Invesco Fixed Income

Global Fixed Income Strategy

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July contents

1 **Invesco Fixed Income June 2016 Global Investors' Summit**
We provide our strategic views for the next 12-18 months.

5 **Interest rate outlook**

7 **Currency outlook**

8 **Could a more dovish US Federal Reserve be on the horizon?**
Risk to inflation mandate may cause a shift in Fed strategy.

10 **Global investment themes**
Key themes behind Invesco Fixed Income's (IFI) global views and research processes.

12 **Utility bonds: analyzing the impact of renewable energy adoption**
Renewable energy trends may pose a long-term challenge to perceived "safe" utility bonds.

15 **The Bottom Line**
We speak with Rashique Rahman, Head of Emerging Markets (EM), about the EM team's credit cycle approach to assessing macro risk.

Global macro strategy

For a more in-depth discussion of our macro views, please see "Invesco Fixed Income June 2016 Global Investor's Summit."

Invesco Fixed Income June 2016 Global Investors' Summit

Invesco Fixed Income (IFI) held its semi-annual Global Investor's Summit in June, gathering around 50 of IFI's investment professionals from around the world to discuss key themes affecting global bond markets and determine our strategic views for the next 12-18 months. The following represents our current views and outlook.

Global macro overview

In the aftermath of the UK vote to leave the European Union (EU), we believe financial market volatility has the potential to feed through to consumption and domestic demand, adversely affecting growth in the UK and Europe. Globally, we expect the direct impact of the Brexit vote on growth to be limited.

It remains to be seen to what extent tighter financial conditions, including a potentially stronger US dollar following the vote, will dampen global growth. We do, however, expect uncertainty generated by the "Brexit" outcome to curb investment, not only in the UK and the EU, but perhaps elsewhere, until the outcome of the complicated exit negotiations can clarify the trade and business landscape.

With heightened uncertainty and potential market volatility post-Brexit, we favor a market neutral stance. Though market dislocations such as this one can often present opportunities, we currently do not favor taking significant active risk-on positions in credit, currencies or interest rates. Catalysts for a reversal of the risk-off move are not yet clear, in our view, and uncertainties remain. As such, this backdrop does not warrant significant risk taking.

We see evidence of a late cycle emerging in global corporate credit markets. We place most global credit sectors (US bank loans, US investment grade, US high yield, emerging markets and Asian credit) in the mid-to-late phases of their credit cycles. We believe European sectors (European bank loans, European investment grade and high yield) are in the early to mid-cycle expansionary phase.

In the financial sector, changes in global banking regulations have pushed capital, liquidity and asset quality metrics to their strongest levels in decades, but they have also impaired revenue growth and profitability. In Europe, we believe negative interest rate policy (NIRP) has constrained profitability in some cases and made it difficult for banks to grow their returns on equity (ROE) back to pre-financial crisis levels. We believe credit quality differentiation among banks will play an increasingly important role as we enter a more challenged global growth environment.

Regional macro views

US: We have downgraded our US GDP trend forecast for the coming year to around 2.3% from around 2.5% to reflect softer than expected economic data since the November Summit. The bounce in the June payroll brought the three-month moving average of job growth more in line with our 2.3% estimate.[1] However, given declines in other measures of growth, we are not expecting job growth to meaningfully surpass current levels going forward.

There is good news on US inflation, which has been firming. While driven initially by rents, inflation has become more broad-based. We expect core consumer price inflation (CPI) to reach 2.4% over the next year.

What does this moderate growth and inflation backdrop mean for US Federal Reserve (Fed) policy? Near-target levels of unemployment and inflation would typically point to Fed action to raise interest rates. However, the UK's vote to leave the European Union (Brexit) may cause the Fed to remain on hold until it sees greater clarity on the vote's impact on global growth, financial market volatility and the path of the US dollar. US bond markets do not appear to be pricing in a Fed rate hike until 2018. Based on our outlook for US growth and inflation, we expect the Fed to be comfortable raising interest rates in December, with risks to a later move.

Europe: We now expect the eurozone to grow by around 1.2% over the next year (down from our previous estimate of around 1.5%), and expect inflation to measure 0-0.5% (current CPI is running at about 0%, well below the European Central Bank's (ECB) 2% target).The risks to both growth and inflation are tilted to the downside, however, due to economic and political uncertainty created by the Brexit referendum result. Even though the ECB has substantially expanded liquidity, market indicators suggest that investor confidence in the ECB's ability to achieve full-fledged reflation remains low. Core government yield curves, for example, have collapsed and breakeven inflation rates remain at historical lows.

Political challenges - as opposed to market-led financial risks - could constrain the ECB's efforts to restore price stability and growth momentum. Italy's October referendum on Senate reform could be a major risk barometer and the run-up to the second quarter 2017 French presidential election and the October 2017 German federal election will also be monitored closely. Other countries that should be closely watched in terms of sentiment toward EU membership are Finland, the Netherlands and Denmark.

China: At the November Summit, we had expected monetary and fiscal stimulus to boost Chinese growth. However, a May article in a major government newspaper, the 'Peoples' Daily,' suggested that China's macro policy has pivoted away from stimulus toward supply side reform and efforts to curb leverage in the economy. We believe this article marks a policy sea change which could cap future growth momentum.

We continue to expect Chinese GDP to grow by around 6% annually for the foreseeable future, a bit below the government's target. Inflation is also expected to remain below the government's objective at around 2%. Going forward, we expect a "zig-zag" policy approach to achieving desired growth: When GDP growth is below desired levels, we expect increased stimulus; growth at or above desired levels is likely to bring focus on controlling leverage. Uncertainty around our view centers on 1) low productivity growth amid high leverage that could dent growth and 2) possible policy-maker personnel changes later this year that could cause material changes in policy approach or direction.

Go to The Bottom Line

We speak with Rashique Rahman, Head of Emerging Markets, about the EM team's credit cycle approach to assessing macro risk.

Page 15

Emerging markets: While there are some idiosyncratic bright spots, we believe that overall emerging market (EM) growth prospects are challenged. We believe that EM, in general, is at the later stage of its credit cycle or into a credit cycle downturn. This implies a poor growth outlook, as balance sheets are impaired and repaired, and risks associated with slow growth rise, such as fiscal and financial sector strains. Our work suggests that there is quite a bit of differentiation regarding where countries are in their respective credit cycles - some continue in a credit expansion, some are in repair/recovery and most are in the late-expansion/early downturn phase. This dynamic highlights the differentiation that we foresee in macroeconomic and market outcomes for EM countries.

The uncertainty and volatility due to the Brexit vote, especially with respect to US dollar strength, is likely to reinforce these conditions, in our view. That said, stability in the US dollar and global risk sentiment may help ease financial conditions and push out the turn in the cycle.

Risks to our views:

US economy stalls: In the US, strong labor market performance has supported consumption, which has underpinned our above-trend growth outlook. Deterioration in US labor market conditions could pose risks to consumer spending overall, feeding through to weaker growth. Financial market volatility due to increased global growth uncertainties could also dampen consumer confidence and spending.

European downside risks now span economic, financial and political arenas: Risks out of Europe now pose perhaps the most significant global economic and financial event risks as China devaluation fears recede. If risks of political fragmentation rise, the eurozone is likely to underperform our baseline scenario of weaker growth and inflation. Anti-EU and/or anti-eurozone political forces could exacerbate headwinds, causing declines in consumer confidence and animal spirits in both the corporate and financial sectors.

Financial and economic instability in China: As China focuses more on supply side reform and controlling private sector leverage, we could see greater than expected financial market volatility and/or downside pressure on Chinese economic growth. Shifts in policy direction due to possible personnel changes among key policy makers could also affect economic outcomes. Chinese capital outflows and associated volatility were some of the drivers of Q1 risky asset underperformance. Renewed volatility in China is likely to have impacts on the global financial markets.

Geopolitical shocks causing generalized global risk-off sentiment: Destabilizing geopolitical events could have systemic implications for developed market and EM countries. Following the surprising "leave" result in the UK referendum, a push for additional referenda across Europe could pose significant risks to financial markets and sentiment.

IFI macro views and 2016 outlook

	US	Eurozone	Japan	China
GDP trend growth	Expect 2.0-2.3% growth in coming year. Labor market improvement on track.	Expect 0.8 – 1.2% growth in coming year with risks skewed to downside.	Expect 0.7% growth in coming year. Investment weak and wage growth insufficient to boost demand.	Expect growth to moderate to around 6%. Growth appears to be stabilizing, but risk of further slowdown.
Inflation	Expect core inflation to near 2.4% by the end of 2016, barring further drops in energy prices.	Expect annual inflation of 0.0 – 0.5% over the next year with risks skewed to downside.	Expect 0.3% inflation over the next year due to soft oil prices and stronger yen.	Expect 1.5-2.0% inflation, below central bank's objective.
Monetary policy	Expect first 2016 Fed rate hike in December. Fed continues to be data dependent and risk sensitive through 2016.	Expect greater chance of ECB increases in asset purchases if downside risks to growth materialize. We do not rule out rate cuts but believe they are less likely.	Expect further easing from Bank of Japan at July or October monetary policy meetings.	Large-scale monetary easing is unlikely. Targeted easing measures are being adopted.
Fiscal policy	Neutral	Currently neutral, but likely to change to expansionary.	Expansionary	Expansionary
Currency	Expect US dollar to continue to appreciate, but at more modest pace than previously.	Expect euro depreciation if more political risks materialize but solid fundamentals should offer support.	Expect yen to trade between Y100-115 per US dollar this year. A yen below 100 will likely be unwelcome by Japanese authorities due to its deflationary impact.	Expect the Chinese currency (RMB) to move generally in line with target basket of currencies.

1 Source: US Department of Labor, Invesco, July 8, 2016.

Interest rate outlook

US: Global uncertainties around growth and politics remain elevated, resulting in strong demand for US Treasuries. Looking at valuations, investors currently receive very low compensation for holding US Treasuries. Furthermore, we expect the Fed to continue policy normalization as growth and core inflation continue to firm. Thus, given low compensation and our Fed outlook, we are constructive on US Treasury inflation-protected securities (TIPS) relative to nominal US Treasury securities, as TIPS should benefit from firming US inflation.

Europe: Surprisingly, financial markets appear to have taken the shock of the UK referendum result in their stride with European credit spreads narrowing and core European interest rates selling off with the long end of the yield curve bearing the worst of the brunt. Perhaps markets were buoyed by a better than expected outcome in Spanish elections and the promise of more global central bank easing. Investor attention at this moment in time is on the ECB where its quantitative easing (QE) program, as currently designed, could start running into operational challenges- i.e. sourcing sufficient bonds to purchase. There are various ways that the ECB could adapt, from increasing the amount it can hold in any security, to extending the duration of how long QE lasts or, to changing the entire makeup of the QE program. We expect the last option to be a last resort.

UK: The outcome of the June 23 EU referendum is likely to have a negative impact on UK growth, as businesses defer expenditure and consumers are negatively impacted by the Brexit vote ("leave" has led to house price declines, weaker sterling etc.). Over the coming months, UK and EU officials will meet to try and negotiate the terms of the UK's exit from the EU (without article 50 being triggered). It is likely that any negotiated settlement will be inferior to what many "leave" campaigners had hoped to achieve. Does the government take it upon itself to unilaterally accept the terms of any compromise (likely) or does it put any deal back to the public for approval (less likely)? The possibility of EU reform will come to the fore over the coming months, as European politicians try and minimize contagion from the June 23 result. Perhaps such reform would be sufficient to bring the UK back from the brink of departure. We expect further central bank easing in the interim, with gilts outperforming other core government bonds.

Japan: The Bank of Japan is due to release updated inflation and growth forecasts at its July meeting. These are likely to show marked downward revisions, compared with previous releases. It is increasingly likely that the central bank will respond to these revisions by easing monetary policy further. This is likely to take the form of an increase in monthly purchases, an increase in the average duration of the bond portfolio, a further move into negative interest rate territory and an increased allocation to equities and real estate. The monetary action is likely to be accompanied by an expansion in fiscal policy, aimed at boosting consumption and investment.

Canada: Severe wildfires in the province of Alberta likely led to an economic contraction in Q2, and the momentum into the second half of the year remains weak. Exports, ex-energy, have slowed to 2014 levels despite the significant depreciation of the Canadian dollar and record US auto sales. Sluggish oil prices and a slow return to oil production will likely further limit economic recovery. Consumer spending and residential investment remain the key pillars of growth and the Bank of Canada has reduced its growth forecasts for this year and next. It is, however, reluctant to cut interest rates amid the high number of overleveraged households and is likely to keep monetary policy on hold this year. Given the weak growth and disinflationary environment, we continue to expect the yield curve to flatten.

Australia: As we expected, the Reserve Bank of Australia (RBA) held interest rates steady at its July 5th meeting. Just like the June meeting, they were light on forward guidance in their statement, other than to reference the need for more information. We believe that information is likely the CPI data scheduled to be released July 27th. With inflation running at all-time lows, we think that number will force the RBA to lower rates at the August meeting. The national election is still being decided but the new government may not be conducive to reform as there is no clear majority. That fact has caused Standard and Poor's to put the government bonds on review for downgrade. While the downgrade might be a headwind in the future, we believe that Australian government bonds should remain well supported in the near term since Australia is one of the highest yielding markets among developed economies and the RBA is expected to lower rates further.

China: Recent Chinese economic data have been mixed. While the service sector has continued to improve, the manufacturing sector remains soft. Producer price deflation has been easing considerably and consumer price inflation is likely to remain tame. China's job market has also shown some signs of weakness. Amid this backdrop, and as more government bonds in the eurozone and Japan trade at negative yields, Chinese RMB onshore government bonds (yielding around 3% on the 10-year bond) may look attractive to global investors.[1] June recorded the largest monthly inflow into onshore Chinese bonds from offshore investors, a total of CNY51 billion (USD7.6 billion).[2]

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1 Source: Bloomberg LP, July 18, 2016.
2 Source: Bank of America Merrill Lynch, July 15, 2016.

Currency outlook

USD: Our US growth outlook continues to play out as expected: Second quarter growth indicators point to a rebound, job market data point to declining slack in the labor market and consumption has held in. However, global growth uncertainties and the extent to which they feed through to the US (whether it is through financial markets or directly) are of major concern. If the US economic picture strengthens further and the Fed assumes a more hawkish stance, we would expect a stronger dollar overall.

EUR: In the aftermath of the EU referendum, we expect downside pressure to emerge for the euro. The increased uncertainty and ubiquity of negative interest rates will be supportive for the US dollar relative to the euro, in our view. Furthermore, market expectations of Fed interest rate hikes have been pushed out due to exogenous factors and domestic data has recovered in the US.

JPY: The yen has come under pressure, since briefly breaching the 100 level (versus the US dollar) the day after the UK's EU referendum (initial "safe-haven" bid). This pressure has coincided with a sense of calm being restored to markets, as political uncertainty in the UK has stabilized (the appointment of a new Prime Minister) and economic data out of the United Stated has continued to point to a tightening labor market. Heightened expectations of fiscal and monetary easing by Japanese authorities is likely to keep downward pressure on the yen over the short term, but aggressive moves are likely to be capped.

GBP: Sterling has declined meaningfully since the June 23 referendum and subsequent resignation of Prime Minister, David Cameron. As we enter what could be, a protracted period of uncertainty, many commentators are suggesting that the currency could have further to fall. However, we believe the timely announcement of Theresa May as new Prime Minister is likely to bring about an air of stability to proceedings. So much so, that the risk/reward to being underweight the currency, at current levels, does not appeal to us, particularly given the extreme positioning seen in the market. We remain neutral, but would give serious consideration to moving to overweight on a material break of 1.30 (versus the US dollar). We believe the UK/EU relationship issue will be resolved and entry levels in the 1.20 – 1.30 area will likely be deemed to have been an opportunity.

CAD: The strength of global risk appetite and oil prices continues to support the Canadian dollar. Capital inflows, both into the Canadian equity market and residential investment, are currently funding Canada's external deficit. Monetary policy divergence has not come to fruition as anticipated - following the UK referendum, the Fed is expected to remain on hold, while the Bank of Canada is unlikely to cut interest rates due to concerns about domestic credit growth. However, global demand for oil is falling as inventories remain elevated making the Canadian dollar vulnerable, in our view. We remain negatively positioned in the Canadian dollar.

AUD: As expected, the RBA held interest rates steady at its July 5th meeting. It provided little forward guidance in its statement other than looking for more information, (probably CPI data to be released July 27th). Inflation has been running at all-time lows as structural wage issues persist, thus we expect the RBA to be forced to lower rates at the August meeting. The currency has strengthened over the last month and a half. With the lower than desired inflation, and a likely more relaxed approach to policy rates in the immediate future, we expect the Australian dollar to be pressured downward.

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Could a more dovish Federal Reserve be on the horizon?

Risk to inflation mandate may cause a shift in Fed strategy

The fallout from the Brexit vote may cause the Fed to focus greater attention on risks to its inflation mandate. While the Fed seems comfortable with the gradual convergence of inflation toward its 2% target, the Brexit vote increases the risk of falling short. The aftermath of Brexit could dampen inflation through two channels: 1) a resurgence in US dollar strength that curbs inflation pressures through the import channel, and 2) increased financial market volatility that leads to tighter financial conditions and reduced lending.

Even before the UK referendum, several indicators had thrown the Fed's inflation target into question. Market-based inflation expectations have been persistently low, and survey-based inflation measures, such as surveys of professional forecasters, have been on a downward trend for several years. Pre-Brexit low inflation expectations exacerbated by post-Brexit disinflationary concerns leave the Fed in a situation where it needs to respond cautiously, in our view.

Recent data such as jobless claims and retail sales suggest limited economic impact, so far, from Brexit. Risk markets such as equities and credit markets have also had a fairly benign reaction. The Fed will be watching how the economy and markets evolve very closely as it judges what reaction is needed.

Because the Fed's target interest rate is close to zero, a relapse into disinflation would likely pose very clear risks to the effectiveness of monetary policy. Because the Fed is unable to cut interest rates much without going below zero, it would likely need to engage in further QE or other unconventional policy in order to ease. We believe the Fed would rather avoid unconventional policy due to its questionable effectiveness and may first adopt a more dovish message.

If the Fed decides to shift toward a more dovish stance (more concerned about growth and inflation), events might occur as follows:

1. A prominent Fed speaker (for example, Fed Chair Janet Yellen or New York Fed President William Dudley) might emphasize risks to the Fed's inflation outlook in either a Federal Open Market Committee statement or speech.
2. The Fed might begin to outline the types of policy measures it might consider in the case of a deteriorating outlook. Talking about such policy measures up front might increase market confidence, making it less likely that they would actually have to be used. The Fed would seek to avoid giving the impression that it is out of ammunition.
3. If the economic outlook began to deteriorate significantly, the Fed may make an actual policy shift back to zero interest rates.
4. If further deterioration were to occur, the Fed may resort to unconventional monetary policy — for example, QE or negative interest rates (as a last resort).

Invesco Fixed Income's view

We do not believe that the economy will get to the point where the Fed implements an actual policy shift. However, a downshift in economic momentum toward a more mediocre range (such as weak labor market data of around 150,000 new jobs created per month) and inflation that continues to firm only gradually may require a dovish shift from the Fed if inflation expectations stay low. This would put the Fed in an environment similar to what the ECB experienced in late 2015 - growth chugging along but its inflation target in danger. If the data strengthen from here (job growth back to around 200,000 per month, for example), then this may all be avoided - stronger data supports inflation expectations and reduces the probability of a dovish shift. However, if payroll growth slows to below 100,000, then we believe the Fed is likely to adopt a dovish stance on an accelerated basis.

The Fed is one of the few major global central banks that has room to lower real interest rates (nominal interest rates less inflation), which are viewed as critical drivers of credit growth and economic activity. Other major central banks either do not have enough inflation to get real interest rates down (e.g., the European Central Bank and the Bank of Japan), or they face the potential to cause a currency crisis if real interest rates are adjusted too quickly (e.g., the People's Bank of China). If global growth disappoints significantly, we believe the Fed is one of the few effective shock absorbers the global economy has left.

James Ong, Senior Macro Analyst

Global investment themes

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

Global macro themes

Greater growth uncertainty: volatility to continue

Rationale

Strong June job growth builds confidence that US is not dipping into recession, but global uncertainties likely to remain in the spotlight. Fed hikes are likely delayed until at least December.

IFI strategy

This environment warrants caution given high uncertainty, yet we favor playing the risk-on rally tactically as we believe accommodative global central banks and a Fed on hold will support demand for high yielding assets.

Asian deflation

Rationale

Many Asian economies still require easing from their central banks and weaker currencies. However, stabilized financial market and deflationary pressures in Asia give policy makers flexibility and time to implement changes.

IFI strategy

Our currency and interest rate risk positioning remains low while this deflationary theme pauses. We favor being short selected Asian currencies versus the US dollar and taking profits on yen long positions.

Global credit themes

Geographical themes

Investment grade (IG): Global reach for yield, cycle differences remain

Rationale: US, Europe and Asia IG seeing strong investor demand due to global central bank policy. US fundamentals are challenging with leverage at cycle highs, although recent corporate actions have been credit supportive, especially in energy.

IFI strategy: Favor gaining exposure to select higher quality issuers in energy, pipelines and metals where shorter-term maturities are well covered by liquid assets. Favor industrials, consumer cyclicals. Neutral financials.

Emerging markets (EM): Growth impulses peaking following duration rally

Rationale: Continuation of broad EM divergence remains overriding theme, with risk markets buoyed by favorable market technicals and major central bank activities/low interest rates.

IFI strategy: Prefer remaining modestly net long US dollars, keeping China beta low. High-yield and commodity-related exposure likely well-supported in near term.

US commercial mortgage backed securities (US CMBS): Macroeconomic headwinds

Rationale: Transaction volume and property price appreciation are slowing. Early signs of tighter financial conditions have become apparent. Rent growth remains modest.

IFI strategy: Prefer seasoned US CMBS as cycle progresses. Credit-differentiation is accelerating, placing a premium on selection.

US residential mortgage backed securities (US RMBS): Favorable fundamentals, valuations mixed, liquidity inconsistent

Rationale: Legacy non-agency US RMBS offer opportunity where fundamentals are favorable. Credit risk transfer (CRT) deals show solid fundamentals, however, valuations are nearing stretched in below-investment grade segment. Liquidity remains inconsistent. Market remains sensitive to supply.

IFI strategy: Prefer higher quality legacy prime, alt-A, seasoned CRT, 2014-early 2015 vintages. Avoiding sub-prime, option adjustable rate mortgages. Neutral BBB-rated CRT and below-investment grade.

Global investment themes continued

US asset backed securities (US ABS): Value in subordination, pronounced tiering

Rationale: US ABS has been less volatile versus US IG. Fundamentals are strong but modestly weaker as collateral performance has moved off historical low delinquency and loss levels. Technicals are supportive.

IFI strategy: Prefer adding exposure to subordinate tranches where collateral performance remains stable. Lower volatility AAA attractive, in our view. Believe senior auto US ABS and esoteric issuers can provide opportunities. Favor avoiding deep subprime auto US ABS.

Sector themes

Commodities: Global rebound in energy, metals; volatility remains

Rationale: Expect global IG credit risk premia to improve as some energy and metals credits transition to high yield. Fundamental credit quality concerns due to modest economic growth and risk of volatility due to OPEC and Fed uncertainty.

IFI strategy: Favor gaining exposure to select higher quality energy and metals issuers where shorter-term maturities are well covered by liquid assets.

Consumer story more nuanced globally

Rationale: Solid US labor market and lower gas prices are supportive, but consumers more value-conscious and international retail demand remains uneven, due partly to volatile capital markets. Watching European consumer for post-Brexit behavior shift.

IFI strategy: Favor select US consumer sectors including autos, restaurants, leisure and housing-related sectors. Negative on "big box" retailers that lack differentiated products. Favor EM consumer sectors on a selective basis.

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

Rationale: M&A activity at post-recession high, driven by large cash balances, low all-in financing cost, lack of organic growth, and need to reposition business portfolios.

IFI strategy: Preference to play post-transaction bond issuance, typically characterized by size, liquidity, concessions and plans to deleverage. Due to rise in M&A-related issuance, believe more discriminating approach to this strategy is warranted.

Global technology – big data

Rationale: Expect global use of data to grow and transition to cloud-based platforms.

IFI strategy: Prefer to gain exposure to software and services (SAAS), cell towers and select wireless issuers. Have avoided hardware original equipment manufacturers (OEM).

Yield curve themes

Credit curve positioning, value in long end

Rationale: Global zero interest rate policy has forced cash investors and sovereign wealth funds into 3-5 year part of the credit yield curve, creating steep 5-7 year part of the curve. Lately, sovereign wealth funds have targeted the 10-year part of the curve. Longer duration spreads remain wide and offer favorable carry, in our view. As Fed normalizes policy and money market rates become more attractive, we expect some outflows from 1-3 year part of the curve into money market funds, but expect demand for 5-10 year paper to be resilient.

IFI strategy: Prefer 7-10 and select 30-year points on US IG credit yield curve. New issuance at longer maturities has tended to come at healthy concessions.

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Global credit strategy

Utility bonds: analyzing the impact of renewable energy adoption

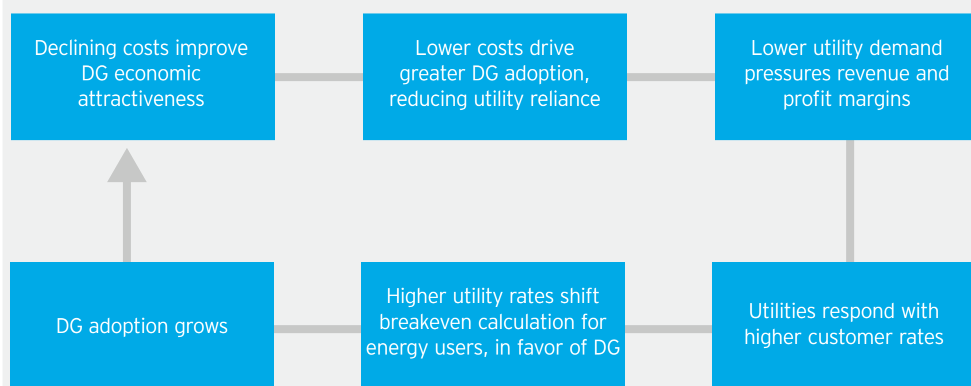
Renewable energy trends may pose a long-term challenge to perceived "safe" utility bonds

"Distributed generation" is currently a hotly debated topic within the investor-owned, regulated utility sector. In its simplest form, distributed generation (DG) is power generated at the point of consumption - think of solar panels on a rooftop being used to provide electricity for a home. Although solar penetration is relatively small in the context of total US electricity generation, it is possible to envision a scenario in which declining DG costs lead to increased adoption rates, leading to a long-term structural decline in utility usage as customers opt to generate their own electricity at home. This risk may bode negatively for certain regulated utilities. However, we believe such a potential long-term industry-wide shift could also provide unique opportunities for value-oriented and highly selective active investment managers.

The ultimate downside case for the modern-day utility may seem dire, but we think it is unlikely

As the cost of purchasing and installing solar equipment declines, residential and commercial adoption rates could expand significantly, to the potential detriment of utilities. This increase in DG adoption could result in decreased demand for utility-owned generation, potentially pressuring utility growth and ultimately capacity utilization, company profit margins and credit profiles. Further, this adoption reduces the number of customers paying full utility rates, leaving those customers without DG to cover the cost of a large and expensive asset base, effectively raising electricity prices for remaining customers. However, by raising utility rates as DG costs are declining, utilities could ultimately spur even greater DG adoption as the economics of adoption improve, all else equal, resulting in further customer losses. Figure 1 below simplistically illustrates a potential long-term scenario in which increased DG economic attractiveness ultimately drives greater adoption - a circular phenomenon.

Figure 1: Hypothetical DG adoption cycle



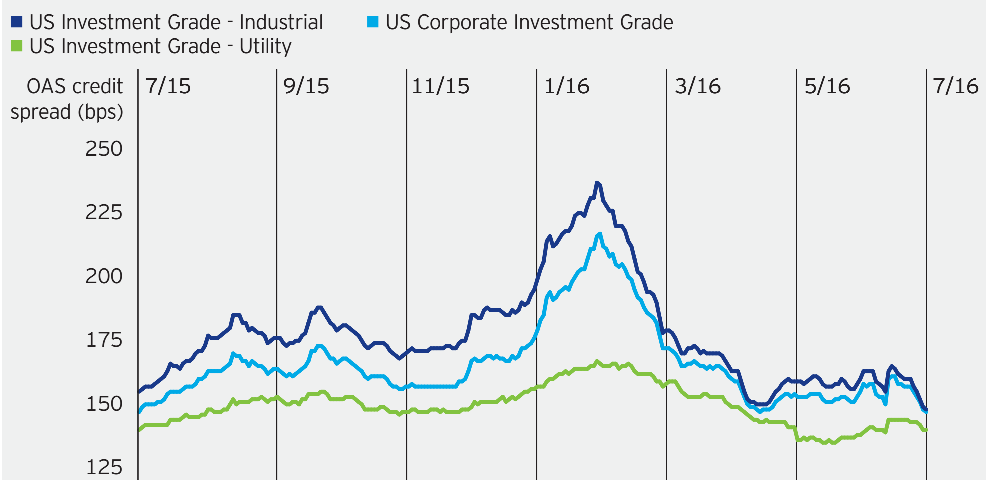
Source: Invesco, July 15, 2016. For illustrative purposes only.

In the ultimate downside case, DG functionality and economics could become so attractive that customers could power their homes with minimal utility reliance, which could prove costly to utilities that rely on a large and stable customer base to recoup sizeable capital investments. We believe this ultimate downside case is, however, likely a low-probability scenario that relies on DG-supportive regulatory guidelines in the short-term and/or more cost-feasible energy storage options in the long run. Utilities are already beginning to diversify business models into different business segments with attractive growth attributes, potentially as a longer-term offset to concerns around future electricity demand trends. Nevertheless, we believe that utilities must respond to this risk over time to reassure investors that the regulated business model will, in fact, remain economically viable.

Are investors being compensated for longer-term industry-wide risks associated with alternative energy adoption?

We believe that many investors tend to favor utility bonds given the generally predictable and stable nature of the regulated, monopoly-like business model enjoyed by many investor-owned utilities. However, if DG adoption were to become more broad-based in the US, all else equal, this could potentially cause meaningful demand destruction for traditional utility service offerings. Given this perceived safety, we question whether this aforementioned risk, although likely a longer-term one, is reflected in today's relatively tight credit spreads in the utility space. As is seen in Figure 2 below, US investment grade utility spreads have traded tight compared to both US investment grade corporate spreads and US investment grade industrial spreads, which we believe supports the assertion that investors ascribe meaningful value to the regulated nature of this space. However, given the existence of this presumed "safety premium", it is unclear to us that investors have priced in many of the longer-term, industry-wide risks associated with the potential growth in renewables adoption.

Figure 2: Utility credit spreads historically tight versus investment grade corporates



Sources: Barclays US Corporate Investment Grade Index, Barclays US Investment Grade Industrial Index, Barclays US Investment Grade Utility Index, data from July 13, 2015 to July 13, 2016.

Accretive (but debt-financed) M&A another key long-term risk for credit

We expect utilities to proactively and prudently work with regulators while simultaneously adjusting and managing their business models in anticipation of shifts in commercial and residential demand for energy generation. However, we also remain cognizant of certain potential side-effects of anticipated growth in DG adoption. Notably, we believe that utilities could seek to acquire other businesses as a solution to offset both growth and profitability pressure - we are already seeing such activity in the regulated utility space today. Given the potential for heavy utilization of debt financing for M&A transactions (which, although situationally dependent, has the potential to drive accretion for equity investors), this trend is a clear concern for credit investors, in our view. It represents another key risk that we believe investors must be aware of when evaluating trading levels for investment grade utility bonds. However, on the positive side, acquisitions can result in net revenue growth, and, although each situation and acquisition financing structure is unique, M&A could also potentially result in valuable cost synergies that may be net profit-enhancing.

We remaining highly selective as renewable energy trends evolve over time

As trends in DG and other forms of renewable energy adoption evolve over time, we believe these changes may present unique opportunities for active investment managers. By thoroughly understanding key differentiating factors among regulated utility business models and determining which companies are best positioned to most successfully navigate ongoing industry changes, we believe that active managers will likely be able to strategically position themselves with those utilities that provide the highest risk-adjusted return potential. Capitalizing on this longer-term opportunity will require a deep understanding of (i) business models and state-specific regulatory relationships, (ii) balance sheet capacity and flexibility as it relates to maintaining investment grade ratings, (iii) M&A and other situational risks and (iv) company-specific idiosyncratic opportunities that may be catalysts to drive both alpha and spread compression.

We continue to monitor these developing industry-wide trends in search of investment opportunities that exhibit both healthy downside protection and attractive risk-adjusted return potential - two key attributes that we believe are necessary as we invest in what has historically been viewed as the "safe" regulated utility sector.

Bixby Stewart, Analyst, Jay Sammons, Analyst

The Bottom Line

Rashique Rahman,
Head of Emerging Markets

We speak with Rashique Rahman, Head of Emerging Markets, about how the EM team incorporates a credit cycle framework into its investment process.

Q1: Why is it important to understand the EM credit cycle?

Rashique: Gauging where a country is in its respective credit cycle is important; it has implications for assessment of overall macro-related risk – and how that risk should be priced by markets. The analysis of credit cycle dynamics is, therefore, an important input into our investment decision-making process. First, it informs us on growth and inflation dynamics. Second, it provides guidance on, not only the type of policy measures likely to be implemented, but the potential efficacy of those policies. Third, it gives indications as to how markets are likely to respond, based on the imbalances developed during the credit expansion phase, and depending on where we are in the credit cycle.

From an investing standpoint, we want to ensure that we are being properly compensated for the markets of countries where macro conditions suggest higher risk – that is, uncertainty as to economic and market outcomes as a result of where a country is in its respective credit cycle.

Read more about how the EM team incorporates a credit cycle framework in its investment process in the upcoming IFI white paper, "A cycle approach to assessing emerging markets macro risk" by Rashique Rahman, Head of Emerging Markets and Jay Raol, Senior Macro Analyst.

Q2: How do you determine where a country is in its credit cycle?

Rashique: It is hardly an exact science, but based on academic work and our own analysis, we have isolated a number of factors that provide guidance on where a country is likely to be in its respective credit cycle. First, we examine the current credit-to-GDP ratio relative to its historical trend. When the current value exceeds its trend, this would indicate to us an excess of credit.

However, because the rapid pace of financial deepening in EM countries makes looking only at credit/GDP problematic (rising levels of credit also reflect maturing credit markets and deepening financial intermediation), we augment this by looking at changes on a cross-country basis. When a country experiences credit growth in excess of GDP greater than its peers, this would additionally indicate an excess buildup of credit. Based on these factors, we bucket EM countries as in expansion, downturn, repair or recovery in their respective credit cycles.

Q3: Generally speaking, where is EM currently positioned in the credit cycle?

Rashique: With some notable exceptions, most EM countries that we have analyzed appear to be late into their expansions or in the early stage of a downturn. Brazil, Chile and China, for example, have seen expansion beyond prior cycle peaks; hence are well into late-expansion territory, which increases the likelihood of entering a downturn, in our view.

Q4: What does this mean for the for the overall EM macro outlook?

Rashique: The main implications are around domestic leverage and growth. On an aggregate basis, when countries approach a credit cycle downturn, we observe that real GDP growth tends to decline below trend – defined as growth relative to a three-year rolling window. This suggests that EM economies reach a point at which additional credit does less and less to induce economic activity. This appears to be occurring in a number of EM countries since 2010, most notably China.

Q5: Do external factors play a role in EM credit cycle dynamics?

Rashique: Yes, in fact, we have found a very important link with the US dollar. As the dollar weakening since 2004 tended to reinforce the upturn in the credit cycle via capital inflows and currency appreciation, what is likely exacerbating the downturn in the credit cycle for a number of EM countries now is the recent appreciation in the US dollar.

US dollar appreciation and the concomitant depreciation in EM currencies serve to tighten domestic financial conditions, which may manifest itself in a more-pervasive downturn in the credit cycle. EM currency depreciation serves not as a means of loosening domestic monetary conditions but in fact tightening them.

That said, we are likely in the late stage of the currency adjustment, evidenced by a tightening in overall domestic financial conditions, which is likely to suppress domestic demand and, in the process, materially suppress imports. Although there is scope for a further rise in currency risk premia, we are likely closer to a point of currency stabilization, especially for those countries where the real exchange rate has adjusted materially and who are in the early/mid-stages of their respective credit cycles. Countries at the late stages of their respective credit cycles, with more entrenched imbalances, may still see their currencies depreciate even as imports contract, this as risk premia rise and capital outflows increase (or capital inflows decrease).

Q6: How is this likely to play out? Is there risk of an EM crisis?

Rashique: We do not believe we have the makings of an EM crisis. The result of all this tightening in credit/financial conditions is that it ultimately serves to rebalance the economy both domestically and externally; moreover, as the currency depreciates and economic activity and wage growth slows, external competitiveness is increasingly restored and current account balances improve as imports slow and exports grow.

Q7: What are you watching out for going forward?

Rashique: We are watching trends in real effective exchange rates. Since 2011, real effective exchange rates for EM countries have declined, largely reflecting trade-weighted depreciation in their nominal exchange rates. We expect that moderation in domestic prices and wages will increasingly contribute to the real exchange rate adjustment going forward, to the extent that currency depreciation fosters a tightening in overall domestic financial conditions. We also monitor overall domestic and external financial conditions to detect countries that may be transitioning from a growth slowdown to a more disorderly deleveraging.

That said, the recent pause in the Fed's plans to normalize interest rates relating to Brexit - and the generalized tightening in global financial conditions – has served to at least push out, if not begin to reverse for a time, the tightening in EM domestic financial conditions that had persisted over the last several quarters. However, given that we believe we are in the late credit-cycle phase for many EM countries, we believe the positive impact is only likely to be temporary. Moreover, a resumption of US policy rate normalization is likely to further facilitate the process of EM domestic rebalancing.

Recent IFI publications

1. **IFI Global Investors' Summit,** June 2016, July 15, 2016, Greg McGreevey, Chief Executive Officer, Rob Waldner, Chief Strategist, Head of Multi-Sector Credit
2. **Brexit, Brexident or Bremain?,** June 20, 2016, Arnab Das, Head of EMEA and EM Macro Research
3. **Emerging markets' alpha beta soup,** June 2016, Arnab Das, Head of EMEA and EM Macro Research, Rashique Rahman, Head of Emerging Markets, Jay Raol, Senior Macro Analyst
4. **Has US financial sector reform created excess demand for government securities?**, May 2016, Justin Mandeville, Portfolio Manager
5. **The 2016 IMF-World Bank Spring Meetings,** May 2013, Arnab Das, Head of EMEA and EM Macro Research
6. **Metals and mining – The worst appears over but risks remain,** April 2016, Rahim Shad, Senior Analyst, and Jason Trujillo, Senior Analyst
7. **Corporate hybrids offer potential opportunities in low interest rate environment,** April 2016, Samira Sattarzadeh, Senior Analyst
8. **The corporate hybrid: Expanding market offers opportunities,** April 2016, Samira Sattarzadeh, Senior Analyst, Lyndon Man, Senior Portfolio Manager, and Luke Greenwood, Senior Portfolio Manager
9. **Currency management: A simple roadmap,** April 2016, Ray Uy, Head of Macro Research
10. **European banks' balance sheets strongest for a generation,** April 2016, Ian Centis, Senior Analyst
11. **The UK reconsiders its membership in the European Union,** February 2016, Sean Connery, Portfolio Manager

Market monitors

Fixed income market monitor

	Coupon (%)	Yield to worst (%)	1 month change in YTW	Option-adjusted spread: current	Option-adjusted spread: 1 month change in spread	Option-adjusted spread: 10 year range min	Option-adjusted spread: 10 year range max	Returns: 1 mth (%)	Returns: 3 mth (%)	Returns: YTD (%)	Returns: 12 mth (%)
Global Aggregate (USD hedged)	2.82	1.14	-0.23	52	4	23	156	1.90	2.51	5.87	7.37
U.S. Aggregate	3.13	1.91	-0.29	55	5	32	258	1.80	2.21	5.31	6.00
U.S. Mortgage-backed	3.64	2.07	-0.30	27	9	-16	181	0.81	1.11	3.10	4.34
Global Inv Grade Corporate (USD hedged)	3.80	2.39	-0.21	154	9	55	515	1.83	3.05	6.53	7.06
U.S. Investment Grade Corporate	4.16	2.88	-0.26	156	7	76	618	2.25	3.57	7.68	7.94
Emerging Market USD Sovereign	n/a	5.37	-0.43	387	-10	157	906	3.37	5.02	10.31	9.79
Emerging Market Corporate	n/a	5.01	-0.34	376	1	120	1,032	1.79	3.77	7.80	5.30
Global High Yield Corporate (USD hedged)	6.35	6.73	-0.01	574	28	231	1,845	0.66	4.61	7.95	2.13
U.S. High Yield Corporate	6.58	7.27	-0.04	594	28	233	1,971	0.92	5.52	9.06	1.62
Bank Loans	4.84	5.16	0.01	n/a	n/a	n/a	n/a	0.03	2.86	4.99	0.93
Municipal Bond	4.77	1.61	-0.23	n/a	n/a	n/a	n/a	1.59	2.61	4.33	7.65
High Yield Municipal Bond	5.32	6.01	-0.42	n/a	n/a	n/a	n/a	3.11	5.10	7.98	12.09

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	2.05	1.11	-0.31	2.21	2.10	5.37	6.22
Canada	2.48	0.91	-0.16	1.68	2.05	3.19	4.98
United Kingdom	3.74	1.00	-0.46	5.92	6.48	12.03	14.19
Germany	2.28	-0.33	-0.25	2.76	2.85	6.77	8.26
Italy	3.73	0.85	-0.08	1.08	0.43	2.99	8.93
Japan	1.14	-0.19	-0.10	1.34	2.74	7.08	9.10
China	3.60	2.87	-0.04	0.62	-0.18	1.94	7.25
EM Local Currency Governments	n/a	n/a	n/a	2.20	3.23	7.93	9.77

FX market monitor[1]

	Current	10 year range: min	10 year range: max	Returns: 1 mth (%)	Returns: 3 mth (%)	Returns: YTD (%)	Returns: 12 mth (%)
EURUSD	1.11	1.06	1.60	-0.23%	-2.41%	2.00%	-0.37%
USDJPY	103.20	75.82	124.77	7.32%	9.11%	17.27%	18.73%
GBPUSD	1.33	1.33	2.11	-8.09%	-7.31%	-7.77%	-15.28%
USDCNY	6.65	6.04	8.28	-0.89%	-2.90%	-0.95%	-6.52%
USDCHF	0.98	0.75	1.39	1.83%	-1.46%	4.48%	-4.15%
AUDUSD	0.75	0.60	1.10	3.00%	-2.69%	4.74%	-3.32%
CADUSD	0.77	0.72	1.09	1.30%	0.61%	7.91%	-3.32%
EURJPY[2]	114.61	94.31	169.49	7.54%	11.78%	14.95%	19.13%
EURGBP[2]	0.83	0.70	0.84	-7.88%	-5.00%	-9.58%	-14.95%

Sources: Barclays, J.P. Morgan, Bloomberg L.P., as of June 30, 2016. Credit Suisse Leveraged Loan data as of June 30, 2016. Within the Treasury monitor, United States is represented by Barclays US Treasury Index; Canada is represented by Barclays Global Treasury Canada Index; United Kingdom is represented by Barclays Sterling Gilts Index; Germany is represented by Barclays Global Treasury Germany Index; Italy is represented by Barclays Global Treasury Italy Index; Japan is represented by Barclays Global Treasury Japan Index; China is represented by 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 Barclays Global Aggregate (US$ Hedged) Index; US Aggregate is represented by Barclays US Aggregate Index; US Mortgage-backed is represented by Barclays US Mortgaged-backed Index; Global Investment Grade Corporate is represented by Barclays Global Aggregate Corporate (US$ hedged) Index; U.S. Investment Grade Corporate is represented by 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 Barclays Global High Yield Corporate (US$ hedged) Index; U.S. High yield Corporate is represented by Barclays U.S. Corporate High Yield Index; Bank Loans is represented by the Credit Suisse Leveraged Loan Index; Municipal Bond is represented by Barclays Municipal Bond Index; High Yield Municipal Bond is represented by 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.

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All data as of June 30, 2016, unless otherwise stated.

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