3rd QUARTER OUTLOOK

PGIM FIXED INCOME

July 2017

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Assessing the Opportunities with Multiple Risks in Play

In this edition of PGIM Fixed Income's quarterly outlook, **Robert Tipp, CFA, Managing Director, Chief Investment Strategist and Head of Global Bonds**, explores the ramifications of a coalescing EU, the U.S. dollar's fading strength, and the possibility of a new Fed chair in early 2018. With those factors in mind, economic fundamentals and market technicals still present value-adding opportunities in fixed income portfolios with bonds likely to outperform cash over the intermediate to long term given steep yield curves and the potential for tighter spreads (page 3, click here to read).

Risk assets continued to climb a wall of worry in Q2, and we believe that these risks will likely continue to mount in the coming quarters while higher valuations and tighter spread levels reduce comfort margins. **Arvind Rajan, PhD, Managing Director, Head of Global and Macro**, provides a tour of the most prominent risks that keep us up at night (page 5).

In our global economic outlook, **Jürgen Odenius, PhD, Managing Director, Chief Economist and Head of Global Macroeconomic Research**, examines the solidifying global economic backdrop and whether potential changes in China and in European monetary policy might affect the economic momentum across the emerging markets (page 6).

Recently Released White Papers

1 The Return of Absolute Return (June 2017)

Michael Collins, CFA, Managing Director, Senior Investment Officer

- This paper explores how a well-diversified, duration-constrained absolute return portfolio seeks to generate alpha while mitigating interest-rate risk.

2 Fed Shift Set to Muddy MBS Waters (June 2017)

Stewart J. Wong CLU, ChFC, Head of Agency Mortgage-Backed Securities and Senior Portfolio Manager

- As the Fed tapers its MBS reinvestments, the market will need to absorb the increase in net supply and the worsening convexity within the sector.

3 Our Sovereign ESG Framework (May 2017)

Jürgen Odenius, PhD, Managing Director, Chief Economist, Head of Global Macroeconomic Research, and Yi Lu, Analyst, Global Macroeconomic Research

- This paper (click here to read a caption in our Emerging Markets section) details our proprietary framework for assessing countries' ESG performance.

4 The Compelling Case for Global Senior CLOs (May 2017)

John Vibert, Managing Director, Head, Structured Products

- We look at how AAA and AA CLO tranches offer a compelling safe haven—the ability to generate comparatively high risk-adjusted returns.

5 The Hidden Cost of Mismatching Duration (May 2017)

Gary Knapp, Managing Director, Head of Liability-Driven Strategies, and Tom McCartan, Vice President, Liability-Driven Strategies

- How much should pension plan sponsors hedge interest rates? More than you may think.

6 The Bond Bull's Twain Moment (April 2017)

Robert Tipp, CFA, Managing Director, Chief Investment Strategist, Head of Global Bonds

- Does the increase in rates driven by the Trump bump, the ECB taper, and the so-called reflation trade turn out to be another buying opportunity?

Sector Views

Corporate Debt (page 9, click here to read): Modestly positive given fair spread levels, strong investor demand, and economic growth momentum. Still favor U.S. money center banks.

Global Leveraged Finance (page 10): Neutral for U.S. high yield as we see room for additional spread tightening, but remain cautious given elevated macro tail risks. We prefer the CCC portion of the U.S. market (offset with higher cash balances), but continue to explore opportunities across all quality buckets. Our outlook on the energy sector remains cautious, but we're seeking opportunities. We maintain a favorable outlook for European high yield given the supportive technical backdrop and low default expectations.

Emerging Markets Debt (page 11): Positive as we would use periods of volatility as buying opportunities, and we're maintaining our barbell positioning in hard currency sovereigns. In local rates, we see potential rate cuts in several countries, while we're emphasizing relative value in EMFX.

Municipal Bonds (page 13): Neutral. Strong technicals to start Q3 should begin to abate by quarter end; in addition, solid outperformance vs. Treasuries in Q2 leaves valuations less attractive compared to earlier this year.

Global Rates (page 14): Our constructive view is based on the attractive tactical opportunities that exist throughout the developed rates markets as central bank policies progress on varied trajectories.

Agency MBS (page 14): Underweight in favor of high quality spread sectors.

Structured Products (page 15): We remain positive on top-of-the-capital structure assets and the fundamentals of GSE credit risk mezzanine cashflows, but are cautious on GSE spreads at current levels. We are negative on CMBS mezzanine tranches. Given tight spreads and the demand for leverage, we are increasingly looking at financing trades rather than exposure to underlying assets.

Slow and Steady Still Winning the Race

Another quarter gone by and the evisceration of the bond market has yet to come. In fact, returns for the quarter weren't bad—at least relative to cash (see the following table). The year-to-date returns were better yet, with the higher-yielding / more economically sensitive sectors posting the strongest returns and the lower-yielding market segments generally posting single-digit positive returns—arguably a respectable performance given the trend towards tighter monetary policy both in Europe and the U.S.

Economically Sensitive Sectors Lead YTD Returns

		Total Return (%)				
Sector	Q2 2017	YTD 2017	2016	2015	2014	2013
Long IG Corporates	4.94	6.36	11.0	-4.6	15.7	-5.7
Global Aggregate	2.60	4.41	2.1	-3.2	0.6	-2.6
U.S. IG Corporate Bonds	2.54	3.80	6.1	-0.7	7.5	-1.5
European High Yield Bonds	2.26	4.27	10.8	1.3	5.1	9.1
EM Debt Hard Currency	2.24	6.19	10.2	1.2	7.4	-5.3
U.S. High Yield Bonds	2.14	4.91	17.5	-4.6	2.5	7.4
Municipal Bonds	1.96	3.57	0.3	3.3	9.1	-2.6
EM Currencies	1.93	7.21	3.5	-7.6	-7.0	-2.0
U.S. Aggregate	1.45	2.27	2.7	0.6	6.0	-2.0
CMBS	1.35	2.30	3.3	1.0	3.9	0.2
EM Local (Hedged)	1.22	2.80	4.7	-2.2	3.2	-4.2
U.S. Treasuries	1.19	1.87	1.0	0.8	5.1	-2.8
European Leveraged Loans	1.02	2.28	7.0	3.6	2.1	9.0
Mortgage-Backed (Agency)	0.87	1.35	1.7	1.5	6.2	-1.5
U.S. Leveraged Loans	0.76	1.91	9.9	-0.4	2.1	6.2
European IG Corporate	0.36	0.62	4.7	-0.6	8.4	2.4

Sources: Bloomberg Barclays except EMD (J.P. Morgan), HY (Merrill Lynch), Senior Secured Loans (Credit Suisse). Performance is for representative indices as of June 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.

The Bullish Bond Beat Goes On

Before we get into the waning and waxing of the prior quarter, it's worth taking a step back to recognize that this kind of price action—modest returns, some setbacks, then the reversion to modest returns—has been the pattern in the bond market for a few years running. All said, the market has racked up substantial excess returns relative to cash. More importantly, we expect this pattern to continue, albeit with a bit more modest returns going forward. In short, if the market is in fact a bit cheap to fair value and the "low and range bound" rates thesis holds, bonds will continue holding up their end of the bargain in diversified portfolios.

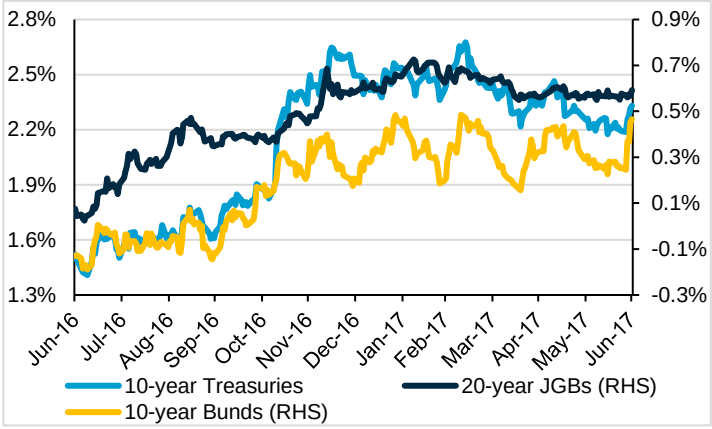
Trading Places: The U.S. and Europe as DC Stalls

Instead of the Trump sweep leading to broad healthcare reform and a fast track to stimulative fiscal policy, Washington bogged down in political intrigue, hearings and investigations, as well as the normal legislative hurdles. Policy disappointment, along with modestly softer economic data, resulted in a modest decline in long-term U.S. rates.

Mario Draghi has Reloaded the Bond Market

By contrast, bund yields rose as Europe as a whole seemingly rose to meet the challenges that surfaced in Q2. The economy strengthened, three failing banks were resolved (two in Italy and one in Spain), and election results in France ushered in an aggressively pro-Europe, economic reform minded government. Even Greece received passing marks from Europe, clearing the way for another tranche of aid. As the quarter wound down, ECB chief Mario Draghi declared a shift from deflation risk to reflation, promising that the ECB's policy would "accompany" the European economic recovery, suggesting that beyond the 2017 QE commitment, the ECB's agenda in 2018 would include ending the bond buying program and mulling rate hikes.

While Japanese Yields Held Steady in Q2, Long-term U.S. Yields Fell as Optimism for Stimulus Waned. Meanwhile, Economic Recovery, Favorable Election Results, and the ECB's Turn from the Dovish Side Pushed Bund Yields Higher



Source: Bloomberg as of June 30, 2017

While Not Front and Center in Q2's Bond Market Action, Some Important Issues Lie Ahead for Investors

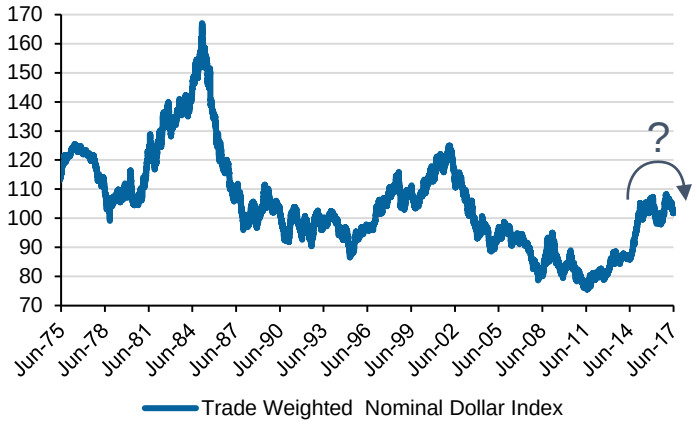
Europe: Almost Feeling the Union

With the results of the French election promising a turn towards fiscal conservatism and economic reform, French spreads tightened to 35 bps over bunds—about where they started the year—after trading 80 bps wide prior to the election. Greek yields, which started the year and the second quarter roughly 700 bps over bunds, closed in on 500 bps over as the quarter ended. With a small budget surplus, Greece is well positioned to bring up the rear in Europe. At the other end of the spectrum, with polls suggesting Angela Merkel will remain German Chancellor beyond this year, prospects are improving that France and Germany will lead with reforms that strengthen the Union.

Euro Up, Dollar Downtrend Ahead?

Looking ahead, with Mario Draghi having turned the ECB's narrative away from easing and towards QE tapering and potential rate hikes, the euro's rise accelerated in the final days of Q2. Assuming the euro strength is durable, this will likely bring a significant improvement in the breadth of currencies that have recently advanced vs. the dollar, which so far has included several emerging market currencies, as well as the "dollar bloc" commodity exporters. Over the short term, the dollar's decline may pause, but nonetheless, the odds appear to be increasing that the dollar is well into a multi-year bear market.

The Dollar: On the Cusp of Rolling Over?



Source: Bloomberg as of June 30, 2017.

The Fed's Runoff Plan: Like Paint Drying, *But Who Will Watch?*

As discussed in the following economics section, the Fed—intent on beginning its long-awaited balance sheet runoff before year end—unveiled its plan at the June FOMC meeting. With the five-quarter ramp up expected to begin before year end, the Fed is hoping the process will be uneventful. Beyond this year's assumption for one additional rate hike and the commencement of the runoff, the next big potential event for the market is the replacement question: who will head the Fed after Janet Yellen's term expires in early 2018? A dove intent on boosting the Trump growth agenda? Or, a more rules-based chief intent on getting rates up to meet the Fed's date with the dots?

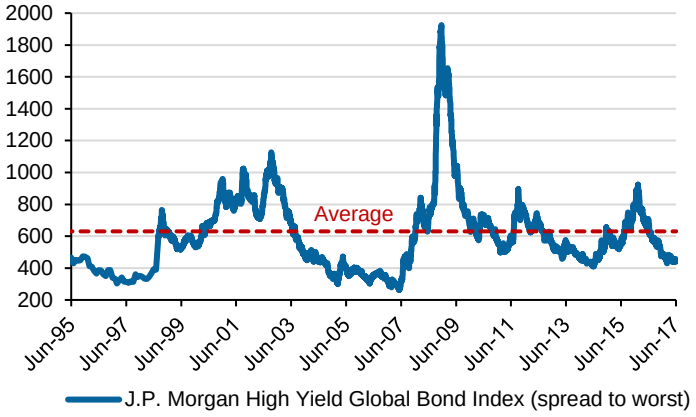
Never Mind the Dots, Mind the Yields;That's Where the Money Is

In our view, the deciding factors for the bond market won't be the Fed or the ECB; it will be economic fundamentals and the market's balance of supply and demand. From this perspective, our opinion is that rates are probably a bit above fair value in the G3 bond markets. In particular, it looks like the market has priced in an unrealistic amount of tightening in the years to come in both the U.S. and Europe. Furthermore, the euro has already begun to rise in response to the range of positive developments on the continent. That, in and of itself, may sufficiently take the edge off of European growth and inflation, pushing the ECB away from any aggressive course towards reduced accommodation. In short, the current configuration of yield curves relative to the fundamental backdrop looks just a bit too high and too steep. As a result, government bonds appear poised to continue to outperform cash over the intermediate to long term.

Spreads: Less on the Table, and a Bit Later in the Cycle, But Still a Positive Outlook

No doubt, spreads have narrowed to below average levels in the non-government sectors, and, yes, there are a range of risks on the horizon that are difficult to measure (see the following box on risks). Nonetheless, the global expansion appears poised to continue, supporting credit fundamentals. While the expected ECB taper and Fed runoff will take a bite out of the demand side of the bond market equation, other investors, both private and official, seem likely to pick up the slack, allowing spreads to continue tightening in the absence of an unexpected material change in the environment.

While Global High Yield Spreads—and Spreads in General—Have Tightened to Below Average Levels, History Shows There May be Room for More



Source: Bloomberg as of June 30, 2017

The Bottom Line: Yes, there are risks to the outlook. But all said, economic fundamentals and market technicals still present value-adding opportunities in fixed income portfolios with bonds likely to outperform cash over the intermediate to long term given steep yield curves and the potential for tighter spreads.

Building Blocks In the Wall of Worry

As outlined in our bond market outlook, it is probably too early to call an end to the long phase of gradual growth and abundant liquidity. That said, risk assets are climbing a wall of worry, and we believe that these risks will likely mount in the coming quarters while higher valuations and tighter spread levels reduce comfort margins. Here is a tour of the most prominent risks that keep us up at night.

Central Bank Policies

After extraordinary monetary stimulus over the past several years, major central banks appear set on tightening in an environment where inflation is still running below official targets. All of the G3 central banks have turned less accommodative in the recent past, increasing the risks of overtightening going forward.

- Of the G3 central banks, the Fed likely poses the greatest overtightening risk—one that may ultimately pull the next recession forward. The risks from the Fed stems from the reduction in U.S. labor overcapacity, a decline which has underscored the concern that the reduction will spill over into inflation pressures. Resolving the wide gap between the Fed's median dot at the end of 2019, at 2.9%, and the market's implied policy rate, at 1.66%, could prove painful. These risks could rise if potential replacements for Chair Yellen and other FOMC voters carry more hawkish policy views.

- With ECB asset purchases reaching self-imposed limits and a formal tapering decision possible by September of 2017, this shift could weaken some of the key supports that have bolstered European and global growth over the past several years.

- Chinese authorities may well choose to reduce the economic credit stimulus of approximately a quarter turn of GDP per year after they have held their 19th Congress in the fall of 2017 and the retiring members of their Politburo have been replaced.

Geopolitical Risks

While geopolitical risks can stem from a number of places, the Middle East and North Korea are two locations of particular concern in mid-2017.

- The ultimatum issued to Qatar is a symptom of a more fractious Gulf, with rising tensions between Saudi Arabia/GCC and other players including Qatar, Turkey, and Iran. This deepens the stakes and risks in a region already beset by weak oil prices. Near-term risks include escalation of regional political tensions, while longer term—unless oil prices recover—the region faces falling FX reserves, budget strains, and weakness in the banking sector.

- North Korea's ongoing tests of its nuclear and missile capabilities pose a challenge to the Trump administration, and the risks remain that Chinese and other diplomatic efforts will fail to rein in the regime, triggering a military confrontation.

- Additional risks emanate from the Trump agenda in the U.S. and from the upcoming Italian elections in Europe. However, Trump bump expectations have subsided, while near-term risks in Europe have also faded somewhat due to the pick up in growth, consolidation of the political center in Germany and France, and the potential for reforms in France.

Exogenous Event Risks

These risks are hard to enumerate, let alone quantify, but they are no less real than those threats in plain sight. Here are two that bear watching.

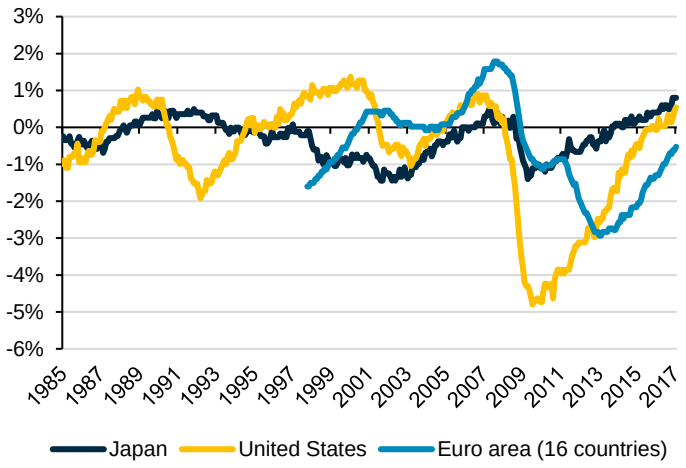
- A global pandemic from diseases, such as Zika, Ebola, or a respiratory virus, such as SARS, remains a concern due to growing global populations and urbanization, human encroachment into new environments, increasing frequency of heat waves and flooding, international travel, civil conflict zones, and poor medical coverage in frontier countries.

- As a whole, global cyberattacks, unplanned IT or communication outages, and data breaches constitute a growing threat to markets, which are vulnerable to attacks on e-services or on entities that provide critical physical or financial infrastructure. For example, the Wannacry attack in May 2017 crippled computers in 100 countries, including those used by the UK's National Health Service.

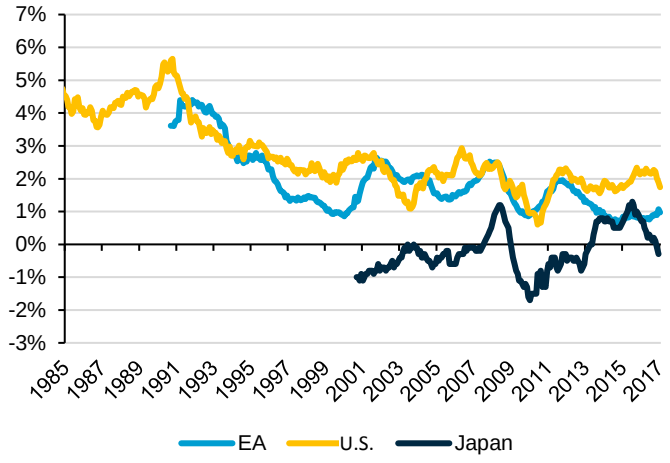
Solidifying Growth as Monetary Policy Accommodation Wanes

The second quarter in large part delivered on PGIM Fixed Income's benign near-term macro outlook. The expansion of the global economy continued to gather momentum, albeit at a moderate pace, and key central banks took further steps towards removing extraordinary monetary policy stimulus, although to different degrees. As expected, labor markets have continued to strengthen and the NAIRU[1] gap—the difference between the NAIRU and the current unemployment rate—points to dissipating slack, especially in the U.S. and Japan and parts of the euro area, as shown below. At the same time, core inflation rates have so far remained broadly stable.

NAIRU—Unemployment Rate



Core CPI



Source: Haver Analytics as of April 2017

Against this backdrop, market expectations have continued to diverge further from central banks' apparent aspiration for policy normalization. At the time of writing, forward markets had priced in about two hikes of the Fed funds rate by the end of 2019—a far cry from the approximate seven hikes that are implied by the median in the Fed's dot plot. The European Central Bank (ECB) has seemingly initiated the reduction in its policy accommodation. Whereas as previously the ECB left open the possibility of adding further accommodation, President Draghi, in a recent speech that got the market's undivided attention, pointed to the need for curtailing accommodation as the recovery solidifies. Underlying this policy stance is the assessment that tighter labor markets will eventually result in rising wage pressures and, therefore, engender price inflation. It is this outlook that seems to define a fault line between the confidence of central bankers and market skepticism that remains rooted in the view of broken Phillips curves. PGIM Fixed Income's base case, as discussed in our previous Quarterly Outlook (click here to read), remains that deflation risks have abated in the key economies with the notable exception of Japan. Reflation remains on course, but has come under threat recently by steeper declines in commodity prices, especially oil prices. Meanwhile, global growth may well be nearing its peak, given the gradual unwinding of monetary accommodation and depending on the prospects for continued China stimulus.

Reducing the Fed's Balance Sheet

In the U.S., rising concerns that the Trump reform agenda may have all but come to a halt along with a mixed rebound from an already weak first quarter have tempered some of investors' post-election enthusiasm. However, private sector demand remains solid and prospects for continued demand strength are boosted by lower energy prices and the resulting gains in real household incomes. On the policy front, deregulatory steps are continuing, and even landmark policy moves, such as health-care and tax reform, are moving ahead, at least for now. Even if not meeting the very high expectations immediately following elections, these offer prospects of a demand- and supply-side boost that could yet trigger a resumption of U.S. growth optimism. Early fears of protectionist moves appear to have been replaced by expectations of market-opening steps—notably in the initial discussions with China—which would, other things being equal, also be growth positive.

Moreover, the labor market continues to tighten. The U.S. has continued to create 189,000 jobs on average over the past twelve months, although this pace slowed to 121,000 over the last three months. Fed chair Janet Yellen continues to emphasize labor market strength and the resulting expectations for inflation to move up and stabilize near 2% over the next couple of years. Within this context, the Fed outlined its policy guiding balance sheet reduction. After an initial phase in, the Fed would taper its reinvestments fairly rapidly.[2] As a base case, PGIM Fixed Income expects the Fed to begin tapering its reinvestments in September and to follow up with another rate hike in December, provided the recovery continues as expected.

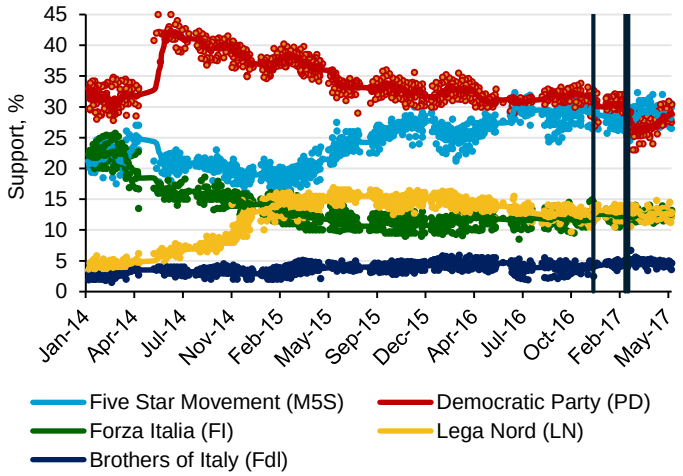
[1] *NAIRU is the non-accelerating inflation rate of unemployment.*
[2] *After an initial ramp-up period, the monthly runoff could reach as much $50 billion in principle, but is limited to the bonds that are maturing.*

ECB Tapering on the Horizon

In Europe, the recovery is becoming both more broad based and entrenched. After 16 consecutive quarters of expansion, EZ recovery has broadened to parts of the periphery, most notably Portugal and Italy of late. Nevertheless, just as elsewhere, the impact of rising demand on inflation has been muted so far. Besides the continued lull in commodity prices, labor market developments seem to be at the center of hitherto subdued core inflation. Despite aging pressures, labor force participation in the euro area has risen by 1½ percentage points amidst belt tightening and social benefits reform. Meanwhile, there has been an increasing segmentation in the labor market, characterized by a pronounced rise in often involuntary part-time employment, typically affording lower benefits. These developments would plausibly have an impact on wage setting, since they suggest a preference for more hours and job security over wage gains. Some of the structural reforms, such as enhancing the possibility of opt-outs from sector wage bargaining agreements and introducing flexibility at the firm level, also would in part explain the absence of notably accelerating wage inflation in countries, such as Germany, that are growing beyond potential and where labor markets are becoming stretched.

However, that said, the ECB has indicated its intention to see through these developments, as policy makers in Europe tend to view these largely as temporary. Just as in the U.S., the estimation that wage inflation is deemed forthcoming as labor markets continue to tighten is informing policy normalization. Indeed, the ECB took a further step toward policy normalization in June, altering its forward guidance by removing a reference to standing ready to further lower policy rates, if need be. We interpret the ECB's confidence to look through low wage inflation as a signal that tapering is likely to be announced in the fall, with asset purchases possibly already ceasing in June next year or somewhat thereafter. Many of the political headwinds have abated and some may yet become tailwinds, especially the recent elections in France, although the Italian elections remain a source of considerable uncertainty.

Opinion Polls—Italian Parliamentary Elections



Source: Wikipedia, PGIM Fixed Income as of May 2017

BoJ Staying the Course

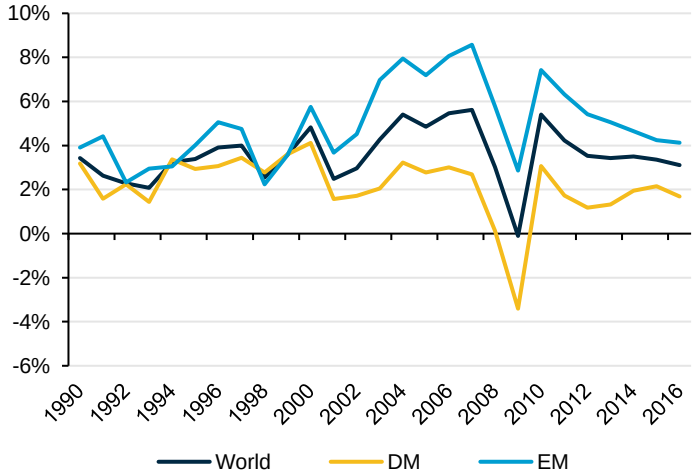
In Japan, the economy has been expanding for five consecutive quarters and has been running well beyond potential. Unemployment has fallen to another decade low and job openings relative to the labor force are at a new high. But just as elsewhere, the strain in the labor market has yet to translate to notable increases in core inflation, although deflation risks appear to have dissipated at this juncture. Much needed wage-price dynamics have been largely absent amidst a heavily segmented labor market. Wage gains are seemingly stymied by a preference for job security, low labor mobility, and wage setting based on past inflation.

As a result, core inflation is hovering still about zero, significantly below the Bank of Japan's 2% target. Although moderate increases seem likely over the next quarters, on current plans, the latest fiscal stimulus is set to wane this year, and the resulting impact on domestic demand thus may well pose a headwind to next year's outlook for inflation, especially in case of any potential weakening of the external environment. Against this background, any substantial changes to the highly accommodative policy stance of the Bank of Japan seems unlikely at present.

EMs Turning Up Amidst Improving Fundamentals

The emerging markets have continued to attract large inflows and investor interest. The recession in Russia has ended, while fiscal and credit stimulus have been boosting growth in Turkey. In Latin America, the recession in Brazil has given way to a moderate recovery, while concerns have also eased about the outlook for Mexico, despite the desires of the U.S. to renegotiate NAFTA. Against this backdrop, the differential between EM and DM growth has once again been widening (as observed in the following chart), while global trade has regained some momentum, as earlier fears of protectionism have somewhat faded.

EM vs. DM Real GDP Growth

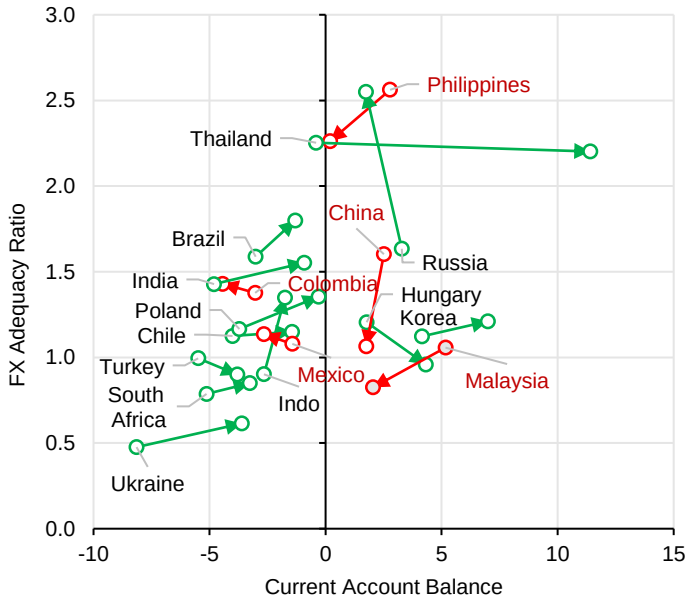


Source: Haver Analytics, IMF, and PGIM Fixed Income as of April 2017

However, the continued monetary policy accommodation in DM as well as large-scale China credit stimulus have also been important factors. China stimulus has lifted all boats and has notably benefitted Asia during the first half of this year. Emerging Europe remains geared into ECB stimulus and above-potential growth in the euro area, especially in Germany, while continued expectations of only very shallow U.S. rate increases have supported carry trades, especially in the high-yielding LatAm region (exemplified by Argentina's 100-year bond issuance).

Nevertheless, prominent risks to the EM outlook remain. Key among those is a potentially more pronounced policy tightening by the Fed and a removal of policy accommodation by the ECB. Both could well trigger a possible sudden stop of financing flows to the EMs. Moreover, the recent sagging of commodity prices, if sustained, imparts risks to commodity exporters, while a waning of China stimulus or a hard landing would generate global spillovers. Despite these risks, their potential impact appears mitigated by broad-based improvements in EM fundamentals that have taken hold since the taper tantrum in May 2013. As illustrated in the following chart, FX reserve coverage metrics have improved considerably while external imbalances—and hence financing requirements—have ameliorated.

EM Fundamentals—2012 vs. 2016



Source: Haver Analytics, IMF, and PGIM Fixed Income as of April 2017

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U.S. and European Corporate Bonds

U.S. corporate bonds delivered a solid return in Q2 against a backdrop of modest but acceptable economic growth, solid investor demand in the face of record issuance, and positive earnings momentum. U.S. corporate spreads narrowed by 9 bps, posting an excess return of 151 bps over similar-maturity U.S Treasuries.

European corporate returns were nominally positive in the wake of better economic news and reduced political uncertainty, although the European Central Bank did hint that it may consider scaling back its bond buying program next year. For the quarter, spreads narrowed by 16 bps to 102 bps.

	Total Return (%)		Spread Change (bps)		OAS (bps)
	Q2	YTD	Q2	YTD	6/30/2017
U.S. Corps.	2.54	3.80	-9	-14	109
European Corps	0.36	0.62	-16	-21	102

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 June 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

U.S. corporate bonds remained an "in-demand" asset in Q2, particularly from overseas investors searching for higher yields in light of ultra-low rates and quantitative easing programs in many other developed countries. In aggregate, investor demand continued to move out on the yield curve and down the risk spectrum during the period.

Overall, credit fundamentals remained favorable, with most industries enjoying record profit margins and generating significant cashflow before share buybacks and dividends. Companies remained active in mergers and acquisitions, although deal flow has dropped from record levels and leverage metrics appear to have stabilized. Subordinated banks and BBB-rated issues were strong performers, while energy and traditional brick-and-mortar retailers struggled.

New issuance, already at record levels, pushed higher as companies sought to lock-in low rates prior to anticipated Fed rate hikes and to finance mergers and acquisitions, share buybacks and dividends. Most issues were oversubscribed, with minimal concessions, if any. Tenders for higher coupon debt also rose as companies moved to reduce interest expense ahead of potential U.S. corporate tax reform that would eliminate or limit interest deductibility.

While the market appears to have priced in much of the U.S. administration's pro-growth platform, corporate tax reform, as currently proposed, could provide a tailwind while also increasing volatility in the corporate sector. Lower corporate tax rates, coupled with the repatriation of up to $2 trillion of offshore profits, may lead to reduced issuance, particularly in the technology and pharmaceutical sectors, as well as potential selling in short-maturity (1-5 year) spread product. Limiting the deductibility of interest expense could also incent companies to favor equity financing over borrowing.

As the credit cycle marches on, we continue to favor U.S. financials over industrial issues that may be subject to event risk. We believe the higher capital requirements of U.S. money center banks should remain intact even if certain regulations are rolled back. In fact, all major banks recently passed their annual stress test for the first time since the 2008 financial crisis, setting the stage for banks to initiate higher payout ratios to shareholders.

We remain positive on U.S. money center preferreds and reduced exposure to lower-rated finance companies during the period. We are adding European banks due to stabilizing fundamentals and wider spread levels. We favor electric utilities, property and casualty and health insurers, paper, select pharmaceuticals, and U.S.-centric issuers that may benefit from positive economic growth.

We remain overweight BBB-rated long-maturity credits due to a steep spread curve and possibly higher pension funding, which could lead to increased demand and potentially flatten the spread curve. We remain underweight A-rated and higher industrials due to event risk concerns. Taxable municipals also offer a safe haven from event risk.

Overall, we look for U.S. corporate spreads to tighten in the coming quarter given little to no risk of a U.S. recession and on-going investor demand spurred by non-U.S. quantitative easing programs.

European Corporate Bonds

The European corporate market held a positive tone for most of the quarter in response to the ECB's strong technical support, a recovering economy, and market-friendly election results in France and the UK.

At quarter end, the more hawkish tone of the ECB and other central banks weighed on the European sovereign market, but had minimal impact on investment grade corporates. The ECB announced it would consider tapering its bond buying program in 2018, but then back-pedaled a bit, reinforcing its cautious stance the very next day. Meanwhile, the Bank of England and Bank of Canada suggested rate hikes may be in order given more positive economic conditions.

On the election front, French corporates rebounded nicely following the Macron win and, in the UK, a still conservative government is expected to bring a softer tone to Brexit negotiations, focusing more on the economy than leaving at all costs.

European economic data improved in Q2 while credit fundamentals remained solid, near their apex for this cycle. Leverage has been increasing, primarily in response to weaker earnings, although M&A activity has picked up nominally.

New issuance remains high, including an uptick in reverse yankee issuers as the cross-currency swap has improved. For now, the ECB's bond buying program continues to provide a structural support, although the Bank of England's bond purchases have concluded.

At current levels, European corporate spreads are at the tight end of our 2017 forecast, but we believe there are still attractive opportunities across regions, industries, and issuers, especially given the more constructive economic backdrop.

In European portfolios, we prefer non-euro zone issuers and those ineligible for the ECB's bond purchases where spreads trade at fairer levels. 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. Most European banks now trade on the expensive side, but we are adding exposure as value arises. Within euro-area industrials, we favor regulated companies with solid balance sheets, such as electrical grids and airport operators. 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 balanced between euros and dollars, however, we hold a significant overweight to U.S. domiciled companies (reverse yankee issuers). We hold a mild preference for U.S. issues given that European spreads in general are tighter than their U.S. equivalents, making it more difficult to find attractive European opportunities on a bottom-up basis. In the euro currency, we prefer non-ECB eligible bonds. Within the financial sector, we are overweight U.S. money center banks and insurers and are underweight euro zone banks. We remain 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 the coming quarter, we believe positive technicals will remain the strongest return driver in both the U.S. and European corporate markets. Key risks include more aggressive-than-expected central bank policy changes, political risks across the U.S. and Europe, and, longer-term, China's high debt burdens.

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

Global Leveraged Finance

Despite some weakness in select sectors, U.S. high yield spreads continued to grind tighter and the market enjoyed another quarter of solid performance. While technical conditions remain favorable and high yield fundamentals remain supportive, the asset class is not immune to the presence of elevated macro tail risks. Against this backdrop, we remain neutral on U.S. high yield. The European high yield market also had a strong quarter and remains attractive given the strong demand and limited supply.

	Total Return (%)		Spread Change (bps)		OAS (bps)
	Q2	YTD	Q2	YTD	6/30/2017
U.S. High Yield	2.14	4.91	-15	-45	377
Euro High Yield	2.26	4.27	-67	-92	287
U.S. Leveraged Loans	0.76	1.91	-2	-18	442
Euro Leveraged Loans	1.02	2.28	-43	-36	364

Sources: BofA Merrill Lynch and Credit Suisse as of June 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.

Supported by the low-rate environment, continued gains in equity valuations, and solid corporate earnings, U.S. high yield prices ticked higher in Q2. While declining oil prices pressured the energy sector, the impact to the broader high yield market was minimal, and the index returned +2.14% in the second quarter, and +4.91% year-to-date.

The second quarter saw a reversal of the lower-quality outperformance trend that steered the U.S. high yield market over the previous six quarters, as higher-quality credits outpaced the lower-rated segments of the market in Q2. For the quarter, BBs returned +2.59%, followed by Bs and CCCs, which returned +1.76% and +1.70%, respectively. Despite outperforming CCCs in Q2, BBs are trailing CCCs by approximately 230 bps year-to-date. As was the case in Q1, longer duration paper once again outperformed, as the high yield 10+ index returned over 3% in the second quarter. Of note, the longer index only generated approximately +20 bps of excess returns over Treasuries in Q2—versus almost +450 bps in Q1—compared to +120 bps for the broad market high yield index during the same period.

Supported by further delays to healthcare reform, the healthcare sector continued its ascent from the worst performer in Q4 2016 to the top performing sector so far this year, returning +7.7% year-to-date. Solid performance within the aerospace, cable, and food & beverage sectors also pushed the market higher in Q2. Although the retail sector returned over 2% in the second quarter—which moves its year-to-date total return into positive territory—retail is still the weakest performing sector in 2017.

Energy was the only sector to post a negative total return (-0.66%) in the second quarter, pressured by rising inventories and concerns over OPEC production agreements, both of which helped push oil prices down into the mid-$40s range—a decline of approximately 17% year-to-date.

Despite the underperformance, high yield energy is in better form than in years past. The sector's improved health and the recent repricing has prompted us to re-evaluate our long-held underweight to the high yield energy space. Therefore, it's possible our positioning could approach market weight by the end of the year.

Moody's 12-month U.S. speculative grade default rate ended May at 3.9%—down from 4.7% at the end of Q1. While the commodity sectors continue to drive defaults—11 of the 39 defaults to occur this year have originated from commodity issuers—May was the first month since January 2015 that there were no commodity related

defaults. Moody's default forecast suggests the U.S. default rate will decrease to 2.9% by year-end, with the highest likelihood of defaults emanating from the retail sector. Except for the retail sector, we still expect default rates outside of the energy and basic materials sectors to remain benign through 2018.

Following heavy outflow activity in Q1, high yield funds reported only modest outflows of $404 million in Q2. Net flows for 2017 reached -$7.6 billion by the end of the second quarter. Meanwhile, total new issue activity has increased year-over-year, climbing to $157 billion year-to-date versus $140 billion over the same period last year. Energy has been the top issuing sector—accounting for 15.6% of the volume—while metals and mining has also been a steady source of supply—representing 10.6% of new deals. Despite the uptick in high yield new issuance, 65% of the activity has been refinancing related, leaving net new issuance at its lowest level since 2011.

While technical conditions within the asset class should drive spreads tighter, we remain neutral on U.S. high yield given elevated tail risks and how these may affect returns. However, given the strong fundamentals—apart from retail and potentially commodities—expectations are for a continuation of the benign credit environment. While we see the best value in the CCC portion of the U.S. market, we continue to explore opportunities across the entire quality spectrum. We will look to hedge our market risk by maintaining elevated cash balances, some of which will be tactically deployed to AAA-rated CLOs. We also remain overweight to electric power companies and U.S. consumer-related names.

The Credit Suisse Leveraged Loan Index returned +0.76% in Q2 with as much as 75% of the market was trading above par, which limited price appreciation. As the quarter drew to a close, just over half of the market was trading above par.

Flows into U.S. leveraged loans were solid, with +$3.6 billion coming into the asset class in Q2. While inflows are down in comparison to the Q1 total of +11.5 billion, year-to-date flows now total +$17.6 billion versus to -$6.2 billion over the same time last year.

New issue volume in the loan space has already topped $500 billion in 2017, however more than 78% of the activity has been refinancing and repricing related. The technology and healthcare sectors have been the largest source of supply in the loan market, accounting for 17.0% and 11.5% of the volume, respectively.

European Leveraged Finance

Despite the potential for increased volatility caused by uneasiness surrounding the French election, rising concerns involving the Trump administration, and the surprise outcome of the UK election, risk appetite persevered, with the broad European high yield index returning +2.26% in Q2. Unlike the U.S. high yield market, lower-rated credits outperformed, as CCCs returned +3.73%, compared to +2.09% return for Bs and +2.20% for BBs.

Flow activity in the second quarter lacked consistency, as periods of steady inflows were often followed by bouts of outflows. For example, during the month of May, three consecutive weeks of positive flow activity—one of which was the largest since the start of 2017—were immediately followed by the largest weekly outflow to take place since Q1. The volatile nature of European high yield flows during Q2 left overall flow activity flat for the quarter.

Following record issuance to close out the first quarter, the primary market got off to a slow start in April, remained light for much of Q2, ending the period flat overall. While the subdued new issue pipeline was partially a result of the seasonal slowdown around the Easter holiday, primary issuance also remained muted as issuers showed a continued preference to refinance debt into the loan markets. However, the lack of primary issuance supported the secondary market, as strong demand and limited supply were key drivers of the spread tightening within the asset class in Q2.

Moody's default rate increased slightly to 2.5% to end the quarter and is expected to end 2017 at 2.0%. Echoing our theme from the previous quarter, we believe defaults in general should remain low over the next 12 months given that the European economy should continue to grind forward, issuers have been opportunistically taking advantage of favorable market conditions to refinance debt, and that there is no major maturity wall over the near term.

European leveraged loans held in well during the quarter, returning +1.02% in Q2 and +2.28% year-to-date. Given the solid technical backdrop with consistent demand underpinned by CLO formation, our outlook for European leveraged loans remains favorable, despite growing primary issuance.

Overall, with new issue volume trending below last year's pace, robust demand from managers with ample cash balances, and low default expectations, we're maintaining a positive outlook for the European high yield market.

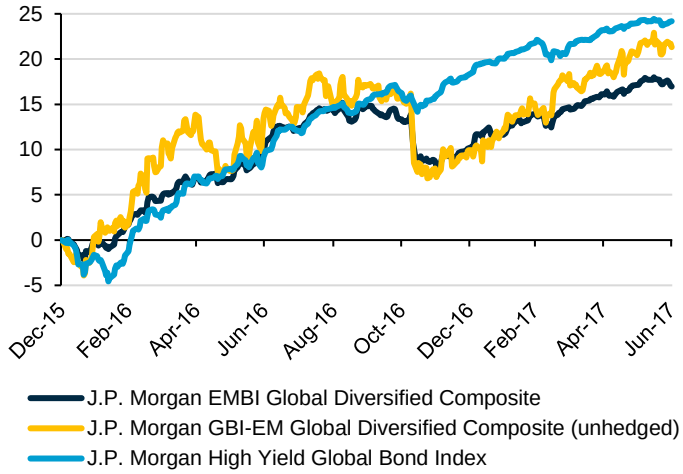
We will look for attractive relative value opportunities between sterling-denominated and euro-denominated currency bonds. Additionally, we will continue to maintain our overweight exposure to B-rated credits as we expect the default outlook in Europe to remain benign in the near to medium term.

OUTLOOK: Neutral for U.S. high yield as we see room for additional spread tightening, but remain cautious given elevated macro tail risks. We prefer the CCC portion of the U.S. market and are offsetting that exposure with elevated cash balances. As we analyze opportunities across all quality buckets in the U.S., we're also evaluating opportunities in the energy sector, although we remain generally cautious on the sector. We maintain a favorable outlook for European high yield given the supportive technical backdrop and low default expectations.

Emerging Markets Debt

Emerging market bonds continued their post-U.S. election rebound in Q2, as an improving global growth outlook, diminished protectionism fears, and low developed market interest rates continued the strong demand for higher-yielding assets. The strong EM returns represent a partial retracement of their underperformance vs. developed market assets since November of 2016.

EMD Still Recovering vs. DM Following U.S. Elections



Source: Bloomberg as of June 30, 2017

	Total Return (%)		Spread / Yield Change (bps)		OAS (bps) / Yield %
	Q2	YTD	Q2	YTD	6/30/17
EM Hard Currency	2.24	6.19	-1	-32	310
EM Local (hedged)	1.22	2.80	-40	-64	6.16
EMFX	1.93	7.21	+52	-38	4.25
EM Corporates	1.98	5.01	-5	-23	292

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

During the quarter, EM hard currency bonds returned 2.24%, although index spreads were only 1 bp tighter. Smaller NEXGEM countries were generally the top performers in hard currency, with Cameroon (+6.66%), Ethiopia (+4.87%), Ghana (+7.19%), Suriname (+5.18%) and Ukraine (+5.90%) providing the highest returns.

The EM local bond index returned 1.22% on the quarter. In currencies, emerging Europe currencies such as Czech Koruna (+9.47%), Turkish Lira (+6.38%) and Polish Zloty (+7.20%) outperformed, due in part to their higher correlation with the euro which was approximately 5% stronger versus the USD during the quarter. The Mexican Peso (+5.87%) also outperformed, continuing its rebound from a difficult 2016 on diminishing concerns over trade tensions with the U.S. Hedged local bond returns were more subdued, with Hungary (+2.05%) and Peru (+2.99%) beating out the higher yielding countries such as Brazil (-0.03%) and Turkey (+1.40%).

There were a number of notable idiosyncratic country events during the quarter which impacted the markets. In Brazil, Temer's presidency was threatened by the release of tapes implicating him in a hush money scandal. While the constitutional court did not remove him from office, he is clearly weakened and the outlook for social security and labor reform is likely diminished. Brazilian hard currency bond spreads and local yields are approximately 60 and 45 bps wider respectively since the scandal broke, and the currency sold off by 6%. We have reduced our exposure to the BRL, but maintain our overweight in local bonds due to our expectations for up to 200 bps of additional reductions to the central bank rate. We also continue to hold our overweight in the hard currency bonds due to the very low levels of external government debt and an improving current account position. Moody's and S&P put Brazil's ratings on negative outlook and negative watch, respectively.

In Mexico, the ruling PRI party won the governor's race in the State of Mexico over a challenger from the leftist Morena party. The Mexican peso rallied approximately 3.5% while spreads rallied 20 bps on the news. We continue to monitor the political situation in Mexico closely, as presidential elections are scheduled for July 2018 and Morena's candidate Lopez Obrador is currently leading in the early polls. We continue to like a variety of Mexican assets, which were dramatically oversold during the U.S. electoral campaign. The local bonds yield 7% and there is a high probability that the central bank will start a cutting cycle within the next six to nine months. Despite its strong performance year-to-date, the Mexican peso is still one of the cheapest currencies in the emerging world, in our opinion. Moreover, we view hard currency quasi-sovereign Pemex bonds that trade at spreads of up to 170 bps wide to the sovereign as attractive.

In Turkey, President Erdogan consolidated his power through passage of a referendum on a package of constitutional amendments that would dramatically increase his power. While the reaction from Berlin, Brussels, and Paris has been uniformly negative, Turkish assets reacted positively to the lessening of near-term pollical risks and an acceleration in local economic activity. We continue to be positive on Turkish assets due to their compelling relative value. The Turkish lira is second only to the Mexican peso in REER cheapness, and the hawkish central bank is keeping the carry close to 11.5%. Similarly, local bond yields are near the top of their post-2008 range, and we expect inflation to roll over in early 2018. The Turkish hard currency spreads trade at spreads that more than compensate for its Ba1 rating in our view; we particularly favor five-year quasi-sovereigns trading at spreads over 300 bps.

Our Approach to ESG in EM Sovereigns

ESG considerations, especially governance considerations, have always been part and parcel of our sovereign ratings framework. We find that sovereign creditworthiness is inextricably linked with the strength of its governing institutions, legal framework, social conditions, and quality of life. These factors have always been carefully evaluated as part of our qualitative framework and have direct impact on our proprietary country ratings.

In an attempt to build on these efforts, PGIM Fixed Income has recently developed a formalized approach for ranking sovereigns along E, S, and G dimensions. This framework is used to evaluate each of the over 100 emerging market and developed market sovereigns in our universe, providing a systematic means of including ESG assessment in our rating process. The variables underlying this framework are all chosen from publicly available academic datasets and policy studies. However, rather than importing these datasets in their entirety, we have stripped out any data overlap and limited cross-correlations to the extent possible. This approach allows for a detailed analysis of the specific factors driving a country's ESG performance. The following table shows the categories of variables that were used to construct the rankings.

PGIM FIXED INCOME ESG

Environmental	Social	Governance
▶ Air quality ▶ Water and Sanitation ▶ Climate and Energy ▶ Biodiversity and Habitat	▶ Nutrition and Basic Medical Care ▶ Personal Safety ▶ Access to Basic Knowledge ▶ Access to Information and Communications ▶ Health and Wellness ▶ Tolerance and Inclusion	▶ Voice and Accountability ▶ Political Stability and Absence of Violence ▶ Government Effectiveness ▶ Regulatory Quality ▶ Rule of Law ▶ Control of Corruption

In addition to providing country ESG rankings, our analysis produced some interesting results. It appears that ESG performance is strongly correlated with the overall degree of development in a country, as approximated by per capita income. This result strongly suggests that building reliable institutions, providing good governance, and enhancing social welfare is a tall order and can be difficult for lower income countries. However, when assessing ESG performance within cohorts of *comparable* income, we find that the "performance bias" of higher income countries tends to disappear. Controlling for this effect, we find many instances of lower income countries which are positive ESG outliers (Further description can be found in our May 2017 white paper).

Where To From Here?

As the summer continues, the markets often experience lower levels of liquidity, and as a result, pockets of volatility could emerge over the next couple of months. Over the medium-term, however, we continue to expect an environment where low developed market rates, moderate global growth, and low inflation supports investors' search for yield and spreads. Additionally, as shown above, the selloff after the U.S. elections resulted in attractive EM valuations versus developed markets. We're comfortable with our current positioning and would look to add to select positions during periods of volatility.

In hard currency sovereigns, we believe the spread tightening theme remains intact, and we're maintaining our barbell positioning, including five-year quasi-sovereigns that provide incremental yield and roll-down opportunities coupled with longer-dated issues that continue to present the potential for spread compression.

In terms of local rates, we see potential rate cuts in several countries, including Brazil where the Banco Central do Brasil is likely to ease, possibly up to a couple hundred basis points over the next six to 12 months. Despite Mexico's recent rate hike, there is the perception that the tightening may be coming to an end and the central bank could start easing within the year. Other rate cut candidates consist of Colombia, Peru, Russia, South Africa, and Turkey.

We've recently reduced our EMFX risk and remain focused on relative value in the asset class. We'll look for stabilization within the commodities complex and for certain higher-yielding names to stabilize vs. lower-yielding names before reassessing our EMFX risk.

OUTLOOK: Positive. We would use periods of volatility as buying opportunities, and we're maintaining a barbell in hard currency sovereigns. In local rates, we see potential rate cuts in several countries while we're emphasizing relative value in EMFX.

Municipal Bonds

In Q2, AAA-rated municipal bonds outperformed U.S. Treasuries across the yield curve. Demand for tax-exempt municipals picked up in Q2 as expectations for major policy initiatives did not come to fruition, and year-to-date mutual fund inflows exceed $5 billion. Municipal issuance totals $195 billion YTD, approximately 13% lower vs. prior year. Year-to-date total returns were +3.57% and +6.13% for high grade and high yield, respectively. High yield index returns were driven by the tobacco sector (+18.51% YTD), the most liquid sector in the high yield muni space with performance generally driven by high yield muni fund flows.

Long taxable municipals returned 3.86% in Q2, underperforming the long corporate index. Investor interest remains robust with limited dealer inventory available.

Legislation related to the administration's key policy initiatives namely health care and tax reform, have yet to materialize. While the ultimate outcome of the American Health Care Act (AHCA) remains uncertain,

passage of a bill will likely have a negative impact on certain hospitals as reimbursements are cut and bad debt rises with declining insurance enrollment. Certain states will also be negatively impacted with cuts to Medicaid, which comprises a significant portion of state budgets. We believe the odds of significant tax reform continue to decline and any legislation will likely be delayed beyond 2017.

On the credit front, the news flow related to Puerto Rico contributed to increased volatility and negative total returns for various credits in the Puerto Rico complex; the Bloomberg Barclays Puerto Rico index YTD total return is -7.99%. The Federal Oversight Board took advantage of the provision under PROMESA and filed for Title III bankruptcy protection on behalf of the commonwealth, COFINA, the PRHTA, the Employees Retirement System pension obligation bonds, and PREPA; this provides another 120 days of protection from lawsuits. The Governor and the board have stated that negotiations with creditors will continue under Title III. The filing for PREPA occurred on June 30th following the Oversight Board's failure to sign off on the restructuring support agreement (RSA) between PREPA and its creditors. The RSA negotiations between PREPA and its creditors had been ongoing since 2015 and was viewed as a potential framework for other creditor negotiations. The situation will continue to unfold as the bankruptcy judge overseeing the case is set to preside over multiple hearings in the coming months regarding the myriad creditor disputes.

The state of Illinois has entered unprecedented territory for a state with the downgrade of its credit rating to Baa3/BBB- by Moody's and S&P, respectively. Failure to begin FY2018 with a budget represents the 3rd consecutive year this has occurred. We continue to believe that Illinois has the ability to begin to address its problems; however, the Governor and legislature need to demonstrate the political will to act. As this remains a very fluid situation, headline risk could lead to elevated volatility.

While technicals should remain favorable through much of Q3, we would expect the environment to be less supportive by the end of the quarter. A range bound interest-rate environment should continue to be supportive of mutual fund flows. Tax-reform discussions will be closely monitored, but are not expected to negatively impact the market in 2017. Volatility will continue in Puerto Rico, as the Judge overseeing the bankruptcy case has encouraged all parties to resolve disputes through negotiation. Looking ahead, we expect taxable municipals to perform in line with corporate bonds, with potential for outperformance should corporate M&A activity pick up.

OUTLOOK: Neutral. Strong technicals to start Q3 should begin to abate by quarter end. Solid outperformance vs. Treasuries in Q2 leaves valuations less attractive vs. earlier this year.

Global Rates

Developed market central banks shifted towards tighter policies in Q2, which continues to support our tactical positioning across the global rates sector over the coming months.

The U.S. Treasuries market continues to offer a robust set of long and short opportunities across the curve. The front of the curve rose in Q2 as the Fed implemented another rate hike in June and set the stage to start tapering its balance sheet by the end of the year. While our base case is that the Fed raises rates one more time in 2017, the market-implied probability for another hike this year only stood at about 50% as the quarter ended, which we believe is underpriced and supports our short positioning at the front of the Treasuries curve.

The intermediate sector of the U.S. Treasury curves appears attractive, driven by an elevated term premium that has the potential to decline going forward. We believe the Fed will have difficulty maintaining a traditional hiking cycle as rate hikes in 2018 and beyond become more challenging with core inflation rates receding from the Fed's 2% target. In addition, the market may receive some technical support going forward given the Treasury's recently disclosed plan to exclude Treasuries from bank leverage ratios, thus possibly making them more palatable in bank portfolios. Given the potential increase in demand, along with the possibility of 50-year Treasury issuance, we believe 30-year bonds will outperform overnight index swaps going forward. In Q2, the Treasury also raised the possibility that it could issue 20-year tenors, and the new supply could pressure securities at that point on the curve.

Elsewhere in the U.S., we're maintaining exposure to swap spread wideners at the seven-year and 30-year portions of the swap spreads curve, and we have a spread tightening position on at the 20-year portion given the potential for 20-year Treasury issuance. With core inflation data tailing off during the quarter, we prefer to position for five-year breakeven rates to widen from the recent level of 1.60% to a range of 1.80-2.00%.

Looking ahead, Europe also presents interesting tactical opportunities. Although the front of the bund yield curve rose notably in Q2, we're maintaining short positioning in two-year bund futures given the lack of a safe-haven bid following the French elections and the curve's susceptibility to potential QE tapering by the ECB later this year. Looking further out on the bunds curve, the 10- to 20-year portion appears attractive given the carry and roll-down opportunities.

With the perception that the Bank of England turned more hawkish in Q2, we're anticipating marginally higher gilt yields versus bunds and Treasuries, particularly with the potential for less emphasis on austerity with the changing political dynamic within the UK.

We've also taken a view on the USD/JPY cross currency basis with expectations for the basis to become less negative in the five- to 10-year space as bank balance sheets are eventually freed up amid the deregulatory push in the U.S.

OUTLOOK: Constructive as attractive tactical opportunities exist throughout the developed rates markets as central bank policies progress on varied trajectories.

Agency MBS

With the Fed clarifying its intent to begin balance sheet normalization by the end of 2017, the effects of the tapering process remain the overriding factor in our outlook to stay underweight agency MBS until option adjusted spreads widen to more attractive levels.

MBS spreads cheapened in Q2 and underperformed other high-quality spread sectors as net supply increased and outright buyers—banks and overseas participants—seemed willing to wait for better entry points to add MBS exposure. Prepayment speeds continued to be uneventful as primary mortgage rates remained elevated compared to last year, keeping the Fed's MBS reinvestment needs averaging about $24 billion per month in the first half of the year.

As for the details of the Fed's balance sheet normalization plans, it intends to initially cap the amount of MBS balance sheet reduction at $4 billion per month, increasing in steps of $4 billion at three-month intervals until a maximum of $20 billion per month is reached. Although the balance sheet reduction process may start this year, the first months without reinvestments are expected to arrive in late 2018 (based on the forward yield curve) or in early 2019 (based on a static yield curve). Based upon the expected cap schedule, the Fed's MBS holdings will fall by $120 billion in the first 12 months.

Given the market's projected increase in net issuance, combined with the expected runoffs from the Fed's balance sheet in the coming years, private investors will need to absorb approximately $400 billion of agency MBS in 2018 and nearly $450 billion in 2019. Overall, the Fed's current $1.7 trillion MBS portfolio is expected to approach $1 trillion by 2022 assuming prepayments remain at current levels.

In addition to the market's need to absorb the additional supply, we expect the convexity of MBS to worsen over time as the market loses its ability to use the Fed's balance sheet as a home for "worst-to-deliver" bonds. Lastly, the rise of non-bank originators and their aggressive lending practices will contribute to elevated risk for bonds delivered into TBA.

As we look ahead, some factors may lend support to MBS, including cheaper valuations as Q3 commences, sticky primary mortgage rates that are unlikely to cause a pickup in prepayment rates, and a large base of short positions within the sector that could act as a backstop into wider spreads.

However, with MBS option adjusted spreads (versus Libor) widening to 39 bps as the second quarter ended, we believe that OAS would have to widen into the 50 bps area before we become neutral on agency MBS and into the 60 bps area before we turn positive, as spreads would then be comparable to agency CMBS.

Our general positioning themes in early Q3 include an overweight to 30-year 4.0% coupons within the stack—which cheapened as rates declined in Q2—an underweight to the 15-year sector, and a preference for seasoned bonds over recently originated issues.

OUTLOOK: Underweight in favor of high quality spread sectors.

Structured Products

Structured products had a good, but less uniformly bullish, quarter than in Q1. Notable spread tightening occurred in consumer ABS (40-50 bps tighter), legacy non-agencies (35 to 50 bps tighter), and GSE credit risk transfers M2s (50 bps tighter). Trading sideways were CMBS IOs (one of the best performers in Q1), CMBS 10-year front-pays (after tightening 20 bps in Q1), and AAA CLOs. The underperformer was rental car ABS, which widened 20 bps on used car price concerns. The spread tightening in the second quarter outperformed our expectations. While structured products are noteworthy for favorable supply technicals and a benign fundamental backdrop, we believe they remain vulnerable to spread volatility in other risk assets. Looking forward, we continue advocating a more defensive positioning with an emphasis on senior financing trades and favor on-the-run vs. off-the run structures.

Non-Agency RMBS: Legacy non-agency performance was driven by overwhelmingly favorable technicals (the non-agency float declines 10-15% on an annual basis), continued positive fundamentals from a strong housing market, and an overall positive environment for spread product. Vintage senior bonds from 2006/2007 now trade at LIBOR+150 bps and more seasoned bonds, with better performing collateral, trade at or inside L+100. Demand from asset managers remains very strong, making non-agencies less vulnerable to pressures in the hedge fund industry, which we see as a risk to other parts of the structured product market. On fundamentals, early indications are home price appreciation will exceed our expectation of 2-4% in '17, due to low inventory of homes for sale, positive economic conditions, and still manageable mortgage payments. While current spreads can persist, valuations appear stretched and the legacy non-agency RMBS market no longer represents the superior risk-reward proposition relative to other structured products. For new production mortgages, the largest opportunity in mortgage credit is the GSEs' credit risk transfer (CRT) bonds. This market is maturing and spreads performed strongly in Q2. M2 bonds (typically rated single B at new issue) now trade at L+250, in 50 bps for the quarter. While these bonds are deeply subordinated, with about 1% enhancement, the associated reference mortgages benefit from early cycle underwriting and are backed by high-quality borrowers. We remain constructive on these bonds, but recognize these spreads are susceptible to broad-market spread widening. We continue to find significant opportunities in financing unrated securitizations of 1) loan pool dispositions from money center banks and the GSEs and 2) pools of legacy bonds. Senior financing spreads are generally in the L+200-300 range and approach the spreads on the assets being financed. Access to deal flow is only provided to select asset managers who have the expertise and capacity to analyze and close these deals. Away from the US, UK RMBS credit performance was stable while technicals were excellent, leading to continued tightening in the sector. Given cheaper funding provided by the Bank of England's Term Funding Scheme, the expectation is for limited supply to continue. While we are neutral on senior non-conforming paper with generic spreads currently L+70-80 bps, we find value in select seasoned 2nd pay classes trading 130-160bps. Cooling UK housing prices and Brexit-related headwinds remain on our radar.

CMBS: CMBS fixed rate senior spreads were generally flat for the quarter with AAA 10-year conduit bonds staying at Swaps+92 bps and agency spreads widening 2 bps to S+62. Our opinion is conduit AAAs are cheap and agency CMBS offers value as an agency RMBS substitute. Conduit issuance for the first half of '17 was around $21 billion, up 10% from '16. We expect conduit issuance for full year '17 to be similar to the $47 billion of issuance from 2016. Notably, the wall of maturities from '06/'07 production that was once seen as a large potential negative for the CMBS market has passed with most loans being refinanced. Single Asset/Single Borrower (SASB) AAA floater spreads tightened to LIBOR+80 bps from LIBOR+90 despite higher first half issuance compared to '16 ($12 billion vs. $7 billion). We think L+80 bps is fairly valued. On the run BBB- index was unchanged at +437 with cash also unchanged at +350. We are not constructive on mezzanine tranches. Meanwhile, on-the-run AAA CMBX index outperformed cash, tightening 10 bps to +76. Negative retail headlines continue to be a large focus in the market. Mezzanine tranches from deals originated in 2012 and 2013, as well as CMBX from those vintages, continue to trade at wide levels despite some tightening. These deals have large concentrations in Class B/C malls. CMBX6 (2012 vintage) BBB- was 13 tighter in Q2 to about 570 bps and CMBX 7 ('13 vintage) BBB- was 10 tighter to about 440 bps. The senior tranches for these vintages have been subject to less volatility.

CLOs: CLOs continue to be fundamentally and comparatively attractive to many fixed income assets. U.S. CLOs currently offer AAA spreads between three-month LIBOR+121 and 3L+132 for new issue deals depending on manager tier. European deals currently offer nominal spreads of three-month Euribor+90 bps plus the value of the zero Euribor floor (which we believe is worth about 12 basis points). We continue to see strong demand from global banks, insurance companies, and asset managers in the senior part of the capital structure. In the most junior parts of the capital structure, we are observing a higher number of risk retention funds and have begun seeing more "real money" buyers participate as they continue to chase nominal yields. First half issuance of $52.5 billion in primary and $100.2 billion in refinancings and resets surprised most in the market to the upside. Heavy issuance has kept senior spreads floored around 3L+120, but mezzanine spreads and equity yields continue to tighten. European issuance was also higher than expected at €8.4 billion in primary and €15.2 billion between refinancings and resets. Going forward, we believe CLO spreads have some room to tighten across all parts of the capital structure as demand remains very strong. In the U.S., we are also seeing more demand from large institutions as 3-month LIBOR continues to rise and all-in yields become harder to ignore. We believe that despite a "light" new issue pipeline in loans, CLOs creation will continue due to strong demand from risk retention vehicles and investors who need to invest in junior mezzanine and equity to meet yield hurdles. We also continue to see strong demand for U.S. AAAs as many investors recognize both the absolute cheapness from a spread perspective and/or the attractive carry as 3 month LIBOR continues to rise. For global investors, we continue to observe that despite some loss in spread from cross currency swaps, CLOs remain very attractive.

ABS: We expect normalization/weakening trends in consumer credit fundamentals to continue throughout the year. For example, subprime auto defaults have been trending higher due to a weakening in underwriting by some lenders. However, more established issuers have begun to tighten standards to reduce the credit risk of their loan portfolios. Prime consumer default rates, particularly in credit card space, remain low. With traditional fixed rate credit cards and autos continuing at year-to-date tights inside of LIBOR+20 bps for three-year paper, fundamentally sound issuers in the consumer loan, subprime auto, and refinanced private student loan sectors, with seniors and subs trading +100-200, offer compelling relative value. We also favor term roll-down plays in AAA five-year year fixed revolver prime autos and floating rate credit cards with the opportunity to earn +60-90 bps total return over one year. We expect rental car ABS price volatility to continue with corporate parent earnings variability centered around declining fleet residual values. We continue our cautious stance on marketplace lenders due to unproven and shifting business strategies and regulatory ambiguity.

OUTLOOK: We remain very positive on top-of-the-capital structure assets, and after a pleasantly surprising Q2, we would be content if the sector traded flat in Q3—a historically tough quarter for risk assets. We remain positive on the fundamentals of GSE credit risk mezzanine cashflows, but are cautious on spreads at current levels. We are particularly wary of the high LTV CRT and have pared back our exposure to those deals. We are negative on CMBS mezzanine tranches as conduit credit quality is unimpressive. We are increasingly looking at financing trades rather than exposure to the underlying assets as spreads are tight and the demand for leverage is high.

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Source of data (unless otherwise noted): PGIM Fixed Income and Bloomberg as of July 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

2017-3280