Invesco Fixed Income

Global Fixed Income Strategy

July 2015

July takeaways

- We are constructive on European investment grade credit, particularly relative to the US. (page 15)
- We believe the municipal default rate is likely to rise. We examine this key variable and implications for bond investors. (page 17)
- We explain the basics of commercial mortgage backed securities (CMBS) and the potential investment benefits of this important asset class. (page 19)
- We highlight our global macro and regional views concluded in the IFI June Investor's Summit.

Global Strategy Perspective

For a more in-depth discussion of our macro outlook, please see "June 2015 Investor's Summit: Macro Overview."

Go to The Bottom Line

We speak with Head of Global Investment Grade Credit Research, David Todd, about his team's role in the portfolio investment process.

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Invesco Fixed Income June Summit: Macro Overview

Invesco Fixed Income (IFI) held its semi-annual Investor's Summit in June, gathering around 50 of IFI's investment professionals from around the globe 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

We continue to be upbeat on the US economy and view ongoing US labor market tightening as in line with our forecasts laid out in past Summits. Despite improvement in the US economy, however, we believe the global disinflationary environment will prevent longer-term US interest rates from rising to levels seen in past expansions. We continue to expect the divergence between the US and other major economic blocs to drive US dollar strength, although some weak US data and signs of a pick-up in Europe recently caused a pause in the dollar.

We have upgraded our 2015 growth forecast for the eurozone. Despite recent signs of recovery, however, we believe Europe's lack of structural reform and deleveraging is likely to limit its potential growth. We also maintain our slow growth outlook for Japan, in line with the previous Summit. We believe the resurgence of the Japanese consumer will likely be necessary for meaningful recovery and are watching consumption data closely. In China and non-Japan Asia, economies are facing a slowdown in global trade that continues to drive their deceleration.

Our view on China remains largely unchanged from December - we have expected slower growth compared with many market participants, but no hard landing. We expect additional monetary easing aimed at lowering real interest rates and supporting domestic demand. It will be important to see whether China's easier financial market conditions (lending environment) lead to a pick-up in real output. Our view on emerging markets (EM) remains cautious, in line with the December Summit. Although markets appear focused on EM external funding needs, especially with a US Federal Reserve Bank (Fed) interest rate hike on the horizon, we believe a build-up in domestic private sector debt is more threatening to EM growth prospects and credit fundamentals. We believe careful analysis and security selection will be paramount for EM bond investors going forward.

We have believed Greece would remain in the eurozone, primarily due to the fact that the Greek population is largely supportive of membership in the euro. Negotiations between Greece and its eurozone creditors have been drawn out but seem to be coming to a conclusion. As long as tensions do not escalate, we believe investors may view current European government bond yields as attractive.

Regional macro views

US: We believe the US output gap - widened by the financial crisis — is finally closed or nearly closed. We expect the Fed to raise interest rates in the third or fourth quarter, based on the strength we are seeing in the US labor market. We expect GDP growth to trend at around 2.5-2.8% for the rest of the year and inflation to reach the Fed's 2% target by year-end. We believe a yield of 2.5% on the 10-year US Treasury bond represents fair value, but we expect global disinflationary pressures to anchor US interest rates below that level for some time.

We believe our positive US macro view represents a relatively benign environment for credit: Default rates are likely to remain low and financial conditions are likely to remain easy (financial conditions tend to turn adverse in anticipation of recession). Although the bond market appears to be pricing in the likelihood of an interest rate hike in December, we believe a September rate hike is possible, if the chances of global contagion remain limited. We believe the timing of "lift-off" is less important than how fast monetary policy is normalized over time. The bond market appears to be pricing in a relatively slow pace of interest rate increases, and a faster than expected pace would likely be negative for the bond market, in our view.

Europe: We have upgraded our macroeconomic outlook on the eurozone. We estimate that eurozone GDP growth is currently running at about 1.5% on an annual basis, helped by the favorable impact of lower oil prices, a weaker euro and a decline in borrowing costs due to European Central Bank (ECB) monetary easing. That said, investment demand remains weak and the region is burdened by a heavy domestic debt load. Therefore, we believe that market confidence in a reflation scenario — demonstrated by a sharp sell-off in core European government bonds in recent months — may be somewhat overdone. We believe structural constraints will limit long-term potential growth to around 1% and expect inflation to level off to around 1.5% by year-end.

We see potential opportunities in core European government bonds, European credit and peripheral sovereign bonds, given the recent rise in yields and strong demand driven by ECB quantitative easing (QE). Over time, we would expect a committed ECB to cause investors to move out of lower yielding core European sovereign bonds and into higher yielding peripheral sovereign and corporate bonds.

Japan: The economy recorded strong growth in Q1, but it will likely be difficult for that level of output to be maintained without the consumer making a greater contribution, in our view. The Japanese consumer continues to be negatively affected by the consumption tax hike in April 2014. We think this situation will improve as the labor market tightens and now that real wages have turned positive. Japanese exports have picked up but are showing signs of slowing again. The well-being of the Chinese economy will likely determine where exports go from here. Recent weakness in the yen should also have a positive impact, although Japanese government officials do not appear pleased with the yen's recent weakness given the negative impact that a weaker currency has on business profitability and energy import costs. We continue to expect Japanese monetary policy to remain on hold, despite the fact that inflation remains well below the Bank of Japan's (BoJ) 2% target.

China: Similar to past Summits, we believe that China's slowing growth trend over the past few years is consistent with a soft landing, although risks of a greater than expected slowdown have risen somewhat, in our view. Monetary easing measures implemented in the fall of 2014 and earlier this year appear to be stabilizing growth. Nevertheless, we anticipate slower potential growth in the coming years relative to the past decade as China aims to transition to a consumption-led versus investment-led economic model. We expect this transformation to take time and result in a "new normal" of slower growth going forward.

We expect inflation to stabilize, in part due to higher food prices, after concerns of deflation in the first half of this year. However, forecast inflation of 0.75-1.25% still remains well below the central bank's target of 3%, leaving room for further monetary easing, in our view. Prevailing high real interest rates point to further interest rate cuts and reduction in the central bank's reserve requirement. What remains to be seen is whether lower borrowing costs will generate real output growth. It will partly depend on banks' appetite for lending, in our view, although companies have recently turned to the local bond market as an important source of financing.

A key event to watch in the second half of this year will be the acceleration of China's capital account opening, as China seeks inclusion of its currency in the IMF Special Drawing Rights (SDR) currency basket. We will be watching China's capital account opening initiative carefully, along with its net impact on financial flows, especially as the government seeks to support two main objectives, boosting growth and maintaining a stable currency.

Emerging Markets: We are broadly negative on the outlook for emerging markets (EM). We believe EM are at the end of an extended credit cycle. Most EM will likely see deleveraging and slower growth going forward. A lack of competitiveness and poor productivity growth magnify the problem. However, we do not foresee a broad EM crisis. While the bond market appears to be focused on the public sector external debt and funding-related risks (driven by Fed rate hike concerns), EM's large private sector domestic debt burden is more problematic, in our view. We believe the potential for a disorderly deleveraging is underestimated and may be the root of future financial stress in EM. Given this dynamic, investors may be currently misallocating risk, creating the potential for EM spread widening, in our view. However, to the extent that these risks are adequately priced, we believe there is potential opportunity in EM, with careful analysis and distinction among credits.

Risks to our views

Fed policy error: Monetary policy normalization that occurs too fast could be perceived as choking off growth and may be disruptive to financial markets. On the other hand, a Fed that is perceived to be behind the curve may also disrupt markets. We view this scenario as lower risk, however, since low global potential growth is likely to keep inflation muted for some time.

China hard landing: A sharp slowdown in the Chinese economy would likely have a negative impact on global growth and EM in particular. A hard landing scenario could result in China devaluing its currency, with competitive devaluations occurring elsewhere in response.

EM contagion: A crisis in EM that develops beyond a single country could have systemic implications for other EM and developed market countries. Such a crisis could potentially be precipitated by a stronger US dollar that severely tightens funding conditions or sharply lowers commodity prices, for example.

Eurozone: A return to the deflationary environment seen in the eurozone at the end of last year could challenge US growth assumptions and the effectiveness of available policy measures in both the US and Europe.

IFI macro views

	US	Eurozone	Japan	China
GDP growth	Expect 2.5-2.8% growth in 2015. Labor market improvement on track.	Expect above-trend growth of 1-1.5% in 2015. Cyclical recovery has picked up post-ECB easing.	Expect 0.5-1% growth in 2015. Growth challenged by weak consumer. Tighter labor market conditions may provide upside.	Expect growth to moderate to 6-7%. Growth appears to be stabilizing, but risk of further slowdown.
Inflation	Expect inflation to remain low at around 1% in 2015.	Expect reflation to continue, resulting in 0.3% inflation in 2015.	Expect 1.5% inflation in 2015. Wage pressure, weaker yen and higher oil prices could push inflation closer to BoJ target of 2%.	Expect 0.75-1.25% inflation, well-below central bank target of 3%.
Monetary policy	First Fed rate hike in Q3/Q4. Pace of hikes gradual.	ECB will likely keep easing on track until 2016, as planned.	BoJ likely to stay on hold, although inflation remains below target.	Expect additional easing measures aimed at lowering real interest rates.
Fiscal policy	Neutral	Neutral	Easy	Neutral, easing bias
Government yields	Expect global disinflationary forces to anchor 10-year US Treasury yields below fair value of around 2.5%.	Expect 10-year bunds in range of 0.6-1%. Expect peripheral bond yields to stabilize post-Greece resolution.	Expect Japanese 10-year government bond yields in range 0.3-0.5%. Expect to trade directionally in line with US Treasuries.	
Currency	US dollar strong relative to developed market and many EM currencies.	ECB ease and Fed normalization lead to euro declines via portfolio outflows.	Yen expected to be stable, but stronger than expected US data or softer than expected Japanese data could cause yen to weaken.	Less managed, rising two-way volatility as capital account becomes more open.

Rob Waldner, Invesco Fixed Income Chief Strategist

Interest Rate Outlook

US: US long-term interest rates have moved closer to fair value, in our view. The US growth outlook continues to improve (we expect GDP to grow around by 2.8% for the rest of 2015). We continue to be constructive on the US labor market and expect recent wage gains to support higher core inflation readings over the course of the year. We believe the Federal Reserve (Fed) is likely to begin its hiking cycle in the fourth quarter. Anticipation of monetary normalization will likely lead to yield curve flattening, in our view, as the short end of the curve begins to price in higher short-term rates. We see the US 10 year Treasury yield staying below fair value of 2.5% due to global deflationary forces.

Europe: We remain constructive on the German bund market, expect volatility to calm, and believe the current disorderly price action has led to an overshoot in bund yields. In our view, we are seeing a cyclical bounce in a low inflation environment. Lending is picking up, although modestly, and the output gap in Europe remains very wide. This should ensure that European Central Bank (ECB) quantitative easing (QE) lasts to the end of the program in December 2016. The ECB also signaled it would respond to any "unwarranted tightening in the monetary policy stance," suggesting it would not tolerate a sharp bund sell-off. While it appears that the deterioration in liquidity conditions is a permanent fixture of the markets, we do not believe that the fundamental backdrop has changed enough to warrant much higher yields from here — additionally, supply is likely to be low in the summer months. We believe investors will likely return for the higher yields on offer as growth and inflation remain low and zero interest rate policy in Europe remains in place for a long time. We expect 10-year bund yields to trade in a range of 0.5-0.9% in the near term.

Japan: We expect the Bank of Japan (BoJ) to remain on hold in the coming months, despite the fact that inflation remains well below its 2% target. The Japanese economy continues to make a moderate recovery but the government will need to see a step up in the pace of growth if it is to go ahead with the additional consumption tax rate hike in 2017. We have seen some progress recently on the investment front, but this is likely to dwindle unless the Japanese consumer starts to spend more. Wages are moving in the right direction, but lagging, as are exports. We expect JGB yields to remain range-bound in Q3 (0.3-0.5%) as the BoJ seeks to keep real interest rates low.

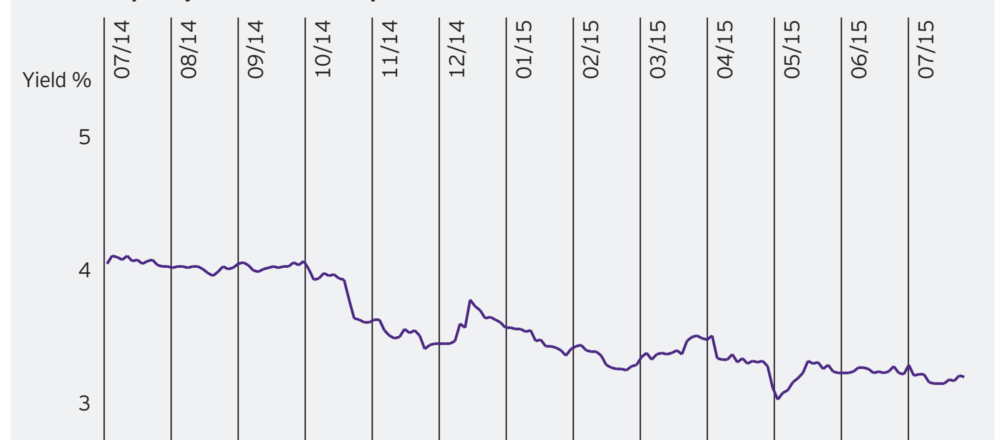
UK: The August Quarterly Inflation Report will likely provide guidance regarding the timing of the first Bank of England rate hike. In recent weeks, we have heard comments from a number of committee members suggesting they are getting close to favoring a rate hike, including more dovish members of the committee. Average wages are on the rise and the labor market remains very tight, so it is easy to see why some committee members are concerned. With remaining uncertainty surrounding Greece, we expect the timing of a rate hike around May 2016, and market pricing appears to be in line with our thinking. We would expect gilts to underperform bunds on a cross market basis, given the policy divergence between the respective central banks.

Canada: Economic growth has slowed even more than our below-consensus expectations would have predicted. A recession is now likely in 2015, in our view. Monetary policy appears to be the only source of economic stimulus available, since fiscal easing is likely on hold until after the upcoming federal election in October. Therefore, interest rate cuts appear to be on the table, contrary to our expectations. An interest rate cut would likely only exacerbate Canada's internal imbalance, in our view. We continue to favor owning Canadian duration versus US Treasuries, as policy and growth formation diverge. We expect 10-year Canadian government bond yields to trade in a range of 1.5-2.2% through year-end, as global bond valuations remain expensive and volatility elevated.

Australia: We have added to our Australia interest rate exposure as we think Australian rates offer attractive relative value. Despite improvement elsewhere, the economic outlook for Australia remains challenging, in our view. This was confirmed when iron ore touched multi-year lows on expectations that policy easing in China will not likely improve the outlook for Australia's key commodity exports – slow growth in China is likely to keep Australia's terms of trade under pressure and negatively impact its national income. The Reserve Bank of Australia is currently in a "wait and see" mode, but we expect it to adopt a softer stance eventually, especially if the Fed delays rate hikes.

China: We expect continued bull steepening (a decline in short-term interest rates relative to long-term rates) of the onshore China government bond (CGB) yield curve. The People's Bank of China (PBoC) has steadily cut policy interest rates since last November to combat low consumer price inflation and producer price deflation. Producer prices in China have been in deflation for more than three years, resulting in high real interest rates for Chinese manufacturers. Because the Chinese authorities appear to favor a stable renminbi versus the US dollar, we believe the PBoC will need to cut interest rates and the bank reserve requirement further to mitigate the disinflationary pressures caused by the strong currency and economic slowdown. We see attractive value in the five-year CGB, which trades at roughly 3.2%, and expect its yield to drop upon further rate cuts.[1] Room for the yield on the 10-year CGB to decline, however, will likely be limited by the large expected supply of new municipal bond issuance on the horizon.

China five-year government bond yields



Source: Bloomberg, July 20, 2015. Data from 7/17/14 to 7/17/15.

Rob Waldner, Chief Strategist, James Ong, Senior Macro Strategist, Mark Nash, Head of Global Multi-Sector Portfolio Management, Nick Wall, Portfolio Manager, Sean Connery Portfolio Manager, Avi Hooper, Senior Portfolio Manager, Josef Portelli, Portfolio Manager, Ken Hu, CIO, Asia Pacific.

1 Source: Bloomberg, July 20, 2015.

Currency outlook

USD: We are constructive on the US dollar over the longer term. The US economy continues to outpace other major developed markets. As US economic data continue to improve, we believe the trend toward a stronger US dollar will reemerge. The Fed is likely to begin its tightening cycle later this year, as it gains confidence that inflation will likely move up to its 2% target, while most other major central banks are in easing mode. We expect global monetary policies to continue to diverge from US policy. We expect US GDP growth for the remainder of 2015 to be around 2.8%.

EUR: We remain bearish on the euro and believe it will breach parity within this calendar year. The consolidation episode we've experienced in Q2 is complete and with the near term resolution of "Grexit" concerns, negative interest rates, disinflation and QE in Europe will continue to drive the euro lower. ECB policies aimed at transforming the euro into a funding currency appear to be effective and we believe underpinned the recent cyclical improvement in euro area growth data. We believe a weaker euro is essential to eurozone growth.

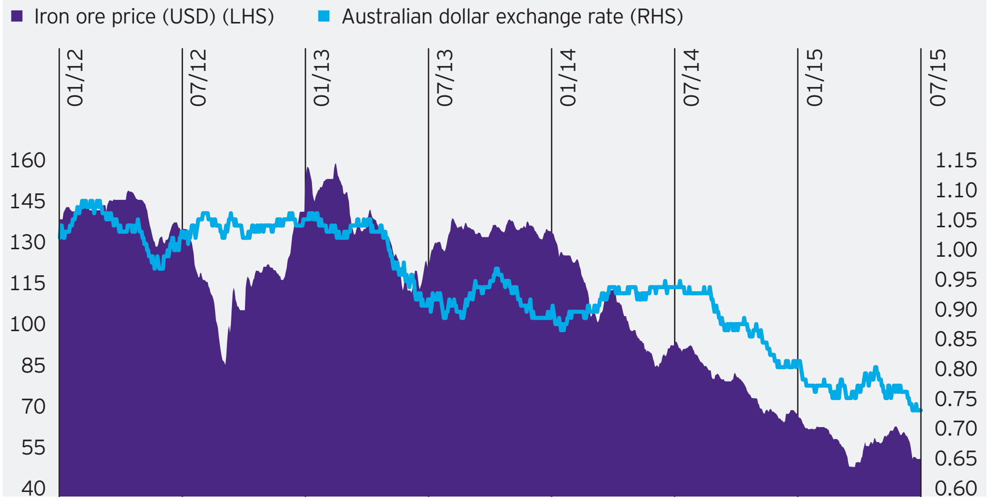
JPY: We remain neutral on the yen, particularly against the US dollar, despite the fact that we appear to be edging closer to a Fed rate hike and market consensus appears to lean toward a weaker yen. As we move through Q3, we expect a greater focus not only on the slowdown in global growth, but also on the low rates of inflation that are being seen worldwide. Add the unresolved issues in Greece, and we do not believe the yen is likely to weaken materially from here. Furthermore, we see factors that could potentially lead to yen strength, such as a delay in Fed interest rate hikes or a flight to quality event.

GBP: There is potential for sterling to continue to strengthen as we head into the second half of 2015, in our view, especially if it looks as though the Bank of England will raise interest rates before the Fed. However, this is not our base case. Sterling continues to trade at elevated levels and oil prices have been on the decline over the past month. This combination promises to produce disinflationary headwinds for the economy and ensure that the central bank will likely be in no rush to hike rates until Q1 2016, at the earliest, in our view.

CAD: We believe the Canadian dollar will continue to depreciate against the US dollar as policy, growth and terms of trade remain headwinds. Currency weakness has not translated into an improvement in Canada's external deficit. Falling investment in the energy sector, loss of auto production to a more competitive Mexico and a strong consumer are some of the ongoing problems facing the currency. A win by the left-leaning New Democratic Party (NDP) in the fall election would be an added negative for the currency, in our view, due to potential fiscal slippage. We expect to add exposure to our prevailing short Canadian dollar position.

AUD: The Australian dollar has drifted lower, touching multi-year lows as iron ore prices have weakened. This confirms our long-term view that, due to the pressure on the country's terms of trade, the Australian dollar will likely act as a safety valve and adjust lower. The country needs a lower exchange rate to boost growth, in our view. We believe it makes sense to reengage in Australian dollar shorts at current levels, as investor positioning appears neutral and we expect modest Reserve Bank of Australia easing.

The Australian dollar has drifted lower with weaker iron ore prices



Source: Bloomberg, July 20, 2015. Data from 1/2/12 to 7/21/15.

Ray Uy, Head of Macro Research, James Ong, Senior Macro Strategist, Avi Hooper, Senior Portfolio Manager, Sean Connery, Portfolio Manager, Josef Portelli, Portfolio Manager

Global Investment Themes

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

Global macro themes

Stronger US labor data indicate above-trend growth

Rationale

US wage data point to a tightening labor supply and stronger core inflation. We project US growth at around 2.5-2.8%.

IFI Strategy

We favor 5-year/30-year flatteners (a trade strategy based on expectations that short-term rates will rise relative to long-term rates). Global monetary easing will likely support the long end of the US yield curve, while shorter-term Treasuries are likely to be more vulnerable to stronger US data, in our view.

Reflation story: Subsided

Rationale

With the recent decline in Chinese stocks and uncertainty around Greece spillover effects, the reflationary story has subsided. We expect it to remain on hold until we see further policy measures or a reversal in the aforementioned catalysts.

IFI Strategy

We favor adding rates risk if global rates markets stabilize. In the meantime, we favor neutral positioning.

Greece: Uncertainty remains

Rationale

Although near term risks have waned, in our view, a European Stability Mechanism (ESM) deal is needed for a longer term bailout program. Going forward, we believe there are several catalysts for further volatility.

IFI Strategy

We are cautiously constructive on the recent agreement, but remain vigilant regarding further developments.

Global credit themes

Commodity prices: "Lower for longer" theme strengthens

Rationale

We expect a number of commodity prices, including oil, to remain lower for longer, driven by excess supply conditions and moderating global aggregate demand.

IFI Strategy

We see risk-adjusted opportunities in the pipeline sector, which generates a high degree of revenue from volume and is less reliant on strong commodity prices. In addition, we prefer large, integrated energy companies and gas-centric exploration companies, as we see less volatility in this space.

Seasonal trends in US investment grade and US high yield

Rationale

Over the period 1988 to present, we have observed some seasonal tendencies in US investment grade and high yield returns.[1]

IFI Strategy

On the margin, this seasonality supports scaling back risk at certain points in the year, such as early summer and early fall, and finding entry points, such as toward year-end.

We favor financials on improving fundamentals and lower event risk

Rationale

Financials benefit from lower event risk compared to other corporates, an increasingly credit supportive regulatory environment, and supportive fundamentals, in our view.

IFI Strategy

We see greater value in securities lower down the capital structure of institutions with improving fundamental profiles. We favor US preferred securities over European AT1s (Additional Tier 1 Capital instruments) due to a combination of valuation, supply expectations and greater regulatory certainty.

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

Rationale

M&A activity is at a post-recession high. Currently, strategic buyers dominate financial buyers, a positive for credit quality. Significant activity has been concentrated in the investment grade space, creating elevated event risk.

IFI Strategy

Preference to play post-transaction bond issuance – which is typically characterized by size, liquidity, concessions, and a plan to deleverage.

Improved visibility in housing-related sectors

Rationale

Improved employment, growing household formation and low interest rates support the housing-related ecosystem.

IFI Strategy

We favor homebuilders and building materials, particularly in the high yield arena where valuations put a premium on selectivity.

Momentum in US consumer spending

Rationale

The US labor market recovery, signs of wage growth and lower energy prices should be supportive for spending, particularly among lower wage earners.

IFI Strategy

Preference for consumer discretionary sectors, including US retailers, restaurants, leisure, and technology, media and telecommunications sectors.

Credit curve positioning-mindful of tight front-end valuations

Rationale

Zero interest rate policy globally has forced cash investors and Japanese government bond investors into the 3-5 year part of the credit curve, creating a steep 5-7 year part of the curve. Once money market rates become more attractive, reversal becomes a risk, as these investors are likely to move back into shorter-term instruments.

IFI Strategy

We prefer 7-, 10- and 30-year points on the curve. Concentration of issuance at the short and long ends of the curve may make the 10-year portion the most attractive, in our view.

1 US investment grade refers to the Barclays Aggregate Corporate Index. US high yield refers to the Barclays US Corporate High Yield Index. Return seasonality examined from Jan. 1, 1988 to June 30, 2015.

Fundamentals — diverging paths, US investment grade versus European investment grade
Rationale
Increasing debt at US companies is driving a relative deterioration in fundamentals for US credit versus European credit.
IFI Strategy
We favor gaining exposure to select European issuers where valuations have cheapened despite improvements in their balance sheets.

Tony Wong, Head of Global Research, Joe Portera, Head of Global High Income, Michael Hyman, Head of Investment Grade

Global Strategy Forum

This section highlights the views of Invesco Fixed Income's bottom-up analysts across a broad range of fixed income assets managed by Invesco. The Bottom Line highlights the views of a different investment team each month.

Emerging markets

At mid-year, emerging market corporate debt glass looks half-full

The size of the emerging market (EM) corporate debt market has grown significantly over the last decade. The asset class has also been resilient to some recent price declines brought on by a strengthening dollar and slowing emerging market economies.

The Invesco Fixed Income Emerging Market Debt team believe the emerging market corporate asset class offers opportunities for income and capital gains potential for the remainder of 2015.

Headwinds continue in EM

The continuing headwinds to emerging market corporates include large amounts of domestic debt, G3 interest rate volatility, foreign exchange weakness, lower commodity prices and slumping growth in several countries. We also believe investors will continue to navigate through major sovereign idiosyncratic minefields, such as the ongoing political scandal in Brazil and geopolitical tensions between Russia and Ukraine.

Given these challenges, and taking into account what we view as still attractive risk-adjusted returns relative to other risky asset classes, we believe an actively managed allocation to EM corporate debt may continue to play an accretive role in a broader diversified fixed income context.

Less concern over tapering

While not without uncertainty — and the potential to experience periodic bouts of volatility — we believe the asset class is much better positioned today to counter ongoing headwinds than it was during the "taper tantrum" of 2013, when the US Federal Reserve (Fed) announced its intentions to taper quantitative easing, surprising most market participants.

The taper tantrum triggered a sell-off in global risk assets, but we don't believe we'll see a repeat of this if Fed policy changes going forward. While uncertainty over the timing of when the Fed will raise rates may generate volatility in EM spreads, we do not envision a market disruption as great as the 2013 reaction, as this market has been preparing for rising interest rates in the US for some time. For example, US Treasury volatility has clearly picked up recently — the US 10-year Treasury bond has traded from a low of 1.64% in January to a recent peak of 2.48%.[1] However, wider spreads on EM corporates today than during the "taper tantrum" may provide a better cushion in this round of monetary policy adjustment, in our view.

A new normal for commodities — impact on corporates

While not ruling out additional weakness, we believe the price of key commodities — such as copper, iron ore and oil — will stabilize at near-current levels. In such an environment, we remain highly selective and limit our focus to miners and oil plays that we deem to have sufficient ability to preserve credit metrics in the current operating environment.

Among other issuer-specific drivers, we seek issuers with:

- Support from deep-pocketed shareholders.
- Solid and readily accessible liquidity.
- A demonstrated ability and willingness to rationalize investment programs.
- A willingness to prioritize leverage reduction and maintenance over dividend payments and to refrain from share repurchases.
- An ability to cut costs by improving operating efficiency.
- If needed, the ability to sell non-strategic assets to raise cash.

Rigorous fundamental analysis is crucial in the EM corporate space because many issuers may still be vulnerable to commodity price-induced volatility, given what we would view as companies' over-reliance on debt taken on during the recent commodity price boom.

Investing in the right neighborhood — not all EMs are positioned equally

We believe adept sovereign analysis is increasingly important in the context of a well-positioned corporate bond portfolio. Given the current global macro crosswinds facing many emerging markets, we believe that, all things being equal, positioning in countries with reduced reliance on foreign capital inflows is desirable (e.g., countries with well-balanced current accounts or moderate deficits offset by stable foreign direct investment). Likewise, we continue to appraise the proclivity of emerging markets to implement structural reforms that could play a key role in attracting and retaining investment — in what we see as a challenging near- and medium-term future for the asset class.

While the analysis is complex, major beneficiaries of commodity price weakness are India, Korea and many Caribbean countries, in our view. Sovereigns that we see on a constructive reform path include China, Mexico, Indonesia and India.

Combating the headwinds

Our baseline scenario is for a gradual and carefully orchestrated increase in US interest rates, coupled with continued accommodative monetary policy in other parts of the world, including Europe and China. To counter any Fed-induced volatility in this scenario, we favor overweighting higher-rated EM corporates (BBB-) with generous spread premiums over developed market peers and the sovereign benchmark in such countries as Mexico and Chile — and combining that with exposure to certain BB names with improving business fundamentals. Likewise, while we're cognizant of a potential lack of liquidity and investor sponsorship at the longer end of most EM corporate yield curves, we believe more liquid, longer-dated bonds of many EM issuers now look attractive since, in our view, valuations appear to be starting to factor in higher US interest rates.

Outlook for remainder of 2015

For the remainder of the year — while we see potential for further tightening of the benchmark J.P. Morgan CEMBI Broad Diversified Index, and expect moderate returns — we favor avoiding what we see as the more vulnerable components of the EM corporate market and focusing on the above-mentioned opportunities. While new corporate issuance is slightly behind last year's levels, (~USD161 billion versus USD214 billion year-to-date, as of July 14)[2] we still believe supply will be strong in the second half of 2015 and would focus on avoiding the components of the index with tighter spreads, where above mentioned supply may threaten to push spreads wider. Likewise, we believe that, despite their defensive credit quality, higher-rated names are relatively more exposed to US interest rate volatility, thus we maintain a tactical underweight view. Overall, we believe investors' performance in the EM corporate asset class over the next few months will be very much tied to adept industry, country and tactical yield curve selection.

Jack Deino, Head of Emerging Markets Portfolio Management, Senior Portfolio Manager

1 Source: Bloomberg, July 9, 2015.
2 Source: EM Corporate Strategy Weekly, Bank of America Merrill Lynch, July 14, 2015.

High yield

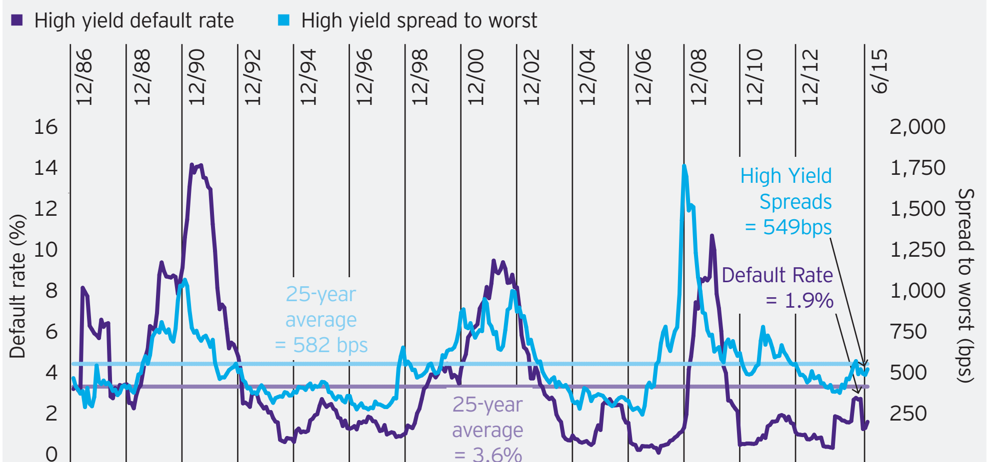
Second quarter volatility generates attractive entry point

We are constructive on potential spread tightening in US high yield after a bout of volatility in the second quarter caused US high yield spreads to widen. The main causes of volatility included increased equity market volatility, concerns over a potential slowing of Chinese GDP, and the Greek debt crisis. With a potential Greek solution in view, we expect equity volatility to decrease and high yield spreads to narrow over the next few months. In addition to attractive relative value, we believe fundamentals of high yield issuers have been quite strong. The exceptions have been metals and mining and energy companies, but we have already seen signs of recovery in the energy sector. We believe energy sector fundamentals will likely improve before metals and mining issuers due to the unique demand drivers in each sector. From a technical standpoint, the new issuance calendar has been very healthy with a high percentage of refinancing deals and relatively low leveraged buyout activity, which is positive for the market. Also, the high level of refinancing during the low interest rate environment has pushed out the maturity timeframe, which makes it more likely that default rates will remain low, in our view. Finally, we are constructive on high yield despite the prospect of rising interest rates. High yield has historically performed well in rising rate environments for the basic reason that when the Fed raises rates, it is because the economy is expanding, and an expanding economy is a positive force for many levered companies. In our view, high yield potentially offers a high level of income with a relatively low duration, where fundamental drivers are heading in the right direction.

The risk to our view is a recession. Additionally, while Greece is likely to be less of a focus going forward, the health of the Chinese economy demands careful study for the foreseeable future, in our view. That said, we think China's ongoing transition to a consumption-based economy presents potential opportunities for the high yield market through the export channel. Finally, if the Fed were to raise interest rates more rapidly than expected, the high yield market may experience short-term volatility similar to the "taper tantrum" of 2013. However, this is not our base case and not consistent with Fed comments, in our view.

IFI's strategy is to raise our high yield risk profile moderately, including being overweight B-rated securities and underweight double B-rated securities, which generally have longer duration. In addition, we continue to have a slight overweight to CCC-rated securities, but we remain very selective in this segment. On a sector basis, we have a constructive view on the wireless, building materials, aerospace/defense, retail and automotive sectors. We are underweight banking, media and entertainment, and metals and mining. With respect to our weight in the energy sector, we entered the year underweight, moved to an overweight in February, and had moved back to neutral weight by the end of June. We continue to see opportunities in energy, but recognize that not all companies will succeed in this low oil price environment.

High yield spreads and default rates — current vs. 25-year averages



Sources: J.P Morgan. Data from 12/31/86 to 6/30/15. Spreads are based on the JP Morgan High Yield Index.

Darren Hughes, Scott Roberts, Co-Heads High Yield

Investment grade

European investment grade credit: Implications of Greece and broader outlook

We are constructive on the outlook for European investment grade credit. Europe is still in the early stage of its economic cycle, where both growth and inflation are low, but not negative, and the economy is strongly supported by a central bank seeking to reflate its balance sheet. Also, due to the recent Greece-induced weakness and bund yield volatility, valuations are now more attractive, in our view. Despite negative Greece headlines, European credit weakness has largely been contained and risk aversion limited. We believe there are three key reasons for why we have seen greater market resilience compared to the sovereign crisis three years ago:

1. **The European economy is relatively healthier:** Europe is no longer battling with a double-dip recession but, instead, is seeing relatively promising signs of growth. Political risks (except for Greece) have also subsided, although they may re-emerge in other peripheral countries facing growth challenges down the road.
2. **Greek risk has been transferred to the public sector:** European banks have negligible exposure to the Greek sovereign or banks, and very few loans to Greek corporates. Additionally, thanks to the asset quality review (AQR) and various bank stress tests, the transparency surrounding banks' asset quality and level of capitalization has improved significantly.
3. **Increased ECB firepower:** The number of policy tools has expanded to allow the ECB to effectively perform its role as "lender of last resort." For example, long-term refinancing operations (LTRO) and targeted longer-term refinancing operations (TLTRO) and QE programs now supplement the broader European Stability Mechanism (ESM) and Outright Monetary Transactions (OMT) programs.

We believe it is largely the last point that is preventing the European bond market from selling off more significantly than may have been expected in light of Greece-related uncertainty.

Expansion of the public sector purchase program (QE)

The ECB announced that it is expanding the list of eligible institutions whose securities it can buy as part of its asset purchase program. While there is no increase in size, the positive surprise is that certain state-owned corporates will now be included – for example, a large, partially state-owned Italian utility company. This is the first time the ECB has included an issuer where the credit default swap is actively traded, raising the notion that the ECB is, for the first time, buying something with "credit" risk.

Should the ECB further expand its eligibility list, we believe it would likely be positive for other partially state owned corporates (mainly infrastructure and utility names) at a minimum. Such a move would also likely be positive for European corporates, once there is a resolution to the Greece impasse.

We are monitoring new issue supply and flows into the asset class very closely to help gauge the potential for spread volatility in European credit, especially with dealers less able to warehouse securities. At present, the risk of oversupply appears relatively low, in our opinion. Net supply is certainly higher this year than in previous years, but this is compared to a low base (flat to slightly negative over the last few years) and projections are for less than EUR100 billion of new issuance in 2015.[1] The latest data through June show that just over half of that expected supply has materialized.

European investment grade new issuance: 2015 outpacing 2014

European investment grade outstandings

	2015		2014	
Eur bn	Net supply	Accumulated year-to-date.	Net supply	Accumulated year-to-date.
January	19	19	-18	-18
February	12	31	-12	-30
March	20	51	9	9
April	9	60	-3	6
May	23	83	-9	-9
June	-18	65	10	1
July			-22	-22
August			1	-21
September			33	33
October			-10	23
November			41	41
December			-19	22

Source: Dealogic, Barclays, Invesco, July 1, 2015.

The recent uncertainty around Greece, however, has resulted in the new issue calendar being put on ice. This delay adds to the already weak secondary market; investors, aware that supply is backing up, appear to be delaying purchases in the secondary market in anticipation of new issue premiums that might offer a better opportunity once clarity is gained.

Of particular note in the new issue market is the increase in American companies issuing bonds in euros this year. Known as "reverse Yankees," these bonds provide US companies diversification in their investor base at relatively attractive yields. Already this year, EUR45 billion have been issued with the conditions (lower all-in yields) expected to stay in place to attract more of the same.[2] Clearly, this is a material number in the context of the overall new supply in Europe. In overall terms, reverse Yankees now account for over 13% of the euro investment grade index (from less than 10% eighteen months ago).[2] We continue to evaluate the potential opportunities in this space, although, to-date, we have been cautious about the potential for outperformance in the current market environment.

More positively, flows into the European investment grade asset class have held up relatively well with recent outflows only denting the annual average by a couple of percent. The prevailing themes – the need for greater monetary easing, a potential stall in confidence and economic growth – are all positive for credit markets, in our view, since they underpin the "lower for longer" interest rate environment concept.

Finally, on credit fundamentals, there is no material change in dynamic, in our view. European corporates continue to plough along with a conservative mindset (mergers and acquisitions are still muted in Europe compared to the US) and benefit from lower interest rates and energy input costs, which help support margins. A weaker euro is positive for Europe's more globally oriented businesses. However, if EM currencies underperform to a greater degree, this will likely have a foreign exchange translation impact on revenues and may result in some margin pressure, in our view.

David Todd, Head of Global Investment Grade Credit Research, Lyndon Man, Senior Portfolio Manager

1 Source: Barclays, July 1, 2015.
2 Source: BAML, July 10, 2015.

Municipals

Published default rates likely to rise. Negative headlines could present investment opportunities.

In 2008, the City of Vallejo, California filed for bankruptcy on the heels of the sub-prime mortgage crisis. This event, along with the subsequent demise of several highly-rated municipal bond insurers, got the attention of the municipal bond community. Since 2008, several other high-profile municipality defaults have occurred, such as Jefferson County, Alabama, Harrisburg, Pennsylvania and Detroit, Michigan. The small uptick in the frequency of large municipality defaults over the last seven years has raised questions about how distressed municipalities may view and treat various contractual obligations. In response, some investors have sharpened their focus on the potential default risk found within the municipal market.

Since 2008, Standard and Poor's (S&P) and Moody's have conducted and published their own default studies. The main approach is to calculate the ratio of obligors that have defaulted in any given year versus the total obligors within each agency's rated universe during that particular period. Using this type of method, default rates over any given period are extremely low, at less than 0.01% overall.[1] These studies go on to provide further detail on average cumulative default rates within the individual rating categories. The conclusion is that default rates remain extremely low for investment grade credits but increase substantially for credits rated below investment grade.[1]

Various statistics from these rating agency reports often get reflected in the press. Since these reports only measure the rated obligors of each agency, they tend to understate the municipal market's true default rate, in our view. Another way to measure default rates would be to use total par value defaulted within the market versus the total par value of the market. This is an extremely difficult task with approximately 44,000 municipal issuers and hundreds of thousands of individual obligors found within the market.[2] Many of these issuers are non-rated and tend to be risker credits. Municipal Market Advisors (MMA) uses this type of broad approach and also expands the definition of default to include various characteristics of distress. Using MMA's calculation of total distressed par value, we estimate a higher overall default rate of approximately 1.6%.[3] While this number is still very low, we believe it provides a more realistic view of the total distress found within the municipal market. Non-rated, high yield municipal sectors have always had default cycles that mirror the peaks and troughs of the business cycle. Including these types of securities in the analysis provides a more representative view of the overall market's default risk, in our opinion.

What are the implications for bond investors?

In the foreseeable future, we may see rating agency default statistics rise, albeit only incrementally, as more economically distressed municipalities seek debt reduction through Chapter 9 bankruptcy. The Chapter 9 bankruptcy procedure is not currently authorized in all states, but more politicians are beginning to view Chapter 9 as a tool that can provide debt relief for distressed municipalities. The governor of Illinois is an example of a politician pushing for legislation authorizing Chapter 9 bankruptcy for distressed municipalities within his state. If the number of municipality defaults continues to increase, these types of obligors are likely to be found within a rating agency's universe of securities. For example, Wayne County, Michigan recently filed a petition for a financial emergency with the state and may eventually end up filing for bankruptcy. Wayne County has debt rated by both S&P and Moody's. Puerto Rico has USD72 billion of Commonwealth and Public Corporation debt outstanding with approximately seven separate obligors, each rated by S&P and Moody's as well.[4] Recently, the Governor of Puerto Rico indicated that the Commonwealth will be seeking to negotiate a debt moratorium with bondholders to postpone debt payments on some or all of its debt for a number of years. If any of the obligors listed above or any other distressed municipalities ultimately default, these events will eventually work their way into the various published default studies. In addition, high-profile defaults tend to be a source of headline risk. However, in our view, this type of risk may also provide investment opportunities.

IFI Municipal team approach

The IFI Municipal team takes a broad view of municipal default risk. We believe that we assume a higher baseline rate of municipal default than perhaps other market participants. Factors such as an increase in the number of states authorizing Chapter 9 bankruptcy, published default rates incrementally rising or the more frequent occurrence of high-profile municipality defaults may, however, surprise some market participants. A negative broad-brush reaction to these types of situations could cause some fundamentally sound credits to be unfairly punished, thereby creating some potentially attractive investment opportunities, in our view. IFI continually monitors prevailing developments around distressed issuers. Our municipal research process is designed to help detect declining credit trends and ultimately avoid defaults. Our experienced municipal portfolio management and research team has many tools at its disposal to maximize recovery, should a default situation occur.

Eric Nelmark, Senior Analyst

1 Standard and Poor's, Moody's Investors Service, July 17, 2015.
2 US Securities and Exchange Commission, July 31, 2012, Invesco, July 20, 2015.
3 MMA, Invesco, July 17, 2015.
4 The Bond Buyer, July 20, 2015.

Structured

What are US commercial mortgage-backed securities (CMBS)?

Background to the US CMBS market

The US CMBS market began in the early 1990s after the US congress created the Resolution Trust Corporation (RTC) to resolve the savings and loan crisis (the large scale failure of community savings and loans institutions. So-called "S&Ls" were active in mortgage, consumer and commercial lending). The issuance of CMBS helped the RTC dispose of non-performing and distressed commercial mortgage loans as it liquidated failed S&Ls. The RTC paid discounted prices for the commercial mortgages, pooled them together, and sold them in tranches to investors in the form of securities – CMBS. The strong performance of the RTC CMBS transactions, and the ripple effects of the crisis (additional bad loans), led to the creation of more CMBS, collateralized by newly originated loans. Due to its success as an asset class, the CMBS market continued to develop after the crisis was resolved.

Growth

The US CMBS market has grown in size and investor acceptance over time. In recent years, CMBS issuance has accelerated, as investors have demanded exposure to loans with lower loan-to-value ratios (ratio of loan amount to property value) and higher debt service coverage ratios.

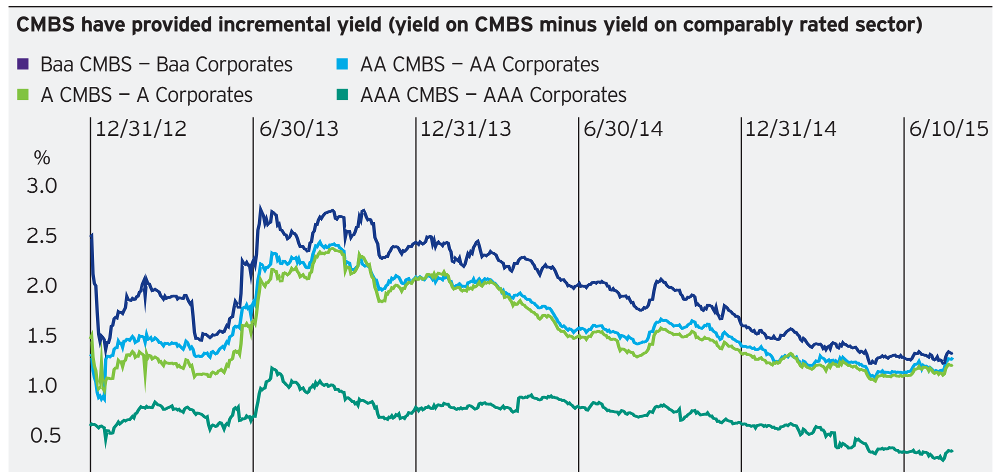
Today

Today's US CMBS market is an important sector in the global fixed income market. It enables a wide range of investors to gain exposure to the US commercial real estate market and facilitates financing to real estate owners across a wide range of property types. Today, the US CMBS sector is part of the Barclays US Aggregate Index.

CMBS

A CMBS strategy can provide focused exposure to commercial real estate loans or help diversify an overall fixed income portfolio. We believe interesting opportunities in CMBS currently exist due to strong US commercial real estate fundamentals and a growing number of US commercial real estate loans that will need to be refinanced. Further, CMBS may provide attractive incremental yield relative to many comparably rated fixed income sectors.

CMBS have provided incremental yield (yield on CMBS minus yield on comparably rated sector)

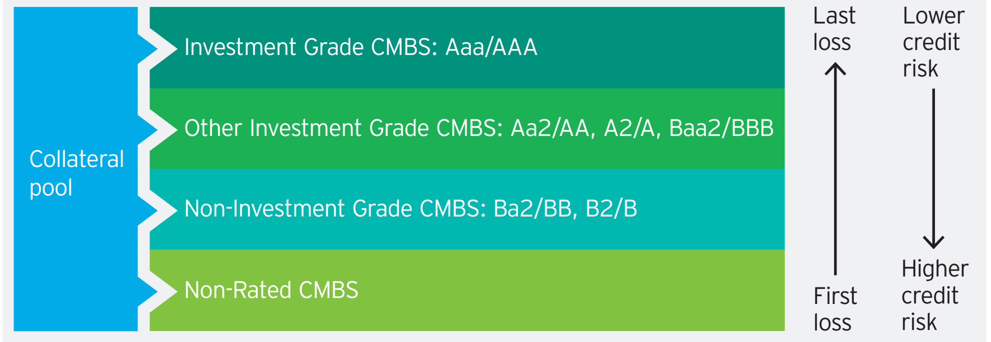


Source: Barclays, June 10, 2015. Data from 12/31/12 to 6/10/15. Barclays US CMBS 2.0 Aaa 8.5+ Year Index, Barclays US CMBS 2.0 Aa Year Index, Barclays US CMBS 2.0 A Year Index, Barclays US CMBS 2.0 Baa Year Index, Barclays Aaa Corporate Index, Barclays Aa Corporate Index, Barclays A Corporate Index, Barclays Baa Corporate Index.

How does a CMBS work?

The cash flow from a collateral pool of mortgage loans is used to service interest and repay principal on CMBS. Typical CMBS capital structures include multiple classes of bonds divided according to their level of expected risk and maturity. These classes have different positions in terms of priority of receiving interest and principal payments. The senior classes (lower credit risk) are scheduled to receive interest and principal payments before the junior classes (higher credit risk). Any collateral losses would typically be applied to the junior classes first and distributed in order of junior to senior class. As such, the risk of not receiving interest and principal payments on a given security is greater for the junior classes relative to the senior classes.

Typical CMBS transaction



IFI approach to CMBS

Invesco Fixed Income employs a balanced top-down, bottom-up risk allocation approach in our portfolio construction process. Our top down analysis examines factors in the broader economy such as GDP growth, interest rates, labor market dynamics, consumer data and corporate earnings. Our bottom-up analysis defines fundamental trends in commercial real estate such as property supply, tenant demand, occupancy, rental rates and financing terms to shape our outlook for various commercial real estate property types by geographic region. Our robust credit and macro analysis plays an important role in our CMBS investment process. On this foundation, we seek to capture attractive income potential and incremental credit spread tightening through disciplined security selection and timely sector allocation.

Kevin Collins, Head of CMBS Credit

The Bottom Line

We speak with David Todd, Head of Global Investment Grade Credit Research, about the global investment grade research process and the research team's role in the portfolio investment process.

David Todd has been part of the Invesco Fixed Income team for over ten years. He is currently responsible for a team of global analysts based in London and Hong Kong, supporting the IFI platform across multiple regions and markets.

Q: What does "global" mean in terms of the scope of coverage of your team?

David: Our team has been designed as a "go-anywhere" unit of experienced and highly skilled analysts who are tasked with adding value across the IFI platform. We analyze issuers across all corporate sectors with a broad geographical remit. There is a fairly natural split between financials and other corporates. Financials over the last few years have involved a good deal of focus on broad issues such as regulatory change and banking reform (Basel III for banks and Solvency II for insurers). To give you a sense of range on the corporate side, we have recently been looking at a South African media company, a Chinese toll road operator and a European high yield telecom company.

Q: What are the main tenets of your credit research process?

David: We aim to provide a robust research process that generates transparent, consistent and comparable investment views with an emphasis on fundamental research. For me, the key to our work is 'consistency where possible' and 'differentiation where necessary', done within a framework that provides transparency and allows for ease of consumption. There are some core credit metrics that we use to get a sense for most companies – such as leverage and ebitda (earnings before interest, taxes, depreciation and amortization) margin – and others that are more important to certain asset classes – such as asset coverage (assets less liabilities divided by total debt) in the high yield space.

Q: How do you manage the research process across IFI?

David: We are developing the best ways to enable the output from each research team to be clearly visible to the whole IFI platform. We are opening up our database architecture to make the work of the credit team easy for the whole platform to access. Individual company analysis and recommendations are being produced continuously and can be found on our shared internal investment platforms.

Q: What are the important things you think about?

David: One of the key elements of our research output is a view on the current credit worthiness of a company and the fundamental direction it is heading in. Over the long term, the dynamic of change is the main driver of performance, in our view, from a fundamental perspective. More broadly, I am always thinking about our role as a provider of information and investment views to the platform and how to make sure that we are doing that optimally.

Q: What role do the credit analysts play in the investment process?

David: The primary role of analysts is to help portfolio managers ensure that they have the right security selection in their portfolios. Once we have a view at the company level, we focus on individual securities to identify specific investment recommendations and track their performance over time. Analysts' written output is the basis for dialogue with the portfolio managers. We believe this interaction is critical in reaching the best decisions for client portfolios. Through our sector teams and credit strategy function, analysts also contribute to the thematic views that filter through to the top-down investment process.

Q: Can you give an example of the strength of IFI's research team?

David: We believe one of the key differentiators of our platform compared to competitors is that our analysts collaborate with each other (and members of the macro and portfolio management teams) across locations. The sector teams provide one of the main forums for that. For example, with the volatility that we have seen in the commodity space over the last year, there have been a number of meetings between our specialists allowing for the formulation of views (see IFI Global Credit Themes summarized on pages 9-11), as we think about the energy sector.

Q: Where do you see opportunities for the research process to develop?

David: The Asian market, and China in particular, is very interesting from a research perspective. That is why we are expanding the team in Hong Kong and involving more of the global team in Asia. As the Chinese market develops, it is critical that we have a robust framework in place to help assess the relative credit worthiness of Chinese companies that, for example, may be state-owned directly or are supported by a particular province, or are issuing bonds with credit-enhancing features, such as guarantees. We are currently building the framework to address the unique features of this developing market.

Market monitors

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)	3.04	1.76	0.18	49	6	23	156	-1.24	-2.20	-0.39	2.96
U.S. Aggregate	3.22	2.39	0.20	51	6	32	258	-1.09	-1.68	-0.10	1.86
U.S. Mortgage-backed	3.75	2.78	0.26	26	8	-16	181	-0.76	-0.74	0.31	2.28
Global Inv Grade Corporate (USD hedged)	4.03	2.83	0.28	139	14	55	515	-1.77	-2.75	-0.73	1.66
U.S. Investment Grade Corporate	4.32	3.36	0.27	145	12	76	618	-1.84	-3.16	-0.92	0.75
Emerging Market USD Sovereign	n/a	5.79	0.30	353	9	157	906	-1.56	-0.34	1.67	0.51
Emerging Market Corporate	n/a	5.22	0.30	340	6	120	1,032	-0.90	1.32	3.70	2.35
Global High Yield Corporate (USD hedged)	6.58	6.20	0.63	470	43	231	1,845	-1.52	0.04	2.72	0.24
U.S. High Yield Corporate	6.76	6.57	0.65	476	43	233	1,971	-1.49	0.00	2.53	-0.40
Bank Loans	4.77	4.91	0.02	n/a	n/a	n/a	n/a	-0.31	0.79	2.87	2.15
Municipal Bond	4.82	2.33	0.07	n/a	n/a	n/a	n/a	-0.09	-0.89	0.11	3.00
High Yield Municipal Bond	5.45	6.88	0.41	n/a	n/a	n/a	n/a	-3.69	-3.00	-1.92	3.84

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	2.07	1.48	0.13	-0.88	-1.58	0.03	2.31
Canada	2.72	1.17	0.01	-0.28	-1.51	1.94	5.52
United Kingdom	3.82	1.93	0.18	-1.89	-3.67	-1.41	9.24
Germany	2.46	0.42	0.17	-2.14	-4.54	-1.05	4.09
Italy	4.01	1.67	0.35	-2.62	-6.13	-0.89	4.80
Japan	1.21	0.44	0.03	-0.05	-0.22	-0.72	2.14
China	3.74	3.30	-0.04	0.38	2.06	3.06	7.68
EM Local Currency Governments	n/a	n/a	n/a	-0.41	-0.26	2.26	4.99

FX Market Monitor[1]

	Current	10 year range: min	max	Returns: 1 mth (%)	3 mth (%)	YTD (%)	12 mth (%)
EUR/USD	1.11	1.07	1.60	2.01	3.88	-7.86	-18.59
USD/JPY	122.50	75.82	124.77	1.86	-1.93	-2.30	-17.29
GBP/USD	1.57	1.38	2.11	3.36	6.03	0.87	-8.15
USD/CNY	6.20	6.04	8.28	-0.12	-0.13	-0.03	-0.06
USD/CHF	0.94	0.75	1.39	1.12	3.95	6.28	-5.21
AUD/USD	0.77	0.60	1.10	1.33	1.31	-5.72	-18.30
CAD/USD	0.80	0.77	1.09	0.21	1.51	-7.00	-14.62
EUR/JPY[2]	136.54	94.31	169.49	-0.15	-5.59	6.09	1.61
EUR/GBP[2]	0.71	0.71	0.84	1.30	2.07	9.43	12.80

Sources: Barclays, J.P. Morgan, Bloomberg L.P., as of June 30, 2015. Credit Suisse Leveraged Loan data as of June 30, 2015. 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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Important information

All information is sourced from Invesco, unless otherwise stated. All data as of May 31, 2015 unless otherwise stated. All data is USD, unless otherwise stated.

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