Invesco Fixed Income

Global Fixed Income Strategy

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Global macro strategy

Brexit recap and scenario sets

Two months after the UK surprise vote to leave the European Union (EU), it is a good time to assess the initial financial and economic effects of "Brexit," the official policy response and review our outlook.

The knee-jerk tightening in financial conditions immediately after the vote was surprisingly short-lived. UK and global risky assets have performed well, partly thanks to easier monetary policy rhetoric and action and faster political stabilization in the UK than expected before the vote. Therefore, the Brexit vote itself will probably have little economic impact; we do not expect a sharp economic recession, as during the global financial crisis or the eurozone crisis.

Instead, Brexit is more of a structural, political-economy shock that may well translate into sustained pressure on UK activity over the next two-to-three years, led by an adjustment in business spending and investment, the current account and eventually household consumption. The unfolding UK slowdown may well impose a disinflationary adjustment on the eurozone, gradually pushing it from above- to below-trend growth, because the UK and eurozone are highly integrated trade and investment partners.

The political ramifications of Brexit loom large for Europe. We do not expect a domino effect whereby the demonstration effect of Brexit precipitates fragmentation. But the Brexit shock has affected the pricing of eurozone financials, especially weak entities like Italian banks (see accompanying piece by Ian Centis - rather than systemic risk, we see idiosyncratic solvency challenges). Italy's referendum on political reform as well as elections that lie ahead in the eurozone core in the months and year ahead may be influenced by the Brexit process.

The Italian referendum on political reform (expected in October 2016) is a key event because Prime Minister Matteo Renzi has said he will resign if he does not win, which might re-open the door to Italy's perennial political instability and to gains for the Euroskeptic radical Five Star Movement or less extreme Northern League parties. The French presidential election (mid-2017) also bears watching, because the far-right National Front leader Marine Le Pen intends to hold an in-out EU referendum (though she has modified her eurozone skepticism to reflect the popularity of the euro itself with the electorate).

We believe that further Bank of England (BoE) easing is likely and fiscal easing is possible if UK growth suffers significantly. If the UK slowdown pressures eurozone economic performance, further European Central Bank (ECB) easing should be expected, in our view. The effects on the euro would be ambiguous – fragmentation risk would be a negative for the euro, as would easing, but risk-aversion might prompt unwinding of euro outflows from what is now a largely negative interest rate region. There might also be renewed portfolio shifts out of the European periphery into eurozone safe-harbor core government bonds.

Long-run scenario uncertainty

Looking further ahead, the ultimate impact of Brexit is subject to grave uncertainty, in our view. In summary, we see three scenario sets:

1. **Hardly Brexit:** Essentially "Bremain." It is still possible that Article 50 of the Lisbon Treaty (triggering Article 50 kicks off two years of EU exit talks) could be averted or eventually reversed.
2. **Soft Brexit:** Variants of Bremain include "Brespoke," a tailor-made arrangement, or an off-the-shelf "Bready-to-Wear" arrangement such as the European Economic Area (EEA), which allows eligible countries to be part of the EU's single market. This scenario set is not only the most likely in our view, but also could be the most economically bullish – if it were accomplished quickly and with minimal disruption.
3. **Hard Brexit:** There is also some downside risk of a globally bearish scenario in which UK-EU divorce negotiations become acrimonious causing an irreparable UK-EU rift ("Brexile"), possibly associated with further EU fragmentation risk or even other eurozone exits.

Brexit, therefore, poses major uncertainties: a wide range of scenarios from minimally to seriously disruptive and long time frames. There will likely be some two years of EU exit talks if and when Article 50 is triggered. On top of this, several more years may be needed to negotiate other trading arrangements with the rest of the world, as well as with the EU, depending on which scenarios take shape.

Furthermore, the time frame for Article 50 is itself a moving target as UK and EU political signals shift. The pre-referendum plan was to trigger Article 50 immediately upon a Brexit vote. In the event, some EU officials and national leaders demanded rapid action, while others urged caution and patience. The new UK government signaled six-to-nine months, pending formulation of a coherent strategy. Now, it seems another 15-18 months may be needed to fully establish and staff up new trade and Brexit ministries, as well as avoid any spillovers to major EU political events, such as the Italian referendum, the French presidential election, or the late-2017 German federal election. So the timeframe for an actual UK exit from the EU seems to be slipping from mid-2018 to late-2019.

Economic impact – UK and EZ

These uncertainties suggest that all kinds of economic actors – businesses and banks, universities, households and even the authorities may reconsider major investment and consumption decisions. Economic behavior spanning immigration, trade and investment patterns may well be suspended or be permanently diverted, affecting the demand for housing, schools, transport among other areas. An alternative interpretation is that the delays may reduce the chances of actual full-blown Brexit, which could in turn mitigate the long-term economic damage. At any rate, uncertainty prevails.

The most important macro risks to our views are that the UK slowdown proves less than expected, and correspondingly, that any economic spillovers to the eurozone are limited and not just in the short term. In such a scenario, eurozone markets would likely be driven more by Europe's own political developments, rather than economic performance or financial risks related to Brexit.

Arnab Das, Head of EMEA and EM Macro Research

Interest rate outlook

US: Although US second-quarter growth was mixed, we continue to see evidence of a strong consumer and robust labor market. We expect this growth backdrop coupled with firming inflation to give the US Federal Reserve (Fed) reasonable confidence to continue toward policy normalization. Because rich valuations of US Treasuries offer little compensation to investors, we remain constructive on US Treasury inflation-protected securities (TIPS) relative to nominal US Treasury securities, as TIPS could benefit from firming US inflation.

Europe: European Central Bank (ECB) policy and its quantitative easing (QE) program remain the most potent drivers of European interest rate markets for now. From July's ECB meeting minutes, it seems that more evidence around the impact of the Brexit vote on the domestic economy is needed before announcing a policy response. The euro-area data we have seen for July showed resilience across Europe so far, but we will need to watch the upcoming data closely to assess if this resilience is likely to continue.

Japan: The Bank of Japan (BoJ) disappointed markets at its July meeting but did announce that it would undertake a review of its monetary stimulus programs in time for it's next meeting in September. These reviews are likely to demonstrate that previous efforts have had some positive impact on the economy, but that additional action is going to be required if the BoJ is to have any chance of achieving its 2% inflation target. It is likely that the review will be accompanied by further easing, including a further move into negative interest rate territory and an increase in the average maturity of bond holdings. A more radical adjustment to policy should not be ruled out either, with changes possible to the BoJ's objectives and timelines. Better incentives for banks to lend could also be announced while further fiscal easing could bolster the effectiveness of any monetary adjustments.

UK: The first economic data releases since the UK's EU referendum point to the UK consumer not being as negatively impacted as some commentators had previously forecast. Nevertheless, we expect some easing from the government as the year progresses, possibly including infrastructure spending and some initiatives to maintain confidence in the housing market. The BoE eased monetary policy at its August meeting and stands ready to do more.

Canada: Economic growth momentum remains weak in Canada but a small rebound is anticipated in the second half of the year led by fiscal support for household spending. Whether this cash disbursement is spent or saved will be closely monitored. Stable oil prices and rebuilding in Alberta are providing some support for that province, but oil production is slow to return. The introduction of a foreign home buyer's tax in British Columbia has brought the property market there to a standstill. Residential housing activity was already slowing ahead of this decision. A slowdown in house price appreciation and subsequent impact on consumer spending are key downside risks going forward, in our view. We believe the domestic growth and inflation backdrop remain supportive for a flatter yield curve.

Australia: At its August meeting, the Reserve Bank of Australia (RBA) cut its policy interest rate as expected to 1.50%. T his represents a record low for the Australian rate. There was very little forward guidance provided, except to note that the RBA expects inflation to remain low for some time. The statement left the door open for further rate cuts, but with economic data aside from wage growth and inflation remaining strong, we believe another cut this year is unlikely. After a messy election, Standard and Poor's put Australian government bonds on watch for downgrade, while Moody's retained its AAA rating. With the RBA likely on hold for the remainder of the year, combined with the fact that Australian yields are still relatively high, we expect Australian government bonds to be well supported.

China: China's economic growth remains modest. Manufacturing is still tepid and investment activity growth is slowing. But the service sector has maintained its stellar performance. We do not expect inflation to pick up any time soon and the Chinese local currency onshore bond market has performed well. The opening of the onshore interbank bond market to foreign investment and the global low yield environment may also be bolstering the performance of Chinese onshore bonds, especially government and policy bank bonds.

Rob Waldner, Chief Strategist, James Ong, Senior Macro Strategist, Noelle Corum, Analyst, Sean Connery, Portfolio Manager, Avi Hooper, Senior Portfolio Manager, Josef Portelli, Portfolio Manager, Ken Hu, CIO Asia Pacific, Scott Case, Portfolio Manager, Alex Schwiersch, Portfolio Manager

Currency outlook

USD: A mixed second quarter growth picture diminished market expectations of a US Fed interest rate hike in the near term, supporting emerging market currencies and weighing on the US dollar as investors moved into riskier assets. We believe this environment could reverse if the US economic picture strengthens further and the Fed assumes a more hawkish stance. Economic growth indicators continue to point to a solid consumer and strengthening labor market. We believe this supports a growth outlook favorable for a tighter monetary policy and a rate hike in December.

EUR: The re-emergence of euro weakness that we expected post-Brexit never materialized. The sharp recovery in global risk assets during the summer doldrums has been at odds with a late-cycle fundamental backdrop in the US and moderating growth globally. The ECB has adopted a wait-and-see approach to previous policy actions and will likely remain sidelined until the impacts are known. Technical flows appear to be dominating markets. We remain on the sidelines for now.

JPY: The yen has traded in a relatively tight range over the past month against the US dollar. Looking forward, we believe the Fed is likely to encourage market participants to price in a greater chance of a 2016 interest rate hike. Simultaneously, we expect the BoJ to ease monetary policy further. This combination should lead the USD/JPY exchange rate to trend higher. However, a flight to quality (potentially brought about by global geopolitical events, such as the Italian referendum) could limit the potential upside of such a trade. We favor remaining neutral for now.

GBP: Short positioning in sterling appears to remain at extreme levels, despite initial post-Brexit economic releases suggesting that the UK economy has not been as negatively impacted as some forecasters had predicted. That said, we would like to see more data to confirm this. We continue to believe that the risk/reward to being underweight the currency is not good. We remain neutral, but are looking for an opportunity to reinstate an overweight position, which we believe could pay off over a twelve-to-eighteen month horizon, especially if UK/EU negotiations result in the UK remaining "in" the EU in some form.

CAD: The Canadian dollar continues to remain resilient. Capital inflows have risen to record levels, supporting the deterioration in the external balance. The trade deficit continues to widen as exports are unable to rebound despite a generally weaker currency. Canada's strong credit rating and positive yields remain an attractive destination for global savings. The equity market has also benefited from inflows on the back of stronger commodity prices - the unexpected bounce in oil prices has capped currency weakness. However, the economy remains imbalanced and the currency is vulnerable to shifts in commodity market behavior. We remain negatively positioned in the Canadian dollar.

AUD: As expected, the Reserve Bank of Australia (RBA) lowered its policy interest rate to 1.50% at the Augus t meeting. The RBA provided very little forward guidance, other than to acknowledge that inflation will likely remain low for some time. With the labor market starting to show signs of stabilization and with the policy rate at all-time lows, the RBA will likely be under less pressure to lower rates further in the immediate future. Despite lower than desired inflation and a relaxed approach to policy rates, the currency has strengthened over the last several months. With the RBA on hold, we believe any immediate downward pressure on the currency has been removed.

Ray Uy, Head of Macro Research and Global Multi-Sector Portfolio Management,
James Ong, Senior Macro Strategist, Noelle Corum, Analyst,
Avi Hooper, Senior Portfolio Manager, Sean Connery, Portfolio Manager,
Josef Portelli, Portfolio Manager, Scott Case, Portfolio Manager,
Alex Schwiersch, Portfolio Manager

Global investment themes

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

Global macro themes

Greater growth uncertainty

Rationale

Lack of Brexit-driven market volatility points to minimal global growth impact, although the economic reaction to Brexit is still likely to be unclear by September. Therefore, a Fed hike is likely to be delayed until December.

IFI strategy

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

Asian deflation

Rationale

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

IFI strategy

Our currency and interest rate risk positioning remains low while this deflationary theme pauses. We have reduced our short Asia positioning versus the dollar. We look to re-engage as Asian central bank policy eases toward year-end, particularly in China.

Global credit themes

Geographical themes

Investment grade (IG): Global central bank forces, credit cycle differences remain

Rationale: US, Europe and Asia IG has seen strong investor demand due to impact from global central bank policy, most recently the BoE. US fundamentals are challenging with leverage at cycle highs, although recent corporate actions have been credit supportive, especially in energy. European credit markets generally earlier in cycle, less levered, growth challenged.

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

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

Rationale: Broad EM divergence remains overriding theme, with risk markets buoyed by favorable market technical support and major central bank activities/low interest rates. We see market underpricing risk of Fed rate hike. EM valuations are stretched.

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

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

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

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

US commercial mortgage backed securities (US CMBS): Tighter financial conditions

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

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

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

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

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

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

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

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 premiums to improve as some energy and metals credits transition to high yield. Fundamental credit quality concerns due to modest economic growth and risk of volatility due to OPEC and Fed uncertainty.

IFI strategy: Favor gaining exposure to select higher quality energy, 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

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

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

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

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

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

Global technology – big data

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

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

Global investment themes continued

Yield curve themes

Credit curve positioning, value in long end

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

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

Rob Waldner, Chief Strategist, Ray Uy, Head of Macro Research and Global Multi-Sector Portfolio Management, Tony Wong, Head of Global Research, Joe Portera, Head of Global High Income, Michael Hyman, Head of Investment Grade

Global credit strategy

European banks well capitalized

Recapitalization of weak names must come from private sector

The recent European Banking Authority (EBA) bank stress tests show that the main European banks are largely well capitalized. The test results did not evidence any widespread need for additional capitalization, except for one glaring exception in Italy: Monte dei Paschi. Overall, while having some reservations about the toughness of the recent EBA European bank stress test, we find that the results confirm the capital resilience of the vast majority of the larger banks in the EU system. The 51 banks that took part in the exercise accounted for some 70% o f total EU banking assets.[1] Even those names that reported results at the weaker end of the spectrum are in a relatively benign situation, in our view, and are on a stable or improving solvency trajectory. This state of affairs is also evidenced by the evolution of the Barclays Euro Aggregate Finance Index, which showed tightening bank bond spreads over the last two months.[2]

UK and Irish names could prove sensitive to the effects of Brexit, which was not factored into the exercise, but this is still not our base case and would most likely affect earnings rather than solvency. Portuguese and second or third tier Italian banks that were not part of the tests and are small in the European context could still run into difficulties.

Profitability, not solvency, is the problem in Europe

In general, the problem that a meaningful number of European banks still face – with the exception of the Scandinavian, Benelux and some Swiss banks – is one of low profitability as a result of the very low or negative interest rate environment. Outside the three countries mentioned above, banks' returns on equity are currently in the single digits.[3] Nevertheless, there is evidence that banks are taking action to protect their earnings: operating costs are being cut and fees are on the rise.[3] On the whole, second quarter results were more robust than the first quarter, although a better trading result was often also a factor.[3]

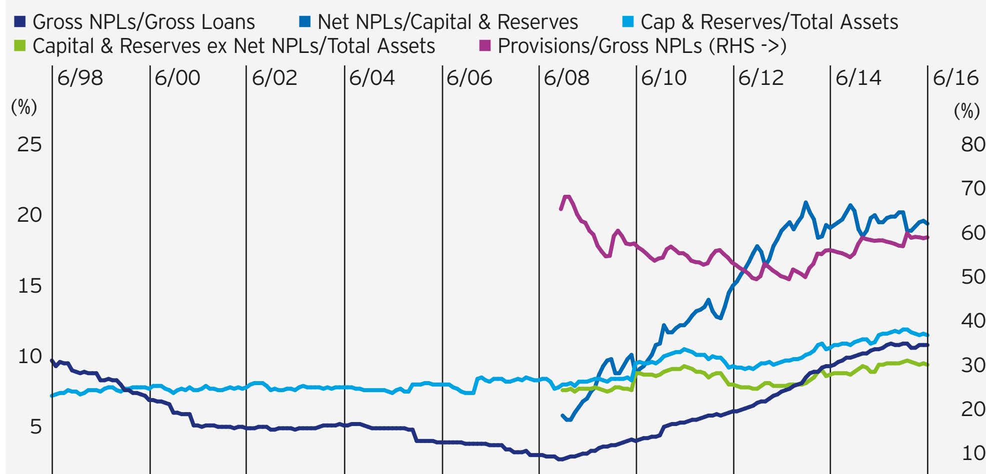
Banks can lend, but borrowers do not want to borrow

As banks mostly have sufficient capital and abundant cheap funding, it is hard to argue that they are the bottleneck to economic growth. The principal reason for weak lending growth actually seems to be low demand, something that comes through in different surveys. In particular, the ECB's July Bank Lending Survey (BLS) pointed to declining expectations of loan demand from households after a reasonably strong period mainly in France, Italy and the Netherlands.[4] This weak state of affairs found confirmation in the ECB's June Survey on the Access to Finance of Enterprises (SAFE), in which European small and medium-sized enterprises signaled banks' increased willingness to provide credit at lower rates but continued to express concern at the difficulty they have had in finding customers.[5]

Italian banks also did well in the test, with one exception

With the exception of Monte dei Paschi, which has probably adversely influenced perceptions of the system as a whole, the main Italian banks that were subjected to the test did surprisingly well. This was due to good capitalization and reserve coverage, despite the high stock of non-performing loans (NPLs).

Figure 1: Italian banking system non-performing loans



Source: Bank of Italy statistics, data from June 30, 1998 to June 30, 2016. Net NPL series only available from Dec 31, 2008. Note: Bank of Italy's definition of Capital and Reserves could be broader than what is commonly used.

New European state aid rules no longer allow state capital injections

Still, Monte dei Paschi is quite large (it accounts for close to 5% o f total Italian banking system assets) and does have the potential to cause market disruptions in Italy (but less so in wider Europe as European exposure to Italian banks looks contained) if not handled well.[6] However, EU state aid rules, mainly in the form of the Bank Recovery and Resolution Directive, no longer permit state capital injections without first bailing in (i.e. wiping out) shareholders and subordinated bond investors at the very least, but possibly also some senior bond investors, depending on the magnitude of the capital deficit to be absorbed.

Bail-in considerations for Italy

The bail-in option is particularly problematic in Italy as retail savers tend to be large holders of bank bonds, including subordinated ones. Imposing losses on this customer segment is fraught with adverse political considerations.

The Italian government argued hard with the EU to obtain a specific exemption and be allowed to inject state capital in Monte without triggering a bail-in. Avoiding the latter also acquires a particular significance at the moment as the government faces a referendum to approve important constitutional amendments that it has put forward to improve Italy's governance. Another hit to Italy's individual savers (following a similar episode at the end of last year involving four smaller banks) risks undermining its authority and reform efforts and bringing to power the main opposition party, which is untried in government and may favor the country's exit from the eurozone.

The EU refused to grant an exemption

However, the EU stood firm and the exemption to state aid rules was not granted, blocking a government rescue. This is in itself instructive: it shows the principle that taxpayers should no longer pay for bank rescues seems well and truly established. The Italian private sector is therefore attempting to organize a mixed solution for Monte dei Paschi that would involve the securitization and sale of discounted NPLs coupled with further losses for existing shareholders and a recapitalization of the resulting cleaned up institution.

Italian government seems to be playing for time

It is as yet unclear whether the private sector has sufficient appetite for Monte dei Paschi's NPLs. However, a number of international banks have entered into a pre-underwriting agreement, subject to a number of conditions, with the purpose of eventually entering into an underwriting agreement for the subscription of any unsold new shares offered as part of the EUR5 billion capital raising plan.[7] In any case, the government's main aim seems to be to delay a resolution until after the referendum so as not to jeopardize further its chances of winning it. Of course, resorting to a bail-in may still prove necessary if insufficient private funds are found, with a consequent adverse impact on general confidence. The government's polling figures would likely also be severely affected, but if the reforms have been approved by then, it may have time to recover, as a general election is not due till 2018.

Ian Centis, Senior Analyst

1 Source: European Banking Authority, press release, July 29, 2016.
2 Source: Barclays Euro Aggregate Finance Index, Bloomberg, L.P., data as of June 18, 2016 to August 18, 2016.
3 Invesco assessment based on majority of bank second quarter earnings results.
4 ECB Euro Area Bank Lending Survey, July 2016.
5 ECB Survey on the Access to Finance of Small and Medium-Sized Enterprises in the Euro Area, June 1, 2016.
6 Source: Banca Monte dei Paschi di Siena 2015 balance sheet, Bank of Italy database December 31, 2015.
7 Source: Banca Monte dei Paschi di Siena press release, July 30, 2016.

What is behind the recent rise in US dollar Libor?

US dollar Libor (London Interbank Offered Rate denominated in US dollars) spiked recently to its highest level in seven years. Typically, US dollar Libor jumps during times of market stress, and/or when the Fed tightens monetary policy. However, Invesco Fixed Income believes the recent increase in Libor is due to neither of those circumstances.

What is Libor?

Libor, a benchmark rate that some of the world's leading banks charge each other for short-term loans, is considered a primary benchmark for short-term interest rates globally. It's also used as a barometer for measuring the health of the banking system and for gauging market expectations of future central bank policy.

We believe the recent rise is primarily a result of the decline in demand by prime money market funds for short-term unsecured money market instruments, such as bank certificates of deposit (CDs) and corporate commercial paper (CP). The decline in demand for CDs and CP is a result of the exodus of USD420 billion out of prime money market funds over the last year, driven by looming money market fund reform, which is set to be fully implemented on Oct. 14.[1]

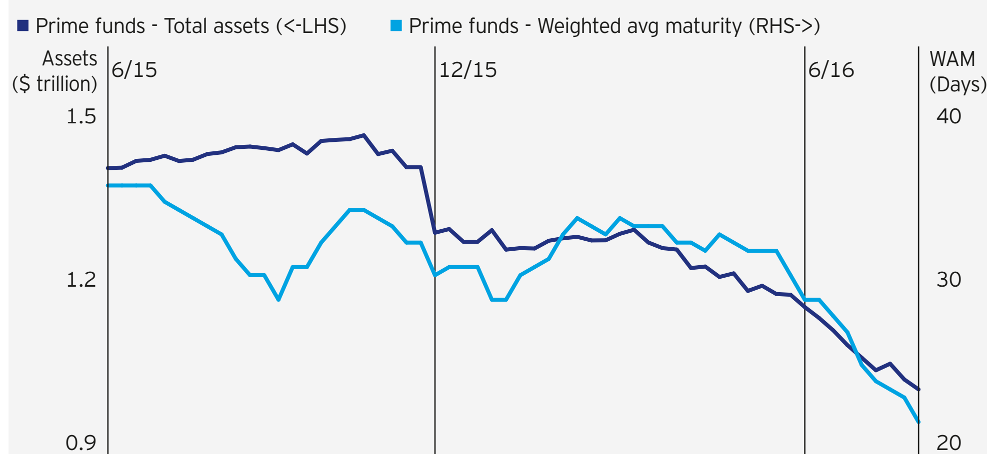
Figure 2: US dollar Libor

Source: Bloomberg L.P., Intercontinental Exchange, daily data as of July 29, 2016. Past performance is not indicative of future results.

Additionally, prime money market fund managers' unwillingness to commit a lot of capital to these instruments with maturities beyond Oct. 14, 2016, has reinforced the supply-demand imbalance. Substantiating this point, the weighted average maturity (WAM) of all prime money market funds has declined to 21 days from 36 days just three months ago.[2] We believe this is a major reason for the disproportionate rise in three-month and six-month US dollar Libor.

The shift of assets out of prime money market funds is expected to continue through October, likely providing little reason for US dollar Libor to revert before then, in our view.

Figure 3: Prime money market fund assets and average maturities have declined in tandem



Source: Bloomberg L.P., ICI, iMoneyNet, Inc.; weekly data as of July 27, 2016.

Where has the money gone?

While assets of all US money market funds have increased by USD67 billion over the past year, as seen in the table below, the change in the underlying makeup of those assets due to money market fund reform has been monumental. Some USD550 billion has been added to government money funds due to fund managers changing their strategies and investors actively switching out of prime and tax-exempt money market funds.[1]

Money market fund assets (USD millions)

	Government	Prime	Tax-exempt	Total
7/29/15	991.5	1,410.1	245.9	2,647.4
7/27/16	1,541.2	990.0	183.4	2,714.7
Year-over-year change	**+549.7**	**-420.0**	**-62.5**	**+67.3**

Source: Investment Company Institute as of July 27, 2016

Outlook for US dollar Libor

We believe the future path of US dollar Libor will likely depend on the supply of and demand for loanable funds to banks. Libor could remain elevated if prime money market fund assets persist at relatively low levels and banks struggle to find new sources of funding to replace the decline in prime money market fund assets. On the other hand, if banks can easily replace the lost funding and/or assets move back into prime money market funds, Libor could revert back to a new lower level.

Robert Corner, Senior Client Portfolio Manager

1 Source: Investment Company Institute (ICI) as of July 27, 2016
2 Source: iMoneyNet, Inc. as of July 27, 2016

The Bottom Line

Ray Uy
Head of Macro Research

Darren Hughes
Co-Head High Yield

Matt Brill
Senior Portfolio Manager
Investment Grade

We speak with IFI portfolio managers about managing liquidity as an integral part of IFI's portfolio construction process.

Q1: How does IFI manage liquidity in its portfolios?

Ray Uy: Liquidity management is and always has been an integral part of IFI's portfolio management function. We use portfolio management systems to monitor liquidity needs across our portfolios and collaborate with our specialized risk teams to help calibrate the liquidity profiles of the securities that we hold. As part of our routine portfolio oversight process, we also constantly analyze market liquidity conditions based on a variety of indicators such as prevailing bid-ask spreads, volatility conditions and trading conditions.

Q2: Is IFI taking steps to increase its liquidity levels?

Ray Uy: In general, we continue to do what we have always done to ensure appropriate levels of liquidity in portfolios. However, we are currently more sensitive to monitoring changes in the bond markets that could impact portfolios.

Q3: Are different asset classes addressed differently?

Ray Uy: We apply the same liquidity management process across asset classes, but we keep in mind that portfolio liquidity must be managed according to differences in market liquidity among various asset classes. For example, cash levels related to liquidity management may be higher within the high yield asset class compared to government bond portfolios.

Q4: What is IFI's liquidity management approach in high yield portfolios?

Darren Hughes: We adhere to a number of basic guidelines to manage liquidity in high yield portfolios and we have strengthened these in recent years. For example, we do not own more than 10 percent of any given bond issue.

In general, we have a bias toward better credit quality, and this is where careful research comes in. We tend to require a large issue size – at least USD500 million - and we typically do not own small-cap issuers, since these names can be more challenging to sell. We also tend to maintain more cash on hand than we have in the past.

Q5: On the other end of the spectrum, what is IFI's approach in investment grade portfolios?

Matt Brill: We keep a large portion of our investment grade portfolios in liquid securities. In other words, we keep a large portion in securities that we believe we could liquidate in one day. Depending on the portfolio, we also keep varying amounts invested in US Treasury securities in case of redemptions and in case we would like to take advantage of opportunities that arise, such as new issues, without having to sell corporate holdings. We believe having the flexibility to take advantage of attractive opportunities outweighs the drag of lower yielding US Treasuries. We limit what we consider to be less liquid securities to under 10 percent of our portfolios.

We have managed portfolios through the global financial crisis, and have learned how certain bonds are likely to react in stressed scenarios. We, therefore, construct portfolios with liquidity in mind. In the event of mass redemptions, ideally, we would not want to sell only one sector, such as US Treasuries, but, rather a balance of corporate and US Treasury holdings, drawing on sources of liquidity from across asset classes. This way, even in a stressed scenario, we would seek to maintain the characteristics of our portfolios, such as risk levels and asset allocations.

Q6: Can derivatives play a role in managing liquidity?

Ray Uy: Yes, derivatives can be a helpful tool in liquidity management. Some derivative instruments may be more efficiently transacted than underlying cash securities. This may allow portfolio managers to hold more cash for a given level of market exposure, providing portfolio managers with the flexibility to address investor cash flows – both inflows and outflows.

Recent IFI publications

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

Market monitors

Fixed income market monitor

	Coupon (%)	Yield to worst (%)	1 month change in YTW	Option-adjusted spread: current	Option-adjusted spread: 1 month change in spread	Option-adjusted spread: 10 year range min	Option-adjusted spread: 10 year range max	Returns: 1 mth (%)	Returns: 3 mth (%)	Returns: YTD (%)	Returns: 12 mth (%)
Global Aggregate (USD hedged)	2.80	1.10	-0.05	47	-5	23	156	0.60	2.95	6.50	6.95
U.S. Aggregate	3.12	1.86	-0.05	52	-3	32	258	0.63	2.47	5.98	5.94
U.S. Mortgage-backed	3.63	1.98	-0.09	24	-3	-16	181	0.20	1.15	3.32	3.90
Global Inv Grade Corporate (USD hedged)	3.78	2.22	-0.17	139	-15	55	515	1.63	3.67	8.27	7.91
U.S. Investment Grade Corporate	4.15	2.76	-0.12	145	-11	76	618	1.46	3.66	9.26	8.78
Emerging Market USD Sovereign	n/a	5.16	-0.21	368	-19	157	906	1.80	5.05	12.30	11.22
Emerging Market Corporate	n/a	4.74	-0.27	348	-28	120	1,032	1.58	3.62	9.51	7.01
Global High Yield Corporate (USD hedged)	6.35	6.15	-0.59	519	-55	231	1,845	2.60	3.83	10.76	5.02
U.S. High Yield Corporate	6.59	6.71	-0.57	540	-54	233	1,971	2.70	4.29	12.01	4.98
Bank Loans	4.85	5.12	-0.04	n/a	n/a	n/a	n/a	1.41	2.36	5.69	2.26
Municipal Bond	4.77	1.61	0.00	n/a	n/a	n/a	n/a	0.06	1.93	4.40	6.94
High Yield Municipal Bond	5.26	5.02	-0.99	n/a	n/a	n/a	n/a	0.65	5.15	8.69	13.44

Treasury market monitor

	Coupon (%)	Yield to worst (%)	1 month change in YTW	Returns in local currency: 1 mth (%)	Returns in local currency: 3 mth (%)	Returns in local currency: YTD (%)	Returns in local currency: 12 mth (%)
United States	2.05	1.13	0.02	0.41	2.62	5.79	5.77
Canada	2.43	0.90	-0.01	0.38	3.26	3.58	3.94
United Kingdom	3.73	0.85	-0.15	2.13	10.18	14.41	14.69
Germany	2.20	-0.35	-0.02	0.17	3.98	6.95	6.88
Italy	3.69	0.75	-0.09	1.09	2.95	4.11	6.35
Japan	1.13	-0.12	0.07	-0.89	0.83	6.13	7.81
China	3.59	2.78	-0.09	0.92	1.52	2.87	7.14
EM Local Currency Governments	n/a	n/a	n/a	0.91	2.69	9.32	9.59

FX market monitor[1]

	Current	10 year range: min	10 year range: max	Returns: 1 mth (%)	Returns: 3 mth (%)	Returns: YTD (%)	Returns: 12 mth (%)
EURUSD	1.12	1.06	1.60	0.51%	-2.52%	2.77%	1.63%
USDJPY	102.39	75.82	124.77	0.76%	3.85%	17.44%	20.97%
GBPUSD	1.32	1.32	2.11	-0.99%	-9.81%	-10.57%	-15.64%
USDCNY	6.64	6.04	8.28	-0.01%	-2.49%	-2.23%	-6.54%
USDCHF	0.97	0.75	1.39	0.80%	-0.93%	3.51%	-0.21%
AUDUSD	0.75	0.60	1.10	1.14%	-0.88%	3.43%	3.12%
CADUSD	0.76	0.72	1.09	-1.51%	-4.33%	5.44%	-0.27%
EURJPY[2]	114.30	94.31	169.49	0.27%	6.68%	14.30%	19.06%
EURGBP[2]	0.85	0.70	0.85	-1.50%	-7.48%	-12.99%	-16.99%

Sources: Barclays, J.P. Morgan, Bloomberg L.P., as of July 31, 2016. Credit Suisse Leveraged Loan data as of July 31, 2016. Within the Treasury monitor, United States is represented by Barclays US Treasury Index; Canada is represented by Barclays Global Treasury Canada Index; United Kingdom is represented by Barclays Sterling Gilts Index; Germany is represented by Barclays Global Treasury Germany Index; Italy is represented by Barclays Global Treasury Italy Index; Japan is represented by Barclays Global Treasury Japan Index; China is represented by Barclays China Aggregate Treasuries Index; EM Local Currency Governments is represented by J.P. Morgan GBI_EM Broad Diversified Index. In the Fixed Income Monitor, Global Aggregate is represented by Barclays Global Aggregate (US$ Hedged) Index; US Aggregate is represented by Barclays US Aggregate Index; US Mortgage-backed is represented by Barclays US Mortgaged-backed Index; Global Investment Grade Corporate is represented by Barclays Global Aggregate Corporate (US$ hedged) Index; U.S. Investment Grade Corporate is represented by Barclays Aggregate Corporate Index; Emerging Market USD Sovereign is represented by the J.P. Morgan EMBI Global Diversified Index; Emerging Market Corporate is represented by J.P. Morgan CEMBI Broad Diversified Index; Global High Yield Corporate is represented by the Barclays Global High Yield Corporate (US$ hedged) Index; U.S. High yield Corporate is represented by Barclays U.S. Corporate High Yield Index; Bank Loans is represented by the Credit Suisse Leveraged Loan Index; Municipal Bond is represented by Barclays Municipal Bond Index; High Yield Municipal Bond is represented by Barclays Municipal Bond High Yield Index.

Yield to Worst (YTW) is the lowest expected yield calculation given maturity and call features. Option Adjusted Spread (OAS) is the yield difference relative to similar maturity Treasuries that incorporates call, put, sinking fund or paydown features of a bond. Past performance cannot guarantee future results. An investment cannot be made directly in an index. Returns less than one year are cumulative.

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

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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
- Over USD 247.2 billion in assets under management

Experienced team

- Over 160 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 & trading	77	11	20
Global research	90	8	16
Total investment professionals	167	10	18
Business professionals	61	12	18
Total fixed income employees	228	10	18

Source: Invesco.

As of June 30, 2016. Subject to change without notice.
Investment specific experience for investment professionals.

Important information

All information is sourced from Invesco, unless otherwise stated. All data as of July 31, 2016 unless otherwise stated.

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