FRANKLIN TEMPLETON

September 2022

Paradigm shift

Volume 12 | Franklin Templeton Fixed Income views

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Monetary tightening by major central banks has gained further momentum and determination, with financial markets gradually internalizing that we are in the midst of a long-overdue policy paradigm shift.

In the United States, the Federal Reserve (Fed) delivered a third consecutive 75 basis point (bp) rate hike in September and seems set to continue to hike in the meetings ahead. Perhaps more importantly, Fed officials have pushed back strongly against market expectations of an early pivot back to rate cuts. Starting with Fed Chairman Jerome Powell at the Jackson Hole Economic Symposium in August, Fed officials have stressed that monetary policy needs to tighten further and will need to remain tight for a sustained period and cause a significant degree of economic pain to bring inflation convincingly back to target. The Fed has, in other words, begun to signal very explicitly that it stands ready to accept a meaningful rise in unemployment as well as an adjustment in asset prices to fight inflation and to prevent the de-anchoring of inflation expectations.

Financial markets have begun to absorb the message and have started to price in a higher terminal rate for the policy rate, and to price out some of the rate cuts they initially expected for 2023. We believe, however, that financial markets still underestimate the extent and duration of the monetary tightening that will be needed. Even though the impact of adverse energy price shocks has begun to fade, we see inflation pressures as still broad-based and persistent, and expect that headline Consumer Price Index (CPI) will end the year close to 8%. We correspondingly expect the Fed will have to raise the policy rate to 4.50%–4.75%, and possibly above, driving further adjustment in market yields.

Markets and commentators are also busy debating whether or not the United States is already in a recession: real gross domestic product (GDP) contracted in both the first quarter (Q1) and second quarter (Q2) of 2022, but the labor market remains very strong and characterized by excess demand. Whether the current situation fits the definition of a recession is, in our view, more academic than substantial. The important question is what kind of weakening in economic activity lies ahead, and what impact it will have on inflation. Economic activity has been weakening, but the US economy maintains an important degree of resilience, including still healthy household balance sheets. Monetary policy will keep tightening, but it is doing so at a calibrated pace. Our most likely scenario envisions a shallow recession accompanying a slow disinflation, with monetary policy remaining tight for longer.

The European Central Bank (ECB) has also shifted gears, delivering a 75 bp interest-rate hike in September and signaling a more hawkish stance. This is an even more momentous change than in the United States, since the ECB had not raised interest rates in 11 years and had kept them in negative territory for eight years. But with headline inflation at 9% and signs of inflation expectations drifting up, the ECB had little choice but to shift to a significantly more hawkish stance.[1]

The ECB, however, faces an even more challenging situation than the Fed. Russia's decision to curtail gas supply poses a severe threat to the European economy over the coming winter. The economic impact will be partly cushioned by greater fiscal support at both the national and region-wide level (implying a further deterioration in debt metrics), but a material risk of recession remains. Moreover, the ECB has to contend with "fragmentation risk," as rising interest rates cause stress on the more highly indebted members of the euro area.

As we stressed in our previous Views papers, financial markets are having to adapt to a new reality where central banks can no longer prioritize support to asset prices. Bringing inflation back to target has now become paramount, the crucial objective to be achieved before inflation expectations can become de-anchored in a more structural way.

As investors have for some time underestimated both the inflation threat and the needed reset in monetary policy, technical conditions will likely continue to add pressure in several segments of the fixed income universe. Fundamentals, however, remain resilient in several fixed income sectors, providing support and selected investment opportunities. We remain moderately bullish on municipal bonds, where we believe fundamentals remain solid and we project issuance to remain low throughout this year. We also still see emerging market (EM) debt as being fundamentally supported by increased and improving external balances, notably in those markets benefiting from higher commodity prices. Emerging market central banks have also placed themselves ahead of the curve in the fight against inflation, and we expect the asset class will recover some of the ground lost so far this year, with upside potential also for selected EM corporates.

Overall, as we have been cautioning for some time, fixed income investing will continue to be challenged by rising rates and higher volatility, putting a premium on an active, research-driven, selective investment approach. We continue to recommend that investors keep dry powder to deploy as we gain greater visibility on the extent of the growth slowdown ahead to identify rising income-generating opportunities in the fixed income universe.

Macroeconomic themes

Inflation remains front-and-center
Headline inflation continues to surprise to the upside, both in the United States and the euro area, suggesting that price pressures may well be becoming more entrenched than previously thought. We are in a paradigm shift—one we have not seen in some time—where central banks are being forced to tighten financial conditions to fight inflation. Restoring price stability will require tight monetary policy for some time, and financial markets still underestimate the extent and duration of the monetary tightening that will be needed to bring it under control.

Volatility in markets will continue
The growing macroeconomic uncertainty and rising real rates that have led to one of the most volatile fixed income markets in history will continue, and weak technical conditions will likely add pressure. The headwinds that have steadily increased throughout the year have not receded, and in many cases have strengthened, which will lead to continued elevated volatility in markets.

Growth slowdown is here and a certainty
We believe underlying economic momentum remains stronger than the market is signaling but economic activity is undoubtedly weakening. We have further revised down our growth projections to reflect the increasing risk of the effects of prolonged inflationary pressures and tighter financial conditions. With central banks acknowledging the need to cool off economic activity and bring inflation down, they are expected to continue aggressively hiking rates into a growth slowdown, increasing the risk of a disruptive outcome.

Portfolio themes

Continue to stay up in quality
Fundamentals remain strong in many spread sectors, but the macroeconomic environment remains challenging and technical conditions are weak, which we continue to believe will put significant stress on markets and result in higher risk premiums. We recommend de-risking of portfolios away from lower credit-quality issuers and cyclical industries that are more vulnerable to a demand slowdown. We are likely to see shorter-duration, high-quality assets outperform and provide greater protection from potential fundamental weakness.

Keep duration exposure short but be ready to reposition
Even after the recent repricing of risk assets, rates still have more room to rise. Limiting duration remains one of our main underlying strategy themes to protect against rising yields. As yields continue to rise, however, income-generating opportunities are increasing in fixed income markets. As technical conditions and investor sentiment stabilizes, healthy fundamentals should provide a tailwind for select opportunities.

Position portfolios to take advantage of opportunities
While volatility will continue due to slowing growth, greater market uncertainty, and less favorable market technicals, yields and valuations have become more attractive, in our view. We would continue to take advantage of market dislocations to add risk exposure to issuers with relatively stronger balance sheets and less rate sensitive end-market demand. Investors will need to continue to take an active approach to identifying and selecting investment opportunities that arise. We continue to recommend investors keep “dry powder” ready to deploy as we gain greater visibility on the length and extent of the economic growth slowdown ahead.

Sector settings

Overall risk outlook

US Treasuries

US Treasury Inflation-Protected Securities (TIPS)

Eurozone Government Bonds

Japanese Government Bonds

Agency Mortgage-Backed Securities (MBS)

Non-Agency Residential Mortgage-Backed Securities (RMBS)

Commercial Mortgage-Backed Securities (CMBS)

Asset-Backed Securities (ABS)

US Investment-Grade Corporates

European Investment-Grade Corporates

US High-Yield Corporates

Euro High-Yield Corporates

Floating Rate Loans

Collaterized Loan Obligations (CLOs)

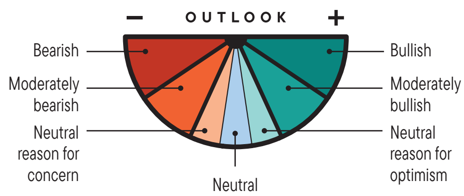
Municipal Bonds

Emerging Market (EM) Debt

Emerging Market Corporates

Global Sukuk

Understanding the pendulum graphic



Arrows represent any change since the last quarter end.

Franklin Templeton Fixed Income macroeconomic recap & outlook

US economy: Talking ourselves into a recession?

The Federal Open Market Committee (FOMC) has recently issued clearer and stronger signals that it is determined to bring inflation under control through sustained monetary tightening. Fed Chairman Jerome Powell and other FOMC members have pushed back against market expectations of an early pivot back to rate cuts in response to the weakening growth outlook. The FOMC's unanimous decision to raise the policy rate by 75 bps in July, for the second successive meeting, as well as Powell's statement that another unusually large rate hike in September was possible was a clear message that the Fed's hiking cycle was nowhere near done. Powell's comment that the FOMC will consider headline inflation in addition to core measures and the acknowledgement that the natural rate of unemployment has likely moved up "materially" (we estimate the natural rate of unemployment is almost 1.5–2.0 percentage points higher than it was pre-pandemic), also suggested that the terminal rate is higher than current market pricing.

Markets, however, chose to focus on just the few dovish aspects of Chair Powell's remarks—that the policy rate now was within what the FOMC considers the neutral range and that "as the stance of monetary policy tightens further, it likely will become appropriate to slow the pace of increases."

> **"Chair Powell pushed back against financial markets with a forceful and unequivocal speech at the August Jackson Hole Economic Symposium, reiterating the FOMC's 'overarching focus right now is to bring inflation back down to our two percent goal' and using the phrase 'price stability' no less than 10 times. He stressed this would imply some economic pain, to cool off economic activity and allow unemployment to increase."**

As a result, equity markets and the shorter end of the yield curve staged strong rallies immediately following the July FOMC meeting. Markets priced the policy rate peaking at approximately 3.25% by February 2023, followed by aggressive rate cuts thereafter.[2] The easing in financial conditions offset some of the monetary tightening, making the Fed's job harder to accomplish.

Chair Powell pushed back against financial markets with a forceful and unequivocal speech at the August Jackson Hole Economic Symposium, reiterating the FOMC's "overarching focus right now is to bring inflation back down to our two percent goal" and using the phrase "price stability" no less than 10 times. He stressed this would imply some economic pain, to cool off economic activity and allow unemployment to increase. He also acknowledged that the longer inflation remains elevated, the greater the risk that expectations will become unanchored and embedded into higher price and wage-setting behavior. Markets took notice and priced in a higher terminal rate (close to 4.0% by April 2023) and priced out some rate cuts expected for next year.

What is our view on the policy path?

In our view, there is still far too much confidence that rates will peak in the first half of next year and be followed by a dramatic easing cycle. We believe the Fed's hiking campaign will extend until the end of Q1 2023, followed by a pause at the Fed's chosen plateau until the third quarter/fourth quarter (Q3/Q4) of 2023 to convincingly rein in inflation. Given statements by Fed policymakers, we expect the terminal rate to reach 4.5%, at a minimum, with risks now firmly tilted to the upside. We now also expect to see another 75 bp hike in September, a 50 bp hike in November, and a 50 bp hike in December, thus leaving the policy rate at 4.25% by year-end. The Fed will prefer to emphasize the longevity of its tightening cycle rather than shock and awe. That said, we expect the Fed to remain data/inflation dependent, and if the market continues to price in aggressive rate hikes in response to incoming data the Fed will take that opportunity to move rates into more restrictive territory since it might well be able to do so without causing material market disruption.

Restoring price stability will require tight monetary policy for some time, and while markets will test the Fed's resolve again, we do not believe the Fed will waver when the labor market starts feeling the pain. Fed officials have often admitted that the natural rate of unemployment has likely moved higher after the pandemic. Therefore, any increase in the unemployment rate would be viewed by the Fed as bringing demand and supply in the labor market into better balance. Before the Fed considers pausing its hiking cycle and eventually reversing course, it will need to see a weaker labor market and a convincing, sustained stabilization of inflation at much lower rates. Yet inflation still has a lot of inertia: we expect headline CPI to remain close to 8% at the end of 2022, which would still imply deeply negative real rates.

Turning to the Taylor Rule (TR)—where both the output gap and the deviation of the Core Personal Consumption Expenditures (PCE) Price Index from the Fed's inflation target are weighted equally—the TR policy rate path started to turn positive at least 4–5 quarters before the Fed started hiking rates. The TR policy path then peaks in Q3 2022, followed by rate cuts. Taking into account the lag between the Fed and the TR policy path and the fact that the Fed is effectively playing catch-up to inflation, we believe a more realistic pivot point for Fed policy would be around Q3/Q4 2023.

What is the market signaling?

Inflation breakevens remain close to (or lower than) where they began the year, not because markets aren't worried about inflation, but rather because the market is confident that the Fed's tighter monetary policy will lower inflation in the medium term. Nowhere is this acceptance of Fed policy more apparent than in the yield curve, with the spread between the US two-year Treasury yield and 10-year Treasury yield (2s10s) now more inverted than it has been since 2000.[3] The three-month/10-year curve (3m/10y), which had shown little-to-no recessionary angst for much of this cycle, also flattened rather quickly, and especially so after the June CPI print. Overall, nearly 48% of all yield curves are now inverted—up from 26% at the last quarter-end.[4] From the Treasury market's perspective, a recession is effectively an inescapable certainty.

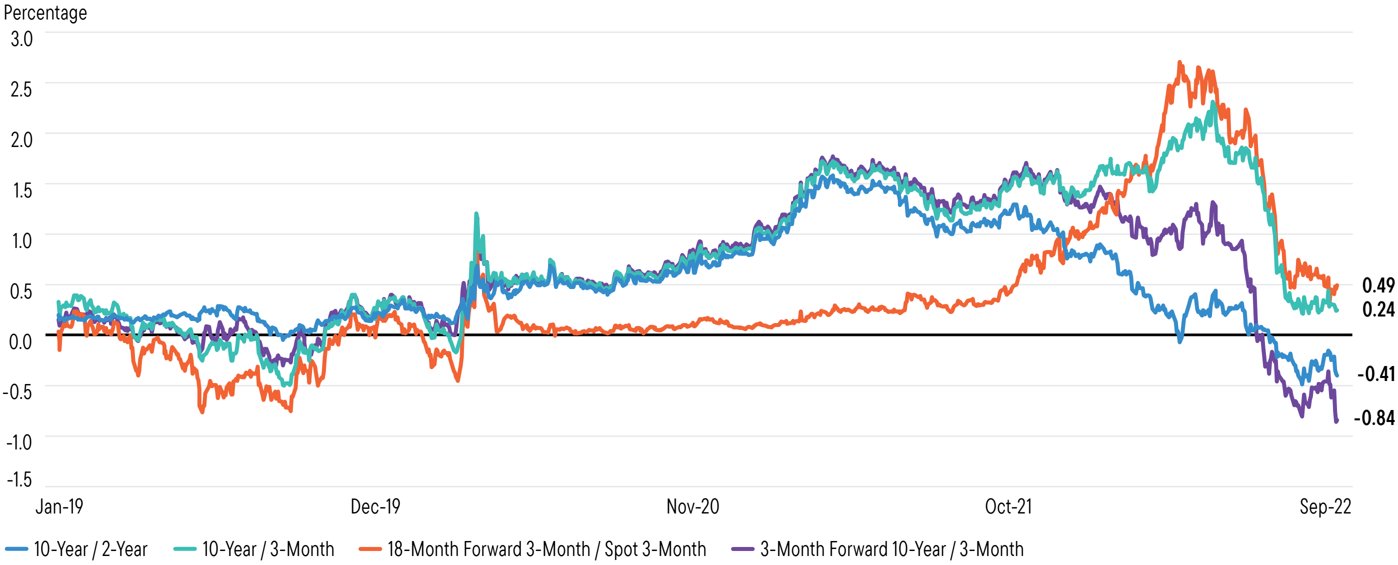
Is the United States in a recession?

The United States registered a second consecutive quarter of negative growth in Q2 2022, the unofficial but broadly accepted rule of thumb for a recession. The GDP contraction, however, is at odds with the strong labor market performance. The National Bureau of Economic Research (NBER) makes the official call on a recession based on a significant decline in economic activity across a broad range of sectors that lasts more than a few months, rather than simply two consecutive quarters of negative GDP growth. Therefore, relatively small declines in the real GDP would not necessarily mean that a growth peak has occurred. The NBER also gives equal weight to Real GDP and Real Gross Domestic Income (GDI)—a measure of all the income earned from the production of goods and services. Real GDI growth remained positive in Q2. Historically, both GDI and GDP have turned negative during recessions.

Yield Curves Have Flattened or Inverted

Exhibit 1: Yield Curve Spreads

January 1, 2019–September 15, 2022



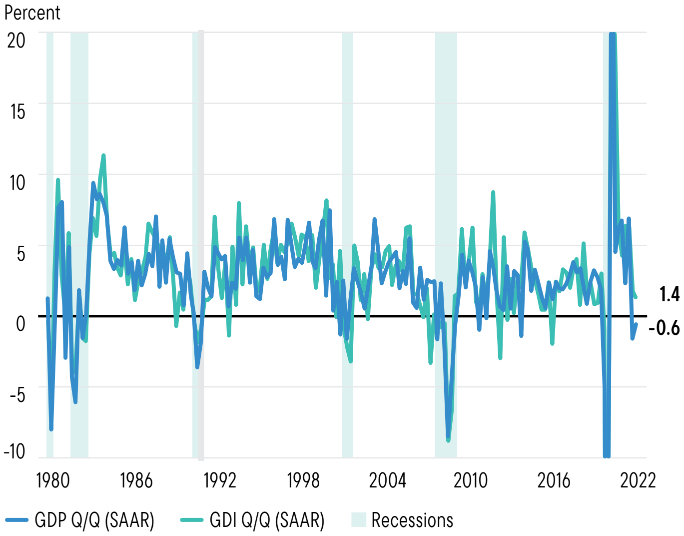
Source: Bloomberg.

The NBER considers six variables to identity peaks and troughs in economic activity—real personal income less transfers, nonfarm payroll employment, real PCE, real manufacturing and trade sales, household employment and industrial production. While these six variables show that activity levels have slowed consistently since November 2021, we have seen these kinds of slowdowns in past strong expansionary phases during the 1990s and 2010s. Except for the 2001 recession, economic activity has generally declined 2.5 standard deviations below average since the late 1960s for a recession to be called—the current level of activity is still some ways off of recessionary levels.[5]

US Economy is Slowing but Not at Past Recessionary Levels

Exhibit 2: GDP vs. GDI

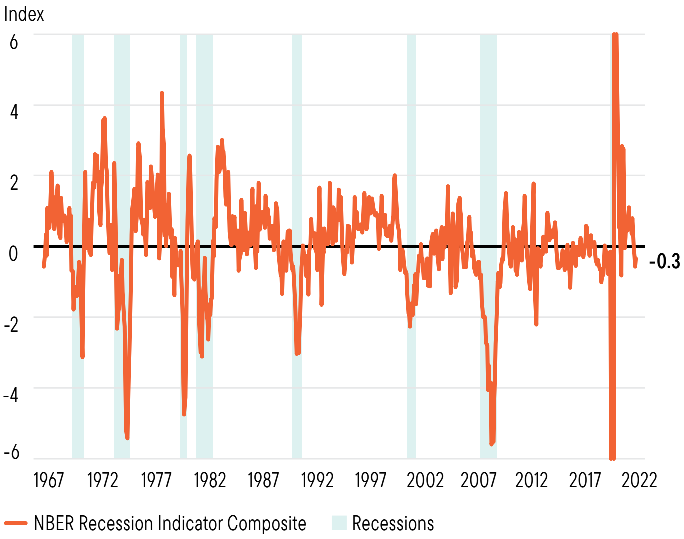
Q1 1980–Q2 2022



Source: Bureau of Economic Analysis (BEA).

Exhibit 3: NBER Recession Indicator Composite

April 1967–July 2022



Sources: Franklin Templeton Fixed Income Research, BEA, BLS, Federal Reserve, Macrobond.

Alternatively, one could argue (and rightly so) that the NBER is looking at lagging economic indicators, which are also subject to significant revisions. Historically, by the time the NBER has officially called a recession, nearly 10 months (on average) have passed since the economic peak. In the case of the Global Financial Crisis (GFC) and COVID-19 recessions, the determination occurred 12 and 14 months, respectively, after the economic peak. In a way, the question of whether the United States is already in a recession is somewhat academic. Growth has certainly weakened, but as Powell also acknowledged in August, underlying economic momentum remains robust and we still have significant excess demand in the labor market. The relevant question is how quickly and sharply activity will still have to weaken to cool off inflation.

What do recent macro indicators suggest?

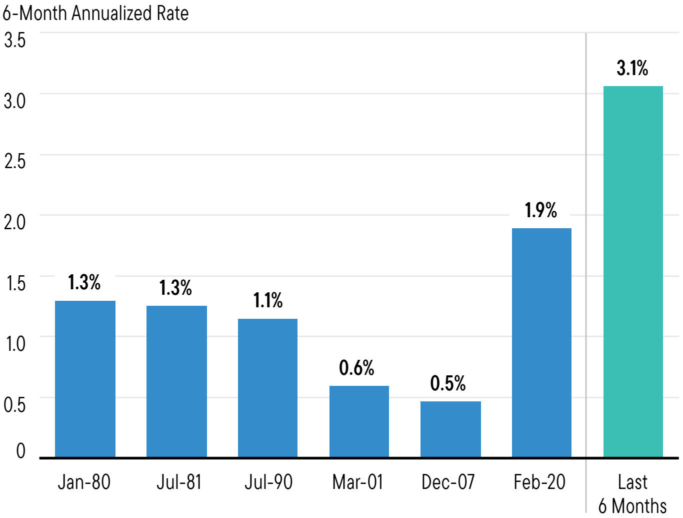
Several components of consumer expectations, manufacturing, services and housing have shown that broader economic conditions continue to deteriorate. Conversely, the labor market has thus far provided hopeful signs against a recession. Although the pace of job gains has slowed since the second half of last year, it remains much stronger relative to the 2012–2019 average. The level of payrolls growth in the last six months has been 3.1% annualized—more than double the pace of job gains in the six months leading up to the last five recessions prior to the COVID-19-induced recession.[6] The unemployment rate remains at historically low levels, coming in at 3.7% in August (from 3.5% in July—the lowest since February 2020), and still some ways off from triggering the Sahm Rule (the Sahm Rule signals the start of a recession when the three-month moving average of the unemployment rate exceeds its minimum value over the prior 12 months by at least 0.5 percentage points). Incorporating our unemployment forecasts, the Sahm Rule would be triggered around May/June of 2023. Even then, the unemployment rate is expected to be at 4.4%, still well below the 5% level that the Fed often referred to as a neutral/equilibrium level during the post-GFC period.

However, the labor market could very well be in the early stages of a slowdown. Survey data show a significant slowdown in future employment/hiring plans, albeit to more normalized levels. Whether this represents merely a freeze in future hiring or is an early indication of impending layoffs remains to be seen. Households, however, as indicated by the University of Michigan Surveys of Consumers, are still positive about their employment prospects with the share of consumer expecting unemployment to rise in the year ahead falling from 38% in July to 34% in August.

Excess Demand in Labor Market Unlike Past Recessions

Exhibit 4: Change in US Nonfarm Payrolls

Last 6 Months vs. Previous 6 Recessions



Source: Bureau of Labor Statistics (BLS).

Going forward, the ideal scenario (or at least the one the Fed hopes to see) would be one where growth in hires and layoffs hover around "normal" levels, while openings continue to dip further, thus taking the froth off the labor market and the sting off of wage growth. However, historically, after openings have reached a peak and as the Fed begins to tighten policy, the unemployment rate has always risen as openings fell. This time, with the demand for labor (openings + employment) continuing to outstrip supply (participation) by about 5.6 million (or 3.4% of the labor force)—the largest in postwar history—companies may be hesitant to lay off workers in the face of persistent labor shortages.[7] Moreover, if workers who are laid off can find new jobs quickly, the drag on employment from slowing growth may be substantially diminished.

What is the inflation outlook?

Underlying inflationary pressure remains elevated, but goods inflation may offer some respite going forward with upside pressure from supply constraints being offset by downward pressure from falling demand. Demand for goods (both durables and non-durables) downshifted in Q2, while supply chains have become more resilient, with delivery times falling back to more normal levels in the United States. Broader commodity prices are nearly 12% off their April 2022 highs, and largely back to where they were at the start of the year. Gasoline prices are also down a little over 24% from their mid-June peak, while freight rates have also continued to decline, though they remain well above pre-pandemic levels.[8] However, even though there are several disinflationary factors at work on the goods inflation side—easing supply constraints, lower transportation costs, a strong dollar, falling import prices and inventory build-up—a range of goods prices continued to increase in August, suggesting the inflation story may be increasingly turning into a demand-led story and less so the supply-driven one that it was through late 2021 and early 2022.

On net, weaker US demand for goods and a firming up of supply chains relative to the start of the pandemic will mean that goods inflation could start to soften the headline numbers in the coming months. A composite of the prices received (or selling prices) sub-index from the various regional Fed manufacturing indexes shows that goods inflation may well be past its peak. However, the greater concern remains services inflation (especially shelter) and underlying measures of trend inflation—all of which remain substantially above their 2012–2019 month-over-month (M/M) averages.[9] As we've noted in the past, rental inflation will likely remain elevated through much of this year, firstly because it tends to track wage growth quite closely over time. Secondly, continued policy tightening could actually lead to a worsening in rental inflation, as it prevents some renters from becoming homeowners. Additionally, rents on existing leases still have considerable ground to cover to match up to higher rents on new leases. This catch-up process will likely keep rent inflation firm over the medium term. Rents in the CPI are based on an average change over six months rather than over a single month, thus creating a lag in the data. Therefore, the effects of rental inflation, which have yet to fully materialize, will keep up the pressure on services inflation.

What about wage growth?

Year-over-year (Y/Y) growth in job openings has moderated across different industries since the beginning of the year, with the normalization in openings leading to a moderation in wage growth through Q1—both headline and for Production and Non-Supervisory workers (P&NS).[10] However, given that the level of openings still remains at historically elevated levels, growth in the latter appears to have accelerated again in Q2. Average hourly earnings (AHE) for P&NS remains well above normal for a majority of industries. Additionally, the Employment Cost Index (ECI)—which better accounts for labor composition distortions—accelerated for the second successive quarter in Q2 to 6.3% quarter-over-quarter (Q/Q) and 5.5% Y/Y.[11] That alone should keep up the pressure on the Fed to tighten policy to more restrictive levels.

A simple regression of AHE P&NS on the openings-to-unemployed ratio, lagged 12 months, shows that there remains an upside risk to wage growth in the coming months. While this is unsurprising given elevated labor shortages, there is

Underlying Inflation Trend and Stickier Inflation Continue to Rise

Exhibit 5: Inflation Heatmap (M/M % Change)

August 2021–August 2022

Year	Month	Headline CPI	Core CPI	Core Goods CPI	Core Services CPI	CPI Rent of Shelter	16% Trimmed Mean CPI	Median CPI	Sticky CPI	Sticky CPI Excl. Shelter	Flexible CPI	Headline PCE	Core PCE	Core Goods PCE	Core Services PCE	Housing PCE	Trimmed Mean	Cyclical Core PCE	Acyclical Core PCE
2012–2019		0.1	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.1	0.0	0.1	0.1	–0.1	0.2	0.3	1.8	2.7	1.1
2021	8	0.3	0.2	0.4	0.1	0.2	0.4	0.3	0.3	0.3	0.5	0.4	0.3	0.4	0.3	0.3	3.0	7.0	2.1
2021	9	0.4	0.3	0.3	0.2	0.4	0.5	0.4	0.3	0.2	0.7	0.3	0.2	0.2	0.2	0.4	4.5	6.6	0.9
2021	10	0.9	0.6	1.1	0.4	0.4	0.7	0.5	0.5	0.5	2.0	0.6	0.5	1.0	0.3	0.4	4.3	7.6	4.9
2021	11	0.7	0.5	0.9	0.4	0.5	0.5	0.5	0.4	0.3	1.6	0.6	0.5	0.4	0.5	0.4	4.3	6.5	5.6
2021	12	0.6	0.6	1.2	0.3	0.4	0.5	0.4	0.4	0.3	1.2	0.5	0.5	0.7	0.4	0.4	4.5	7.0	5.9
2022	1	0.6	0.6	1.0	0.4	0.4	0.6	0.6	0.6	0.7	0.7	0.5	0.5	0.9	0.3	0.5	6.5	4.8	6.0
2022	2	0.8	0.5	0.4	0.5	0.6	0.5	0.5	0.5	0.6	1.5	0.5	0.3	0.4	0.3	0.5	4.1	6.1	2.4
2022	3	1.2	0.3	–0.4	0.6	0.5	0.5	0.5	0.5	0.5	3.4	0.9	0.3	0.0	0.4	0.4	3.1	4.8	3.8
2022	4	0.3	0.6	0.2	0.7	0.5	0.4	0.5	0.6	0.7	–0.3	0.2	0.3	0.1	0.4	0.5	2.9	7.1	2.1
2022	5	1.0	0.6	0.7	0.6	0.6	0.8	0.6	0.6	0.6	2.1	0.6	0.4	0.3	0.4	0.6	5.5	6.1	3.4
2022	6	1.3	0.7	0.8	0.7	0.6	0.8	0.7	0.7	0.6	2.9	1.0	0.6	0.7	0.6	0.7	6.9	8.1	7.3
2022	7	0.0	0.3	0.2	0.4	0.5	0.4	0.5	0.4	0.3	–1.0	–0.1	0.1	0.1	0.1	0.6	3.4	8.0	–2.9
2022	8	0.1	0.6	0.5	0.6	0.7	0.6	0.7	0.6	0.6	–0.9								

Sources: Franklin Templeton Fixed Income Research, Federal Reserve, BEA, Macrobond.

a possibility that wage growth drifts lower over the next 12 months due to lower productivity—which dipped well below the 2012–2019 trend in the first half of 2022.

That also likely explains the very unusual disconnect between the trajectory of output and the trajectory of employment. Given that strong growth in productivity is also a strong driver of wages, it wouldn't come as a surprise if below-trend productivity leads wage growth lower, especially as the economy begins to cool. Aside from strong domestic demand, above-trend productivity in 2020–2021 likely explains the stronger-than-anticipated wage growth we've seen over the past few years.

US economic outlook

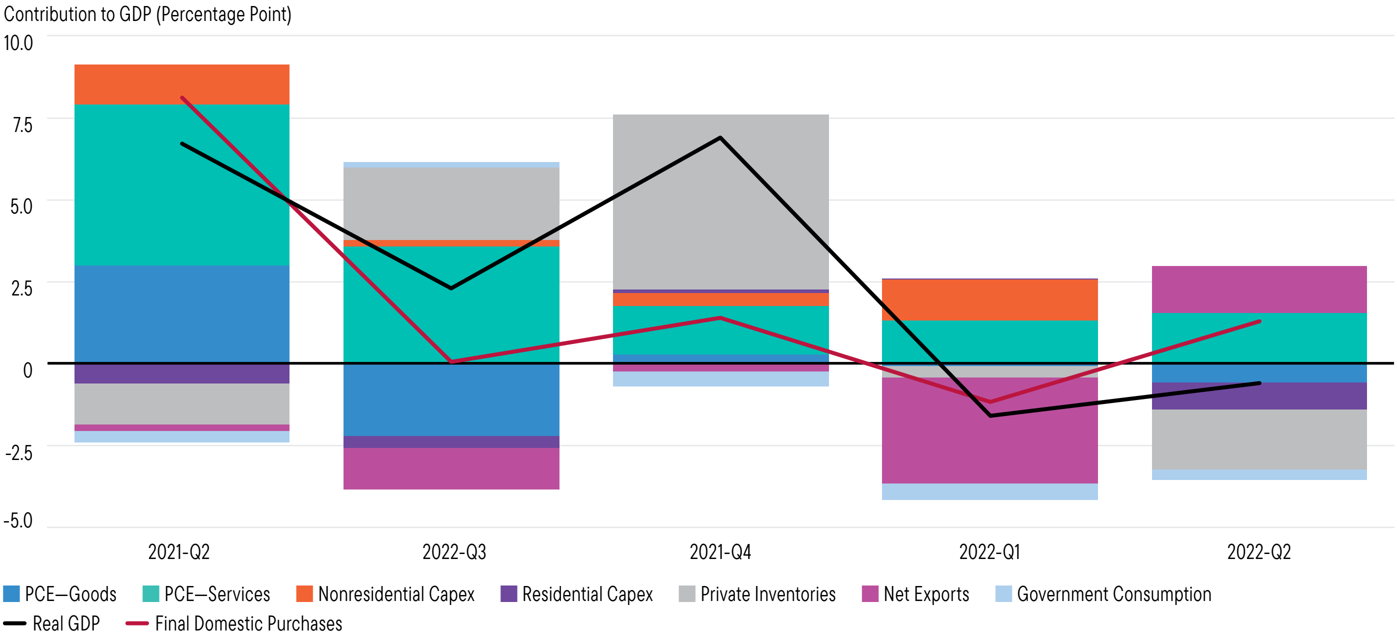
The US economy had a second consecutive quarter of negative growth in Q2 2022, declining by 0.6% on an annualized basis, driven primarily by declines in inventories, PCE goods and residential investment (which suffered a 16.2% drop, the largest quarterly decline in two years).[12] On the one hand, the continued drawdown of inventories showed aggregate demand remained healthy, but not overly exuberant. On the other, the lack of a buildup may be an indication that firms are hesitant to add inventory in anticipation of a slowing economy. Therefore, inventories may not necessarily provide a significant upside surprise in the coming quarters. Moreover, final sales of domestic product—a better measure of domestic demand in our view—increased at a 1.3% Q/Q seasonally adjusted annualized rate (SAAR) after a 1.2% decline in Q1. Contractions in PCE goods and residential investment did not come as a surprise given that tighter interest rates likely started to negatively impact households' ability to borrow for durable goods and homes.

Despite the drop in GDP in the first half of the year, the US economy is still peaking. The ECI, PCE, personal income, retail sales and nonfarm payrolls for June all showed robust gains, surpassing expectations in each case. Combining these datapoints with stronger-than-anticipated prints for CPI and PCE (both headline and core measures) suggests that inflation is still much too high, while employment, consumption and personal income all continue to grow.

Personal consumption measures did soften in July, however, and we have downgraded our outlook for US manufacturing, business investment and consumer health as we enter into Q4 2022. We have further revised down our growth projections

While GDP Declined, Final Demand Accelerated

Exhibit 6: US Gross Domestic Product (GDP) Contributions
Q2 2021–Q2 2022



Source: BEA.

for the remaining quarters of 2022 and for 2023, and now expect to see negative growth in the United States in the second half of next year along with an increase in unemployment. Overall, our growth forecasts are slightly weaker than consensus for 2023, primarily due to the effects of prolonged elevated inflationary pressures and tighter financial conditions.

Euro area economy: A cold winter ahead?

The European Union (EU) is bracing for a cold winter ahead as the Ukraine-Russia war intensifies and spills over into an economic fight between international sanctions and energy supply. The complete shutdown of Nord Stream1 gas supplies from Russia, after severe curtailments and interruptions over the summer, is the most recent significant retaliation aimed at squeezing the European energy market. Although some gas supplies continue to flow through the Ukraine and Turkstream pipelines, the overall remaining supply is roughly 80% below last year's flows.[13] Gas prices surged to alarming levels, with the one-month ahead forward price surpassing €300 per megawatt hour (MWh) in late August, also affecting power generation quotes throughout Europe.[14] The unsustainable levels of energy prices and reduced supplies are triggering widespread policy reactions from euro area governments to prepare for reduced consumption throughout the winter. The European Commission (EC) is also planning a

Franklin Templeton Fixed Income: US Growth Outlook

Exhibit 7: Real US GDP Growth, Unemployment Rate, and Inflation-Rate Forecasts
As of September 2022

	Real GDP (% Q/Q AR)	Unemployment Rate (%)	CPI Inflation (% Y/Y)
2021-Q4	6.9%	3.9%	6.7%
2022-Q1	-1.4%	3.6%	8.0%
2022-Q2	-0.9%	3.6%	8.6%
2022-Q3	*1.5%*	*3.8%*	*9.2%*
2022-Q4	*1.1%*	*4.0%*	*8.4%*
2023-Q1	*0.9%*	*4.2%*	*7.1%*
2023-Q2	*0.2%*	*4.4%*	*5.4%*
2023-Q3	*-0.2%*	*4.5%*	*4.1%*
2023-Q4	*-1.0%*	*4.7%*	*3.8%*

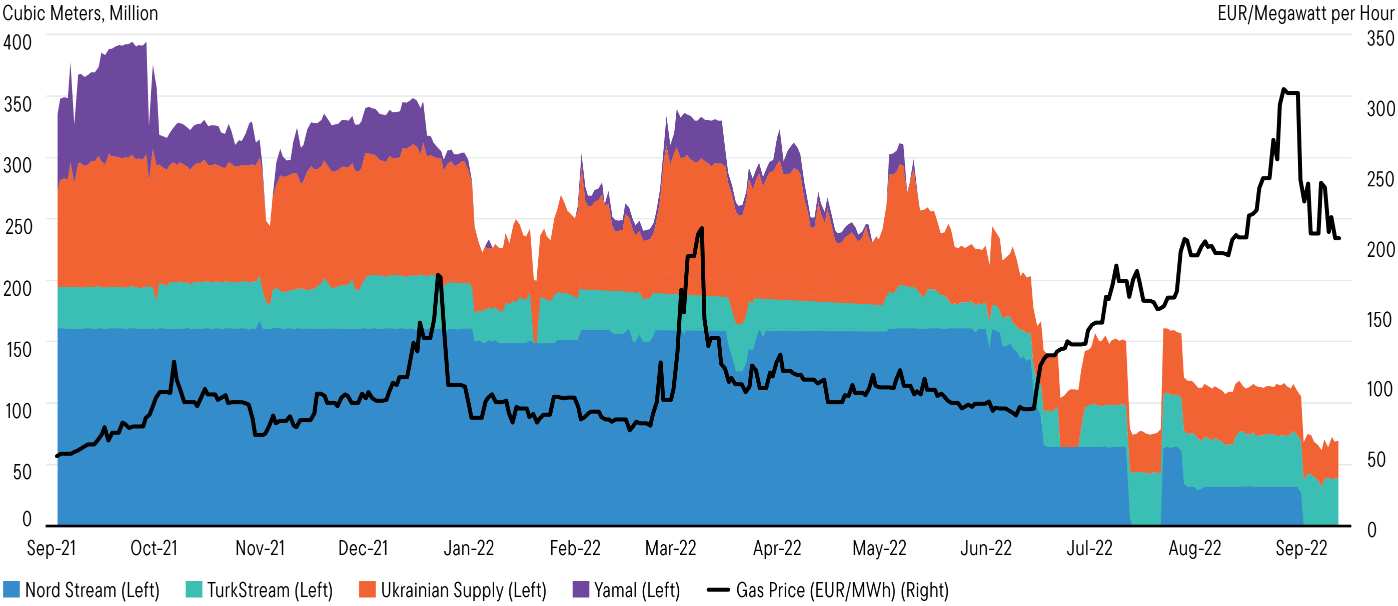
	Real GDP (annual)	Real GDP (Q4/Q4)
2021	5.7%	5.5%
2022	*1.6%*	*0.0%*
2023	*0.5%*	*0.0%*

Italics indicates forecast.
Source: Franklin Templeton Fixed Income Research. There is no assurance that any estimate, forecast or projection will be realized.

European Gas Supply Remains Low but Reserves Are Building

Exhibit 8: Gas Flows in the Euro Area

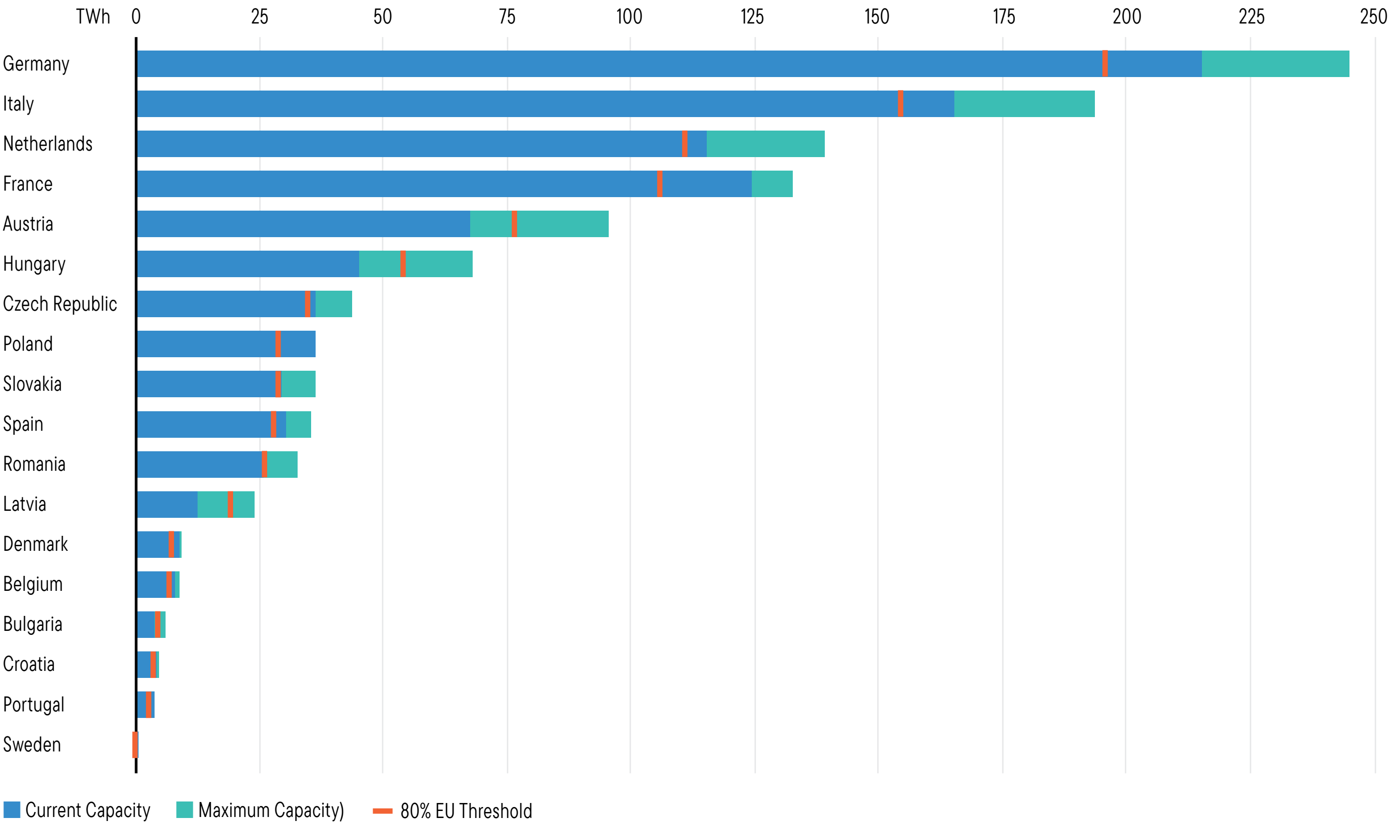
September 2021–September 2022



Source: BEA.

Exhibit 9: Gas Storage in the Euro Area

As of September 9, 2022



Sources: Gas Infrastructure Europe (GIE), Macrobond.

concerted intervention in the energy markets at the EU level, aimed at capping prices in certain market segments. European gas reserves have been building amid fears of a worsening in the energy crisis, with gas storage facilities now above 80% of their total storage capacity, months ahead of the EU target to hit this level by November 1.[15] Although government efforts are focused on a resolution to the crisis, uncertainty over a smooth energy supply over the winter persists and remains conditional on weather conditions. The risk of some energy rationing over the season looms.

Saving energy and finding alternatives

Gas demand destruction has already occurred within the EU since the beginning of the year, as some countries have undergone significant demand cuts over the past few months and the EU has roughly halved its historical dependency on Russia over the first half of 2022.[16] German gas imports were about a third lower than the historical average in May, while they increased from Norway and other non-Russian countries.[17] Most of the energy replacement needs have been filled by increased imports of liquefied natural gas (LNG), with more expected to be used over the next winter as countries are rushing to build or make operative the needed infrastructure to reduce Russian gas dependence (e.g., new LNG plants and floating terminals in Germany and Italy).

> **"Governments are also increasing their energy saving efforts. The German government already announced a package to further decrease gas consumption internally (e.g., reducing heat for public institutions and firms). Recent indicators show that Germany gas consumption for industrial customers was already down 22% Y/Y in August and averaging –11.4% Y/Y compared to the historical average (2018–2021) during the first eight months of the year. This is already close to consistent with the EC recommendations, and somewhat reassuring as the economic drawdown could be more limited than feared."**

However, energy demand will need to be reduced. Gas reduction efforts are already ramping up, as the EC proposed the European Gas Demand Reduction Plan, which sets a voluntary 15% reduction in gas consumption target (versus the five-year average) between August 2022 and March 2023 The plan prioritizes households and societal-crucial sectors (e.g., health, food, etc.) and advises the reduction of unnecessary consumption. Country exceptions will apply (e.g., in Spain and Portugal), but the overall need of energy savings will be increasingly felt. Governments are also increasing their energy saving efforts. The German government already announced a package to further decrease gas consumption internally (e.g., reducing heat for public institutions and firms). Recent indicators show that Germany gas consumption for industrial customers was already down 22% Y/Y in August and averaging –11.4% Y/Y compared to the historical average (2018–2021) during the first eight months of the year.[18] This is already close to consistent with the EC recommendations, and somewhat reassuring as the economic drawdown could be more limited than feared.

Fiscal policy to the rescue

European governments continue to have a largely expansionary fiscal stance as interventions to alleviate pressure on households and firms from the energy crisis keep increasing. The "big4" countries (France, Germany, Italy and Spain) adopted a series of interventions that began in late summer 2021 and is now estimated to total 2.0% of euro area GDP.[19]

If mandatory and/or forced cuts to gas consumption are imposed, more is likely to be done to cushion the economy's income loss—although it is unlikely to cover the full extent of the negative impact. A mix of income protection measures over the most vulnerable and price controls have already been put in place throughout the EU, and more is yet to come. The EC intervention will be a relevant signal for the direction of future measures. In sum, the risk of gas disruptions and the associated recession risk are high, but the proactive efforts being made by national governments and firms could lead to a more controlled economic landing.

From negative rates all the way to neutral—and above?

After 11 years since its last interest rate hike, the ECB has ended the eight-year long negative interest era by raising its policy rates by 50 bps in July. In its September meeting, a further outsized 75 bps hike was delivered, quickly trying to catch up with surging inflation, which reached 9.1% in August.[20] Substantial hawkish remarks have been added into the official ECB statement post the September meeting and during the press conference. The urge to normalize monetary policy is real as is the need "to dampen demand and guard against the risk of a persistent upward shift in inflation expectations." This raises the chances of the ECB moving all the way to neutral, and above, in a rushed manner in an attempt to prevent de-anchoring of inflation expectations. Although widely discredited in a public mea culpa, inflation projections have once again been massively revised with the 2024 forecast now being set at an above target 2.3%. The appetite to bring the deposit rate to restrictive territory is growing, despite the growth risks that we highlighted above.

Multiple elements make the ECB stance multifaceted. Some considerations and takeaways below:

- **Death of forward guidance:** The July meeting effectively eliminated forward guidance, which the ECB has used extensively. Upcoming policy decisions will be fully data-dependent and taken on a "meeting-by-meeting" basis, providing policymakers more flexibility. Although dovish optionality of pausing the cycle as growth slows down would be theoretically still on the table, the latest comments from ECB officials and the decisive rate hikes leave increasingly smaller chances to such scenario. The September hike should help the ECB move toward the terminal rate (in the 1.5% range) faster and make up some of the lost ground relative to international peers. Further hikes in October and December now look to be a certainty, and more outsized moves cannot be excluded as indiscretions after the ECB press conference have already signaled some support for additional 75 bp hikes. We expect the deposit rate to be, at a minimum, 1.5% by year-end, with significant upside risks. Further hikes in Q1 2023 also cannot be excluded, to bring the terminal rate into restrictive territory (in the 2.25%–2.50% range, in our view).

- **Transmission Protection Instrument (TPI) tool raises many unresolved political questions:** The ECB finally announced its anti-fragmentation tool, after deeming it not necessary in June, and quickly reversing course in an emergency meeting shortly after. The tool was unanimously approved, giving a semblance of reinstated credibility, but it masks several unresolved issues. The TPI is designed to "counter unwarranted, disorderly market dynamics" across the eurozone, provided some eligibility criteria and a final Governing Council decision. It is based on four indicative and necessary conditions, that can be summarized as compliance with the EU fiscal framework, debt sustainability, commitment to the Next Generation EU (NGEU) reforms, and their timely implementation. The tool is therefore a safeguard measure with some explicit incentives for fiscal rectitude. It is not intended to be used, as it aims to prevent the risk of deviation of spreads from "fundamentals" and encourages governments to enact prudent economic policy. However, the ECB's pandemic emergency purchase programme (PEPP) reinvestments are deemed to be the first line of defense against fragmentation and were heavily used in July, with Italian and Spanish bonds being bought at the expense of German and Dutch ones. In our reading this further suggests that the hurdle for activating TPI is very high, and political uncertainty will certainly not help. In such unchartered territory, several political considerations will need to be made within the central bank.

Dissecting an unknown reaction function

As the ECB abandoned forward guidance, the reaction function will be even harder to disentangle. While inflation will remain center stage, it is unlikely to ease in the short term as the energy crisis is far from being resolved and underlying inflation momentum is still pointing upward. The ECB's inflation projections in September for 2023 are at 5.5% (vs. 3.5% in June), while growth was revised downward to 0.9% in 2023 (from 2.1% in June), with a downward scenario envisaging a –0.9% recession in the eurozone.[21] We believe that the ECB will continue to pay particular attention to the factors below:

1. **Long-term inflation expectations have adjusted to the upside:** The current extreme spot inflation is feeding inflation expectations, raising worries at the ECB. The long-term Harmonized Index of Consumer Prices (HICP) estimate from the Survey of Professional Forecasters (SPF) in Q3 has shown a further increase to 2.2%, the highest value on record. Of particular concern is also the overall long-term expectation distribution, which keeps shifting to the right, a potential sign of more de-anchoring going forward. The latest Consumer Expectation Survey (CES) indicates that the median eurozone household now expects inflation to be above target in the medium term. The development of these measures is increasingly center stage in the internal policy discussion.

2. **Financing conditions are tightening but credit is still flowing:** The ECB will attempt to achieve a delicate balancing act between the need to tighten after years of extraordinarily loose monetary policy and the materializing recession risks stemming from the Russian gas situation. The transmission process has started as overall financing conditions have already tightened in anticipation

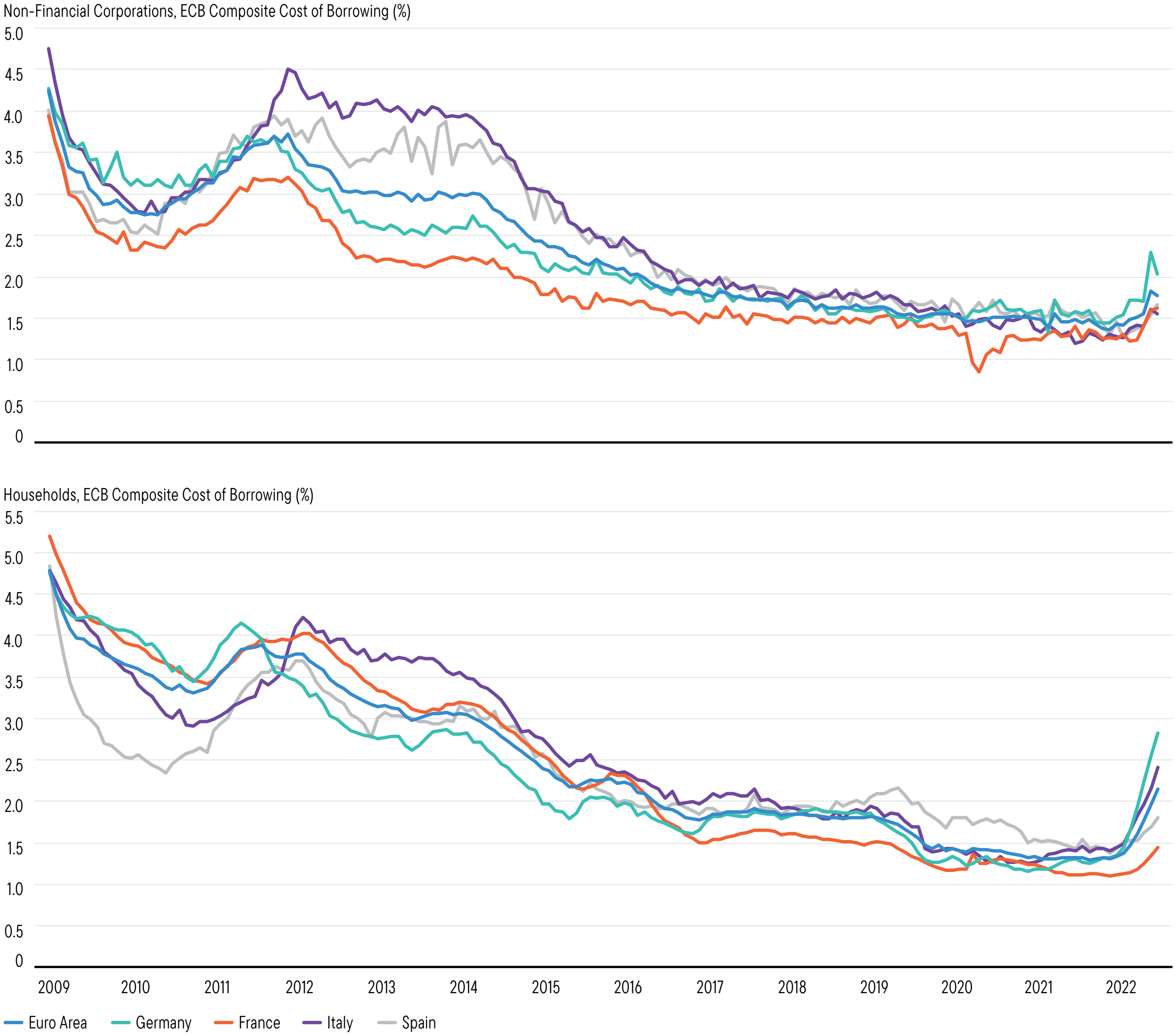
of upcoming ECB moves. The Q2 Bank Lending Survey points to credit conditions deteriorating both at the corporate and household level. The composite cost-of-borrowing has been on the rise for both households and non-financial corporates, although in both cases borrowing rates still remain at historical lows. Moreover, while banks anticipate a slowdown from current levels, corporate credit flows were still running at 7.6% Y/Y in July. The current monetary policy stance is still expansionary and more tightening will be needed, in our opinion.

3. **Wage growth will pick up and could increase further next year:** Wage growth is picking up on the back of a historically tight labor market. The euro area unemployment rate keeps falling to new record low levels, registering 6.6% in July.[22] Germany remains center stage—union negotiations are scheduled between September-end and year-end, affecting more than six million workers directly. The manner in which increases are enacted will be crucial, as industries will likely push for higher one-off payments versus core wage increases—one-off payments

Cost of Borrowing Rising, Especially for Households

Exhibit 10: European Central Bank Composite Cost of Borrowing

January 2009–July 2022



Sources: European Central Bank (ECB), Macrobond.

being read as less inflationary than the latter by the ECB. Moreover, the minimum wage will rise in October to €12 per hour, directly affecting eight million workers.[23] Indirect effects across the wage ladder will also follow. Given that a sizeable portion of the aforementioned adjustments will take place on January 1, wage inflation in 2023 is likely to set another data record.

Euro area economic outlook

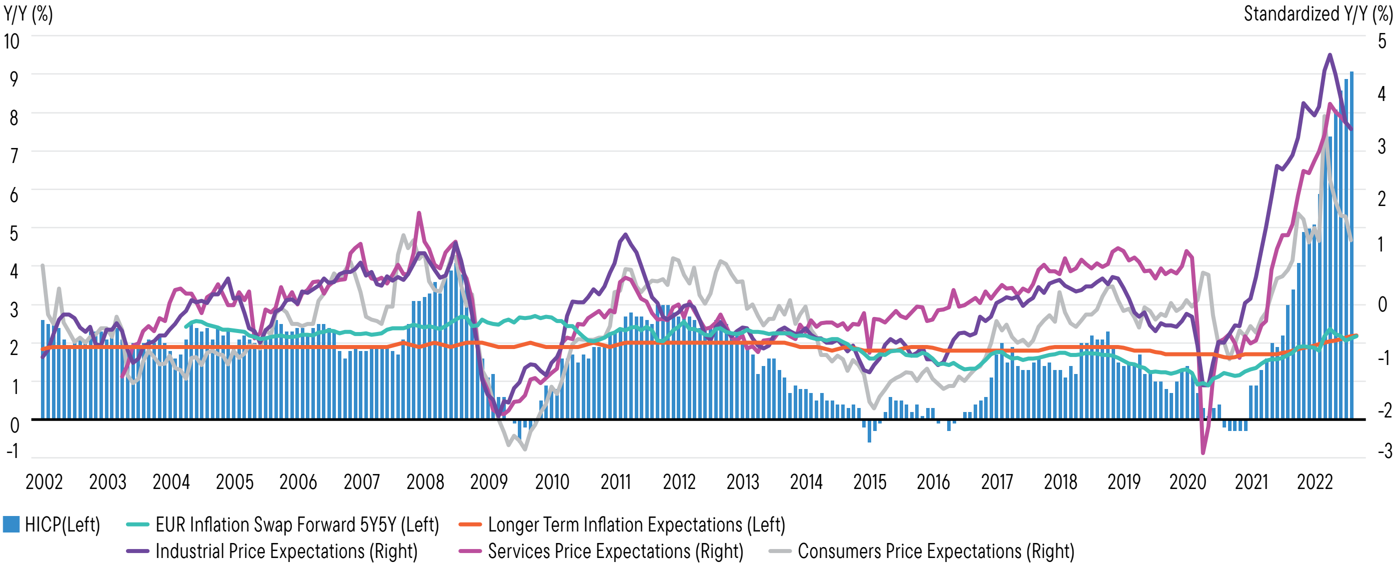
Euro area real GDP grew by a healthy 0.8% Q/Q in Q2 2022, up from the revised figure of 0.5% in Q1 and significantly above gloomy consensus expectations.[24] The upside surprise was driven by stronger growth in Spain (+1.1%), Italy (+1.1%) and France (+0.5%), while Germany remained flat (+0.1%) but significantly revised Q1 up to 0.8%. The full lift of COVID-19-related restrictions and a rebound in the hospitality sector in southern countries drove improvement in the region. The tourist season may provide a sizeable growth boost, on the back of the post-pandemic savings boom, alleviating the hit in the short-term. As the summer boon dissipates, expectations for the future are more uncertain given the prolonged squeeze on incomes flagged by plunging confidence. Germany is on the brink of an economic contraction, which could already be underway.

Euro area inflation continued to surprise to the upside, rising to 9.1% in August from 8.9% in July, and is likely to continue to accelerate as gas and electricity prices remain at record levels.[25] Core inflation also rose to 4.3% and will likely continue to rise, both driven by technical factors (e.g., the end of subsidized transportation tickets in Germany) and broadening inflationary pressures through cost-push adjustments and in food prices. We have not yet moved to recession as our baseline, but have significantly revised our GDP forecasts downward to reflect the increasing risk.

European Commission Survey Measures of Inflation Have Peaked

Exhibit 11: Euro Area Inflation Expectations

January 2002–September 2022



Sources: Franklin Templeton Fixed Income Research, Bloomberg, European Commission (DG ECFIN), Eurostat, ECB, Macrobond. The 5Y 5Y inflation swap reflects the partial average of September, as of September 9, 2022. ECB Survey of Professional Forecasters (SPF) long-term inflation expectations are quarterly values linearly interpolated for charting purposes.

Franklin Templeton Fixed Income: Euro area Growth Outlook

Exhibit 12: Real Euro area GDP Growth and Inflation-Rate Forecasts

As of September 2022

		% Q/Q					% Q/Q				
Euro Area	2021 (% Y/Y)	*2022 Q1*	*2022 Q2*	*2022 Q3*	*2022 Q4*	*2022 (% Y/Y)*	*2023 Q1*	*2023 Q2*	*2023 Q3*	*2023 Q4*	*2023 (% Y/Y)*
Real GDP (% Q/Q)	5.2%	0.7%	0.8%	*0.2%*	*-0.1%*	*3.3%*	*-0.3%*	*0.3%*	*0.4%*	*0.5%*	*0.5%*
HICP (% Y/Y)	2.6%	6.1%	8.0%	*9.1%*	*8.9%*	*8.1%*	*8.0%*	*6.1%*	*4.6%*	*3.5%*	*5.5%*

Italics indicates forecast.

Source: Franklin Templeton Fixed Income Research. There is no assurance that any estimate, forecast or projection will be realized.

Sector settings

Overall Risk Outlook

Inflationary pressures continue to increase globally despite an aggressive monetary policy response from central banks and ongoing concerns regarding an economic slowdown and a possible impending recession. The headwinds that have steadily increased throughout the year have not receded in the third quarter, and in many cases have strengthened, leading to continued elevated volatility in fixed income markets.

Markets have begun to recognize the fact that we are in a paradigm shift—one we have not seen in some time—where central banks are being forced to tighten financial conditions to restore price stability. While the drivers of inflation have diverged, for example between the United States and the eurozone, we continue to see inflation at or near multi-decade highs across various regions with ongoing supply/demand imbalances foreshadowing the need for more policy tightening ahead, in our opinion.

Fundamentals remain generally positive, in our analysis, despite tightening financial conditions, but we do expect some deterioration as price pressures impact sentiment and purchasing power. We have further downgraded our growth forecasts as we head into the final quarter of the year given the certainty of aggressive policy tightening and the growing uncertainty in the macroeconomic environment. Valuations within fixed income markets have become more attractive to us, but the uncertainty on the demand side is likely to increase risk premiums across spread sectors.

Markets have been driven largely by technical conditions, which continue to be pressured and have led to one of the largest drawdowns in history across the fixed income universe. The inevitable commencement of quantitative tightening will add pressure to already weak supply and demand conditions.

Our outlook remains moderately bearish: with multiple rate hikes on the horizon and higher rates across the yield curve, we continue to believe returns for risk-free assets will remain under pressure along with duration-heavy segments of the fixed income universe. We believe volatility will persist given the macroeconomic environment, and investors will need to continue to take an active approach to identifying and selecting investment opportunities that arise.

The following sector settings reflect our six- to 12-month outlook on each asset class.

Sector	Outlook	Our viewpoint
US Treasuries		Despite the recent run-up in yields and strong rhetoric from the US Federal Reserve (Fed) that restoring price stability is its primary focus—which will require a slowdown in economic activity—the US Treasury (UST) market is still showing signs that it believes the Fed will waver and be forced into halting or reversing its monetary tightening cycle before inflation is under control. We continue to believe the market's expectation for the federal funds terminal rate is too low and the duration of tight monetary policy required is being underestimated. The Fed remains committed to keeping restrictive monetary policy in place until "the job is done" and not making the mistake of prematurely loosening policy. This alone should put upward pressure on intermediate UST yields as short-term interest rates will remain elevated for some time. Additionally, supply and demand factors should negatively impact the market as the Fed allows its ample UST holdings to run off. This extra supply coupled with increased issuance of USTs due to recent US federal government spending programs will weigh heavily on the market, which has already displayed signs of stress. While the market adjustment since the end of July has been significant, we remain moderately bearish on USTs and believe intermediate UST yields will rise and the yield curve will steepen as long-term real rates remain negative. Markets will test the Fed's resolve again, making for a volatile adjustment process in asset prices. We believe duration management will be an important part of portfolio construction as volatility will persist in this economic environment.
US Treasury Inflation-Protected Securities (TIPS)		In the first half of 2022, US Treasury Inflation-Protected Securities (TIPS) strongly outperformed their nominal counterparts mostly due to extraordinary monthly inflation accruals. Prior to the July level of 0.0%, these accruals have averaged 1.0% year-to-date, well above the 0.2% average over the previous 10 years.[26] It is unlikely that monthly accruals will return to the highs seen earlier this year. Break-even (BE) rates reached their all-time highs in March 2022, however since then they have fallen with August-end two-year rates reaching their lowest level in a year. As we have noted for some time, these BEs have traded with an inverse relationship with market perceptions of the Fed's credibility in controlling inflation. With the Fed increasing short-term interest rates by 300 bps since March, the market has gained confidence in the narrative that the Fed will be able to, over time, lower persistent, frustratingly high inflation rates. As described in our macro outlook, our belief is that inflation is by no means under control, but we must acknowledge progress has been made by the Fed toward lowering inflation rates and controlling market expectations. In our view, recent declining month-over-month inflation rates have been driven primarily by falling energy prices, especially gasoline, but other important contributors, such as shelter costs and wages, are going to cause inflation to become sticky and keep it well above the Fed's 2.0% target. Going forward the influence of BE rate changes will be a primary determinant of TIPS returns. With the strong decrease over the past several months, BE rates have fallen to at or below our longer-term inflation expectations. As such, we have reduced our outlook on TIPS to neutral, but would look to add if inflationary pressures return.

Sector	Outlook	Our viewpoint
Eurozone Government Bonds		The European Central Bank (ECB) finds itself in a precarious position as it tries to fine-tune monetary policy, threading the needle between 50-year high inflation rates and a deterioration of economic conditions due to the ongoing war in the Ukraine and Russia's use of natural gas flows in retaliation for severe Western economic sanctions. As we discussed above, the bank has turned much more hawkish, signaling a rapid path of policy-rate increases. In response to the change in ECB policy and high inflation, euro area (EA) bond yields have increased significantly, with the benchmark 10-year German government bond yield moving into positive territory for the first time since April 2019 in the first quarter, peaking at 1.97% as of September 22.[27] Although there was a decline throughout July, yields have since returned to their upward trajectory and have tested the prior year-to-date (YTD) highs in September. We continue to hold a moderately bearish view on rates across the EA as we still believe strong inflationary factors will remain as we move into 2023, keeping upward pressure on yields across the curve. Although the ECB has pledged to support periphery country yields through their "anti-fragmentation instrument," we have seen spreads between countries continue to widen. In our view, this will remain an ongoing issue and as such we continue prefer bonds from core countries, while actively managing our duration exposure.
Japanese Government Bonds		Japan remains somewhat of an outlier among developed economies with relatively limited inflation pressures and continued loose monetary policy. Second quarter (Q2) 2022 gross domestic product (GDP) growth surprised on the upside, posting a 2.2% annualized rate driven by a solid increase in consumer spending.[28] On a nominal basis, GDP also exceeded pre-COVID-19 levels for the first time. Inflation remained somewhat contained with the Consumer Price Index (CPI) excluding fresh food—the Bank of Japan's (BoJ's) preferred measure—rising 2.8% year-over-year (Y/Y) in August, marginally above the BoJ's 2.0% target.[29] Even the headline level of 3.0% remained well below other developed economies. We expect inflation to peak in Q1 2023. With this backdrop, we expect the BoJ will keep its accommodative monetary policy stance, including the yield-curve-control policy pegging the 10-year government bond yield at 0.0%+/–0.25% through mid-2023. The bank has commented that the need for wage increases to be commensurate with CPI gains was a pre-condition for tightening policy. We have updated our economic projections and have lowered our full-year 2022 GDP growth expectation to 2.0% and see the rate falling to 1.7% in 2023 as inflation will most likely push slowly higher. We maintain our neutral outlook on Japanese government debt as the BoJ's loose monetary policy will keep short- and intermediate-term rates rangebound. However, we feel that the yield curve should steepen as inflation becomes more entrenched. The BoJ has also communicated that it would be unlikely to change its policy in response to a weaker Japanese yen. In our view, the yen will continue to be on the backfoot versus the US dollar as differential interest rates will remain a cause for worry.

Sector | Outlook | Our viewpoint

Agency Mortgage-Backed Securities (MBS)

The Fed will continue to wind down its balance sheet, the runoff rate has increased to US$95 billion (US$60 billion USTs and $35 billion MBS) in September 2022.[30] In August, the Fed reinvested principal payments from their holdings of agency debt and agency MBS received that exceeds the previous cap of US$17.5 billion. The cap increased to US$35 billion in September, which is expected to surpass projected paydowns for the month, which in turn will lead to no agency MBS purchases. As the Fed decreases its support for markets, we expect spreads to widen by 5–10 bps for the remainder of the year.[31] With mortgage rates rising to 5.89% on September 8 (over 275 basis points higher than the sub-3% average mortgage rate in 2021), we expect prepayment risk will continue to remain muted and mortgage origination should remain in higher coupons.[32] Amid the high interest-rate environment, we favor the 30-year sector over conventional 15-year securities as the latter are relatively overvalued, in our view. A strong housing market coupled with the Fed purchasing fewer securities as part of its balance sheet normalization should leave approximately US$550 billion in net supply to be absorbed by the market.[33] With limited alternative demand sources to replace the Fed, we believe most of the expected additional supply will need to be absorbed by money managers, who may require more attractive yield spreads to add MBS to their portfolios. Another risk to the basis, although remote in the near term, is the potential selling of MBS assets by the Fed as part of its balance sheet normalization. We expect MBS basis volatility to remain high going into Fed meetings and on macroeconomic releases. The zero-volatility option-adjusted spreads (ZVOAS) on the Bloomberg US MBS Index[34] are at 66 bps as of September 12, slightly wider than the 10-year average of 63 bps.[35] Against this challenging backdrop, with spreads slightly wider than their 10-year averages, we have slightly upgraded our outlook to neutral on the Agency MBS sector.

Non-Agency Residential Mortgage-Backed Securities (RMBS)

Fundamentally, the US housing market remains strong, with supply and demand dynamics still supportive of another year of positive home price growth. However, higher mortgage rates have eroded affordability and led to declining new and existing home sales. Our US housing model is projecting home price appreciation to remain positive, but decline from the current level of 19% Y/Y to 6% (or lower) over the next 12 months.[36] We acknowledge RMBS could be more impacted than other sectors as slowing prepayments will likely result in duration extension and could lead to additional spread widening. While declining forbearance requests, strong underwriting standards and a healthy labor market should keep mortgage credit performance stable, the smaller size of the RMBS sector relative to other fixed income sectors can act as a technical headwind, in our view. Despite our cautious stance on RMBS, we continue to favor higher exposure to the sector and favor opportunistically adding exposure. We maintain our neutral outlook for the sector.

Commercial Mortgage-Backed Securities (CMBS)

While valuations for CMBS have started to look marginally attractive, we remain cautious on CMBS conduit transactions, which represent the largest investment opportunity within the asset class and typically have 50%–80% exposure in the office, retail and hotel sectors—where sector fundamentals are likely to remain challenged.[37] We do find pockets of value in single-asset single borrower (SASB) transactions, however, where we are positive on the collateral type, geographic location and expected cashflows. In SASB, we prefer properties with long and stable rent rolls in preferred geographies. From a property sector perspective,

Sector	Outlook	Our viewpoint
Commercial Mortgage-Backed Securities (CMBS) *continued*		we are positive on the industrial and multifamily sectors and negative on the hotel, retail and office sectors. We are cautiously optimistic on the industrial sector, although we believe much of this optimism may already be priced into market valuations. Amid persistent housing affordability challenges, we are positive on multifamily fundamentals as high property price growth and increasing mortgage rates create a favorable backdrop for rentals, as prospective homeowners are more likely to rent than buy. Issues that are plaguing the retail environment are secular in nature, such as online shopping gaining market share at the expense of brick-and-mortar stores. We remain negative on hotel sector fundamentals—the sector is susceptible to economic downturns as it generally does not operate on long-term leases. Despite the potential challenges in the sectors that we are negative on, we believe there may be select opportunities, especially in the SASB space, if favorable property characteristics and idiosyncratic factors negate the broader headwinds. Our neutral with reason for concern outlook for the sector remains unchanged. We continue to favor exposure up in the capital structure on the CMBS stack.
Asset-Backed Securities (ABS)		We believe ABS spreads are likely to stay rangebound (or tighten marginally) over the coming six to 12 months as uncertainty remains around inflation, the Fed's policy path, and the probability (and potential severity) of a recession. While fundamentals remain robust, with delinquencies and charge-offs at record lows, we expect a reversion to pre-pandemic levels given a rise in inflationary pressures and higher consumer borrowing costs—this is particularly visible with subprime borrowers who have experienced an uptick in delinquencies. Amid the looming risk of an economic slowdown, we maintain our neutral outlook on the ABS sector and prefer a defensive position favoring shorter duration assets that are higher in the capital structure, backed by prime credit cards and prime auto loans.
US Investment-Grade (IG) Corporates		US investment-grade (IG) corporate bond returns continue to be driven by a volatile economic and market risk environment. Amid strong negative returns, the sector has experienced significant outflows of funds so far this year, although this trend has reversed more recently. Extreme day-to-day volatility and redemptions from IG corporate funds have also caused market supply/demand technical conditions to deteriorate, leading to more challenging trading liquidity. On the positive side, valuations in the sector have become more attractive, drawing back in some investors. Corporate fundamentals also remain generally strong, despite tightening financial conditions, providing most IG companies substantial flexibility to manage through a period of slowing economic growth. However, some companies may face additional margin pressures going forward due to labor cost increases and ongoing input cost inflation from supply-chain woes, hurting third quarter performance. We remain moderately bearish on the sector due to slowing growth, greater market uncertainty, and less favorable market technicals, although we believe yields and valuations have become more attractive. Our base case calls for spreads to widen further in the coming months, although the magnitude will be highly dependent on how the global economy responds to central bank policy actions. We generally favor moving up in credit quality, while also focusing on shorter duration, higher yielding parts of the corporate credit curve. Many low dollar price issues also still offer favorable risk/return characteristics. We would also continue to take advantage of attractively priced new issues or any market dislocations to add exposure.

Sector | Outlook | Our viewpoint

European Investment-Grade Corporates

The macroeconomic environment for European investment-grade (Euro IG) corporates has remained very challenging with headwinds including the war in Ukraine, record-high energy prices, surging inflation, and the ECB's first policy-rate hikes in over a decade. Euro IG spreads have widened significantly since the start of the year, but have seen some stabilization recently, at levels we believe price in a shallow recession in Europe. Spread volatility is expected to remain, with the ECB ending its corporate bond buying program in July, effectively removing the largest purchaser from the market. On the positive side, firms have weathered the first half of the year relatively well and have mostly been able to push through price increases to offset input cost inflation. Balance sheets and credit metrics also remain strong, providing a buffer against an economic slowdown, though we do expect fundamentals to deteriorate slightly as issuers face wage pressures and high energy prices. We retain our neutral outlook on the sector—even though valuations appear attractive from a long-term perspective, spreads will very likely continue to be volatile amid much market uncertainty. In the meantime, we continue to stay defensive by favoring higher-credit-quality issues, focusing on A rated over BBB rated bonds and remaining cautious on credits based in peripheral countries due to short-term pressures on sovereign government bond yields.

US High-Yield (HY) Corporates

US High Yield has seen its share of volatility this year as inflation reached multi-decade highs, the Fed responded aggressively, growth concerns ebbed and flowed, and spreads fluctuated accordingly. The Q2 2022 earnings season showed that fundamentally the asset class has remained in good shape, with credit metrics solid, earnings before interest, taxes, depreciation and amortization (EBITDA) margins hanging in as companies continue to enjoy pricing power, and the default rate still low by historical standards. There are ominous clouds on the horizon, though, and we do expect fundamentals to deteriorate from here. However, at this point we do not expect the default rate to rise significantly above the long-term average over the next 12–18 months, for two main reasons: 1) maturity walls for most issuers have been pushed out substantially over the past two years of wide-open capital markets, and 2) the energy sector (the largest in major high-yield indexes) is likely to experience a much milder default cycle than over the past decade, when it has been an outsized contributor to defaults, given significant improvement in balance sheets combined with supportive oil prices except in a more severe recession scenario. Higher short- and long-term rates and slowing economic growth will make for some challenging crosscurrents to navigate given impacts to both ends of the ratings spectrum, highlighting the case for active management and individual security selection. Amid the potential challenges, we have maintained our moderately bearish outlook for the asset class.

European High-Yield (EHY) Corporates

Amid persistent headwinds, particularly geopolitical issues, surging energy prices and unabating inflationary pressures, intensified recession and even stagflation fears, volatility in the EHY corporate bond market has continued to increase throughout 2022. EHY spreads widened at a historic pace in June/July as risk-off sentiment caused investors to pull back from the sector. This was followed by a strong snapback in spreads in July and August as nominal European sovereign debt yields fell, and investors were attracted by record low valuations within the asset class. Despite market turmoil, corporate fundamentals remain robust as firms retain

Sector	Outlook	Our viewpoint
European High-Yield (EHY) Corporates *continued*		large cash balances and solid pricing power. However, we observe that operational challenges are on the rise and will likely lead to what we believe will be a gradual increase in the default rate, to levels slightly above their 10-year average. Strong balance sheets coupled with attractive EHY yields lead us to maintain our moderately bullish outlook for the sector. Projected low levels of new issuance throughout autumn should add a technical tailwind for the sector. At the same time, we do note that continuing market volatility and the potential for a severe recession carry significant downside risks. The current environment makes an active and selective investment approach key to successfully navigating the EHY market.
Floating Rate Loans		Loan spreads saw rapid widening at the end of June/early July, followed by a sustained rally (narrowing of spreads) in the second half of July into mid-August. Despite the gyrations, YTD performance in bank loans continues to exceed that of most other asset classes.[38] Given the fact that earnings for a majority of the loan market had not been released in July, the rally in the market appeared to be driven by investor's fatigue with negative sentiment and/or their desire to see the positive in whatever newsflow was materializing. We believe that the current rally in the market will ultimately give way to more volatility, and importantly, more bifurcation in credits as Q2 and third quarter (Q3) earnings are announced. While fundamentals continue to remain healthy in the loan market overall, we expect the rate of improvement in revenue, margin and leverage to continue to decelerate as the impact of rapid rate hikes and record inflation begins to affect issuer fundamentals and as Y/Y comparisons become more difficult in future quarters. In general, our view remains unchanged in that technical factors surrounding inflation and interest rates will guide near-term sentiment in the market. As we progress through the year, with more rate hikes under the Fed's belt, visibility should begin to improve on the success (or not) of their 2022 measures, which will influence spread movements in the medium term. Against this backdrop, we continue to focus on the fundamentals and are most concerned about cyclical issuers with weak interest-rate coverage and liquidity. We favor issuers with relatively stronger balance sheets and less discretionary and rate-sensitive end-market demand. In periods of volatility, we favor moving up in credit quality, building liquidity buffers to protect against spread widening, and de-risking of portfolios away from lower credit-quality issuers in cyclical industries that are vulnerable to a demand slowdown. Against this backdrop, we have maintained our moderately bearish outlook.
Collateralized Loan Obligations (CLOs)		We expect CLO spreads to stay relatively rangebound in the near-term with a bias for widening over the next 12-months—the combination of higher interest rates and the risk of an economic downturn will likely impede CLO fundamentals, in our view. Primary issuance slowed in the first half of the year and is forecasted to stay subdued throughout 2022, mainly due to macroeconomic volatility and the London Interbank Offered Rate (LIBOR)-Secured Overnight Financing Rate (SOFR) transition in the United States. Loan issuer downgrades have also started to outpace upgrades, a trend that we believe is likely to continue. While leveraged loan default rates remain near historically low levels, increasing borrowing costs and declining margins could lead to deteriorating fundamentals in the coming months. Nevertheless, particular senior CLO tranches should be relatively immune from

Sector	Outlook	Our viewpoint
Collateralized Loan Obligations (CLOs) *continued*		principal impairment. We maintain our neutral outlook on both the US and euro CLO asset classes as we believe market volatility is unlikely to abate for some time. Amid a challenging environment, we favor securities that are higher up in the capital structure.
Municipal Bonds		A more uncertain macroeconomic backdrop and increased volatility in the market has put pressure on the tax-exempt municipal bond (muni) market. Valuations have worsened significantly since the start of the year, though we have seen some stabilization more recently. Heavy outflows of funds from the sector have been a key culprit as roughly 10% of funds dedicated to muni retail mutual funds have left the asset class. However, this has begun to moderate as investors are starting to take note of a high-quality asset class offering incremental tax-exempt yield pick-up. A technical tailwind has come from limited primary issuance, which we expect should stay low throughout 2022. At the same time, muni fundamentals remain solid: prudent budgeting and robust surpluses have resulted in many issuers facing this economic slowdown with ample reserves. Still, strong fiscal management will be crucial. The recent selloff has provided investors with an opportunity to acquire promising securities at attractive valuations. This leads us to remain moderately bullish on the tax-exempt muni sector. We also retain our moderately bullish outlook on the taxable muni market on the back of attractive valuations and the view that the combination of diminished supply, elevated spreads and the asset class's high credit quality should support demand leading spreads to tighten going forward. Nevertheless, volatility will likely persist over the near- to medium-term as the trajectory of inflation, the Fed's policy path and the likelihood of a recession will all become clearer.
Emerging Market (EM) Debt		Events in 2022 have culminated in one of the most difficult environments for EM debt since the "rebirth" of the asset class in the mid-1990s. The asset class has returned roughly –18.8% this year, through the end of August.[39] This is comparable to declines seen in many of the main headline crises that have impacted the asset class such as 1994's Tequila crisis, 1998's Russian and Asian crises, and the global financial crisis drawdown of 2008. The tragic events that have taken place since the start of the Russia-Ukraine war have certainly been a key factor in the weakness of EM debt. We still see EM debt as being in a strong place fundamentally through increased and improving external balances, as high commodity prices bring benefits in aggregate to the asset class. While inflationary factors, particularly food prices, pose a potential risk to government stability in countries reliant on imports of food staples, decisive action by EM central banks so far has put them ahead of the curve—in contrast to most developed-market peers. Better managed debt stocks, with longer durations and lower foreign-currency exposure underpin our belief that, while the coming period of further tightening in external financing conditions will not be easy for EM debt, it should not unravel into a systemic crisis for the asset class. With so many unknowns at play in the global economy and the potential for very wide-ranging outcomes for EM debt, it seems prudent to maintain our neutral outlook, at least through the end of the year. Longer term, we retain a more positive bias to our outlook, as the resilience of EM debt is expected to see the asset class recover some of the ground lost so far this year.

Sector	Outlook	Our viewpoint
Emerging Market (EM) Corporates		Global macro factors and geopolitical issues have been the driving force behind the poor performance of emerging market corporate (EM Corp) bonds so far in 2022. The general risk-off sentiment among investors has resulted in fund outflows from the sector and, with our expectations of a further tightening of financial conditions and lingering uncertainty, this trend is unlikely to reverse over the near-term. However, fundamentals remain strong with corporate balance sheets continuing to demonstrate resilience in the face of headwinds as companies appear quite adept at pushing higher input costs through price increases. Nevertheless, we believe defaults will pick up in the coming months though they should largely remain concentrated in China's high-yield property developers and Ukrainian issuers. Longer term, as technical conditions stabilize, healthy fundamentals should provide a tailwind for EM Corps as firms are well positioned to deal with slowing global growth. This leads us to retain our neutral outlook on the asset class. Under our base case, we expect sector spreads to trend slightly wider over the near term but then to tighten somewhat over the following six to 12 months. Despite persistent volatility, we believe the sector can provide investors with interesting opportunities at attractive valuations.
Global Sukuk		With the Fed expected to continue aggressively hiking rates into an economic slow-down, the risk of a disruptive outcome is growing and we have downgraded our outlook to moderately bearish. The Fed remains optimistic on the possibility of a soft landing for the economy, but inflation may realistically only normalize in a downturn, with higher unemployment. History offers little comfort from periods where unemployment rises, even by small margins. Few markets, if any, are currently priced for that risk (including Sukuk markets). Despite all the headwinds, spreads are not much higher than they were at the beginning of the year, as commodity-exporting countries benefit from a natural buffer to high inflation through exposure to rising oil prices.[40] The improvement in sovereign fiscal balances has also improved credit profiles, most notably in the high-yield universe where valuations are much more expensive than 2018 or 2020. Conversely, investment-grade yields have reached 2018 and 2020 levels, presenting what we believe to be a compelling opportunity as 12-month forward returns from similar yield levels have consistently resulted in double-digit total returns historically. Despite yields being as high as they are, spreads of these investment-grade bonds are also still low. It is reasonable to expect, as a result, for them to widen from their current levels, dampening potential returns. However, the more meaningful risk resides in a continued rise in benchmark rates, likely alongside continued upside surprises in inflation. This scenario, however, might be challenged by an approaching recession, limiting the time rates stay elevated. All things considered, the opportunity presented in regional investment-grade Sukuk stands out in the asymmetry between the upside and downside at present, particularly in comparison to other markets, which leads us to favor longer-dated, high-quality issuers. The broader universe of risk assets, such as equities or high-yield bonds, may have further to decline in a downturn and historically bottom only slightly before economic troughs, or at a pivot in Fed policy toward an easier setting; neither of which are currently in place. Despite the risks, in our analysis, valuations are more attractive and opportunities are increasing, but we remain cautious due to elevated global risks.

Endnotes

1. Source: Eurostat.
2. Source: Bloomberg.
3. Source: Bloomberg.
4. Source: Bloomberg. As of September 12, 2022.
5. Source: Franklin Templeton Fixed Income Research.
6. Sources: Franklin Templeton Fixed Income Research, Bureau of Labor Statistics (BLS).
7. Sources: Franklin Templeton Fixed Income Research, BLS.
8. Sources: Drewry World Container Index, Bloomberg. As of September 12, 2022.
9. Source: BLS.
10. Source: BLS.
11. Source: BLS.
12. Source: BEA.
13. Source: Franklin Templeton Fixed Income Research, European Network of Transmission System Operators for Gas (ENTSOG).
14. Source: Bloomberg.
15. Source: Gas Infrastructure Europe (GIE).
16. Source: Bruegel.
17. Source: Bruegel.
18. Source: Bundesnetzagentur.
19. Source: Deutsche Bank.
20. Source: Eurostat.
21. Source: ECB.
22. Source: Eurostat.
23. Source: Deutsche Bank.
24. Source: Eurostat.
25. Source: Eurostat.
26. Source: Bloomberg. As of August 2022.
27. Source: Bloomberg. As of September 11, 2022.
28. Source: Economic and Social Research Institute Japan.
29. Source: Ministry of Internal Affairs and Communications, Japan.
30. Sources: US Federal Reserve, eMBS (Mortgage-Backed Securities Online: Black Knight).
31. Source: Franklin Templeton Fixed Income Research.
32. Sources: Bank of America Merrill Lynch, US Federal Reserve, eMBS.
33. Source: Franklin Templeton Fixed Income Research.
34. The Bloomberg US Mortgage Backed Securities (MBS) Index tracks fixed-rate agency mortgage backed pass-through securities guaranteed by Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC).
35. Source: Bloomberg.
36. Source: Franklin Templeton Fixed Income Research.
37. Source: Franklin Templeton Fixed Income Research.
38. Source: JP Morgan.
39. Source: JP Morgan Emerging Market Bond Index (EMBI)—Global Diversified Composite.
40. Source: Dow Jones.

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