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Global macro strategy

What's up with US dollar LIBOR?

The widely quoted benchmark rate is now at post-crisis highs

The last time we wrote about the US dollar London Interbank Offered Rate (LIBOR) was in 2016, when the spread between LIBOR and the Overnight Indexed Swap (OIS) rate increased due to market dislocations leading up to US money market fund reform. Now in early 2018, we have seen LIBOR rates rise and LIBOR-OIS spreads widen again, causing us to ask the same question – what's up with LIBOR?

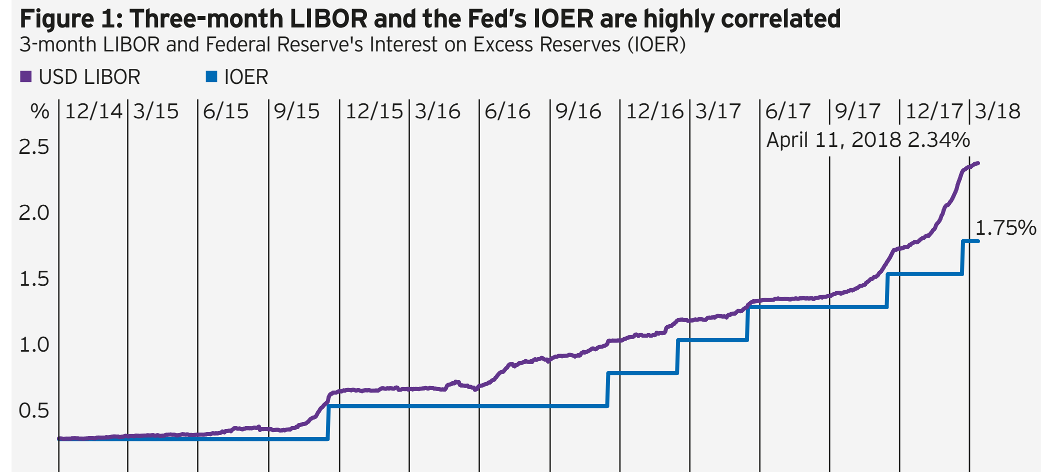
In our opinion, there are four factors driving LIBOR rates higher:

- The US Federal Reserve (Fed) has continued to push monetary policy rates higher with its latest hike in March.
- Demand has fallen for short-term credit instruments due to potential corporate repatriation following last year's tax reform.
- The BEAT provision of US tax reform has increased the issuance of short-term funding instruments from US branches of foreign banks, to avoid new taxes on cross-border intra-company lending.
- Given projected budget deficits, markets expect an abundant supply of US Treasury bills (T-bills) through 2019.

What is LIBOR?
LIBOR is a benchmark rate that some of the world's leading banks charge each other for short-term, unsecured loans.[1] Globally, it is considered a primary benchmark for short-term interest rates. LIBOR is also used as a barometer to gauge market expectations of future central bank policy and for measuring the health of the banking system (although LIBOR's utility as a credit market indicator has diminished, as discussed in "Elevated LIBOR creates opportunities," later in this report). As such, LIBOR rates typically increase when the Fed tightens monetary policy and/or during times of market stress.

LIBOR has increased in part due to Fed policy rate hikes
The recent rise in LIBOR can be partially tied to the Fed's removal of monetary policy accommodation. As seen in Figure 1, there has been a relatively close correlation between LIBOR and the Fed's interest rate on excess reserves (IOER). The Fed has increased policy rates six times since 2015. Looking ahead, Invesco Fixed Income expects future Fed rate hikes to keep this trend in place.

Figure 1: Three-month LIBOR and the Fed's IOER are highly correlated
3-month LIBOR and Federal Reserve's Interest on Excess Reserves (IOER)



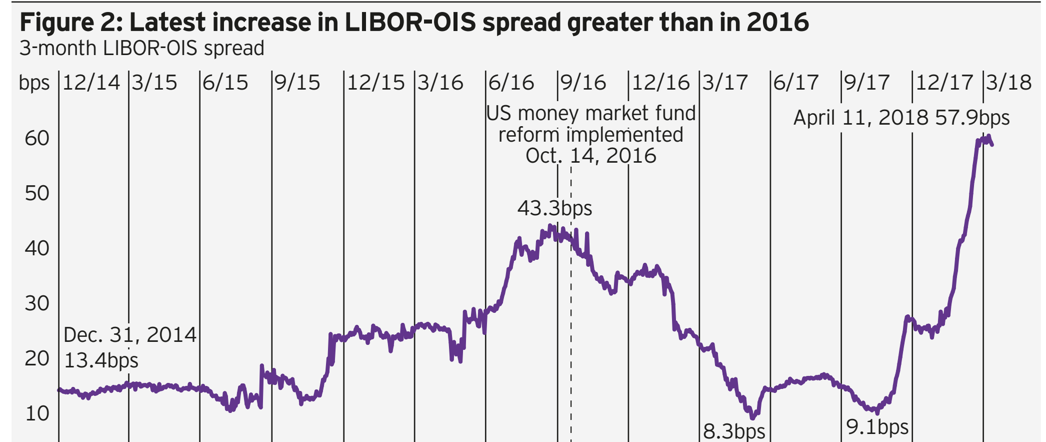
Source: Bloomberg, L.P., ICE Benchmark Administration, Federal Reserve, data from Dec. 31, 2014 to April 11, 2018.

Impact of new US tax law
A provision of the new US tax law, known as the Base Erosion Anti-Abuse Tax, or "BEAT" may also be playing a role in LIBOR's sharp rise. The BEAT has made it more expensive for US branches of foreign banks to borrow from their overseas headquarters by making those debt payments taxable.[2] Consequently, these US branches have suddenly tapped the short-term funding markets instead, driving LIBOR higher.

Supply and demand have pushed the LIBOR-OIS spread wider
The LIBOR-OIS spread is considered a key measure of investors' perception of credit risk within the banking sector. It is the difference between LIBOR and the overnight index swap rate (OIS).[3] OIS represents a given country's central bank policy rate over a certain time period (the federal funds rate in the US).

Current supply and demand dynamics in short-term funding markets have pushed the LIBOR-OIS spread wider. In our opinion, this is not reflective of stress or credit concerns in the banking system but is similar to 2016 when assets flowed out of prime money market funds into government money market funds, disrupting supply/demand dynamics in short-term funding markets and causing the LIBOR-OIS spread to increase. Eventually, markets adjusted, banks found new sources of funding and the LIBOR-OIS spread settled down to new clearing levels (Figure 2).

Figure 2: Latest increase in LIBOR-OIS spread greater than in 2016
3-month LIBOR-OIS spread



Source: Bloomberg, L.P., ICE Benchmark Administration, data from Dec. 31, 2014 to April 11, 2018.

Invesco Fixed Income believes the recent increase in the LIBOR-OIS spread is due to diminished demand for short-term credit instruments (and some selling pressure), as companies seek to repatriate and spend cash that is no longer invested offshore. As time passes, and supply and demand adjusts, we expect the LIBOR-OIS spread to revert to lower clearing levels.

US T-bill supply higher

Adding to the technical picture is the increase in the supply of US T-bills following February's passage of a two-year US government spending plan and the typical increase in issuance around tax season. T-bill supply was up 17% to USD2.3 trillion as of March 31 (Figure 3) — an all-time high. The current abundance of T-bill supply has supported the widening of the LIBOR-OIS spread, as institutional buyers have opted for T-bills over repurchase agreements, causing T-bill yields to lag LIBOR. While T-bill supply could drop following this year's April 17 tax deadline, we believe future US budget deficits are likely to keep overall Treasury issuance on the rise through 2018 and 2019.

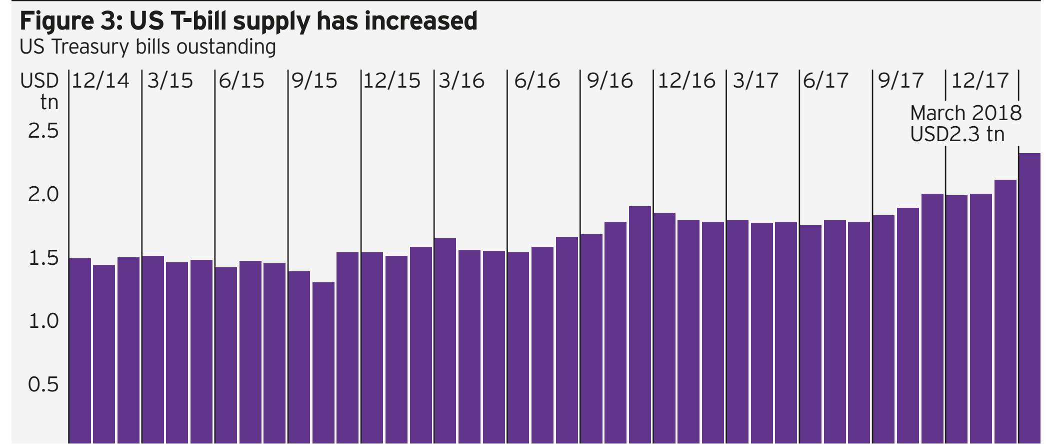


Figure 3: US T-bill supply has increased
US Treasury bills oustanding

Source: Bloomberg, L.P., US Treasury, data from Dec. 31, 2014 to March 31, 2018.

Summary

We believe Fed rate hikes and supply/demand technicals — not credit concerns in the short-term funding markets — have put upward pressure on LIBOR and the LIBOR-OIS spread. While the Fed will likely continue to raise interest rates in 2018, the LIBOR-OIS spread mainly reflects the current supply/demand dislocation in the short-term funding markets.

Rob Corner, Senior Client Portfolio Manager, Jacob Habibi, Senior Analyst

1 Source: Invesco. Since 2017, there have been plans afoot among regulators to replace LIBOR by 2021. However, this effort is still in the early stages, and we believe these potential changes have not yet had an impact on LIBOR valuations.
2 Source: The Wall Street Journal, "Could the Libor Mystery Be All About Taxes?" May 23, 2018.
3 The interest rate on excess reserves (IOER) is determined daily by the Board of Governors of the US Federal Reserve System. This payment of interest is intended to eliminate the implicit tax imposed on depository institutions by bank reserve requirements.

Interest rate outlook

US: Neutral. Inflation trends are showing no signs of a significant pick-up, and economic data over the coming months should support a Fed rate hike in June, which appears largely expected by the market. We think slowing inflation will become a concern for the Fed later in the year, especially as the housing component slows. Over the longer term, we think risk/reward dynamics favor US Treasuries, especially if geopolitical uncertainty begins to pick up. However, a market correction pushed yields higher in April, and, therefore, we remain neutral on US rates in the near term.

Europe: Underweight. Eurozone economic data and several survey indicators have weakened since the start of the year. However, we see this as normalisation from extremely strong levels and do not expect a significant slowdown in growth, as domestic fundamentals such as capital expenditures and hiring intentions still indicate that the business cycle has room to run. The European Central Bank (ECB) sees the main risk from global trade tensions coming from a potential decrease in confidence, which could delay capital spending plans. Therefore, we will be watching confidence indicators very closely in the coming months. We think ECB asset purchases will likely extend into December 2018 and expect the tapering decision to be announced in June or July.

China: Overweight. We continue to see attractive opportunities in onshore government bonds, and with new asset management rules in place, we expect demand for Chinese government bonds to pick up. In our view, regulatory tightening has pressured non-bank financial institutions, and we see limited room for the central bank (PBoC) to tighten liquidity further from here. In addition, lowering financing costs in the real economy remains a major task assigned by top policy makers, all suggesting less upward pressure on yields in the near term.

Japan: Neutral. The Japanese economy continues to perform well. Wage increases resulting from the recent wage negotiations between unions and employers should help consumption. Export demand remains dependent on the well-being of the global economy. We continue to expect solid growth, but an escalation in trade war rhetoric could dampen those expectations. Inflation remains well below the Bank of Japan's (BoJ) 2% inflation target.[1] Consequently, we believe the BoJ is likely to remain accommodative, despite increasing calls for them to change tact. We expect 10-year Japanese government bond yields to remain range-bound over the next month between 0-0.1%.

United Kingdom: Neutral. Since the beginning of 2017, the UK economy has underperformed compared to its European Union (EU) counterparts, mostly due to the uncertainty surrounding Brexit. Forward looking purchasing manager's index (PMI) data suggest a continuation of this trend. The UK is due to leave the EU in March 2019, and negotiators from both sides will try to strike a deal regarding their ongoing trading relationship in the coming months. However, we think it is unlikely that a final deal will be reached by the official departure date, as it would need to be ratified by all twenty-eight countries. Calls for an extension to the UK's EU membership may increase, and a vote of no confidence in the UK government cannot be ruled out. Inflation remains above the Bank of England's (BOE) target but is slowing – supportive of our expectation that the BOE will hike interest rates in May. Further hikes in 2018 will be dependent on how the economy fares.

Canada: Neutral. The economic data has been mixed since the Bank of Canada hiked the overnight rate 25 basis points in January.[2] Employment growth remains positive and consumer price inflation has been firm. However, retail sales and exports have been soft, and housing turnover has fallen since housing policy changes in 2017 pulled forward turnover into the fourth quarter. The Canadian 10-year yield has been in a 2.08%-2.38% trading range for most of the year.[3]

Australia: Neutral. The Reserve Bank of Australia (RBA) held rates steady again at its April meeting. The statement, like previous statements, continues to express optimism for the future while stressing "patience." Within this statement the RBA expressed some concern for financial conditions and noted that further global monetary tightening was expected. Retail sales rebounded in February, but consumer confidence and business confidence surveys have fallen recently, though they remain relatively high. The labor market remains strong, but most new jobs have come from lower paying sectors – keeping wage inflation lower than desired. The RBA is likely to remain on hold for the foreseeable future especially as long as inflation and wage growth remain low.

India: Neutral. We like current yield levels from a valuation perspective, and we have observed a rally from the high in early March on the back of lower inflation prints, a favorable government borrowing calendar and the Reserve Bank of India (RBI) relaxing the mark-to-market rule for government securities. Going forward, we see inflation as the key uncertainty and the main reason for our neutral stance on Indian interest rates. Inflation averaged about 4.6% in the first quarter of the year,[4] driven by moderation in food prices, while core inflation remained at 5.4% in March. We still expect inflation to average around 4.5% in the second half of 2018, but upward pressure could come from higher crude prices or the government setting higher minimum support prices (MSP) for crops.

Rob Waldner, Chief Strategist, James Ong, Senior Macro Strategist, Noelle Corum, Associate Portfolio Manager, Reine Bitar, Macro Analyst, Yi Hu, Senior Analyst, Sean Connery, Portfolio Manager, Brian Schneider, Head of North American Rates Portfolio Management, Scott Case, Portfolio Manager, Amritpal Sidhu, Quantitative Analyst

1 Source: Bank of Japan, Jan. 22, 2013
2 Source: Bank of Canada, Jan. 17, 2018
3 Source: Bloomberg, L.P., Jan. 1, 2018 to April 18, 2018
4 Source: Bloomberg, L.P., Jan. 1, 2018 to March 31, 2018

Currency outlook

USD: Underweight. The US is in the later stage of its economic cycle relative to the rest of the world. We expect the Federal Reserve (Fed) to grow cautious while other central bank policies continue tightening. The dollar should be pressured weaker as investors look for better growth and return opportunities elsewhere. However, the fundamental picture has been muddied recently as growth data disappoints relative to expectations – resulting in mixed performance in the US dollar. We believe this is a short-term correction in market expectations in not only US growth but globally as well. We are watching the data closely to be sure that constructive fundamentals are still intact and this is not a downward trend developing.

EUR: Overweight. We continue to expect further euro appreciation due to the broader US dollar trend. We believe the eurozone trade surplus will also support the euro higher. We continue to view pullbacks in the euro as consolidation within a longer-term trend higher.

RMB: Neutral. The US dollar renminbi exchange rate hovered around 6.3 in April,[1] and we believe its performance will continue to be driven by the depreciation of the US dollar. Potential trade friction with the US may complicate the currency's outlook. If China's trade surplus narrows, it could put downward pressure on the renminbi. On the other hand, if a global risk-off event causes a sharp rise in the yen or euro against the US dollar, the renminbi will likely face appreciation pressure. A sharp weakening in the US dollar would probably cause the US dollar renminbi exchange to settle at about 6.2. However, in the near term, we expect it to trade in its current range of 6.3-6.5.[1]

JPY: Underweight versus the Australian dollar. With Japan's fiscal year-end behind us, we expect Japanese domestic investors to seek higher yielding foreign assets in the period ahead. In addition, the global backdrop of above potential growth and low inflation is likely to provide for a "risk-on" trading environment. Long AUD/JPY typically performs well against such a backdrop. Concerns over a potential trade war and the situation in Syria are the key risks to our view. An escalation in either would likely be yen-supportive. We continue to keep a close eye on the land sale scandal in Japan that threatens to bring down senior members of the Japanese government. This could also have a de-stabilizing effect on the currency.

GBP: Neutral. Sterling has recently benefited from the news that the UK government has reached an agreement with the EU on a post-Brexit transition deal. However, several issues still need to be resolved – such as the Northern Ireland border issue – before any agreement is signed and implemented. Therefore, we would caution against expecting the currency to move meaningfully higher from current levels. We are entering a key period in negotiations, and anything that suggests an increased potential for a hard Brexit could hurt sterling.

CAD: Neutral. The Canadian dollar has recovered after a rough February and March. The risk-off market tone that affected the currency late in the first quarter has given way to positive expectations that NAFTA negotiations may soon be finalized. Removal of uncertainty around NAFTA should be a positive for the currency. In addition, oil has strengthened recently on the back of tensions with Syria and Russia, providing another positive catalyst for the currency.

AUD: Neutral. The Reserve Bank of Australia (RBA) held rates steady again at its April meeting. The RBA said in its statement that it expects gradually improving conditions and is committed to its desire to remain patient with economic policy. It did, however, express concern about the tightening of conditions in US dollar money markets. They see higher short-term rates flowing through to other countries, including Australia. Australia's trade surplus has narrowed recently due to an increase in imports, while exports have remained stable, even with the current decline in commodity prices. With inflation and wage growth still below desired levels, the RBA is likely to remain on hold for the foreseeable future.

INR: Neutral. Recent weakness in the rupee was largely driven by equity outflows in February after a new long-term capital gains tax was introduced into the 2018 budget. More recent macro data, however, show a pick-up in industrial production and overall growth, which we believe will be rupee-supportive. Higher crude prices and a growing current account deficit remain the main downside risks to our view.

Ray Uy, Head of Macro Research and Currency Portfolio Management, James Ong, Senior Macro Strategist, Yi Hu, Senior Analyst, Sean Connery, Portfolio Manager, Brian Schneider, Head of North American Rates Portfolio Management, Scott Case, Portfolio Manager, Amritpal Sidhu, Quantitative Analyst

1 Source: Bloomberg, L.P., April 1, 2018 to April 18, 2018

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

Global investment themes

Global credit themes

Geographical themes

Investment grade (IG): Fundamental outlook remains strong, but "Goldilocks" market technicals turning lukewarm

Rationale

Corporate credit fundamentals continue to improve across most geographies and sectors, aided by a pick-up in the global growth outlook. Leverage has come down from cycle highs in 2016 with little pressure from shareholders to increase leverage to fund growth. In addition, corporate tax reform has penalized high levels of interest expense, thus we expect balance sheet improvement to continue. Regulatory changes should reduce cost structures (financials specifically) and enable opportunities for revenue growth. Despite the constructive fundamental backdrop, we are seeing early signs of weakening demand from foreign investors as tightening monetary policy drives currency hedging costs higher. Other key factors pressuring demand for shorter-term bonds include the repatriation of overseas cash by US corporations, much of which is invested in short maturity IG corporates, as well as an uptick in US T-bill issuance driven by increases in deficit spending at the same time the Fed scales back its bond reinvestment program. Fortunately, institutional demand for long-end corporate bonds remains robust and domestic flows into mutual funds and ETF's remains positive. European credit markets are generally earlier in the credit cycle and less levered, although Brexit and political uncertainties remain. With credit spreads in many asset classes now wider from cycle tights and a fundamental outlook that remains supportive, IG credit market returns should stabilize.

IFI strategy

We have recently moved to neutral from overweight IG credit, favoring Europe over the US, UK and Asia. Key drivers to monitor include: 1) future changes in monetary policy from the Fed, ECB, BoJ and BoE, viewed on an aggregate basis for their impact on global credit flows 2) development of fiscal and regulatory policy changes 3) "hard" economic data to confirm the increase in "soft," sentiment-based leading economic indicators.

Emerging markets (EM): Reversal of reflation trade, favorable financial conditions, growth outlook supportive

Rationale

The positive view on global growth, aggregate global monetary policy and benign inflation pressures support our constructive view on EM credit, despite tight valuations. These forces have helped leverage decline from cycle highs, and we expect this trend to continue at a measured pace. Global inflation pressures remain conspicuously absent, but would likely become a favorable credit influence.

IFI strategy

We prefer high yield bonds due to our positive view on global growth, benign inflation outlook and continued easy financial conditions. We prefer to take credit over interest rate risk. We favor Latin America over Europe and Asia and are underweight Central and Eastern Europe. We are focused on sovereigns that have underperformed without a meaningful catalyst: Lebanon, Kazakhstan, Oman, quasi sovereigns. We actively use the new issue market as a source of alpha and to build exposure in favored names and regions.

US commercial mortgage backed securities (US CMBS): Notable decline in primary market issuance, watching retail industry fundamentals

Rationale

Negative retail news has dominated headlines. However, we are generally not advocates of selling stronger US CMBS credits since they are often hard to replace. Issuance is increasing after a slow 2017 despite slightly tighter credit standards. US property price growth continues, but will be monitored given higher interest rates.

IFI strategy

Given the significant move in spread tightening we prefer seasoned US CMBS as the cycle progresses. We think AAA-rated US CMBS look less attractive. Credit-differentiation is accelerating, placing a premium on selection, so we must navigate large regional mall concentrations. Rich valuations and poor hedge-adjusted carry weigh on shorter-term high quality paper.

US residential mortgage backed securities (US RMBS): Favorable fundamentals, valuations fair, Credit Risk Transfer (CRT) securities market depth improving

Rationale

Mortgage underwriting quality remains high, while the home price outlook is expected to normalize as affordability declines after strong price gains. Limited housing supply and long-term negative net issuance remain dominant factors in US RMBS. Valuations appeared stretched relative to other asset classes following outperformance during 2017 in legacy US RMBS and below-IG CRT.

IFI strategy

We favor higher quality legacy prime, alt-A, and seasoned BBB-rated CRT. We are avoiding sub-prime, coastal concentrations, and option adjustable-rate mortgages.

US asset backed securities (US ABS): Value in floaters, fundamentals normalizing, favorable technical

Rationale

Normalization of credit underwriting and our forecast for a healthier economy should support consumer credit performance in 2018. As the overall market continues to weigh the longer-term impact of Trump administration policies and additional rate hikes going forward, uncertainty should be supportive of a more stable, shorter-duration US ABS market.

IFI strategy

We favor adding exposure to floaters where collateral performance remains stable.
We believe senior prime auto US ABS and esoteric issuers can provide opportunities.
We are avoiding deep subprime auto US ABS.

Sector themes

Commodities: Global supply concerns creating energy volatility, prefer pipelines

Rationale

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

IFI strategy

We favor gaining exposure to pipeline credits with favorable idiosyncratic credit catalysts that provide downside protection at attractive yields.

Consumer story more nuanced globally, watching US fiscal policy influences

Rationale

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

IFI strategy

We favor selected US consumer sectors including leisure and housing-related sectors.
We are negative on "big box" and mall-based retailers that lack differentiated products.
We favor EM consumer sectors on a selective basis. We are more cautious on the automotive original equipment manufacturer (OEM) sector given excess inventory.

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

Rationale

M&A activity has moderated but remains a risk, driven by large overseas cash balances, repatriation potential post-tax law changes, low all-in financing costs, still modest organic revenue growth, and the need to reposition business portfolios.

IFI strategy

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

Global technology – big data

Rationale

We expect global use of data to grow and a transition to cloud-based platforms.

IFI strategy

We prefer to gain exposure to software and services, cell towers and select wireless issuers. We have avoided hardware original equipment manufacturers.

Yield curve themes

Credit curve positioning, long end valuations getting full

Rationale

Rising currency hedging costs and repatriation of overseas corporate cash has resulted in underperformance of the front end. This has caused credit curves to flatten from previously steep levels, particularly 3-5's and 5-7's spread curves. Lately, sovereign wealth funds have targeted the 10-year part of the curve. We expect demand for 7-10 year paper to be resilient, while the flatter curve has taken the value out of the long end.

IFI strategy

We favor the 7-10 point on the US IG and EM credit yield curve.

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

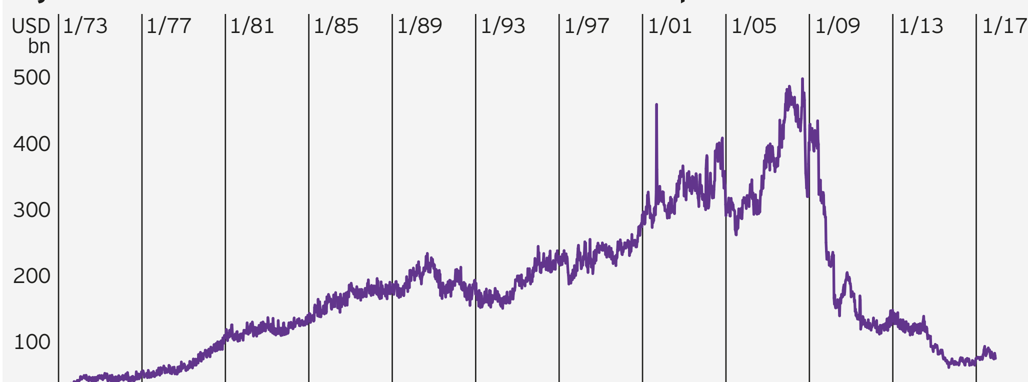
This section highlights the views of Invesco Fixed Income's credit analysts across a broad range of fixed income assets managed by Invesco.

Global credit strategy

Elevated LIBOR creates potential opportunities in money markets and floating rate bonds

As noted in our macro article earlier in this report, What's up with LIBOR? the difference between US dollar LIBOR (LIBOR) and the overnight index swap rate (OIS), a.k.a. the "LIBOR-OIS spread," has been traditionally considered as an important indicator of banking sector credit risk. However, since the global financial crisis, the LIBOR-OIS spread has become less relevant. After the global financial crisis, interbank lending was severely penalized under Dodd-Frank in an effort to reduce systemic risk arising from the interconnection of large banks. Consequently, US banks' use of the interbank funding market (the market on which LIBOR is based) has shrunk dramatically. Interbank loans outstanding have declined by 86% from a peak of USD492 billion in Sep. 2008 to USD68 billion in Dec. 2017, drastically reducing the utility of LIBOR-OIS as a market bellwether (Figure 1). Indeed, in recent years, credit spreads on US dollar-denominated banking sector corporate bonds have not been highly correlated to LIBOR. For example, while the recent spike in LIBOR resulted in a 50 basis point widening in the LIBOR-OIS spread, bank credit spreads widened by only 10 basis points over the same period.[1]

Figure 1: LIBOR has become less relevant due to the sharp decline in interbank loans



Source: FRED Economic Data, data from Jan. 3, 1973 to Dec. 27, 2017.

Since efforts to curtail the systemic risk of large global banks have dramatically reduced the interbank lending market, the US and other major countries that remain reliant on LIBOR as a benchmark reference rate have been working to replace it. The New York Fed began publishing its recommendation for the US replacement, the Secured Overnight Funding Rate (SOFR), on April 2, 2018. The goal is to replace LIBOR in the next few years.[2]

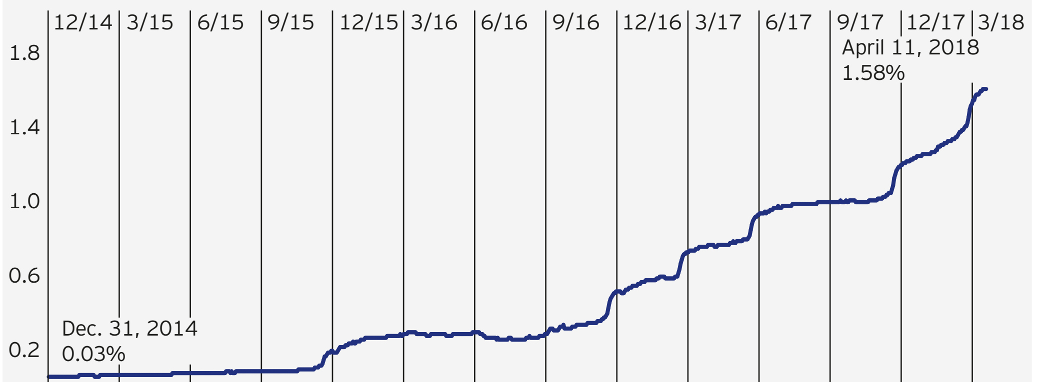
While LIBOR may no longer be an accurate representation of banking sector transactions, more than USD350 trillion in securities are still tied to the rate.[3] As a result, we believe the recent spike in LIBOR presents several opportunities for investors in short-term and floating rate bonds.

Who could benefit from these dynamics?

Investors in money markets

Prime money market funds (which rely on short-term funding markets) have already benefited as yields on these types of funds have increased (Figure 2). Second, ultrashort bond funds and exchange traded funds (ETFs) that invest in LIBOR-based floating-rate securities could benefit as coupons potentially reset higher. Additionally, short-term products such as securities lending cash reinvestment pools, local government investment pools, offshore US dollar money market funds and certain separate accounts could stand to benefit.

Figure 2: The average yield on prime institutional money market funds has increased
Crane Prime Institutional Money Market Fund Index – 7-day Yield (%)



Source: Crane Data, LLC, data from Dec. 31, 2014 to April 11, 2018. Past performance is not a guarantee of future results.

Investors in floating rate bonds

One of the less appreciated corners of the fixed income market is floating rate bonds. The floating rate bank loan category is perhaps more well-known, but variable coupon assets are also available in corporate bonds, commercial mortgage-backed securities (CMBS), residential mortgage-backed securities (RMBS), asset-backed securities (ABS) and municipal bonds.

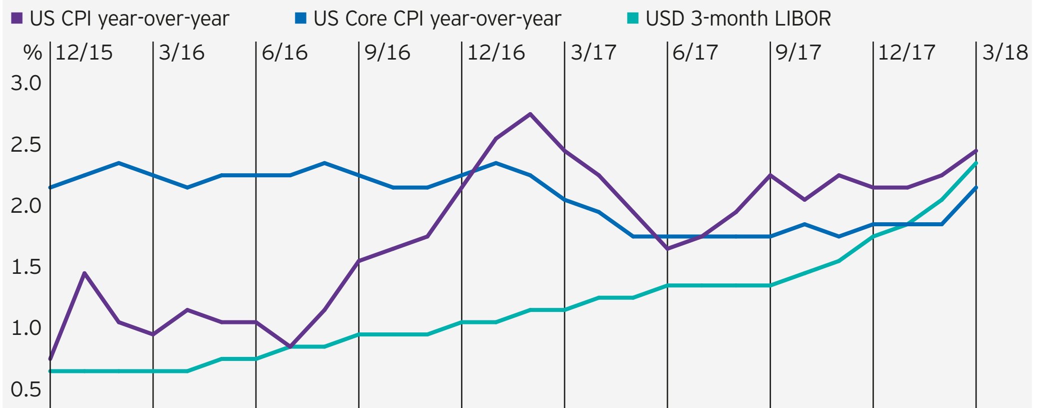
What are they?

Floating rate bonds generally have maturities of one to five years. What differentiates them from fixed coupon bonds is that their interest rates reset every one to three months, depending on a reference rate (historically LIBOR) and a spread, which reflects the credit and liquidity risk of the issuer and asset class. As short-term rates increase, the coupon on the floating rate asset increases. The result is an asset with virtually no exposure to interest rate sensitivity. As a result, floating rate bonds may be a solution for fixed income investors concerned about rising interest rates. Floating rate bonds tend to have a very low duration (typically less than three months) because their rates reset and are, therefore, generally not exposed to the volatility of intermediate or longer term interest rates.

Why consider floating rate bonds now?

For many years, short-term interest rates in the US were very low - below the rate of inflation. Negative real interest rates may have caused investors in floating rate assets to experience a loss of purchasing power. But more recently, short-term interest rates have exceeded 2%, which, when added to the spread, represents a return yield well above US inflation. This may draw investor attention to the floating rate market.

Figure 3: Three-month LIBOR has surpassed core inflation and is approaching headline inflation

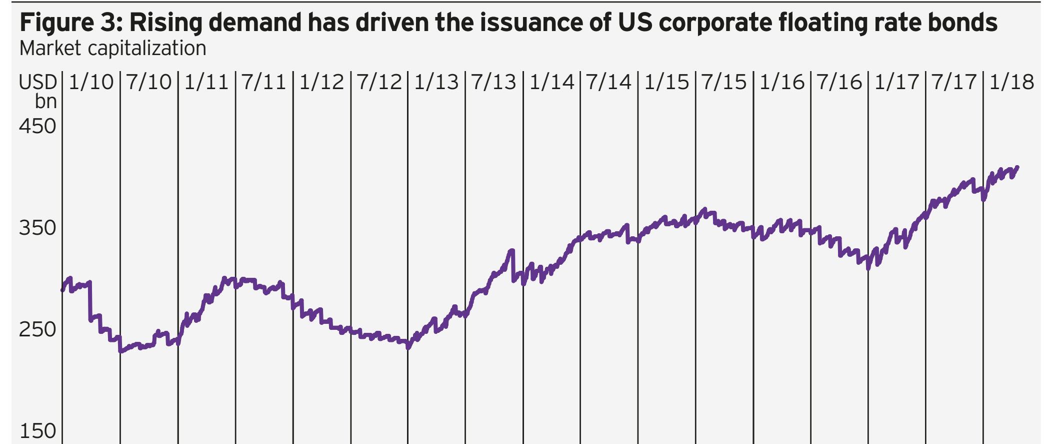


Source: Bloomberg, L.P., data from Dec.1, 2015 to March 31, 2018.

In addition, the flattening of the US Treasury yield curve has increased the attractiveness of short duration bonds relative to intermediate and longer-term assets. This flattening often occurs as the Fed embarks on the process of tightening liquidity by increasing short term rates. As the yield curve flattens, and the differential between short and longer-term interest rates declines, investors often migrate toward the short end of the investment spectrum.

Issuers of debt in the investment grade market are capitalizing on this additional demand by increasing the issuance of floating rate debt, particularly within corporate bonds. Financial firms have also capitalized on the demand for variable coupon bonds by issuing "fixed-to-float" securities. Traditionally, fixed-to-float securities are subordinate bonds that pay a fixed rate for a stated period and convert to floating at a stated date. Often, these financial hybrid bonds are also callable on the first floating rate set date and periodically thereafter.

Figure 3: Rising demand has driven the issuance of US corporate floating rate bonds
Market capitalization



Source: Bloomberg Barclays US Floating Rate Note Index, data from April 1, 2010 to April 19, 2018.

Risks of floating rate bonds
There are risks associated with floating rate bonds. There is a risk of lower coupons if short-term rates decline from current levels. Investors in floating rate assets also do not benefit from the negative correlation to equities that typically exists with longer duration bonds. Finally, financials tend to make up a significant portion of the corporate floating rate market, which could create concentration risk in portfolios.

Jacob Habibi, Senior Analyst, Rob Corner, Senior Client Portfolio Manager, Mike Hyman, CIO Global Investment Grade and Emerging Markets Debt, Steve Thompson, Senior Client Portfolio Manager

1 Source: Bloomberg L.P., JP Morgan JULI Banking Sector Spread to Treasury Index, 3-month LIBOR-OIS spread Index, data from Nov. 8, 2017 to April 10, 2018.
2 Source: "LIBOR Funeral Set for 2021 as FCA Abandons Scandal-Tarred Rate," Bloomberg L.P., July 27, 2017.

The bottom line

What does trade protectionism mean for credit?

Jacob Habibi
Senior Analyst

Yi Hu
Senior Analyst

Mike Kelley
Head of Global High Yield Research

Michael Breuer
Senior Analyst

Over the past few decades, markets have come to accept the trend toward globalization and free trade. With a potential reversal under the Trump administration, what does it mean for the US, China and global credit? We speak with members of IFI's global research team about the potential impact of trade protectionism on key sectors and how we are positioning our portfolios in response.

Q: What is the likely end-goal of the US administration's protectionist measures?
Jacob Habibi: In our view, the end goal of this administration is to prompt other countries to reduce taxes and tariffs currently levied on US products and services, to cease or curtail unfair trade practices involving intellectual property and copyrights, and to lift caps on foreign direct investment. So if other countries are willing to open their markets, we believe there is potential for free trade to ultimately grow and improve. Of course, if they don't, protectionist measures could mushroom and drag down economies on both sides of a trade war, as well as entangle other countries in the global supply chain.

Q: How might China respond to trade frictions with the US?
Yi Hu: We continue to believe that negotiation rather than retaliation is preferred by the Chinese government to resolve any escalating trade friction with the US. As China further opens its domestic market, lowers trade tariffs and improves intellectual property rights protection, we see room for more dialogue between the US and China. However, we remain mindful that there could be ongoing uncertainty regarding US trade policy as we approach this year's US mid-term elections. In addition, China is determined to pursue its "Made in China 2025" strategy to advance its global competitiveness in technology and manufacturing. The Trump administration has reportedly demanded that China stop subsidizing high-technology industries under this initiative. It may be very difficult to close the gap between the two countries on this issue.

Q: What is China's strategy to promote re-globalization?
Yi Hu: We believe most countries, policy makers and market participants still appear to favor globalization over protectionism. In the event of rising tariffs and investment restrictions, China is likely to further develop its cooperation with non-US trading partners in Europe, Asia, South America and Africa. China's "Belt and Road initiative" is intended to push re-globalization forward and improve connectivity and cooperation among countries. In addition to increased investment, the Belt and Road initiative may lead to increased Chinese imports from non-US trading partners or even trade concessions.

Q: What are some of the implications of protectionist policies for US credit?
Mike Kelley: In the long-run, we believe protectionism is generally negative for economies and society, as it increases costs and tends to misallocate resources. However, for certain segments, protectionist policies can be beneficial, particularly if a country creates an uneven playing field to give an advantage to the home team. An example that comes to mind is the China-US trade issue concerning technology transfer and the disadvantage faced by US companies. If US intellectual property rights are not protected, China would accrue the benefits and innovation would go unrewarded, hurting society as a whole. Better protection of intellectual property rights would generally be a positive for US credit.

Q: Drilling deeper, what are the impacts likely to be on key US credit sectors?
Michael Breuer – Healthcare: We do not expect protectionist policies to have a significant impact on US healthcare companies. US hospitals, managed care companies, pharmacies, and pharmacy benefit managers are domestically-focused, so their products are not susceptible to retaliatory tariffs by our trading partners. Other healthcare service providers such as distributors are likely insulated as well because their operations are also largely domestic, and so far, proposed policies have largely been focused on goods rather than services. Regarding the pharmaceutical sector, tariffs on pharmaceuticals are not likely to be politically popular anywhere, especially for life-saving drugs without alternatives.

Andy Stone
Senior Analyst

Jay Sammons
Credit Analyst

Sam Morton
Senior Credit Analyst

Andy Stone - Technology: The impact on the technology sector of protectionist policies and trade war rhetoric with China has so far been limited. However, under Section 301 of the Trade Act of 1974, the US Trade Representative (USTR) can conduct investigations to determine if foreign countries or companies are engaging in unfair trade practices. President Trump requested that the USTR investigate China's acts, policies, and practices related to technology transfer, intellectual property, and innovation.

The USTR reported back in March 2018 that China's practices are "unreasonable or discriminatory and burden or restrict U.S. commerce."[1] The Trump administration responded in April with 25% tariffs on USD50 billion worth of Chinese goods. While this is a small number, the risk for credits in the technology sector is that China will retaliate and that the US will expand the list of items subject to these tariffs. At this point, there are simply too many variables to determine the impact on the US technology sector, but we are watching for the answers to the following questions:

- Will tariffs be imposed across the board?
- What will tariff levels be? 25%? More?
- Will the dispute remain a bilateral issue with China or will tariffs be imposed on other Asian countries? Will they apply to the European Union with whom the US also has a large trade deficit?

The largest trade deficit with China is in the computer and electronic goods sector. US imports of these products were USD228 billion in 2017.[2] This sector is assumed to be a target of the Section 301 investigation and subject to a tariff. US tariffs on Chinese imports would mean higher consumer prices on consumer electronics goods ranging from expensive cell phones and flat screen TVs to inexpensive toys. The top three imports from China are cell phones, computers, and telecom equipment. Any tariff would likely be passed on to consumers until manufacturers can switch production to other countries. We believe the US-based technology companies that are most at risk in this sector are the electronic manufacturing services firms that supply components for products that are assembled in China.

On the other hand, the Trump Administration is now considering reviving the Trans-Pacific Partnership trade agreement, which does not include China. This move could offset much of the damage of recent trade disputes. If the ultimate outcome is that China reforms its technology transfer practices, respects international trademarks and patents and enforces intellectual property rights, we believe this will be bullish for US semiconductor and software companies.

Jay Sammons - Agricultural chemicals: So far, this sector has been the most affected by recent trade friction from a market perspective. China's response to US tariffs was to propose tariffs and quotas on US sorghum and soybean crops. Because China is one of the top three global buyers of each of these crops, Chinese tariffs or quotas on grain imports could lead to immediate changes in planned acreage by US farmers. Following China's retaliation, we have seen spreads for two large potash and phosphate producers widen over the past two months. Likewise, agricultural machinery spreads have widened due to concerns that less cash income at farms could lead to decreased demand for new agricultural capital expenditure. Following years of low crop prices and the resulting challenges faced by related industries, an agriculture-focused trade war could upend a long awaited rebound in industry fundamentals.

Sam Morton - Global consumer sector: We think the sectors most exposed to trade barriers are those with international supply chains where goods are consumed domestically and have a relatively high value. We applied these criteria to rank the consumer sub-sectors according to high, medium or low risk. Our analysis flagged the global auto sector as being the most exposed to trade barriers, with global consumer products next on the list. Given the scale of automotive exports – Europe alone exported USD682 billion in 2016[3] – we believe trade barriers have the potential to be a source of significant disruption in this industry.

Maynard Xu
Credit Analyst

Steve Thompson
Senior Client Portfolio Manager

Maynard Xu - Global property: China is the largest cross-border real estate investor in the world. According to Juwai.com, a major international real estate portal, Chinese buyers invested USD101.4 billion in international, commercial and residential real estate markets in 2016.[4] Just over half of this went into the US – with USD30 billion going to residential.[5] Chinese foreign investments in general are sensitive to geopolitical risk and tensions. Therefore, we could see a marginally negative impact on the US real estate sector, and marginally positive support for the UK and European real estate sectors, if the protectionist rhetoric influences Chinese real estate investors.

Q: How are we positioning investment grade portfolios in response to protectionist policies?
Steve Thompson: Our general view is that protectionism is currently a risk faced by certain non-service industries and individually exposed companies. Producers may benefit or suffer depending on individual circumstances related to factors such as their source of raw materials, location of final goods production and end market.

There are also overarching risks associated with protectionism, such as potential inflation and reduced global trade, which could negatively impact global growth. We are closely monitoring the current trade environment and future policies that may exacerbate trade friction. An intensification of trade concerns and resulting potential declines in growth may move us to adjust overall portfolio risk downward.

Q: How are we positioning high yield portfolios in response to protectionist policies?
Mike Kelley: With the March announcement of US tariffs on steel and aluminum, we moved to increase our exposure to certain metals names that were beneficiaries of favorable regional pricing dynamics. Regarding potential future policy changes, we are following the situation closely but are not making changes to the portfolio directly related to anticipated protectionist policies. While the day-to-day situation is fluid, our current expectation is that any changes in policy will only be incremental in nature and will not have a large impact on economic activity at the aggregate level. At the industry and company levels, anticipating changes is very difficult right now, and we believe determining, not only the primary impact, but secondary or tertiary impacts, is extremely challenging.

Q: What are the odds that we will see a lasting reversal in globalization and free trade?
Jacob: In most cases, implementing long-lasting protectionist policies seems likely to hurt other countries economically and strategically more than it will hurt the US. Since the countries that stand to lose more than the US are also able to easily avoid such an outcome by acquiescing to US demands of better trade terms, we believe probabilities favor an outcome in which long-term protectionist measures will likely be largely avoided, and global trading terms will likely improve for US exporters.

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

1 Source: Office of the United States Trade Representative Executive Office of the President, March 22, 2018.
2 Source: US Census Bureau, Department of Commerce, 2017.
3 Source: WTO Secretariat, World Trade Statistical Review, 2017.
4 Source: Juwai.com, "Juwai releases Chinese Global Property Investment Report", July 21, 2017.
5 Source: US National Association of Realtors Research Department, 2017 Profile of International Activity in U.S. Residential Real Estate, data from July 3, 2017.

Fixed income market monitor

	Coupon (%)	Yield to worst (%)	1 month change in YTW	Option-adjusted spread		10 year range		Returns			
				Current	1 month change in spread	min	max	1 mth (%)	3 mth (%)	YTD (%)	12 mth (%)
Global Aggregate (USD hedged)	2.64	1.83	-0.04	38	3	23	156	0.83	-0.12	-0.12	2.46
U.S. Aggregate	3.08	3.12	-0.03	41	4	32	258	0.64	-1.46	-1.46	1.20
U.S. Mortgage-backed	3.53	3.30	-0.07	29	3	-16	181	0.64	-1.19	-1.19	0.77
Global Inv Grade Corporate (USD hedged)	3.47	2.91	0.05	107	14	55	515	0.23	-1.41	-1.41	2.97
U.S. Investment Grade Corporate	3.95	3.76	0.05	109	13	76	618	0.25	-2.32	-2.32	2.70
Emerging Market USD Sovereign	n/a	5.78	0.07	304	18	157	906	0.29	-1.74	-1.74	4.30
Emerging Market Corporate	n/a	5.05	0.12	241	22	120	1,032	-0.19	-1.12	-1.12	3.66
Global High Yield Corporate (USD hedged)	5.93	5.56	0.12	349	23	231	1,845	-0.47	-0.65	-0.65	4.42
U.S. High Yield Corporate	6.34	6.19	0.05	354	18	233	1,971	-0.60	-0.86	-0.86	3.78
Bank Loans	5.43	5.39	0.15	n/a	n/a	n/a	n/a	0.32	1.58	1.58	4.64
Municipal Bond	4.70	2.68	0.02	n/a	n/a	n/a	n/a	0.37	-1.11	-1.11	2.66
High Yield Municipal Bond	5.14	5.26	-0.11	n/a	n/a	n/a	n/a	1.46	0.58	0.58	6.03

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	2.18	2.55	-0.07	0.94	-1.18	-1.18	0.43
Canada	2.23	1.95	-0.06	0.91	0.41	0.41	-0.09
United Kingdom	3.41	1.34	-0.09	2.07	0.07	0.07	0.49
Germany	1.90	0.10	-0.11	1.13	0.24	0.24	-0.39
Italy	3.25	1.07	-0.20	1.78	2.49	2.49	5.31
Japan	1.02	0.11	0.00	0.17	0.40	0.40	0.97
China	3.50	3.72	-0.07	1.00	2.26	2.26	0.86
EM Local Currency Governments	n/a	n/a	n/a	0.96	2.32	2.32	7.94

FX market monitor[1]

	Current	10 year range		Returns			
		min	max	1 mth (%)	3 mth (%)	YTD (%)	12 mth (%)
EURUSD	1.23	1.05	1.60	0.29	2.41	-1.66	15.30
USDJPY	105.89	75.82	124.77	0.32	6.39	3.32	4.72
GBPUSD	1.40	1.22	2.11	1.95	4.01	-1.54	12.48
USDCNY	6.28	6.04	8.28	1.30	3.67	0.43	9.63
USDCHF	0.96	0.75	1.39	-1.41	2.06	-3.02	4.84
AUDUSD	0.77	0.60	1.10	-1.20	-1.82	-4.68	0.76
CADUSD	0.77	0.72	1.09	-0.59	-2.84	-5.00	3.63
EURJPY[2]	130.27	94.31	169.49	0.04	3.85	5.03	-9.17
EURGBP[2]	0.88	0.70	0.89	1.67	1.57	0.11	-2.44

Sources: Bloomberg Barclays, J.P. Morgan, as of March 30, 2018. Credit Suisse Leveraged Loan data as of March 30, 2018. Within the Treasury monitor, United States is represented by Bloomberg Barclays US Treasury Index; Canada is represented by Bloomberg Barclays Global Treasury Canada Index; United Kingdom is represented by Bloomberg Barclays Sterling Gilts Index; Germany is represented by Bloomberg Barclays Global Treasury Germany Index; Italy is represented by Bloomberg Barclays Global Treasury Italy Index; Japan is represented by Bloomberg Barclays Global Treasury Japan Index; China is represented by Bloomberg Barclays China Aggregate Treasuries Index; EM Local Currency Governments is represented by J.P. Morgan GBI_EM Broad Diversified Index. In the Fixed Income Monitor, Global Aggregate is represented by Bloomberg Barclays Global Aggregate (US$ Hedged) Index; US Aggregate is represented by Bloomberg Barclays US Aggregate Index; US Mortgage-backed is represented by Bloomberg Barclays US Mortgaged-backed Index; Global Investment Grade Corporate is represented by Bloomberg Barclays Global Aggregate Corporate (US$ hedged) Index; U.S. Investment Grade Corporate is represented by Bloomberg Barclays Aggregate Corporate Index; Emerging Market USD Sovereign is represented by the J.P. Morgan EMBI Global Diversified Index; Emerging Market Corporate is represented by J.P. Morgan CEMBI Broad Diversified Index; Global High Yield Corporate is represented by the Bloomberg Barclays Global High Yield Corporate (US$ hedged) Index; U.S. High yield Corporate is represented by Bloomberg Barclays U.S. Corporate High Yield Index; Bank Loans is represented by the Credit Suisse Leveraged Loan Index; Municipal Bond is represented by Bloomberg Barclays Municipal Bond Index; High Yield Municipal Bond is represented by Bloomberg Barclays Municipal Bond High Yield Index. Yield to Worst (YTW) is the lowest expected yield calculation given maturity and call features. Option Adjusted Spread (OAS) is the yield difference relative to similar maturity Treasuries that incorporates call, put, sinking fund or paydown features of a bond. Past performance cannot guarantee future results. An investment cannot be made directly in an index. Returns less than one year are cumulative.

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

Invesco Fixed Income

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7. **November 2017 Summit Outlook,** November 2017, Rob Waldner, Chief Strategist, Head of Multi Sector, Tony Wong, Global Head of Credit Research, Liquidity and Municipals

Invesco Fixed Income

Global perspective and deep local market knowledge

Global presence

- Regional hubs in Atlanta, London and Hong Kong
- IFI is in ten locations with additional Invesco colleagues in two
- USD312.1 billion in assets under management

Experienced team

- 170 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	95	9	17
Total investment professionals	170	10	18
Business professionals	54	12	19
Total fixed income employees	224	11	19

Source: Invesco.

As of Dec. 31, 2017. Subject to change without notice.
Investment specific experience for investment professionals.

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