

4th QUARTER OUTLOOK



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Broad, Balanced Growth Puts Emerging Markets in Focus

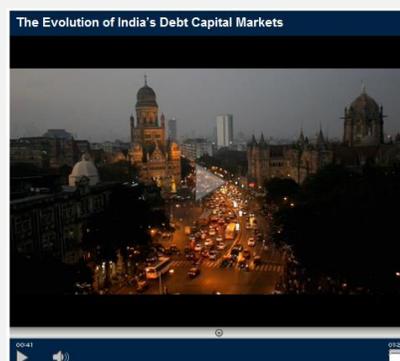
- In this edition of PGIM Fixed Income's quarterly outlook, **Nathan Sheets, PhD, Chief Economist and Head of Global Macroeconomic Research**, looks at a global recovery that is often characterized as "sluggish," but one that may ultimately be remembered for its durability (click to read page 3).
- Coming off an eventful quarter complete with heightened geopolitical tensions, natural disasters, and monetary policy developments, **Robert Tipp, CFA, Chief Investment Strategist and Head of Global Bonds**, examines what might capture the markets' attention in the quarters ahead (page 8).
- We also make several stops across the emerging markets with inserts on our expectations for China's 19th Party Congress (page 7) and the nuanced evolution for EM corporate debt (page 17). Finally, in the videos highlighted below and available on PGIMFixedIncome.com, **Arvind Rajan, PhD, Head of Global and Macro**, explores some key issues pertaining to investing in emerging market debt.

EM Videos Featured on PGIMFixedIncome.com:

Emerging Market Debt: The Re-Rating Opportunity



The Evolution of India's Debt Capital Markets



Sector Views

Global Rates (page 10): Tactically optimistic. While developed market monetary policies generally appear to be on a tightening trajectory, market reactions to various pronouncements may come in fits and starts. The resulting idiosyncratic mispricings that occur will continue to mean revert, leading to numerous tactical opportunities across the developed rate markets.

Agency MBS (page 10): We remain underweight MBS vs. other high-quality spread sectors. We anticipate the Fed's balance sheet normalization process will ultimately widen spreads by the second quarter of 2018.

Structured Products (page 11): Very positive on top-of-the-capital structure structured products, especially AAA CLOs and AAA CMBS. While we remain positive on the fundamentals of GSE credit risk mezzanine cashflows, we are cautious at current spread levels. We are negative on CMBS mezzanine tranches and continue to look at financing trades rather than exposure to the underlying assets.

Corporate Debt (page 12): Modestly positive given fair spread levels, strong investor demand, and economic growth momentum. Still favor U.S. money center banks. Tax reform could provide further upside.

Global Leveraged Finance (page 13): Moderately constructive on high yield in the near term given improving fundamentals and favorable technicals. Elevated tail risks and the threat of a recession triggered by an unforeseen event leave us less bullish in the long term. We see the best value in CCCs and continue to manage overall portfolio risk via higher cash balances and allocations to AAA CLOs.

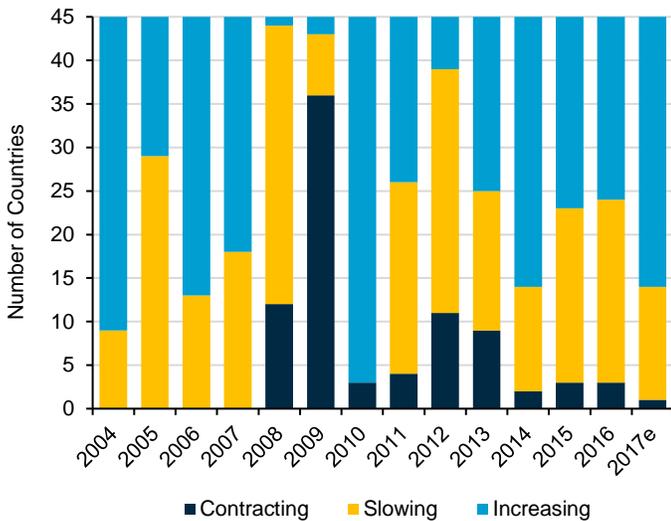
Emerging Market Debt (page 15): Positive. Heading into year end, the relatively healthy fundamental backdrop in EM—supported by rebounding growth, inflows, and attractive valuations—will likely help assets end the year with strong returns. Selloffs are likely to be buying opportunities in lower-rated, hard currency assets, EMFX, and local bonds.

Municipal Bonds (page 18): Positive. Improving technicals by year end should lead to outperformance vs. Treasuries.

The Global Expansion: Slower than Previous Cycles, but Surprisingly Durable

The global economy is firing on essentially all cylinders. While overall growth rates remain somewhat below those recorded before the financial crisis, the expansion has become increasingly balanced across regions, with the United States, the euro area, Japan, and China all growing in tandem at above-potential rates, as seen in the following chart. Although the ongoing recovery has been characterized as “lackluster” and “the new mediocre,” perhaps these very features will allow it to live longer. The more restrained pace of growth through this cycle, while disappointing when taken by itself, may have limited the scope for imbalances to emerge.

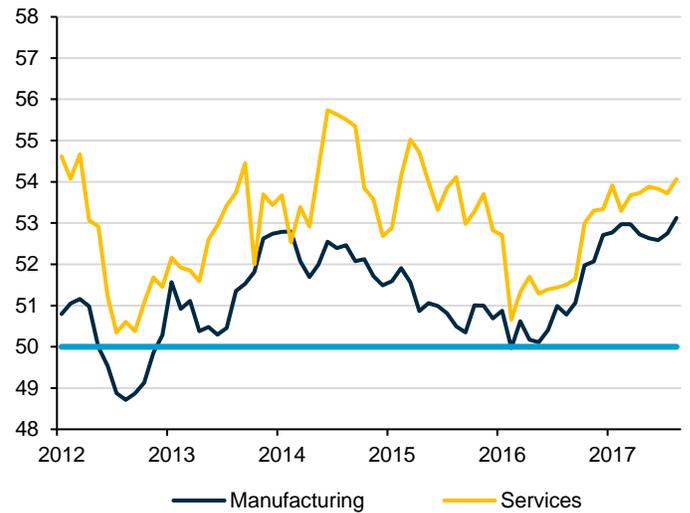
THE BREADTH OF GLOBAL GROWTH



Source: OECD, Haver Analytics, WSJ. Note: 2017 is an estimate based on 2017 H1 data.

Consistent with this assessment, global Purchasing Managers Indices (PMIs) for both manufacturing and services have moved steadily upward since the middle of last year, as observed in the next chart. Global trade volumes stepped up sharply at the end of 2016 and have preserved those gains this year, although subsequent growth has been somewhat slower. A welcome development is that we have recently seen a strengthening in global investment. If sustained, a rebound in investment could help stoke lagging global productivity and support continued economic expansion.

A STEADY INCREASE IN GLOBAL PMIs



Source: Haver Analytics and PGIM Fixed Income

WORLD EXPORT VOLUME HOLDING ONTO SHARP GAINS (3-MONTH MOVING AVERAGE)



Source: Netherlands Bureau for Economic Policy Analysis, IHS Markit, Haver Analytics

Another notable feature of recent economic performance is the behavior of inflation. Global headline inflation has remained low throughout the recovery and has ground lower still over the past couple of years, as the following chart demonstrates. While wage growth has tended to remain anemic, in part reflecting overall sluggish productivity developments, the aforementioned signs of an upturn in investment may yet spur wage inflation. Commodity prices have settled in at lukewarm levels—up from last year’s lows but well off their 2014 peaks. The current level of commodity prices seems to have struck a balance between providing reasonable terms-of-trade support for commodity exporters while still not creating widespread pressure on prices or sapping the profit margins of importing firms.

AFTER GRINDING LOWER, WILL GLOBAL HEADLINE INFLATION REBOUND?



Source: Haver Analytics, PGIM Fixed Income, Commodity Research Bureau

Based on these observations, we expect global growth to continue at a solid pace through the next year or so, with inflation slowly rebounding. While this cycle has thus far been slower than previous cycles, it may yet be remembered for its durability. The path of inflation will prove critical in determining the extent and breadth of the forthcoming monetary policy normalization.

Risks to the Outlook

Despite these generally favorable developments, we remain focused on potential storm clouds on the horizon. The unemployment rate in several countries, including the United States, Japan, the United Kingdom, and Germany has declined to low levels. And these countries are testing the limits of resource availability in their labor markets. In this context, major central banks are looking to take gradual steps to normalize policy. Similarly, in China, the authorities are signaling an increasing determination to address high levels of debt and leverage, which could require a further tightening of financial conditions.

These observations point to a set of inter-related risks associated with the normalization of macro policies in the major economies. First, some sectors of the global economy may prove to be more sensitive to rising policy rates than we anticipate. For example, levels of indebtedness in many advanced economies are still high, particularly in the household and public sectors. Alternatively, the emerging market economies have not absorbed a synchronized advanced-economy tightening cycle in over a decade, and navigating through these headwinds may prove challenging with a potentially new vulnerability arising from the ongoing increase in EM household debt. That being said, overall vulnerabilities of the emerging markets have declined significantly since the 2013 taper tantrum.

Second, especially in the U.S., there is a wide gap between what markets are pricing in for rate hikes and what the Federal Reserve is signaling. If market expectations move toward Fed guidance, the adjustment could be abrupt. As a related matter, resource constraints in labor markets might start to bind in a non-linear fashion. The upshot would be a sharper-than-expected rise in inflation, which would require policy to tighten even faster than central banks are signaling.

Another risk is that the tightening of China's financial policies, which is likely to intensify in the aftermath of the upcoming Party Congress, proves to be difficult and disruptive. This could mean markedly lower Chinese growth, with adverse knock-on effects for global trade and commodity prices. Global financial markets could also be affected, especially if this were happening in the context of policy normalization by the Federal Reserve and other major central banks. A disruptive adjustment is not our base case because the Chinese authorities have multiple tools to manage their economy and, ultimately, maintaining stability is their core objective. In addition, China's efforts to address leverage could prove to be tepid and ineffective. This would mean faster Chinese growth in the near term, but greater financial stability risks down the road.

We also are closely monitoring a range of political and geopolitical risks. On the political side, key risks include the upcoming Italian election, whether German Chancellor Angela Merkel successfully repositions herself following her underwhelming electoral victory, and potential difficulties due to Brexit. As a related matter, the U.S. administration is still defining its strategies on international trade, and a disruption in key trading relationships is still possible. Finally, security issues—particularly the situation in North Korea—could continue to heat up.

The subsequent section considers the economic performance of major global economic regions in greater detail.

United States

U.S. economic growth is expected to slow a bit in Q3, dampened by disruptions from Hurricanes Harvey and Irma. As activity resumes and rebuilding gets underway, growth should pick back up in Q4, leaving our forecast for 2017 GDP growth unchanged at 2.1%. Near-term volatility aside, underlying economic momentum remains solid. Headwinds that buffeted production a year and a half ago—including a then-strengthening dollar and downshifting energy sector—have now unwound, paving the way for a pickup in manufacturing and business investment this year. Meanwhile, strong job gains continue to support consumer spending. However, with the boost to purchasing power from lower energy prices having now faded, households have resorted to lowering their saving rates to maintain robust spending. Household borrowing has also markedly shifted, going from undershooting household income growth during six years of post-crisis deleveraging to now growing at a faster pace.

But as the economic expansion has extended and broadened, inflation has unexpectedly retreated and wage growth has stalled. After peaking in early 2017 near the Fed's 2% target, core PCE inflation has since decelerated to just 1.3%, while average hourly earnings have softened to a 2.5% pace.

The downshift in wage and price pressures at this stage of the business cycle has Fed officials debating whether this is a temporary development, or if it signals a more permanent structural shift. Although that issue is still being sorted out, the Fed has kept policy on track, announcing in September the start of balance sheet tapering and reiterating its intention to hike the funds rate again in December. We still anticipate a rate hike in December, followed by two more in 2018—a forecast below the three hikes that the Fed has signaled for next year, but more than is priced into the market. Elsewhere in Washington, the legislative agenda remains packed with a docket that includes tax reform and a December 8th expiration of the government spending authorization and the reinstatement of the debt ceiling.

Euro Area

The economic expansion in the euro area is entering its 19th consecutive quarter with all member countries now recording positive output growth. The recovery, however, is much more advanced in core Europe, a point that is highlighted by the decline of Germany's unemployment rate to a new post-unification low. Nevertheless, as in other advanced economies, wage increases have so far remained muted, despite emerging labor market strains in some parts of the euro area.

Consequently, headline inflation has remained sluggish, and core inflation has managed to eke out only modest increases. Amidst base effects, the European Central Bank (ECB) expects headline inflation to briefly ease once again and to trough early next year at just below 1% (yoy), thus temporarily diverting the direction of inflation away from the ECB's de facto 2% target.

Against this background, the doves and hawks on the ECB's Governing Council seem to agree on the need to gradually withdraw monetary stimulus. Nevertheless, settling on specific policy parameters has proven to be a difficult compromise. A judicious two-step approach appears most likely, whereby ECB asset purchases would be tapered from €60 billion currently to €30-40 billion per month during the first half of next year. At that stage, another decision on asset purchases would ensue, likely setting out a timeline for halting them completely. Meanwhile, policy rates would likely remain unchanged in accordance with the ECB's forward guidance.

Separately, Germany's parliamentary elections in September serve as a further reminder of the deepening fragmentation of the political landscape across Europe. Chancellor Merkel's efforts at securing majority-support in parliament requires her to cobble together a coalition with two junior parties. Although it is too early to draw definite conclusions, the outcome is likely to limit her policy flexibility

and may well spillover to the European agenda. Any further losses for Merkel's center-right party in upcoming state elections—whether in Lower Saxony or Bavaria—may have a disproportionate policy impact. Parliamentary elections that are scheduled to be held early next year in Italy are also characterized by increasing fragmentation and raise legitimate concerns regarding the next government's zeal for reform.

Japan

Momentum in the Japanese economy has been building over the past two years with GDP growth on track to accelerate to an estimated 1.6% in 2017. The sources of growth have also broadened over this period: An increasingly robust labor market has underpinned household spending; business investment has picked up; and an improved global economy has supported net exports. PM Abe is taking advantage of the positive economic performance and a turnaround in his approval ratings by calling a snap election for October 22. A win would re-consolidate Abe's power, enabling him to continue economic reforms aimed at the private sector and to implement spending plans on education, childcare, and defense, and he will likely postpone fiscal consolidation targets to do so. Tensions with North Korea risk dominating the headlines in coming months, however.

Emerging Markets

Although tensions with North Korea escalated sharply in Q3, inflows into EM, especially to EM Asia, remained buoyant and allowed some decoupling of monetary policy from advanced economies. In EM Asia, this development has been most evident in India and Indonesia where the respective central banks were able to ease rates as the Fed tightened; but monetary conditions have also remained accommodative elsewhere in Asia. Looking forward, the key question is whether this can last as several factors are in play.

First, the inflation situation. The most recent trend in Asia has not been favorable as actual prints have surprised to the upside. While volatile food inflation has been a driver of the elevated prints, higher oil prices have also fed through. Moreover, as output gaps narrow, wage-driven inflation could accelerate along the lines already observed in Central Europe.

Next, the environment for portfolio flows is critical. While a full-blown recurrence of the "taper tantrum" is unlikely, portfolio inflows have returned to very high levels, and these flows are not just being used for reserve accumulation, but to also finance some widening of external deficits.

Third, the previously buoyant trade recovery in Asia has slowed since July, driven by comparatively weaker import demand from China. While this may just reflect the ongoing evolution of Asian value chains as China integrates production processes within its borders, the slowdown may run deeper. The current tech cycle—driven by new

mobile technology—is maturing, while China’s efforts to restrain property-price inflation and reduce leverage have slowed economic growth. It is too early to tell for sure, but our outlook for China’s upcoming leadership change and its policy implications is consistent with a further slowdown over the next year (see the box on page 7), something that may yet test overall EM resilience.

In Latin America, several central banks have recently cut their policy rates. For example, in Brazil, monetary policy is normalizing after having engineered a significant reduction in inflation. In contrast, rate cuts in Peru and Colombia more likely reflected a cyclical easing in external conditions, including an important improvement in terms of trade. Beyond monetary policy developments, in Mexico, uncertainty surrounding the renegotiation of NAFTA has persisted, and investors will likely begin to focus on the 2018 presidential elections in the coming months. In Venezuela, market pricing suggests that investors are increasingly questioning the authorities’ ability to roll maturities.

China: The Timeline Over the Next Six Months and Some Firsthand Perspective

China's 19th Congress of the Chinese Communist Party will commence on October 18th, kicking off Xi Jinping's second five-year term as General Secretary and marking the beginning of a series of comprehensive changes in leadership and potential policy over the next six months. While the Congress will formally receive and discuss a report by President Xi on the progress achieved over the prior five years—as well as an outline of policies for the coming period—the main agenda item will be the selection of new party leaders, i.e., the Central Committee (some 200+ members), the Politburo (some 25 members), and, most importantly, the Standing Committee of the Politburo. The key points of this selection process include:

- The size of the new Standing Committee, which was reduced from nine to seven members at the 18th Congress. A further reduction could hint at continued centralization of policy making, while an increase may indicate a return to the consensual style prior to Xi's leadership, which would arguably reflect a weakening of his position.
- The General Secretary could receive additional elevation with one step consisting of conferring Chairmanship to Xi Jinping (a position that was abolished after Mao in favor of collective leadership). Another step could elevate "Xi Jinping Thought" into the Party Constitution (Mao has been the only sitting leader to receive the recognition).
- Existing retirement rules will result in the retirement of five of the seven Standing Committee members, with only Xi Jinping and Prime Minister Li Keqiang eligible to serve one more term. The elevation of someone young enough to still serve in 2022 (i.e. a "sixth-generation leader") would, therefore, give strong indications regarding Xi's succession, while the absence of such a selection would further feed expectations of Xi Jinping extending his leadership beyond 2022.
- Adherence to retirement rules would imply the retirement of the governor of the People's Bank of China (PBoC), who has already been granted an extension, along with five of the current Standing Committee members, including Vice PM Wang Qishan who has been heading the anti-corruption campaign. While some investors have expressed hope that Wang would stay on—pointing out that the rules are informal—adherence to these rules should provide some reassurance that stability remains important. Otherwise, a wholesale change of the political model developed since Deng Xiaoping could be in the offing. Moreover, with a human capital base as strong as China's, personalities are likely not as important as adherence to rules.

The Central Economic Work Conference is set to take place in December 2017. A key development at this stage could include the potential for further loosening of the economic growth target, which is currently set "around 6.5%." The National People's Congress in March 2018 will determine the shape and composition of the new government. One key decision for investors to follow concerns the Prime Minister. Following the economic and financial wobbles in 2015-2016, observers speculated whether PM Li Keqiang would remain in his position for another term. With the subsequent stabilization of the economy and financial conditions, these rumors have subsided, but a new PM would indicate a significant strengthening of Xi Jinping's position.

When evaluating the potential series of changes, our expectation is that Xi Jinping will succeed in further strengthening his position, but will do so while adhering to long-established rules. We also expect that he will use this strengthened position to push ahead with economic reforms.

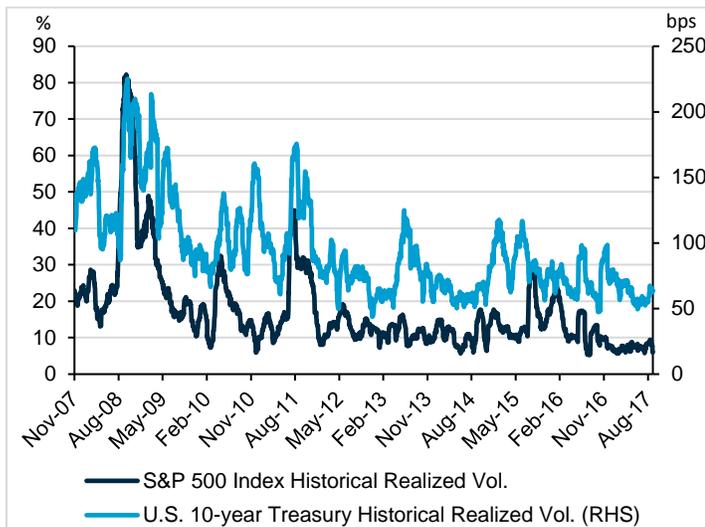
Furthermore, a series of recent meetings in China provided some insight of how economic and market conditions may develop following the highly-anticipated conclave.

- There were indications that a growth slowdown to the 6.0% area may be acceptable.
- It appears the authorities will generally progress with financial liberalization over time. Although its bond market remains relatively immature overall, China is making progress with inclusion into the global sovereign bond indices. China's recent inclusion in the MSCI equity indices has also been regarded as a key structural development with the equity market experiencing increased flows. One meeting participant put China's financial development in the following context: If the global integration of Chinese manufacturing was the key event for the global economy in recent decades, the most significant event in the years ahead could be China's comprehensive integration in the global financial system.
- While it can be difficult to determine whether China's monetary policy is accommodative or contractionary, some suggested policy bellwethers to watch include the following: Growth rate of total social financing, growth rate of M2, the seven-day repo rate (viewed "almost like the Fed Funds rate for the Fed," and the behavior of the exchange rate (an appreciating rate both reflects and amplifies tighter monetary conditions).

Weaving Around the Fed: Still Good Knitting

While hardly devoid of events, the third quarter was not very eventful in terms of economic and market gyrations. Indeed, the level of volatility in the Treasury and equity markets remains near historical lows, as seen in the following chart.

EVENTS, YES; VOLATILITY, NO

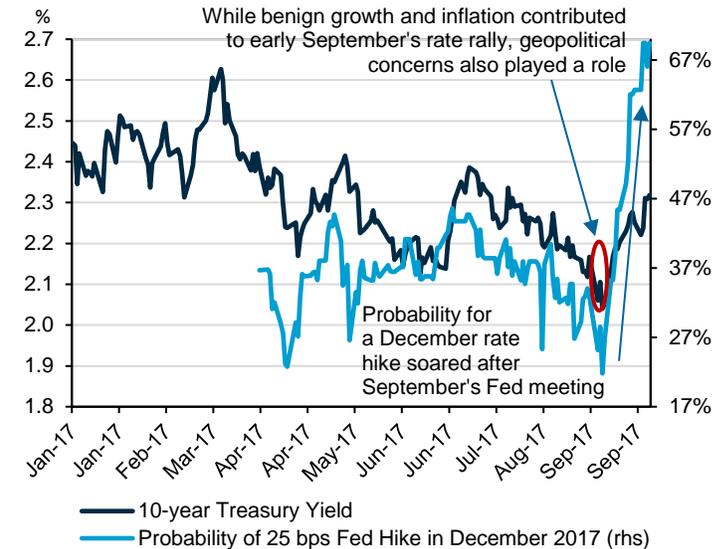


Source: Bloomberg.

As discussed in the economics section, the big picture trends over the quarter were relatively unchanged, with only minor variations. On the policy front, following more false starts than progress in Washington DC, a potentially stimulative tax package began to materialize towards the end of the quarter. Additionally, after being virtually priced out of the market for the next several months, the Fed came back into the picture following its September meeting by not only announcing an October start date for its long-anticipated and well-telegraphed balance sheet roll-off program, but by also signaling that the odds are on for a December rate hike, with more likely to come, assuming all remains on course.

The Fed's revival, along with a surprisingly quick resolution to the debt ceiling stand-off, pushed Treasury yields higher. After touching 2.00% on fears sparked by North Korea's saber rattling and missile launches, the 10-year yield quickly made its way to around 2.33% during the final week of the quarter.

TREASURY YIELDS RISE OFF 2017 LOWS AMID FED REVIVAL



Source: Bloomberg

Even so, the quarter was yet another step forward for the bond market—especially the higher yielding sectors (see Returns Table). The combination of stable yields (the U.S. 10-year yield only rose 3 bps on the quarter) and a fairly stable to improving growth picture in much of the developed and developing world sustained investors' search for yield. Higher-quality bonds generally added to their already positive year-to-date returns, while higher-yielding sectors, such as emerging markets and high yield, continued their progress towards meaningfully positive results.

Multi-Sector	Q3 2017	Total Return (%)				
		YTD 2017	2016	2015	2014	2013
Global Aggregate	1.76	6.25	2.1	-3.2	0.6	-2.6
U.S. Aggregate	0.85	3.14	2.7	0.6	6.0	-2.0
Global Agg. Hedged	0.78	2.22	4.0	1.0	7.6	-0.1
Euro Aggregate	0.68	1.06	3.3	1.0	11.1	2.2
Yen Aggregate	0.14	-0.18	3.0	1.1	4.3	1.9
Individual Sectors	Q3 2017	YTD 2017	2016	2015	2014	2013
EM Debt Hard Currency	2.63	8.99	10.2	1.2	7.4	-5.3
U.S. High Yield Bonds	2.04	7.05	17.5	-4.6	2.5	7.4
EM Currencies	2.00	9.35	3.5	-7.6	-7.0	-2.0
EM Local (Hedged)	1.23	4.60	4.7	-2.2	3.2	-4.2
Long IG Corporates	1.97	8.46	11.0	-4.6	15.7	-5.7
European High Yield Bonds	1.69	6.03	10.8	1.3	5.1	9.1
U.S. IG Corporate Bonds	1.34	5.19	6.1	-0.7	7.5	-1.5
European IG Corporate	1.13	1.76	4.7	-0.6	8.4	2.4
Municipal Bonds	1.06	4.66	0.3	3.3	9.1	-2.6
U.S. Leveraged Loans	1.06	3.04	9.9	-0.4	2.1	6.2
Mortgage-Backed (Agency)	0.96	2.23	1.7	1.5	6.2	-1.5
CMBS	0.79	3.11	3.3	1.0	3.9	0.2
European Leveraged Loans	0.67	3.08	7.0	3.6	2.1	9.0
U.S. Treasuries	0.38	2.26	1.0	0.8	5.1	-2.8

Sources: Bloomberg Barclays except EMD (J.P. Morgan), HY (Merrill Lynch), Senior Secured Loans (Credit Suisse). Performance is for representative indices as of September 30, 2017. See Notice for full index names. Past performance is not a guarantee or a reliable indicator of future results. An investment cannot be made directly in an index.

Everything but the Locusts

Some of the more powerful global events during the quarter, such as Mexico City's earthquake and the hurricanes that swept across the Southeast U.S., Texas, and the Caribbean, had limited impact on the markets. An increasing number of missiles fired by North Korea in more menacing directions and the countervailing tweets, however, did spark a few market lurches of risk aversion. While noise surrounding the personnel issues emanating from the White House have generally not been market movers, rumors (subsequently refuted), that Gary Cohn would leave his post as Director of President Trump's National Economic Council also caused a sharp flight-to-quality rally in Treasuries and a concurrent swoon in stock prices.

Who's Next?

The possibility of a rift between the President and Gary Cohn unnerved the markets as he had been regarded as a—if not the—leading contender to head the Fed. With Janet Yellen's term expiring in February 2018 and a number of vacancies on the board, uncertainty about the course that the Fed's next helmsman and the remaining board nominees may chart has become a leading theme of the market's zeitgeist. While Trump has indicated he'd like a low interest rate Fed, the fact of the matter is that some of the rumored nominees may lean towards a more rules-based approach to rate setting that could result in a more hawkish tack than he'd prefer. In the end, pragmatism will presumably continue to drive the Fed's decision making process, placing it on a methodical path in its policy normalization course. Nonetheless, the market will keep this key issue on its radar in the coming months.

What's Ahead for the Markets? Probably More of the Same: Bumpy Progress

While it's true that the monetary policy backdrop is becoming a bit less accommodative, we believe that the back up in rates since the middle of 2016 has probably more than compensated for modest increases to the Fed funds rate and major central banks' general shift from expanding their balance sheets to stabilizing or contracting them. All said, the cautious approach taken by the world's central banks to remove accommodation, combined with a lack of the financial excesses often seen at the end of an economic cycle, suggest a positive environment for both government bonds as well as spread products.

As for currencies, the dollar bull market of 2011 to 2016 has given way to a volatile, but weaker dollar on balance. While there is the potential for a near- to intermediate-term rise in the dollar should a tax package encourage repatriation of foreign profits, longer term, however, with the Fed presumably past its point of maximum rate-hike velocity, the dollar is likely to continue to underperform, with relative value continuing to favor a range of emerging market and developed country currencies.

THE DOLLAR BULL GIVES WAY, BUT VOLATILITY MAY REMAIN



Source: Trade weighted nominal U.S. dollar index via Bloomberg.

Conclusion: Bond On!

No doubt, spreads are tighter and yields lower than they've been at various points in time. And the markets are likely to continue to be intermittently buffeted by the flow of policy, economic, and geopolitical news. But in the end, it continues to look like this bull market in bonds and credit has a ways to go, with moderate growth and inflation keeping long-term rates low and range bound and a search for yield that is likely to drive outperformance by spread products.

The Bottom Line: Bonds continue to appear poised to outperform cash over the intermediate to long term with good opportunities for outperformance through active management.

Global Rates

While the prospects for greater policy synchronization emerged on multiple fronts in Q3, a broad opportunity set remains across the developed rate markets as the frequent divergence between market expectations and policy guidance leads to idiosyncratic mispricings that are likely to mean revert.

The third quarter commenced with a notable rate selloff after ECB President Draghi suggested that “we can be more assured about the return of inflation to our objective than we were a few years ago.” This sent the 10-year bund yield to a Q3 high of 60 bps and steepened the bund curve to more than 120 bps. This supported our subsequent positioning for the 10- to 20-year sector of the bund curve to outperform, and it subsequently richened with the 10-year yield ending the quarter at 47 bps.

While we also positioned for the front of the curve to underperform and approach the ECB deposit rate of -40 bps—particularly in the wake of the French Presidential election—short-term bunds remained well bid during the quarter. Two-year bund yields richened by about 10 bps in Q3 to -69 bps as the ECB delayed a tapering announcement (possibly until October 2017) and focused its asset purchases toward the front of the curve.

In the U.S., prospects for further policy tightening arrived as the Fed announced an October start to its balance sheet tapering with a roll-off of \$6 billion Treasuries per month. The amount of tapering is expected to increase by \$6 billion per month each quarter over 12 months until reaching a maximum of \$30 billion Treasuries per month. The Fed telegraphed tapering months in advance, therefore we anticipate a muted response in yields. The August CPI report—headline +0.4% and core +0.2%—broke a multi-month streak of weaker-than-expected readings, and along with a hawkish Fed, lifted the markets’ expectations for a rate hike in December 2017. Following the subsequent bear flattening in the U.S. yield curve, we covered some of our underweight positioning at the front end. In general, with market expectations for the terminal Fed funds rate rising into the 2.25% area, we still see the terminal rate as elevated and believe it will eventually recede into the range of 1.75-2.00%.

In general, we expect demand to remain solid among U.S. investors seeking duration and overseas investors who are drawn to the relatively high yields in the U.S. Indeed, foreign central bank holdings of U.S. Treasuries reached a record of \$3.05 trillion in late September 2017, marking a stark shift from 2016 when central banks trimmed their Treasury holdings to about \$2.80 trillion.

In terms of other U.S. positions, the CPI report and higher inflation expectations in the wake of Hurricanes Harvey and Irma pushed five-year breakeven rates to about 1.80%, prompting us to sell our long exposure to five-year breakevens that we put on at about 1.60%. While we continue to favor swap spread wideners at the intermediate

portion of the swaps spreads curve, there could be spread tightening at the 20-year point as Treasuries may be susceptible to potential 20-year Treasury issuance going forward.

Elsewhere, we’re paying at the five-year part of the euro swaps curve while receiving at the 15-year part of curve given its steepness and positive roll-down. Finally, we’re overweighting the front of the Canadian curve as it cheapened on the prospects for tighter monetary policy, but those expectations may be constrained by an appreciating currency and the ongoing volatility in commodity prices.

OUTLOOK: Tactically optimistic. While developed market monetary policies generally appear to be on a tightening trajectory, market reactions to various pronouncements may come in fits and starts. The resulting idiosyncratic mispricings that occur will continue to mean revert, leading to numerous tactical opportunities.

Agency MBS

The agency MBS sector benefitted from a technical tailwind in Q3 as investors initially underweighted the sector prior to the Fed’s well-telegraphed announcement about the start of its balance sheet tapering, but were forced to cover their positions amid strong bank buying and the Fed’s sizable reinvestment needs during the quarter.

With an excess return of +39 bps in Q3 (+19 bps YTD), the agency MBS sector held in well versus Treasuries as cheaper valuations attracted outright buyers, particularly banks and REITs as the 10-year Treasury yield crossed 2.10%. Meanwhile, the Fed announced reinvestment need of \$80 billion during the quarter, or an average of \$26.6 billion per month, up from \$24 billion per month in Q2. However, agency MBS still underperformed other high-quality spread sectors and were about flat to CMBS.

Although 30-year primary mortgage rates moved down about 5 bps during the quarter, they remained range bound and limited prepayment speeds. The constrained prepayment speeds provided basis buyers with additional comfort in holding mortgages for carry opportunities. That said, higher coupon 30-year MBS—essentially 30-year 4.0% and higher—underperformed as the 10-year Treasury yield tested the lows of the year in early September. Given that dynamic, investors, including ourselves, sought better convexity in 2010-2014 vintage 30-year seasoned MBS, which outperformed in Q3. Elsewhere, 15-year MBS underperformed as the yield curve flattened.

One performance anecdote pertains to the volatility in high-coupon GNMA securities after Senator Warren of Massachusetts alleged “churning” activity in veteran loans, which contributed to higher prepayment speeds. The excess return of GNMA2 4.5% MBS had been negative heading into Q3, and it bottomed out in August at -102

bps before rebounding strongly in September on a response from GNMA stating that an investigation into the matter will be conducted.

Looking ahead, several positive factors may affect the market in Q4 and beyond. The base of underweight investors remains and could provide a backstop for the sector should spreads widen. Although overseas buyers appear to be waiting for higher yields, banks and REITs may continue buying with the 10-year Treasury yield in a trading range of about 2.15-2.30%. In addition, prepayment speeds should also stay contained unless primary mortgage rates decline at least 0.25-0.375 percentage points from their current levels. Finally, supply should recede given the fall and winter seasonal effects.

Some substantial negative factors will be in play as well. First, the pending tapering of the Fed's MBS reinvestments (an initial \$4 billion monthly roll-off to increase quarterly at \$4 billion increments over 12 months until reaching \$20 billion per month) is set to reduce the role of the market's largest non-economic buyer. Even when excluding the effects of the Fed's withdrawal from the market, which is slated to start on October 13th as the New York Federal Reserve already announced its MBS purchases through October 12th, net supply is expected to increase in 2018, and any increase in implied volatility would tighten option-adjusted spreads from their current levels.

In terms of positioning, we favor 30-year 3.5% coupons, which still have an attractive carry profile relative to five-year and seven-year Treasuries, but we've tempered our view toward seasoned bonds given their strong performance in Q3. We're also holding underweight positions in 15-year issues and GNMA2 lower coupons.

OUTLOOK: We remain underweight MBS vs. other high-quality spread sectors. We anticipate the Fed's balance sheet normalization process will ultimately widen spreads by the second quarter of 2018.

Structured Products

High-quality structured products generally earned their carry in Q3. For example, the spreads on AAA tranches of CMBS and CLOs finished the quarter basically unchanged. Range bound spreads were consistent with our expectations, and this remains our base case in Q4. Our favorite picks continue to be AAA CLO and CMBS bonds, and we continue to advocate for other senior financing trades and favor on-the-run vs. off-the-run structures.

Non-Agency RMBS: Legacy non-agency issues continued to trade at post-crisis tights. Vintage senior bonds from 2006-2007 now trade at or inside LIBOR+150 bps and more seasoned bonds, with better performing collateral and more credit enhancement, trade inside L+100. We believe spread levels will persist as technicals remain overwhelmingly favorable with the \$450 billion float declining 10-15% on an annual basis. Legacy non-agencies no longer represent the

superior risk-reward proposition relative to other structured products. Opportunities in financing unrated securitizations of legacy mortgages or bonds waned over Q3. This was due to fewer loan pool dispositions from legacy holders and a shift toward agency-rated structures, particularly for re-performing mortgage loans (RPL). RPL seniors traded at about L+65 bps. GSE credit risk transfer bonds showed vulnerability to natural disasters, as evidenced by Hurricane Harvey and Irma. Spreads were pushed 50-75 bps wider in the aftermath of Hurricanes Harvey and re-traced about 40-50 bps after Hurricane Irma's damage was less than initial expectations. Away from the U.S., UK RMBS credit performance was stable and technicals remained strong due to limited supply. We are neutral on senior non-conforming paper with generic spreads currently at L+70-80 bps, and we are constructive on select 10-yr+ seasoned 2nd pay classes trading at 130-160 bps. Potential headwinds are a cooling UK housing market, securitization regulation, and Brexit-related uncertainty.

CMBS: We maintain our opinions that conduit AAA CMBS is cheap and agency CMBS offers value as an agency MBS substitute. AAA spreads tightened on solid demand, but ended Q3 unchanged at Swaps +92 bps as supply increased in September. Meanwhile, the on-the-run AAA CMBX index tightened 12 bps to +64 bps, which could presage tightening in cash spreads. Agency spreads tightened slightly from S+62 to S+60. Single Asset/Single Borrower AAA floaters spreads were unchanged at L +80, and select deals based on credit fundamentals, offer value. We maintain our negative opinion of mezzanine tranches based on capital structure position and potential volatility of mortgage loan outcomes. The on-the-run BBB- CMBX index was 30 wider at +452, and BBB- cash was 25 wider at +375.

Negative headlines about retail property (i.e., malls) continued. The 2012 and 2103 vintages have large concentrations in Class B/C malls. Mezzanine tranches from these vintages reached new wides in Q3 with CMBX6 BBB- 104 wider to 673 and CMBX 7 BBB- 50 wider to 522. Spreads on '12 and '13 senior tranches have been immune to this widening due to significant credit enhancement and strong demand for short-duration bonds. Conduit issuance reached \$34 billion YTD, 13% higher than that 2016. We project the conduit issuance for full year 2017 should be similar to that in 2016. New issue volume in 2018 is uncertain because there effectively is no 2008 CMBS to refinance; however, CMBS could refinance existing bank loans. On commercial real estate (CRE), property values are now 27% above the previous peak (2007), with major markets 46% above the 2007 peak, leading the way. We do not think CRE is in a price bubble, despite cap rates at or near record lows, because: 1) the risk premium in cap rates is at wide levels, which provides ample cushion should rates rise, and 2) occupancies and rents continue to slowly improve.

CLOs: AAA CLOs remain one of the most attractive fixed income investments. AAA U.S. CLOs currently offer AAA spreads between 3L+118 and 3L+130 for new issue deals depending on the manager tier. European deals currently offer AAA nominal spreads of about 3E+87 plus the value of the zero Euribor floor (which we believe is

worth about 12 bps). We continue to see strong demand for AAA bonds from global banks, pensions, insurance companies, and asset managers. Demand is also strong for the most junior parts of the capital structure as there are more risk retention funds and “real money” buyers that are pursuing nominal yields. We favor senior bonds over junior bonds due to higher credit enhancement, which mitigates our concern that recoveries on defaulted bank loans will be lower. Demand has supported issuance, which surprised to the upside. U.S. issuance year-to-date reached about \$80 billion for primary, \$90 billion for refinancings, and \$35 billion for resets. For European CLOs, issuance reached about €12 billion in primary and €20 billion for refinancings and resets. We expect issuance to be strong through year end. Despite elevated issuance, we believe that CLOs will continue to be biased toward spread compression due to fundamental cheapness (particularly for AAAs), higher carry from rising LIBOR, and continued demand from investors based in Japan.

ABS: Consumer fundamentals remain healthy, despite our expectation for credit trends to soften marginally toward long-term levels. Regarding the “headlines” in subprime auto, while defaults have been trending higher due to weaker underwriting by some lenders, we expect loss rates to stabilize as more established issuers have tightened credit. In terms of valuation, demand for ABS has been very strong, particularly at the front-end of the curve, and spreads in most sectors remain at or near YTD tight. Traditional fixed-rate credit cards and autos were clearing inside of S+20 bps for 3-year paper, and as such, we find better value is consumer loan securitization from originators that focus on income verified underwriting, select subprime auto, and private refinance student loan sectors—seniors and subs from these sectors trade at L+75-175. We also like high-quality credit roll-down plays in AAA 5-year fixed revolver prime autos and floating rate credit cards. These trades can earn 60-90 bps total return over a one-year period assuming no change in the spread curve. In the event of a selloff, these sectors are defensive. Rental car ABS had previously underperformed in 2017 due to disappointing corporate parent earnings centered around declining auto residual values. More recently these bonds have rallied on expected better future financial performance. Nonetheless, we think valuations do not compensate for the technical noise, and we find better relative value elsewhere.

OUTLOOK: Very positive on top-of-the-capital structure structured products, especially AAA CLOs and AAA CMBS. While we remain positive on the fundamentals of GSE credit risk mezzanine cashflows, we are cautious at current spread levels. We are negative on CMBS mezzanine tranches and continue to look at financing trades rather than exposure to the underlying assets.

U.S. and European Corporate Bonds

U.S. corporate bonds posted another positive return in Q3 as the Federal Reserve’s desire to ‘normalize’ interest rates and record new issuance took a back seat to encouraging signs of global economic growth, strong earnings, and robust investor demand. U.S. corporate spreads narrowed by 8 bps and posted an excess return of 87 bps over similar-maturity U.S. Treasuries.

European corporate bonds also delivered a positive return during a volatile quarter. Spreads were ultimately supported by a broadening recovery and the European Central Bank’s corporate bond buying program, although an announcement on tapering the program is widely expected in Q4. In Q3, spreads narrowed by 6 bps to 96 bps.

	Total Return (%)		Spread Change (bps)		OAS (bps)
	Q3	YTD	Q3	YTD	9/30/2017
U.S. Corps.	1.50	5.40	-8	-22	101
European Corps	1.13	1.76	-6	-27	96

Represents data for the Bloomberg Barclays U.S. Corporate Bond Index and the Bloomberg Barclays European Corporate Bond Index (unhedged). Source: Bloomberg Barclays as of September 30, 2017. Past performance is not a guarantee or reliable indicator of results. An investment cannot be made directly in an index.

U.S. Corporate Bonds

Trends in the U.S. corporate bond market were little changed in Q3 with healthy fundamentals and robust new issuance dominating market sentiment. Most industries continued to enjoy record profit margins and generate significant cashflow before share buybacks and dividends. Revenue and earnings growth have improved with the global deflation trade, particularly for multinational companies that benefit from a weaker U.S. dollar. Credit fundamentals generally remained stable as leverage metrics have leveled off. Companies remained active in debt-financed mergers and acquisitions, although deal flow has declined from record levels.

On the supply front, issuance continued at a record pace as companies sought to lock-in low rates or fund M&A and other shareholder activities. Demand remained equally strong, particularly from non-U.S. investors searching for higher-yielding alternatives. Many companies have also tendered higher coupon debt to reduce interest expense and take advantage of higher tax rates this year.

Tax reform, as currently proposed, should push the market higher but may also stoke volatility. Lower corporate tax rates will provide a boost while the repatriation of up to \$2 trillion of offshore profits would lead to reduced issuance from multinational companies, particularly in the technology and pharmaceutical sectors. This could lead to selling in short-maturity (1-5 year) spread product. Limiting the deductibility of interest expense may also steer companies to favor equity financing over borrowing.

Another item to watch is the Pension Benefit Guaranty Corporation's premium increase to 4% on the underfunded portions of U.S. corporate pension plans. The increase, along with a potential decline in the corporate tax rate next year, is incenting companies to contribute more to their plans. These additional contributions, coupled with the strength of the stock market, have improved plan funding levels. This, in turn, could support long-duration corporates as pension plans rotate from stocks to bonds.

Financial issuers and utilities were strong performers during the period. Industrials were generally flat with commodity spreads tightening and cable/media/telecom lagging on heavy supply, event risk, and increased competition. Auto industry sales have cooled while traditional retailers have suffered from online competition and consumers' shifting tastes.

In this environment, we are overweighting better-quality financials and electric utilities over industrials that may be subject to event risk and "late cycle" risks. Financials are relatively immune to event risk and should remain subject to higher capital requirements even if other post-financial crisis regulations are relaxed by a pro-growth administration in the U.S. Within industrials, the chemical, health insurance, paper, and pharmaceutical (selective) sectors appear attractive. We are also selectively adding European banks due to stabilizing fundamentals and wide spread levels. We remain overweight lower-quality bonds in shorter maturities as well as BBB-rated, long-maturity corporates due to a steep spread curve and potential uptick in demand from pension plans.

European Corporate Bonds

In Q3, market sentiment in the European corporate market shifted from an initial positive technical as tail risks from European politics waned, to a lack of liquidity and concerns over North Korea, before ending the quarter with a return to the initial, positive tailwind.

Overall, the ECB's corporate bond buying program, combined with the successful European election results, compressed spreads in Q3. So far this year, spreads are 27 bps tighter and have outperformed our expectations. Entering Q4, however, the prospect of the ECB tapering its buying program may come to the forefront. Brexit negotiations may also cast a shadow over the market.

On a more positive note, credit fundamentals remain robust, and European economic data have been much more constructive. M&A activity has picked up a bit, but is still considerably below that of the U.S. market. New issuance remains high, but manageable. As in prior quarters, U.S. companies added to volume by issuing in the Euro/Sterling/Formosa markets.

In European portfolios, we remain overweight non-euro zone issuers and those ineligible for the ECB's bond purchases. While attractive opportunities remain in these areas, we have reduced exposure to credits with compressed spreads that now trade flat to U.S. dollars.

We see value in select reverse-yankee issues that are priced at discounts to where they trade in U.S. dollars. Although we remain underweight European financials, our tone is less negative on the fundamentals and more focused on relative value; we are selectively adding exposure. We are keeping a close eye on euro zone corporates that may offer attractive value, but they are hard to source as a result of the ECB's CSPP initiative.

Within euro-area industrials, we continue to favor regulated companies with solid balance sheets, such as electrical grid and airport operators, although finding attractive opportunities has been increasingly difficult. We find value in certain corporate hybrids from stable, well-rated utility issuers and are avoiding hybrids issued to uplift ratings, including those in the telecom industry.

In global corporate portfolios, we hold a risk overweight that is roughly balanced across currencies. We do, however, hold a mild preference for U.S. companies given ECB tapering risk and tight European spreads. We are reducing exposure to companies with potential tail risk, such as Italian corporates that trade through the sovereign and are prime candidates for spread widening. Within the financial sector, we remain overweight U.S. money center banks and insurers. We are focused on BBB-rated issuers and U.S. taxable revenue municipals. We continue to take advantage of price dislocations and yield discrepancies between U.S. and euro bonds of the same and/or similar issuers.

In both the U.S. and Europe, we believe that spreads are at fair levels but have the potential to grind tighter in Q4 given the favorable fundamentals, ongoing investor demand for yield, and minimal risk of a recession in the near term. Downside risks include more aggressive-than-expected central bank policy changes, global geopolitical risks, and, longer-term, China's high debt burden.

OUTLOOK: Modestly positive given fair spread levels, strong investor demand, and economic growth momentum. Still favor U.S. money center banks. Tax reform could provide further upside.

Global Leveraged Finance

The high yield market had a strong quarter overall, however the rally was tempered by several macro events that the markets could not ignore. Despite the bumps, the tone of the market generally remained firm, prompting average yields to decline and spreads to tighten.

	Total Return (%)		Spread Change (bps)		OAS (bps)
	Q3	YTD	Q3	YTD	9/30/2017
U.S. High Yield	2.04	7.05	-21	-66	356
Euro High Yield	1.69	6.03	-16	-108	271
U.S. Leveraged Loans	1.06	3.04	-11	-29	416
Euro Leveraged Loans	0.67	3.08	-1	-67	379

Sources: BofA Merrill Lynch and Credit Suisse as of September 30, 2017. Past performance is not a guarantee or reliable indicator of results. An investment cannot be made directly in an index. European returns are euro hedged.

U.S. Leveraged Finance

U.S. high yield returns were solid in the third quarter on the back of record-high equities, improving commodity prices, a manageable new issue calendar, and investors ongoing search for yield. While the market was not completely immune to the impact of various events which took place across the globe—geopolitical tensions involving the U.S. and North Korea, the terror attack in Barcelona, and impact from Hurricanes Harvey and Irma—the broad high yield index returned +2.0% in the third quarter, and +7.1% year-to-date.

After underperforming higher-quality credits in the second quarter, CCCs supplanted BBs and Bs as the top-performing segment of the U.S. high yield market in Q3. For the quarter, CCC-rated bonds returned +2.7%, compared to +2.1% for BBs, and +1.8% for Bs. Year-to-date, CCCs are up 9.8% and have outpaced the broad high yield index by +273 bps. Longer duration paper enjoyed solid performance in Q3—returning +4.7%—and generated approximately +408 bps of excess returns over Treasuries for the quarter. Year-to-date, the high yield 10-year+ index is outpacing Treasuries by +1,107 bps.

Bolstered by higher oil prices, the energy sector was the top performer in Q3, rebounding nicely after posting underwhelming returns in Q2. Performance within high yield energy was led by the lower-quality credits, which have come off recent lows while the higher-quality credits generally remain relatively rich. Despite the strong quarter, the energy sector is trailing the broader high yield market by 154 bps year-to-date.

Utilities also enjoyed solid performance in Q3 as attractive valuations, improving fundamentals, and potential M&A activity supported the sector. Year-to-date, utilities are one of the top performing sectors in the high yield market, trailing only chemicals and healthcare.

The food & drug retail sector was the only one to post a negative total return (-4.4%) in Q3, as the market assessed the impact of the Whole Foods acquisition by Amazon and the potential squeeze on the profit margin of traditional grocers.

Moody's 12-month U.S. speculative grade default rate ended August at 3.4%—its lowest level since January 2016—and is now approximately 240 bps lower than the September 2016 12-month default rate. Moody's default forecast suggests the U.S. default rate will decrease further, ending the year at 3.1%, with the highest likelihood of defaults originating from the printing & publishing sectors. Looking ahead, we still expect default rates outside of the energy and commodity sectors to remain benign through 2018.

Positive flows into ETFs (+\$2.5 billion) were not enough to offset the withdrawals from active funds (-\$3.1 billion) in Q3. Year-to-date net retail flows now total -\$11.1 billion. Total new issue activity continues to increase year-over-year, climbing to \$236 billion year-to-date, up from \$216 billion over the same period last year. The energy sector remained active in the primary market, accounting for more than 14% of the new issue volume during the quarter and for the year. Although general issuance is running ahead of last year's pace, 63% of the issuance has been related to refinancing activity, putting net issuance 10% below 2016's net total. The forward supply calendar is expected to remain light for the rest of the year, which should support secondary prices.

While improving fundamentals and favorable technicals—given limited net supply and strong offshore institutional demand—leave us with a constructive view on U.S. high yield in the near term, we are not as bullish in the long term given tight spreads and elevated tail risks. That said, we continue to see relative value opportunities in selected higher yielding CCC-like issuers, however if CCC spreads continue to tighten from current levels, this view could change. We remain cautious on commodities and auto-related names, while maintain an overweight to electric power companies and U.S. consumer-related credits.

Our primary concern for U.S. high yield remains a recession triggered by an unforeseen event, however we expect such a scenario to result in less spread widening than in previous recessionary episodes due to the relative caution that issuers and investors have been exhibiting.

The S&P/LTSA U.S. Leveraged Loan Index returned +1.1% in Q3, which brings the year-to-date return +3.0%. Lower rated loans—although only approximately 5% of the index—continued to outperform, as CCC loans returned +1.8% during the quarter, outpacing Bs and BBs by approximately 80 bps. As was the case with high yield bond funds, loan funds also reported outflows for the quarter, with a modest -\$73 million leaving the asset class in Q3. However, year-to-date net flows remain positive for U.S. leveraged loans, with \$17.3 billion coming into the market. In addition, strong demand from CLO formation is providing support for the asset class.

New issue volume in the loan space slowed in the third quarter, with \$153 billion of primary market issuance. This compares to \$331 billion and \$246 billion in Q1 and Q2, respectively. Despite the slowdown, total bank loan issuance is nearing \$730 billion for the year, putting it ahead of the annual record of \$670 billion set in 2013. Of note, the bulk of the activity has been from refinancing and repricing related, accounting for 73% of new issuance.

European Leveraged Finance

The European high yield market recovered sharply to start Q3—following the rates-induced selloff in late June—and remained relatively stable through the summer slowdown before picking up momentum as the quarter drew to a close. For the quarter, the broad European high yield index returned +1.69% and has returned +6.03% so far this year. As was the case in Q2, lower-rated credits outperformed as CCCs returned +3.45% in Q3 compared to +1.48% for Bs and +1.61% for BBs.

While the size of the monthly outflows reported during Q3 decreased following July's sizeable €1.2 billion withdrawal, flow activity remained negative with €38 million and €140 million leaving the asset class in August and September, respectively, as noted by JPMorgan. Year-to-date net flows are approaching €-3.0 billion.

The primary market got off to a fast start as July was the year's heaviest month, driven mostly by underwriters' general eagerness to bring deals to market ahead of the August holidays. After a slow August, the new issue pipeline ramped back up significantly in September with €10 billion of supply coming to market.

Overall, new issue volume has increased almost 70% year-to-date compared to the same period last year. And while the heavy issuance is expected to continue through October, the supply could be readily absorbed as more than 60% of European high yield managers are said to be carrying cash balances that are higher than their historical averages. We would note, however, that issuers have shown a preference to issue loans rather than bonds, a trend that has shown no signs of waning since gathering pace this year.

Moody's default rate ended Q3 at 2.6%, down slightly from 2.7% at the end of the Q2. Looking ahead, the year-end default rate forecast remains unchanged since last quarter at 2.0%. Given expectations for the European economy to continue to grow slowly, issuers opportunistically taking advantage of favorable market conditions to refinance debt, and the lack of a major near-term maturity wall, we expect default rates to remain low over the next 12 months.

European leveraged loans posted a modest return of +0.67% in Q3, and have returned +3.08% year-to-date. Despite the modest performance on the quarter, we still see strong investor demand for the asset class, supported by elevated levels of managed account loan money, increased CLO formation, robust demand from banks, and expectations for future rate increases. We acknowledge that

additional spread tightening and continued demand for leveraged finance products could prompt some aggressive underwriting, and a degree of caution should be exercised.

Overall, we remain constructive on European high yield with expectations that spreads may continue to tighten modestly from current levels on improving fundamentals, reduced political risk, and a fair macro environment. The lack of material recession risk in Europe in the near term, as well as expectations that the ECB will remain accommodative for now, further supports our outlook.

We remain overweight B-rated issues amid expectations for spread compression—driven by continued ECB support—in the higher-rated buckets that could filter down the risk spectrum. We will also look to tactically increase our BB allocation through the primary market. Additionally, we continue to seek out attractive relative value opportunities between sterling-denominated and euro-denominated bonds.

OUTLOOK: Moderately constructive on high yield in the near term given improving fundamentals and favorable technicals. Elevated tail risks and the threat of a recession triggered by an unforeseen event leave us less bullish in the long term. We see the best value in CCCs and continue to manage overall portfolio risk via higher cash balances and allocations to AAA CLOs.

Emerging Market Debt

The emerging market debt sector continued its solid performance in Q3, with all segments posting healthy returns. In the hard currency sovereign space, the higher-yielding issuers reported the highest returns, particularly El Salvador (+9.7%), Belize (+7.9%), and Suriname (+7.06%). Additionally, a number of countries returned more than 5%, including Argentina, Egypt, Ethiopia, Ghana, Iraq, Suriname, and Mozambique. The common themes noted throughout the quarter included a rebound in commodity prices, a reach for yield, and improved idiosyncratic factors (e.g. political outlook).

The big underperformer in Q3 was Venezuela, which returned -10.57% amid the sanctions imposed by the U.S. and the heightened economic and political crisis. Of note, the sanctions do not prevent investors from trading outstanding bonds of the sovereign or PDVSA in the secondary market. Despite Venezuela's general underperformance, its bonds that are scheduled to mature or amortize this year have significantly outperformed.

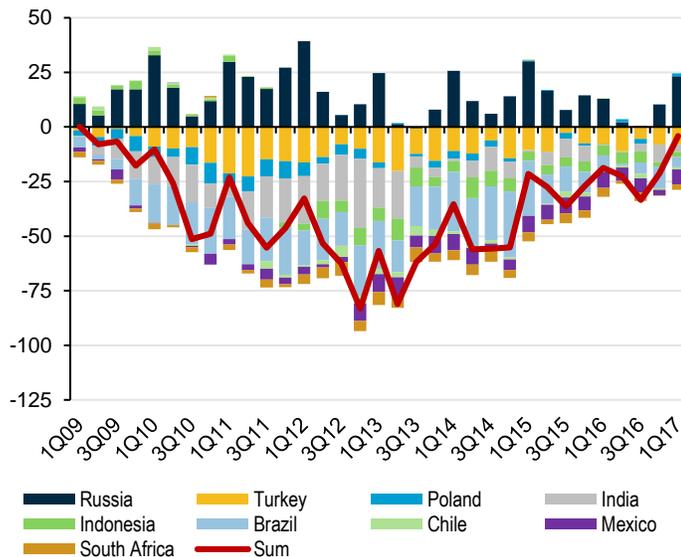
	Total Return (%)		Spread / Yield Change (bps)		OAS (bps) / Yield % 9/30/17
	Q3	YTD	Q3	YTD	
EM Hard Currency	2.63	8.99	-23	-55	287
EM Local (hedged)	1.23	4.60	-16	-81	5.99
EMFX	2.00	9.35	-29	-60	3.96
EM Corporates	2.11	7.23	-14	-37	277

Source: J.P. Morgan as of September 30, 2017. Past performance is not a guarantee or reliable indicator of results. An investment cannot be made directly in an index.

In spread terms, the hard currency index is at +287 bps, more than +50 bps wide from the tightests reached within the past five years. Spreads have shown an ability to tighten past current levels, and they have been particularly resilient amid the most recent repricing of U.S. Treasuries. Despite lagging sovereigns, EM corporates have generally performed steadily—with select outliers—and still present some attractive opportunities (See accompanying box on EM corporates).

On a year-to-date basis, the top performing EMD assets were EMFX with a return of more than 9% and unhedged local bonds with return of more than 10%. This performance reflects the sector's attractive valuations and the improved growth prospects for EM, which have been supported by a healthy balance of payment flows. In fact, there has been a notable improvement in current account balances since the commodity fallout in 2013, as observed in the following chart. In EMFX, this has contributed to outperformance in commodity-sensitive currencies, such as those in Brazil (BRL), Chile (CLP), Colombia (COP), and Russia (RUB). Elsewhere, the Mexican peso continues to rebound from oversold levels.

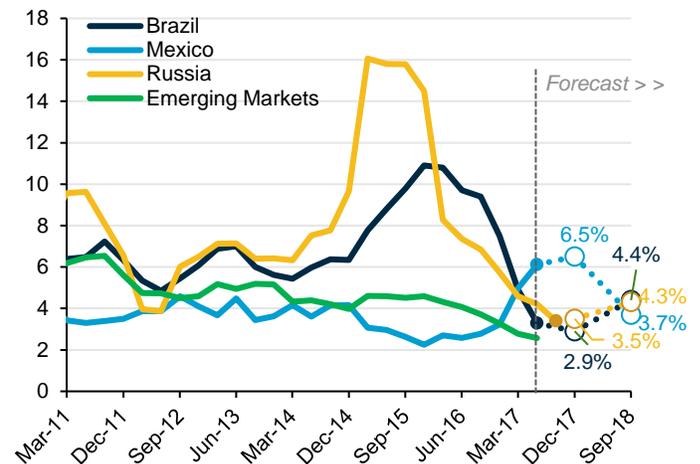
EM CURRENT ACCOUNTS IMPROVED SHARPLY SINCE 2013 (U.S. \$BN)



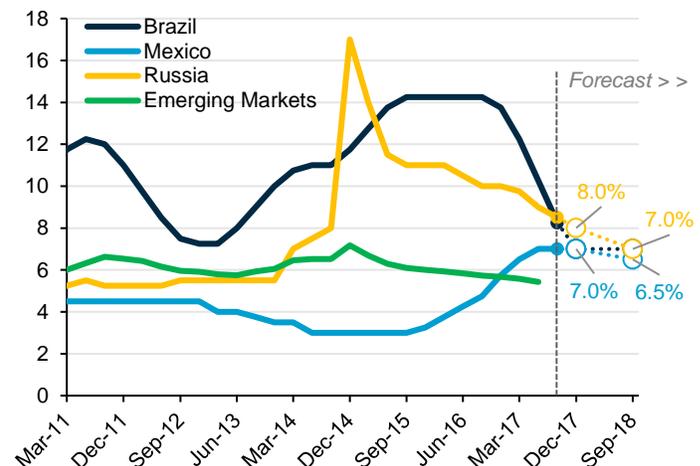
Source: Bloomberg as of March 2017.

Another Q3 theme was the strong returns in euro-related Central and Eastern European currencies as the euro outperformed the U.S. dollar on uncertainty regarding U.S. policy. Local bonds that posted the strongest returns were in markets where the central banks are cutting rates—Brazil, Peru, Indonesia, and Hungary. Conditions in a number of local bond markets could support performance going forward, including those where policymakers are likely to cut rates over the next year or sooner, such as Mexico, or where tight monetary policy presents very high nominal yield, such as in Turkey. The case for local bond allocations is supported by both the positive outlook for EMFX and by the dramatic decline in EM inflation, as indicated in the following chart. The case for EMFX going into the end of the year is supported by synchronized global growth, low inflation, and high EM real yields. We will monitor attempts by central banks to limit currency appreciation and the effect that balance sheet normalization in the developed markets—and any consequent market repricing—have on overall sentiment and risk appetite.

MODERATING CPIs ACROSS EM (YOY %)



CENTRAL BANK POLICIES SHOULD BOLSTER LOCAL RATES (%)



Source: Haver Analytics, PGIM Fixed Income as of Q3 2017.

Not to be overlooked, the positive backdrop for EM assets is also supported by a constructive growth outlook for China over the near term and prospects that President Xi's influence will consolidate after the Party Congress in mid-October. Attempts to address financial instability and continued efforts to deal with imbalances remain a risk, but also appear manageable from our vantage point.

Hard Currency Relative Value Opportunities Abound

Within EM hard currency assets, there is still room for spreads to tighten in sovereigns, quasi-sovereigns, and corporates. For example, value remains in select quasi-sovereigns that trade at attractive spreads relative to the sovereign, such as Pemex, Petrobras, and Eskom. These issuers trade at levels that range from +130-170 bps relative to similar-maturity sovereign bonds. Likewise, a number of EM countries continue to reprice in anticipation of rating upgrades, including Argentina, Ukraine, and Russia. EM corporates also present opportunities for asset managers capable of conducting thorough credit analysis, as indicated in the accompanying box.

Supportive Inflows

Emerging market flows have been consistently positive after the initial outflows following last year's U.S. elections. EM fixed income retail flows have reached about \$56 billion, with more than half going into hard currency investments. Institutional inflows are estimated to be over \$100 billion. These inflows have come amid concerns over developed market central banks tapering their QE programs in addition to geopolitical uncertainty in North Korea and other global hotspots. Potential idiosyncratic selloffs in EM assets related to the political calendar in Q4 (China's Party Congress as well as developments in South Africa and Argentina) and next year (Mexico, Brazil, and Russia) are likely to present opportunities to take advantage of mispriced assets. The market's appetite for new issues—totaling over \$300 billion reflects the increased appetite to add to EM allocations. Even a default and restructuring in the Venezuela/ PDVSA complex is unlikely to spread contagion within the broader EM sector as the idiosyncratic nature of the issues have been well telegraphed and priced into the relevant assets.

The Nuanced Evolution of the EM Corporate Market

The evolution of the EM corporate sector continued in 2017 as investors' search for yield supported constructive refinancing conditions and the emergence of debut issuers from some under-represented industries. While EM corporate spreads have mirrored the tightening across the broader spread sectors, the asset class continues to present opportunities for asset managers capable of conducting thorough credit analysis.

Similar to developed market corporate issuance, the primary market for EM corporates maintained a brisk pace in 2017 and issuance through Q3 already exceeded 2016's total of \$317 billion, and estimates from J.P. Morgan place the full-year issuance at \$440

billion. By comparison, EM sovereign issuance only totaled about one third of the corporate issuance through Q3. Primary issuance continued to expand the investable universe of EM corporates as the market capitalization of the J.P. Morgan CEMBI Broad Diversified Index (the Index) stood at \$945 billion at the end of August 2017, an increase of more than 80% since August 2012.

A receptive new issue market also facilitated refinancing activity. Although idiosyncratic credit risk exists, the ability to refinance, combined with stabilizing currencies and improving economic growth in most EM economies, contributed to a historically low year-to-date default rate of 1.1% on the Index compared to 3.7% in 2016. With that backdrop, the Index posted a return of 2.11% in Q3 and 7.23% year-to-date in 2017. And areas of opportunity remain across the asset class as we look ahead.

The national oil companies of some Latin American countries, such as Brazil, Colombia, and Mexico, have significantly lowered their operating costs, optimized their capital allocations, and started to de-lever their balance sheets to make them commensurate with the lower oil price environment. The consequent balance sheet strengthening has freed up capital to expand exploration, broaden hydrocarbon production, and replace reserves. As integrated oil and gas companies, the entities have also improved the profitability of their midstream and downstream operations, which have become significant contributors to their bottom lines.

The companies' largest shareholders—the respective Latin American governments—have introduced reforms and policy measures that have liberalized the oil and gas industries in several countries, opening up their rich deep-water and unconventional hydrocarbon resources to foreign capital and technology. It has also been the first time that international oil companies, including the supermajors, have had the opportunity to participate in farm outs in the mid- and downstream sectors and to form joint ventures. We believe the credit ratings of these companies will be upgraded over the next year or so due to the improvement in their stand-alone fundamentals, assuming that the ratings of their respective governments stabilize. Importantly, current valuations do not fully reflect the potential for rating upgrades.

Bonds of Latin American transportation infrastructure companies also offer relative value opportunities. Infrastructure is a diverse sector in Latin America with companies receiving concessions to build and operate airports, toll roads, and railroads. Some bond issuers are quasi-sovereign entities while others are private companies. These bonds are usually backed by the cashflows associated with the respective concessions, which are usually amortizing and more predictable and less volatile than the cashflows of other companies. Sovereign risk is an important consideration for this sector as the granted concessions are subject to political risk. The stability of the local economies and currencies are also important credit factors to consider, but to a lesser degree. Our preferred credits have a healthy spread pick-up to the sovereign and construction risk is minimal.

We also like the subordinated bonds of certain Latin American financial institutions in Mexico, Brazil, and Colombia. Senior bonds of these issuers currently have very tight spreads, and moving down the capital structure provides an opportunity to pick up additional spread for only slightly more risk. We particularly like this trade in high-quality banks that should manage through bouts of economic weakness with relative ease and in the event that some pockets of deteriorating asset quality last longer than expected. Although Brazil and Colombia are still experiencing rising non-performing loans, we believe that the trend of deteriorating asset quality is coming to an end.

We find value in Indian quasi-sovereign corporates given the historical strong support from the government. We also see a strong technical bid for these names as substitutes for sovereign debt considering the lack of Indian government debt denominated in U.S. dollars. In particular, we see value in companies associated with quasi-sovereign names where the associated entity provides strategically important services. For example, we like the bonds issued by an oil refinery that is a joint venture between a government-owned entity and a major conglomerate. In addition to robust domestic demand for fuels, we believe the refinery enjoys implicit government support.

Select Chinese state-owned enterprises also offer relative value. These enterprises are not only platforms for the execution of government initiatives, but also have the potential for strong growth going forward. For example, a large Chinese agrochemical producer will likely experience a degree of secular growth as the government has been actively seeking enhancements to food security, and state-owned banks have provided favorable financing. The global agrochemical industry is undergoing consolidation, and we believe that companies with leading positions in the sector stand to benefit the most as they can leverage their scale and diversity to further expand their market share. We believe that the credit ratings of companies fitting this profile will be upgraded as they execute their policy mandates, and current valuations have yet to reflect this potential.

OUTLOOK: Positive. The relatively healthy fundamental backdrop in EM—supported by rebounding growth, inflows, and attractive valuations—will likely help assets end the year with strong returns. Selloffs are likely to be buying opportunities in lower-rated, hard currency assets, EMFX, and local bonds.

Municipal Bonds

In Q3, AAA-rated municipal bonds outperformed U.S. Treasuries out to 20 years and underperformed slightly in the 30-year segment of the curve. A relatively stable rate environment contributed to robust mutual fund inflows with approximately \$8 billion in Q3 and \$13 billion year-to-date. Supply remained manageable with issuance of \$285 billion YTD, approximately 16% lower vs prior year. Year-to-date total

returns are +4.66% and +7.72% for high grade and high yield municipal bonds, respectively. High yield index returns were positively impacted by Chicago Board of Education (B3 stable/B negative/B+ negative), which benefited from increased state funding following implementation of a new funding formula for schools. The tobacco sector remains among the top performing sectors YTD (+18.1%). Long taxable municipal total returns were 3.16% in Q3 and 8.96% YTD, outperforming the long corporate index. Tightening credit spreads for Illinois general obligation bonds contributed to the outperformance. Inquiry remains robust with limited dealer inventory available.

On the credit front, any Puerto Rico bankruptcy hearings and creditor negotiations have been delayed following the damages from Hurricane Maria. While significant federal aid will follow, rebuilding and recovery is expected to be a long and arduous process with increased uncertainty surrounding ultimate bondholder recoveries.

The state of Illinois (Baa3 negative/BBB- stable/BBB negative) avoided a downgrade to below investment grade following the passage of a FY2018 budget that includes expenditure cuts and permanent tax hikes. While this is positive news and resulted in significant credit spread tightening, the state's large unfunded pension and other post-employment benefit (OPEB) liabilities will continue to present long-term challenges. In addition, the state has accumulated close to \$16 billion in unpaid bills, which also needs to be addressed. The state is scheduled to issue \$6 billion in tax-exempt bonds early in Q4 to begin to pay down these bills. Credit spreads for the city of Chicago (Ba1 negative/BBB+ stable/BBB- stable) and Chicago Board of Education (B3 stable/B negative/B+ negative) also narrowed considerably following passage of the new state funding formula for education. We continue to believe that certain states and localities will struggle with underfunded pension and OPEB liabilities. However, we also recognize that states and localities generally have greater flexibility to reduce OPEB liabilities since they don't benefit from the same contractual and constitutional protections as pensions.

While technicals have the potential to soften early in Q4, we would expect the environment to become more supportive by year end as we approach the January reinvestment period. We, therefore, view any weakness as a buying opportunity. A range bound interest-rate environment should continue to be supportive of mutual fund flows. Tax-reform discussions will be closely monitored; however, preliminary proposals indicate that municipal bond tax-exemption will not be marginalized. We also continue to believe that the events unfolding in Puerto Rico will not impact the broader municipal market. Looking ahead, we expect taxable municipals to perform in line with corporate bonds with the potential for outperformance should corporate M&A activity pick up.

OUTLOOK: Positive. Improving technicals by year end should lead to outperformance vs. Treasuries .

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Source of data (unless otherwise noted): PGIM Fixed Income and Bloomberg as of October 2017.

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Performance for each sector is based upon the following indices:

- U.S. Investment Grade Corporate Bonds: Bloomberg Barclays U.S. Corporate Bond Index
- European Investment Grade Corporate Bonds: Bloomberg Barclays European Corporate Bond Index (unhedged)
- U.S. High Yield Bonds: BofA Merrill Lynch U.S. High Yield Index
- European High Yield Bonds: Merrill Lynch European Currency High Yield Index
- U.S. Senior Secured Loans: Credit Suisse Leveraged Loan Index
- European Senior Secured Loans: Credit Suisse Western European Leveraged Loan Index: All Denominations Unhedged
- Emerging Markets USD Sovereign Debt: JP Morgan Emerging Markets Bond Index Global Diversified
- Emerging Markets Local Debt (unhedged): JPMorgan Government Bond Index-Emerging Markets Global Diversified Index
- Emerging Markets Corporate Bonds: JP Morgan Corporate Emerging Markets Bond Index Broad Diversified
- Emerging Markets Currencies: JP Morgan Emerging Local Markets Index Plus
- Municipal Bonds: Bloomberg Barclays Municipal Bond Indices
- U.S. Treasury Bonds: Bloomberg Barclays U.S. Treasury Bond Index
- Mortgage Backed Securities: Bloomberg Barclays U.S. MBS - Agency Fixed Rate Index
- Commercial Mortgage-Backed Securities: Bloomberg Barclays CMBS: ERISA Eligible Index
- U.S. Aggregate Bond Index: Bloomberg Barclays U.S. Aggregate Bond Index