Invesco Fixed Income

Global Fixed Income Strategy

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Global macro strategy

Venture forth in EM, but be cautious on funding risks

A tightening of financial conditions, led by US Federal Reserve (Fed) rate hikes and an appreciating US dollar, have pressured the emerging market (EM) assets so far this year. However, concern over a generalized "crisis" in EM external debt is largely unwarranted in our view – and with it, concern over external vulnerability. That said, structural impediments are likely to limit EM growth over the medium term – particularly in the context of a stronger US dollar. We believe there is value in EM right now, on a selected basis – and scope to add meaningful outright exposure exists when dollar funding pressures ease.

External and idiosyncratic factors behind EM volatility

Underlying fundamental conditions for most emerging market (EM) countries have improved markedly over the past several years. When considering the "five pillars" of fundamental sovereign assessment, only one – fiscal and domestic debt – pose a problem.[1] Policy orientation is more mixed, given the prospect of less market-friendly and interventionist policy in certain countries. Indeed, measures of political risk in EM have increased, justifying some of the uncertainty and market volatility in recent months.

However, in our view, the causes behind recent volatility in EM have been both idiosyncratic and exogenous. Concerns in Argentina and Turkey, specifically, point to idiosyncratic factors. The primary external factor has been a tightening in US financial conditions, triggered by a rise in real interest rates and –importantly– the US dollar. This effective tightening in US dollar funding conditions has led to concerns about the "fragility" of many EMs –that is to say, the ability of many EMs to fund their external liabilities coming due. Arguably, this concern was only exacerbated in countries with idiosyncratic issues, namely Argentina and Turkey.

In the case of Argentina and Turkey, these economies were perceived to have been running policy "too hot" and in the process generating external imbalances – that is, widening current account deficits and large external funding requirements that require future financing, either through capital flows or via a drawdown in foreign exchange reserves. Domestic imbalances were also a concern, given trends in rising inflation in both countries. On top of this, both countries are perceived to have been externally vulnerable, given low foreign exchange reserve coverage of these countries' external funding requirements.

EM stress and rising external debt

While it is true that external debt levels in EM have climbed over the past decade, particularly since the global financial crisis, most of this rise has been in China and to a lesser extent Mexico. In other countries, the rise in external debt has been more modest. Additionally, most of this rise in external debt comes from the private, corporate sector. Measures of capacity to repay have worsened since 2008, but for most countries they remain at comfortable levels. For instance, total EM external debt to export receipts has climbed since 2008, but remains below 2x for most countries.

More importantly, focusing solely on EM external debt ignores the other side of the balance sheet – external assets. These have grown faster than external debt. Using central bank foreign exchange reserves as a proxy (and a conservative one at that), EM reserves (excluding gold) now stand at upwards of USD6 trillion (3 trillion ex-China). In aggregate, liquid EM foreign exchange reserves can pay down all EM external debt.

Important considerations

There are, however, important aspects to bear in mind:

- **Foreign exchange assets are concentrated in some countries and not in others.** At the extremes, China currently has several times the foreign exchange reserves needed to fund its current account balance and external debt redemptions over the next 12 months. In contrast, both Argentina and Turkey do not have enough, with less than 1x the reserves needed to meet external funding needs by the end of 2019. With the recent backing of the International Monetary Fund, Argentina can likely meet these needs – assuming they comply with program dictates and continue to receive disbursements.
- **Given that external assets are with the public sector and external liabilities with the private sector – there is a 'transference' problem.** Getting the external assets to the private sector can pose challenges, and is typically manifested via the exchange rate. Central banks can mitigate potential pressure on the domestic currency via various mechanisms, including foreign exchange auctions or, as in more and more cases, via foreign exchange swaps. We think many EMs would be wise to institute some form of foreign exchange swap mechanism, which could help mitigate temporary bouts of financial and funding stress.

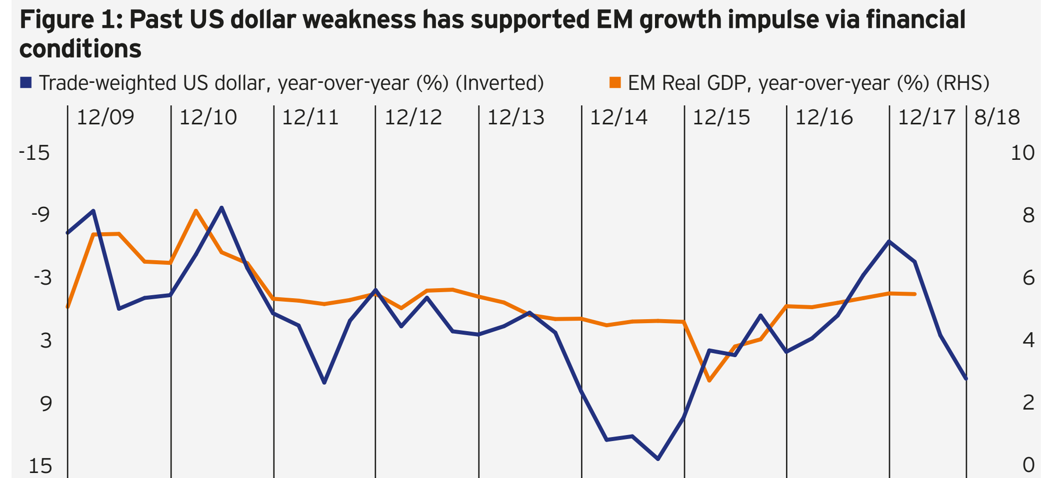
Domestic debt is true source of EM vulnerability

Domestic leverage in EMs has increased over the past decade, particularly in the non-financial private sector and, in some countries, households. More recently, government debt has also increased on fiscal expansion. A domestic debt overhang will likely restrain growth, absent a resurgence in productivity that boosts income and repayment capacity. The recent upturn in EM growth up to 3Q17 has reduced domestic debt and debt-servicing ratios, but this dynamic may not persist if EM countries fail to address underlying competitiveness concerns.

Why does this matter? As monetary policy normalization leads to rising core developed market interest rates, growth differentials between EM and developed markets become more important determinants of capital and portfolio flows needed to support EM asset markets. The higher the differential in favor of EM, the higher the capital inflows (and vice versa). This dynamic becomes more problematic if global financial conditions continue to tighten, particularly via the US dollar.

US dollar and EM growth inversely related
There is, in fact, a persistent relationship between trends in the trade-weighted US dollar and EM growth. Though other factors contribute – such as commodity prices – the US dollar tends to dictate domestic financial conditions for many EM countries via the domestic currency. As the domestic currency depreciates versus the US dollar, domestic financial conditions tighten (and vice versa). It takes time for the depreciation of the domestic currency to improve export competitiveness and contribute to net trade. Meanwhile, as domestic financial conditions tighten, so too does domestic demand and overall growth.

Figure 1: Past US dollar weakness has supported EM growth impulse via financial conditions



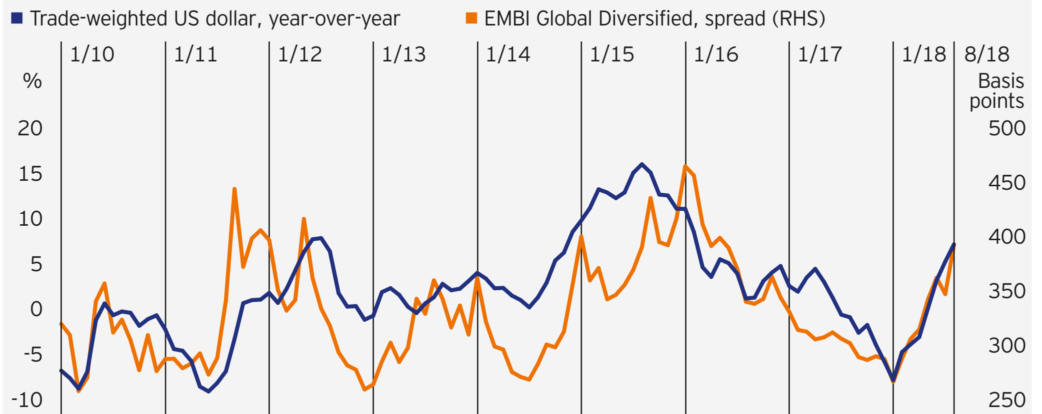
Source: BIS, Macrobond, Invesco, data from Dec. 31, 2009 to Aug. 29, 2018.

Favorable financial conditions as reflected in a weaker US dollar have served to improve domestic credit conditions and, therefore, the growth impulse in many EMs. However, the recent rise in the US dollar is likely to moderate this improvement in domestic demand, via a tightening in domestic financial conditions.

Though the impact varies, as a general rule, we find that a 1% rise in the trade-weighted US dollar (on a year-on-year basis) has tended to lead to a moderation in aggregate EM real gross domestic product (GDP) growth (year-on-year) by 0.3% with a 3-month lag. A rise in the US dollar tends to lead to a decline in commodities (and vice versa) but more recently, the correlation between the US dollar and commodities has broken down. Specifically, the recent stability in oil prices – even in the midst of the recent rise in the trade-weighted US dollar – is likely reducing the overall impact of a stronger dollar on EM growth.

What's priced in?
Indications suggest that the market has priced in the recent strength in the US dollar. EM sovereign credit spreads have tracked the trade-weighted US dollar higher. So, any moderation in EM growth as a result of recent dollar strengthening is, in our view, already reflected in asset prices. In fact, we argue that EM credit spreads would have been even wider on idiosyncratic developments – primarily Argentina and Turkey – were it not for the recent stability in oil prices.

Figure 2: Recent US dollar strength appears priced into EM asset prices



Source: BIS, Bloomberg L.P., Invesco, data from Jan. 29, 2010 to Aug. 31, 2018. EMBI Global Diversified is the JP Morgan Emerging Market Bond Index Global Diversified.

Outlook and strategy

A scenario of a material further tightening in US dollar funding conditions – particularly if not only the cost of borrowing increases but the availability of US dollar funding diminishes – may place lower-rated sovereign and corporate issues under repayment duress, particularly those without external funding backstops.

We believe there has been value creation in certain segments of the market, in assets that have been unjustifiably impacted by the recent concerns over a tightening in US dollar funding conditions. The opportunity has therefore presented itself to add exposure to these select markets. Stability in Argentina and Turkey alone should give way to an EM asset-price recovery. We believe indications of broader stability in the US dollar, and US funding conditions more generally, would serve as an all-clear to add outright exposure to EM fixed income.

Rashique Rahman, Head of Emerging Markets

1 Our five pillars of sovereign fundamentals cover (1) growth; (2) inflation; (3) fiscal balances and domestic debt; (4) external balances and external debt; and (5) policy orientation.

Interest rate outlook

US: Neutral. We expect US rates to stay range-bound, caught between growing trade worries and above-trend US growth. Core US inflation has begun to soften, a trend we expect to persist for the rest of the year. Going forward, we expect softer rental and service costs to drive core consumer price inflation below 2%, excluding tariff-related price increases. Assuming no large trade-driven shocks, US growth is likely to remain above-trend for the rest of the year, supported by stronger energy sector capital expenditure, job growth and consumption. We expect 2018 gross domestic product (GDP) growth of around 2.8%, a percent above the long-term sustainable trend. The risk of tighter global financial conditions due to trade-related tensions and the possibility of further tariffs in the next few months may cause asset price volatility. US Treasury prices may benefit if volatility picks up.

Europe: Underweight. The September European Central Bank (ECB) meeting was uneventful. Draghi showed confidence in the European macro outlook and maintained his dovish rhetoric regarding balance sheet tapering. Growth forecasts were revised downward by 0.1% for 2018 and 2019.[1] Core inflation forecasts were also tweaked marginally lower. Although European economic data remain mixed, 10-year German bund yields have reached 0.50% as risk sentiment around emerging markets has improved and Italian bonds rallied this month.[2] We continue to believe the bond market will begin to price greater term premium into the European yield curve given the prevailing strength of the euro area economy and depressed valuations.

China: Neutral. We expect a flattening government bond yield curve and believe short-term rates may underperform long-term rates. Despite loose interbank liquidity, the market has been relatively cautious. We think this is due to the heavy issuance schedule of local government project bonds, market expectations of higher inflation and potential fiscal stimulus. However, the upcoming inclusion of Chinese onshore bonds in major global indices and the low correlation of this market to other markets should lead to strong foreign demand for Chinese onshore bonds, in our view, especially those issued by governments and policy banks.

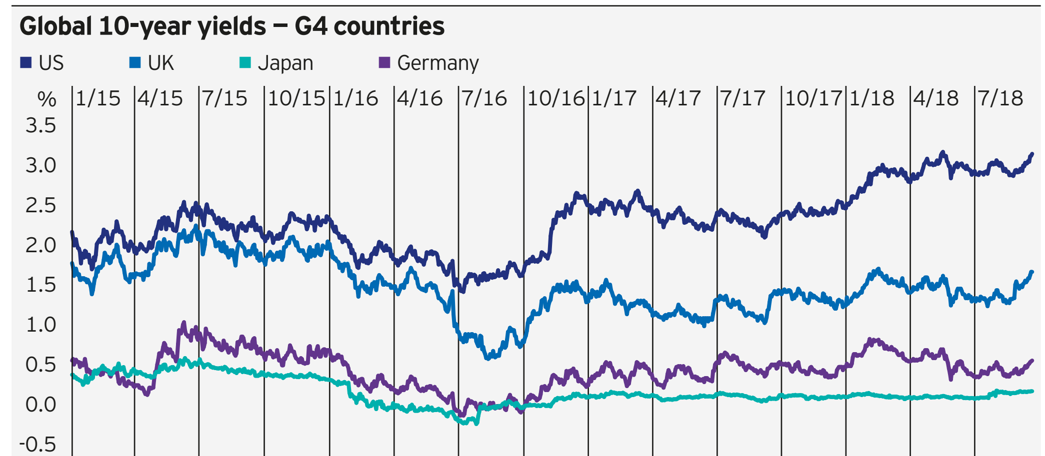
Japan: Neutral. 10-year Japanese government bond (JGB) yields have remained range-bound around 0.1% since the Bank of Japan (BoJ) adjusted its policy guidance in July.[3] Although yields have recently drifted higher, JGBs continue to be little influenced by moves in global fixed income markets. This reflects the market's belief that the BoJ is unlikely to change its Quantitative and Qualitative Easing (QQE) policy soon given still lackluster inflation and the potential hit to growth from next year's planned value added tax (VAT) hike. Underlying GDP growth has remained strong, although third quarter growth is likely to slow sharply from the second quarter due to weather and earthquake related disruptions. Core inflation remains very low, but there are some nascent signs that labor shortages are leading to upward pressure on wages.

UK: Neutral. We are approaching a critical juncture in the Brexit negotiations as Theresa May attempts to convince both the European Union (EU) and the UK parliament that she has the solution to the current deadlock. We are biased towards a favorable outcome and expect a deal at some point in the final quarter of the year. Despite the recent political stalemate, the UK economy has continued to show signs of resilience. Both GDP and average earnings were recorded higher than anticipated by markets in July, and market sentiment regarding a positive outcome to Brexit negotiations has improved. UK gilts yields have drifted higher in recent weeks, in line with global markets, and if we continue to see improving growth data, above-target inflation and an increasing likelihood of a positive Brexit outcome, then the Bank of England (BoE) may raise rates more quickly than currently anticipated, pushing yields higher.

Canada: Overweight. Second quarter GDP data rebounded nicely from the weather induced slowdown in the first quarter. Employment reports have been mixed in recent months. Inflation appears to have stabilized around the midpoint of the Bank of Canada's (BoC) target of 1.0%-3.0%, and the housing market has cooled due to macro prudential measures put in place last year.[4] We expect the BoC to hike the overnight rate to 1.75% at its October meeting. The Canadian 10-year rate should find buying interest if it nears 2.52%, the high for the year.[5]

Australia: Neutral. The Reserve Bank of Australia (RBA) kept its policy rate stable at the September meeting. The statement was nearly identical to the previous month's. The RBA continues to expect above-trend growth, gradual declines in the unemployment rate and a pick-up inflation. The latest employment report was strong. While the unemployment rate remained stable, the number of jobs created was higher than expected and was made up of mostly new, full-time positions, bringing the "underemployment" rate to a four-year low. The latest GDP numbers were also quite strong. The RBA has cautioned, however, that trade tensions between the US and China are a material risk to its outlook. This concern, along with stubborn wage inflation and a slumping housing market, should keep the RBA on hold for some time.

India: Neutral. The Indian interest rate market experienced significant volatility this month, partly driven by a selloff in the rupee. We find current yield levels attractive from a valuation perspective, and expect the Reserve Bank of India (RBI) to intervene from time to time via open market operations to curb further downward pressure on the currency. Additionally, consumer price inflation has softened in recent months with the August headline figure at 3.7%.[6] We expect inflation to hover around 4% in coming months, meaning it is unlikely to be a driving factor of yields in near future, in our view. However, we believe the RBI may raise rates at its October meeting to contain rupee volatility. Although we believe these factors are net positive for the Indian 10-year government bond, we are staying on the sidelines until we see a shift in recent negative sentiment driven by the current account deficit, oil prices and general bearish sentiment toward emerging markets.



Source: Bloomberg L.P., data from Jan. 1, 2015 to Sept. 20, 2018. (Past performance is not indicative of future results).

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1 Source: European Central Bank, Sept. 13, 2018.
2 Source: Bloomberg L.P., Sept. 24, 2018.
3 Source: Bloomberg L.P., July 23, 2018 to Sept. 20, 2018.
4 Source: Bank of Canada, October 2016.
5 Source: Bloomberg L.P., May 17, 2018.
6 Source: Bloomberg L.P., Sept. 12, 2018.

Currency outlook

USD: Neutral. We believe the US dollar is caught between two trends. Interest rate hikes by the Fed alongside its balance sheet reduction have increased US dollar funding costs and tightened financial conditions, spurring the US dollar rally. On the other hand, global growth has been strong, and it appears that US economic activity, while buoyant, has peaked, a convergence that typically causes the US dollar to weaken. If the trade environment stabilizes, this may benefit other currencies versus the US dollar in the near term.

EUR: Neutral. We remain on the sidelines despite the bounce in the euro/US dollar exchange rate from its lows in August. Risk aversion across emerging market currency markets, sparked by Turkey, has abated but remains unresolved. While the fundamental economic picture has improved in the euro area, exogenous factors driving sentiment across currency markets remain unpredictable.

RMB: Neutral. The renminbi/US dollar exchange rate traded between 6.8-6.9 in September, driven by various headlines related to US-China trade friction.[1] The central bank's (PBoC) daily fixing level has been consistently stronger than market expectations. This has helped stabilized the currency, especially during US dollar strengthening moves, and the planned issuance of PBoC bills in the offshore market may give the central bank another tool to manage renminbi liquidity – and, exchange rate stability. Capital controls on outflows remain tight, but financial market opening, such as the inclusion of Chinese equities and onshore bonds in major global indices, will likely further increase overseas demand for Chinese onshore assets and could help maintain stable capital flows. We expect the exchange rate to hover around 6.8-6.9 in the near term.

JPY: Overweight. The yen remains dependent on yield differentials, in our view. The recent rise in US Treasury and German bund yields pushed the currency weaker versus the US dollar and the euro. However, long-term valuations suggest the yen is undervalued, and a reversal in the recent rise in global yields, for example, due to falling growth expectations, should be positive for the yen. Consequently, long yen positions should act as a partial hedge to risk assets.

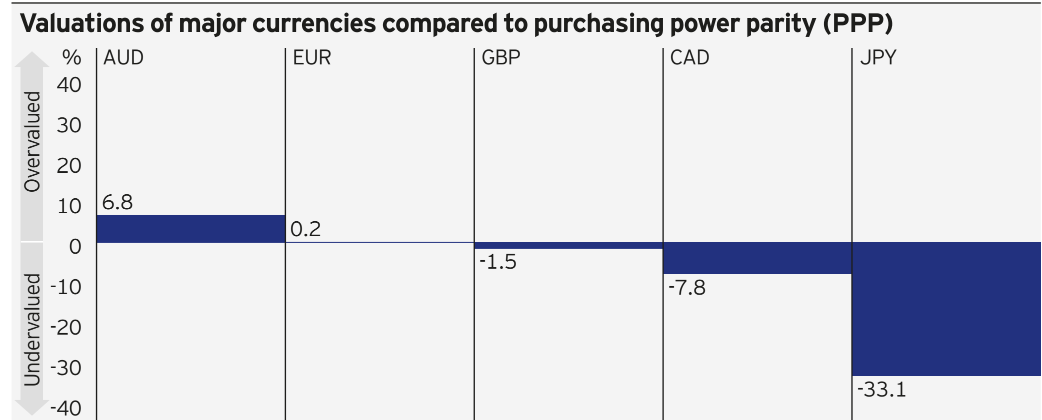
GBP: Overweight. We recently adopted an overweight position in sterling versus the euro due to our expectation of a more favorable outcome to the Brexit negotiation than is currently anticipated by the markets. Economic data in the UK have also begun to show signs of recovery after a weak first half of the year, and inflation remains well above the Bank of England's 2% target.[2] These dynamics suggest that a positive Brexit outcome could result in sterling's strong performance.

CAD: Neutral. An end to trade negotiations with the US remains elusive. However, Canadian growth rebounded from its first quarter slowdown. The BoC appears likely to hike the overnight rate to 1.75% at its upcoming meeting in October. We believe the Canadian dollar's strength over the last quarter will have difficulty continuing, unless trade issues are resolved quickly.

AUD: Neutral. The RBA has said it will be very patient with interest rates but recently said its next move will likely be higher. It has been neutral for some time, so stating that its next policy move will likely be for higher rates is somewhat hawkish, in our view. That being said, we do not think the bank will move any time soon. We do not believe the trade war is over and any new escalation could pressure the Australian dollar down again.

INR: Neutral. The rupee has experienced a significant selloff, especially in the last several weeks, depreciating 11.75% year-to-date against the US dollar.[3] This was largely driven by an increase in crude oil prices, foreign portfolio outflows and investor fears of a higher current account deficit. Some policy initiatives have been announced in recent days to stabilize the rupee, and we expect the RBI to initiate more concrete policy intervention measures should there be any further sell off in the rupee.

Valuations of major currencies compared to purchasing power parity (PPP)



Source: Bloomberg L.P., Sept. 20, 2018.

Ray Uy, Head of Macro Research and Currency Portfolio Management, James Ong, Senior Macro Strategist, Noelle Corum, Associate Portfolio Manager, Yi Hu, Senior Analyst, Michael Siviter, Senior Fixed Income Portfolio Manager, Gareth Isaac, CIO EMEA, Brian Schneider, Head of North American Rates Portfolio Management, Scott Case, Portfolio Manager, Amritpal Sidhu, Quantitative Analyst

1 Source: Bloomberg L.P., Sept. 3, 2018 to Sept. 20, 2018.
2 Source: Bank of England, 2016.
3 Source: Bloomberg L.P., Sept. 19, 2018.

This section highlights the key themes driving Invesco Fixed Income's global credit research process and views. Themes are updated based on evolving trends and expectations.

Global investment themes

Global credit themes

Geographical themes

Investment grade (IG): Fundamental outlook remains strong, valuations fair and technicals improving into year-end

Rationale

Corporate credit fundamentals continue to improve across most developed markets and sectors, with impressive earnings and revenue growth reported during the first half of 2018. Leverage has peaked from recent cycle highs, and we are now seeing more pressure from shareholders to decrease leverage in response to rising funding costs and tax reform, which penalizes excessive interest expense. In addition, the return to higher organic growth has limited the need for debt financed share repurchases or mergers and acquisitions (M&A). As a result, we expect corporate balance sheets to improve going forward. Despite the constructive fundamental backdrop, global trade disputes have the potential to create cost pressures and delay investment following a strong trend in capital expenditures in early 2018.

In terms of technicals, we have seen lower demand from foreign investors as tightening monetary policy drives currency hedging costs higher. Repatriation of overseas cash by US corporations, much of which has been invested in short-maturity IG corporates, is also putting downward pressure on demand for shorter-term bonds. We expect the uptick in US Treasury issuance to shift from US Treasury bills to longer maturities, posing another potential drag on technicals as the Fed scales back its bond reinvestment program. Fortunately, institutional demand for long-term corporate bonds remains robust, and domestic flows into mutual funds and exchange-traded funds (ETFs) remain positive, although they are slower compared to last year.

European credit markets are generally earlier in the credit cycle versus the US and are less levered, although risks from Brexit and political uncertainties in Italy and other countries remain. Given wider credit spreads in many asset classes and a supportive fundamental outlook, we expect European IG credit market returns to stabilize.

IFI strategy

We continue to favor Europe over the US, the UK and Asia. Key drivers to monitor include 1) future changes in monetary policy from the Fed, ECB, BoJ and BoE, viewed on an aggregate basis for their impact on the US dollar and global credit flows 2) the development of US fiscal and regulatory policy changes and 3) the impact on demand and investment of announced tariffs and the potential for a more destabilizing global trade war.

Emerging markets (EM): Compelling valuations are supported by still-favorable macroeconomic fundamentals but geopolitical concerns and US dollar are headwinds

Rationale

Valuations continue to improve in sovereign EM credit, particularly in the high yield, growth-sensitive segments of the market. US dollar funding pressure has eased, but until short-term US interest rates are measurably lower, flows back into EM will likely remain limited. This leaves us with a slightly negative technical picture, although limited new issuance may offer some support.

Deceleration in Chinese growth has spurred the Chinese government to implement targeted easing measures via monetary and fiscal policy, which should also provide near term support that offsets trade concerns. Aside from concerns over the rising US dollar and tighter financial conditions, US foreign policy developments necessitate a higher risk premium in EM assets, in our view, but we think current spreads reflect this. Recent stability in the US dollar and steepening in the US yield curve has provided scope for EM credit spreads and currencies to recover, in our view.

IFI strategy

We continue to believe the market has overpriced risks to EM coming from rising US interest rates and a stronger US dollar as well as geopolitical concerns. While some EM countries face significant challenges, we do not see context for a broader EM crisis. In addition, fundamentals remain broadly supportive. As such, we favor adding risk in a selective manner, focusing on those countries that are less externally vulnerable or that have solid policy anchors, especially at the lower end of the quality spectrum. An easing in US funding conditions would provide context for adding outright exposure to EM, given improved valuations.

US commercial mortgage backed securities (US CMBS): Positioning is key as the commercial real estate cycle progresses

Rationale

We expect commercial real estate rent growth and property price appreciation to continue. However, we believe the pace will slow as new commercial real estate supply dampens space absorption. Furthermore, we expect growth in e-commerce to remain a headwind for the retail property sector. On the bright side, lending conditions remain accommodative across property markets despite slightly tighter credit standards and higher rates. Additionally, we expect modest new issuance volumes to be absorbed by investors.

IFI strategy

Given our neutral outlook on spreads, we prefer slightly seasoned credits that benefit from embedded property price appreciation and decreasing spread duration. Additionally, we expect to find opportunities in non-index, single asset/single borrower positions. Despite continued fundamental strength in the US commercial property sector, we are exercising caution in security selection as the real estate cycle continues to extend, central bank tailwinds have diminished and CMBS have recently outperformed corporate bonds.

US residential mortgage backed securities (US RMBS): Positioned to potentially weather market volatility as fundamentals and technicals remain favorable

Rationale

Thanks to favorable fundamental and technical dynamics, we believe residential credit investments stand to outperform other fixed income credit sectors in a risk-off environment. Though recent housing data reflect some weakness in construction and sales activity, the limited supply of homes against the backdrop of a strong labor market underpins our positive outlook for home prices and borrower performance. Meanwhile, issuance volumes continue to fall short of legacy paydowns, resulting in heavy competition for floating rate and limited duration assets prevalent in the sector. Nevertheless, the flatness of the credit curve warrants a measure of caution with respect to below-investment grade securities, with limited room for further spread tightening in these credits.

IFI strategy

We favor the IG portion of the credit curve in anticipation of continued deleveraging, rating agency upgrade activity, and spread sustainability. While we are cautious about non-IG spreads, our concerns about the ultimate credit quality of lower-rated classes are limited. As short-term rates continue to move higher, we see attractive opportunities in floating rate securities, including Single Family Rental securitizations and moderately seasoned Credit Risk Transfer (CRT) bonds issued by Government Sponsored Entities (GSE). Additionally, new issue Prime Jumbo spreads have recently widened following an increase in supply and, in our view, currently offer a material yield pickup relative to Agency MBS.

US asset backed securities (US ABS): Flat credit curve, contained credit risk; esoteric ABS potentially offer attractive yield and diversification

Rationale

Fundamentals are favorable as the US economy approaches its late cycle. This is a positive factor for the consumer and underlying ABS collateral performance in the near term. As the Fed continues to tighten and the yield curve flattens, shorter-term ABS should remain in high demand. We are somewhat cautious as we approach US mid-term elections and as trade negotiations intensify. However, uncertainty should be supportive of the relatively stable, shorter-duration ABS market.

IFI strategy

Relative attractiveness to corporate bonds has somewhat diminished but we still favor certain higher-yielding, lower-rated aircraft and container ABS for additional yield and diversification. Shorter-duration, non-benchmark triple-A ABS still offer good relative value, in our view, compared to benchmark credit card and auto loan ABS, benefiting from additional carry on the steeper, short end of the curve. We continue to focus on larger, seasoned sponsors as strong demand for ABS has significantly reduced spread tiering across asset types and servicers.

Sector themes

Commodities: Global supply concerns have created energy volatility; we prefer pipelines

Rationale

Commodities have generally benefited from broad global growth, which has increased global commodity demand and pushed commodity prices higher over the past year. However, tariff-related uncertainties and recent US dollar strength pose near-term risks to the commodity space. We still expect corporate and credit fundamentals to remain supportive, given anticipated organic de-levering driven by earnings growth. Additionally, certain commodities may benefit from the favorable demand flow-through impact of accelerated Chinese infrastructure investments, driven by credit easing and fiscal stimulus.

IFI strategy

We favor aluminum and copper producers, which tend to benefit from better supply/demand dynamics, and given more attractive bond valuations. We like exploration and production oil companies located in Latin America as well as certain Russian oil and gas producers. We also remain constructive on selective US midstream companies that are focused on cost of capital optimization and active de-levering to stabilize or maintain investment grade ratings.

Consumer story more nuanced globally, watching US fiscal policy influences

Rationale

The solid US labor market and consumer confidence are supportive of the consumer sector but US consumers are more value and delivery conscious, while international retail demand remains uneven. We are watching the European consumer for any post-Brexit behavior shifts.

IFI strategy

We favor certain US consumer sectors, including leisure and housing-related sectors, but are negative on department stores and mall-based retailers that lack differentiated products. In EM, we favor consumer sectors on a selective basis. We are more cautious on the US automotive original equipment manufacturer (OEM) sector given an adverse trade environment, but European auto demand is proving resilient which creates some potential in the European crossover segment. We are cautious on large European consumer goods companies, based on tight valuations and financial policies that favor equity over debt, but we see selective opportunities in the primary market on the back of increased M&A activity in the sector.

Post-merger and acquisitions (M&A) deleveraging plays

Rationale

M&A activity remains an elevated risk, driven by large overseas cash balances, cash repatriation potential due to tax law changes in the US, moderate financing costs, still modest organic revenue growth and the need to reposition business portfolios.

IFI strategy

We prefer to play post-transaction bond issuance typically characterized by size, liquidity, concessions and plans to deleverage. We believe a discriminating approach to this strategy is warranted due to a lower, but still large, M&A-related pipeline.

Technology, media and telecommunication (TMT): Data and connectivity

Rationale

The TMT landscape continues to evolve as companies contend with cord-cutting trends, the evolution of 5G, and ongoing media sector consolidation.

IFI strategy

We prefer exposure to issuers that build on connectivity – both via spectrum and towers – as well as those that benefit from the secular growth in data.

Yield curve themes

Credit curve positioning impacted by US tax reform

Rationale

There has been increased demand for long-end credit recently ahead of the September 15th deadline for US corporations to fund their pension plans at 2017 tax levels versus lower 2018 levels. Pension plans have been aggressive buyers of long-end credit, which has flattened the credit curve. We believe this is likely a temporary shift around the tax deadline and should normalize. Over the longer term, IG corporate credit curves have steepened to compensate for the flattening of the US Treasury curve and to entice more investors to move out the curve. This steepening of the corporate yield curve has stabilized more recently as 30-year bonds are finding an equilibrium level, although at higher levels than earlier in the year. 10-year bond yields have risen to a lesser extent, but are experiencing similar technicals.

IFI strategy

With the credit curve steepening, 30-year bonds are beginning to look attractive from a spread standpoint, in our view. However, we favor the 7 to 10-year part of the curve to take advantage of some of the steeper yield curve while maintaining lower volatility compared to the 30-year part of the curve.

Tony Wong, Head of Global Research, Joe Portera, CIO High Yield and Multi-Sector Credit, Michael Hyman, CIO Global Investment Grade and Emerging Markets, Mario Clemente, Head of Structured Investments

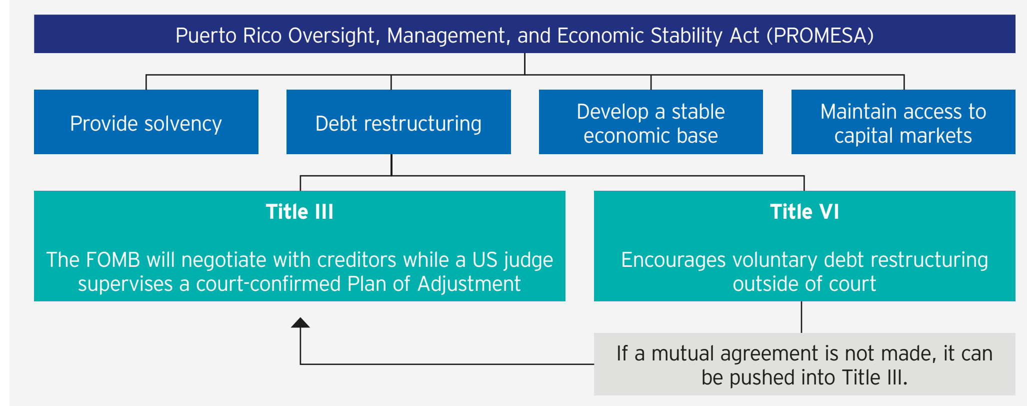
This section highlights the views of Invesco Fixed Income's credit analysts across a broad range of fixed income assets managed by Invesco.

Global credit strategy

Puerto Rico debt developments suggest potential opportunities

From a credit perspective, Puerto Rico has been on a steady downward path for the last decade. Plagued by financial mismanagement, recession and inconsistent financial policies, the territory finally defaulted on its debt in 2016. Because Puerto Rico is a US territory, it cannot file for bankruptcy protection. To fill this gap, the US Congress enacted the Puerto Rico Oversight, Management, and Economic Stability Act (PROMESA) in 2016 to facilitate the restructuring of Puerto Rico's wide range of defaulted obligations, which encompass several of its public sector utilities and other government entities. PROMESA also established the Financial Oversight and Management Board (FOMB) to oversee the debt restructuring process, as well as to approve or enact fiscal plans for various government agencies with the aim of placing Puerto Rico on a path to fiscal and economic stability.

Figure 1: PROMESA overview



For Illustrative purposes only.

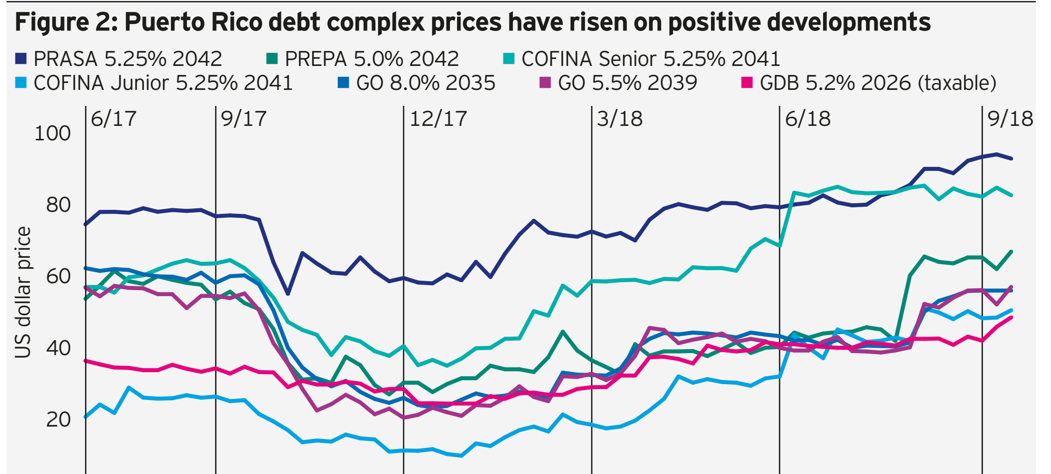
Recent developments

Since the enactment of PROMESA, three entities have entered into preliminary agreements with bondholders – the Puerto Rico Sales Tax Financing Corporation (COFINA), the Puerto Rico Electric and Power Authority (PREPA) and the Government Development Bank (GDB). The GDB restructuring agreement was recently approved by voters and is currently scheduled for a confirmation hearing on November 7. It is difficult to predict when other agreements may be completed, but these deals have raised expectations of potential future deals, resulting in price appreciation across the Puerto Rico debt complex. Given progress on these restructuring fronts, Invesco Fixed Income (IFI) believes there are potential opportunities within the Puerto Rico debt complex, although selectivity is critical, in our view.

Invesco Fixed Income investment strategy

Since IFI meaningfully exited Puerto Rico exposure during the third quarter of 2015, reentry has been challenged by a lack of clarity on potential bond price recovery and concerns about the commonwealth's financial and economic stability. However, over the past several months, progress in setting government fiscal plans (approved by the FOMB) and restructuring agreements between various Puerto Rican entities and investor groups has improved Puerto Rico's credit prospects, in our view. These developments have been reflected in debt prices (Figure 2). They also provide tangible information that we are utilizing to formulate prudent strategies in preparation for a measured reentry.

Figure 2: Puerto Rico debt complex prices have risen on positive developments



Source: Bloomberg L.P., data from June 30, 2017 to Sept. 20, 2018.

In general, IFI's municipal investment strategies are focused on revenue bonds, which are typically backed by user fees and charges, allowing us to run various cash flow scenarios. We believe this strategy also makes sense for Puerto Rico and is potentially the most effective and prudent way to re-establish exposure. The establishment of FOMB-approved fiscal plans and motivated participants in restructuring agreements further help reduce uncertainty, in our view.

IFI strategy — breakdown by government entity

- **Puerto Rico Aqueduct and Sewer Authority (PRASA)** Although a final agreement is not yet in place, we are optimistic a settlement agreement will be finalized in the near term given the recent proposals, including recovery values.
- **Puerto Rico Electric Power Authority (PREPA)** We are also constructive on PREPA but believe the credit presents more challenges than PRASA. Debt prices are lower relative to PRASA, but reflect possible challenges to finalizing a restructuring deal as well as potential downside risks, in our view.
- **Government Development Bank (GDB)** We are cautious on the GDB bonds (taxable). While an agreement was finalized between bondholders and GDB and other relevant parties, there remains a lawsuit filed by the unsecured creditor committee (UCC) as well as a reliance on the Commonwealth's general economic recovery and recovery among its municipalities.
- **Puerto Rico Sales Tax Financing Corporation (COFINA)** Currently we are less positive on COFINA. New COFINA bonds that would be issued as part of the debt exchange would have an escalating debt service schedule, thus requiring economic growth to meet coverage in the future.
- **General obligation (GO)** GO bonds face ongoing legal and political uncertainties that currently preclude the ability to make an informed investment decision, in our view.

Puerto Rico credit outlook

In the near term, Puerto Rico still faces serious challenges and long-term performance remains highly dependent on many factors spanning economic, financial, political and social developments. Recent efforts to formulate fiscal plans and reach more appropriate levels of leverage via debt restructuring are positive actions that help restore balance in Puerto Rico's government operations, the affordability of basic services and economic stability. Continued positive momentum in restructuring agreements with various creditor groups should provide more clarity about Puerto Rico's ability to execute its stated fiscal plans.

Over the next several months, investors will likely focus on the status of PRASA and PREPA. For Puerto Rico to provide its citizens with a safe, supportive and business-friendly environment that fosters economic growth, it will be critical to provide reliable and affordable utilities. The current state of Puerto Rico's utilities is woefully insufficient, especially with regard to electricity provision. Water service is somewhat more reliable and more efficiently managed, but still faces financial challenges and requires significant infrastructure improvements.

Over the longer term, we believe Puerto Rico must avoid the financial and political mistakes of the past. Debt restructuring will likely provide some breathing room, but Puerto Rico will still be burdened with high total fixed costs, including a pay-as-you-go pension plan which accounts for more than 10% of government revenues. In our view, this heavy burden will require the government to make difficult decisions going forward in order to maintain conservative fiscal policies and solvency.

John Schorle, Portfolio Manager, Allen Davis, Senior Analyst, Steve Hong, Senior Analyst

The bottom line

What may LIBOR's phase-out mean for investors?

Justin Mandeville
Portfolio Manager

Jacob Habibi
Senior Analyst

The London interbank offered rate (LIBOR) has long been the benchmark for numerous private-sector interest rates. Now, the US, UK, Europe, Japan, and Switzerland have set out to install replacement benchmarks with greater transparency. We speak with Justin Mandeville, Portfolio Manager and Jacob Habibi, Senior Analyst about the new benchmark rate chosen in the US – the secured overnight financing rate (SOFR) - and what it may mean for investors.

Q: What are the reasons behind the transition?
Justin: LIBOR is a benchmark rate meant to reflect the cost at which large banks borrow from each other. Because it is based on submissions of interbank lending rates by major banks that do not have to be tied to actual transactions, it is more susceptible to manipulation. Evidence of manipulation was identified in an international investigation in 2012, leading the UK Financial Conduct Authority to call for its eventual phasing out by 2021. Given LIBOR's importance as a financial market reference rate, financial authorities around the world have sought to identify new, more transparent benchmarks.

Jacob: Also, the liquidity of US dollar interbank unsecured funding markets has declined significantly over the past several years. This was the goal of Dodd-Frank banking regulations, which sought to reduce systemic risk in the US financial system by dramatically reducing the lending exposure banks have to other banks. This was achieved through onerous capital and liquidity requirements that made interbank lending uneconomical. As a result, average daily interbank lending volume in the US dollar is now extremely thin, yet trillions of dollars in financial contracts still reference this interbank lending market via LIBOR.

Q: How was the new rate determined?
Justin: In the US, the Fed's Board of Governors and the Federal Reserve Bank of New York assembled the Alternative Reference Rates Committee (ARRC) in 2014 to find a replacement. After three years of carefully studying a variety of alternatives, including two other repo rates—the Tri-party General Collateral Rate (TGCR) and the Broad General Collateral Rate (BGCR)—the ARRC chose SOFR, which is the broadest of these options. The Federal Reserve Bank of New York began publishing SOFR in April of this year.

Q: What is SOFR?
Justin: SOFR is a secured, overnight funding rate based on US Treasury repurchase (repo) transactions. It is considered to be one of the most robust indices available since it is based on a high volume of daily overnight transactions. According to Bloomberg, SOFR represents approximately USD800 billion in daily overnight transactions.[1] One of the major advantages of the rate is that it provides market participants with greater transparency into the US Treasury repo market, a vital segment of the US financial system.

Q: Why is the transition important to investors?
Jacob: The New York Fed has estimated that roughly USD10 trillion of corporate loans, floating rate notes, floating rate mortgages, and securitized bonds utilized US dollar LIBOR as a reference rate as of the end of 2016.[2] With interest payments on such a large volume of financial contracts currently based on a reference rate due to be phased out in 2021, a reliable and credible alternative is essential. The most significant question yet to be resolved is how floating rate contracts that mature after the 2021 phase-out date will be modified. Simply switching from LIBOR to SOFR is not ideal for investors because it will likely lead to lower interest rates earned, and the SOFR rate has exhibited volatility around days with increased repo trade volumes. We hope to see more note issuance based on SOFR soon, as this should provide a road map for how to effectively modify LIBOR-based contracts in a way that is acceptable for both investors and issuers of floating rate debt.

Q: What are the potential benefits of SOFR?
Justin: We believe SOFR is a robust benchmark that should avoid some of the challenges faced with LIBOR, since it is based on a large volume of actual transactions. Second, increases in repo rates—due to increased Treasury supply, for example—should be reflected in the SOFR index. SOFR should also automatically reset when the Fed raises rates, providing a quick update to securities pegged to SOFR.

Q: What are the potential challenges related to SOFR?
Justin: We expect the same factors that typically cause volatility in Treasury repo markets to cause some volatility in SOFR. A few of these factors include changes in Treasury bill supply, dealer balance sheet management and excess cash flows of government-sponsored enterprises into and out of funding markets, to name a few. Markets will also likely require an adjustment period to gauge SOFR's liquidity, determine its pricing and understand its potential performance versus other established indexes, such as the overnight bank funding rate, interest on excess reserves and the federal funds rate. Also, because SOFR is tied to overnight repo rates and Treasury collateral, falling repo rates (due, for example, to a credit event that causes a flight to quality) would likely reduce yields on floating rate securities pegged to SOFR.

Jacob: Another important consideration is the persistent pricing gap between SOFR and the most commonly used term for US dollar LIBOR, the 3-month rate. For investors in SOFR-based notes to receive the same floating rate yield as 3-month LIBOR-based notes, they must demand a higher spread over SOFR to compensate for SOFR's lower yields. This differential is due to two factors: first, SOFR is an overnight lending rate, while the most commonly used LIBOR rate is a 3-month lending rate. In almost all market environments, lenders will demand a higher yield to lend funds for three months versus just one day. Second, SOFR represents lending that is secured by US Treasury bonds, very high-quality collateral. Alternatively, LIBOR represents unsecured lending rates based on the general credit of the borrower. Naturally, lenders demand a higher yield to lend funds on an unsecured versus a secured basis.

Q: What do we expect going forward?
Justin: Although the market is still a few years away from completing the transition from LIBOR to SOFR, we believe the success of some recent bond deals tied to SOFR suggests that SOFR will be a welcome replacement. Over the course of the next year, we anticipate increased adoption and issuance of securities based on SOFR, which should help provide depth to the market. As we approach 2021, investors may be wary of LIBOR-indexed securities as questions and concerns arise over whether LIBOR contributors will continue their voluntary submissions, which could lead to volatility of the LIBOR index.

We also expect greater adoption of SOFR by a broad range of issuers as entities collect data points tracking its volatility and liquidity, determine its performance versus other indices and establish the internal systems and procedures necessary to issue and price securities to the SOFR benchmark.

Q: What rates are likely to replace LIBOR in other countries?
Justin: The UK, Europe, Japan and Switzerland have each chosen a new reference rate ahead of LIBOR's phase-out in 2021. In the UK, LIBOR will be replaced by the Sterling Overnight Index Average, or SONIA, which represents the effective overnight interest rate paid by banks for unsecured transactions. SONIA was originally introduced in 1997, but the Bank of England took over its administration in 2017. The benchmark was then reformed in April 2018.

The official European rate, chosen in September, will be the euro short-term rate (also known as ESTER), which the ECB is currently developing. According to the ECB, ESTER will reflect the wholesale euro unsecured overnight borrowing costs of euro area banks. Publishing is set to begin by October 2019.

In Switzerland, the Swiss Average Rate Overnight (called SARON) was established as the Swiss franc LIBOR replacement in 2017. SARON is a secured rate that reflects interest paid on overnight interbank repo transactions. Finally, in Japan, the LIBOR replacement is the Tokyo Overnight Average Rate (TONAR). It is an unsecured, transaction-based benchmark for the uncollateralized overnight call rate market.

Please read the Investment risk section at the end of this publication.

1 Source: Bloomberg L.P., Sept. 20, 2018.
2 Source: Federal Reserve Bank of New Youk, Second Report of the Alternative Reference Rates Committee, March 2018.

Fixed income market monitor

	Coupon (%)	Yield to worst (%)	1 month change in YTW	Option-adjusted spread: Current	1 month change in spread	10 year range min	10 year range max	Returns 1 mth (%)	3 mth (%)	YTD (%)	12 mth (%)
Global Aggregate (USD hedged)	2.67	2.04	-0.01	48	4	23	156	0.31	0.52	0.40	0.74
U.S. Aggregate	3.14	3.30	-0.06	42	2	32	258	0.64	0.54	-0.96	-1.05
U.S. Mortgage-backed	3.56	3.43	-0.06	29	2	-16	181	0.61	0.55	-0.46	-0.53
Global Inv Grade Corporate (USD hedged)	3.48	3.11	-0.03	118	5	55	515	0.46	0.81	-0.78	0.15
U.S. Investment Grade Corporate	3.97	3.95	-0.04	114	5	76	618	0.49	0.74	-1.98	-1.01
Emerging Market USD Sovereign	n/a	6.56	0.34	370	43	157	906	-1.73	-0.42	-4.49	-3.37
Emerging Market Corporate	n/a	5.93	0.34	314	44	120	1,032	-1.08	-0.07	-2.53	-1.52
Global High Yield Corporate (USD hedged)	5.96	5.92	0.07	364	12	231	1,845	0.27	1.74	1.21	2.75
U.S. High Yield Corporate	6.36	6.27	-0.04	338	2	233	1,971	0.74	2.25	2.00	3.40
Bank Loans	5.79	5.88	0.01	n/a	n/a	n/a	n/a	0.41	1.34	3.65	5.29
Municipal Bond	4.68	2.68	0.02	n/a	n/a	n/a	n/a	0.26	0.59	0.25	0.49
High Yield Municipal Bond	5.08	4.74	-0.06	n/a	n/a	n/a	n/a	0.80	1.66	4.86	6.21

Treasury market monitor

	Coupon (%)	Yield to worst (%)	1 month change in YTW	Returns in local currency: 1 mth (%)	3 mth (%)	YTD (%)	12 mth (%)
United States	2.28	2.75	-0.08	0.76	0.36	-0.74	-1.54
Canada	2.25	2.14	-0.04	0.66	0.41	0.64	0.28
United Kingdom	3.40	1.37	-0.01	0.16	-0.80	0.03	-0.54
Germany	1.81	-0.02	-0.08	0.67	0.19	1.64	0.89
Italy	3.23	2.70	0.64	-3.17	-2.03	-6.10	-5.42
Japan	0.99	0.16	0.04	-0.55	-0.72	-0.15	-0.17
China	3.53	3.51	0.10	-0.54	0.71	4.61	4.69
EM Local Currency Governments	n/a	n/a	n/a	-1.16	-1.47	-0.70	0.87

FX market monitor[1]

	Current	10 year range min	10 year range max	Returns 1 mth (%)	3 mth (%)	YTD (%)	12 mth (%)
EURUSD	1.16	1.05	1.60	-0.35	-0.34	-3.12	-2.03
USDJPY	111.07	75.82	124.77	0.58	-1.39	-1.09	-0.74
GBPUSD	1.29	1.22	2.11	-1.96	-3.57	-5.46	-0.63
USDCNY	6.84	6.04	8.28	-0.24	-6.12	-7.40	-4.09
USDCHF	0.97	0.75	1.39	2.36	1.95	2.83	-0.44
AUDUSD	0.72	0.60	1.10	-2.57	-4.69	-3.68	-9.54
CADUSD	0.76	0.72	1.09	-0.74	-1.09	-1.88	-5.34
EURJPY[2]	129.04	94.31	169.49	0.94	-1.06	2.12	1.32
EURGBP[2]	0.90	0.70	0.89	-1.62	-3.24	-2.43	1.42

Sources: Bloomberg Barclays, J.P. Morgan, as Aug. 31, 2018. Credit Suisse Leveraged Loan data as of Aug. 31, 2018. Within the Treasury monitor, United States is represented by Bloomberg Barclays US Treasury Index; Canada is represented by Bloomberg Barclays Global Treasury Canada Index; United Kingdom is represented by Bloomberg Barclays Sterling Gilts Index; Germany is represented by Bloomberg Barclays Global Treasury Germany Index; Italy is represented by Bloomberg Barclays Global Treasury Italy Index; Japan is represented by Bloomberg Barclays Global Treasury Japan Index; China is represented by Bloomberg Barclays China Aggregate Treasuries Index; EM Local Currency Governments is represented by J.P. Morgan GBI_EM Broad Diversified Index. In the Fixed Income Monitor, Global Aggregate is represented by Bloomberg Barclays Global Aggregate (US$ Hedged) Index; US Aggregate is represented by Bloomberg Barclays US Aggregate Index; US Mortgage-backed is represented by Bloomberg Barclays US Mortgaged-backed Index; Global Investment Grade Corporate is represented by Bloomberg Barclays Global Aggregate Corporate (US$ hedged) Index; U.S. Investment Grade Corporate is represented by Bloomberg Barclays Aggregate Corporate Index; Emerging Market USD Sovereign is represented by the J.P. Morgan EMBI Global Diversified Index; Emerging Market Corporate is represented by J.P. Morgan CEMBI Broad Diversified Index; Global High Yield Corporate is represented by the Bloomberg Barclays Global High Yield Corporate (US$ hedged) Index; U.S. High yield Corporate is represented by Bloomberg Barclays U.S. Corporate High Yield Index; Bank Loans is represented by the Credit Suisse Leveraged Loan Index; Municipal Bond is represented by Bloomberg Barclays Municipal Bond Index; High Yield Municipal Bond is represented by Bloomberg Barclays Municipal Bond High Yield Index. Yield to Worst (YTW) is the lowest expected yield calculation given maturity and call features. Option Adjusted Spread (OAS) is the yield difference relative to similar maturity Treasuries that incorporates call, put, sinking fund or paydown features of a bond. Past performance cannot guarantee future results. An investment cannot be made directly in an index. Returns less than one year are cumulative.

1 Positive number represents the currency appreciated against USD, negative number represents currency depreciated against USD.
2 Positive number represents the currency appreciated against EUR, negative number represents currency depreciated against EUR.

Invesco Fixed Income

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Recent IFI publications

1. **IFI Global Investors' Summit May 2018 Macro Overview,** June 2018, Rob Waldner, Chief Strategist, Head of Multi-Sector Portfolio Management, Tony Wong, Head of Global Research and Credit Strategy
2. **Responsible investing in focus: Emerging market bonds,** May 2018, Julie Salsbery, Senior Client Portfolio Manager and Shane Gallagher, Associate Client Portfolio Manager
3. **Do demographics explain structural inflation?** May 2018, Ray Janssen, Senior Analyst
4. **Why should investors consider credit factors in fixed income?** April 2018, Jay Raol, Ph.D., Director of Invesco Fixed Income Quantitative Research and Shawn Pope, Macro Quantitative Analyst, Invesco Fixed Income
5. **Implication of corporate repatriation on money markets,** March 2018, Matt Bubriski, Analyst

Invesco Fixed Income

Global perspective and deep local market knowledge

Global presence

- Regional hubs in Atlanta, London and Hong Kong
- IFI is in ten locations with additional Invesco colleagues in two
- USD311.1 billion in assets under management

Experienced team

- 173 investment professionals
- Averaging 19 years of industry experience
- Deep macro and credit research
- Focused and accountable portfolio management

Global locations

Source: Invesco. For illustrative purposes only.

Invesco Fixed Income teams

	Team members	Average years with Invesco	Average years in industry
Portfolio management and trading	73	12	21
Global research	100	9	16
Total investment professionals	173	10	19
Business professionals	53	12	19
Total fixed income employees	226	11	19

Source: Invesco.

As of June 30, 2018. Subject to change without notice.
Investment specific experience for investment professionals.

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The risks of investing in securities of foreign issuers, including emerging market issuers, can include fluctuations in foreign currencies, political and economic instability, and foreign taxation issues.

The performance of an investment concentrated in issuers of a certain region or country is expected to be closely tied to conditions within that region and to be more volatile than more geographically diversified investments.

Mortgage- and asset-backed securities, which are subject to call (prepayment) risk, reinvestment risk and extension risk. These securities are also susceptible to an unexpectedly high rate of defaults on the mortgages held by a mortgage pool, which may adversely affect their value. The risk of such defaults depends on the quality of the mortgages underlying such security, the credit quality of its issuer or guarantor, and the nature and structure of its credit support.

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