Invesco Fixed Income

Global Fixed Income Strategy

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Global macro strategy

Why we are not afraid of the Fed

The Federal Reserve (Fed) raised interest rates this month and is likely to raise them again twice this year, yet the financial markets have taken these moves in stride. Why is this? Simply, the Fed is behaving dovishly, considering the positive growth pattern we are seeing.

We are in the midst of a global growth pickup that began in the second half of last year. The three largest economic blocs – the US, Europe and China - are showing solid growth. In the US, a pickup in expectations and animal spirits around the recent election has boosted growth from its trend level to above trend. In Europe, monetary stimulus has supported domestic growth and the eurozone economy is now also growing above trend, after lackluster performance in recent years. The Chinese economy stabilized at the end of last year and it too is showing upside growth momentum. For the first time since the global financial crisis, we seem to be in the midst of a solid growth upswing among the world's major economies.

Growth on its own is a positive for credit assets and equities (risky assets), as the fundamentals for these assets are tied to the productive output of the economy in many ways. The potential negative is if policy makers move to tighten policy in response to this growth impetus, and tighter policy causes adjustments in asset prices.

This is where the Fed's recent statement and commentary are reassuring. The Fed indicated that it is unlikely to aggressively tighten monetary policy soon. Indeed, in its recent statement, it stressed the concept of symmetry around its inflation target. The Fed does not view its inflation target of 2% as a ceiling, but rather is willing to allow inflation to run higher than the target for an extended period. This implies that it will likely be patient in raising interest rates – unlikely to take the proverbial "punch bowl" away in the near term. Likewise, we expect the European Central Bank (ECB) to be patient with its quantitative easing (QE) program as political risks remain in the eurozone. The Bank of Japan (BoJ) is committed to its Yield Curve Control (YCC) policy for the time being as well, in our view.

The bottom line: Improving growth with accommodating policy makers is good for most risky assets, and we have seen risky assets perform well, even as the Fed hikes rates.

In previous commentary, we have discussed our macro factor framework that provides the basis for much of our investment strategy work. The framework isolates the impact from growth, inflation and financial conditions to understand the likely behavior of financial markets. Currently, growth is showing upside momentum, while inflation is well contained, in our view, and financial conditions remain stable. Based on this macro factor view and framework, the conclusions for markets are upward pressure on global duration as real rates rise somewhat, relatively solid fundamentals for credit markets supported by growth, and a neutral view on the US dollar versus developed market currencies. Global growth is also supportive for emerging markets (EM) at the margin, so some EM currencies may see appreciation versus the dollar.

What could bring this rosy scenario to an end? At this point in the cycle, an aggressive tightening of financial conditions is the risk. If central banks change their tune, and become concerned about inflation, they could begin to tighten policy. That would change the picture and warrant caution on risky assets, but until they take the punch bowl away, we aim to stay long.

Rob Waldner, Chief Strategist

Interest rate outlook

US: Strong global growth should ultimately pressure US yields upward as global monetary policy tightens. In the short term, however, the Fed has indicated that it does not intend to tighten interest rates quickly. Moves from other central banks, such as the ECB, will likely drive price action in longer-dated US interest rates. As global growth continues to improve, other global central bank actions may catalyze a move higher in US Treasury yields.

Europe: We expect the ECB to move away from its ultra-dovish stance in Q2, clearing the way for a higher yield environment. Growth and inflation data continue to improve in the euro area, with headline inflation back to the ECB's 2% target.[1] Nevertheless, ECB President Draghi has maintained his dovish rhetoric, although it may become more difficult after the April 23rd French election. To placate the northern European countries already experiencing inflation, the ECB might raise short-term rates while maintaining QE through year end.

China: The onshore Chinese government bond (CGB) yield curve flattened sharply in March. Short-term yields rose as liquidity tightened due to the quarter-end effect and more stringent macro-prudential assessment (MPA) measures implemented by the central bank (PBoC). Long-term yields, on the other hand, were dragged down by market expectations of slowing growth later this year and the PBoC's longer-tenor liquidity injection. A short relief rally in the onshore bond market is expected in April after the recent funding tightness and volatility. However, we think short-term rates will remain sticky, as the PBoC's efforts to reduce financial leverage are expected to continue.

Japan: 10-year Japanese government bond yields continue to trade "around zero." Inflation is on the rise, but still well short of the BoJ's 2% inflation target. As a result, we do not expect tapering in bond purchases (or any other adjustments to policy) anytime soon. The near-term focus will likely be on the spring wage negotiations, which have the potential to boost inflation, but tend to underwhelm. We see no reason for this year to be any different. It is, therefore, difficult to see how Japan will reach its inflation target on a sustainable basis.

UK: The UK government triggered Article 50 on March 29th, setting off a two-year timetable to agree the terms of its departure from the European Union and to negotiate a new trading arrangement with the bloc. The European approach to these talks should become clearer after an April 29th summit, organized to discuss negotiation tactics. We would expect the opening stance of the Europeans to be one that suggests a difficult period of negotiation ahead, with the "divorce" settlement being the most contentious issue in the early stages. The Europeans are believed to want to agree to a financial settlement before turning their attention to future trading arrangements. The UK government, meanwhile, is believed to prefer discussing the settlement and future trading arrangements, hand in hand. It is difficult to see how everything will be resolved within the two-year time frame. We do not expect the Brexit negotiations to cause interest rates to break out of their recent trading range in the near term.

Canada: The 10-year Canadian government bond yield has retreated from its 2017 peak yield of 1.87% and currently sits in the middle of this year's range of 1.61% - 1.87%.[2] Economic data has generally been picking up this year with employment growth showing particular strength. The Bank of Canada has kept policy on hold recently, but remains wary of persistent economic slack. We believe the current trading range is likely to persist unless global economic growth picks up further.

Australia: The Reserve Bank of Australia (RBA) held rates steady in March at 1.50%, as expected.[3] The statement was a near repeat of February's, with the RBA conveying continued positive expectations for the economy. With the RBA constructive and signs of economic strength in the data, it is highly unlikely that the RBA will need to lower the cash rate further. In fact, the market is now expecting the next move to be a rise in rates. However, the lack of inflation, especially in wages, despite a pick-up in growth, should keep the RBA on hold. Therefore, we expect Australian rates to be range bound in the near future and maintain a neutral stance versus US rates.

Rob Waldner, Chief Strategist, James Ong, Senior Macro Strategist, Sean Connery, Portfolio Manager, Brian Schneider, Head of North American Rates, Scott Case, Portfolio Manager, Josef Portelli, Portfolio Manager, Ken Hu, CIO Asia Pacific, Alex Schwiersch, Portfolio Manager

1 Source: European Central Bank, March 23, 2017.
2 Source: Bloomberg L.P., data as of March 23, 2017. 2017 high 1.87%: as of March 13, 2017. 2017 low 1.61%: as of Feb. 24, 2017.
3 Source: Reserve Bank of Australia, March 7, 2017.

Currency outlook

USD: Stronger global growth environments, like the current one, are typically mixed for the US dollar. The Fed demonstrated at its March meeting that it is not aiming to disrupt financial markets. This backdrop - above-potential growth and a benign Fed - should translate into mixed US dollar performance versus developed market currencies. The US dollar should underperform EM currencies broadly.

EUR: The euro remains depressed by negative interest rates, QE and a strong US dollar. As the ECB begins to backtrack on QE and considers tapering, the euro should begin to appreciate but that is likely to be a Q2/Q3 story. The new US administration's attitude toward currency manipulators may see Germany especially pushing back against the ultra-loose monetary stance of the ECB. In general we believe QE has approached its conclusion and policy adjustments going forward are likely to be skewed toward supporting longer-term euro strength.

RMB: We expect the CNY and CNH currencies to trade on the stronger side of the 6.80-6.99 range in the month ahead. Softening in the US dollar after the March Fed meeting is expected to continue to support the renminbi. Capital flows have stabilized and we expect foreign reserves to ratchet higher in the coming months. In addition to the valuation effect, tighter controls over corporate overseas investment and measures recently announced to encourage capital inflows should boost reserves.

JPY: The yen has been on a strengthening trajectory since the start of 2017. A large part of the strengthening can be attributed to external developments (i.e. concerns that Trump will under-deliver, worries over European election outcomes, etc). It appears that the Trump administration is closely watching currency markets and, with the BoJ unlikely to ease anytime soon, we do not see an obvious catalyst for a near-term correction brought about by domestic policy.

GBP: We expect sterling volatility to increase in the coming months as Brexit discussions get underway. These discussions could initially be negative for the currency, as the European Union adopt a tough negotiating stance. However, other forces could positively impact the currency over the medium term. A Trump administration that fails to deliver could be such a catalyst (US dollar weaker), as could a failure of the eurozone to maintain its recent growth momentum (euro weaker). A French election outcome that increases the chances of an EU break up would also likely be supportive of sterling.

CAD: The Canadian dollar was reasonably strong until the first week of March, when the Fed began telegraphing the prospects of a rate hike at its March meeting. The Bank of Canada has appeared to continue to favor a somewhat weaker currency in spite of some strong economic data, including very strong full-time employment reports. Our opinion remains that the Canadian dollar is overvalued and we favor being short the currency.

AUD: Signs that inflation is moving higher and positive data surrounding the current and trade accounts should be positives for the Australian dollar. With the economy appearing to be doing quite well, we do not expect the RBA to lower rates further in the near future. We remain neutral on the Australian dollar.

Ray Uy, Head of Macro Research and Currency Portfolio Management, James Ong, Senior Macro Strategist, Brian Schneider, Head of North American Rates, Sean Connery, Portfolio Manager, Scott Case, Portfolio Manager, Alex Schwiersch, Portfolio Manager

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

Global investment themes

Global credit themes

Geographical themes

Investment grade (IG): Global central bank forces, fiscal policy changes

Rationale

US, Europe and Asia IG have seen strong investor demand due to easy global monetary policy. Fundamentals are stable to improving due to positive global growth outlook and fiscal policy stimulus, which should support spreads in 2017. Leverage remains at cycle highs but is stabilizing. Tax policy changes could lead to less issuance going forward. European credit markets are generally earlier in the cycle and less levered, but Brexit and political uncertainty remain.

IFI strategy

Favor gaining exposure to selected higher quality issuers in energy and pipelines, financials, industrials, consumer cyclical, and technology, media and telecommunications (TMT). Remain cognizant of selective tight valuations.

Emerging markets (EM): Macro fundamental momentum steadies, prefer sovereigns

Rationale

Expectations of material fiscal expansion and USD-supportive policy may get tested. Environment supportive for EM risk, although several exogenous risk factors are on the horizon, such as the recent decline in oil prices, China concerns and the impact of higher inflation.

IFI strategy

We believe EM spreads and currencies have scope to recover. We stay long EM sovereign credit, and maintain broadly neutral EM currency, corporate credit and EM rates stance. Pullbacks would likely be an opportunity to add exposure, so long as favorable macro momentum remains intact.

US commercial mortgage backed securities (US CMBS): Notable decline in primary market issuance

Rationale

Negative retail news has recently dominated the headlines. However, we are generally not advocates of selling stronger CMBS credits given they are often difficult to replace. Further, we think the space should continue to benefit from limited supply and higher absolute yields

IFI strategy

We think AAA-rated CMBS look less attractive. Given the significant move in spread tightening we prefer seasoned US CMBS as cycle progresses. Credit-differentiation is accelerating, placing a premium on selection. Positive short-term technicals offset rich valuations and poor hedge-adjusted carry.

US residential mortgage backed securities (US RMBS): Favorable fundamentals, valuations fair, liquidity inconsistent, favor IG Government Sponsored Enterprise (GSE) Credit Risk Transfer (CRT) securities

Rationale

Mortgage underwriting quality remains high, the home price outlook remains supported by limited housing supply, and long-term negative net issuance remains the dominant force in US RMBS. But following outperformance in recent months in legacy RMBS and below-IG CRT, valuations appear stretched relative to other asset classes.

IFI strategy

Prefer higher quality legacy prime, alt-A, and seasoned BBB-rated CRT. Avoiding sub-prime, coastal concentrations, option adjustable rate mortgages and below-investment grade CRT.

US asset backed securities (US ABS): Value in off-the-run securities, fundamentals normalizing, favorable technicals

Rationale

Normalization of credit underwriting and forecast for a healthier economy should support consumer credit performance in 2017. Recent widening in swap spreads and LIBOR rates provide an opportunity to add at fairly attractive levels. As the overall market continues to weigh the longer-term impact of a Trump administration and additional rate hikes this year, such uncertainty should be supportive of a more stable, shorter-duration US ABS market.

IFI strategy

Prefer adding exposure to off-the-run tranches where collateral performance remains stable. Believe wider swap spreads provide opportunities. Believe senior auto US ABS and esoteric issuers can provide opportunities. Avoiding deep subprime auto US ABS.

Sector themes

Commodities: Global rebound in energy, metals but volatility remains

Rationale

Expect global IG credit risk premia to remain volatile as energy and metals credits reflect supply imbalances, offset by credit friendly financial engineering. Credit quality in focus due to modest economic growth and risk of volatility due to OPEC, US fiscal policy implementation and Fed uncertainty.

IFI strategy

Favor gaining exposure to selected higher quality energy, pipeline and metals issuers where shorter-term maturities are well covered by liquid assets and positive corporate actions support financial profiles.

Consumer story more nuanced globally, watching US fiscal policy influences

Rationale

Solid US labor market and consumer confidence are supportive, but consumers more value-conscious and international retail demand remains uneven, due partly to the strong US dollar and volatile capital markets. Watching European consumer for post-Brexit behavior shift.

IFI strategy

Favor selected US consumer sectors including leisure and housing-related sectors. Negative on "big box" retailers that lack differentiated products. Favor EM consumer sectors on a selective basis. Incrementally more cautious on automotive OEM sector.

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

Rationale

M&A activity has moderated but remains a risk, 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. Believe a discriminating approach to this strategy is warranted due to lower, but still large, M&A-related pipeline.

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, cell towers and select wireless issuers. Have avoided hardware original equipment manufacturers.

Yield curve themes

Credit curve positioning, long end valuations improving

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 a steep 5-7 year part of the curve. Lately, sovereign wealth funds have targeted the 10-year part of the curve. We 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.

Rob Waldner, Chief Strategist, Ray Uy, Head of Macro Research and Currency Portfolio Management, Tony Wong, Head of Global Research, Joe Portera, CIO High Yield and Multi-Sector Credit, Michael Hyman, CIO Global Investment Grade and Emerging Markets.

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

Global credit strategy

Evaluating the credit risk of rising pension scheme shortfalls

Rising deficits among defined benefit pension schemes pose a growing challenge to issuers and investors across the US and Europe. The extended low interest rate environment on both sides of the Atlantic has constrained returns on pension plan assets, making it increasingly difficult for European corporates and US municipalities to fund rising retirement liabilities. How these entities manage their retirement-related obligations going forward has implications for their credit quality and credit markets.

To help better understand the problem, we define the scope of the pension funding gap in the US and Europe. From an issuer perspective, the US discussion centers around the public sector while the European discussion centers around private sector companies. For more about the credit implications of Europe's pension funding gap, please read, ''Sizing up Europe's corporate pension gap,'' by Michael Booth, Fabrice Pellous and David Todd.

US public sector retirement plans and challenges ahead

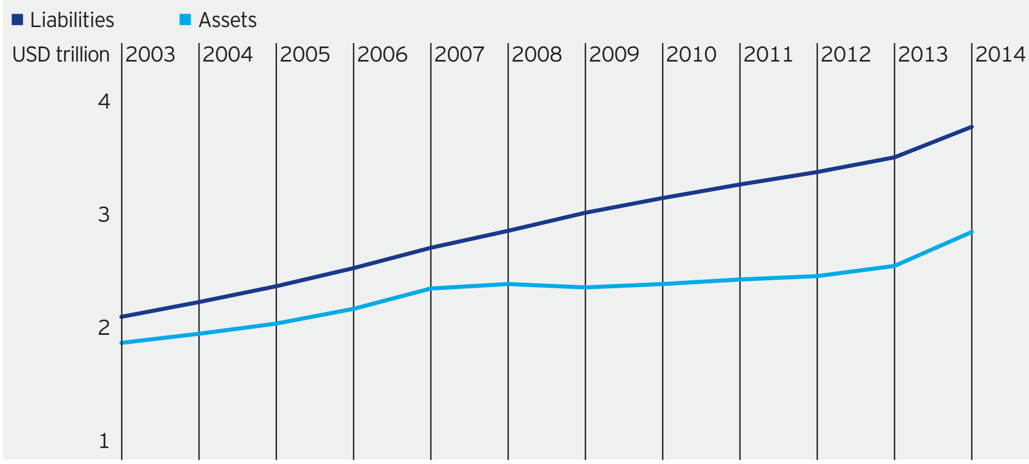
The fiscal positions of many US state and local governments were significantly weakened by the global financial crisis and ensuing recession. A key by-product of of this fiscal deterioration has been a growing funding gap among many public sector pension plans. By eroding the value of plans' underlying assets and the resources available to fund the plans and ''other post-employment benefits' (OPEBs), the financial crisis and subsequent low return environment led to a rise in municipalities' 'unfunded' retirement liabilities.[1] According to the Pew Charitable Trusts, by 2010, the gap between the 50 US states' long-term public sector pension costs and OPEB liabilities and financial assets available to pay for them had widened to USD1.4 trillion.[2] Since 2010, this gap has widened further, with important credit implications for state and local governments across the US.

State and local trends

Figure 1 shows the growing disparity between the mounting pension liabilities and assets of the US states. The graph reveals that the funding disparity emerged in the early 2000s and began to widen in 2007 and later years.

Figure 1: State pension funding gap between 2003 and 2014

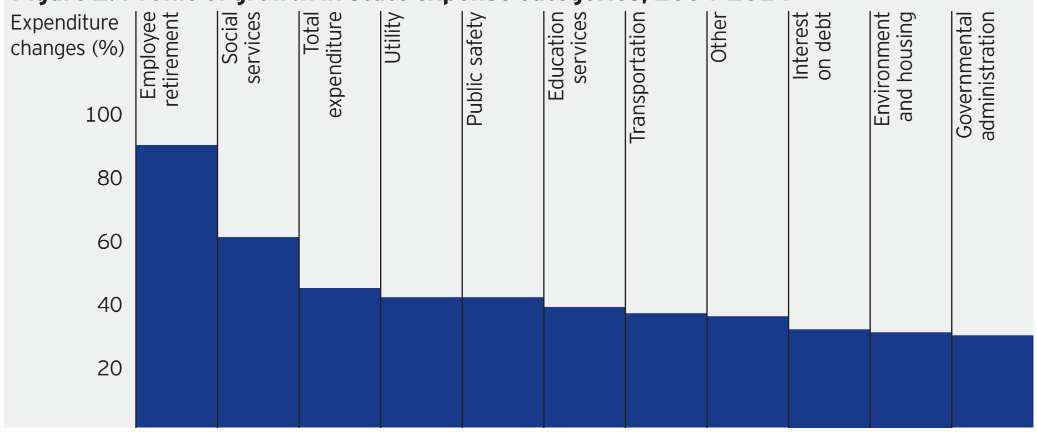
The difference between assets and liabilities for state pension plans totaled more than $900 billion in 2014



Source: The State Pension Funding Gap: 2014, The Pew Charitable Trusts, Aug. 2016.

As a result, between 2004 and 2014, states' retirement-related expenses ballooned. Figure 2 compares states' expenditure growth across different expense categories and illustrates that state retirement expenses rose by nearly 90% between 2004 and 2014, far more than all other expenses.[3]

Figure 2: Profile of growth in state expense categories, 2004-2014



Source: US Census Bureau, US Bureau of Labor Statistics, Fitch, data from Jan. 1, 2004 to Dec. 31, 2014.

Although comprehensive data are unavailable for US cities, sample data indicate that cities' retirement funding gaps are also substantial. A report commissioned by the Society of Actuaries published in February 2014 noted that, although cities' average reported funded ratios rose from 79% in 1990 to 103% in 2000, they had declined to 73% by 2012.[4]

Causal factors

One of the main drivers of unfunded retirement liabilities has been under-funded annual pension costs caused by weakened state and local fiscal positions post-crisis. The second factor has been aggressive investment return assumptions. Over the past ten years, the median investment return assumption made by state governments was around 7.9%, while actual market returns averaged around 4.8%.[5] Fortunately, states have begun lowering their investment return assumptions in recent years.

Credit implications

We do not expect local governments' weak funding positions to negatively impact municipal credit quality overall. Rather, we believe the impact will likely be greatest on those governments with weak underlying economies and demographics, since state and local tax revenues fund most retirement-related expenses.

The political will to address rising pension liabilities will also be important to monitor. There are basically three options to address growing unfunded pension liabilities, all which have political ramifications: tax increases, expenditure reductions or pension reform. Despite the unpopularity of tax increases, several state and local governments have implemented them to offset higher pension contributions. Pension reform can be more challenging, given protections that exist in some state constitutions or under contract law. For example, the State of Illinois passed pension reform in 2013, only to see it overturned by the State Supreme Court in 2015, citing the protection of retirement benefits under the Illinois constitution.

Implications for bondholders

The most obvious impact of rising pension gaps on bondholders is the potential for credit downgrades and reduction in bond values. But in the case of severe credit deterioration, remedies are few. For those government entities that can access Chapter 9 bankruptcy protection, based on limited case law, bondholder recovery could be lower than that afforded to pensioners.[6] For example, in the case of the City of Detroit, the recovery rate for certain general obligation bondholders was 74%, while pension funds recovered 82%, although OPEBs were basically eliminated.[7]

In the case of government entities that cannot access Chapter 9, including states, the implications for bondholders are even more unclear. On the positive side, many states have strong protections for bondholders. For example, in Illinois, debt service on general obligation debt is automatically funded in advance of upcoming debt service payments. Thus, despite the state's large unfunded liability, in our opinion, the likelihood of a default on its general obligation bonds is very low.

Defining Europe's corporate pension gap

In Europe, aggressive monetary stimulus and decline in corporate bond yields has likewise widened deficits among corporate defined benefit (DB) pension schemes. From a credit perspective, the good news is that DB schemes have been superseded by defined contribution (DC) schemes as the accepted vehicle in Europe for delivering retirement benefits to employees. Still, DB schemes have received increased focus in global credit and equity markets lately due to the extended period of low interest rates under QE.

How do defined benefit pension schemes differ across Europe and what are the credit implications?

There are material differences between DB pension schemes on a country by-country basis. The deficit problem is particularly acute for UK-based schemes due to the UK's regulatory oversight and its requirement to renew deficit funding plans every three years. UK regulators have, indeed, increased their scrutiny of pensions, in part due to the high profile collapse of British Home Stores in 2016, which left behind a pension deficit of around £600 million (USD720 million/€690 million).[8]

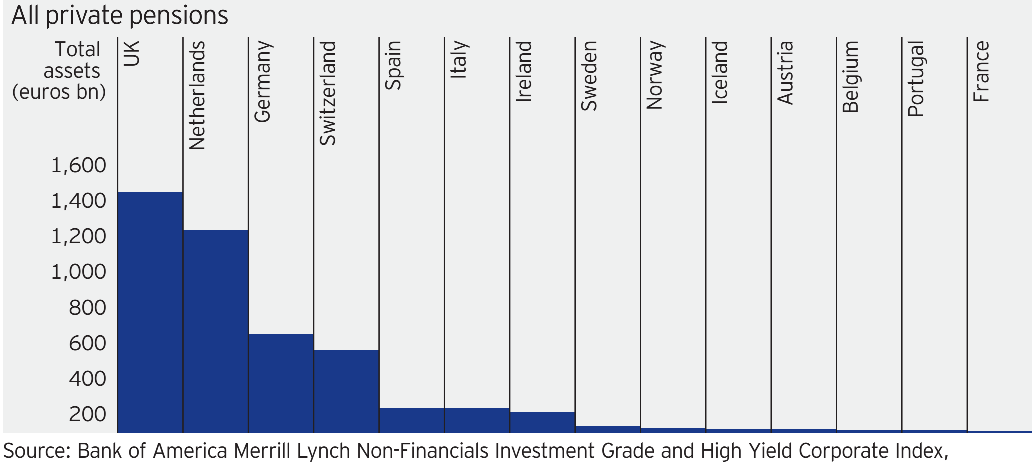
In contrast, German schemes are typically un-funded, with no regulatory oversight. In France, company sponsored DB pension schemes are not commonplace. Instead, employers and employees are required to pay into a mandatory state pension on a monthly basis through a payroll tax (or social security contributions set as a percent of salary).

How is pension scheme risk split between countries, corporate sectors and credit rating brackets?

The largest private pension assets are in the UK, followed by the Netherlands, Germany and Switzerland.[9] By sector, the most exposed industries are the heirs of the industrial revolution, with automotive, capital goods, basic industry, healthcare and consumer goods showing the highest percentage of pension liabilities versus gross financial debt, a common metric.[9] At the same time, the risk appears to be concentrated in the higher rating spectrum. [9] We have identified 24 companies - mostly well-established blue-chip corporates - running very large pension deficits well in excess of 50% of gross financial debt, and well above Europe's median pension deficit of 8% of gross financial debt.[9]

Figure 3: Understanding the scale of invested pension assets across Europe per country

All private pensions



Source: Bank of America Merrill Lynch Non-Financials Investment Grade and High Yield Corporate Index, Bloomberg L.P. and Invesco, data as of Jan. 31, 2017.

Credit rating agency treatment of pensions and implications

Moody's has taken a longer term "through the cycle" view on corporate bond yields and pension scheme deficits on the basis that "interest rates will rise again." Standard and Poor's appears to be taking a more proactive approach as reflected in several recent downgrades of UK and German companies, partially triggered by deepening DB deficits. Fitch's methodology is an outlier as it does not directly incorporate pension adjustments. We believe there is, however, a risk of a hardening stance on the pension deficit issue from all three rating agencies, especially if there is no medium-term respite in the low level of corporate bond yields and/or if issuers' underlying business conditions deteriorate, which could place further pressure on rating metrics.

Investment Implications

In Europe, we believe the greatest risks lie with large UK pension schemes for which triennial reviews are due to be finalized in 2017 and in "low BBB" names with large gross asset/liability balances whose pension-adjusted leverage metrics are at, or close to, credit downgrade trigger levels. The potential market impact of a credit downgrade from BBB to BB could be significant, as illustrated by spread differentials between these ratings buckets. The spread on the Euro BBB Industrial index, for example, is currently 134 basis points, while the spread on the Euro BB index is 271 basis points.[10] A downgrade from BBB to BB could, therefore, result in a potential price decline of around 8% for bonds with 5.7 years of duration (the average duration for the Euro BBB Industrial index).[10]

Invesco Fixed Income (IFI) closely monitors pension risk across the US and Europe. Having a well-resourced and experienced credit team is important for assessing the risks related to issuer pension liabilities and to inform our investment decisions. IFI actively seeks to ensure that credit spreads adequately reflect downside risk or, where this is not the case, that "at-risk" names are avoided.

Gerard Lian, Senior Analyst, Steve Hong, Senior Analyst, Michael Booth, Credit Analyst, Fabrice Pellous, Senior Credit Analyst, David Todd, Head of Global Investment Grade and Emerging Markets Research

1 "Funded" pensions: Employer and employee contributions are invested in market assets out of which cash pension payments are ultimately made. "Unfunded" pensions: Companies meet pension payments out of on-going operating cash flow/cash reserves.
2 Source: "The Widening Gap Update," The Pew Charitable Trusts, June 2012. The USD1.4 billion estimate in 2010 is comprised of USD757 million in pension liabilities and USD627 million in OPEB liabilities. The data put forth by the Pew Charitable Trusts for 2012, 2013 and 2014 is comprised of pension liabilities only.
3 Source: US Census Bureau, US Bureau of Labor Statistics, Fitch, Dec. 31, 2016.
4 Source: Report of the Blue Ribbon Panel on Pension Plan Funding, Society of Actuaries, Feb. 2014. The funded ratio is determined by calculating the ratio of pension or OPEB assets to net pension or OPEB liabilities.
5 Source: "2016 State Pension Update: New Accounting, Old Challenges," Fitch, Nov. 15. 2016.
6 Source: Chapter 9, Title 11, United States Code is a chapter of the United States Bankruptcy Code, available exclusively to municipalities, that assists them in the restructuring of debts. On July 18, 2013 Detroit, Michigan became the largest city in the history of the United States to file for Chapter 9 Bankruptcy protection.
7 Source: "How Moody's Calculates 25% Overall Recovery Rate," Moody's, Sept. 9, 2015.
8 Source: FT.com, May 2016. Source: Bank of America Merrill Lynch Non- Financials Investment Grade and High Yield Corporate Index, Bloomberg and Invesco, Jan. 31 2017. The pension deficit as a percent of gross debt is a common metric of comparison.
9 Source: Bank of America Merrill Lynch Non- Financials Investment Grade and High Yield Corporate Index, Bloomberg and Invesco, Jan. 31 2017. The pension deficit as a percent of gross debt is a common metric of comparison.
10 Source: BofA Merrill Lynch BB Euro High Yield Index and BBB Industrials Index, Feb. 28, 2017.

Scott Baskind
Head of Global Senior Loans

Bank loans - How may bank loans benefit investors in the current environment?

We speak with Scott Baskind, Head of Global Senior Loans, about the benefits of bank loans and recent market trends.

Q: What are some of the benefits of investing in bank loans, especially with interest rates on the rise?
The Bank Loans Team believes that senior loans provide both long-term strategic and tactical investment opportunities that arise from developing credit trends and attractive relative value. Senior loans typically offer a high level of current income and, due to their defensive position at the top of a company's capital structure, may provide capital protection in the event of default. In addition, the floating rate nature of senior loans can offer clients a credit solution that may help provide price protection in a rising interest rate environment.

Q: What are the four main pillars of demand in the bank loans marketplace?
The bank loans investor base is basically comprised of four main investor groups: retail, institutional, collateralized loan obligations (CLOs) and exchange traded funds (ETFs). This diversity of IFI's bank loans platform provides us with a unique perspective on investor behavior and the supply/demand dynamics in the bank loans marketplace.[1]

Q: What has been the primary driver of demand for bank loans?
In the past few years, demand has been relatively broad across multiple constituents. Institutional investors have included pension funds, endowments and insurance companies seeking yield in a low return environment. Demand for structured products such as CLOs has also been strong and high net worth and retail clients have been active. We believe that loans' attractive features such as relatively high current income, relatively low volatility, low correlation to other fixed income asset classes and their floating rate structure have been the primary drivers of increased participation.

From a fundamental perspective, US corporate earnings remain quite supportive, particularly for senior secured debt, which is situated at the top of the capital structure. So from that perspective we remain comfortable with the environment. What we are ultimately investing around is an uncertain global environment that could cause near-term volatility. That said, the market has corrected itself very quickly historically and we would anticipate the same in 2017.

Q: A large part of the market is currently at or above par. Has this situation ever occurred in the past?
It is common for some loans to trade above par when both supportive fundamentals and strong technical conditions exist. This dynamic exists today as fundamentals remain supportive and strong demand has been met with limited new issue supply. Since the global financial crisis, there have been four definable periods when a significant percentage of loans traded above par: Feb. 2013-May 2013, Aug. 2013-March 2014, May 2015-June 2015 and the last six months.[2] Loans typically only have call protection at 101 for 6-12 months after they are issued and for that reason it is common to see loans to trade above par but below 101.

Q: If regulation such as the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank) were wound back, would that likely be positive or negative for the asset class?
CLOs are structured vehicles backed by a pool of loans that distribute income to various tranches depending on priority of payment. One aspect of Dodd-Frank has been to require CLO managers to retain 5% of a vehicle through either a "horizontal" slice of the equity tranche or a "vertical" slice of each tranche. The implementation of Dodd Frank-has therefore reduced the number of CLO managers as some have not had access to sufficient capital required to meet this new "risk retention" rule. While the result has been less demand for loans from the CLO source, bank loan issuance has nevertheless remained strong with net new volume of around USD73 billion in 2016.[3] If Dodd-Frank were wound back, we believe CLO issuance could become less restrictive, leading to potentially greater demand for bank loans overall.

Q: Some investors may have a bias against bank loans given their prior experience pre-financial crisis. How are bank loans different today?

After analyzing the crisis year of 2008, we can conclude that the sharp drawdown was caused by a massive sell-off of loans, primarily driven by two extraordinary factors: 1) deleveraging pressure forced upon some market participants in the course of the Lehman Brothers bankruptcy and 2) a serious overhang stemming from already signed loans that were still on bank balance sheets and which had not yet been syndicated. The factors that led to this event- excess leverage among investors and a large amount of bridge financings on bank balance sheets- do not exist today.

Despite the sharp correction in 2008, two important observations can be made: 1) Compared to other asset classes that also experienced heavy pressure, loans continued to pay highly stable cash flows and 2) the fundamental erosion of issuers was not in line with the magnitude of the price volatility and the mispricing was corrected during the following year. Investors who were prepared to stick to a buy-and-hold strategy saw their strategy rewarded: Between January 2008 and December 2010, bank loan investments produced an absolute return of 4.2% per annum.[4] This was achieved despite the fact that bank loan default rates reached a record high during this period.[4]

1 ETFs are not registered for sale outside of the USA.
2 Source: JP Morgan, Feb. 28, 2017.
3 Source: JP Morgan, Dec. 31, 2016.
4 Source: Credit Suisse Leveraged Loan Index, Jan. 1 2008 – Dec. 31, 2010. Past performance is no guarantee of future results.

Fixed income market monitor

	Coupon (%)	Yield to worst (%)	1 month change in YTW	Option-adjusted spread: current	1 month change in spread	10 year range min	10 year range max	Returns: 1 mth (%)	3 mth (%)	YTD (%)	12 mth (%)
Global Aggregate (USD hedged)	2.72	1.58	-0.07	46	1	23	156	0.86	0.76	0.49	1.97
U.S. Aggregate	3.07	2.57	-0.05	43	-2	32	258	0.67	1.01	0.87	1.42
U.S. Mortgage-backed	3.53	2.85	-0.05	22	0	-16	181	0.48	0.44	0.44	0.44
Global Inv Grade Corporate (USD hedged)	3.66	2.59	-0.12	119	-4	55	515	1.21	2.08	1.34	6.56
U.S. Investment Grade Corporate	4.07	3.26	-0.09	115	-6	76	618	1.15	2.14	1.46	6.42
Emerging Market USD Sovereign	n/a	5.43	-0.22	312	-16	157	906	2.00	4.85	3.48	12.05
Emerging Market Corporate	n/a	4.71	-0.18	262	-15	120	1,032	1.39	3.45	2.65	11.81
Global High Yield Corporate (USD hedged)	6.24	5.10	-0.28	364	-22	231	1,845	1.42	4.72	2.82	20.12
U.S. High Yield Corporate	6.48	5.58	-0.27	363	-25	233	1,971	1.46	4.83	2.93	21.83
Bank Loans	4.86	4.99	-0.04	n/a	n/a	n/a	n/a	0.59	2.28	0.59	12.55
Municipal Bond	4.76	2.44	-0.10	n/a	n/a	n/a	n/a	0.69	2.55	1.36	0.25
High Yield Municipal Bond	5.18	6.13	-0.20	n/a	n/a	n/a	n/a	2.38	5.26	3.82	5.17

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	2.06	1.87	-0.02	0.49	0.61	0.72	-1.24
Canada	2.32	1.30	-0.05	0.64	-0.41	0.39	-1.25
United Kingdom	3.62	1.04	-0.24	3.15	3.22	1.19	6.34
Germany	2.10	-0.24	-0.21	1.57	0.55	0.27	0.14
Italy	3.50	1.42	-0.05	0.88	-0.37	-1.68	-2.34
Japan	1.08	0.10	-0.04	0.32	-0.90	-0.26	-0.30
China	3.57	3.18	0.07	-0.20	-2.16	-0.31	0.78
EM Local Currency Governments	n/a	n/a	n/a	0.40	1.83	1.34	8.39

FX market monitor[1]

	Current	10 year range min	10 year range max	Returns: 1 mth (%)	3 mth (%)	YTD (%)	12 mth (%)
EURUSD	1.06	1.05	1.60	-2.06%	-0.12%	1.16%	-2.73%
USDJPY	112.77	75.82	124.77	0.03%	1.51%	4.26%	-0.07%
GBPUSD	1.24	1.22	2.11	-1.58%	-1.01%	0.83%	-11.04%
USDCNY	6.88	6.04	8.28	0.01%	0.47%	1.32%	-4.54%
USDCHF	1.01	0.75	1.39	-1.63%	1.15%	1.78%	-0.73%
AUDUSD	0.77	0.60	1.10	0.95%	3.68%	6.58%	7.23%
CADUSD	0.75	0.72	1.09	-2.03%	1.02%	1.06%	1.81%
EURJPY[2]	119.27	94.31	169.49	2.12%	1.61%	3.04%	2.73%
EURGBP[2]	0.85	0.70	0.86	0.48%	-0.88%	-0.31%	-8.54%

Sources: Bloomberg Barclays, J.P. Morgan, as of Feb. 28, 2017. Credit Suisse Leveraged Loan data as of Feb. 28, 2017. Within the Treasury monitor, United States is represented by Bloomberg Barclays US Treasury Index; Canada is represented by Bloomberg Barclays Global Treasury Canada Index; United Kingdom is represented by Bloomberg Barclays Sterling Gilts Index; Germany is represented by Bloomberg Barclays Global Treasury Germany Index; Italy is represented by Bloomberg Barclays Global Treasury Italy Index; Japan is represented by Bloomberg Barclays Global Treasury Japan Index; China is represented by Bloomberg Barclays China Aggregate Treasuries Index; EM Local Currency Governments is represented by J.P. Morgan GBI_EM Broad Diversified Index. In the Fixed Income Monitor, Global Aggregate is represented by Bloomberg Barclays Global Aggregate (US$ Hedged) Index; US Aggregate is represented by Bloomberg Barclays US Aggregate Index; US Mortgage-backed is represented by Bloomberg Barclays US Mortgaged-backed Index; Global Investment Grade Corporate is represented by Bloomberg Barclays Global Aggregate Corporate (US$ hedged) Index; U.S. Investment Grade Corporate is represented by Bloomberg Barclays Aggregate Corporate Index; Emerging Market USD Sovereign is represented by the J.P. Morgan EMBI Global Diversified Index; Emerging Market Corporate is represented by J.P. Morgan CEMBI Broad Diversified Index; Global High Yield Corporate is represented by the Bloomberg Barclays Global High Yield Corporate (US$ hedged) Index; U.S. High yield Corporate is represented by Bloomberg Barclays U.S. Corporate High Yield Index; Bank Loans is represented by the Credit Suisse Leveraged Loan Index; Municipal Bond is represented by Bloomberg Barclays Municipal Bond Index; High Yield Municipal Bond is represented by Bloomberg Barclays Municipal Bond High Yield Index. Yield to Worst (YTW) is the lowest expected yield calculation given maturity and call features. Option Adjusted Spread (OAS) is the yield difference relative to similar maturity Treasuries that incorporates call, put, sinking fund or paydown features of a bond. Past performance cannot guarantee future results. An investment cannot be made directly in an index. Returns less than one year are cumulative.

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

Invesco Fixed Income

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Invesco Fixed Income

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- IFI is in ten locations with additional Invesco colleagues in two
- USD 272.4 billion in assets under management

Experienced team

- 165 investment professionals
- Averaging 18 years of industry experience
- Deep macro and credit research
- Focused and accountable portfolio management

Global locations

Source: Invesco. For illustrative purposes only.

Invesco Fixed Income teams

	Team members	Average years with Invesco	Average years in industry
Portfolio management and trading	75	12	21
Global research	90	9	16
Total investment professionals	165	10	18
Business professionals	62	14	19
Total fixed income employees	227	11	18

Source: Invesco.

As of Dec. 31, 2016. Subject to change without notice.
Investment specific experience for investment professionals.

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