt coming due next year (excluding China).

Speculative-grade nonfinancial corporate maturities rise in

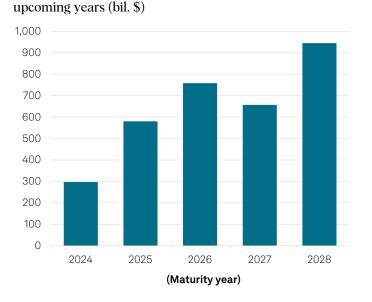
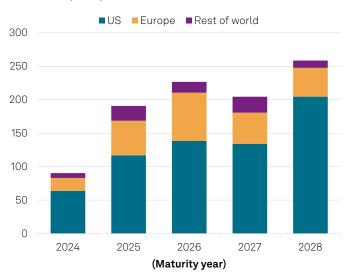


Chart 5

U.S. accounts for most of the upcoming 'B-' and lower maturities (bil. \$)

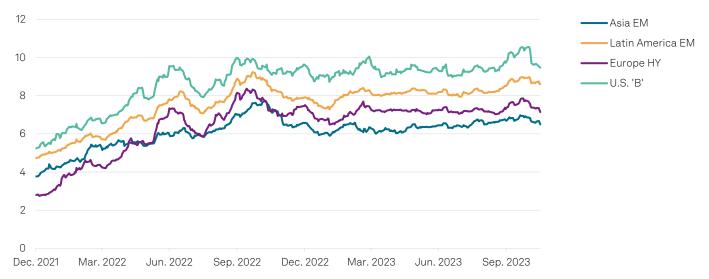


Data as of Jul. 01, 2023. Includes nonfinancial corporate issuers' bonds, loans, and revolving credit facilities that are rated 'BB+' or lower by S&P Global Ratings. Excludes debt instruments that do not have a global scale rating. Foreign currencies are converted to U.S. dollars at the exchange rate on Jul. 01, 2023. Source: S&P Global Ratings Credit Research & Insights.

Borrowing Costs Are Likely To Remain Elevated Through 2024

Borrowers will need to adjust to tighter financing conditions (see chart 6). Long-term rates have been elevated for most of the past 18 months, and even as central banks have paused rate hikes, the bite of quantitative tightening has come alongside increased borrowing by the U.S. Treasury. This has boosted Treasury yields, pulling most other governments' benchmark rates up with them. At the same time, corporate yields from the U.S. to Europe to Latin America have all risen roughly 4% since the start of 2022.

Chart 6
Higher-for-longer: corporate yields elevated globally (%)

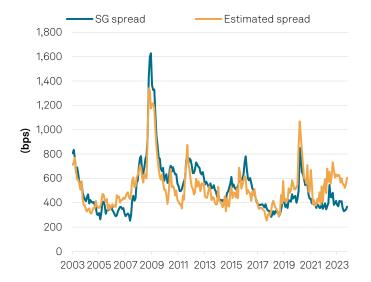


EM--Emerging market. HY--High yield. Sources: ICE Data Indices, LLC, ICE BofAML yield indices effective yields, retrieved from FRED, Federal Reserve Bank of St. Louis, S&P Global Ratings Credit Research & Insights.

And while bond spreads haven't tightened considerably this year, we estimate that current spreads may be well narrower than what is appropriate—as has been the case through most of the post-pandemic period. The speculative-grade bond spread in the U.S. was at 367 basis points (bps) at the end of October, compared to our estimate of 604 bps; the European equivalent spread was at 483 bps, compared to our estimate of 771 bps (see charts 7 and 8). It is more likely that any widening of spreads ahead will be the result of even higher corporate yields rather than a major decline in risk-free rates. And if a recession were to occur, spread widening would likely be particularly acute.

Actual versus estimated spreads, U.S.

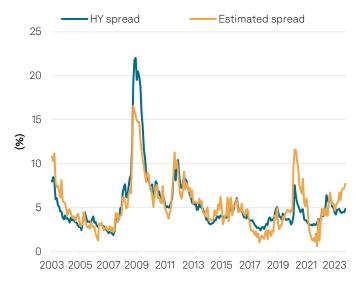
Chart 7



 ${\tt bps--Basis\ points.\ SG--Speculative\ grade.\ Source:\ S\&P\ Global\ Ratings.}$

Chart 8

Actual versus estimated spreads, Europe



HY--High yield. Sources: ICE Data Indices, LLC, ICE BofAML yield indices effective yields, retrieved from FRED, Federal Reserve Bank of St. Louis, S&P Global Ratings Credit Research & Insights.

Corporate borrowers are already feeling the effects of elevated interest rates, and the erosion of margins is also becoming evident, with almost two-thirds of industries globally seeing annual margins decline in the third quarter, albeit from relatively high levels. Further margin erosion on the back of weaker growth would likely have longer-term implications and feed into an increase in unemployment.

At the same time, the resilience of consumers may not last much longer—particularly in the U.S., for those at the lower end of the income scale. Household savings, once fattened by COVID-related stimulus, are shrinking, and consumers are becoming more wary of spending, especially on discretionary goods. Spending on services is now back to its pre-pandemic trend, leaving little pent-up demand. Moreover, real disposable income in the U.S. has declined four months in a row, with the savings rate falling to a very low 3.4% in September.

By contrast, in Europe, notwithstanding higher mortgage costs in countries exposed to variable rates, we anticipate the consumer will provide support to growth next year as real disposable incomes rise on the back of relatively high wage growth and disinflation.

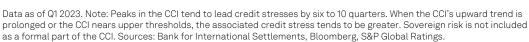
EM corporates will face increasing headwinds in 2024 as growth in major economies slows, cost pressures linger, the effects of rapid monetary-policy tightening surface, and debt maturities pile up. For many borrowers, this will mean falling revenues amid increasing financing costs as debt comes due, resulting in weaker cash flows.

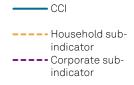
Nonfinancial corporates' revenue growth has stalled, and EBITDA continues to decline. Third-quarter results showed that, at an annual rate, global revenues were near-flat, rising just 0.3% (and down 1.4% vs. the same quarter a year earlier), with EBITDA falling 4.4%. Moreover, the pressure from surging cash interest payments is growing apace, up an aggregate 23% annually overall and 27% for speculative-grade borrowers. Leverage is drifting higher, and interest-cover continues to erode.

Our global and regional Credit Cycle Indicators (CCIs) suggest a credit correction will persist through 2024. We believe the tailwinds from the post-pandemic recovery, stronger-than-expected economic resilience in 2023, some degree of fiscal stimulus still in place, and pushed-out debt maturities have delayed the peak in credit stress. While the CCIs show nascent signs of a trough, a credit recovery looks unlikely to occur before 2025.

Chart 9

A credit upturn may not come until 2025
Global Credit Cycle Indicator (standard deviations)





Amid steeper funding costs and more-selective lending, risks of further increases in nonperforming loans and defaults could shape credit conditions in 2024. For banks, this could mean increased credit losses. But while most asset-quality measures have been worsening, it is generally more a normalization toward historical averages in most cases. Although we expect further weakening in 2024, we believe that owing to decent pre-provision earnings, banks are generally well-positioned to absorb associated credit losses.

All told, our outlook for global banks remains steady. As of Oct. 31, 79% of bank ratings outlooks were stable, with this resilience largely due to solid capitalization, improved profitability, and stillsound asset quality. Still, higher-for-longer interest rates and continuing stress in the office sector may mean elevated commercial real estate (CRE)-related loan losses for debtholders, such as U.S. banks—with regional banks more exposed as a percentage of assets than their larger competitors.

Recovery prospects for corporate debt remain under pressure. Even before macroeconomic concerns about higher-for-longer interest rates and uncertain economic growth, there was an expectation that bloated debt structures with high debt leverage and concentrations of first-lien debt and covenant-lite structures might weigh on recovery rates given default.

In the U.S., our average expectation for future first-lien recoveries (using the rounded recovery percentages that are part of our recovery ratings) is 64%—well below the long-term historical average of 75%-80% (see chart 10). Average recovery expectations for first-lien debt of issuers rated 'B,' 'B-,' and in the 'CCC' category are lower still, at 61%, 59%, and 58%, respectively. Further, out-of-court restructurings will likely push many first-lien recoveries lower and increase dispersion.

Chart 10 Expected recovery on newly issued North America first-lien debt (%)



Data through Sept. 30, 2023, based on the rounded point estimates included in our recovery ratings for rated nonfinancial corporate entities in the U.S. and Canada. Source: S&P Global Ratings.

For Europe, our average expectation for future first-lien recoveries is 59%--compared to the long-term historical average of 70%-75%. Average recovery expectations for European first-lien debt of issuers rated 'B,' 'B-,' and in the 'CCC' category are 63%, 58%, and 51%, respectively. The generally lower European recovery expectations reflect a heavier concentration of first-lien-only debt structures.

New 1L debt, average recovery estimate

Will Sovereigns Unwind Their Fiscal Stimulus?

Much of the recent global economic resilience has been bolstered by governments' large, expansionary fiscal stimulus. Given the associated increase in governments' debt leverage, policymakers will eventually have to unwind at least some of this support—especially given the cost of servicing debt in a higher-for-longer interest-rate environment.

The scaling back of stimulus will likely weigh on demand and dent economic activity, and is thus complicated by upcoming national elections in more than 50 countries, both developed and emerging.

Increased geopolitical strife threatens to disrupt the credit landscape. The escalating war between Israel and Hamas adds another dimension to existing geopolitical tensions, already intensified by the prolonged fighting between Russia and Ukraine. Any significant spread of the fighting in the Middle East raises the potential for energy-supply shocks and the renewed dislocation of supply chains that had more or less normalized once the worst of the pandemic passed.

While we think there is a broad desire that the conflict remain contained and for other countries in the region not to participate directly, the possible involvement of Hezbollah (a well-armed Lebanese Islamist political and militant group with close ties to Iran) would risk drawing in Iran and, conceivably, the U.S.

Against this backdrop, key potential channels of transmission to the rest of the world could include: an energy-supply shock, as price pressures and volatility in the oil market would almost certainly increase if the conflict escalated significantly; supply-chain disruptions, which could underpin inflation at a time of increasing economic uncertainty; and a surge in social unrest, with the possibility of protests or outbreaks of violence becoming politically destabilizing across the Middle East and beyond.

From an energy-supply perspective, the Middle East conflict is especially concerning, given that roughly one-third of the world's liquefied natural gas and almost one-quarter of its oil travels through the 104-mile strait of Hormuz, which is the only shipping route from the Persian Gulf to the open sea.

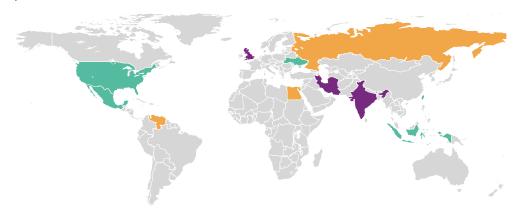
Meanwhile, there are elections (presidential and/or legislative) in more than 50 countries in 2024, many of which could have global ramifications (see chart 11).

Both Russia and Ukraine, mired in a war that will soon enter its third year, have presidential elections in March.

Adding a layer of uncertainty to both the Middle East and Russia-Ukraine situations are the U.S. presidential and legislative elections in November, given the different positions in Congress regarding support for additional funding for Ukraine and Israel.

Chart 11

Key elections in 2024





Election types by location

Egypt	presidential		
India	legislative		
Indonesia	both		

Iran	legislative
Mexico	both
Russia	presidential

Taiwan	both
U.K.	legislative
U.S.	both

Ukraine	both			
Venezuela	presidential			

Source: S&P Global Ratings.

Real Estate Remains Under Pressure

Worries about real estate remain around the globe, albeit with varying dynamics. In the U.S. and Europe, the focus has been on commercial real estate—in particular, the office space—while in China, the ongoing downturn in residential real estate is dragging on the economy.

In the West, CRE concerns have shifted from how pandemic-prompted pressures hurt hotels and retail properties to how hybrid and remote work patterns have depressed demand for office space. Asset valuations have declined in many major cities across the U.S., U.K., and continental Europe. The sharp rise in interest rates has weighed on borrowers' interest coverage and raised refinancing risk.

In both the U.S. and Europe, higher financing costs, falling asset values, and declining cash flows mean that debtholders—including banks, insurers, and commercial mortgage-backed securities (CMBS)—could suffer elevated loan losses. The need to upgrade properties to meet everincreasing energy-efficiency standards is putting additional pressures on landlords in many European countries.

Pressures in the sector will likely be drawn out. Office leases can last 10 years or more and lenders (of which the majority are banks) have been more willing to extend loan maturities in anticipation of an eventual decline in interest rates. But almost four years past the onset of the pandemic, it's clear that the secular shifts mean the office sector may need years to recover from the recent downturn.

In China, the focus instead is on residential real estate and property development, which has been mired in a prolonged downturn since late 2021. Weak property sales, particularly in lowertier cities, are persisting despite stimulus measures from Beijing. Slowing residential sales, which fell nearly 4% in January-October 2023 (compared to the same period in 2022), are hitting property developers' cash flows and land sales—which are a key source of revenue for local and regional governments.

China Faces Stresses At Home And Abroad

This pain in the property market is dragging on China's economic rebound and driving downside risk. While the worst may be over for China's property developers, S&P Global Ratings expects property sales to stay depressed amid the low number of construction starts, an inventory overhang in lower-tier cities, and ever-tightening escrow restrictions.

We think a worsening of the property crisis (which assumes a further 20%-25% decline in 2024 property sales from 2022) could push China's economy—long the engine of global GDP growth—below 3% in 2024, compared to our base case of 4.6%.

At the same time, **the U.S.-China relationship remains strained**. With the U.S. presidential elections set for November, bilateral tensions could intensify amid U.S. domestic political posturing. Concurrently, the U.S.' ongoing export curbs of advanced chips to China and limits on investment in China's advanced-tech sector, could cause renewed supply bottlenecks and crimp capital flows for both—and other—countries.

More broadly, a partial decoupling of China from the West would reshape supply chains, which carries significant costs and operational challenges.

Top Risks

While credit ratings reflect our base-case scenario, our regional and global Credit Conditions Committees monitor top risks that could derail our baseline expectations, leading to further credit deterioration. For 2024, these include the risks that:

- Tight and volatile financing conditions persist amid entrenched inflation, increasingly pressuring debt-service capacity of more vulnerable borrowers;
- A deeper and longer-than-expected recession in the largest economies further damps global growth;
- Persistent input-cost inflation and high energy prices, combined with weakening demand, squeeze corporate profits and pressure governments' fiscal balances;
- Stresses in global real estate markets result in materially higher credit losses and spillovers to broader economies and markets; and
- Amplifying geopolitical tensions roil markets and weigh on business conditions.

Looking ahead at the structural risks that will shape the future of credit, we see greater pressure on credit from the physical and transition risks associated with climate change, along with rising systemic risks from cyberattacks.

Global Credit Outlook 2024

Top Global Risks

An extended period of high real-interest-rate levels further strains the weakest borrowers

Risk level Moderate Elevated High Very high Risk trend Improving Unchanged Worsening

A prolonged period of historically elevated real interest rates could become more challenging as debt maturities increase in 2025, either locking out the weakest borrowers or with most issuers facing higher debt-service costs. This could be exacerbated as revenues slow, raising the real impact of higher borrowing costs. When faced with slower GDP growth, lenders typically become more selective or demand greater compensation for increased risk. This could contribute to default rates reaching our pessimistic cases of 7% in the U.S. and 5.5% in Europe.

An economic hard landing leads to greater credit stress

Risk level Moderate Elevated High Very high Risk trend Improving Unchanged Worsening

Most countries have entered a slower growth period. The U.S. economy has proven resilient, but signs of strain among consumers are growing. Most of core Europe is already experiencing anemic growth, and in our base case for 2024 we expect most countries to slow further, including below-trend growth in most emerging markets. Downside risks to these already slower growth projections are largely linked to any weakness in labor markets, which in many countries are already tight. Consumer delinquencies are starting to rise and built-up savings from pandemic supports have been deteriorating quickly, which will challenge economic resilience ahead. We currently project the U.S. has a historically high 35% likelihood of a recession in the next 12 months, indicating increased downside vulnerability for the world's largest economy, which would have spillover effects globally.

Stresses in global real estate markets result in materially higher credit losses and spillovers to broader economies and markets

Risk level Moderate Elevated High Very high Risk trend Improving Unchanged Worsening

A combination of secular and cyclical factors--high interest rates, falling valuations and cash flows, hybrid work trends, increasingly stringent environmental standards for buildings, and high leverage--are challenging established business models for commercial and residential real estate. Beyond our base case assumptions, spillovers from these vulnerabilities could reverberate more broadly, whether through material losses for more exposed banking systems (such as the U.S. and China), other non-bank financial sectors with real estate exposures, or through negative effects on investor and consumer sentiment more generally.

China's economic growth challenges cause ripple effects globally

Risk level Moderate Elevated High Very high Risk trend Improving Unchanged Worsening

China's economy could weaken on multiple fronts at once, with persistent weakness in the real estate sector, tepid household and business confidence, high debt, and subdued exports already weighing on the country's growth momentum. Contagion risks within China from weaker confidence could spill over from real estate and related sectors (such as local government financing vehicles) -- exacerbating credit stress for banks. Lenders could restrict new debt given the corporate sector's already high leverage. Given China's large proportion of global trade, its slump could spread to multiple regions.

Structural risks

Geopolitical tensions threaten market and business confidence, trade, and a renewal of inflation

Risk level Moderate Elevated High Very high Risk trend Improving Unchanged Worsening

The post-COVID era marks the return to geopolitical risks. The Israel-Hamas war adds another dimension to increasing geopolitical strife. The potential for the war to escalate—and to affect the rest of the world through energy supply shocks, supply disruption, and risks to social cohesion—is a key concern. Other tensions such as persistent U.S.-China frictions, the Russia-Ukraine conflict, and domestic issues in certain emerging markets could curb business activity, trade, supply chains, and investment flows--as well as increase financial market volatility. 2024 will also feature more than 70 elections in 50-plus countries whose outcomes could add complexity to already strained international and domestic dynamics for many countries.

Increased financial, business, and human implications from climate physical and transition risks

Risk level Moderate Elevated High Very high Risk trend Improving Unchanged Worsening

Larger and more frequent natural disasters increase the physical risks public and private entities face and threaten to disrupt supply chains, such as for agriculture and food. This may quickly become a headline risk in the near term as the El Niño phenomenon is expected to disrupt agricultural commodities this year, particularly in emerging markets. At the same time, the global drive toward a "net-zero" economy heightens transition risks (such as policy, legal, technology, market, and reputation risks) across many sectors and will likely require significant investments. Concerns about energy supply and security are adding uncertainty to this transition.

Cyberattacks and the potential for rapid technological change threaten global business and government infrastructure

Risk level Moderate Elevated High Very high Risk trend Improving Unchanged Worsening

Amid increasing technological dependency and global interconnectedness, cyberattacks pose a potential systemic threat and significant single-entity event risk. Criminal and state-sponsored cyberattacks are likely to increase, and with hackers becoming more sophisticated, new targets and methods are emerging. A key to resilience is a robust cybersecurity system, from internal governance to IT software, all requiring additional costs. Entities lacking well-tested playbooks (such as active detection and swift remediation) are the most vulnerable. Meanwhile, increased digitization and the introduction of AI by public and private organizations will foster broader operational disruptions, and potentially increase market volatility for short periods or even pose greater economic adjustments.

Source: S&P Global Ratings.

Risk levels may be classified as moderate, elevated, high, or very high. They are evaluated by considering both the likelihood and systemic impact of such an event occurring over the next one to two years. Typically, these risks are not factored into our base case rating assumptions unless the risk level is very high.

Risk trend reflects our current view about whether the risk level could increase or decrease over the next 12 months.

Global Economic Outlook 2024

2024 Is All About The Landing

Key Takeaways

- Following a synchronized rise in policy rates, growth is now unsynchronized across major economies. The U.S. is outperforming whereas in Europe activity is flat. The common macro thread comprises strong labor markets and spending on services, fiscal tailwinds, and lingering core price pressures.
- Inflation has likely peaked as have policy rates, but central banks are on guard against declaring victory too early. Our higher-for-longer view applies both to policy rates and market interest rates, real and nominal. Caution among developed market central banks is constraining potential rate cuts in emerging markets.
- We have moved our GDP growth forecasts marginally higher in some key emerging
 markets but are broadly unchanged elsewhere. We have again pushed any necessary
 slowdowns into the future.
- The next macro challenge is to "stick the landing." The risks to our soft-landing baseline look balanced. Strong labor markets and fiscal tailwinds are driving the upside, whereas uncertainties about the lagged transmission of cumulative rate hikes since early 2022 are driving the downside.

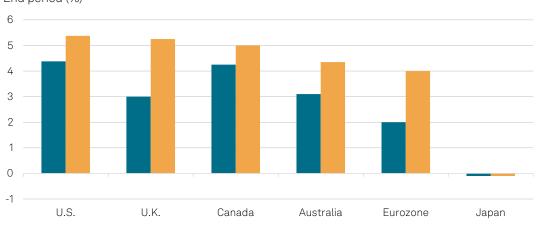
Editor's note: This is an abridged report. For the full version, see: "Global Macro Update: 2024 Is All About The Landing," published Nov. 29, 2023.

Rate Hikes Have Been Synchronized, Macro Outcomes Have Not

Major central banks (excluding Japan) have raised policy rates by about 400 to 500 basis points (bps) since the first half of 2022 to slow inflation, which has surged to a four-decade high. The effort to curb inflation appears to be succeeding, but macro performance has varied widely. This reflects differing speeds of monetary transmission, differing fiscal impulses, and differing external conditions and dependencies.

Chart 1

Major central bank policy rates End period (%)



Sources: Central bank websites.

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■ Dec. 2022

■ Nov. 2023

Our macro summary for the major regions and groups is as follows (details and links appear below):

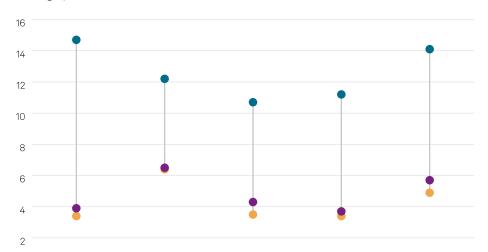
- The U.S. economy continues to outperform, posting nearly 5% annualized growth in the third quarter, led by strong consumer spending and an inventory rebuild. Fourth quarter GDP is tracking close to potential growth of 2%. (For further details, see "Economic Outlook U.S. Q1 2024: Cooling Off But Not Breaking," published on Nov. 27, 2023.)
- Activity in Europe has flatlined. Services-based economies (Spain) have done better than
 manufacturing-based economies (Germany). Monetary transmission works faster than it does
 in the U.S. (For further details, see "<u>Economic Outlook Eurozone Q1 2024</u>: <u>Headed For A Soft
 Landing</u>," published on Nov. 27, 2023.)
- China's growth has stabilized, reflecting targeted government stimulus. But household
 confidence remains weak, and the property sector remains under stress. High inflation has not
 been an issue. (For further details, see "<u>Economic Outlook Asia-Pacific Q1 2024: Emerging</u>
 <u>Markets Lead The Way</u>," published Nov. 27, 2023.)
- Emerging markets have proven resilient overall, led by domestic-driven economies (India, Indonesia), or those linked to the U.S. (Mexico). Policy rates cuts are in part currently constrained by the U.S. Federal Reserve. (For further details, see "Economic Outlook Emerging Markets Q1 2024: Challenging Global Conditions Will Constrain Growth," published Nov. 27, 2023.)

Strong labor markets are a bright spot almost everywhere, despite diverging growth outcomes. Low unemployment rates stem from strong spending on services and labor hoarding. Higher frequency indicators, including payroll additions, quits, and hours worked, do show signs of slower labor demand. Ongoing robust fiscal spending helps in many economies as well.

Chart 2

Unemployment rates

July 1990 through present



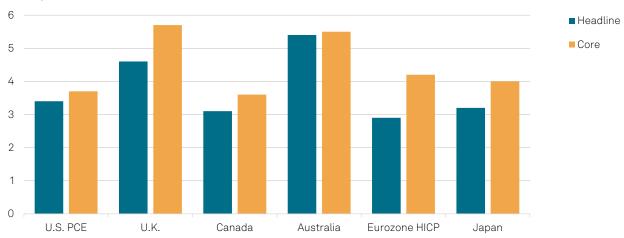
0	US	Euro Area	UK	Australia	Canada
High	14.7	12.2	10.7	11.2	14.1
• Low	3.4	6.4	3.5	3.4	4.9
Latest	3.9	6.5	4.3	3.7	5.7

Sources: FRED. S&P Global Ratings Economics.

Both headline and core inflation continue to decline following their peaks of late 2022. Headline inflation rose to higher rates than core and is now generally lower, reflecting the recent declines in food and fuel prices. However, core inflation remains stubbornly high--near 5% in several major advanced economies--and well above central bank targets, typically 2% over the medium term. This stickiness reflects strong labor markets and spending on services and other non-tradable goods. By extension, sticky inflation also implies that demand growth is too strong and that the pace of activity needs to fall to bring inflation lower.

Chart 3
Inflation--selected economies

End of period (%)



PCE--Personal consumption expenditure. HICP--Harmonized index of consumer prices. Sources: Country websites.

Major central banks are signaling that they will need to keep rates near current levels for a sufficiently long time, interpreted by markets as until the middle of 2024, because core inflation remains high and sticky. This stems from strong labor markets, which are driving services spending. Also, having been surprised by the jump in inflation in 2021 and responded too late, central banks are wary of getting burned again and are therefore leaning higher. Markets have bought the higher-for-longer view for the most part.

Latest Forecasts And Regional Narratives

Our updated GDP growth forecasts for the advanced economies are broadly unchanged for the U.S. and eurozone as a whole (see chart 4). Our global growth forecast is 0.2% higher this year and is unchanged over 2024-2026. The main revisions were in the big emerging markets: China and India. We have nudged Spain, France, and the U.K. higher and Italy lower, with all of these moves less than 30 bps, mainly due to carryovers from revisions to 2022 GDP. The emerging markets had somewhat larger revisions for key countries.

Chart 4

GDP growth forecasts

Annual percentage change

_	GDP growth forecast				Change from previous forecast				
_	2023	2024	2025	2026	2023	2024	2025	2026	
U.S.	2.4	1.5	1.4	1.8	0.1	0.1	0.0	0.1	
Eurozone	0.6	0.8	1.5	1.4	0.0	0.0	0.0	(0.1)	
Germany	-0.2	0.5	1.5	1.4	0.0	(0.1)	0.1	0.0	
France	0.9	0.9	1.5	1.3	0.2	0.1	0.1	(0.1)	
Italy	0.7	0.6	1.2	1.3	(0.2)	(0.1)	(0.1)	(0.1)	
Spain	2.4	1.8	2.0	2.1	0.3	0.2	(0.2)	0.0	
U.K.	0.5	0.4	1.5	1.6	0.2	(0.1)	(0.1)	0.0	
Asia-Pacific									
China	5.4	4.6	4.8	4.6	0.6	0.2	(0.2)	0.1	
Japan	1.7	0.9	1.0	0.9	(0.1)	(0.1)	0.0	0.0	
India*	6.4	6.4	6.9	7.0	0.4	(0.5)	0.0	0.0	
Emerging econo	mies								
Mexico	3.3	1.8	2.0	2.1	0.3	0.1	(0.1)	0.0	
Brazil	2.9	1.5	1.9	2.0	0.0	0.2	0.2	0.0	
South Africa	0.8	1.5	1.6	1.6	0.0	(0.2)	(0.1)	(0.1)	
World	3.3	2.8	3.2	3.3	0.2	0.0	(0.1)	0.0	

World GDP is in purchasing power parity terms, based on sample of 33 countries we cover (excluding Russia).

Risks To Our Soft-Landing Baseline

We continue to see a material risk that macro developments will turn out better than

anticipated. Indeed, this has been the pattern for the past year, and many of the contributing elements remain in place. Labor markets remain tight across a wide swathe of economies even though headline growth numbers are diverging. The other factor is fiscal policy, which remains expansionary for this part of the cycle. This is also occurring across a wide number of economies, boosting output, labor demand, and wages more than would otherwise be the case.

An upside growth scenario also implies that interest rates will need to stay higher for longer.

This is relative to our already higher for longer baseline. Downside risks to our baseline scenario relate mainly to uncertainties around the transmission of higher policy rates to financial conditions and the real economy.

Given the steep increase in policy and market rates since early 2022, these resets will not be small. To the extent that the reaction to higher rates is not linear, these large rate increases pose greater downside risks. Not surprisingly, this downside is larger where the resets take longer and the rate adjustment is higher.

^{*}Fiscal year, beginning April 1 of the reference calendar year. Sources: S&P Global Market Intelligence. S&P Global Ratings.

Non-macro risks are inherently more difficult to quantify but must be recognized. In particular, geopolitical factors are at play. Spillovers of the ongoing conflicts between Russia and Ukraine and Israel and Hamas have so far been lower than we expected. But we can't rule out escalations, which could potentially move the macro needle. Tensions around the U.S.-China rivalry have manifested so far in some modest realignment of trade and financial flows, but also remain largely bounded.

Sticking The Landing

The macro focus has shifted from watching inflation to watching the landing. Since the transmission of monetary policy works with a lag, the next few quarters will be critical in determining whether we soft land or not. But what does this elusive soft landing look like?

Growth needs to slow below potential in order for excess demand pressures to ease and inflation to fall back to target. In a soft-landing scenario the necessary adjustment takes place gradually. Critically, there is little or no undershoot of the level of GDP nor the rate of inflation, and no undershooting of policy rates. The glide path allows for a slower and more calibrated adjustment.

The soft-landing story mostly hinges on the labor market. If workers keep their jobs, or expect to keep their jobs, then spending is likely to be maintained. No paradox or thrift here, or a sharp drop in spending.

Real rates remain positive throughout. This can be seen as the cyclical manifestation of higher for longer. Policy rates will fall, but only after inflation is on a clear downward path. Real rates are likely to remain elevated, and even rise in the coming quarters. When landing is achieved, inflation will be at the target of 2% and the policy rate will exceed inflation by r*, the real rate of interest. We think r* has risen globally and could be as high as 1%.

Questions That Matter

Corporates | Could interest rate and recession risks derail corporate credit?

Credit headwinds

Interest cost pressures and a difficult economic backdrop mean credit pressures will remain acute for weaker borrowers.

How this will shape 2024

Weaker economic growth and a rising interest burden will test corporate issuers globally. The corporate sector proved surprisingly resilient in 2023, with sustained consumer spending, notably in the U.S., and supportive tailwinds from capital investment. Still, difficulties are apparent with default rates edging higher, net downgrades, and contracting annual revenues and EBITDA. The challenges will grow in 2024, as higher interest costs continue to filter through to effective interest rates, refinancing pressures start to build, and the economic backdrop remains difficult.

Corporate decision-making will likely amplify broader economic trends. Continued resilience and a gradual rebound in profits would likely contain credit pressures to the most vulnerable. This could start to unlock cash balances for M&A and investment. However, if the global economy weakens more than our forecasts assume, companies will likely act quickly to protect cash flows through layoffs and investment cuts, traditional harbingers of recession.

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Chart 1

The long decline in financing costs is likely over....

Cash interest paid/total debt and three-month U.S. interbank rates plus 350 basis points

Median, LTM, rated U.S. nonfinancial corporates

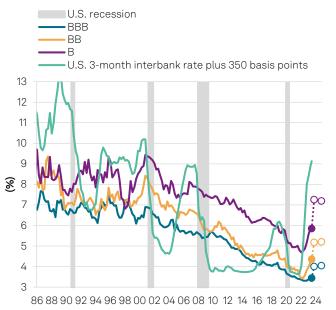
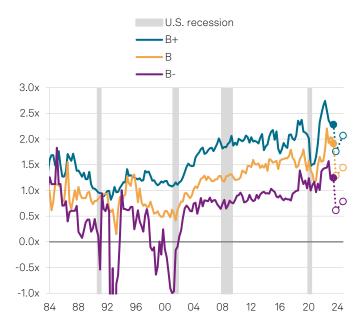


Chart 2

...and interest cover risks are building for weaker credits

EBIT interest coverage

Median, LTM, 'B' rated U.S. nonfinancial corporates



Source: S&P Global Market Intelligence CreditPro®, Compustat, S&P Capital IQ, NBER, S&P Global Ratings. Shows data for the contemporaneous rated universe through time. Financial data from Compustat from 1982 to 1994, and S&P Capital IQ thereafter. LTM data to Q3 2023, with last two markers indicating S&P Global Ratings estimate for end-2023 and end-2024.

What we think and why

Interest rate and refinancing pressures will continue to bear down on corporates. Third-quarter results to date show cash interest payments still surging, up 21% at an annual rate and 25% for speculative-grade entities overall. Refinancing conditions remain difficult, particularly for weaker entities, with lending standards tightening and debt maturity pressures building next year.

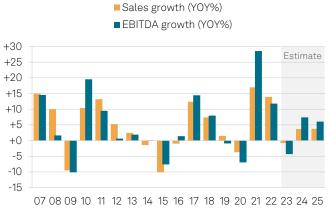
We think structural changes are at play that will put pressure on unsustainable capital

structures. The era of ever cheaper borrowing costs is over (see chart 1), as is the steady uptrend in profitability wrought by globalization, muted labor cost inflation, and reduced energy intensity. Trade and political tensions are unlikely to fade in the near term, although artificial intelligence (AI) may be a productivity wildcard. Sustained higher financing costs will likely mean that credit metrics such as interest cover, which had ceased to be of much relevance, will again be of value. More broadly, the end of financial repression (defined as interest rates being held below the inflation rate) may bring risks from unsustainable capital structures to a head.

Credit pressures are likely to be confined to the weakest credits. Despite these pressures, we believe credit quality will remain robust in investment grade and the stronger parts of speculative grade, absent a severe economic contraction, and allow a modest turnaround in the earnings cycle (see chart 3). However, the weaker end of the credit spectrum is vulnerable. We estimate median EBIT interest cover for U.S. 'B' rated nonfinancial corporates will drop below one by the end of this year to 0.6x, its lowest level since Q3 2004, and remain below one in 2024 (see chart 2). Among U.S. 'B' category ratings, 11% have had EBIT interest coverage ratios of less than one for three years or more (see chart 3), showing further evidence of fragility. For these reasons, we expect default rates will continue to rise even if the broader story is one of recovery.

Chart 3

Avoiding recession should help global earnings rebound...



Data for global rated nonfinancial corporates. Sources: S&P Capital IQ, S&P Global Ratings.

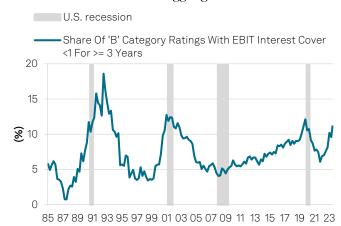
Read more

Corporate Results Roundup Q3 2023: Deterioration continues and revenues disappoint, Nov. 16, 2023

Interest-cover risks are growing for vulnerable corporate credit, Oct. 26, 2023

Chart 4

...but weaker credits are struggling with interest costs



Sources: S&P Global Market Intelligence CreditPro®, Compustat, S&P Capital IQ, NBER, Refinitiv, S&P Global Ratings.

What could go wrong

Sustained inflationary pressures or a sharp economic contraction are the primary risks.

Prolonged or reignited inflation pressures would exacerbate the already significant impact of higher interest rate costs, and likely be accompanied by intensified labor cost inflation and margin pressure. A sharp economic contraction could entail a dangerous combination of falling EBITDA and still elevated financing costs, with market volatility and higher risk premia likely to overwhelm any benefit from the lower policy rates that would likely follow.

Real Estate | Is the worst over for the global office sector and China's residential market?

Higher-for-longer interest rates remain the key risk for real estate assets globally. The distress will likely be drawn out on the commercial side, and especially in the U.S. where office vacancies are relatively higher. In China, as the property downturn continues, we expect property sales will track an extended L-shaped recovery in 2024.



As the real estate sector confronts credit headwinds globally, persistent and prevailing risks differ across type of real estate, region, country. This is true even for office buildings that are right next to each other based on asset quality, occupancy, maturity profile, and more. And while high interest rates remain the key risk for real estate assets globally, remote working is hurting U.S. office landlords more than in Europe and China—as demonstrated by average vacancy rates (see chart 1). Homebuilders are also facing diverging paths, largely based on geography; the U.S. housing market remains resilient due to limited supply of existing housing while Chinese property developers are facing a prolonged slump in demand. We expect real estate issuers to face a challenging operating environment in 2024 given our expectations for interest rates to stay higher for longer while revenue is pressured from weaker economic growth. We expect rates to stay elevated in the next year, with gradual cuts beginning in the second half of 2024.



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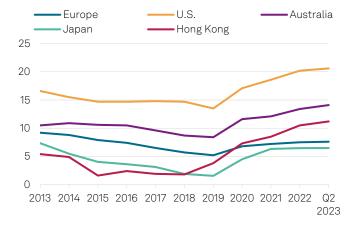
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Chart 1

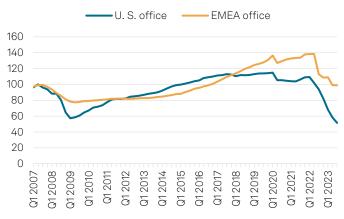
Global office vacancy snapshot (%)



Sources: JLL, Property Council of Australia, Colliers International, Miki Shoji, S&P Global Ratings.

Chart 2

U. S. and EMEA office CPPI, 2007-present (index)



Source: Green Street.

Stress on the office segment remains high. Across commercial real estate, higher interest rates have reduced debt-service coverage and raised refinancing risk. Declining demand for office space—particularly in major cities across the U.S., U.K., continental Europe, and Australia—is weighing on asset valuations (see chart 2). Demand increasingly concentrates on the most centrally located and energy efficient assets. Offices in particular are also generating lower levels of cash flow given increasing financing costs and credit headwinds. Rising operating expenses as well as leasing incentives (e.g., rent concessions) have made it that much harder to meet interest obligations, resulting in increased delinquency rates. Still, the picture is far less negative for cash flows/revenues from hotels, industrial, and multifamily properties, which have held up well to

date. The stress in office will be drawn out for years, as office leases typically carry longer terms – ten years or more.

Higher mortgage payments are hurting affordability. For residential real estate, the rapid rise of mortgage rates is also dampening housing demand globally as buyers are adjusting to the highest rates in almost two decades. We expect the U.S. and European housing markets to face pressure, given worsening housing affordability. As steep increases in mortgage payments hurt home purchasability, rental housing remains a cheaper option in many markets. We expect rental housing demand in 2024 to remain healthy, albeit at slower pace. In Europe, residential rents will remain supported by lagging indexation, falling supply, and higher demand from immigration.

Property sales in China will track an L-shaped recovery in 2024, after a decline of more than one-third since the peak in 2021. As the property downturn enters into its third year, the government's continuous policy relaxations (including lowering mortgage rates) aimed at stabilizing the sector will benefit the upper-tier markets, particularly the first-tier cities. Lower-tier cities are contending with excess supply and depleted confidence. All developers will have to manage slowing sales; in our view, their leverage will remain high for the next two years. In Hong Kong, we expect residential property prices to fall in 2024, as leading developers will likely lower prices to entice demand, as well as sacrifice margins to meet their contracted sales targets and to gain market share.

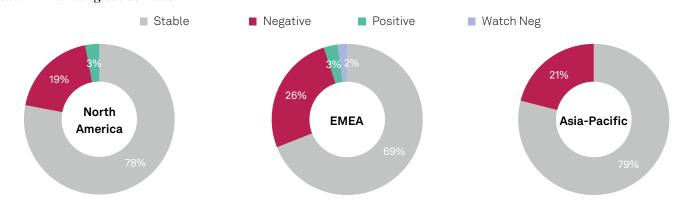
What we think and why

Refinancing risk is growing. Higher-for-longer interest rates will continue to pressure asset values and erode credit metrics in 2024, increasing refinancing risk across all property types. Refinancing options remain more limited, given a pullback from bank lending while debt issuance remain subdued due to steeper cost of borrowing. In the meantime, real estate transaction volume remains low and will not likely recover until rates starts to decline (or at least stabilize), perhaps toward the end of 2024.

Amidst challenging financing conditions, we expect an increase in downgrades and many loans to be restructured or default if maturities are unable to be extended. We maintain a negative rating bias for the REIT sector globally—with about 20% of U.S. ratings on negative outlook, compared to 26% in EMEA and Asia-Pacific's 21% negative rating bias. In the U.S., the office REITs space saw four fallen angels in 2023, and almost 40% of office REITs were speculative grade as of November 2023. Growing refinancing risk has led to a growing number of 'CCC' ratings in the U.S.

Global REITs rating outlook bias

Chart 3



Source: S&P Global Ratings.

The effects on ratings are already evident in the U.S. CMBS market (with some 254 class ratings lowered in the 12 months ended Oct. 31, 2023). Negative rating bias has also increased significantly for rated REITs globally, and we have downgraded a growing number of issuers with significant exposure to office assets. For banks, there have been increases in criticized assets/loans (that is, showing a higher probability of default or deteriorating collateral values). Across CRE loans and reserves, the impact seems muted for the larger entities that we rate. For newer class-A offices with strong tenant rosters, or other types of CRE where the distress largely stems from higher rates, lenders may extend loan maturities in the hopes that a decline in interest rates and stabilization of property valuations will soon materialize. For example, we're watching multifamily closely in the U.S. as some properties were underwritten at what might be peak rents, thus having less margin for any corrections amid significantly higher rates.

Limited housing supply mitigates soft demand in housing. Despite sharp increases in home mortgage payments, we expect demand for housing to remain resilient due to limited supply of homes and relatively benign job markets in the U.S. U.S. homebuilders have gained share as existing homeowners are reluctant to sell their homes at low mortgage rates, while European homebuilders continue to face strong margin pressures due to significantly lower demand for newly built residentials and elevated costs of constructions. Conditions for Chinese developers remain challenging. We believe the spillover impact from China's property market into other property markets will likely be limited given the risks to Chinese banks are manageable. These institutions have sufficient capital buffer to absorb the potential losses from property-sector write-downs, while government policies are helping stabilize residential sales, particularly in higher-tier markets.

What could go wrong

Higher for even longer could increase downside risk. The credit outlook for both global commercial and residential real estate depends on the path of benchmark interest rates, likely more so for commercial. While our macroeconomic base case does not call for a recession in 2024, weaker growth with higher unemployment and consumer spending could further pressure real estate demand, particularly in a prolonged high-rate environment.

Loan distress could increase. Amid higher rates, declining asset values, and lower cash flows for certain property types, elevated CRE-related loan losses may rise for debtholders including banks, NBFIs, insurers, REITs, and CMBS. Reduced construction/new projects may also contribute to slower macroeconomic growth, amid relatively lower demand for space.

A weaker macro landscape can slow demand further. If interest rates remain elevated for much longer, residential investments could deteriorate significantly. If interest rates remain high or move even higher, the already stressed market for refinancing would certainly worsen—and the prospect of "higher-for-longer" loan rates could thwart any plans borrowers may have to simply wait conditions out by extending their loans. While we expect benchmark rates to stay elevated in the next year, our U.S. base case calls for gradual (policy) rate cuts beginning in the second half of 2024, lowering mortgage rates from peak levels and supporting a recovery in housing demand in 2024 and beyond. Persistently high mortgage rates could erode demand such that housing could see more material pricing decline.

"Higher-for-longer interest rates increase refinancing risk across all property types."

Private Markets | How long can the golden age of private credit last?

Whether private or public, credit is credit. And with interest rates likely to remain higher for longer, weaker borrowers and their lenders are paying far more attention to cash flow metrics and borrowers' ability to service debt.

How this will shape 2024

We expect opportunities for private credit and funds to remain robust in 2024, after booming in 2023. After years of strong fundraising, private credit funds have amassed more than \$400 billion in dry powder globally (as of September), leaving them with cash to deploy. While limited partners (LPs) appear to be responding to restrictive, higher-for-longer interest rates by slowing contributions to alternative assets--especially private equity funds--private credit allocations have held up better. Whether 2024 will be another golden year for private debt investors will depend on their risk appetites and strategic focus, as well as the economic backdrop.

The pool of private credit continues to expand. In the U.S., private credit is growing its capacity through nontraded business development companies, interval funds, and middle-market collateralized loan obligations (CLOs). Direct lenders have tended to target traditional middle-market borrowers with \$25 million-\$100 million (or equivalent in euros) of EBITDA, but the growing trend for club deals has extended private credit's reach to larger and more diverse borrowers. Additionally, distressed and special situations funds--which represent as much as one-third of available capital--are waiting in the wings for rescue financing opportunities.

Challenges for borrowers may be opportunities for lenders. Given challenging public markets, borrowers are looking for other sources of funding to meet upcoming maturities. Broadly syndicated loan (BSL) issuance in the U.S. and Europe is down nearly 30%, to its lowest level since 2010 (at \$318 billion). Meanwhile, 'CCC' bond issuance has fallen to its lowest level since 2008 (around \$2 billion). Private credit is looking to take up some of the slack as upcoming maturities of nonfinancial corporate debt rated 'B-' and lower (in the U.S. and Europe) doubles to \$169 billion in 2025, from \$83 billion in 2024.

What we think and why

Credit is credit, and these borrowers face the same fundamental risks as rated issuers.

Financial risks weigh more on the credit quality of borrowers with weak business risk profiles or high leverage. In particular, companies issuing floating-rate debt, such as from private lenders, will be vulnerable to the higher cost of funding amid higher-for-longer interest rates.

We see this in rising default rates. We expect the trailing-12-month speculative-grade corporate default rate to reach 5% in the U.S. by September 2024 (up from 4.1% in September 2023) and 3.75% in Europe (up from 3.1%) as companies grapple with higher interest rates.

Cash flow metrics are regaining their importance as a key driver of credit quality, alongside measures of leverage. We see many borrowers laser focused on maximizing cash flow through various measures, including: cutting expenses, protecting margins, trimming inventories and working capital, selling assets, reducing dividends and share buybacks, or raising equity. Cash-constrained borrowers are also using payment-in-kind instruments on their balance sheets and choosing to build cash buffers rather than repay debt.



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Read more

<u>Testing Private Debt's Resilience</u> <u>Through The Credit Estimate Lens,</u> Nov. 2, 2023

Middle-Market CLO And Private Credit Quarterly: Strong CLO Growth, But Weakening Underlying Credit, Oct. 20, 2023

"Credit is credit, and these borrowers face the same fundamental risks as rated issuers." For businesses that require significant investment, the need to prioritize liquidity could come at the expense of longer-term growth. In addition, some financial sponsors--facing the reality of higher funding costs, lower valuations, longer hold times, and fewer exit routes for portfolio companies--are resorting to new arrangements to raise debt, often hoping to bridge to a more favorable business climate.

Tighter financing conditions will test financial vulnerabilities. In our base case, we expect policy interest rates to only start easing in the second half of 2024, meaning financing conditions will remain restrictive for a while. This is likely to pressure the credit quality of the more than 2,000 U.S. middle-market borrowers for which we have credit estimates. In the year to August 2023, a significant minority were already struggling to generate positive free operating cash flow (FOCF), and 78% had a low 'b-' score, with 13% in the 'ccc' category. In comparison, about 30% of global speculative-grade issuers are rated 'B-' or lower.

"Even a moderate stress could diminish the credit quality of private credit borrowers."

What could go wrong

Even a moderate stress could diminish the credit quality of private credit borrowers. Our analysis highlights that many companies with 'b-' credit estimates could be at risk of a downgrade from higher interest rates and lower earnings. We assume a moderate stress scenario of SOFR rising 1 percentage point over our current base case of about 5%, together with a 20% fall in EBITDA. In such a case, only about 35% of this set of middle-market borrowers would likely generate positive FOCF, and about 28% of those with 'b-' credit estimate scores would be vulnerable to a downgrade.

Interestingly, 55% of these credit estimates are for companies in the business and consumer services, health care services, and technology software and services sectors. Technology appears most vulnerable in our stress scenarios, with materially weaker interest coverage ratio and covenant headroom.

Information asymmetry is more problematic for credit investors than equity providers.

Lenders are always more sensitive to downside risks than equity investors. One such risk is the considerable information asymmetry in the private credit market, which is exacerbated by the influx of less-sophisticated retail investors into the asset class.

While tighter documentation and close working relationships help to facilitate an open flow of information between borrowers, lenders, and sponsors, LPs and institutional investors have a more indirect flow of information. Disclosures about borrowers' operational and financial performance, credit quality, and asset valuations may vary between funds and intermediaries.

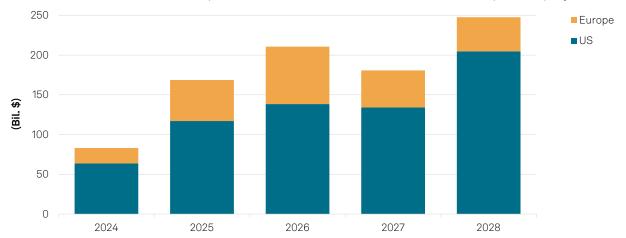
Illiquidity could reveal contagion risk. Without a sizable secondary market, private credit assets are largely illiquid buy-and-hold investments held in vehicles with capital that is typically locked up for at least five years. We think the scale of private debt is unlikely on its own to threaten financial stability in the U.S. or Europe, as it accounts for only about 4% and 1% of total nonfinancial corporate debt in each region, respectively.

However, a material shock in this opaque, illiquid, and unregulated market could expose vulnerabilities elsewhere in the financial system. For instance, there could be some contagion risk to banks, insurance companies, and pension funds. Banks often provide private credit lenders with some of the capital they use to extend loans--in some cases to companies the banks themselves would consider uncreditworthy. Banks could therefore be indirectly exposed to troubled borrowers, but without the oversight they have in the BSL market. Pension funds and insurance companies invested in private credit funds are exposed in much the same way.

Chart 1

Debt maturities will pressure funding demands

Annual maturities of nonfinancial corporate debt rated 'B-' and lower in the U.S. and Europe rise rapidly after 2024

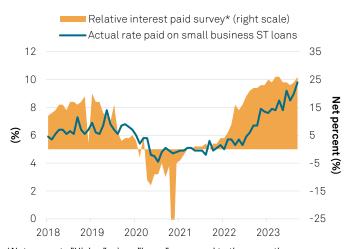


Includes nonfinancial corporate issuers' bonds, loans, and revolving credit facilities that are rated 'B-' and lower by S&P Global Ratings. Data as of July 1, 2023. Source: S&P Global Ratings Credit Research & Insights.

Chart 2

The funding costs of smaller borrowers have climbed rapidly

Interest rates on small business loans are approaching 10%

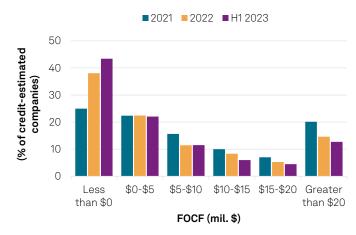


*Net percent--"Higher" minus "lower" compared to three months ago. Sources: Small Business Economic Trends, Sept. 2023, NBIF Research Centre, and S&P Global Ratings Credit Research & Insights.

Chart 3

Higher interest rates weigh on the cash flow of smaller borrowers

Nearly 45% of companies with credit estimates are now generating negative free operating cash flow (FOCF)



FOCF--Free operating cash flow. Source: S&P Global Ratings.

Market Dynamics | How will the path of interest rates in 2024 affect corporate borrowing strategies?



With central bank policy rates likely at or near their peak, how quickly borrowers can expect a U-turn toward rate cuts is of paramount importance to their refinancing strategy.

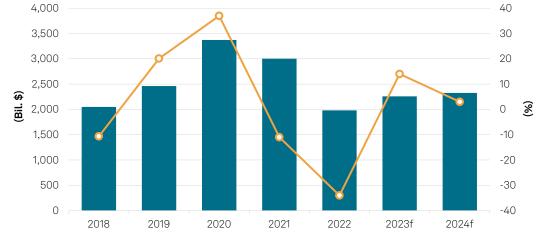
How this will shape 2024

Times have changed—quickly. A protracted period of exceptionally low borrowing costs, combined with longer tenors on new debt during the pandemic period, provided corporations the best financing conditions we've ever seen. And this was preceded by more than a decade of falling interest rates compounded by central bank asset purchases and backstops, coaxing investors into ever riskier debt.

Sky-high inflation created a new landscape for lending conditions. The onset of the highest rates of inflation in more than four decades forced central banks into sharp monetary-policy tightening in the past two years. The response by corporations was a 35% global reduction in overall bond issuance in 2022, with a 10% growth rate this year still keeping 2023's total below 2019's. And the majority of debt that has been issued has been largely limited to refinancing rather than more growth-oriented ends.

Central banks have entered a new, post-pandemic phase of tighter monetary policy. Barring a major economic collapse, this will force corporations to reconfigure their balance sheets and financial planning, given that more income will need to be used to service debt. Our initial projections for overall corporate bond issuance in 2024 calls for very modest 3% growth—but given expectations for the path of policy rates by the Federal Reserve, this otherwise modest (but positive) annual total may fluctuate considerably throughout the year (see chart 1).

Chart 1 Issuance growth could be limited amid stubbornly higher rates



Note: Includes rated and unrated long-term debt. f--Forecast. Source: S&P Global Ratings.

Many companies already appear to be postponing coming to market in the hopes that interest rates will start to fall in the next six months. While we feel current rates and slowing growth will keep 2024's bond issuance growth lower than this year's pace, some issuance that we expected in late 2023 may be pushed deeper into 2024, thus boosting our 3% growth projection.

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Global Financing Conditions: Stubborn Rates Portend Slower Issuance Growth In 2023 And 2024, Oct. 26, 2023

Corporate bond issuance
YOY growth rate (right

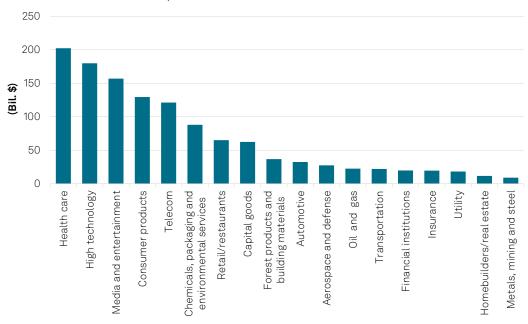
scale)

While market sentiment may be optimistic amid increased hopes for central banks to pivot, we've been here before—at the same time a year ago, in fact. And for borrowers, waiting is a gamble. Rates may not fall as far or as fast as some hope, investors will prefer higher-yielding assets if rates do fall, and the timeframe to address large refinancing needs in 2025 is running thin.

The pain won't be felt evenly across sectors. At the lowest rating levels ('B-' and below), there are five sectors globally that have more than \$100 billion in debt outstanding (see chart 2). And of the \$790 billion among these five, roughly 82% comes due in 2024-2028. Four of these five sectors—high technology, health care, media and entertainment, and consumer products—are the largest in terms of their presence in the leveraged loan market and have (aside from high tech) been the largest contributors to global defaults this year. In contrast to bonds, leveraged loans have felt rate hikes more immediately since they typically have floating rates with benchmarks very tightly tied to moves in policy rates.

Chart 2

The riskiest debt is not evenly distributed across sectors



Source: S&P Global Ratings.

What we think and why

Even with a pivot by central banks, effective long-term rates look set to remain historically high. While we think the Fed will start a cycle of interest-rate cuts in June, we think the federal funds rate will be at 4.7% at the end of 2024 and average roughly 5.25% for the year. We also

expect the European Central Bank to start cutting rates in the second half of 2024, albeit at a slower pace.

Changing supply and demand dynamics are influencing benchmark U.S. Treasury rates. (And

Treasury rates have pulled other non-U.S. government bond yields up with them). There's been a substantial \$2 trillion increase in Treasury supply since December 2022, alongside reduced Treasury holdings among some of the largest buyers—including the Fed, via quantitative tightening. So, while short-term policy rates might decline next year, the transmission mechanism to lower rates in the long term may run into some obstacles, keeping effective borrowing costs elevated.

What could go wrong

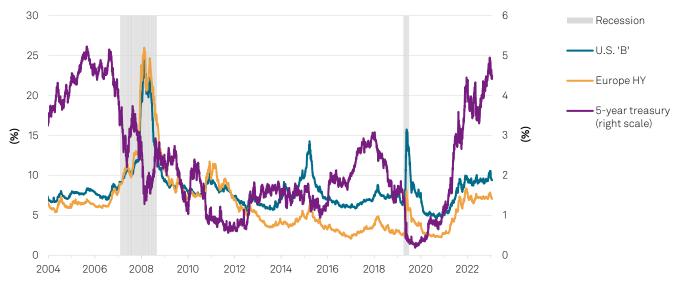
We see a potential lose-lose situation. Given the high level of uncertainty for the path of economic growth and what has already proven to be "sticky" inflation, there's a potential lose-lose situation ahead for corporate borrowers.

If inflation lingers amid robust economic activity and tight labor markets, central banks will need to keep policy rates high. On the other hand, if rate cuts happen faster than we expect, it will likely be because the economy stumbles—perhaps into recession.

Economic downturns always hit credit harder than higher rates do. This is because they erode top-line (revenue) growth, making all expenses—including interest rates—more cumbersome. And for corporations, history has shown that recessions come with rapidly rising market yields and wider spreads, even if risk-free benchmarks fall (see chart 3).

Chart 3

Corporate and benchmark yields diverge during stressful periods



Sources: FRED, S&P Global Ratings.

Sovereigns | What are the credit implications of intensifying conflicts and political disruption?

Geopolitical uncertainties will affect global growth and inflation, consumer and investor confidence, trade and supply chains, and overall capital flows. These uncertainties come against a backdrop of the continuing Russia-Ukraine and Israel-Hamas wars, disputes over the South China Sea, and upcoming national elections in more than 50 countries in 2024. Government and corporate borrowers alike could continue to face elevated funding costs while interest rates remain higher for longer.

How this will shape 2024

The Russia-Ukraine and Israel-Hamas wars are extending into 2024 and continue to dominate much of the regional and global agendas. The continuation of these conflicts will keep geopolitical uncertainties high.

Intensifying U.S.-China diplomatic and trade frictions, and disputes over the South China Sea, will remain a risk. After the pandemic exposed supply chain vulnerabilities, the U.S. is likely to continue diversifying trading partners, to the benefit of Mexico, Vietnam, and other economies. Policymakers, like the leaders of the BRICS countries, have been advocating a move away from using the U.S. dollar for trade among their countries. Making supply chains more resilient to geopolitical uncertainty could boost investment locally, or in politically stable or aligned countries, while leading to economic costs that could stoke inflation.

At the same time, more than 50 countries will hold national elections in 2024. Most prominent will be the U.S. presidential elections in November. The U.K. general elections will likely occur in late 2024 or early 2025. Across emerging market economies, national elections will take place in India, Indonesia, South Africa, India, and Mexico, among many others.

What we think and why

Geopolitical uncertainties affect consumer and investor confidence, trade, and capital flows.

The active military conflicts could lead to upward pressure on energy and other commodity prices, and consequently affect global growth and inflation--keeping interest rates even higher for longer. Governments and private-sector borrowers could continue to face higher funding costs. At the same time, elevated energy prices would weigh on the balance of payments of energy importers. Energy suppliers, by contrast, would likely benefit. At the same time, the sticking points of U.S.-China relations will continue to be trade, technology, and security. This geopolitical disruption, alongside other tensions, could reinforce trade fragmentation and the relocation of supply chains.

We think that the impact, including on economic growth, of the war in the Middle East can largely be contained to Israel and its nearest neighbors--for the time being. However, the situation is fraught with risk, particularly if the ground offensive into Gaza provokes a military response from Iran-backed militant groups. We believe the conflict could increase tensions within the region, and between communities and governments around the world.

We expect the active phase of the Russia-Ukraine war to continue at least until the end of 2024. Ukrainian forces have so far largely struggled to retake substantial swathes of territory as part of their ongoing counteroffensive. We think that the prospect of any negotiated peace plan



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CreditWeek: What Are The Credit Ramifications Of The War In The Middle East?, Nov. 2, 2023

<u>Global Sovereign Rating Trends:</u> <u>Third-Quarter 2023</u>, Oct. 16, 2023

<u>Challenges To Trading Oil In</u> <u>Renminbi Remain Significant</u>, Oct. 5, 2023

"Governments and private-sector borrowers could continue to face elevated funding costs while interest rates remain higher for longer."

appears almost nonexistent, and that a military stalemate remains the most likely scenario as both sides resign themselves to an extended war.

Intensifying conflicts and geopolitical disruption have implications for credit quality. Of our 137 sovereign ratings, 14 currently have negative outlooks and 11 have positive outlooks (see chart 2). Most non-stable outlooks on sovereign ratings are in EMEA (Europe, the Middle East, and Africa), and some of them reflect those geopolitical risks, including the outlooks on Latvia, Lithuania, Estonia, and Israel. The negative outlook on Israel, for example, reflects the risk that the Israel-Hamas war could spread more widely or affect Israel's credit metrics more negatively than we expect.

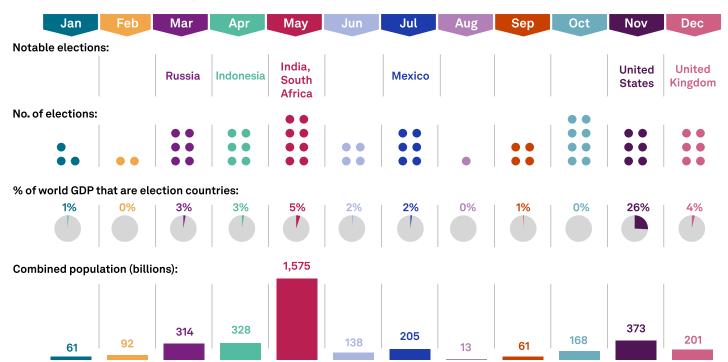
"Of our 137 sovereign ratings, 14 have negative outlooks and 11 have positive outlooks."

Global geopolitical positioning, domestic preelection controversies, and election outcomes could affect each other. Although election years often go hand in hand with extra fiscal spending, this could be exacerbated by the rising cost of living, as well as the vulnerabilities in access to public health services that the pandemic exposed. As the electorate has likely become more sensitive to such shortcomings, we could see fiscal slippage while government funding costs are high. These conditions would be detrimental for government finances but could temporarily create some extra demand.

Government spending could focus on garnering short-term electoral support rather than infrastructure spending that supports long-term growth. At the same time, if a preelection phase comes with heightened polarization or uncertainties, that could affect local consumer and investor confidence.

Chart 1

2024 national election statistics by month



Note: Some election dates not fixed yet. Some countries have two national elections in 2024 (e.g. legislative and presidential). In such case, the data only counts the legislative election. European Parliament elections June 2024 not included. Source: CIRCA People In Power, S&P Global Ratings.

What could go wrong

In the Middle East, the key risk is the potential for the conflict to escalate and spread more widely in the region. Hezbollah, for instance, could intervene more, which could risk drawing in the U.S. if Iran is viewed as having directed Hezbollah's actions. Such escalation would have significant repercussions that could extend globally, for instance on energy markets.

The tail risk for energy markets and supply chains relates to the possibility of Iran impeding transit through the Strait of Hormuz. Saudi Arabia, the United Arab Emirates, Kuwait, Iraq, and Iran ship most of their oil exports--or the equivalent of about one-fifth of global oil consumption-and chemical product exports through Hormuz, while Qatar sends almost all of its liquefied natural gas through the strait.

Protests or refugee flows could be politically destabilizing across the Middle East, and beyond. They could also lead to more polarized public debates on migration in Western countries, which could add to anti-globalization movements.

We also think some risk of escalation in the Russia-Ukraine war remains. Escalation could include the use of nonconventional means, unforeseen accidents, or direct confrontation with NATO countries. An escalation would lead to renewed shocks on energy and food markets and, consequently, on inflation and growth.

Heightening disputes over the South China Sea could damage investment, trade, and supply flows within and outside the area, since some 20%-30% of global trade passes through it.

Taiwan accounts for about 60% of global semiconductor production. Given mutual dependencies between the U.S. and China, an escalation could disrupt financial markets globally. The U.S. sanctions on Russia raised questions on whether the U.S. could bring similar measures against Chinese banks. China, on the other hand, is the largest holder of U.S. Treasury bonds.

The strength of institutional frameworks could be affected if election campaigns lead to increased political polarization. The increase in the cost of living and low growth could set the agenda of election campaigns in some countries, and lead to more lax fiscal policies and growing government debt, amid high interest rates. Leadership changes--in particular, in the U.S.--could have global repercussions, for example if the U.S. were to take a more isolationist approach.

Chart 2
Outlook distribution across regions

Americas **EMEA** APAC Barbados Albania Brazil Andorra Positive outlook Benin Bulgaria Croatia Cyprus Portugal Ras Al Khaimah Turkiye Argentina Bangladesh Estonia Bolivia Ethiopia **Negative outlook** Chile France Panama Israel Peru Kenya Latvia Lithuania Ukraine

Source: S&P Global Ratings.

"An escalation of the Russia-Ukraine war could lead to renewed shocks on energy and food markets."

Emerging Markets | Which EMs are better positioned to outperform in 2024?

Many emerging markets (EMs) are bound to navigate the challenging global macroeconomic backdrop in 2024 better than their peers. Structural trends that will allow these EMs to mitigate the impact from global headwinds are nearshoring (Mexico, India, and Vietnam) and energy transition (Indonesia, Chile, and the Philippines, among others).

How this will shape 2024

EMs will face tough global macroeconomic conditions in 2024. A soft landing in the U.S. (with an elevated risk of a hard landing), persistent weakness in the eurozone, soft Chinese demand, and two major wars (Russia-Ukraine and Israel-Hamas) will act as a drag on growth in EMs. These dynamics are taking place amid global interest rates that are likely to remain high. Therefore, we expect most EMs to grow below trend next year, with risks mostly on the downside.

There are bright spots in EMs' complex panorama. Many EMs are noticeably better positioned than their peers to thrive despite these challenges. Structural trends, such as nearshoring, will allow them to offset some of the impact from global economic woes. In the medium term, energy transition will also benefit many EMs that produce or hold large reserves of key metals.

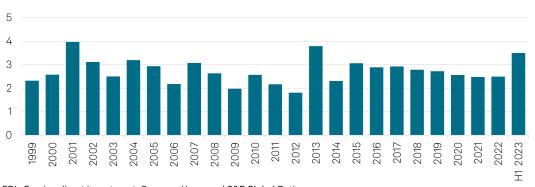
What we think and why

Supply-chain relocation will remain a key trend that could benefit many EMs. Nearshoring and friendshoring have gained attention as supply-chain disruptions during the COVID-19 pandemic made a case for manufacturers to diversify locations of their operations to minimize production disruptions. Tensions between the U.S. and China, especially over technology, may have also encouraged companies to move some manufacturing production out of China. Mexico's long-standing manufacturing linkages with, and access to, the U.S. market make it an obvious potential beneficiary for nearshoring. Since then, the nearshoring activity in Mexico has picked up, as seen in the robust construction pace of industrial parks in the northern part of the country, as well as an uptick in foreign direct investment (FDI) so far this year (see chart 1). Given high external financing costs, having strong FDI inflows will be particularly important for external account stability.

Chart 1

Nearshoring is already changing tides for Mexico's FDI

FDI as % of Mexico's GDP



 ${\sf FDI--Foreign\ direct\ investment.\ Sources:\ Haver\ and\ S\&P\ Global\ Ratings.}$



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For Mexico, Nearshoring's Potential Benefits--And Obstacles--Are Significant, April 4, 2023 Vietnam has also been a key beneficiary of changing trade dynamics and supply-chain

relocation. The country's trade ties with the U.S. have been quickly expanding even before the pandemic. Vietnam's exports to the U.S. have jumped fourfold since 2013 (see chart 2) and accelerated following the Trump administration's imposition of tariffs on China in 2018. The country has recently become the sixth-largest trading partner of the U.S. And Vietnam will remain one of the fastest growing EMs in the next three years, supported by policies that favor global trade integration to foster domestic economic growth. Nevertheless, maintaining a strong global supply-chain presence will require sustained investments and reforms. Vietnam confronts significant challenges, considering its infrastructure, labor, and resource constraints. Insufficient expansion of power generation capacity means that the country could face electricity shortages especially during summer seasons.

India is set to become the third-largest economy by 2030, and we expect it will be the fastest growing major economy in the next three years (see chart 3). A paramount test will be whether India can become the next big global manufacturing hub, an immense opportunity. Developing a strong logistics framework will be key in transforming India from a services-dominated economy into a manufacturing-dominant one. Unlocking the labor market potential will largely depend upon upskilling workers and increasing female participation in the workforce. Success in these two areas will enable India to realize its demographic dividend. A booming domestic digital market could also fuel expansion in India's high-growth startup ecosystem during the next decade, especially in financial and consumer technology. In the automotive sector, India is poised for growth, building on infrastructure, investment, and innovation.

Overall, Mexico is not the only EM that could benefit from the reconfiguration of global-supply chains. Countries with strong and stable trade ties with the U.S., such as Vietnam and India, are also gaining attention in this area. Outside of Asia, EMs with wide access to the eurozone market and with developed manufacturing sectors, such as Poland, are also bound to benefit from that trend.

"Despite difficult global macroeconomic conditions in 2024, nearshoring and energy transition will benefit many emerging markets."

Chart 2

Vietnam has boosted its trade potential Vietnam's exports to the U.S.

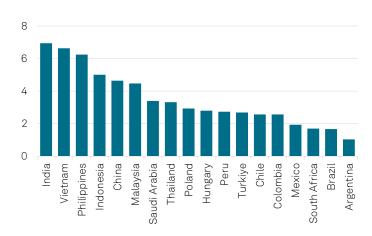
Exports to U.S. Exports to U.S. as percentage of Vietnam GDP (right scale) 160 40 140 35 120 30 25 100 20 8 80 15 60 40 10 20 5

Sources: WITS, UN Comtrade, IIF.

Chart 3

India and Vietnam will be the fastest growing EMs

Average forecasted growth 2024-2026 (%)

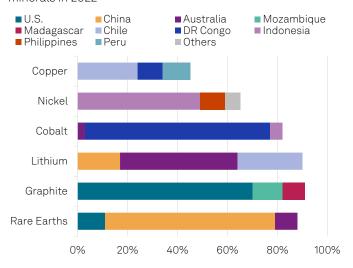


Source: S&P Global Ratings forecasts.

The energy transition will position some key EMs in the spotlight. Ongoing global efforts to accelerate energy transition and the achievement of sustainable development goals will boost the demand for key metals. In particular, copper, cobalt, nickel, and lithium are critical in electrical vehicle (EV) and battery production and performance. Currently, the leaders in mining and processing these metals are mostly EMs, including China (copper, cobalt, nickel, and lithium), Chile (copper and lithium), and Indonesia (nickel; see charts 4 and 5). However, there are initiatives across advanced economies to ensure supply diversification and strategic access to these metals, which will likely boost investments in other EMs with large reserves of these metals. This is a major opportunity for key EMs such as Chile, Peru, Mexico, Indonesia, Argentina, The Democratic Republic of Congo, and the Philippines, which hold some of the world's largest reserves of these metals. Particularly, we view Indonesia's substantial reserves of nickel, a key material needed to make EV batteries, as well placed to turn its EV battery manufacturing into a major export industry. The Indonesian government's supportive policies (ranging from lower value-added tax on EVs to labor liberalization and reduction in corporate tax) foster a more favorable landscape for foreign investors.

Chart 4

EMs play a relevant role in critical metals for transition Share of top three producing countries in mining of selected minerals in 2022

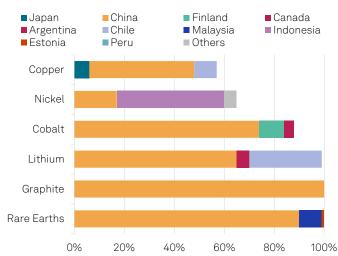


Source: International Energy Agency, Paris, 2022.

Chart 5

China dominates key metal processing

Share of top three producing countries in processing of selected minerals in 2022



Source: International Energy Agency, Paris, 2022.

What could go wrong

Many EMs will hold elections in 2024. Low levels of policy predictability can undermine investor sentiment and derail existing investment potential. EMs that will have elections next year include Indonesia, India, South Africa, and Mexico, among many others. EMs, about which we discussed above, still have work to do to reap a bonanza from the abovementioned structural opportunities. For instance, enhancing policy visibility will be critical in attracting investments into these developing trends.

Structurally high interest rates, in the absence of structurally greater growth expectations, will constrain investment growth. A sharp rise in investments will be hard to justify amid higher average cost of capital and interest rate burden--as interest rates are likely to remain higher than normal for some time--and without larger average expected returns (growth).

Physical Climate Risk | How will challenging credit conditions affect resiliency and adaptation to more costly climate hazards in 2024?

Extreme weather conditions and worsening physical risks continue to increase and influence credit fundamentals. However, we believe companies' and governments' readiness to address these risks, in large part, remains low and could become even more challenging to overcome in an environment of slower growth and tighter financing conditions.

How this will shape 2024

Global, extreme weather conditions will continue to increase and influence credit fundamentals. According to the World Meteorological Organization, there is now a 66% probability the global temperature will exceed the 1.5 C Paris Agreement threshold over the next five years. S&P Global Ratings believes that surpassing this threshold could result in increasingly frequent and severe physical climate hazards, such as heat waves, floods, storms, and wildfires, that could destroy physical capital, lower labor productivity, and increase mortality without additional investment in adaptation and resiliency measures. We believe the physical impact from climate hazards can weigh on the credit quality of some entities more than others. Therefore, we generally analyze these risks against an entity's exposure (location and concentration), comprehensive risk management strategies, financial liquidity and reserves, as well as its capacity for planning and adaptation that could help preserve credit quality.

Higher incidences of heat days and water stress will require additional resiliency and adaptation measures and could affect long-term economic growth. We find that lower- and lower-middle-income countries are disproportionally at risk of economic losses from physical climate risks under a slow transition scenario (see charts 1 and 2; "Lost GDP: Potential Impacts Of Physical Climate Risks," published Nov. 27, 2023). Developed economies may have resources to cope, but lower- and lower-middle-income countries are most vulnerable to physical risks where exposure is high. More frequent climate risks could pose an additional barrier to economic development while interest rates remain higher for longer, proving that access to funding may be more difficult when considered against a backdrop of slowing global growth. This includes the U.S., which has had 25 events year to date through Nov. 8, 2023, an increase from 18 events in 2022 and 22 in 2021, and losses of at least \$1 billion according to the National Oceanic and Atmospheric Administration.

A slowing economic environment and higher interest rates could challenge planning and preparation. Interest rates are now set to be higher for longer, not only slowing growth as central banks fight inflationary pressures, but also tightening budget constraints for companies and governments. We believe allocating resources in this environment might come at the expense of adapting to climate change, when the focus returns to balancing the books and creating pecuniary value. Deprioritizing investments in adaptation and resilience could increase credit headwinds for entities most exposed to physical climate hazards, including certain governments, in utilities, and transportation-sector entities, as extreme weather events and natural disasters become more frequent and damaging.



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More Mexican States Could Face Water Stress By 2050, April 4, 2023

Weather Warning: Assessing Countries' Vulnerability To Economic Losses From Physical Climate Risks, April 27, 2022

ESG Credit Indicator Report Card: Regulated Utility Networks, Nov. 18. 2021

What we think and why

Reduced availability of insurance coverage and evolving risk-sharing arrangements could leave some entities more exposed. Rising global insured losses have pressured insurers' profitability and, in some cases, has led to difficulty in obtaining insurance at affordable prices (see chart 3). The recent move by a few major insurers to discontinue writing new homeowners' business policies in California highlights this trend (see "California's Evolving Insurance Market Has Mixed Impacts: Spotlight On U.S. Public Finance, Spotlight Off U.S. RMBS," published Aug. 2, 2023). To the extent insurance coverage becomes less available, it could limit our view of entities' financial resiliency and preparedness for physical climate hazards. Similarly, public-sector disaster recovery arrangements (such as the U.S. Federal Emergency Management Agency and Canada's Disaster Financial Assistance Arrangements) could come under pressure to absorb increasing losses and costs of recovery and to promote enhanced risk mitigation and resilience. As a result, local and regional governments globally could bear a greater share of risk, including the potential for less financial support following an acute event.

Private and blended finance could play an increasing role to lower institutional risk and help fill the funding gap for adaptation and resilience measures. Financing adaptation to and recovery from physical risks is more difficult for economies with fewer resources and more restricted access to finance. Private capital can help fill this gap but is often deterred by concurrent political and institutional risks. For example, the Cauchari solar farm in the Argentine province of Jujuy was financed through a provincial green bond and a loan from the Export-Import Bank of China despite the province's fragile fiscal and liquidity positions and limited experience in global markets. Similarly, we may see more financing for adaptation projects where climate finance also targets pro-growth investments (e.g. irrigation systems in agriculture). Multilateral development institutions have a significant role to play in providing concessionary and bridge financing and building capacity to access private capital.

The fixed location of assets operated by utilities and transport infrastructure may be less able to adapt to physical risks in the near term. Despite generally above-average preparedness, utilities' electric overhead networks are more exposed than other utilities to physical risks, including wildfires, hurricanes, and storms. This increases replacement and insurance costs and affects their safety and reliability (see "ESG Credit Indicator Report Card: Regulated Utility Networks," published Nov. 18, 2021). Power generators, airports, and ports also have elevated vulnerability to physical risks due to their localized, fixed-asset nature; S&P Global Ratings has downgraded more investor-owned utilities due to physical risks over the past six years nearly 10 times more than across the previous 13 years (see "A Storm Is Brewing: Extreme Weather Events Pressure North American Utilities' Credit Quality," published Nov. 9, 2023). While benefiting from generally protective regulated revenues, higher interest rates and insurance premiums could crowd out or delay big-ticket investments in infrastructure replacement, adaptation, and resilience in these sectors, leading them to remain exposed to physical risks for longer.

What could go wrong

The adaptation gap could widen due to tighter financing conditions. According to the United Nations' 2023 report, the adaptation finance gap is 10–18 times above current international flows. Estimated annual adaptation needs range from \$215 billion-\$387 billion (i.e. 0.6%-1% of developing countries' GDP) per year for this decade. Higher interest rates are already set to weigh on investments in emerging markets and developing markets (the most vulnerable to physical risks) as the growth outlook remains subdued. At the same time, higher yields in advanced economies, especially the U.S., could lead to stronger outflows from emerging markets, which are mostly in the higher-risk speculative-grade ratings category. As a result,

"Deprioritizing investments in adaptation and resilience could increase credit headwinds for entities most exposed to physical climate hazards."

vulnerable countries could continue to fall behind their higher-rated and wealthier counterparts, leaving their population and economic development efforts exposed to accelerating physical climate risks.

Extreme weather and natural disasters could disrupt supply chains and dampen growth.

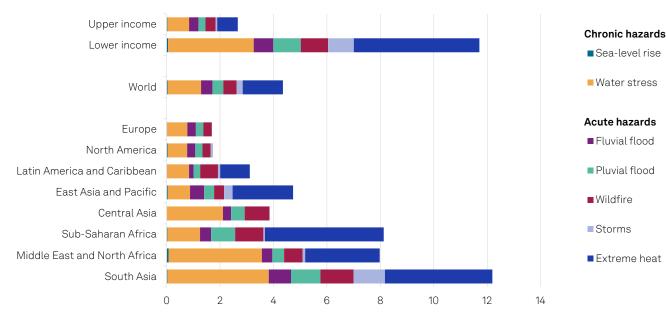
Acute physical risks often have a localized impact, but heat waves, storms, and wildfires can hamper output and mobility of goods, cascading through global supply chains. Many large companies have a moderate degree of diversification in their operating assets and can potentially divert supply chains through alternative channels to avoid sizeable operating disruptions; however, more frequent and severe physical climate hazards may require greater adaptation efforts of our rated issuers, regarding their own assets and supply chains, to minimize disruptions. To the extent tighter financing conditions and slow growth lead companies to postpone adaptation efforts, the risk of supply chain disruption could continue unabated.

Credit quality could diverge. We could see credit quality deteriorate for sovereigns and governments in places where worsening physical risk exposure coupled with a lack of resources, capacity, or support to adapt erodes our view of their fiscal performance, economic strength, and growth prospects. For example, high and increasing exposure to water stress in some Mexican states poses risks to public health and economic growth, and the cost of investing in adaptation and resilience could weigh on state finances and credit quality (see "More Mexican States Could Face Water Stress By 2050," published April 4, 2023). Places with already-vulnerable economic and fiscal assessments coupled with high exposure to physical risks could be the most susceptible (see "Weather Warning: Assessing Countries' Vulnerability To Economic Losses From Physical Climate Risks," published April 27, 2022). For corporate entities with exposure to physical risks, a lack of insurance or changing liability landscape could make these risks more financially material to creditworthiness.

Chart 1

Chronic risks dominate potential losses in Asia-Pacific and MENA

Annual GDP at risk by 2050 by climate hazard and region, under a slow transition scenario (SSP3-7.0) absent adaptation (%)

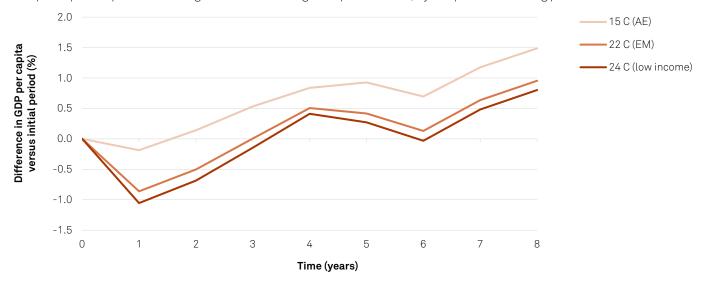


Note: Upper income = Upper middle and high income; Lower income = Low and lower middle income, based on World Bank data. GDP at risk represents the share of GDP that could be lost annually due to high exposure to physical climate risks, in the absence of adaptation to climate risk, without accounting for changes in the economic geography and structure and assuming all hazards occur every year. SSP3-7.0--Moderate to high emissions scenario. Sources: Sustainable1; S&P Global Ratings.

Chart 2

Temperature increases could have a permanent impact on relative GDP levels

GDP per capita response to a 1-degree C annual average temperature rise, by temperature starting point

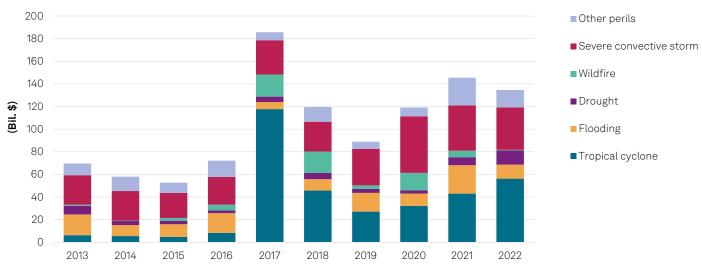


AE--Advanced economies. EM--Emerging economies. Note: The results describe the relationship of the variable shown with average annual temperature using a panel model estimation with country fixed effects and regional time fixed effects. We derive impulse response functions using local projections and controlling for lags and forwards of the temperature. Source: S&P Global Ratings.

Chart 3

Rising global insured losses are leading to changing insurance coverage

Tropical cyclones remain primary climate hazard underpinning losses



Source: Aon PLC.

Energy Transition | Can the shift to net zero accelerate amid growing headwinds?

While climate change remains recognized as a key global risk, any acceleration to decarbonize might face challenges—from higher costs, geopolitical disruptions, and environmental policy backlash—that divert climate mitigation priorities. Credit risk is higher in an abrupt transition, and the disruption potential for carbonintensive sectors remains both high and difficult to predict.

How this will shape 2024

Higher-for-longer interest rates and input-cost inflation could slow the energy transition. As funding and the economic environment dramatically change after a decade of supportive monetary policy, the cost of the energy transition has also increased and will continue to tighten in 2024. Higher funding costs affect renewables investments more so than for fossil fuels, given the upfront capital needs. Additionally, supply-chain bottlenecks and the resulting inflationary effects on critical materials for the energy transition remain key issues as demand for clean technologies increases globally, especially for wind and battery storage. Governments and companies will navigate these risks as they progress on decarbonization.

Tighter budget constraints put pressure on environmental policies. Even though heat pumps, energy-efficiency retrofits, and electric vehicles (EVs) are becoming more cost-competitive in relation to their fossil-fuel alternatives, higher borrowing costs are likely to slow the uptake among households—especially as households' real disposable incomes are only just recovering from the recent inflation surge. Looking to 2024, consumers may be confronted with difficult choices between what is most cost-effective for their families, or what is better for the planet. Companies confronting credit headwinds may also take into account new considerations when it comes to their plans for energy reliance and resilience. At the policy level, tighter resources can give rise to a growing backlash from certain political constituencies to slow climate action. This translates into climate policy back-and-forth, and results in a more uncertain business environment as governments and companies face pressures on both sides.

Innovation could support faster decarbonization, while slower economic growth in 2024 reduces the need to add more fossil-fuel capacity. Rapid technological change could also surprise on the upside as initiatives to decarbonize the economy spread, especially in the context of broader government subsidies and support. After the passage of the Inflation Reduction Act in the U.S., the likely upcoming response from the EU, and China's 14th five-year plan, we will be watching for the next climate policy shifts in 2024. At the same time slower growth, in part driven by global manufacturing weakness, reduces the need to compensate so-far insufficient renewable-capacity additions with fossil fuels.

What we think and why

With slower economic growth and higher financing costs, priorities might shift away from tackling climate change. While climate change is likely to remain a top risk for many governments and corporates, more short-term pressures—such as lower growth prospects, rising pressures to tighten spending and related social tensions, or access to liquidity—could divert their attention away from investing in decarbonization and preparing for climate change. This means some countries and businesses are more likely to fall behind in their transition if they reduce their climate-mitigation efforts.



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China's IPPs Can Speed Energy Transition As Power Demand Tapers, Nov 07, 2023

Will Oil and Gas Producers Lose Access to External Financing as Lenders Decarbonize? Nov 16, 2023

Economic Research: Climate Change Will Heighten Output Volatility, Jan 2023 Credit risk is higher in an abrupt transition. Implementing comprehensive and coordinated climate policies and strategies remains a challenge for governments and companies. As climate actions progress faster for a given sector or a region, this could reshuffle sector-specific competitiveness, potentially leading to negative side effects across local supply chains. This could, for instance, result in weakened business positions or profitability for certain players, or ongoing regulatory adjustments that reduce stability and visibility and jeopardize investment decisions.

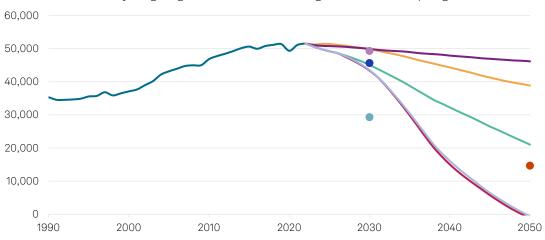
However, the higher carbon-emitting sectors are not yet feeling a lot of credit pressure.

Carbon pricing remains relatively low worldwide. The oil and gas sector has not faced any notable deterioration in its financing conditions so far, even though the IEA projects that demand for fossil fuels will have peaked by 2025. Sectors such as cement, airlines, and chemicals currently do not face very binding climate policies. As scalable technology alternatives remain scarce, we believe policymakers might still avoid stricter environmental policies for hard-to-abate sectors.

Chart 1

Total greenhouse gas emissions

S&P Global Commodity Insights global scenarios, NDC targets, and net-zero pledges (MtCO2e)



Note: The Commodity Insights Energy and Climate scenarios set out how emissions could evolve under five cases. Inflections is a base case. Discord assumes a worsened geopolitical future with weak climate policy. Green Rules assumes rapid reduction in fossil fuel dependence and a more sustainable energy system. ACCS and MTM represent net zero cases with differing assumptions on energy use and clean technologies. NDC--Nationally determined contribution. ACCS--Accelerated carbon capture and storage. MTM--Multitech mitigation. Source: S&P Global Ratings.

What could go wrong

Markets might not be sufficiently prepared for disruption. Failure to comply with fast-changing climate policies and regulations in some markets could pose significant business risks and future liabilities. Market dynamics might also evolve rapidly, with new and disruptive competitors growing their market shares. We could see this in the automotive sector, for example, with new EV players. But lack of preparedness could also stem from weak resilience to climate physical risks and unaddressed adaptation needs. Such risks are still largely unaddressed by many governments and companies, when looking at the adaptation gap.

More radical climate policies would increase transition risks. Most economies lag both their intermediary pledges (2030) and the well-below 2°C pathway set by the Paris Agreement. While these gaps will be hard to close, more constraining climate regulations on certain sectors, including stricter industry norms or sanctions, could be considered by policymakers. The visibility and materiality of such risks remain challenging to foresee, however.

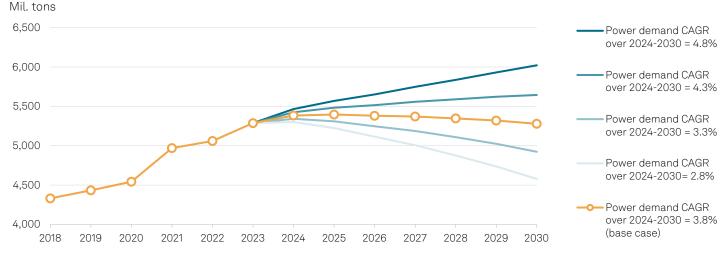
"Implementing comprehensive and coordinated climate policies and strategies remains a challenge for governments and companies."



Geopolitical uncertainty could prevent necessary global coordination. Ongoing conflicts, such as the Russia-Ukraine and the Israel-Hamas wars, might make it harder to attain the global coordination required to truly mitigate climate change. In addition, trade disputes in the clean technology space could become more prominent (including with China in relation to EV subsidies) and add to the collective action problem. Additional pressure points include the unresolved funding of the transition for countries in the Global South, which would need to increase investments by more than five times to meet the IEA's net-zero scenario.

Chart 2

Power demand growth will affect the timing for carbon peak



CAGR--Compound annual growth rate. Source: S&P Global Ratings (China's IPPs Can Speed Energy Transition As Power Demand Tapers, Published Nov 07, 2023)

Artificial Intelligence | What are the key credit risks and opportunities of AI?

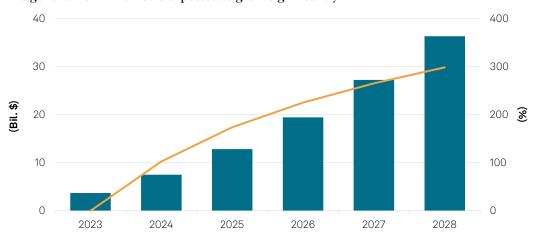
Artificial Intelligence's (AI) potential to replace, transform, and regenerate human-work processes promises significant efficiency and productivity gains. While this could be a boon for companies' financial and operating performance it comes with dangers linked to data privacy, cyber security, and AI safety that could exacerbate operational and reputational risks if not properly governed and managed.

How this will shape 2024

Generative AI use will continue maturing in 2024. Companies have begun rapidly developing, acquiring, and integrating generative AI into their operations. This promises to dramatically transform global markets, particularly as corporations expand their understanding of the nuances, options, and capabilities of AI-based technologies. As adoption continues to mature next year, it will likely result in an expansion of AI's capacity to generate content and perform complex tasks with relative autonomy, interactively, and in real time. But such expansion will come with increased data input requirements and the need to understand the effects of AI adoption on customer demand.

While efficiency gains should emerge, technical challenges will be key. Improvements in productivity due to generative AI applications may meaningfully materialize next year in the form of cost savings and scalability benefits--particularly at large technology companies that made swift and focused investments in 2023. Productivity enhancements could reduce operating expenses and improve efficiency, though near-term benefits will be offset by investment requirements. Conversations about how AI influences operations-level success will gradually clarify and help define the technologies' benefits and how they are measured. Over the next few years, we expect AI to deliver a combination of efficiency gains (that may improve financial performance), stronger product differentiation, and shifts in competitiveness. These changes will demand thorough evaluation, not least to avoid technical pitfalls such as hallucination (where AI generates incorrect information that appears to be correct), exacerbating bias (where algorithms contribute to unfair discrimination), and risk management issues, including relating to data privacy and cyber risk.

The generative AI market is expected to grow significantly



^{*}Revenue forecasts for AI vendors. Source: 451 Research, Generative AI Market Monitor, S&P Global Market Intelligence.

Crypto, cyber, and tech disruption

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Artificial Intelligence Insights

Making Sense of Artificial Intelligence

The Al Governance Challenge

Al in Banking: Al Will Be An Incremental Game Changer

Al for Security, and Security for Al: Two Aspects of a Pivotal Intersection

Gen Al Is Writing A New Credit Story For Tech Giants



Developed regions will enact AI-focused regulations. New rules focused on education, governance, and protection are likely to be developed and deployed in 2024 as major economies react to the widespread adoption of AI technology. There is already evidence of this rapidly evolving regulatory environment. The European Union's 'AI Act' will set rules that establish obligations for providers and users, varied in risk level as defined by the law. In August, China introduced a similarly groundbreaking law targeting the regulation of generative AI. The U.S. is taking a more decentralized approach, though elements of privacy legislation include provisions and protections applicable to AI,notably due to a combination of data privacy laws and algorithmic accountability and fairness standards. On Oct. 30, 2023, US President Joe Biden issued an executive order on the "Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence" to create safeguards. Similar regulations and policies are being developed or discussed in Canada and some Asian countries.

What we think and why

The opportunities offered by AI will vary across sectors, geographies, and company sizes. Early

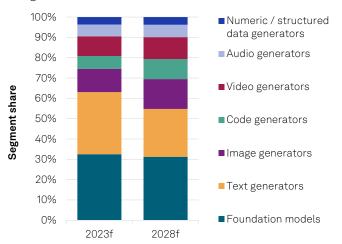
adopters of AI technology will primarily be larger companies with deep pockets and the motivation to invest in custom technology stacks (though small- to medium-sized enterprises that are able to leverage open source technologies will also lead adoption). This will be most prominent in developed economies, where capital spending capacity is higher, and where companies can take advantage of AI's various open-source models, frameworks, and applications. Sectors with more flexible business models (including high-tech, banking, medical devices, education, media and entertainment, and telecommunications) and those with greater discretionary capital spending will likely yield earlier benefits from AI in terms of cost efficiencies, profitability, and competitive positioning. Sectors characterized by capital-intensive infrastructure demands and fiscal and operational rigidity are likely to prove laggards.

Companies confronting manufacturing and supply chain issues could turn to an incremental use of AI for analytical solutions to enhance their competitivity--potentially deepening AI usage among automakers and other manufacturing sectors, many of which already use machine learning and telemetric instrumentation in their processes.

Chart 2

Code, image and video generators will gain market share in generative AI over the next five years

Text generators' and foundation models' markets will mature

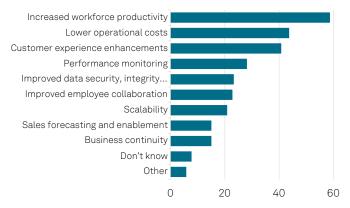


 $\hbox{f--Forecast. Source: TMT Research, S\&P Market Intelligence.}$

Chart 3

Al's productivity and cost efficiency are the primary benefits identified by SMEs

Survey respondents using or planning to use generative AI (%)



*Respondents were asked: Which of the following benefits is your organization experiencing (or would like to experience) from utilizing generative AI tools? Survey sample: 206 respondents that use or plan to use generative AI. Source: 451 Research's Voice of the Customer: Macroeconomic Outlook, SME Tech Trends, Cloud and Generative AI Adoption 2023.

Al will have replacement, transformative, and regenerative effects on labor productivity.

Replacement, or job displacement, seems the most prominent fear related to Al's adoption but is likely overstated and will largely be limited to automation of manual and repetitive cognitive processes. The transformative (and disruptive) effects of the technology will typically offer possibilities to augment people's workplace efficiency and effectiveness. This should develop further in 2024 as companies discover advancements in machine learning and analytics, and implement more and better telemetric instrumentation. The regenerative implications of Al refers to the technologies' ability to intelligently redesign processes and create new types of jobs. Generative Al should continue its early experimental development of regenerative innovation in 2024, but we believe that significant impacts likely remain some way off.

Al is likely to contribute to sustainability and social goals in the longer-term. We expect AI will progressively realize its potential to deliver social benefits, beyond financial gains. Companies and public organizations will increasingly look at AI technologies as a sustainable tool to reduce the adverse effects of issues including climate change, supply chain disruption, and gender, social and wealth imbalances. For example, in developing economies, the use of digital data coupled with advanced, machine-driven analytics and robotics could significantly widen access to healthcare through remote diagnosis, surveillance, and telemedicine, and promises improvements to agriculture production, through automatic irrigation and pest control.

"We expect AI will deliver efficiency gains, lead to stronger product differentiation, and power shifts in competitiveness."

What could go wrong

Al-related risks could worsen in the short-term. Data privacy and security risks, including cyber risk, could increase with the rapid growth in accessible data stored across the digital ecosystem. Additionally, threat actors can be expected to adopt new techniques, including sophisticated social engineering. Amplified by technologies that power "deep fakes", Al could have negative implications for businesses, nation-states, and society if the technology is used illegally and unethically to power misinformation.

Unequal access to AI could increase the digital divide. Utilization of AI technologies will remain unbalanced and could exacerbate digital inequalities based on geography and socioeconomic differences. Access to education and digital infrastructure will significantly determine the extent to which AI helps or hinders a company's operating efficiency and revenue growth, and could thus weigh on its financial performance and creditworthiness.

Inadequate AI adoption may lead to nonfinancial risks for companies. As adoption of AI technologies becomes more widespread, companies' operational and reputational risks may increase if development lags in education, governance, and protection. Depending on the consequences (e.g., regulatory breaches), nonfinancial risks have the potential to evolve into financial risks and hurt companies' financial health.

Regulatory complexity will likely increase. Al regulations are rapidly evolving and vary depending on region, meaning companies are facing an evolving and increasingly complex environment that heightens regulatory risks.

Digital Assets | Will technological and regulatory developments unleash institutional blockchain adoption?

Institutional interest in and adoption of digital assets and blockchain technology will continue to grow in 2024, supported by technological advances. We expect regulators to firm up their stances in key jurisdictions before activity volumes and related risks represent a key risk for traditional finance.

How this will shape 2024

Consolidation of technological developments will set the scene. Although crypto markets have endured a rough 18 months, technological progress has continued at a steady pace to address key inhibitors to institutional adoption of blockchains in financial markets. In 2023, innovations in interoperability solutions have supported increasingly elaborate institutional test cases across different private and public blockchains. The growth of layer 2 roll-ups (a blockchain network built on top of a layer 1 blockchain that aims to add functionality and speed) within the Ethereum ecosystem, and in particular roll-up chains using zero knowledge proofs--a cryptographic technique that verifies a statement is true without revealing the statement's contents--shows some promise in addressing scalability and privacy limitations that have inhibited adoption thus far, and may begin to be tested in institutional use cases.

Regulatory progress will be uneven despite coordination efforts. In July, the Financial Stability Board published its global regulatory framework for crypto-asset activities. The recommendations are high-level, and we think policy choices and their timing may vary considerably across jurisdictions. In the U.S., we expect progress will still be partly hampered by the fragmented regulatory framework and increasingly partisan political divide. In contrast, regulatory frameworks in other jurisdictions are progressing, often starting with stablecoin regulation. In the EU, the provisions for stablecoin regulation in the Markets in Crypto-Assets (MiCA) are set to apply from July 2024, while rules for other service providers will apply in January 2025. Meanwhile, in Asia, the Monetary Authority Of Singapore finalized a comparable regulation on stablecoins in August 2023.

Institutional testing of new use cases will accelerate. We think incumbent financial institutions will continue adopting blockchain technology to optimize or automate processes or create new tools for institutional users, partly supported by regulatory "sandbox" schemes in key jurisdictions. We see examples of this in the trial launch by a number of banks across regions of stablecoins or tokenized deposits. Other examples of institutional use cases include collateral mobility, foreign exchange, and cross-border payments. That said, we expect commercialization to retail clients of crypto assets will continue to progress more slowly until regulatory frameworks have greater clarity. A spot bitcoin exchange-traded fund (ETF) received regulatory approval in the EU in 2023, while several spot bitcoin and ether ETFs are currently under review in the U.S.

What we think and why

The evolution and growth of digital bond issuance is credit neutral. Digital bonds aim to automate segments of fixed-income markets leveraging blockchain technology. We expect that a small but growing universe of rated issuers will experiment further with digital bonds. But progress on widely accepted digital currencies and know-your-customer solutions is required for bonds to become fully digital and exchangeable on the blockchain. Experimentation with fully digital bonds will remain contained within regulatory pilot schemes, limiting issuers' exposure to



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"Crypto markets have endured a rough 18 months, but technological progress has continued at a steady pace." new operational and technological risks. For example, the Swiss National Bank has announced that a pilot for fully digital bond issuances using a wholesale central bank digital currency (CBDC) will take place in the first half of 2024.

Regulated stablecoins will further some rated issuers' experimentation with applications financing the real economy. CBDCs remain a long-term prospect in the EU and U.K., and a remote one in the U.S. Their absence has thus far inhibited the issuance of fully digital bonds and on-chain financing of fiat-denominated real-world assets. As regulatory frameworks for stablecoins come into play in 2024, the emergence of regulated stablecoins could address this issue. We expect that real use cases at scale remain some years away, and therefore that ratings will not be affected by shifts in the competitive landscape for now. In 2024, we may see test cases emerge from those financial institutions leading research and development in this area.

The boundaries between centralized and decentralized finance (DeFi) will become increasingly blurred. As use cases emerge that aim to provide financing to the real economy through decentralized protocols, the centralization of some functions (for example, credit underwriting) will be necessary because of regulatory hurdles and a need for accountability when offering financial products. Regulators have thus far focused on addressing centralized crypto finance entities, but in some jurisdictions are turning their attention to DeFi. They will need to strike a balance between achieving the same levels of investor protection as in traditional finance and recognizing the unique features of DeFi. The development of regulatory frameworks should eventually create opportunities for incumbent financial institutions to participate and take on new roles in innovative projects with decentralized elements. Meanwhile, centralized crypto businesses that aim to operate globally will need to comply with emerging regulatory frameworks in key jurisdictions. That said, we do not expect that shifts in competitive dynamics will meaningfully affect credit risk in 2024.

What could go wrong

The sparse landscape of banking partners could cause issues for U.S. crypto businesses and stablecoins. In March 2023, regulators closed two of the crypto industry's main banking partners, Signature Bank and Silvergate, and major U.S. banks appear to have no appetite to pick up that mantle due to regulatory uncertainty. Crypto businesses such as exchanges or stablecoin issuers need banks to support on- and off-ramps between the fiat and crypto economies. The closure of Signature Bank and Silvergate was a meaningful factor in the March 2023 depegging of the USDC stablecoin, and limited banking rails could lead to issues with other stablecoins.

Market conditions heighten any contagion risk between crypto players. Monetary policy tightening raises the risk of accidents and an abrupt reversal in market sentiment, also compounded by prevailing geopolitical risks. In this environment, regulatory changes--or rumors thereof--can also have material effects on crypto asset pricing, as illustrated by the recent Bitcoin price volatility on rumors of the regulatory approval of a spot Bitcoin ETF established by institutional players. However, crypto asset price volatility is likely to present a credit risk only for specialized crypto businesses rather than financial institutions, whose exposure will remain minimal: adopting blockchain technology for traditional financial market use cases does not in itself create exposure to crypto asset prices.

Fragmented regulations can trip large players. Within the U.S., different policy stances between states, and between regulatory bodies, can lead to the risk of belated litigations or fines when financial institutions engage in activities with unclear regulations. For global firms, the crossborder nature of crypto activities also raises the risk of litigations in specific jurisdictions in the event of hasty forays in certain activities, especially if marketed to retail customers.

Chart 1

"A lack of banking partners creates difficulties for U.S. crypto firms."

Recent examples of blockchain use cases by major institutions

Digital bond issuance

The Swiss National Bank has announced a pilot scheme for 2024 for Swiss financial institutions to issue fully digital bonds using a wholesale CBDC.

Asset tokenization and collateral mobility

SWIFT has successfully concluded a pilot scheme operating the transfer of tokenized assets across multiple private and public blockchains.

J.P. Morgan has tokenized a Blackrock money market fund and used this as collateral for a transaction with Barclays on its Onyx blockchain.

Cross-border payments

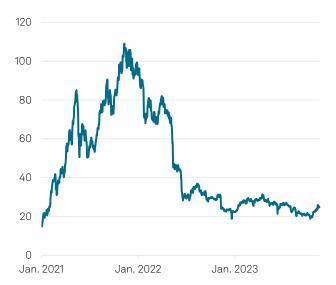
Visa has enabled crossborder payments using the USDC stablecoin on both the Ethereum and Solana blockchains.

CBDC--Central bank digital currency. Sources: S&P Global Ratings, public reports.

Chart 2

Total value locked has not recovered from the "crypto winter"...

TVL on Ethereum (bil. \$)

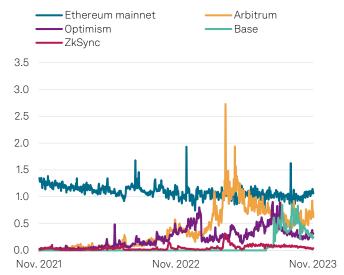


TVL--Total value locked. Source: DeFiLlama.

Chart 3

...But the emergence of scalability solutions supports new use cases

Daily transactions on Ethereum mainnet and selected layer 2 roll-ups (mil.)



Source: Dune (@blockworks_research, @tk_research, @dashagubaha).

Regional Credit Conditions

Credit Conditions North America Q1 2024

A Cluster Of Stresses

Key Takeaways

- Credit stresses are growing, and borrowers will need to adjust to a new playing field in which financing conditions could become even tighter. The costs of debt service and/or refinancing could be overly burdensome, especially for lower-rated borrowers.
- Other high risks include the chance of recession in the U.S. and persistent cost pressures.
- The net outlook bias for North American corporates was negative 10.9% as of Nov. 15. We expect the U.S. trailing-12-month speculative-grade corporate default rate to reach 5% by September.

Editor's note: S&P Global Ratings' North American Credit Conditions Committee took place on Nov. 20, 2023.

Credit stresses are growing for borrowers in North America, and near-term relief seems unlikely, as all-in borrowing costs look set to stay elevated, investors become more cautious, and U.S. GDP growth looks set to slow.

We expect the Federal Reserve to raise its policy rate once more and then wait until June to begin a cycle of rate cuts, assuming inflation approaches the central bank's target. The Fed has paused its cycle of interest rate hikes, holding the benchmark federal funds rate at 5.25%-5.50% at its November meeting, but the "longer" part of higher-for-longer has taken center stage.

Against this backdrop, the costs of debt service and/or refinancing could be overly burdensome, especially for lower-rated borrowers. Borrowers have reduced near-term maturities—trimming speculative-grade corporate debt due in 2024 by 34%. However, the share of spec-grade debt coming due rises in coming years, especially for those rated 'B-' and lower.

As higher interest rates and inflation erode financial cushions, more subdued business investment and/or a sharper pullback in consumer spending could lead to a recession, causing more credit stress. Consumers are already showing signs of weakness. American households (especially in the lower-income cohort) have been tapping more into their credit cards, with delinquencies on the rise. If consumers become more frugal than expected this holiday season, it could lead to downgrades in the retail and consumer products sectors. Meanwhile, mortgage-payment shocks are pushing Canada's household debt-service ratio close to its historical high.

The Israel-Hamas war adds another dimension to the geopolitical strife. The potential for the conflict to escalate and spread—and to affect the rest of the world through energy supply shocks, risks to social cohesion, and/or supply chains—is a key concern, as the U.S.-China strategic confrontation and the Russia-Ukraine war continue.

Downgrades continue to outpace upgrades, and the net outlook bias, indicating potential ratings trends, for North American corporates was at negative 10.9% as of Nov. 15. This is a worrisome level given that we rate 20% of the region's corporates 'B-' or below. Health care, telecom, and consumer products are the sectors with the highest negative bias.

Defaults are rising, and credit quality could erode further. S&P Global Ratings Credit Research & Insights expects the U.S. trailing-12-month speculative-grade corporate default rate to reach 5% by September—above the 4.1% long-term average. If, as we expect, unemployment rises and discretionary spending declines, consumer-reliant sectors, which make up roughly half of borrowers in the 'CCC/C' categories, will suffer most.

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Top North American Risks

Tight financing conditions pressure borrowers' liquidity

Risk level Moderate Elevated High Very high Risk trend Improving Unchanged Worsening

If interest rates rise further or remain elevated for even longer than we expect, and investors become more selective, the costs of debt service and/or refinancing could be overly burdensome for some borrowers. Increased volatility in the U.S. Treasury market could add to credit stress. With earnings under pressure and debt maturities approaching, lower-rated borrowers may feel more severe liquidity strains.

U.S. suffers a recession and rising unemployment, hurting demand

Risk level Moderate Elevated High Very high Risk trend Improving Unchanged Worsening

Higher interest rates and inflation continue to erode financial cushions and purchasing power. More subdued business investment and/or a sharper pullback in consumer spending could lead to a recession and a jump in unemployment, causing more credit stress. This comes amid slowing global growth, which could have deleterious second-order effects in the U.S. through a hit to business and financial market sentiment.

Cost pressures squeeze profits, erode credit quality

Risk level Moderate Elevated High Very high Risk trend Improving Unchanged Worsening

For many corporate borrowers, input prices—including wages and energy costs—remain high, and some are finding it more difficult to pass along costs to consumers and customers. If profit erosion becomes more widespread and steeper than we expect, credit quality could suffer further.

Falling asset values and cash flows, plus high financing costs, exacerbate CRE losses

Risk level Moderate Elevated High Very high Risk trend Improving Unchanged Worsening

Higher financing costs are weighing on commercial real estate valuations and heightening refinancing risk. Declining demand for office space--the focus of CRE markets right now--is further weighing on asset valuations. This may ultimately lead to elevated loan losses for debtholders.

U.S. bank failures erode sentiment, add to credit strains

Risk level Moderate Elevated High Very high Risk trend Improving Unchanged Worsening

Market conditions for U.S. regional banks remain challenging, and any renewed fears around profitability and equity levels could accelerate deposit outflows. As banks have become more selective in lending, commercial and consumer customers may find it harder to gain funding.

Structural risks

Escalating geopolitical tensions impede trade and investment, weighing on growth

Risk level Moderate Elevated High Very high Risk trend Improving Unchanged Worsening

The Israel-Hamas war adds another dimension to the geopolitical strife already intensified by the Russia-Ukraine conflict. The potential for the war to escalate—and to affect the rest of the world through energy supply shocks, supply disruption and risks to social cohesion—is a key concern. Meanwhile, any further worsening of U.S.-China tensions could also kink supply chains, and disrupt trade, and investment and capital flows.

Climate risks intensify, energy transition adds to costs

Risk level Moderate Elevated High Very high Risk trend Improving Unchanged Worsening

More frequent natural disasters increase the physical risks that public and private entities face and threaten to disrupt supply chains, such as for agriculture and food. The global drive toward a net-zero economy also heightens transition risks across many sectors, requiring large investments.

Accelerating tech transformation disrupts business models, cyberattacks threaten operations

Risk level Moderate Elevated High Very high Risk trend Improving Unchanged Worsening

Cyberattacks pose a systemic threat and significant single-entity event risk as new targets and methods emerge—with geopolitical tensions raising the prospect of major attacks. Businesses may need to incur more costs to adapt to technological advances. The accelerating digitalization of business and economic activity also adds potential market volatility.

Source: S&P Global Ratings.

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Credit Conditions Europe Q1 2024

Adapting To New Realities

Key Takeaways

- 2024 looks set to be a year of adaptation to the hangovers from high inflation, high rates, and high debt, against a more uncertain and volatile geopolitical backdrop.
- Geopolitical conflicts spilling over to Europe, a sharp rise in unemployment dragging Europe into recession, and a protracted period of higher rates exposing financial vulnerabilities are the key risks.

Editor's Note: S&P Global Ratings' Europe Credit Conditions Committee took place on Nov. 21, 2023

We expect corporate resilience to gradually erode as slow growth and higher funding costs squeeze earnings and free cash flow. We anticipate higher financing costs will become an increasing burden as 2025 and 2026 maturities are addressed, bringing coverage ratios back into focus and putting financial policies (especially discretionary expenditure including capex) under greater scrutiny. So, for lower rated nonfinancial corporates, generating cash flow, protecting liquidity, and managing down debt levels will be important to underpin debt sustainability and credit quality. Vulnerable segments include commercial real estate (CRE; mainly office), where there is a potential €93 billion funding gap between 2023-2026; and lower rated corporate sectors, particularly consumer products, media and entertainment, chemicals, and capital goods sectors that comprise about 50% of entities rated in the 'CCC/CC' categories. Given the demonstrated resilience of corporates to recent systemic shocks, we characterize the outlook as one of gradual deterioration in credit quality, reflected in the default rate ticking up to 3.75% by September 2024 from 2.9% currently. Credit deterioration among lower-rated corporates would put potential downward rating pressure on CLOs backed by leveraged loans.

Ratings prospects for European banks remain broadly stable, with earnings able to cover a normalization in credit costs comfortably. Strong European labor markets should underpin the performance of the residential mortgage market (albeit with some potential issues around legacy buy-to-let and adverse credit borrowers evident in some RMBS transactions). However, unsecured consumer borrowers will come under greater pressure, similar to corporate borrowers (primarily SMEs), owing to tighter debt and affordability metrics. Restrictive financing conditions are likely to continue to weigh on valuations in the CRE segment and expose banks to losses, all the more so in systems such as Germany, the Netherlands, and the Nordics that have a higher-than-average share of customer loans to CRE. However, EBA stress tests point to potential credit losses being contained at about 2% over a three-year period, even in a very adverse scenario.

Slow growth, higher cost of funding, and weakened public finances will increase pressures to restore greater fiscal discipline. 2024 will see the reimposition of the EU's stability and growth pact in some form. This, together with the higher cost of debt service, slow growth, and slowing inflation, will induce European governments to adopt more restrictive fiscal policies. Further pressure comes from central banks now shrinking their balance sheets significantly, requiring increased gross funding to be raised from public markets. Government interest payments will rise, in general. But the overall increase will be gradual due to the long-dated average maturity of sovereign debt and the relatively low average rate of interest on outstanding debt.

Geopolitics is a key downside risk. The crisis in the Middle East threatens to undermine the strength and cohesion of the Western Alliance that has coalesced in support of Ukraine. And that is even before the U.S. election next year that could see the Republican Party readopting an isolationist policy to the detriment of NATO. This could be unnerving for governments, businesses, and citizens in Europe if security concerns eclipse other priorities.

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Top European Risks

Escalating geopolitical conflicts could spill over to Europe

Risk level Moderate Elevated High Very high Risk trend Improving Unchanged Worsening

With two wars now being conducted in the region, geopolitical risk is heightened, with touchpoints ranging from potential military escalation in both theaters to protests or outbreaks of violence that could be politically destabilizing across the Middle East and beyond, especially where migration has become a divisive political issue. To varying degrees, this runs the risk of disrupting supply chains and triggering extreme flight to quality/risk aversion, excessive volatility, and the freezing up of some financial markets (at least temporarily).

Recession in Europe remains a downside risk

Risk level Moderate Elevated High Very high Risk trend Improving Unchanged Worsening

With the region already experiencing a borderline recession, the risk is that a combination of high rates, still elevated energy prices, weaker business and consumer confidence, and a slowing fiscal impulse translates into a more extended downturn, with rising unemployment. Given elevated public debt, few European governments have sufficient fiscal space to launch contra-cyclical support for the economy, should things get worse.

Tighter financing conditions will test financial vulnerabilities

Risk level Moderate Elevated High Very high Risk trend Improving Unchanged Worsening

High short-term nominal interest rates in restrictive territory and, as headline inflation subsides, an extended period of positive real rates could expose financial vulnerabilities for issuers that are finding access to financing restricted and the cost of debt service prohibitive. Tightening credit standards for bank lending and central banks aiming to shrink their balance sheets could exacerbate the situation. This is a particular credit challenge for companies needing to refinance and generating minimal FOCF where interest coverage ratios are falling below 2x.

Real estate downturn heightens risk of spillovers to the broader economy

Risk level Moderate Elevated High Very high Risk trend Improving Unchanged Worsening

High interest rates, declining demand in some sectors, and falling valuations continue to pressure credit quality in European real estate. A clear risk is that interest rates and associated financing costs could remain at their current high levels over an extended period. For residential property, higher mortgage rates and softening prices feed through to existing borrowers and new transactions. These pressures could spill over to the broader economy, transmitted through negative effects on consumer confidence, spending, and employment (especially in the construction sector), as well as damaging the asset quality of European banks more than anticipated.

China's structural economic slowdown amplifies potential spillovers from international trade tensions

Risk level Moderate Elevated High Very high Risk trend Improving Unchanged Worsening

Further increases in trade tensions and protectionist sentiment, or any unexpectedly sharp economic slowdown in China, would be detrimental to the operating performance of European companies with material country risk exposure to China.

Structural risks

Disruptions linked to climate change and the energy transition could increase

Risk level Moderate Elevated High Very high Risk trend Improving Unchanged Worsening

Growing tension between the widening stretch goal of reducing net emissions in the EU by 57% by 2030 and the challenges of implementing all aspects of the European Green Deal raises the risk of abrupt, and potentially contradictory, changes in climate policy that could disrupt industries and business models, notably in the automotive, building, cement, steel, chemicals, transportation, and utilities sectors.

Cyber risks may rise

Risk level Moderate Elevated High Very high Risk trend Improving Unchanged Worsening

The pace of digitalization, including artificial intelligence, in the global economy, and heightened geopolitical discord in EMEA, exposes corporates and countries to mounting cyber risks, with targets ranging from utilities to insurers and government agencies. This can weigh on credit quality, result in substantial monetary losses, and undermine public confidence in key institutions and infrastructure.

Source: S&P Global Ratings.

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Credit Conditions Asia-Pacific Q1 2024

China Slows, India Grows

Key Takeaways

- Shift in regional growth pattern. We expect Asia-Pacific's growth engine to shift from China to South and Southeast Asia. We project China's GDP growth to slow to 4.6% in 2024 (2023: 5.4%), edge up to 4.8% in 2025, and return to 4.6% in 2026. We see India reaching 7.0% in 2026 (6.4%); Vietnam, 6.8% (4.9%); Philippines, 6.4% (5.4%); and Indonesia remaining steady at 5%.
- **High rates and inflation.** With Asia-Pacific's central banks likely to keep interest rates high, the region's borrowers will see costlier debt servicing. Concurrently, a widening conflict in the Middle East could drag global supply chains and raise energy costs, fanning inflation. High input costs dilute corporate margins, while high prices weaken demand.
- Energy and demand shock risk. Asia-Pacific's growth is susceptible to energy shocks (widening Middle East conflict) and slower global demand (risk of U.S. hard landing). We lowered our projection for the region's growth (ex-China) in 2024 from 4.4% to 4.2%. The prospects for industries also differ, with export-centric manufacturing faring worse.

Editor's Note: S&P Global Ratings' Asia-Pacific Credit Conditions Committee took place on Nov. 21, 2023.

Despite stimulus, China's property sector remains stressed. China's recent approval of a Chinese renminbi (RMB) 1 trillion sovereign bond issue and allowance for local governments to partially frontload 2024 bond quotas, contributed to our real GDP growth forecast of 5.4% for 2023 and 4.6% for 2024. However, real estate challenges persist. Demand for new properties remains lackluster, affecting developers' cash flows and land sales (a revenue source of local and regional governments). Amid constrained liquidity, highly indebted local government financing vehicles (LGFVs) could see credit stresses intensify and hit Chinese banks' capital positions.

Costlier borrowing. We expect regional interest rates are likely to stay high, given the U.S. Federal Reserve will maintain tight monetary policy to rein in inflation to target. Meanwhile, gaps in policy rates between global and regional central banks could intensify capital outflows and domestic currency depreciation. For borrowers with impending or sizable refinancing needs, high borrowing costs and tighter credit availability from lenders are prominent risks. While onshore funding remains accessible, often cheaper than offshore, these too could turn selective.

Global obstacles. Although we anticipate the U.S. and Europe will see a soft landing in 2024, the risk of a hard landing could affect business and households' propensity to spend, slowing demand and hurting revenues. Meanwhile, a sudden shift in the Bank of Japan's monetary policy could introduce capital market volatility and reversal of the yen carry trade.

Geopolitical tensions. The risk of a widening Middle East conflict is compounding geopolitical tensions. This comes alongside ongoing U.S.-China friction and the Russia-Ukraine war. While we see the likelihood of an energy shock as remote, pricier energy and potential disruption of supply chains could reignite inflationary pressures and slow trade. The net energy-importing status of Asia-Pacific underlines its susceptibility to high energy prices. Businesses may find it harder to fully pass through costs to customers (see "Asia Pacific Sector Roundup Q1 2024: Slowing Dragons, Roaring Tigers," Nov. 7, 2023).

Longer-term risks. Climate change and rapid technological advancements are disrupting business models. To prepare for these risks, businesses are incurring higher capex investments (notably in the oil and gas, aviation, and utilities sectors for the energy transition), leading to rising debt leverage. Concurrently, increasingly extreme weather (flooding and high temperatures across Asia) could render some assets uninsurable; it could also threaten agriculture production and affect energy supply.

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Top Asia-Pacific Risks

China's economy: Deepening property sector woes, weak confidence, and high debt levels to weaken China's growth momentum Unchanged Risk level High Risk trend Spreading contagion from China's real estate crisis (to local governments and real estate-related sectors) is curbing the country's economic growth momentum. Risk of financiers curtailing lending amid China's very high corporate leverage could exacerbate credit stresses for borrowers. Financing: High rates for longer to exacerbate interest burdens and worsen prospects of weaker credit issuers Unchanged High Risk level Risk trend Asia-Pacific could see rates stay high for longer, amid global and regional central banks' concerted efforts to contain inflation. Higher borrowing costs could strain borrowers' liquidity, while slowing economies could hit revenue growth and margins, denting borrowers' credit quality. Global economic downturn: U.S. and Europe risk a hard landing, further depressing aggregate demand and exports Unchanged High Risk level Risk trend Slower household consumption and corporate investment activity could exacerbate soft demand from Western economies. For Asia-Pacific, exports and manufacturing activities face hits. Capital outflows for some economies could intensify, compounding recessionary headwinds. High prices: Inability to fully pass-through high prices could risk increasing cost pressures faced by borrowers **Improving** Risk level High Risk trend While inflation has eased, rising food and fuel prices could cause core inflation to spike. While businesses had raised prices to pass through higher input costs, slowing consumption could limit the momentum. Meanwhile, soft domestic currencies add further risk of imported inflation. Japan's monetary policy: Bank of Japan's further monetary tightening triggers short-term volatility Unchanged Risk level Risk trend If investors perceive that the Bank of Japan could embark on significant monetary policy normalization, abrupt portfolio adjustments and capital market volatility may occur. This could lead to significant asset and derivative repricing, hurting economic recovery and financing conditions. Real estate: Cash flow tests abound amid low new-sales volume and higher interest burdens Unchanged Risk level Risk trend Higher mortgage rates (except China), a still-weak global commercial real estate (CRE) sector and low new sales could risk property devaluation, spilling into real-estate related segments (e.g., banks). Costlier mortgages will slow consumption and growth, while developers' narrowing cash flows intensify liquidity stresses. If CRE liquidity strains intensify, investors (such as private debt) face the likelihood of substantial write-downs. Structural risks Geopolitics: Intensification of geopolitical tensions could hit business confidence, worsen trade and investment conditions Worsening Elevated Risk level Risk trend Risks of deepening or widening of political tensions and conflicts, such as U.S.-China geopolitical frictions, Russia-Ukraine war, and Israel-Hamas conflict could spill over into regional trade and investment flows. In the region, the key risk is disputes with China. A further reduction in supply chain reliance on China by Western and other importers could push up costs over the next few years, adding to inflation pressures. An escalation of international disputes over the seas and lands in the south and south-east China seas would damage economic activity. Climate change: Extreme weather and energy transition to threaten supply and costs Worsening Elevated Risk level Risk trend More extreme weather and costs of climate-change policies could worsen physical and financial effects. A rapid phase-out of fossil fuels could disrupt industries and strain credit quality. Meanwhile, disruptions in agriculture and energy supply could fan inflation and social unrest. Technology: Accelerating technological advancement and mounting cyber-attacks to disrupt business operations Unchanged Risk level Risk trend While technology advancements could enhance productivity and competitive positioning, businesses may need to incur additional ongoing and rising costs to keep up with new technologies. Critical infrastructure and issuer operations may be prone to cyber-attacks amid increasingly interconnectedness of economic activities. Source: S&P Global Ratings.

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Credit Conditions Emerging Markets Q1 2024

Not Getting Easier

Key Takeaways

- Credit conditions in emerging markets (EMs) will likely deteriorate in 2024, as major economies slow down (the U.S., China, and the eurozone), the effects of rapid monetary tightening surface, and debt maturities pile up.
- The balance of risks for EM credit conditions remains on the downside, given an extended
 period of high interest rates, the potential for further inflationary pressures, and weakerthan-expected growth in the largest economies. Debt refinancing will likely complicate
 the picture, as the global maturity wall is building up with considerable peaks in 2025.
- Credit quality across key EMs will likely be strained as risks unfold.

Editor's Note: S&P Global Ratings' EM Credit Conditions Committee took place on Nov. 20, 2023.

Credit conditions in EMs will likely erode in 2024, as major economies slow down (the U.S., China, and the eurozone), the effects of rapid monetary tightening surface, and debt maturities pile up. For many corporations, this will mean falling revenues upon increasing financing costs as debt comes due, resulting in pressured cash flows. EM banks have largely benefited from higher interest rates, reflected in higher margins, but EMs' sluggish economic growth will slow credit expansion and weaken asset quality. EM sovereigns will continue struggling given the trade-off between keeping key prices under control and avoiding social strife, while maintaining fiscal accounts balanced on rising debt burdens and high financing costs. Moreover, there is a heavy electoral calendar for key EMs in 2024, which will shape the political landscape for years to come.

EMs face difficult political dynamics, which have been exacerbated by the pandemic and geopolitical conflicts. Thirty emerging and frontier economies will hold elections next year. All these countries grapple with various challenges, and issues are highly idiosyncratic. For most of these countries, a critical issue is providing a predictable and stable political environment that fosters sustainable economic growth and improving living conditions. Most EMs also confront substantial fiscal challenges after boosting debt during the pandemic, so pursuing fiscal consolidation in an election year will prove tricky. On the positive side, many EMs could benefit from developing structural global trends, such as supply-chain relocation and energy transition. Policy predictability and investments in critical infrastructure will be key in benefiting from unfolding opportunities.

Financing conditions may improve as economic trends stabilize and there is more visibility about the peak of interest rates across advanced economies. However, financing costs will remain elevated for all EM issuers, especially for the lower-rated ones. Debt refinancing will likely complicate the picture, as the global maturity wall is building up with sizeable amounts coming due in 2024 and 2025. EM issuers will be at a disadvantage as investors will likely ask for additional returns, given comparatively higher country risk premia. For many issuers, the new interest-rate environment could be unsustainable, leading to defaults and bankruptcies. Access to primary markets could also be impeded if geopolitical risks were to rise further.

Adverse weather events are becoming more frequent and taking a heavy toll on EMs. El Niño phenomenon has had uneven effects during the year with many EMs suffering from either severe droughts or abnormal rains. An intense hurricane hit Mexico's Pacific coast, causing significant physical damage and human losses. The severe drought is affecting the Panama Canal's transit, the reduction of traffic on which could mean a considerable hit to freight fees and influence supply chains. Full effects of El Niño phenomenon are yet to be seen, but past occurrences have caused food prices to jump and other supply shocks.

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Top EM Risks

Higher interest rates amid increasing refinancing risks

Risk level Moderate Elevated High Very high Risk trend Improving Unchanged Worsening

Uneven global monetary policy trajectories still pose risks for EMs. As inflation eases, many EMs are now in position to lower their policy rates and some have begun an easing cycle, including Brazil, Chile, Hungary, Peru, and Vietnam. However, despite recent inflation readings in the U.S., mixed signals remain over the path of the Federal Reserve's approach to interest rates. While the peak of U.S. rate is certainly near, or perhaps already occurred, we expect the Fed will take much longer to lower interest rates, and more importantly, the terminal rate will likely be higher than the past decades' average. Financing conditions may improve as economic trends stabilize; however, financing costs will remain high for all EM issuers, especially for the lower-rated ones with refinancing needs in 2024 and 2025. Access to primary markets could also narrow if geopolitical risks were to continue rising. For many issuers, the new interest-rate dynamics could be unsustainable, leading to defaults and bankruptcies.

A sharper-than-expected downturn in advanced economies impedes global trade

Risk level Moderate Elevated High Very high Risk trend Improving Unchanged Worsening

Once again, EM economies will be facing tough external conditions as advanced economies slow down. The key question is if domestic demand resilience will be able keep EM economies afloat in 2024. The lagged effects of the rapid monetary tightening are still yet to be seen. Our base-case scenario assumes an economic slump across key advanced economies, and the risk for a recession in the U.S. and eurozone remains considerable. China's economy is also struggling, and expected growth for 2024 is far below levels in previous years that were supportive for many EMs. We expect these factors will be a drag on trade and will hurt EM exporters. A deeper-than-expected downturn could depress exports from key EMs by reducing trade volumes, portfolio flows, and foreign direct investment. Slower economic activity could imperil their corporate sectors' fundamentals and banks' asset quality. Unemployment could rise, hitting households already burdened by inflation.

Weakening economy and increasing financing costs squeeze corporate fundamentals

Risk level Moderate Elevated High Very high Risk trend Improving Unchanged Worsening

EM corporations will be facing growing headwinds in 2024. Our economic growth baseline for EMs already points to a below-trend expansion across the board, which will be much pronounced for major exporters. This will likely reduce revenues for most sectors, with only a few ones to be spared. Cost pressures continue, especially as workers demand higher salaries to cope with the rampant inflation and high prices that accumulated over the past few years. Moreover, we expect financing costs will remain high, unbearable for low-rated issuers. Sooner or later, EM corporations will need to refinance at higher costs, likely leading to credit deterioration.

Geopolitical tensions and difficult domestic socio-political conditions erode credit fundamentals

Risk level Moderate Elevated High Very high Risk trend Improving Unchanged Worsening

The eruption of war between Hamas and Israel brings back another disturbing focal point to an existing global geopolitical strife. While not underestimating the human tragedy that's unfolding in Gaza and Israel, our assessment is that the geographic and credit impact can largely be contained to Israel and its nearest neighbors—for the time being. The key risk is the potential for the conflict to escalate and spread more widely in the region with significant repercussions that could extend globally. The Russia-Ukraine conflict will drag into 2024. Ongoing hostilities, and both countries' large role in key commodity markets increase the risk for energy and food prices to rise, which could undermine confidence and growth in EMs. In addition, the political landscape across many EMs remains complicated amid a heavy electoral year. Overall fragile institutions, along with fragmentation and polarization at the legislative level, are making it difficult to carry out relevant reforms to support long-term growth. The disenchantment with politicians and democracy is growing, which could in the long run erode policy predictability and sovereigns' ability to deal with fiscal challenges and to support economic growth.

China's economy: Deepening property sector woes, weak confidence, and high debt levels to weaken growth momentum

Risk level Moderate Elevated High Very high Risk trend Improving Unchanged Worsening

The spreading contagion from China's real estate crisis (to local governments and real estate-related sectors) is curbing the country's economic growth momentum. Risk of financiers curtailing lending amid China's very high corporate leverage could exacerbate credit stresses for borrowers. China's weakening economy could filter into the region's economies and EMs reliant on China for tourism, exports, imports (product components), finance, or the supply chain.

Structural risk: Climate change and rising adaptation costs

Risk level Moderate Elevated High Very high Risk trend Improving Unchanged Worsening

Larger, more frequent natural disasters increase physical risks for public- and private-sector entities and threaten to disrupt supply chains such as for agriculture and food production in some EMs. El Niño phenomenon has had uneven effects during the year with many EMs suffering from either severe droughts or abnormal rains. Full effects of El Niño phenomenon are yet to be seen but past occurrences have caused food prices to jump and other supply shocks.

Source: S&P Global Ratings.

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