PGIM FIXED INCOME

Q2 22 QUARTERLY OUTLOOK

Published April 2022

WHATS INSIDE?

Select a section to jump to jump ahead.

	Total Returns (%)				
Individual FI Sectors	Q1 22	2021	2020	2019	2018
U.S. Leveraged Loans	-0.10	5.40	2.8	8.17	1.14
European Leveraged Loans	-0.48	4.87	2.4	4.38	1.25
European High Yield Bonds	-4.13	3.32	2.9	11.4	-3.35
U.S. High Yield Bonds	-4.84	5.36	6.2	14.4	-2.26
European IG Corporate	-4.96	-0.97	2.77	6.24	-1.25
Mortgage-Backed (Agency)	-4.97	-1.04	3.87	6.35	0.99
EM Currencies	-5.53	-3.09	1.73	5.2	-3.33
U.S. Treasuries	-5.58	-2.32	8.00	6.86	0.86
CMBS	-5.59	-0.64	8.11	8.29	0.78
Municipal Bonds	-6.23	1.52	5.21	7.54	1.28
U.S. IG Corporate Bonds	-7.69	-1.04	9.89	14.5	-2.51
EM Local (Hedged)	-8.12	-5.52	6.07	9.14	0.75
EM Debt Hard Currency	-10.02	-1.80	5.26	15.04	-4.26
Long U.S. Treasuries	-10.58	-1.13	17.7	14.8	-1.84
U.S. Long IG Corporates	-11.41	-4.65	13.94	23.9	-7.24
Multi-Sector					
Yen Aggregate	-1.55	-2.85	-0.8	1.64	0.93
Global Agg. Hedged	-4.97	-0.15	5.58	8.22	1.76
Euro Aggregate (Unhedged)	-5.41	-4.71	4.05	5.98	0.41
U.S. Aggregate	-5.93	-1.39	7.51	8.72	0.01
Global Agg. (Unhedged)	-6.16	-1.54	9.2	6.84	-1.2
Other Sectors					
U.S. Dollar (DXY Index)	2.76	6.37	-6.69	1.35	4.9
3-Month SOFR[1]	0.29	0.18	0.74	2.4	2.23
S&P 500 Index	-4.60	28.71	18.4	32.6	-4.4

Past performance is not a guarantee or a reliable indicator of future results. See Notice for important disclosures and full index names. All investments involve risk, including possible loss of capital. Sources: Bloomberg except EMD (J.P. Morgan), HY (ICE BofA), Bank Loans (Credit Suisse). European returns are unhedged in euros unless otherwise indicated. Performance is for representative indices as of March 31, 2022. An investment cannot be made directly in an index.
[1] Prior annual returns were based on 3-month LIBOR.

PGIM FIXED INCOME

SECTION 1

KEY CONVICTIONS & INVESTMENT THEMES

01

KEY CONVICTIONS & INVESTMENT THEMES

The fixed income outlook quickly evolved from one framed by reopening-fueled growth and inflation to one saddled with the unsettling implications from the war in Ukraine.

1 **Splintered global growth.** The world's largest economies face vastly different conditions. The U.S. is experiencing above-trend growth and uncomfortably high inflation, while China lumbers under COVID lockdowns and a real-estate overhang as Europe confronts the threat of an energy embargo that could almost certainly push the economy into recession and/or stagflation.

2 **Varied phases of tackling inflation.** Central banks around the world stand at different phases of removing their virus-induced policy accommodation. The slow movers, such as the ECB and the Fed, are just wrapping up QE and starting to tighten policy, respectively, while the faster moving EM countries in Eastern Europe and Latin America remain way ahead in taking action to address inflation.

3 **The fog of war.** The unpredictable course of the Russia/Ukraine conflict, the global response, and the associated impacts on the world's geopolitical order and financial system will continue to drive market dynamics.

4 **The bottom line for alpha generation.** The disconcerting backdrop may render beta an ineffective generator of returns, reinforcing the need for an expanded micro focus on bottom-up research and relative-value positioning as a reliable way to generate alpha.

PGIM FIXED INCOME

SECTION 2

BOND MARKET OUTLOOK

By Robert Tipp, CFA, Chief Investment Strategist and Head of Global Bonds

War and inflation forced the bond bull market into a major detour. Given the disorienting aspect of unexpected turns, we map the road ahead in the following steps.

02

DETOUR

At this point in the COVID-reopening process, some moderation in global growth and inflation might have been expected. Instead, a much more complex set of events played out in Q1, causing a steep selloff in the bond market that quickly pushed yields toward previous cycle highs and drove a significant widening in credit spreads—in short, a major detour in the multi-decade bond bull market. Given the disorienting aspect of detours, we're mapping the destination ahead in a series of steps.

Step 1: The market repriced by how much in Q1?

Concerns about central bank tightening, hard economic landings, and the war in Ukraine led global credit spreads notably wider in Q1 (**Figure 1**). Indeed, the repricing for ECB and Fed rate hikes over roughly 18 months jumped by about a factor of three (**Figure 2**): from slightly less than 50 bps to more than 150 bps for the ECB and from about 100 bps to nearly 300 bps for the Fed.

Step 2: The new inflation paradigm

These repricings didn't happen in a vacuum—inflation, which was already high, has gone off the charts—and that was before Russia's invasion of Ukraine pushed the commodity bull market into overdrive. As a result, high inflation is likely to remain a major market concern for the foreseeable future thanks to the supply/demand dynamic. But why the sudden repricing?

Figure 1
(bps)

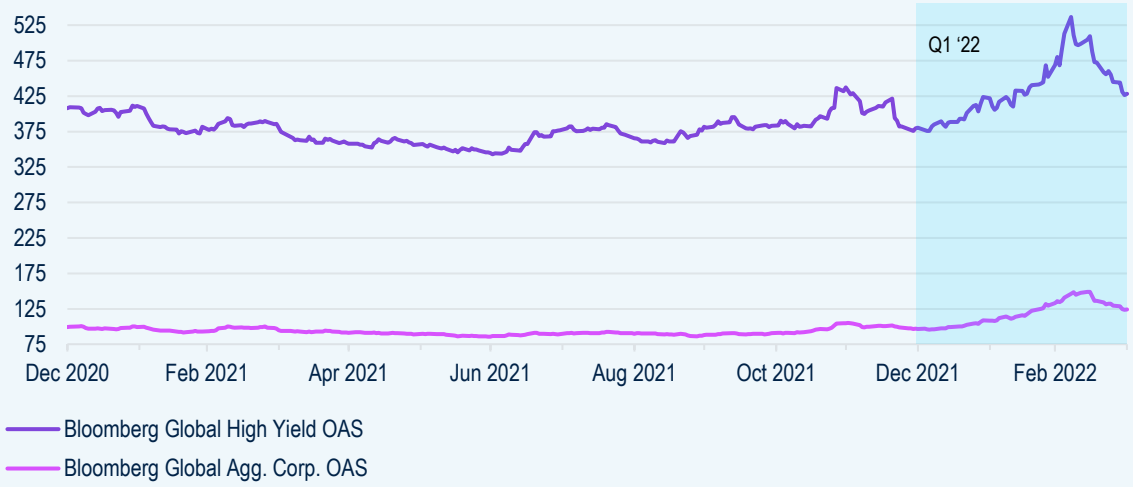
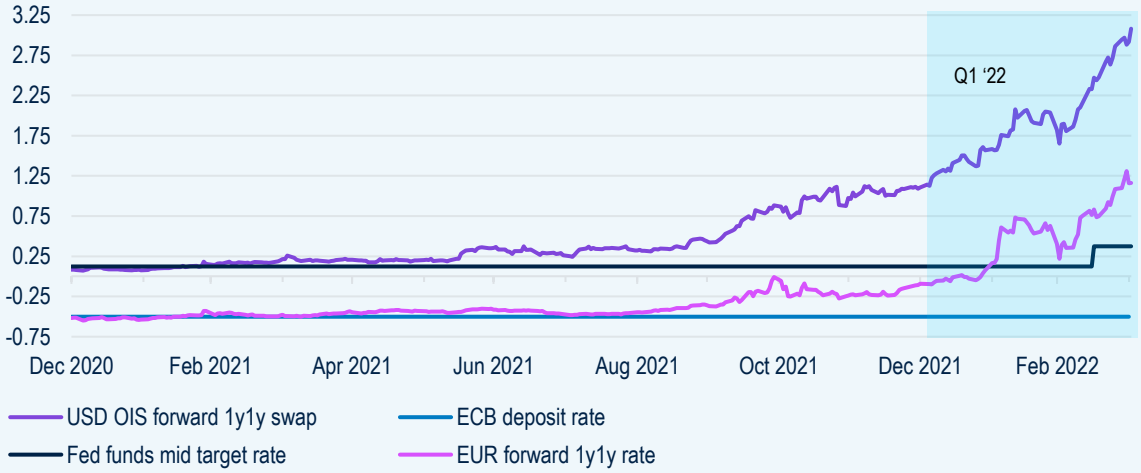


Figure 2
(%)



Source: Bloomberg as of April 1, 2022..

In the U.S., when looking back to Q3 2021, the few high post-COVID inflation prints circled in **Figure 3** looked like an aberration. Six months later, we find ourselves in the midst of a completely different paradigm: the 0.5%/month, 6% annual rate increases are the new norm, and Q3's lower inflation prints are the exception. Although the Fed could be forgiven for the transitory theme then, it's easy to see why it quickly shifted to a "control inflation now" posture given the subsequent shift in the data.

Figure 4 shows the analogous transformation in Europe's inflation outlook from a pre-Q4 2021 environment where inflation of 2% or higher was unsustainable to one where suppressing inflation below 2% now seems implausible. And the year-to-date numbers pre-date the rise in commodity prices since Russia's invasion.

Step 3: A solid backdrop to hike rates

While expectations for central bank tightening in a few key economies, such as China and Japan, remain benign, those that have experienced very strong growth, such as the U.S., have seen rate-hike expectations surge. Given the key role of the U.S. and the Fed in global markets, it's worth looking at the rate of job growth over the last several months in **Figure 5**. Some moderation in job growth might have also been expected at this point of the cycle, yet reopening has become an extended process with a pace of job growth like nothing we've seen this century. Further, there may be a more lasting, demographically-driven boost from household formations (**Figure 6**).

Figure 3
(%)

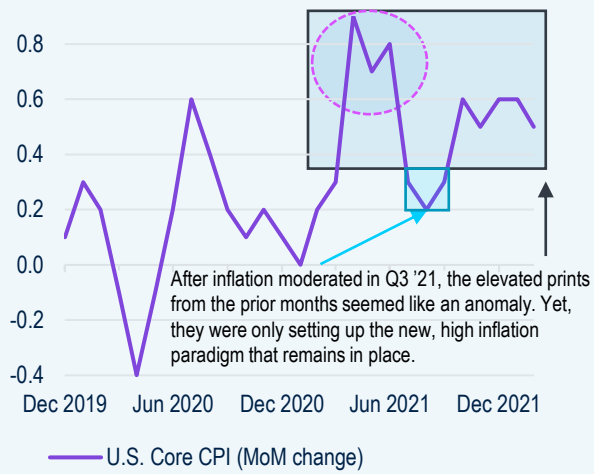


Figure 4
(%)

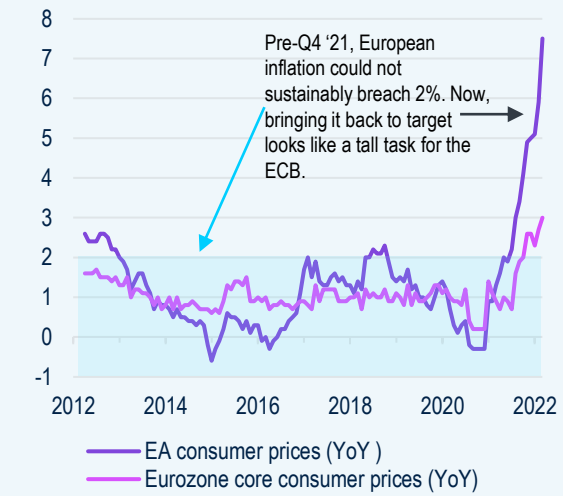


Figure 5
(000s)

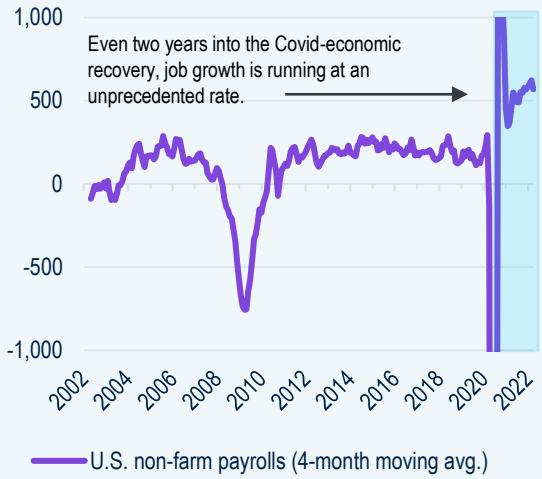
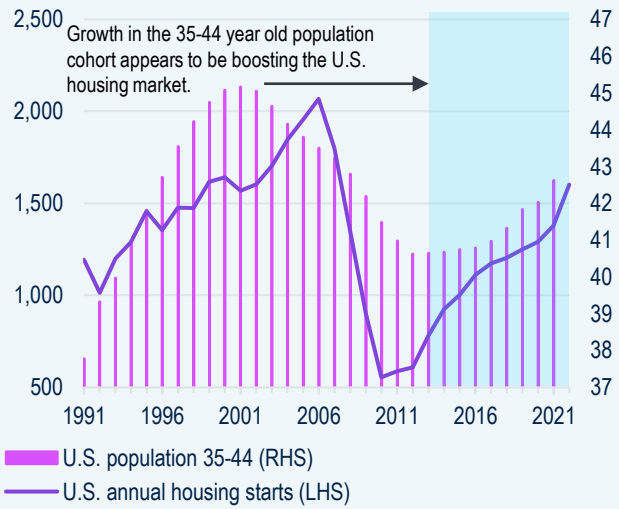


Figure 6
(LHS in 000s; RHS in millions)



Source: Bloomberg as of March 31, 2022..

While the case for Fed rate hikes looks quite solid, the situation for the ECB is clouded by the risks from Russia's invasion, which are primarily associated with energy availability and price inflation. Furthermore, the potential for military escalation cannot be dismissed. In particular, if the conflict disrupts the flow of fossil fuels to Europe, it would likely push the continent into recession. This creates a highly-uncertain outlook that is likely to keep ECB rate actions far more limited than those by the Fed.

Step 4: Where to from here?

After a jarring quarter, the market should be biased to consolidate—both in terms of interest rates and credit spreads—as typically happens after a rate-hike cycle finally begins. At that point, the economy is usually strong, credit fundamentals are solid, and the risk of a hard landing is relatively low as financial conditions generally remain easy. **Figure 7** shows that, after the first rate hikes in 2004 and 2015, measures of expected volatility (i.e., the VIX) fell, and credit spreads narrowed. So, for the next quarter or two, the markets may have sufficiently priced in the implications of the war and fears of central bank rate hikes. Therefore, they may be set for a respite from the risk-aversion trade, which would continue a trend that began in the final days of Q1. Similar to credit spreads, after a significant amount of hikes are priced in, long-term interest rates often consolidate as they wait for the Fed to catch up. **Figure 8** shows that, later in the cycle, the where and when of the peak in long rates will closely correspond with the end point of the hiking cycle.

Figure 7
(RHS in index level; LHS1 in %; LHS2 in bps)

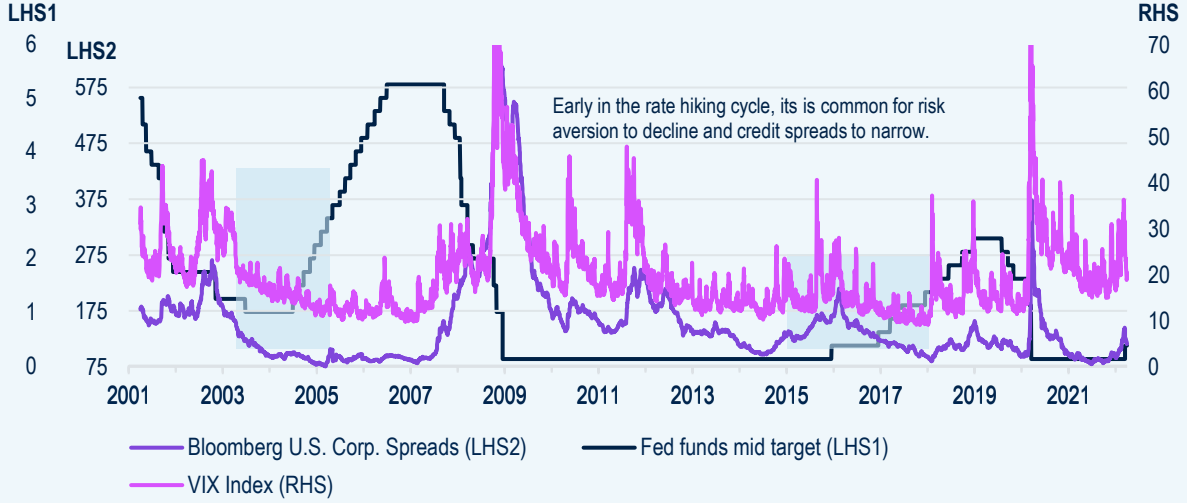
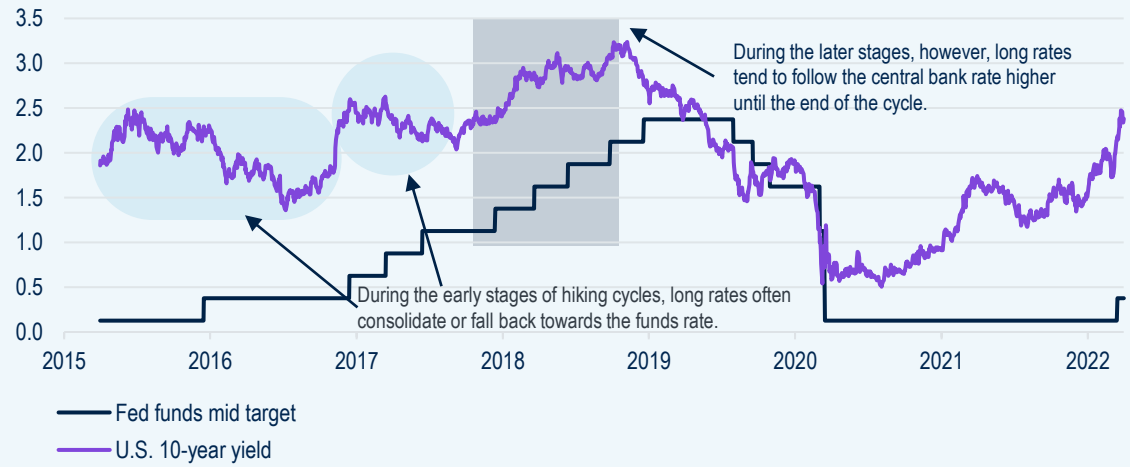


Figure 8
(%)



Source: Bloomberg as of March 31, 2022..

In terms of calling the cycle top in long-term rates, given the extraordinary economic strength and level of inflation, it's too early to preclude the possibility of higher highs later this year or in early 2023. But given the underlying secular factors, such as aging demographics and high debt levels, we suspect that most of the increase in yields is behind us.

Step 5: Caveats to our near-to-intermediate outlook

Given the economic and geopolitical uncertainty at present, **our fairly benign-to-positive outlook over the near-to-intermediate term comes with three heavy caveats**, which could take the market and economic outlook even further off course.

The **first caveat is that the conflict must remain limited to Russia and Ukraine and not engulf NATO in a potentially catastrophic war.** This leads to our **second caveat: Western Europe's supply of Russian oil and natural gas must not be cut off.**

If the war spreads to involve other major countries—and/or Europe's energy supply is seriously curtailed—markets could become risk averse, driving credit spreads wider. While high-quality, developed bond markets might be expected to rally in such a scenario, bouts of rising rates and widening spreads—similar to the occurrence during most of Q1—can obviously not be ruled out.

Our **final caveat pertains to the major central banks: they can't panic and over tighten monetary policy.** Given that they should have started their tightening cycles earlier, it's no wonder they are talking such a hawkish game at this point. But if we see they're losing perspective and a latent sense of caution that enabled them to change course and cut rates in 2019, that will signal an increase in the risk of hard landings, which would likely lead to lower interest rates and wider credit spreads.

The bottom line: It's a tricky environment for sure. Over the short-to-intermediate term, we are expecting volatility to drop, providing a respite for bond yields and spreads over the next quarter or two. But given the surprises we've seen over the last few months, we'll need to continually reassess the balance of geopolitics, growth, inflation, and policy risks.

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WHITE PAPER

THE 60/40 PORTFOLIO'S OVERDUE OVERHAUL

If investors' objective is to accumulate future savings, rather than manage asset volatility, their portfolios should be constructed accordingly.

BLOG POST

LATIN AMERICA: CHURNING WATERS HIGHLIGHT AN IMPERFECT GEM

The churning market uncertainty combined with Latin America's relative insulation from the war highlight the differentiation and relative value that exists across the region.

BLOG POST

CHINA'S GDP TARGET: WHEN LOWER MEANS (MUCH) HIGHER

We disentangle the signal from the noise in China's economic data, particularly its ambitious growth target, and discuss the government's likely response to the country's economic challenges.

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SECTION 3

GLOBAL MACROECONOMIC OUTLOOK

By Katharine Neiss, PhD, European Chief Economist

We framed our latest economic outlook in the context of the conflict, its economic impact, and the role of policy. Furthermore, this latest shock arrived with the global economy already undergoing a seismic shift amidst elevated inflation, softening growth, and unwinding fiscal and monetary stimuli.

03

A TECTONIC SHIFT IN THE GLOBAL ECONOMY

The implications of the war in Ukraine have captivated investors since Russia's invasion on February 24. While the longer-term shifts—including reinforced deglobalization trends and an altered geopolitical landscape—may seem evident, the near-term uncertainty remains acute. Therefore, we framed our latest economic outlook in the context of the conflict, its economic impact, and the role of policy. Furthermore, this latest shock arrived with the global economy already undergoing a seismic shift amidst elevated inflation, softening growth, and unwinding fiscal and monetary stimuli.

The uncertain evolution of the conflict and the associated human cost—measured in the lives lost, the 4 million refugees, and the trauma, particularly among the young and the vulnerable—is of the utmost concern.[1] At this juncture, a resolution appears distant, and risks of further escalation, including the imposition of secondary sanctions, remain.

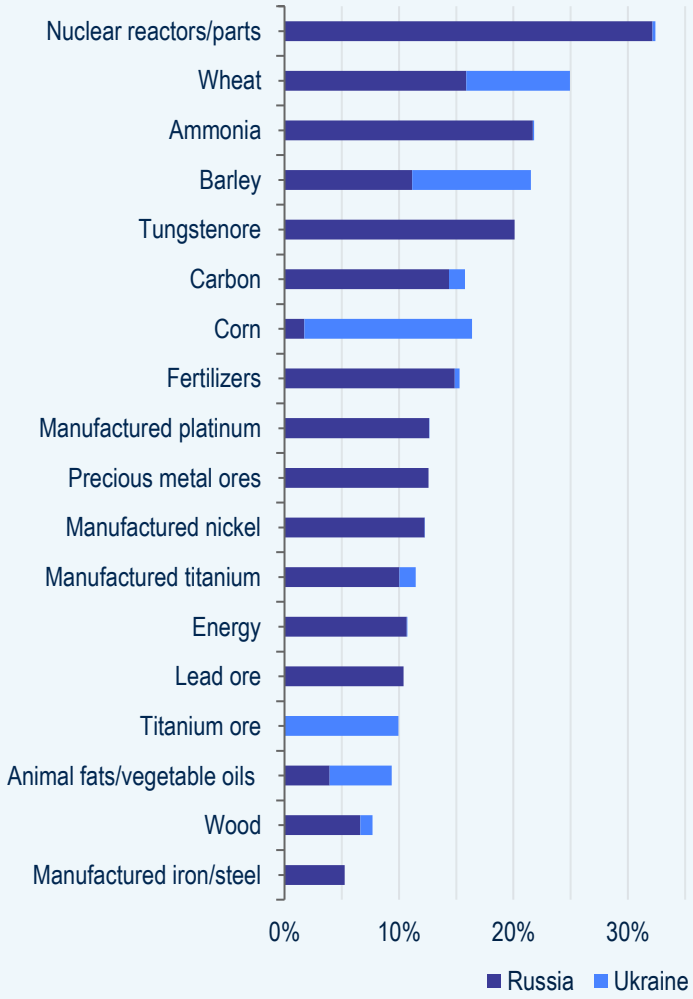
The economic impact of the conflict on key channels, including energy, other key commodities, trade, and financial linkages is also unclear. Disruptions in these channels will likely be exacerbated by deteriorating sentiment and supply chain disruptions. Experience has shown that these amplifiers are difficult to quantify and may be non-linear. Russia is a global player in terms of energy production and supplies Europe with approximately 25% of its energy needs. Russia and Ukraine are also important sources of exports for other key commodities, such as fertilizers, grains, and precious metals (Figure 1). As a result, the isolation of Russia from key regions of the global economy and the production stoppages in Ukraine will reverberate around the globe in unforeseen and varied ways.

Policy support presents a third source of uncertainty. As the world adjusts to life with COVID, governments and central banks around the world are stepping back from the extraordinary support of the last few years. It remains early days, but, thus far, it would seem that the invasion has not derailed the broad trend towards the removal of fiscal and monetary support. On the contrary, central banks are actually stepping up their tightening pace to anchor expectations in economies with elevated growth and inflation.

At the start of 2022, global growth was expected to moderate, but remain above trend. With the conflict representing a clear negative downside shock to growth whilst pushing up on inflation, global stagflation risks have increased markedly in our view, with recession risk in Europe at 50/50.

The economic impact in Europe crucially hinges on the extent to which energy supplies from Russia continue to flow into the region. We assume that an "orderly transition" away from

Figure 1
Key commodities exported by Russia and Ukraine
(Share of global exports, %)



Source: PGIM Fixed Income and Haver Analytics as of March 31, 2022. Note: These goods cover approximately 70% of classified Russian + Ukrainian Exports; manufactured metals exclude raw forms.

[1] The estimate of four million people who have fled Ukraine is from the United Nations High Commission for Refugees.

The Russian energy situation will be a significant drag on growth over several years, and we recently lowered our 2022 GDP growth forecast from a pre-conflict rate of 4.2% to 2.7%. The impact will be asymmetric, with Germany and the Netherlands particularly exposed via Russian energy dependence and trade links. As a large importer of Russian gas via a Ukrainian pipeline, Italy is once again a key vulnerability for euro area cohesion and growth. But if Russian energy supplies are cut off entirely, we would expect to see production cuts and demand destruction that tip the region's annual growth into negative territory.

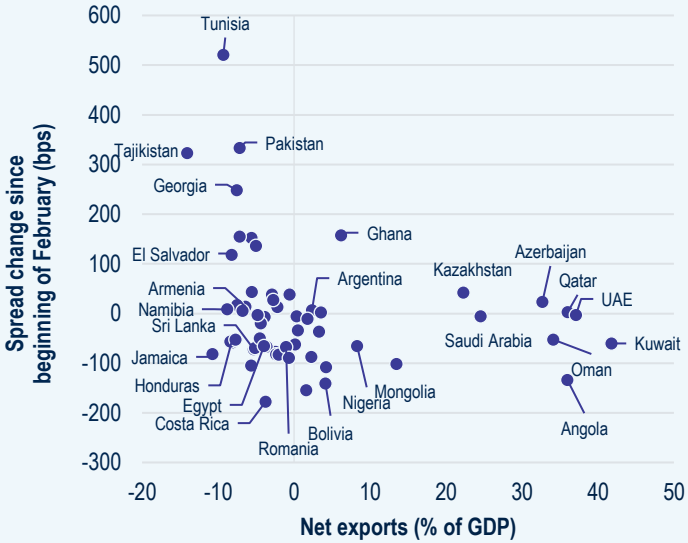
Excluding China, the conflict is separating emerging economies into winners, losers, and those with a more mixed picture (Figure 2). Commodity exporters and those that stand to benefit from trade divergence and regionalization, such as Colombia and Nigeria, may benefit from positive spillovers. But many others, including Tunisia and Chile, have seen a significant hit to their terms of trade as essentials, such as food and energy, have become significantly more expensive. This, in turn, is creating social tensions, with some emerging market economies (e.g., Sri Lanka and Egypt) turning to the international community for support packages. Even oil and gas exporters—which are likely to benefit from higher prices and demand—will have to pay more for food imports, hence limiting the windfall. Deteriorating risk sentiment, combined with ongoing monetary tightening in the U.S. and the euro area, also presents a negative shock, especially for countries that already have to finance large current account deficits. Turkey stands out as particularly exposed to these multiple shocks.

In contrast, the U.S. economy is far more insulated from the conflict. As a net exporter of energy with minimal trade linkages to Russia, the immediate impact on the real economy is likely to be relatively muted. The strength of the U.S. economy going into the crisis also acts as a buffer. That said, the impact of elevated global energy and food prices is pushing high inflation even higher, further squeezing households' real incomes. With fiscal stimulus over and financial conditions tighter, we expect demand will likely slow over the coming year, helping to lessen inflationary pressures.

China finds itself in a somewhat different position. Last year's effort to cool the property market dampened growth more than expected, implying strong headwinds to achieve the country's ambitious growth target of 5.5% for 2022. Given our expectation of easing global growth, this points to the need for additional policy support in order to secure China's growth target. The longer such stimulus is delayed, the more substantial the eventual policy boost that will be required. Considering the critical importance of 2022 for deciding the political leadership for the next five years, we expect the authorities will make every effort to achieve their growth target, which will impart one of the few upside growth risks this year.

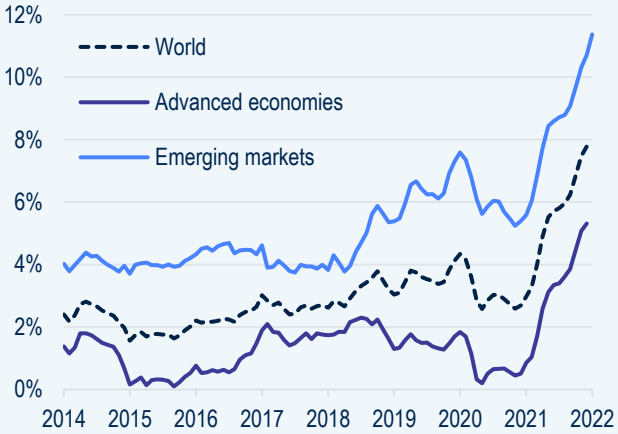
Globally inflation remains exceptionally elevated (Figure 3).

Figure 2
Ranking of EM countries by net exports to Russia/Ukraine and spread change



Source: PGIM Fixed Income and Haver Analytics as of March 31, 2022.

Figure 3
The surge in global inflation (% YoY)



Source: Haver Analytics as of March 31, 2022.

Although Ukraine represents only a very small part of the global economy, the impact of the conflict on energy prices will continue to ripple across the globe, affecting inflation in advanced and emerging economies alike. Additional supply chain disruption from China's continued COVID-19 lockdown measures have kept central banks on course to tighten financial conditions.

With emerging economies, including Hungary, the Czech Republic, and Brazil, as well as small open developed economies, such as Norway, leading the charge, the market is now expecting more aggressive rate hikes by the U.S. Federal Reserve. Our base case assumes the Fed will aggressively front-load its tightening in the first half of this year—including both rate hikes and Quantitative Tightening (QT). The European Central Bank's stance is expected to remain expansionary, with little if any sign of overheating in domestically generated inflation. That said, the ECB looks poised to end its asset purchases before the end of this year and to begin raising rates out of negative territory around the turn of the year. Neither its open-ended asset purchase program nor negative rates were decisive policy levers in the pandemic, so if a severe downside risk in the region were to crystalize, we could see a new bespoke set of measures unveiled.

Where monetary policy is stepping back, additional fiscal support may fill the gap. It remains early days, but already European policymakers have signaled immediate support to compensate households and firms for higher energy costs. That said, an expansionary fiscal package funded by EU debt would likely take several years to secure political unanimity at the EU level. Elsewhere, such as in the United Kingdom, fiscal retrenchment remains very much on the cards.

Although it is a global economic outlook fraught with complications from Russia's invasion of Ukraine, at this point, it appears safe to expect slower growth and greater inflationary pressures than at the start of the year. It is a precarious view, and if further downside risks materialize, the recent tectonic shifts could push multiple regions into recession.

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SECTION 4

GLOBAL SECTOR OUTLOOKS

04

DEVELOPED MARKET RATES

Outlook: Opportunistic. Investors often see tightening cycles as high-volatility events for sovereign rates, but history has shown that implied volatility declines steadily until borrowing costs peak. As such, we remain convinced of the unprecedented return potential of relative-value opportunities.

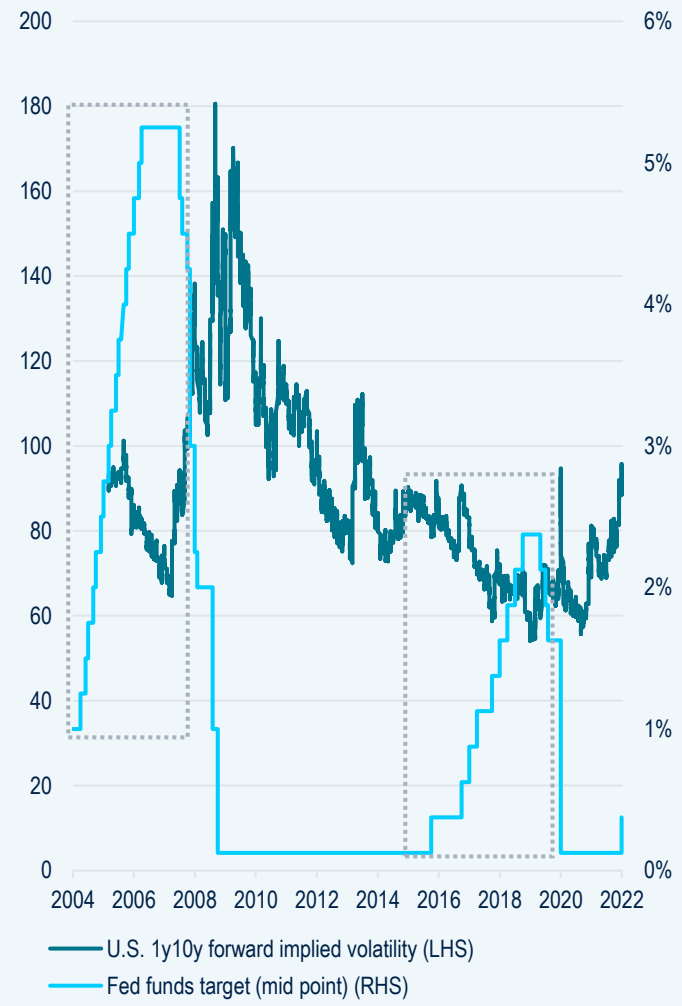
■ Yet another round of bear flattening ensued in developed-market yield curves in Q1, with the Treasury two- and 10-year curve flattening to the point of inversion. In the face of relentless inflation, it's likely that short rates will continue their disproportionate rise going forward. That said, so far we have seen less pronounced moves in the front ends in Germany and the U.K.

■ To us, the Fed's substantially raised forecasts for the fed funds rate sends a nuanced message, one that suggests officials recognize they are behind the curve and are willing to raise through the neutral rate, which they estimate at 2.4%, to catch up with the substantial escalation in the inflation outlook. Fed funds futures have priced in 50 bp hikes in the near term, and officials have clearly put that option on the table as the inflation pressure persists.

■ Fed hiking cycles have often been misunderstood as high-volatility events, but the reality is that rates volatility—i.e., 1y10y implied vol—declined during the 2004 and 2015 cycles, and volatility started to increase only months after the tightening cycle peaked (and shortly before the beginning of the subsequent easing cycle).

■ We think there are enormous arbitrage opportunities given our outlook for lower volatility. Our optimal portfolio model continues to show dislocations in the Treasury market not seen since the Global Financial Crisis, which offers rare duration-neutral, relative-value opportunities for yield pickup across global DM rates at a time when yield curves are almost flat. We're maintaining long positioning in the Treasury 20-year against neighboring futures contracts and short positioning in the off-the-run 10-year against on-the-run seven- and 10-year notes. We have also recently identified interesting Treasuries-futures basis mispricings in securities at the belly of the curve that can potentially qualify as cheapest-to-deliver bonds.

Volatility generally declines during Fed hiking cycles
(LHS: bps per annum; RHS: %)



Source: PGIM Fixed Income, Bloomberg as of March 31, 2022.

AGENCY MBS

Outlook: Underweight, but reducing. While we remain underweight MBS due to tight valuations and nascent signs of spread widening in anticipation of tighter Fed policy, we recognize that peaking volatility, reduced origination, and slower prepayment speeds may support the sector.

■ MBS valuations remained rich on an option-adjusted basis amid the Q1 surge in market volatility, even though excess returns were negative versus Treasuries as spreads widened and hedging costs increased. The looming reduction in the Fed's MBS balance sheet should weigh on the market, but the loss of demand due to the Fed's exit was offset by a sharp drop in mortgage originations, as homebuyers and homeowners looking to refinance face sharply higher mortgage rates.

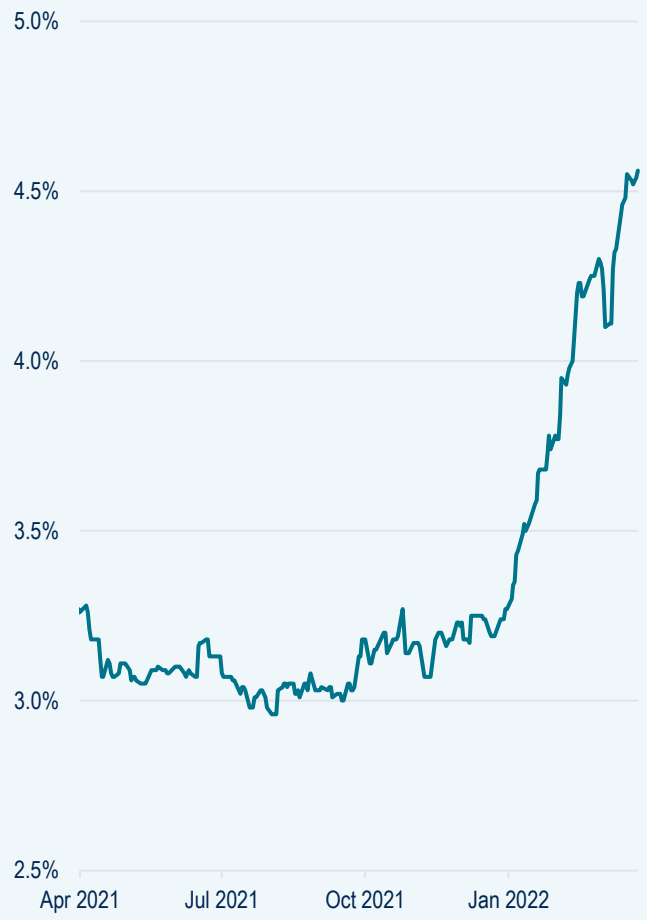
■ The surging mortgage rates have helped boost Ginnie Maes (GNMAs) against conventional coupons as both originations and prepayments in GNMAs decline disproportionately; as such, our positioning in high-coupon GNMAs benefitted from the outperformance. Meanwhile, 30- and 15-year production coupons generated the worst excess returns versus Treasuries, despite significant support during the Fed's most recent QE program.

■ Implied financing for previously well-supported MBS coupons has cheapened considerably as the Fed's holdings flow back to the private sector. That said, the deterioration in liquidity and market functioning has made MBS a more difficult asset to trade, mainly because of reduced liquidity in the MBS markets. During times of rapid spread movements or coupon repositioning, dealers are becoming less able to source the securities or warehouse inventory.

■ We've maintained our underweight bias on MBS versus Treasuries due to their tight valuation from an OAS perspective, and we are starting to see some spread widening in TBAs in anticipation of the Fed's withdrawal. .

■ That said, we've adjusted our short-term outlook to reflect the headwinds stemming from the decline in originations and the possibility of volatility normalizing, which would make MBS more attractive. To avoid positioning issues, we continue to prefer the barbell approach of being long wing coupons and specified pools while staying away from primary production coupons.

30-year mortgage rates national average
(%)



Source: Bankrate.com, PGIM Fixed Income as of March 25, 2022.

SECURITIZED CREDIT

Outlook: Patiently opportunistic. While the sector remains susceptible to macro developments, fundamentals remain favorable. Higher rates should curtail issuance and temper asset price appreciation across residential and commercial real estate. Market volatility has reduced secondary market liquidity and improved valuations across the capital stack. We are tactically adding exposure in high-carry, short spread-duration opportunities.

■ While we remain cognizant of the risks to spread products, the recent market volatility has created value in AAA rated conduit **CMBS**. Rising rates pose risks to commercial real estate, and further increases could lead to softness in capitalization rates, which could pressure property prices in the medium run. After record private label issuance to start the year, the combination of wider spreads and higher interest rates could limit new issue supply. From a positioning perspective, we favor well-enhanced AAA rated conduit CMBS bonds as well as SASB mezzanine floaters, especially those in the multi-family and industrial sector as they should continue to benefit from rising rents and limited supply.

■ Despite higher mortgage rates and increasing affordability pressures, we expect 2022 home price appreciation in the 5-8% range given the supply/demand dynamics. Although **RMBS** issuance and market volatility have weighed on spreads, credit concerns remain at bay.

■ Increasingly, we see value in credit risk transfer (CRT) securitizations given wider spreads and a positive outlook on mortgage credit.

■ As **CLO** spreads widened in Q1, primary market spreads lagged those in the secondary market, and as Q2 commences, we expect primary spreads to converge to secondary levels. We also may see reduced demand from U.S. banks, which composed 60% of last year's demand for AAA CLOs. On the positive side, we expect a rising-rate environment to support demand for floating-rate products, which should provide support for CLOs as new yield buyers emerge. Several **European CLO** warehouses remain open, and new issue deals will be in focus as dealers seek to reduce balance sheet risk. European spreads may also remain under pressure in the near term.

■ The pressure on **ABS** spreads has been milder than other securitized asset classes, and demand has emerged at wider spreads, though thinner market depth is still a headwind. Fundamentals should normalize to pre-COVID levels, rather than the "stimulus boosted" profiles. We favor higher-value ABS, such as select issuers of unsecured consumer loans, subprime auto loans, and prime auto credit risk transfer issues. We continue to avoid sectors with higher exposure to macro volatility, such as aircraft.

Commercial real estate sectors estimated 12-month price change

Sector	Estimated 12-month price change (%)	Commentary
Office	-2.5% to 2.5%	Leasing activity improving, but vacancy rates remain elevated amid WFH.
Hospitality	0% to 5%	Recent improvement, but cautious amid impacts to business travel and intl. tourism.
Retail	0% to 5%	Remain positive on A+/A++ malls that will benefit from consolidation.
Multi-family	2.5% to 7.5%	Positive outlook for Class B/C multifamily given lack of new supply and strong demand.
Industrial	2.5% to 7.5%	Tailwinds from e-commerce and strong household spending to continue benefitting last mile logistics.

Source: PGIM Fixed Income as of March 31, 2022.

INVESTMENT GRADE CORPORATES

Outlook: Broadly cautious, seeking specific opportunities. Given the potential for further, but more modest, spread widening, we're seeking alpha generating opportunities in select sectors and individual credits. The green energy transition likely accelerates going forward.

■ **U.S. investment grade** spreads widened significantly to start the year, but remain inside the post-GFC average of 135 bps even as monetary policy and geopolitical risks remain elevated. Hence, we're taking a cautious approach to the market, and our base case places spreads 30-40 bps wider over the next few months. And the risk of a bearish scenario where spreads widen 50-75 bps slightly outweighs the likelihood of an upside bullish scenario where spreads tighten 20-30 bps.

■ With that context, we seek to take advantage of attractive tender offers when possible and sell into pockets of strength to either reduce risk or create room to invest in new issues that price with attractive concessions.

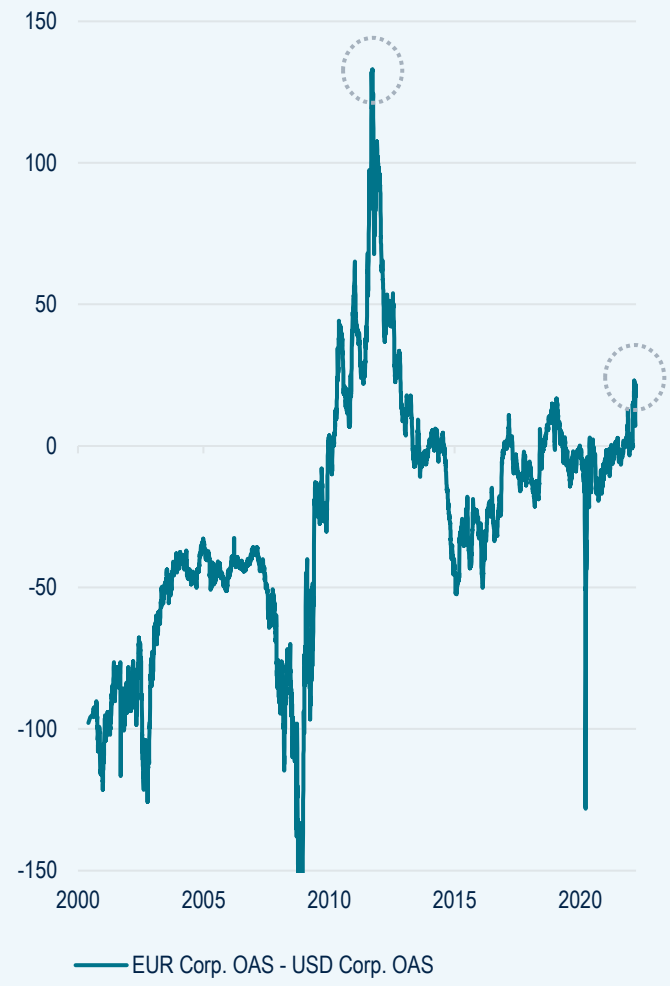
■ From a sector perspective, elevated input prices could squeeze margins in the food & beverage, consumer products, transportation, and healthcare sectors, while disruptions in the semiconductor and auto sectors could persist longer than initially anticipated. Conversely, we believe banks offer good long-term value with strong fundamentals and wider spreads than similarly rated industrial issuers. But bank spreads may experience near-term volatility as the sector's liquidity amplifies market moves. The energy, metals, and chemical sectors should benefit from higher commodity prices.

■ The prior point indicates that while future ESG-implications remain difficult to predict, recent developments have two takeaways. First, the global squeeze on commodity prices likely accelerates the transition to greener forms of energy, which likely brings higher capital expenditures. Second, the markets have coalesced behind a message that bad-actor states and their related assets will quickly find themselves cut off from the global financial system.

■ Conditions in **European IG** are similar to those in other credit sectors as the breadth of the dispersion across the asset class underscores the expanding set of single-name alpha opportunities.

■ While credit metrics are generally strong, conditions require analysis at the individual credit level to determine the effects supply chain bottlenecks and input cost inflation on corporate margins. Furthermore, a grasp of individual corporate financing needs is increasingly important given that primary issuance requires sizable spread concessions that

European IG spreads over U.S. IG spreads reached historical wides in Q1 (bps)



Source: PGIM Fixed Income as of March 31, 2022.

can consequently pressure the credit's spreads in the secondary market.

■ Relying on market beta for returns could place investors in front of additional headwinds. For example, the ECB's response to the energy shock consists of charting a quicker conclusion to its asset purchases—including its corporate purchase program—and its negative-rate regime.

■ From a strategy perspective, we're maintaining a slight underweight in spread duration, and we see room for financial spreads to compress into those for corporates. We also find the spread pick up in BBs vs. BBBs is attractive where applicable and see value in select corporate hybrids.

■ **Global portfolios** are also slightly underweight spread duration and overweight risk. While USD spreads outperformed EUR spreads thus far in 2022, we believe there is scope for the differential between the two to narrow as the year progresses.

GLOBAL LEVERAGED FINANCE

Outlook: Cautious. Despite strong fundamentals, uncertainty around developments in Ukraine, inflation, and central bank hawkishness raise longer-term concerns. Loans should outperform bonds in the short run given continued CLO formation and insulation from rising rates. Active management and accurate credit selection will be rewarded as volatility continues.

■ While strong fundamentals maintain low **U.S. high yield** default rates and scenarios exist where spreads could tighten in 2022, we are slightly more cautious looking ahead. We still believe that U.S. companies remain well-insulated from the most severe impacts of the war over the short term as most are domestically focused with an ability to pass rising input costs to customers. Energy, metals & mining, and chemical companies comprise a large portion of the sector and stand to benefit from higher commodity prices.

■ That said, we believe risk premiums do not fully reflect the increasing possibility—and/or secondary effects—of a slowdown over the longer term. Although this downside scenario could lead to an increase in defaults and wider spreads over the coming year, we believe any spread widening should be generally less severe than in prior downturns amid issuers' credit strength and manageable maturity profiles. In terms of positioning, we are reducing our allocation to lower-quality issuers in favor of higher quality BB-rated bonds. We've also built up our cash balance as part of reducing risk. We are maintaining an overweight to independent power producers, housing, and gaming.

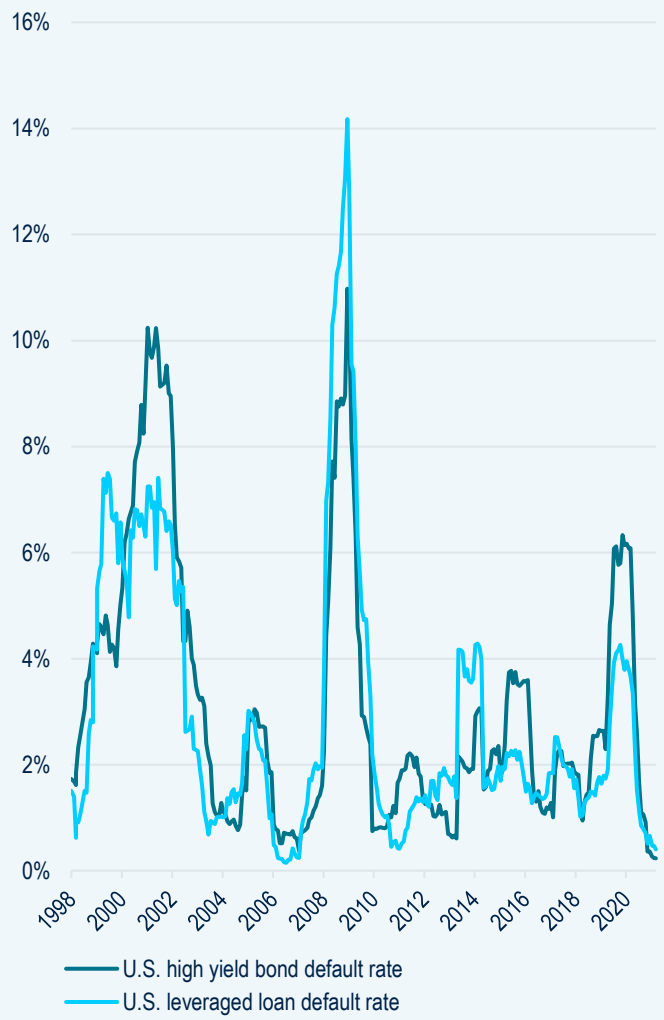
■ We expect further inflows into **U.S. leveraged loan** mutual funds while the Fed remains on a tightening path. Meanwhile, CLO creation will likely remain robust as the arbitrage appears more compelling following the price declines in late Q1. Looking forward, we expect another 2-3 points of loan upside in Q2, with rising base rates leading to higher coupons later in the quarter.

■ Despite the recent spread widening, we remain cautious on **European High Yield** and **European Loans** over the long term. From a macro perspective, uncertainty around the path of the war, inflation, and central bank tightening raise concerns over European and global growth. That said, fundamentals generally remain strong, and, due to a lack of near-term maturities, we don't expect a material pickup in defaults in 2022 or 2023, even as the risk of a recession has risen. Given continued strong CLO formation and insulation from rising rates, we expect loans to outperform bonds in the near term.

■ In terms of positioning, we are focused on carry opportunities in carefully selected B and CCC-rated credits with weighting towards the best relative-value opportunities.

■ Following their recent widening, some BB-rated credits also appear attractive. Given our inflationary concerns, we see prevailing risks in the airline, automotive, and consumer-facing sectors. Ultimately, we think active management and accurate credit selection will be rewarded as volatility continues.

U.S. high yield bond and loan par-weighted default rates
(LTM Default Rate, %)



Source: J.P. Morgan as of February 2022.

EMERGING MARKET DEBT

Outlook: Cautiously selective. Current price levels have, in the past, signaled opportune entry points in EM bonds, particularly for investors who generate returns through credit selection. But we remain cautious as further developments may continue to impact EM economies. Even in a more negative scenario, we see select opportunities among EM hard-currency bonds. Local-currency yields are set to remain high, so we are focused on specific yield curve and relative-value positions. We also remain cautious on EM currencies with a long U.S.-dollar bias and a focus on relative value.

■ The most direct impact of Russia's invasion on **EM hard currency bonds** appears concentrated within Russia, Belarus and Ukraine. Investors have priced in defaults for these countries, whose debt accounts for about 61 bps of EM hard currency spreads (The main EM bond indices removed Russian issues on March 31, 2022). Outside of these three countries, a wide range of outcomes is possible for EM economies and debt. Despite attractive valuations compared to developed markets, we are waiting to see which outcomes begin to materialize before increasing portfolio risk. In the meantime, we see compelling relative value among EM hard currency bonds.

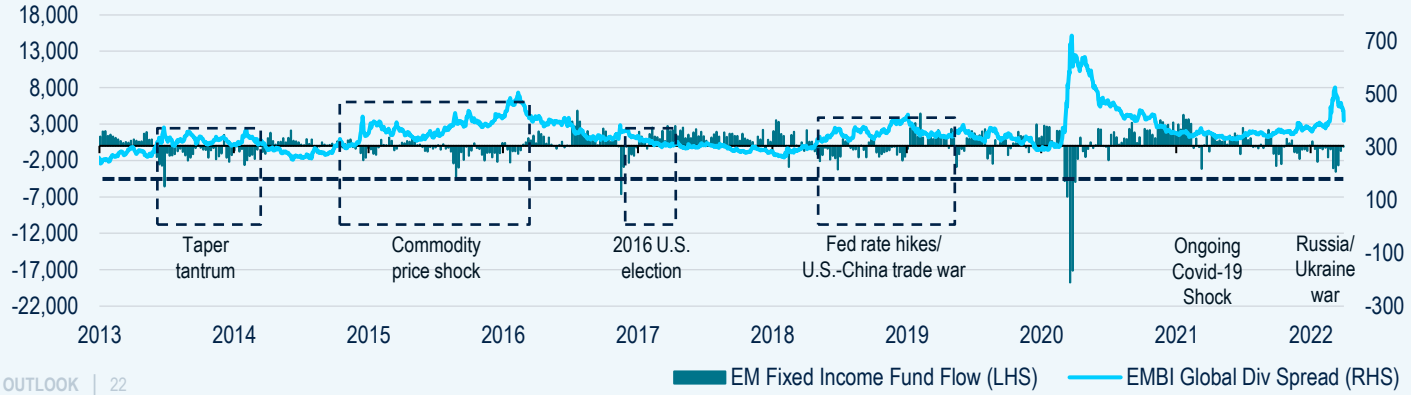
■ Contagion from Russia's invasion will most likely be felt indirectly via inflationary effects in EM economies (see Economics section). Externally vulnerable countries and those with low credit ratings will experience the most fundamental damage from higher food and energy prices. Ghana, for example, will benefit from rising oil prices, but its deficit will remain stubbornly high.

■ By contrast, changes in terms of trade will benefit commodity exporters without significant imbalances, e.g., Angola should continue to perform well and generate twin surpluses this year. Ivory Coast's fundamentals are solid with debt-to-GDP of around 40% plus a fiscal deficit that continues to narrow and higher prices for oil, gold, and cocoa. Other countries, such as Colombia, Nigeria, and Iraq, should also benefit from higher oil prices.

■ Ghana as well as Egypt, Ethiopia, Senegal, El Salvador, and Sri Lanka may lack market access to refinance their upcoming debt maturities. That said, issuers that don't rely on market access to refinance are likely to outperform.

■ Among IG issuers, we continue to favor those in the Middle East that are set to benefit from improved terms of trade as well as those in Central and Eastern Europe, given the support from ECB flexibility. Indonesia's hard-currency bonds should also outperform as the country's external account benefits from its increased coal exports amidst wide-spread gas shortages.

A turn in flows could ratchet EM spreads tighter
(LHS, $ in millions; RHS, bps)



Source: EPFR, J.P.Morgan as of March 31, 2022.

■ Despite YTD outflows of nearly $13.5 billion, strategic, dedicated money appears stable. Furthermore, many EM investors are defensively positioned in higher-quality issuers and/or with high levels of cash, so ample room exists for flows to reverse. Against this backdrop, a positive catalyst could create momentum. Additionally, Russia's exit from most EM indices could stabilize flows.

■ On a positive note, China set an ambitious growth target of 5.5% for 2022 and has started to inject stimulus. While there are downside risks to this target, there is scope for China to contribute to overall EM growth. Given its internal challenges and longer-term objectives, China is likely to remain "neutral" in Russia's invasion of Ukraine to avoid potential secondary sanctions.

■ Slower global growth this year will impact **EM corporate** fundamentals, but corporate defaults outside of China, Russia, and Ukraine will likely remain contained. At the same time, credit spreads for BB-rated issuers, for example, are around 200 bps wider than comparable developed-market issues, and net issuance has all but dried up. As a result, we remain constructive on several EM corporate segments, including overweight positioning in BBs, with a focus on corporate credits in India, Brazil, Peru, Mexico, and Thailand.

■ China's credit market has underperformed this year amid concerns over secondary sanctions, the property market, the government's zero-COVID strategy, and regulatory risks. The government acknowledged these issues in a recent announcement that stabilized Chinese markets in the short-term, but we await tangible stimulus before engaging further.

■ Among quasi-sovereigns, we continue to find value in Mexico's Pemex and the country's state-owned utility CFE as well as South Africa's Eskom. In addition to attractive spreads, each of these issuers benefits from strong government support and, in the case of CFE, an investment-grade rating.

■ **EM local-currency bond** yields rose 150 bps in 2021, so many investors saw 2022 as a year for receiving income from higher, more stable local-currency yields. However, rising inflation, rate hikes in LatAm and Central Europe, Russia's invasion, and a more hawkish Fed dampened that outlook.

■Local-currency yields are likely to remain high until Russia's invasion ends and we see "peak inflation." On one hand, EM local duration appears attractive amid favorable valuations and technical factors. On the other, inverted local-currency yield curves between 1 to 3 years, momentum in food and energy prices, and persistent hawkishness by central banks continue to favor maturities of up to 5 years. To counter our short-dated positioning, our biggest overweight is in China. The People's Bank of China's easy stance on liquidity and China's economic slowdown continue to support our bullish case for Chinese local-currency bonds. In addition, our portfolios have small overweight positions in Indonesia, South Africa, Czechia, and Peru.

■ We prefer underweight allocations to local-currency bonds in Poland, Chile, and Colombia. Central Banks in Poland and Colombia have chosen to lag the inflation curve. Chile is facing fiscal slippages that are likely to keep monetary policy under pressure. But we are looking to cover our underweight positions in Brazil, Mexico, and Hungary where projected policy rates have started to overshoot their historical ranges.

■ We remain cautious on **EM currencies**, favoring a U.S.-dollar bias with a focus on relative value. Current tailwinds for EM currencies come from higher commodity prices for exporters and high EM yields. But we are skeptical that these tailwinds will continue, relative to the U.S. dollar, as the Fed hikes rates and EM growth declines.

■ Our largest underweights are in Asian commodity importers (Singapore dollar, Thai baht, and Taiwan dollar). However, we doubt that commodity exporters' currencies can continue to outperform, and we are underweight in the South African rand and the Mexican peso. We have small overweight exposures in the Polish zloty, due to Poland's hawkish central bank, and in the Colombian peso and Chilean peso amidst rising yields, high commodity prices, and attractive valuations.

■ As in other EM segments, we await peak inflation, an inflection in global growth, or developments in Russia's invasion in Ukraine to substantially adjust our EM currency positioning.

MUNICIPAL BONDS

Outlook: Constructive. We continue to expect short-term volatility, but see an inflection point approaching as technicals turn and credit fundamentals remain strong.

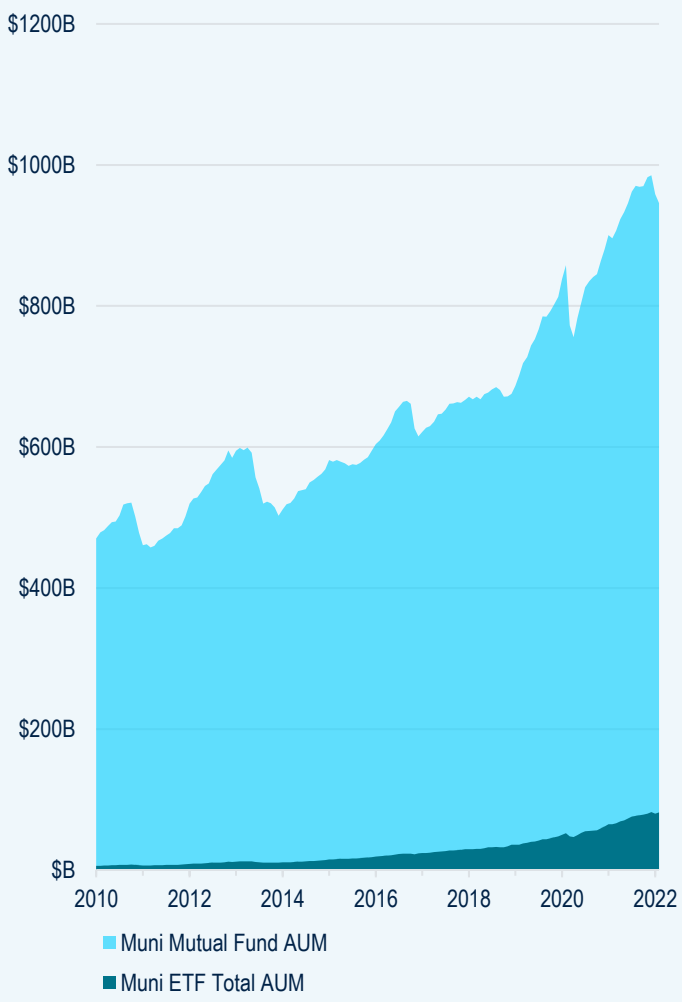
■ While we don't see any signs of immediate relief in outflows from tax-exempt municipal bond funds in light of ongoing rate volatility, the recent selloff appears entirely technical in nature. Recent muni market volatility has been exacerbated by the growing participation of municipal bond ETFs, as well as by dealers' growing reluctance to take balance sheet risk. Meanwhile, new supply is expected to pick up over the near term, competing for a limited amount of dollars.

■ However, credit quality remains strong and the municipal bond sector remains well insulated from the war in Ukraine. Upgrades continue to outpace downgrades and tax collections are meaningfully outpacing pre-COVID levels. According to the National Association of State Budget Officers, states' rainy-day funds have now reached record levels while federal stimulus facilitates more flexible spending. Moreover, many muni issuers are well-positioned for rising energy prices, with airports, toll roads, and utilities able to pass through costs and/or benefit from pent up demand.

■ If technicals turn and credit fundamentals remain strong, we see an inflection point approaching and believe it is appropriate to continue legging into risk. Interest rates may stabilize, and reinvestments are expected to pick up in the summer months, once again leading to net negative supply. Furthermore, municipal bond yields are now nearing levels that appear attractive to crossover accounts.

> *…new supply is expected to pick up over the near term, competing for a limited amount of dollars.*

Growing representation from ETFs



Source: J.P. Morgan as of February 2022.

PGIM FIXED INCOME

SECTION 5

SUMMARY OF OUTLOOKS & ASSET CLASS VIEWS

05

SUMMARY OF OUTLOOKS & ASSET CLASS VIEWS

SECTOR	OUTLOOK	ASSET CLASS VIEW			
DM Sovereign Rates	Opportunistic. Investors often see tightening cycles as high-volatility events for sovereign rates, but history has shown that implied volatility declines steadily until borrowing costs peak. As such, we remain convinced of the unprecedented return potential of relative-value opportunities.	U.S.		UK	
		Germany		Canada	
		Japan		Australia	
Agency MBS	Underweight, but reducing. While we remain underweight MBS due to tight valuations and nascent signs of spread widening in anticipation of tighter Fed policy, we recognize that peaking volatility, reduced origination, and slower prepayment speeds may support the sector.				
Securitized Credit	Patiently opportunistic. While the sector remains susceptible to macro developments, fundamental remains favorable. Higher rates should curtail issuance and temper asset price appreciation across residential and commercial real estate. Market volatility has reduced secondary market liquidity and improved valuations across the capital stack. We are tactically adding exposure in high-carry, short spread-duration opportunities.	CMBS		CLOs	
		Non-Agency		ABS	
Global IG Corporates	Broadly cautious, seeking specific opportunities. Given the potential for further, but more modest, spread widening, we're seeking alpha generating opportunities in select sectors and individual credits. The green energy transition likely accelerates going forward.	U.S. Corps.		European Corps.	
Global Leveraged Finance	Cautious. Despite strong fundamentals, uncertainty around developments in Ukraine, inflation, and central bank hawkishness raise longer-term concerns. Loans should outperform bonds in the short run given continued CLO formation and insulation from rising rates. Active management and accurate credit selection will be rewarded as volatility continues.	U.S. High Yield		Euro High Yield	
		U.S. Leveraged Loans		Euro Leveraged Loans	
EM Debt	Cautiously selective. Current price levels have, in the past, signaled opportune entry points in EM bonds, particularly for investors who generate returns through credit selection. But we remain cautious as further developments may continue to impact EM economies. Even in a more negative scenario, we see select opportunities among EM hard-currency bonds. Local-currency yields are set to remain high, so we are focused on specific yield curve and relative-value positions. We also remain cautious on EM currencies with a long U.S.-dollar bias and a focus on relative value.	Sov. Hard Currency		Local Rates	
		Corporates		EMFX	
Municipal Bonds	Constructive. We continue to expect short-term volatility, but see an inflection point approaching as technicals turn and credit fundamentals remain strong.	Tax-Exempt		Taxable	

SUMMARY OF MARKET PERFORMANCE

Sector		Subsector	Spread Change (bps) Q1	SOFR OAS 03/31/22
CMBS	CMBS: Conduit AAA	First-pay 10-year	31	125
	CMBS: Conduit BBB-	BBB-	78	454
	CMBS: SASB – Senior	AAA	59	150
	CMBS: SASB - Mezz	BBB-	64	300
	CMBS: Agency Multifamily	Senior	22	74
Non-Agency RMBS	Legacy	RPL Senior	54	150
	Legacy	'06/'07 Alt-A	79	210
	GSE Risk-Sharing	M2	190	340
CLOs	CLO 2.0	AAA	14	146
	CLO 2.0	AA	15	200
	CLO 2.0	BBB	60	375
ABS	Unsecured Consumer Loan ABS	Seniors	50	135
	Unsecured Consumer Loan ABS	Class B	70	180
	Refi Private Student Loan	Seniors	35	125
	Credit Card ABS	AAA	17	50

Source: PGIM Fixed Income.

	Total Return (%) Q1	Spread / Yield Change (bps) Q1	OAS (bps)/ Yield % 3/31/22
EM Hard Currency	-10.02	31	400
EM Local (Hedged)	-8.12	52	6.23
EMFX	-5.53	23	4.56
EM Corps.	-8.82	19	331

Source: J.P. Morgan.

	Total Return (%) Q1	Spread Change (bps) Q1	OAS (bps) 3/31/22
U.S. Corps.	-7.69	23	116
European Corps	-4.96	34	129

Source: Bloomberg. Represents data for the Bloomberg U.S. Corporate Bond Index and the Bloomberg European Corporate Bond Index (unhedged).

	Total Return (%) Q1	Spread Change (bps) Q1	OAS/DM (bps) 3/31/22
U.S. High Yield	-4.84	42	325
Euro High Yield	-4.13	77	395
U.S. Leveraged Loans	-0.10	10	449
Euro Leveraged Loans	-0.48	56	471

Source: ICE BofAML and Credit Suisse.

	Total Return (%) Q1
High Grade Tax-exempt	-6.23
High Yield Tax-exempt	-6.53
Long Taxable Munis Agg Eligible	-10.32

Source: Bloomberg. Represents the Bloomberg Municipal Bond Indices.

Past performance is not a guarantee or a reliable indicator of future results. See Notice for important disclosures. All investments involve risk, including possible loss of capital. An investment cannot be made directly in an index. All data as of March 31, 2022.

IMPORTANT INFORMATION

Source of data (unless otherwise noted): PGIM Fixed Income and Bloomberg as of April 2022.

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INDEX DESCRIPTIONS

U.S. INVESTMENT GRADE CORPORATE BONDS

Bloomberg U.S. Corporate Bond Index: The Bloomberg U.S. Investment Grade Corporate Bond Index covers U.S.D-denominated, investment-grade, fixed-rate or step up, taxable securities sold by industrial, utility and financial issuers. It includes publicly issued U.S. corporate and foreign debentures and secured notes that meet specified maturity, liquidity, and quality requirements. Securities included in the index must have at least 1 year until final maturity and be rated investment-grade (Baa3/ BBB-/BBB-) or better using the middle rating of Moody's, S&P, and Fitch.

EUROPEAN INVESTMENT GRADE CORPORATE BONDS

Bloomberg European Corporate Bond Index (unhedged): The Bloomberg Euro-Aggregate: Corporates bond Index is a rules-based benchmark measuring investment grade, EUR denominated, fixed rate, and corporate only. Only bonds with a maturity of 1 year and above are eligible.

U.S. HIGH YIELD BONDS

ICE BofAML U.S. High Yield Index: The ICE BofAML U.S. High Yield Index covers US dollar denominated below investment grade corporate debt publicly issued in the US domestic market. Qualifying securities must have a below investment grade rating (based on an average of Moody's, S&P and Fitch), at least 18 months to final maturity at the time of issuance, and at least one year remaining term to final maturity as of the rebalancing date.

EUROPEAN HIGH YIELD BONDS

ICE BofA European Currency High Yield Index: This data represents the ICE BofA Euro High Yield Index value, which tracks the performance of Euro denominated below investment grade corporate debt publicly issued in the euro domestic or eurobond markets. Qualifying securities must have a below investment grade rating (based on an average of Moody's, S&P, and Fitch). Qualifying securities must have at least one year remaining term to maturity, a fixed coupon schedule, and a minimum amount outstanding of €100 M. ICE Data Indices, LLC, used with permission. ICE DATA INDICES, LLC IS LICENSING THE ICE DATA INDICES AND RELATED DATA "AS IS," MAKES NO WARRANTIES REGARDING SAME, DOES NOT GUARANTEE THE SUITABILITY, QUALITY, ACCURACY, TIMELINESS, AND/OR COMPLETENESS OF THE ICE DATA INDICES OR ANY DATA INCLUDED IN, RELATED TO, OR DERIVED THEREFROM, ASSUMES NO LIABILITY IN CONNECTION WITH THEIR USE, AND DOES NOT SPONSOR, ENDORSE, OR RECOMMEND PGIM FIXED INCOME OR ANY OF ITS PRODUCTS OR SERVICES.

U.S. SENIOR SECURED LOANS

Credit Suisse Leveraged Loan Index: The Credit Suisse Leveraged Loan Index is a representative, unmanaged index of tradable, U.S. dollar denominated floating rate senior secured loans and is designed to mirror the investable universe of the U.S. dollar denominated leveraged loan market. The Index return does not reflect the impact of principal repayments in the current month.

EUROPEAN SENIOR SECURED LOANS

Credit Suisse Western European Leveraged Loan Index: All Denominations EUR hedged. The Index is a representative, unmanaged index of tradable, floating rate senior secured loans designed to mirror the investable universe of the European leveraged loan market. The Index return does not reflect the impact of principal repayments in the current month.

EMERGING MARKETS U.S.D SOVEREIGN DEBT:

J.P. Morgan Emerging Markets Bond Index Global Diversified: The Emerging Markets Bond Index Global Diversified (EMBI Global) tracks total returns for U.S.D-denominated debt instruments issued by emerging market sovereign and quasi-sovereign entities: Brady bonds, loans, and Eurobonds. It limits the weights of those index countries with larger debt stocks by only including specified portions of these countries' eligible current face amounts of debt outstanding. To be deemed an emerging market by the EMBI Global Diversified Index, a country must be rated Baa1/BBB+ or below by Moody's/S&P rating agencies. Information has been obtained from sources believed to be reliable, but J.P. Morgan does not warrant its completeness or accuracy. The Index is used with permission. The Index may not be copied, used, or distributed without J.P. Morgan's prior written approval.

EMERGING MARKETS LOCAL DEBT (UNHEDGED)

J.P. Morgan Government Bond Index-Emerging Markets Global Diversified Index: The Government Bond Index-Emerging Markets Global Diversified Index (GBI-EM Global) tracks total returns for local currency bonds issued by emerging market governments.

EMERGING MARKETS CORPORATE BONDS

J.P. Morgan Corporate Emerging Markets Bond Index Broad Diversified: The CEMBI tracks total returns of U.S. dollar-denominated debt instruments issued by corporate entities in Emerging Markets countries.

EMERGING MARKETS CURRENCIES

J.P. Morgan Emerging Local Markets Index Plus: The JP Morgan Emerging Local Markets Index Plus (JPM ELMI+) tracks total returns for local currency–denominated money market instruments.

MUNICIPAL BONDS

Bloomberg Municipal Bond Indices: The index covers the U.S.D-denominated long-term tax-exempt bond market. The index has four main sectors: state and local general obligation bonds, revenue bonds, insured bonds, and pre-refunded bonds. The bonds must be fixed-rate or step ups, have a dated date after Dec. 13, 1990, and must be at least 1 year from their maturity date. Non-credit enhanced bonds (municipal debt without a guarantee) must be rated investment grade (Baa3/BBB-/BBB- or better) by the middle rating of Moody's, S&P, and Fitch.

U.S. TREASURY BONDS

Bloomberg U.S. Treasury Bond Index: The Bloomberg U.S. Treasury Index measures U.S. dollar-denominated, fixed-rate, nominal debt issued by the U.S. Treasury. Treasury bills are excluded by the maturity constraint but are part of a separate Short Treasury Index.

MORTGAGE BACKED SECURITIES

Bloomberg U.S. MBS—Agency Fixed Rate Index: The Bloomberg U.S. Mortgage Backed Securities (MBS) Index tracks agency mortgage backed pass-through securities (both fixed-rate and hybrid ARM) guaranteed by Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC). The index is constructed by grouping individual TBA-deliverable MBS pools into aggregates or generics based on program, coupon and vintage.

COMMERCIAL MORTGAGE-BACKED SECURITIES

Bloomberg CMBS: ERISA Eligible Index: The index measures the performance of investment-grade commercial mortgage-backed securities, which are classes of securities that represent interests in pools of commercial mortgages. The index includes only CMBS that are Employee Retirement Income Security Act of 1974, which will deem ERISA eligible the certificates with the first priority of principal repayment, as long as certain conditions are met, including the requirement that the certificates be rated in one of the three highest rating categories by Fitch, Inc., Moody's Investors Services or Standard & Poor's.

U.S. AGGREGATE BOND INDEX

Bloomberg U.S. Aggregate Bond Index: The Bloomberg U.S. Aggregate Index covers the U.S.D-denominated, investment-grade, fixed-rate or step up, taxable bond market of SEC-registered securities and includes bonds from the Treasury, Government-Related, Corporate, MBS (agency fixed-rate and hybrid ARM passthroughs), ABS, and CMBS sectors. Securities included in the index must have at least 1 year until final maturity and be rated investment-grade (Baa3/ BBB-/BBB-) or better using the middle rating of Moody's, S&P, and Fitch.

The **S&P 500®** is widely regarded as the best single gauge of large-cap U.S. equities. There is over U.S.D 9.9 trillion indexed or benchmarked to the index, with indexed assets comprising approximately U.S.D 3.4 trillion of this total. The index includes 500 leading companies and captures approximately 80% coverage of available market capitalization.