FOR PROFESSIONAL INVESTORS/INSTITUTIONAL INVESTORS ONLY

Fixed Income 2017

BNY MELLON

Setting the scene

Political risk, and consequentially volatility, is on the rise and will be one of the biggest drivers of fixed income returns this year and after almost a decade, inflation is rising, causing investors to pause and consider its bond implications. Here managers and economists from across BNY Mellon's investment boutiques outline the backdrop for fixed income markets in the opening months of 2017.

In January the IMF's World Economic Outlook forecast advanced economies to grow by 1.9% this year and 2% in 2018. The forecast, it says, though is uncertain in light of potential changes in the policy stance of the United States under new President Donald Trump.

PriceWaterhouseCooper's 20th annual survey of CEOs worldwide, released at the 2017 Davos World Economic Forum, shows corporates appear to be echoing such contradictory expectations. The group reports that 38% of 1,379 CEOs surveyed across 79 countries are very confident about their company's growth prospects in the next 12 months and 29% (up from 27% in 2016) believe global economic growth will pick up in 2017. However, their levels of concern about economic uncertainty (82%) remain high while concerns over protectionism are growing.[1]

Insight senior product specialist April LaRusse says last year returns were influenced by increased uncertainty on the political front and this year the landscape is likely to be just as unsettled, particularly in Europe. "Political events in the UK, US and Europe have introduced risks for the financial markets many of which have been absent since before the financial crisis.

"Don't think it's over just because the initial Trump and Brexit reactions are." This year will bring greater details of The UK's anticipated withdrawal from the European Union (EU) under Brexit, Trump's assumption of power and the initiation of policies ("He won't be boring – or predictable"), plus key elections and political events in Italy, France and Germany, she says.

Alcentra's chief investment officer Paul Hatfield notes: "Given how much optimism is already priced in and with Trump's tendency to shoot from the hip on pronouncements and policies, I expect continued volatility throughout the coming year, as surprise actions and statements from Trump add to already growing geopolitical tensions."

1 *Globenewswire.com:* PwC CEO confidence rises despite new risks and uncertainty. 16 January 2017.

Newton's global strategist Brendan Mulhern says we need to go back to the first half of the twentieth century to find a period of comparable political and economic uncertainty. According to Newton, most prominent among sources of uncertainty, and despite a short-term pick-up in sentiment indicators, is what the group terms the EU's rolling crisis. France and Germany have general elections during 2017 and Mulhern notes the potential for further rejection of market liberalism is obvious. "Perhaps 2017 won't prove to be the opportunity for the European Central Bank (ECB) to cease doing 'whatever it takes' to save the euro bloc? These difficulties suggest that the second quarter is not entirely propitious timing to begin the countdown on complex EU exit negotiations, as planned by the UK government."

Standish's managing director of global fixed income Raman Srivastava agrees political risks remain high for 2017 with uncertainty over everything from US trade policy to rising Chinese capital outflows, from European elections to the need for continued reform in emerging market economies.

Trump and policy uncertainty

Newton views the claims being made in the US media that the new 'business-savvy' US administration's proposed policies of tax reform, infrastructure spending and deregulation will significantly boost real US growth with some scepticism.

According to Mulhern, even if one were to give Trump the benefit of the doubt, it is hard to see how his policies could generate any significant traction before 2018 at the earliest and contrary to what many believe, it could be that much of Trump's agenda turns out to be a net-growth negative, if not for the US then for the world as a whole.

While there has been much talk of Trump's intended US$1 trillion in fiscal stimulus and tax cuts, LaRusse is also somewhat sceptical about what he may be able to implement this year – particularly as the suspension of the US debt ceiling (currently US$20.1 trillion) is set to expire in March.[2] "Trump's intended policies are being absorbed by the market as positive but until now, it's just been comments." Going forward, actions by President Trump may spark a different outcome.

> **Trump's intended policies are being absorbed by the market as positive but until now, it's just been comments.**
>
> April LaRusse, Insight

This type of ambiguity on the political front is directing markets in a manner not seen in years, LaRusse notes, and has been a key source of volatility. "You do not normally see political risk as the main driver of markets and today – it is everywhere. You can think fair value should be a result of some combination of growth and inflation but for years now it has been hard to forecast government markets on the back of fundamentals because that is not what is driving them."

The knock-on volatility though may provide fixed income investors some opportunities. Buying on the dips means value may not be hard to find this year, according to LaRusse. Hatfield agrees, adding that any disappointment in what Trump delivers on the growth and deregulation front is likely to exacerbate market swings, presenting buying opportunities.

Srivastava says headwinds for credit markets this year include valuations, which in his opinion look fair to rich, although he too believes pockets of opportunity are still evident – one of which is inflation-linked bonds.

Inflationary pressures

Back to the fore for the first time in some years, inflation appears to already be the watchword for 2017. LaRusse says this trend may lead to a resurgence of investment interest in Treasury Inflation-Protected Securities (TIPS) and index-linked gilts, as well as inflation-linked instruments across Europe. However, inflation may also be the cause of some fixed income woes in Europe as it could enhance the disparity across European economies.

With ECB policies expected to remain loose, even as the recent spate of bond purchases is scaled down (from April 2017 it will buy €60bn of assets each month, down from €80bn), there remain many economies still trying to establish growth –predominantly those in the periphery, LaRusse explains.

Meanwhile in core Europe, particularly in Germany, inflation is starting to creep

Growth Outlook

The IMF's projected growth for the US is the one with the highest likelihood among a wide range of possible scenarios. Its World Economic Outlook (WEO) assumes a fiscal stimulus that leads growth to rise to 2.3% in 2017 and 2.5% in 2018. In January US publication Forbes reported that Bloomberg-surveyed economists were forecasting a 2.3% level of growth for the US for 2017-2018.

The IMF's growth projections for 2017 have also been revised upward for Germany, Japan, Spain, and the UK, mostly on account of a stronger-than-expected performance during the latter part of 2016. According to the January WEO these upward revisions offset the downward revisions to the outlook for Italy and Korea.

2 *Fox News:* 'Trump's first order of business: the daunting debt ceiling' 10 November 2016.

up, creating tensions over the ECB's monetary expansionary policy stance. "There is a question of whether the ECB's policy should be run for Germany or everyone else. Luckily, until now, there has been no inflation to wage against, so the one policy for the whole eurozone hasn't been too much of an issue. As inflation grows in Germany though it creates a puzzle for the ECB."

Standish's Euroland Bond managers also assert inflation is on the rise and that break-evens look cheap. This extends beyond the US, as inflation picks up generally, they note.

According to Standish's bond investment committee, the US Federal Reserve continues to tighten – a little faster than previously – but they feel its guidance and market expectations are better aligned than has been the case for a long time. "Thus, non-US yield curves, where there is greater scope for differences of opinion, may offer relatively more value. Similarly, the tick higher in US inflation – and the understanding that a little more is in store – tells us that break-evens are still cheap, but not as cheap as they have been."

Weaker sterling is pushing up inflation in the UK, as evidenced by December's numbers 'jumping up' to 1.6%. This, LaRusse says, is pushing up the front end of index-linked gilts. Economically the UK had a brief scare from the Brexit vote last June but since then, data is showing the economy has rebounded, she says. While there may be a lag on indicators, if the UK is going to see weaker data stemming from the Brexit referendum result, it has yet to be seen, she adds.

Srivastava says US headline inflation is rising thanks to increases in commodity prices but he also expects 2017 will see growing pressure on wages in the US. Such movements creates risk the US will overshoot its target and the Fed will react by adopting steeper-than-expected interest rate increases.

Newton's Mulhern says the unpredictable ingredient of the Trump presidency has boosted reflationary expectations further. He says: "Much is being made of the comparison of Trump with Ronald Reagan, also a somewhat unconventional Republican politician who presided over perhaps the greatest boom the US has ever seen.

In practice, the comparison doesn't bear much scrutiny; after a rocky start (a double-dip recession), Reagan presided over an economy where much of the excesses had been cleansed, government debt was low and equity-market valuations and profit margins were modest. Interest rates and inflation were high and were set to fall for many years. On almost all measures, President Trump faces the diametric opposite: the level of US government debt exceeds 100% of GDP, interest rates and inflation are suppressed and the cyclically adjusted price-to-earnings ratio on the S&P index stands at 28x, compared with 9x when Reagan took office."

Newton fixed income team leader, Paul Brain, says expectations of renewed US infrastructure spending and the fading deflationary effects of previous energy-price declines have rendered conventional long-dated 'safe-haven' bonds vulnerable to higher inflation expectations and risk premiums.

Rates and curves

In the US, rates are on the up with expectations of three hikes this year, to end 2017 around 1.25% or above. However, such rate rises are already being priced into the market to an extent, says LaRusse.

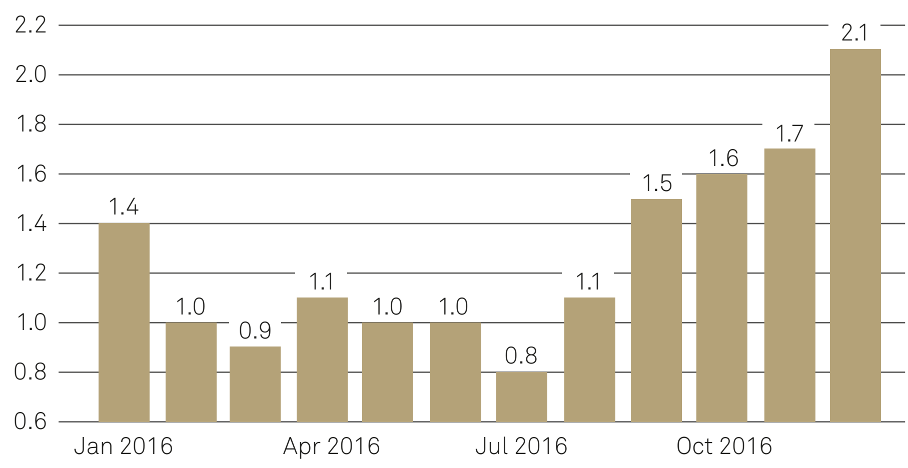
Standish's Srivastava agrees, noting that so far the Fed and markets appear more-or-less to be on the same page with interest rate expectations. However, he cites one area of potential concern – the future composition of the Fed. "There's a good chance the new appointees brought in by President Trump could be more hawkish than the Fed's current incarnation under Janet Yellen."

Uncertainty surrounding the future mandate and independence of the Fed gives further impulse to curve steepening across the 'core' government bond markets, says Brain. "Nonetheless, the extent to which US Treasury yields have already risen warrants some retention of US duration but with a preference for intermediate-dated issuance and diversification into TIPS."

For the first time in Europe, much like in the US and elsewhere, fiscal policy is at the forefront of planned actions. No one is expecting the ECB to make any rate hikes this year and it will likely continue its expansionary policies, albeit somewhat curtailed from a bond purchase point of view, LaRusse says.

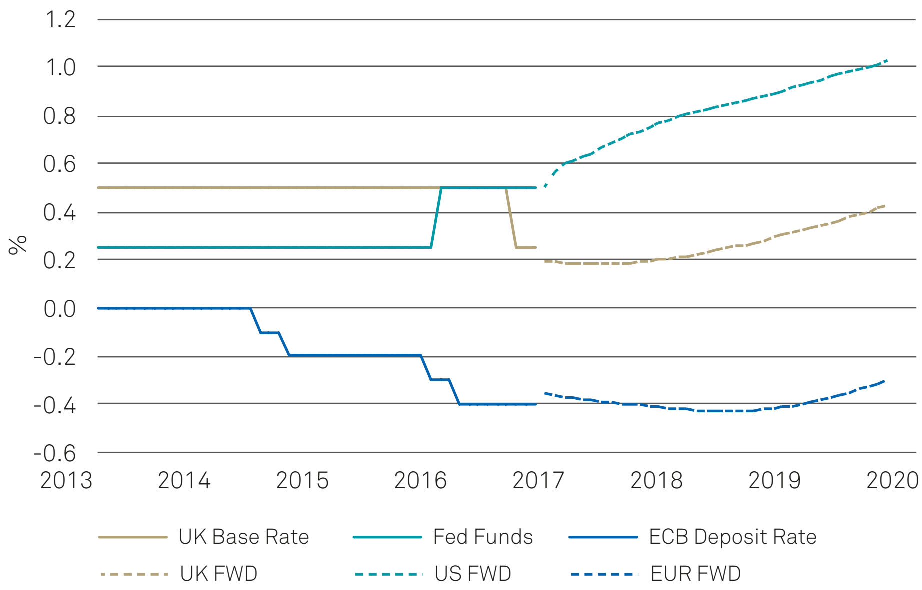
Standish remains pessimistic about the UK's longer term growth prospects.

US INFLATION RATE



Source: www.tradingeconomics.com: U.S. Bureau of Labor Statistics as at 31 December 2016.

MONEY MARKET EXPECTATIONS FOR INTEREST RATES %



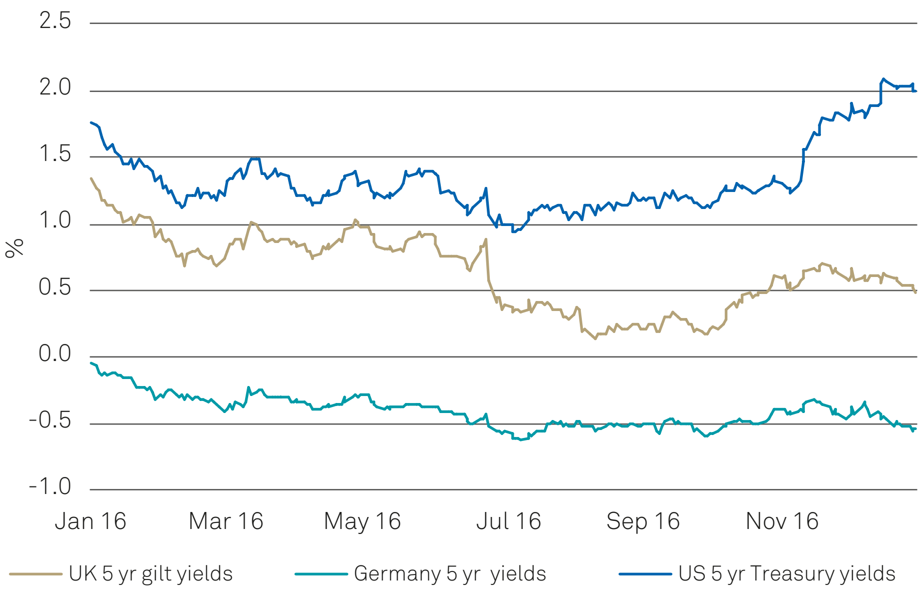
Source: Insight Investment and Bank of England inflation report as at November 2016.

Managers say steeper government yield curves are forecast in the UK and Europe, as shorter bonds are expected to remain anchored around current levels while longer bonds may be threatened by the end of quantitative easing (QE) and fiscal expansion.

In the UK, the Standish team notes: "The ultra-long end of yield curve looks too inverted relative to the rest of the curve and given the likely focus on 40 and 50 year issuance by the DMO in Q1 2017." Standish's Euroland Bond team also believes long-term yields will rise further, steepening the yield curve, necessitating short duration.

With respect to the emerging market yield curve, Newton's Brain notes the modest Fed tightening, stabilising Chinese economic output and a relatively clear electoral calendar (in contrast to the developed world) should continue to support spreads near-term. However, he says greater long-term uncertainty and scope for further underlying yield-curve steepening justifies the avoidance of long-duration exposure, particularly given emerging markets' performance in 2016. Meanwhile, the Bank of Japan's shift to yield-curve targeting (benchmark 10-year yields at zero) further dampens support for long-dated Japanese government bonds, he adds.

GOVERNMENT 5 YR BOND YIELDS %



Source: Insight Investment and Bloomberg as at 30 December 2016.

Defaults and liquidity

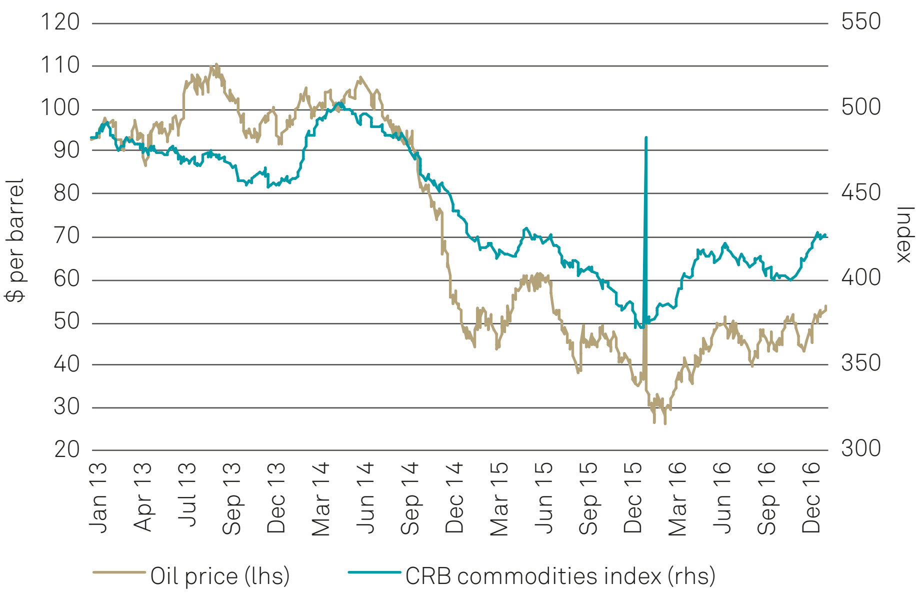
Insight is not expecting a big change in the defaults landscape in 2017. The availability and ability to refinance for companies remains strong, says LaRusse. "We'd start to worry if an economy was in recession, there was a lack of accessibility or we started to see a large increase in yields – none of which are happening. There has been no change in the default picture really anywhere. Yes, companies are indebted but it's still affordable to service that debt and while some emerging markets may undergo some stress, it is not across the board."

Within high yield markets defaults are actually declining having spiked last year as a result of the metals & mining and oil sectors, she says. As commodities stabilised at the back end of 2016, defaults in these sectors slowed.

Srivastava says in the US, the new president's stated policy aims, such as lowering corporate taxes, have generally been interpreted as pro-corporate. "In our view, if adopted in full they could help ease the pressure on companies to raise new capital, which in turn could lengthen the credit cycle and reduce the need for new issuance."

There appears to be plenty of new issuance on the cards and with that LaRusse doesn't expect the liquidity picture for fixed income to see much change this year. In one way it may improve as the ECB's QE lightens up, thereby freeing up more bonds for general purchase. Another area that

OIL PRICE AND COMMODITY INDICES



Source: Insight Investment and Bloomberg as at 30 December 2016. WTI Crude and CRB Index

could have a knock on impact on liquidity – for the positive – is Trump's intentions with respect to regulations. LaRusse notes if Trump were to change the framework for banks, such as reversing some of the more onerous regulations imposed since the financial crisis (he has suggested a partial repeal of Dodd-Frank to encourage bank lending) that could see the sector resume a greater role in market making than they have.

EM and commodities

As for emerging markets, LaRusse believes fundamentals look good and the economies are offering decent levels of growth while inflation is not posing any problems. The caveats to the outlook for EM are the strong dollar and rising bond yields in developed markets which have a negative knock-on effect across EM. "Developed markets are still not yielding much but there are opportunities posed by volatility. There was a material sell off in EM and with c7%+ yields available there appears good value there, albeit selectively. Politics remains as much a risk there as elsewhere."

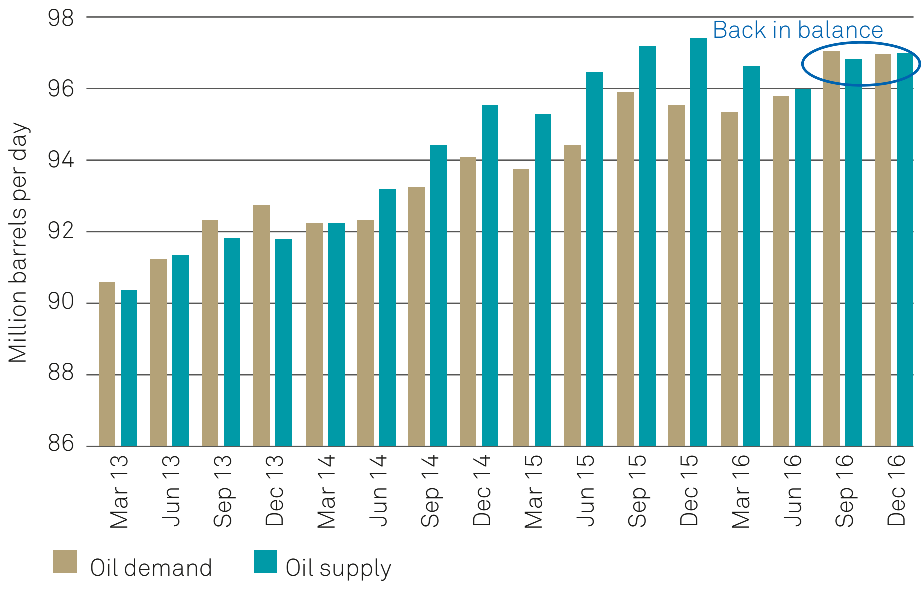
According to Insight's EMD team, volatility could remain elevated due to this increased political risk but they believe EM fundamentals are strong with modest current account deficits and high FX reserves. The larger EM countries (e.g. Brazil, Russia and India) still have relatively high interest rates and with low inflation, rate cuts are likely, the group says. Meanwhile they believe countries vulnerable from the strong US dollar are Turkey, Mexico and South Africa.

Standish believes a stronger global growth picture and a continuing stabilisation in the fundamental drivers for emerging markets should lead to a positive EMBI Global Index return in 2017. For the moment, the group believes there is not sufficient compensation in some of the most exposed countries with exports to the US, such as Mexico (81% of total exports) and Vietnam/China in emerging-market Asia (collectively 39.1% of total exports).

"If higher US growth also implies a more solid floor to global commodity prices or even an increase in commodities, then naturally, commodity exporters will benefit as well – especially the oil exporters, as the oil price will receive a lift from any real OPEC supply cut. Countries in the oil space are Russia, Kazakhstan, Saudi Arabia, Colombia and Mexico. Other large commodity exporters that could benefit are Peru, Chile and Morocco."

While Standish expects oil prices to trade in a relatively narrow range Newton is more cautious on the commodity. Brain says his bearish outlook on the commodities sector has not changed and he considers that commodity prices, especially oil, will come under strain again over the next couple of quarters.

WORLD OIL SUPPLY AND DEMAND – MILLIONS OF BARRELS PER DAY



Source: Insight Investment and International Energy agency as at December 2016.

US protectionism and China

By Aninda Mitra, senior sovereign analyst, Standish

There are two planned US policy initiatives which would be far reaching across East Asia: a corporate repatriation tax and a border tax adjustment.

It is important to consider the possible Chinese response to being singled out, or bearing the brunt of US protectionism. My thinking on this front, is that the Chinese response will be reactive and proportionate. Their policy, however, will be less predictable and, likely, much more aggressive if the "One China" principle underpinning bilateral relations is somehow violated.

But, strictly from a trade retaliation standpoint, the worst the Chinese would do is to restrict services imports where the US has a growing surplus or debilitate supply chains for technology companies and so on.

I doubt if the Chinese can countenance "dumping US Treasuries" more than beyond merely funding a drawdown of the PBOC's foreign reserves. This is because of three main reasons.

1) The practical difficulty of selling existing holdings without incurring a loss and that leaves open the question of what they would buy in equivalent size/proportion.

2) Even if they manage to engineer a spike in US rates that would also widen US-China rate differentials and create more FX pressure, or also push up domestic Chinese rates thereby sharply slowing the Chinese economy.

3) Even a stealthy/gradual move away from USD assets – as some have alleged has already been underway – would leave their FX reserve vulnerable to valuation losses from their relatively rising exposure to large non-USD assets which are on a depreciation path against the USD.

I also do not think there will be a FX regime shift in China right away – unless protectionist policies or border tax adjustments are on the higher end of political rhetoric and analyst estimates. The Chinese remain "committed" to eventual capital account liberalisation – but on their terms and at a pace they are comfortable with. FX reserve adequacy is under pressure, no doubt.

There are some upsides as well, even though these would take more time to play out and follow any near-term FX adjustments.

High product specific tariffs on China could drive a re-orientation of supply chains within Asia. Border taxes would no doubt structurally elevate FX depreciation pressure across the region but it would also, likely, accelerate regional integration in merchandise and services trade, provided the Chinese can re-balance more quickly and play a more anchoring role (as the US has traditionally performed for the last several decades.)

I wonder if some of these issues/risks can be overcome through negotiations and which result in much greater market access for US goods and services in China, which sizably cuts the US bilateral trade deficit.

A question of degree

Fixed income investors must guard carefully against the twin threats of interest rate and credit risks. Here, Newton's investment leader fixed income, Paul Brain, explores the challenges posed by the current global investment climate.

An increasingly uncertain world is encouraging global investors to pay ever closer attention to short-term duration risks, which have been elevated by expectations the US Federal Reserve will initiate three interest rate hikes this year.

Concerns over both rising interest rate risk and volatility levels among bond investors have led some investment managers to consider rebalancing portfolios towards cash or more short to medium dated securities[1] to shield investors from potential loss or employing a range of other investment instruments to minimise risk.

According to Brain: "In a rising interest rate environment it is important to keep duration risk low and that can be achieved through a variety of different tactics, including the adoption of strategies to hedge duration risk.

In some cases this risk can be kept low by buying 'puts', holding cash or gaining exposure to more variable securities such as floating rate notes and Treasury Inflation-Protected Securities. If interest rates rise the investors in these assets can reinvest in higher yields when market conditions are more favourable."

While much recent attention has focused on interest rates, inflationary pressures are also on the increase in both the US and major European market such as Germany, driving upward pressure on bond yields but bringing potential benefits to credit markets. Brain adds: "One advantage of inflation is that it reduces the value of a company's underlying debt – potentially reducing the default risk for credit investors."

With bond yields rising, the US yield curve expected to steepen further and amid increasingly confident predictions of both interest rates rises and growing inflationary pressure some commentators have predicted the end of what has so far proved a 30-year + bull market for bonds.[2] Brain, however, remains unconvinced the market faces any imminent long term transformation.

"While there are modest inflation expectations and interest rates do look set to rise we are nowhere near the scenario of the major bond market correction of 1994 when the yield on the US 30-year long bond at one stage jumped more than 150 basis points.

"From a duration standpoint we do expect to see yields rise gently in the first half of 2017 with all the current anxieties surrounding the global economy. That said, this could balance out later in the year and government bonds could continue to be viewed as a relatively 'safe' asset offering predictable returns and featuring stable and favourable returns in most markets."

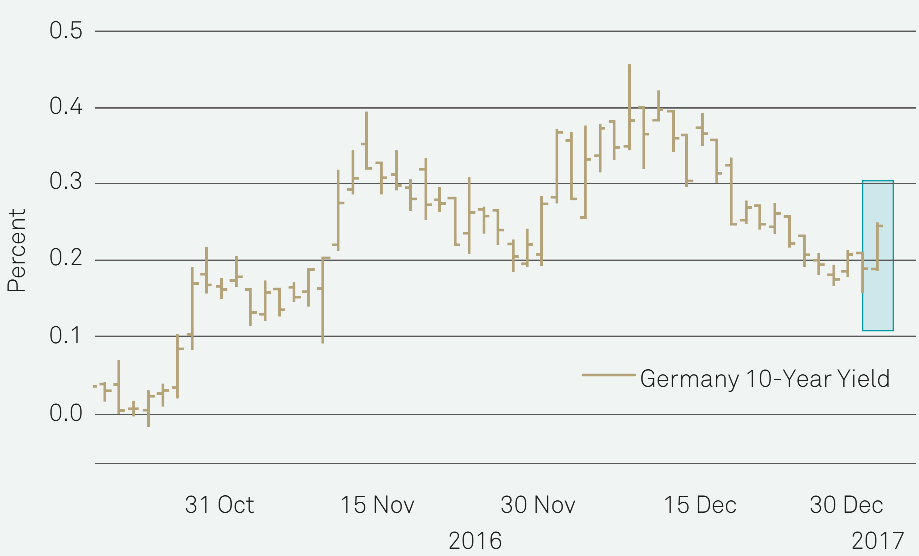
For Brain, the future direction of bond markets – and underlying duration concerns will depend heavily on geopolitical and macroeconomic shifts in the year ahead. Much focus is on the US, where an unpredictable new president has the authority to impose major change. However, Brain also points to concerns over wider global factors in markets such as China and Europe.

"The US faces a rising government deficit and rising inflation giving the Fed reason to adopt a more hawkish stance. In the short-term all this is a recipe for bond yields to rise and therefore duration on US bonds will broadly be negative. However, it remains to be seen if Trump fulfils his economic promise. We could see a shift in the market outlook in the second half of 2017 once his initial 'honeymoon period' as president is over.

"Longer concerns we have are about the Chinese economy and the financial and political developments in the eurozone. That said, a wide range of geopolitical factors suggest short term political risk will build through the year, which could actually prove to be positive for investors in government bonds."

Either way, investors will keep a keen eye on their relative exposure to duration and/or credit risk in what looks likely to be an unpredictable and potentially volatile year ahead.

YIELDS SURGE WITH JUMP IN INFLATION
Rising price pressures in Europe could revive ECB taper talk



Source: Bloomberg as at 03 January 2017.

1 *The New York Times*. The Bond Market Is Shifting, So Steady Yourself. 13 January 2017.
2 *Forbes*. Is The 30-Year Bull Market In Bonds Over? Ray Dalio & Other Hedge Fund Managers Think So. 16 November 2016.

Perceived threats to bond markets in 2017

Threats	Alcentra	Insight	Mellon Capital	Newton	Standish
Inflation	High	High	Neutral	High	High
Liquidity shock	High	Neutral	High	High	High
Geopolitical events	High	High	High	High	High
Volatility	Neutral	High	Neutral	High	High
Interest rate rise	Neutral	High	Neutral	Low	Neutral
Energy and commodity prices	Low	Neutral	Neutral	Low	Neutral

KEY: Very low | Low | Neutral | High | Very high

VARIANCE OF BEST PERFORMERS

BEST ← WORST

YTD 2016	HY 15.7	EM 9.0	IG 5.7	Govt 3.6
2015	Govt 1.7	EM 0.9	IG 0.1	HY -2.1
2014	Govt 8.7	IG 8.0	EM 7.9	HY 2.7
2013	HY 7.3	IG 0.2	Govt -0.2	EM -4.5
2012	EM 22.1	HY 18.7	IG 10.9	Govt 4.6
2011	GOVT 6.3	IG 5.1	EM 4.6	HY 2.9
2010	EM 15.2	HY 14.9	IG 7.5	Govt 3.9
2009	HY 59.7	EM 35.7	IG 16.1	Govt 1.2
2008	Govt 11.7	IG -3.4	EM -16.1	HY -27.0
2007	Govt 6.4	EM 5.6	IG 3.8	HY 2.5
2006	EM 12.1	HY 10.2	IG 3.3	Govt 2.8
2005	EM 14.4	Govt 6.5	IG 5.2	HY 4.9
2004	EM 16.2	HY 14.7	IG 8.7	Govt 8.0
2003	EM 36.1	HY 30.6	IG 8.7	Govt 4.4
2002	EM 13.8	Govt 10.7	IG 10.7	HY 1.6
2001	IG 10.0	Govt 7.3	HY 4.7	EM -0.6
2000	EM 13.4	Govt 10.2	IG 8.5	HY -6.2
1999	EM 24.9	HY 3.1	IG 1.7	Govt 1.3
1998	Govt 13.0	IG 10.8	HY 5.0	EM -15.1
1997	EM 17.9	HY 14.6	Govt 12.0	IG 10.4

KEY: Govt Government | IG Investment grade corporate | EM Emerging market sovereign | HY High yield corporate

Source: Newton, Merrill Lynch Indices Hedged into Sterling, 31 December 2016.

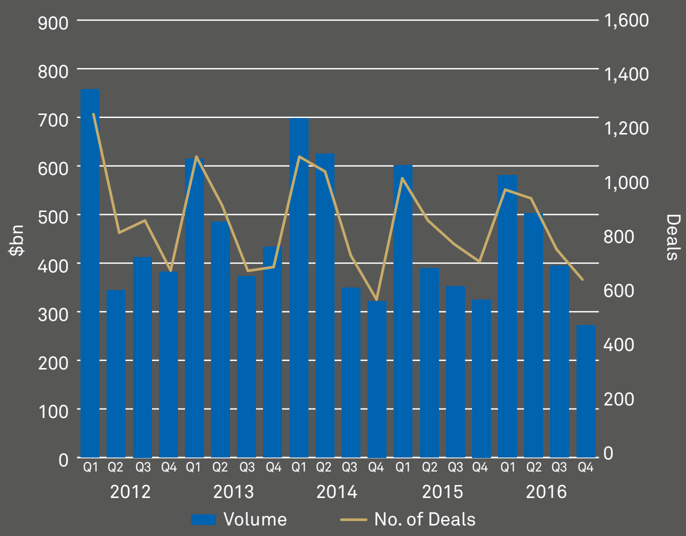
Economics and interest rates

(expectations and forecasts for 2017)

ALCENTRA	INSIGHT INVESTMENT	MELLON CAPITAL
Growth: from 1.5% across EU, 2.0% in the UK and 2.5% for the US.	Growth: from 1.4% (2016 forecast) unchanged at 1.4% (2017 forecast) across Europe, from 0.5% (2016 forecast) to 0.8% (2017 forecast) in the UK, and 1.9% (2016 forecast) to 2.0% (2017 forecast) in the US.	Growth: 1.1% across EU, 0.8% in the UK and 2.0% in the US.
Inflation: 1.5% across EU, 3% in the UK and 2.5% in the US.	Inflation: consumer prices expected to be around 1.0% in 2017 in the EU, 1.5% in the UK and around 2.0% in the US.	Inflation: 1.8% across EU, 2.6% in the UK and 1.9% in the US.
Official interest rates in the EU and UK likely to stay flat with some rises expected in the US.	No change in EU and UK interest rates expected, with a gradual US rate rise likely during the next 12 months.	No change in UK and EU interest rates expected, with rates likely to rise gradually in the US in the next 12 months.
Keys to bond valuations include: the potential for a Fed surprise combined with the pace of fiscal stimulus under new US president.	Keys to bond valuations include: Likelihood the Fed will continue rate hikes and will pay attention to market guidance. Government bonds will be busy pricing in a monetary cycle, a fiscal ease, rising inflation and the risk of a sharp rise in the value of the US dollar. Essentially the risks to growth and inflation globally are now symmetrical having been on the downside in 2016.	Keys to bond valuations include: interest rate risk, fiscal stimulus impact on inflation outlook, China slowdown, geopolitical risk, including upcoming elections in Europe.

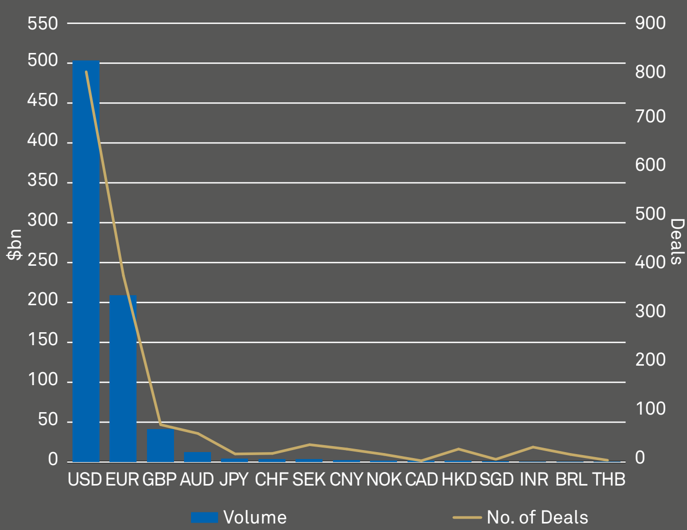
NEWTON	STANDISH
Growth: 1.5% across EU, 1 to 2% in the UK and 3.5% in the US.	Growth: 1.4% across EU, 1.4% in the UK and 2.1% in the US.
Inflation: 1.0% across EU, 2.8% in the UK and 2.25% in the US.	Inflation: 1.3% across EU, 2.8% in the UK and 2.4% in the US.
Official interest rates in the EU considered very unlikely to rise and may fall slightly, while rates in the US are expected to rise over the next 12 months. US rates likely to reach 1.5% in 2017.	Official interest rates in the EU and UK are not likely to change, but two rate hikes expected in the US.
Keys to bond valuations include: likely Fed rate rises in 2017, inflationary possibilities and also significant geopolitical risk and likely market volatility.	Keys to bond valuations include: the market perception of the effectiveness, magnitude and timing of the Trump administration's stimulative policies, the growth and stability of China's economy, the perceived impact on 'Brexit' on the EU and European trading/liquidity.

INTERNATIONAL EUROPEAN DEBT CAPITAL MARKETS VOLUME Q4 2016



Source: Dealogic as at 31 December 2016.

TOP 15 INTERNATIONAL DCM VOLUME BY CURRENCY Q4 2016



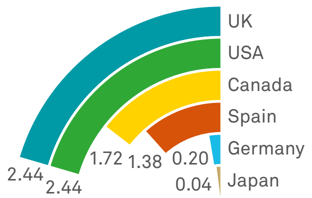
Source Dealogic as at 31 December 2016.

A moving target

Global fixed income markets face an unpredictable year ahead, with growing inflation expectations and uncertainty over geopolitics, interest rate movements and commodity prices. Here managers from Mellon Capital, Standish, Alcentra, Insight and Newton outline their thoughts on high yield, sovereign bonds, emerging market debt, loans, currency, ABS, index-linked and municipal bonds for the year ahead – highlighting the opportunities as well as the potential risks.

DEVELOPED MARKETS

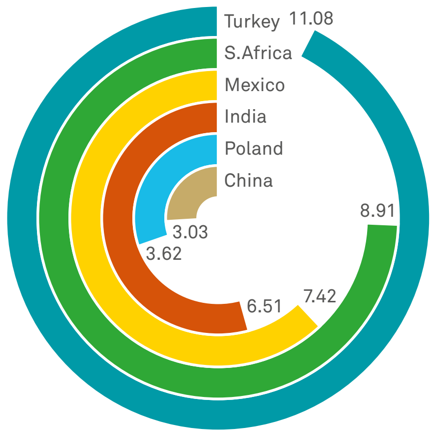
10-Year Govt. Bond Yields (%)



Source: ISSG, Bloomberg. Data as of 31 December 2016.

EMERGING MARKETS

10-Year Govt. Bond Yields (%)



Source: ISSG, Bloomberg. Data as of 31 December 2016.

GLOBAL AND EMERGING FIXED INCOME

	1 month (%)	3 months (%)	1 year (%)	3 years (%)	5 years (%)	7 years (%)	10 years (%)
Global Aggregate (Unhedged)	-0.46	-7.07	2.09	-0.19	0.21	1.72	3.29
Global Corporate (Unhedged)	0.46	-4.18	4.27	1.23	2.97	3.57	4.03
Global High Yield (Unhedged)	1.75	-0.19	14.27	3.60	7.37	7.78	7.35
EM $USD Aggregate	1.14	-2.61	9.88	5.25	5.69	6.86	6.71

U.S. FIXED INCOME

	1 month (%)	3 months (%)	1 year (%)	3 years (%)	5 years (%)	7 years (%)	10 years (%)
US Aggregate	0.14	-2.98	2.65	3.03	2.23	3.62	4.34
US Treasury	-0.11	-3.84	1.04	2.29	1.21	3.05	3.97
US TIPS	-0.15	-2.64	4.85	2.48	0.93	3.47	4.42
US Agencies	0.23	-2.10	2.27	1.84	1.38	2.32	3.49
US Municipals	1.17	-3.62	0.25	4.14	3.28	4.18	4.25
US Securitised	-0.03	-2.01	1.77	3.02	2.14	3.33	4.23
US IG Corporates	0.67	-2.83	6.11	4.23	4.14	5.38	5.47
US High Yield	1.85	1.75	17.13	4.66	7.36	8.09	7.45
US Leveraged Loans	1.16	2.26	10.16	3.58	5.12	5.29	4.64

Source: BNY Mellon Investment Strategy & Solutions Group ("ISSG"), Barclays Capital, Bloomberg, and S&P.
Data as of 31 December 2016. Returns for periods greater than one year are annualised.

Sovereign government debt

Uncertainty looks set to grip government debt markets this year in the aftermath of volatility that buffeted markets in 2016.

The potential for faster US economic growth following its recent election – and further interest rate hikes from the US Federal Reserve – saw the yield on 10-year US Treasuries jump from a low of 1.32% in July last year to 2.5% in early January.[1]

Some commentators wonder if the Trump era could signal the end of a 30-year+ bull market in bonds[2] if equity markets continue to rise and further interest rate hikes are implemented. However, others are more cautious, pointing to low historic yield levels and suggesting the pressures facing bond markets could just be a pause before the bond bull-run continues.[3]

Either way some portfolio managers remain optimistic about global sovereign debt market prospects in 2017. Newton investment leader fixed income Paul Brain says: "We have seen about 30 years of declining yields and many are asking if they going to go up substantially. We think yields will rise slightly this year but do not feel the trend of the past 30 years is suddenly going to go into a major reverse.

"As central banks withdraw from a very loose monetary policy and fiscal expansion is implemented you are almost inevitably going to see rising inflation and interest rate expectations. We are already seeing the start of this. Yields have been rising in the US because the economy is doing well and may rise even further later this year depending on the impact of the new US government's policies."

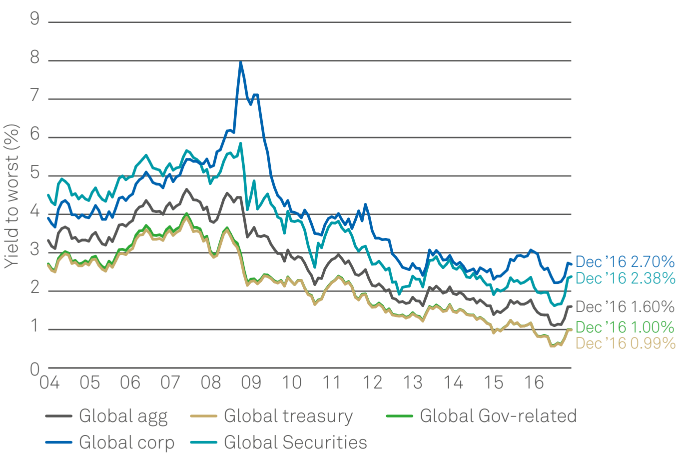
Standish portfolio manager Thant Han also points to the divergence between US and UK markets and continental Europe and Japan as potentially creating pockets of opportunity.

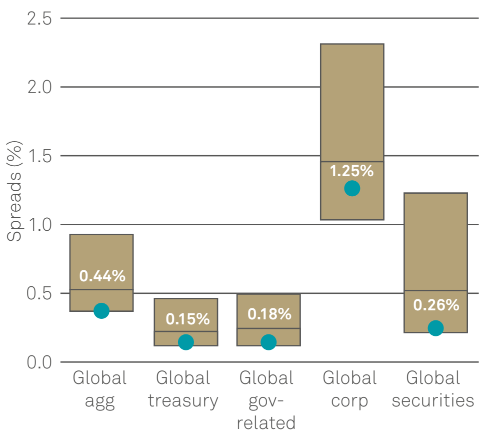
"Monetary policy dynamics are clearly diverging. We have seen the Fed lift-off with its rate hike at the end of last year and our view is that it will continue to adopt a cautious approach to raising rates. In line with market expectations we expect to see two to three hikes over the course of this year, if the US economy continues to grow. That said, we shouldn't see US rates and US Treasury yields move dramatically – a lot of that has already happened," he says. Brain also notes growing market divergence, adding: "The great thing is that with various economies currently moving at different speeds, you can have a big divergence between various government bond yields which allows investors to pinpoint pockets of value."

In Europe, ratings agency Moody's Investor Services expects the 2017 outlook for sovereign creditworthiness in the euro area to remain stable overall, reflecting likely stable but subdued real GDP growth, the mostly neutral fiscal stance and a modestly declining debt burden.

GLOBAL FIXED INCOME

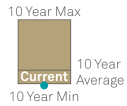
	1 month (%)	3 months (%)	1 year (%)	3 years (%)	5 years (%)	7 years (%)	10 years (%)	Duration
Global aggregate ($USD hedged)	0.27	-2.34	3.95	4.15	3.59	3.99	4.39	
Global aggregate (unhedged)	-0.46	-7.07	2.09	-0.19	0.21	1.72	3.29	6.82
Global treasury (unhedged)	-0.91	-9.27	1.65	-0.83	-1.01	0.98	2.96	7.86
Global govt-related (unhedged)	-0.89	-9.10	1.68	-1.01	-1.09	0.90	2.93	7.68
Global corporates (unhedged)	0.46	-4.18	4.27	1.23	2.97	3.57	4.03	6.56
Global securitised (unhedged)	-0.04	-2.98	1.12	1.29	1.86	2.64	3.86	4.67





Source: ISSG, Barclays Capital and Bloomberg.
Data as of 31 December 2016. Returns for periods greater than one year are annualised.

KEY



1 *FT*. Markets outlook: the big issues facing investors in 2017. 02 January 2017.
2 *Forbes*. President Trump May End The Bond Bull Market, But He Must Choose Growth Plans Over Political Fights. 17 January 2017.
3 *CBS Moneywatch*. As bond market sputters, what should investors do? 30 December 2016.

BUT: The global geopolitical climate remains highly unpredictable, bringing potential uncertainty to sovereign bond markets, including Europe.

According to Peter Bentley, head of global and UK credit at Insight: “The main challenge for fixed income investors will be managing the inevitable increase in volatility in what we expect to be a pro-growth early cycle in the US driven by Trump’s expansionary policies. While we do expect to see a more positive growth environment in Europe, there are some fears inflation could get out of control if it rises more rapidly than expected.

“There is also some concern over whether growth policies will be executed properly. At a global level, there remains a degree of controversy around China managing its currency and there are a number of obvious political events coming up in the eurozone, including several European elections, which could trigger volatility. We believe managing this volatility in 2017 will be a key theme.”

At Mellon Capital, managing director of fixed income strategies David Kwan remains bearish on sovereign debt. “I would say that global developed sovereigns look unattractive relative to spread products, i.e. corporates and other credit instruments, because of the low levels of term risk premia in those countries. In particular, Japanese and German government bonds are least attractive as these countries still have active QE programmes in place,” he says.

Currency

Investors endured unusually high currency volatility in 2016 as political change repeatedly spooked markets, putting pressure on a range of currencies.

Sterling had a tumultuous year, largely influenced by news flow surrounding the UK’s planned withdrawal from the EU and amid fears of a so-called ‘hard Brexit’.

Insight’s head of currency Paul Lambert, anticipates further interest rate rises in 2017 and expects to see a strengthening in US economic indicators, though he adds that wider global economic signals remain mixed.

In the last quarter of 2016 the Mexican peso weakened by as much as 12%, while “safe haven” assets such as gold and the Japanese yen (JPY) fell sharply against the US dollar.

In Europe, the December announcement of an extension of the ECB’s quantitative easing (QE) programme (despite a reduction in monthly purchases) for longer than expected was seen as a dovish move with the euro breaking the lows of its two-year trading range.

Commenting on the outlook for the eurozone, Lambert adds: “We believe the ECB is likely to review its QE programme again and potentially conclude it in the first half of 2018. It will likely maintain an expanded balance sheet by reinvesting maturing debt.

“We expect the deposit rate to remain low for the foreseeable future and with the ECB now able to purchase debt yielding below this rate, yields will likely remain around their historic lows at the front-end unless the central bank seeks to substantially ease repo market conditions further. This could lead to a historically steep yield curve if yields continue to rise at longer maturities.”

BUT: While Insight remains optimistic about US dollar prospects in 2017, it does not rule out further volatility. “The current combination of rising bond yields and strong US economic data should continue to support the US dollar, in our view. Having said that, given how far the US dollar and Treasury yields have moved, a period of consolidation is certainly possible while we await further clarity on US fiscal plans and the Fed’s outlook following its December rate hike,” adds Lambert.

A HARD BREXIT SCENARIO FOR STERLING (VERSUS USD)

Source: Record, OECD, IMF, WEO, Macrobond as at 23 November 2016. The projected exchange rate move under the estimated scenario is shown by the dotted lines.

Loans

Investment managers anticipate a positive year for the loans market, following a turbulent 12 months. The loans sector started 2016 facing serious market turbulence – driven largely by stress in the US energy and commodities sector – only to end the year strongly, offering robust returns against a backdrop of dwindling default rates.

From a geographic perspective, Alcentra's chief investment officer, Paul Hatfield, points to opportunities in the European loans sector but also growing potential in the US, where the prospect of future interest rate hikes augurs well for the market.

Commenting he says: "On the European side the loans market is still very resilient. Technicals remain strong and will afford investors quite a lot of protection. Importantly, the European market doesn't have some of the volatile sectors common in the US market.

"While Europe won't benefit directly from any interest rate rises this year we expect the environment will be one of low defaults and will be fairly defensive and that means loan prices should hold up fairly well. It looks as though we are in for another year of returns of 5.5-6% in the European loan market."

With respect to the US, Hatfield adds: "On the loans side we are starting to see more inflows. The US loans market got off to a terrible start to 2016 with the energy and commodities sectors struggling. We even saw some retail blowouts but those are largely behind us now with the oil price holding fairly steady or even increasing slightly.

"Overall we expect another good year in US loans. In the latter part of 2016 we saw a strong rally in CCC-rated paper and in the energy and commodities sectors and expect to see strong returns with a much lower default rate with less volatility in the months ahead."

The regulatory picture continues to shift. In Europe, where capital adequacy rules have driven many banks away from lending, a long-awaited meeting to sign off a tightening of the rules under Basel III capital requirements was recently postponed[4] in what was widely seen as a reprieve for European banks. In the US, President Trump has called into doubt regulations such as the Dodd-Frank Wall Street Reform and Consumer Protection Act (a post 2008-regulation containing the Volcker Rule, which poses investment restrictions on banks) and may institute reforms which could serve to buoy banks and the wider loans market.

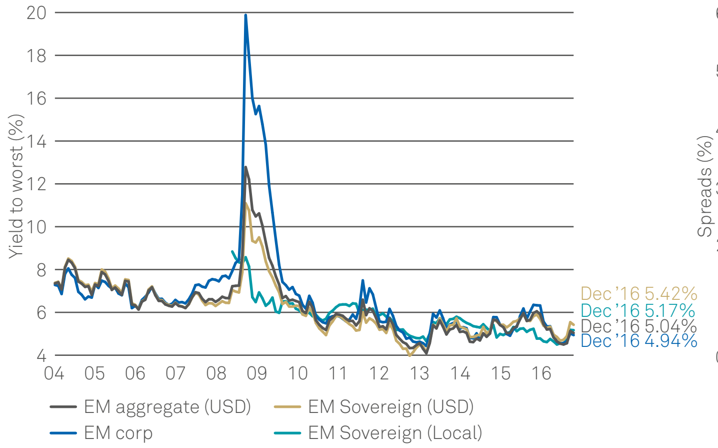
Hatfield also notes a new shift in the European loans market, away from concern over bank lending to a growing maturity within asset management companies providing these services.

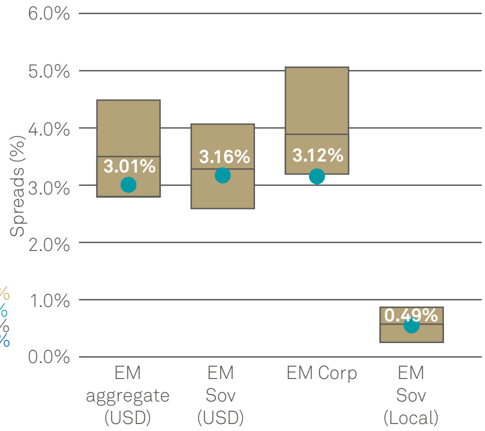
But: The loans market is not immune to geopolitical risk and wider shifts in monetary policy. According to Hatfield, forthcoming elections across Europe pose risk scenarios that could go either way.

"There will be some degree of volatility across all asset classes – including loans – because there will be interest rate, political and foreign exchange risks. But if we do start to see a more stable background coming through in Europe then it should be a very good place to be," he says.

EMERGING MARKET DEBT

	1 month (%)	3 months (%)	1 year (%)	3 years (%)	5 years (%)	7 years (%)	10 years (%)	Duration
EM $USD aggregate	1.14	-2.61	9.88	5.25	5.69	6.86	6.71	5.59
EM sovereign (unhedged)	1.29	-4.34	9.34	5.94	5.69	7.04	6.92	6.90
EM corporate (unhedged)	0.97	-0.54	10.67	4.65	5.76	6.29	6.22	4.43
EM sovereign local currency (unhedged)	0.52	-7.52	5.86	-2.37	0.49	2.11	–	5.43





Source: ISSG, Barclays Capital and Bloomberg.
Data as of 31 December 2016. Returns for periods greater than one year are annualised.

4 *FT*. Basel postpones bank reform vote amid policy differences. 03 January 2017.

Emerging market debt

Improving sentiment in emerging market debt (EMD) has been tempered by fears of a strengthening dollar, rising interest rates[5] and the dawn of a new era of protectionism.

Head of emerging market debt at Insight, Colm McDonagh, feels US politics under a new president could prompt further uncertainty within EM. But he believes EM growth is still likely to be higher than in many developed markets with some showing signs of stabilisation with growth forecasts pointing to a more supportive climate.

"We would argue that emerging markets are more resilient today compared to three years ago. In our view, emerging market fundamentals are in a far stronger position given diminished external vulnerabilities (lower current account deficits, higher currency reserves), a pick-up in economic growth and higher real rates," he says.

From a geographic perspective, Standish's director of emerging markets and portfolio manager Federico Garcia Zamora points to specific credit opportunities in Brazil, Russia, Colombia, Indonesia and Argentina. He also highlights recovering commodity prices, a supportive global interest rate picture and rising inflation expectations as factors supportive of EM investment.

"The fundamentals look increasingly favourable for the asset class. While the currency picture is balanced for both US dollar denominated and local currency denominated debt, 'carry' levels on local currencies are a lot higher than the dollar rate, which we believe is again supportive of local EM investment," he adds.

Liquidity remains a key concern for EMD investors, especially as major markets move away from unconventional monetary policies such as quantitative easing. However, Newton fixed income portfolio manager Carl Shepherd argues that aside from any initial shocks, these worries may soon dissipate.

"The unconventional measures are no longer justified as it is deemed we have entered a more 'normal environment'. In a more 'normal' environment, we should reasonably expect better two-way pricing and liquidity which would reduce the need for spreads to factor in a liquidity premium. We have also seen a turnaround and brighter prospects in the EU and with growth returning to the two largest global markets this should also begin to feed through into global activity and demand," he says.

But: McDonagh stresses that the 'Trump factor' poses risks as well as potential opportunities for EM investors. "It remains highly uncertain which of President Trump's policies will be implemented in the coming months and, therefore, it is difficult to gauge the potential impact on US Treasury yields and the US dollar. As such, we think uncertainty over US trade and fiscal policies pose the greatest risks to emerging markets in 2017," he says.

China also remains a great unknown and potential source of major EM volatility. According to Newton's Shepherd, the new US administration and global geopolitical shifts could spell particularly bad news for frontier markets in Africa. "I remain bearish on African government bonds. With the prospect of a more isolationist policy from the Trump administration, we could expect Chinese policy to focus on its own vicinity. I expect the ability to attract investment into Africa will be increasingly difficult, as it falls further down the list of priorities," he says.

"With its larger infrastructure deficit and exponentially growing populations, high growth is required to accommodate the continually larger numbers of young people entering the workforce. The prospect of large numbers of underemployed and underutilised young adults generally feeds through into greater civil unrest and dissent."

Investment grade credit

Corporate debt issuance on Wall Street saw a record start in January with the prospect of rising interest rates encouraging companies to take advantage of low borrowing costs.[6]

The first week of 2017 saw $53bn in investment-grade issuance in just four days[7], with billions more expected in the months ahead.

Standish's director of investment grade credit David Morse says: "Inflows into the asset class have allowed the market to absorb five consecutive years of record breaking investment grade corporate issuance. Looking ahead, we believe the technical picture will continue to remain supportive for the sector – particularly in the US. We have had a pretty dramatic back up in government yields since the US election and that should make the asset class even more attractive for most domestic buyers as well as foreign investors."

The potential for US corporate tax reform could provide an additional boost to the corporate debt sector, he adds.

"There is talk of eliminating the tax deductibility of US corporate interest expenses. That would be a game changer because it would reduce the relative attractiveness of companies to issue debt. Either way, the technical picture should continue to be supportive for investment grade credit," he says.

In Europe, the ECB's corporate bond purchase programme continues to support the market and has absorbed more than €50bn of European corporate supply since its inception.[8]

While Morse applauds the ECB efforts to support the market, he says investors remain highly sensitive to any policy adjustments and believes concerns about the fundamentals underpinning the European banking system present a potential headwind. On a more positive note he points to the lack of leverage in the European investment grade sector compared to the US.

5 *FT*. Emerging market investors prepare to buckle up for 2017. 19 December 2016.
6 *FT*. Wall Street debt issuance off to a record start in 2017/Dealogic data. 04 January, 2017.
7 *CNBC*. This market has had a wild start to the new year. 13 January 2017.
8 *Bloomberg*. Europe's corporate bond indigestion. 10 January 2017.

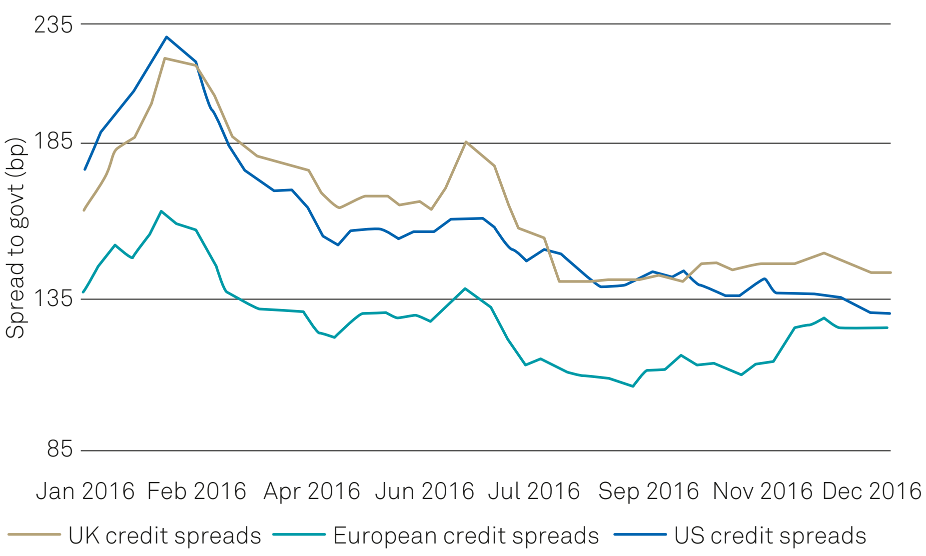
According to Insight, yield buyers, attracted by a sell-off in Treasuries, offered further support to US credit. US dollar credit indices ended the year trading around their narrowest credit spreads of 2016, and ahead of sterling and euro credit on an excess return basis, the fixed income group points out. "However, given the sharp under-performance of US Treasuries relative to gilts, US dollar credit actually under-performed sterling credit on a total return basis during the Q4 and over the year."

Despite this period of underperformance Insight believes the sector continues to hold significant potential. "We have a positive tactical view towards investment grade, particularly in the US, given the demand from long-dated yield buyers.

"In the UK, the recent underperformance of sterling credit on an excess basis, despite aggressive direct support from the Bank of England, has left the market looking more attractive. Euro credit, which underperformed toward the end of the year, also offers some tactical value. We expected concerns surrounding the Italian banking sector to be contained, although we are mindful of political risks."

Lucy Speake, Insight's European credit manager, says this year she expects eurozone growth to be robust and inflation to continue to normalise. In the short-term, the effects of the ECB's purchase programme are a key factor and political risks remain high in Europe and major elections in the coming year represent key risk events, she says. "The ECB corporate-bond purchase programme drove the strong performance of European corporate bonds in 2016. While the ECB will continue to buy credit, this appears to be already priced in to bond prices, and the effect could fade over the year. Moreover, credit spreads may come under pressure from rising global yields. From a historical viewpoint, credit tends to perform well in the early stages of monetary tightening."

INVESTMENT GRADE CREDIT SPREADS



Source: Bank of America Merrill Lynch, as at 31 December 2016.

But: The hunt for yield has driven many investors into higher risk, higher return corporate assets, stoking fears of a potential risk bubble in the sector. Some portfolio managers are also concerned about the impact of continued growth in mergers and acquisitions (M&A). Commenting, Newton fixed income portfolio manager Howard Cunningham says: "We believe we are at the end of the current cycle in the investment grade market and also fear M&A activity will be slightly damaging to the sector. We have already seen a number of downgrades of bonds on the back of related acquisitions."

Insight: ESG In global credit

A range of investment managers, including Insight Investment, subject investments to dedicated environmental, social and governance (ESG) screening to assess specific business/ sectoral risks which may serve to undermine its value with each issuer receiving an overall ESG risk score after detailed analysis. The company also works closely with its clients to assess their overall screening requirements.

Insight believes there are no practical barriers to applying ethical exclusions to fixed income portfolios, though care must be taken to identify the issuers that are to be excluded and then applying restrictions. This does, however, require some work to ensure the application of these exclusions aligns with the client's ethical and investment objectives and to ensure that any potential conflicts are explicitly identified and discussed.

Insight ESG analyst Joshua Kendall says: "In recent years, ESG research providers have broadened the scope of the screening research they offer. There is now good coverage of most recognised investment grade indices and it is reasonably straightforward to generate a list of investment grade issuers that do not meet standard ethical criteria.

"The situation is more complex in the high yield space. Research providers often only provide partial coverage of issuers. This means that there is often a need to conduct issuer-specific analysis to assess whether a specific issuer fulfils the criteria set out by the screens."

Index-linked **bonds**

The return of inflationary pressures – boosted by a range of factors including stabilising oil prices and the prospect of further political change in the US and Europe – have placed a new focus on the index-linked bond market.

While inflation has traditionally spelled bad news for fixed income markets, 'linkers' can provide a valuable hedge against a range of inflationary pressures. Commenting on the potential strengths of index-linked paper in the current market, Insight portfolio manager David Hooker says: "We think inflation-linked bonds remain attractive as the market appears to be pricing in too little inflation risk premium. Since the US election, US inflation markets have not outperformed the UK as one might expect. "Fundamentals favour the US market, particularly as unemployment has fallen close to pre-crisis levels. Meanwhile, the risk of a policy shock is material."

Inflation triggers can prove unpredictable. In the UK a surprise referendum vote to leave the EU last year sparked a rally in inflation-linked gilts, with the asset class returning over 28%, according to Bank of America Merrill Lynch indices.[9]

In 2017, the UK's negotiated withdrawal from the EU looks set to remain a key talking point across markets. Newton's Cunningham points out that while the 'Brexit' vote has so far had limited impact on the economy, inflationary expectations are rising.

"UK economic data has remained more resilient than most forecasters expected. Provided economic activity remains robust, the bar for further monetary easing by the Bank of England's Monetary Policy Committee (either in the form of lower interest rates or larger quantitative-easing measures) seems higher than it was previously.

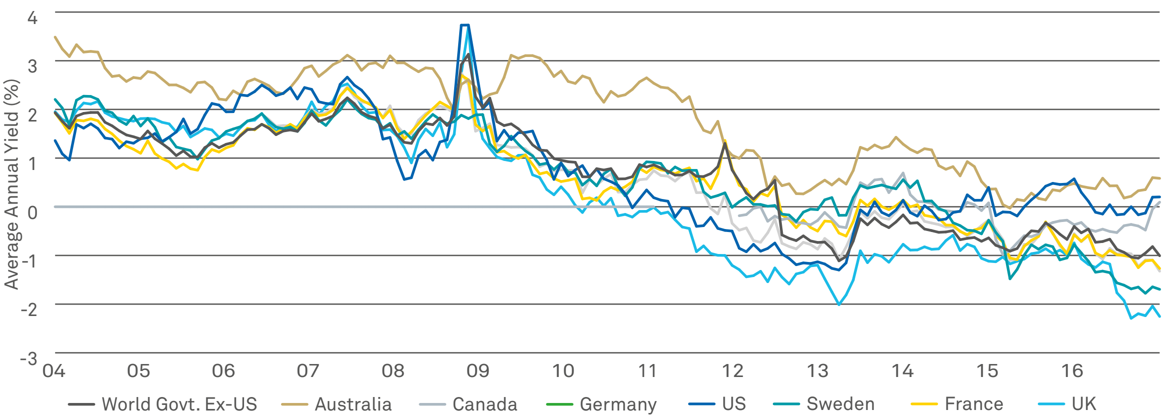
"Inflation expectations have risen considerably over recent months but could be revised lower should economic growth slow more markedly. On balance, however, we expect index-linked gilt yields to resume their drift higher after a mini-reversal at the end of last year," he says.

But: In January, global inflation expectations, as measured by the yield difference between nominal and index-linked bonds, rose to their highest level since May 2015.[10]

While inflation-linked bonds performed well in 2016, some academics believe current inflation fundamentals point to the likelihood of a wider market correction that could be as damaging as the notorious 1994 'bond massacre.'[11]

GLOBAL LINKERS/TIPS

	1 month (%)	3 months (%)	1 year (%)	3 years (%)	5 years (%)	7 years (%)	10 years (%)
World Govt. Ex-US (1-10 Years)	0.31	-6.28	-2.16	-5.45	-2.24	-0.89	1.15
US (1-10 Years)	0.10	-1.50	4.01	1.43	0.70	2.48	3.75
Australia (1-10 Years)	0.30	-0.86	1.12	3.72	3.20	5.38	5.60
Canada (1-10 Years)	-0.79	-1.73	-0.59	3.19	–	–	–
France (1-10 Years)	0.89	0.26	2.95	2.12	2.73	2.80	3.57
Germany (1-10 Years)	1.19	0.88	3.33	1.72	1.07	2.65	3.46
Sweden (1-10 Years)	0.47	0.30	5.09	3.48	1.65	2.82	3.40
UK (1-10 Years)	1.18	0.50	9.77	4.07	2.83	4.81	5.33



Source: ISSG, Barclays Capital and Bloomberg.
Data as of 31 December 2016. Returns for periods greater than one year are annualised.

9 *FT.* Inflation-linked gilt returns have gone through the roof fast. 07 September 2016.
10 *Bloomberg.* Harvard Academic Sees Debt Rout Worse Than 1994 'Bond Massacre'. 04 January 2017.
11 *Ibid.*

Municipal bonds

While the US election result divided global opinion, sending shockwaves across markets, it could provide a valuable boost to the domestic municipal bond market.

An estimated $3.6trn in infrastructure spending will be needed by 2020, according to the American Society of Civil Engineers and President Trump has pledged his administration will work to address this.[12] Standish head of tax sensitive strategies, Christine Todd, believes this will benefit US infrastructure related securities, including 'muni' bonds. "Importantly, in the US we use municipal bonds to fund the development and maintenance of our infrastructure. About 80% of our infrastructure is funded this way, with about $450bn issuance from the municipal bond market this past year," she says.

"We are at an inflexion point where public opinion and politicians have made a dramatic change from post financial crisis austerity. There is also an acknowledgement of the urgency around investment in the US's increasingly unsafe and uncompetitive infrastructure."

In a market that mainly appeals to large institutions such as pension funds and insurance companies, Todd adds that infrastructure bonds can offer specific investment qualities which can benefit non-taxable investors. "If an investor is seeking competitive and stable income and credit quality, municipals have low correlations with other asset classes and are a good choice of investment," she says.

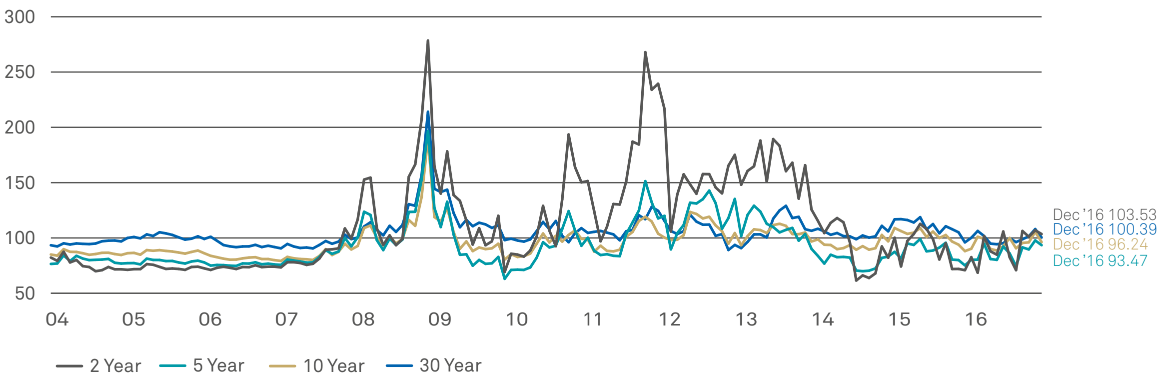
US municipal bonds can be a high quality, low volatility complement to an overall asset allocation, she says. "Our analysis of how various asset classes have performed during previous periods of rising rates makes us confident that opportunities will exist for investors to potentially earn attractive yields, while also reducing portfolio risk amid the ongoing normalization of US monetary policy.

But: The prospects for US tax reform remain unclear. While a reduction of corporate tax rates might impact the municipal bond market somewhat, their income exemption is more important. "While there are no immediate plans to cap the level of exemption muni bonds can have for individual tax returns, if that were to happen we would consider that a form of flat tax which might posed a threat to valuations," adds Todd.

US MUNICIPALS

	1 month (%)	3 months (%)	1 year (%)	3 years (%)	5 years (%)	7 years (%)	10 years (%)
US Municipals	1.17	-3.62	0.25	4.14	3.28	4.18	4.25
Municipals (1 Year)	0.20	-0.17	0.30	0.50	0.63	0.84	1.82
Municipals (3 Year)	0.28	-1.11	0.08	0.82	1.13	1.56	2.71
Municipals (5 Year)	0.50	-2.63	-0.39	1.73	1.79	2.74	3.74
Municipals (10 Year)	1.44	-4.29	-0.12	4.05	3.10	4.51	4.70
Municipals (20 Year)	1.70	-4.52	0.49	5.69	4.42	5.28	4.84

Muni/Treasury ratio (%)
Ratio of muni bond yield to Treasury



Source: ISSG, Barclays Capital and Bloomberg,
Data as of 31 December 2016. Returns for periods greater than one year are annualised.

12 *Fortune*. What You Need to Know About Donald Trump's $1 Trillion Infrastructure Plan. 22 December 2017.

Asset-backed securities (ABS)

Almost a decade on from a global financial crisis which shattered the image of many securitised products, ABS have largely shaken off their reputational problems.

In the US, products such as CLOs (collateralised loan obligations) and CDOs (collateralised debt obligations) continue to attract sophisticated investors looking beyond traditional assets in search of more encouraging returns, though restrictive ABS regulation remains an issue in markets such as Europe.[13]

> **We continue to see impressive long-term value in the UK mortgage market in particular, which can offer credit spreads of 200bp for AA rated debt and 400bp for BBB.**
>
> Jeremy Deacon, Insight

The US ABS market remains healthy, with Wall Street's debt securitisation specialists reportedly embarking on a "frenzy" of issuance late last year in order to satisfy demand from yield hungry investors amid widespread political uncertainty.[14]

Insight portfolio manager Jeremy Deacon believes the ABS market continues to offer significant opportunity for investors.

"Despite the recent positive performance of ABS, credit spreads are still significantly wider than during the market's post-financial crisis highs of 2014 and at multiples above their pre-crisis levels, indicating strong strategic value," he says.

"We continue to see impressive long-term value in the UK mortgage market in particular, which can offer credit spreads of 200bp for AA-rated debt and 400bp for BBB. Positive technical drivers, driven by falling net supply are also likely to be beneficial in the short-term."

But: In Europe, one potential headwind would occur if, as anticipated, the ECB begins to taper its purchases of ABS.[15] Although no specific announcement has been made, a recent decision to move the ECB's purchasing operations in-house instead of using third party managers indicates this is a possibility and it could lead to some volatility, adds Deacon. Nevertheless, he points to other markets offering significant potential. "We continue to see value in the US market. Investors may be able to find attractive opportunities in higher beta sectors such as Commercial Mortgage Backed Securities on any weakness," he says.

High yield

Rising yields on sovereign bonds could spell good news for issuers of high yield debt as investors move up the risk curve to generate return. Growing interest in the market follows a strong period for US high yield, despite some spectacular 'blow-outs' earlier in the year.

Commenting on developments in the sector, Alcentra's Hatfield says: "We like US high yield because investors are still getting paid a good coupon, especially in the single 'B' space – which is attractive from a duration point of view. While we saw numerous defaults in US high yield last year, we now know where the landmines are. Oil and some other commodity prices have stabilised and investors can generally avoid the problem areas. If the economy continues to grow, investors should be well paid for the risk on their exposure to the high yield sector."

Insight is also positive on the prospects for high yield – particularly short-dated paper – despite some potential geopolitical hiccups in the year ahead.

Commenting on both potential headwinds and grounds for optimism on high yield, Insight senior portfolio manager Uli Gerhard says: "Economic growth looks supportive, particularly in the US and default rates are likely be lower this year than they were in 2016 as weakness in the metals and mining sector has largely played out. The recent oil producer agreements to cut production will also likely support the US market."

Newton fixed income manager Parmeshwar Chadha agrees short-dated paper can potentially offer significant benefits, though he remains watchful of volatility in the US credit market and potential political upsets ahead in Europe. "We favour shorter duration high yield as we don't think investors are getting paid enough to take longer term risk," he adds.

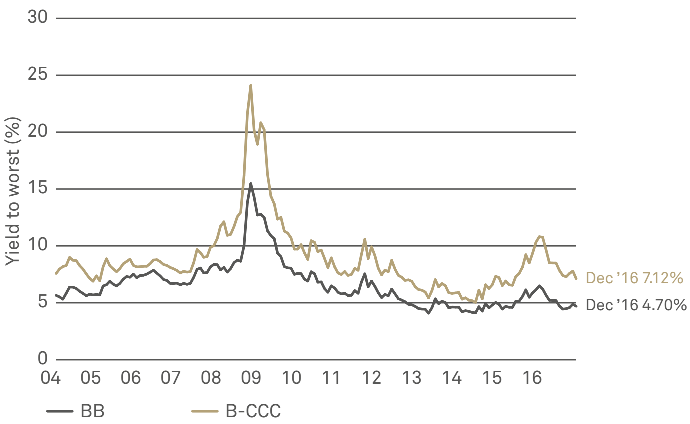
But: Chadha points to a disparate range of potential threats facing high yield investors, including uncertainty over future commodity prices, the Chinese economy and the UK's upcoming negotiations to leave the EU. He is also concerned about liquidity levels in the market and the potential for a sharp correction, though he adds that this could in itself create opportunities.

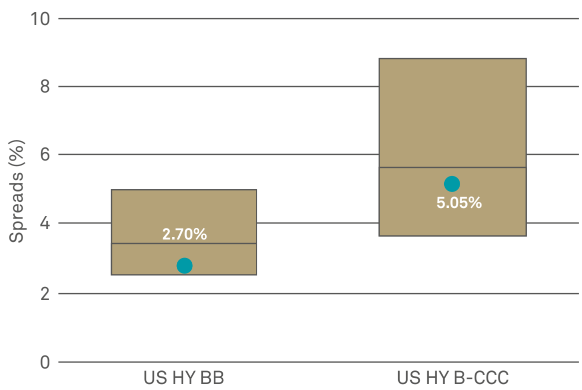
"Our biggest concern is that given the structural imbalances in the market – and very poor secondary market liquidity combined with a lot of hot/retail money – a shift in risk sentiment will lead to significant spread widening. This is because the sale process will likely be disorderly and indiscriminate as investors look to exit or reduce their high yield exposure. That said, once this occurs there will be great opportunities to pick up attractive assets at a very low price/high spread," he adds.

13 *IPE*. Asset-backed securities: shackled by history. 16 January 2017.
14 *FT*. Asset-backed securities issuance revs up as US election nears, 27 September 2016.
15 *Fortune*. The European Central Bank Will Start to 'Taper' Its Bond Purchases in April. 08 December 2016.

US HIGH YIELD & LEVERAGED LOANS

	1 month (%)	3 months (%)	1 year (%)	3 years (%)	5 years (%)	7 years (%)	10 years (%)	Duration
US High Yield	1.85	1.75	17.13	4.66	7.36	8.09	7.45	3.99
High Yield (BB)	1.19	0.43	12.78	5.56	7.20	8.17	7.83	4.54
High Yield (B-CCC)	2.40	2.44	20.28	3.91	7.18	7.79	6.89	3.82
Leveraged Loans	1.16	2.26	10.16	3.58	5.12	5.29	4.64	–





Source: ISSG, Barclays Capital and Bloomberg.
Data as of 31 December 2016. Returns for periods greater than one year are annualised.

CoCos

Despite their higher risk profile, hybrid securities such as contingent convertible bonds (CoCos or AT1s) continue to attract strong interest from many yield-hungry global investors.

A growing number of European banks have issued hybrid fixed income securities in order to meet European central bank capital adequacy requirements and shore up their balance sheets. In Europe, January saw Banca Intesa Sanpaolo attract €5bn of orders for a new €1.25bn issue[16] and other European banks are expected to bolster issuance levels throughout the year.

Currency remains an important consideration for both issuers and investors in the contingent convertible securities market. In the UK, the Royal Bank of Scotland sold £2bn worth of CoCos last year – to build up its capital reserves[17] and it was one of three major UK issues to be US-dollar denominated in order to take advantage of favourable foreign exchange dynamics.[18]

But: CoCos are considered among the riskiest debt issues by banks. While returns are typically over 5%, higher returns reflect a higher risk of capital loss. While uncommon, sharp capital falls on CoCo markets can trigger unexpected conversion to equity or even a complete write off for investors. Last year February saw the main index that tracks CoCo debt drop 10% before stabilising.[19] In Europe, question marks over the health of several major banks involved in hybrid issuance – particularly in Italy – and the likely future treatment of CoCos by regulators continue to concern some analysts.

16 *Bloomberg*. Lovin' that Italian bank risk. 05 January 2017.
17 *CityAM*. Royal Bank of Scotland wins strong demand for first post-Brexit CoCo offer. 11 August 2016.
18 *FT*. CoCo bonds stage summer revival. 31 August 2016.
19 *FTfm*. Bank coco market faces uphill struggle. 23 February 2016. 05 January 2017.

Keeping on track: passive investing and ETFs

The prospect of lower management fees and greater transparency has tempted a number of fixed income investors to adopt passive strategies.

While there are no obvious restrictions on taking a passive approach to any segment of the fixed income universe the ability to maintain good tracking to the benchmark will depend on the trading costs of the underlying instruments.

According to Mellon Capital's David Kwan some performance related benefits of passive investing are now becoming increasingly apparent in specific fixed income sectors. "Historically, the advantages of passive have mostly revolved around fees and transparency. However, more recently, the advantages now include performance as well, especially as it pertains to the less liquid segments of the fixed income markets, namely high yield and emerging market debt," he says.

"We're starting to see that the performance of standard benchmarks for high yield and EMD fares well against active managers' performance. For example, in the high yield space, the broad market US and global high yield index has performed on par or better than median performance numbers of active managers over a one, three, five or even 10-year period. Beating the median performance mark is actually a conservative statement; on a net of fees basis, the high yield index performance over the past five years probably falls closer to top quartile in performance."

Kwan also notes the growing role of exchange traded funds (ETFs) within the fixed income arena. "The development of passive fixed income ETFs is starting to become more important to investment managers. The changes taking place in the ETF arena are providing fixed income investors with an additional layer of liquidity that was not available a few years ago. Development in this market has enabled some managers to tap into the liquidity of these instruments to enhance index-based strategies, thereby enhancing the liquidity of the underlying bonds.

"Bonds, especially credit securities such as corporates, tend to be a less liquid asset class. They trade in the OTC market and generally have wide bid/ask spreads that equate to high trading costs when turning over the portfolio. Our experience in accessing the liquidity of the ETF market to facilitate the trading of bonds is that it can lower costs significantly. With this in mind, I expect growth in the ETF market and index strategies to continue," he concludes.

Finding value

Insight Investment explores why a short-dated approach to high yield can offset some of the credit risks and volatility posed by the asset class in the current investing environment.

High yield credit markets can offer some advantages over government bonds and investment grade credit in a low interest rate world. The average yield on high yield credit is 4% to 7% depending on currency, compared to 1% and 3% for comparable investment grade markets.

High yield credit is also less vulnerable to interest rate risks, an important consideration for those concerned about rising yields over the longer-term. The average duration of investment grade and government bond indices tends to be between five and eight years. Mathematically, this indicates that if government bond yields were to rise 1% then (all else being equal) those indices would be expected to fall by 5% to 8%. Longer-dated investment grade and government bond indices would be expected to lose even more – 15% to 20% for the same 1% rise in yields. By comparison, high yield indices would be expected to lose only 3% to 5%, while short-dated high yield strategies are likely to fall 2% or less based on average duration.

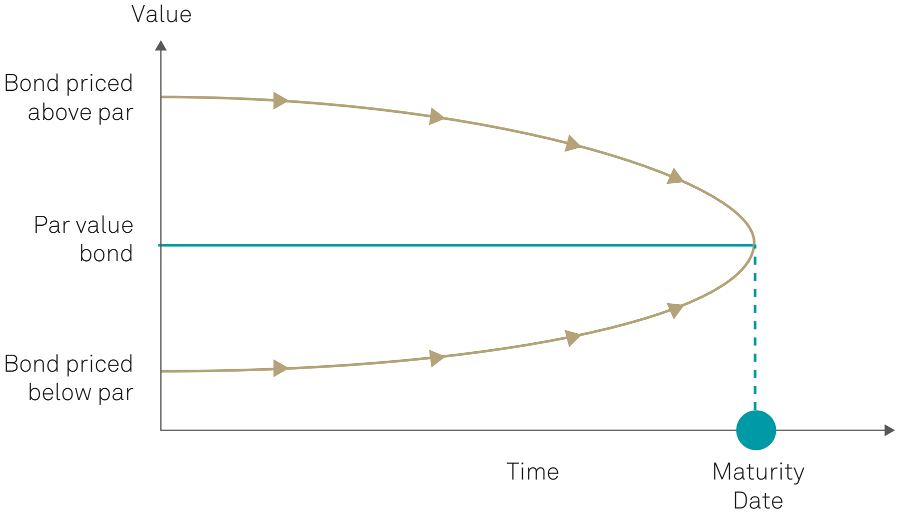
Defensive attributes

Despite these positive characteristics, high yield indices in our opinion present significantly higher credit risks. Given the potential for higher default losses, they tend to be more volatile than investment grade indices with risk levels closer to equity markets. High yield may therefore look compelling in the context of growth assets. However, those prioritising stability may be concerned about volatility. A short-dated approach may be able to overcome this deficiency.

A short-dated approach to high yield can be more defensive than a benchmarked high yield fund. This is largely due to the "pull to par" phenomenon. Provided credit quality has not been impaired, the closer the bond gets to maturity, the more certain it is to redeem at 100% of its par value. Therefore, over time, fixed rate bond prices naturally gravitate towards par whether trading at a premium or a discount.

This effect is particularly relevant in high yield. With a good understanding of a company's liquidity position it can be remarkably clear whether the issuer will be able to meets its most imminent debt obligations. However, when maturity is more than two years away, such analysis becomes progressively less useful, given the many macroeconomic and microeconomic variables.

PULL TO PAR



Source: Insight Investment, for illustrative purposes only.

Short-dated bonds are therefore fundamentally less susceptible to changing interest rates and average credit spreads. Furthermore, debt frequently matures in short-dated portfolios, throwing off cash. Should yields or credit spreads rise, this cash can be reinvested at higher rates to further smooth the impact of volatility.

Market opportunities

In the investment grade market, credit ratings agencies typically assign different credit ratings to the same issuer's shorter-dated and longer-dated debt. Pricing of investment grade credit curves is therefore relatively steep – reflecting lower credit spreads on short dated bonds.

However, in high yield, the same dynamic does not apply. Issuers typically receive only a single credit rating for all their debt regardless of maturity. This results in flatter credit curves and, in our view, often disproportionate value in short-dated high yield.

The lack of short-dated high yield bond indices adds to this structural inefficiency. This can provide active managers opportunities to exploit mispricings.

Unlike in the investment grade market, most high yield bonds are also callable, meaning the issuer has the option of redeeming it before its maturity date. This is usually allowable at specific intervals (such as each year) after an initial 'non-call' period has elapsed (typically the first three or five years after it has been issued). In practice this reduces the life of most bonds, as most are called prior to maturity.

Debt can be called early for a number of reasons. A general fall in interest rates is often cited, but this has become less relevant since government bond yields reached record lows. When a company's business develops and its credit quality improves, it may be upgraded or experience a contraction in its credit spreads. Calling its existing debt will allow it to refinance itself more cheaply.

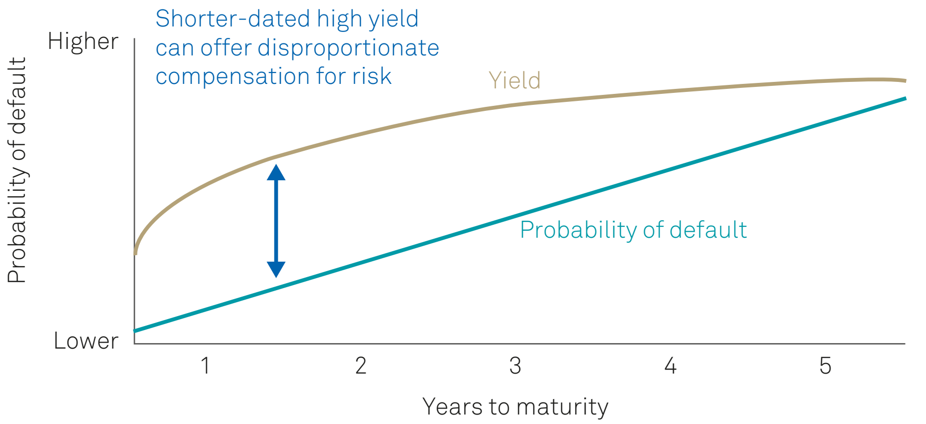
Global view

A global approach can maximise available value opportunities in high yield as well as the short dated end of the market, particularly as the global market has matured, making regional diversification compelling. The market value of the US and European high yield markets has doubled and tripled respectively over the last decade. This is partly because, since the financial crisis, fewer corporates have been able to receive financing from banks and have turned to non-bank alternatives (such as bonds) instead.

The European market is young with the first bonds issued in 1997. However, it now offers significant depth and diversification. Historically it offered low levels of structural protection and an average single-B credit quality. Today, seniority and security are increasingly common and over 70% of the market is BB rated, compared to 50% for the US dollar market. The US high yield market offers its own advantages. It is four times larger and significantly more liquid. While the euro high yield market now contains over 250 unique issuers, the US market has almost 900.

From a country perspective, the US dollar market contains over 80% exposure to US companies. The euro market has 12% exposure each to France and Germany, but Italy is the most predominant at 19%. This means a significant proportion of euro high yield is exposed to peripheral Europe. Concentration risk is also significant. Given the relatively small size of the market, fallen angels (former investment grade issuers that were downgraded particularly during the financial crisis), occupy relatively large shares of the European market. Italy's Telecom Italia and the UK's Tesco are two examples, accounting for 4% and 5% of the entire euro market respectively. In the US market, concentration risk is less

CREDIT RATING AGENCIES TYPICALLY ASSIGN HIGH YIELD ISSUERS THE SAME CREDIT RATING REGARDLESS OF MATURITY



Source: Insight Investment, for illustrative purposes only.

of an issue, although the largest issuers, Sprint and Valeant, account for 2% to 3% of the market.

The markets also differ on a sector basis. The US is substantially more exposed to the oil markets, with 14% exposure to energy. This sector was the source of a substantial uptick in defaults in 2015 (which were isolated to the sector), but also the source of a strong rebound in 2016. A global approach provides investors with far larger universe from which to pick and choose optimal sectoral or regional exposure.

It is notable that several companies issue debt in both euros and US dollars and their bonds can trade differently in each market, providing relative value opportunities. Diverging global monetary policy contributes to this.

With too few managers investing across both markets, these inefficiencies will likely persist. Divergence in pricing also indicates benefits from diversification. The US dollar market has a larger proportion of single-B issuers, while euro single-Bs are significantly weighted towards peripheral Europe.

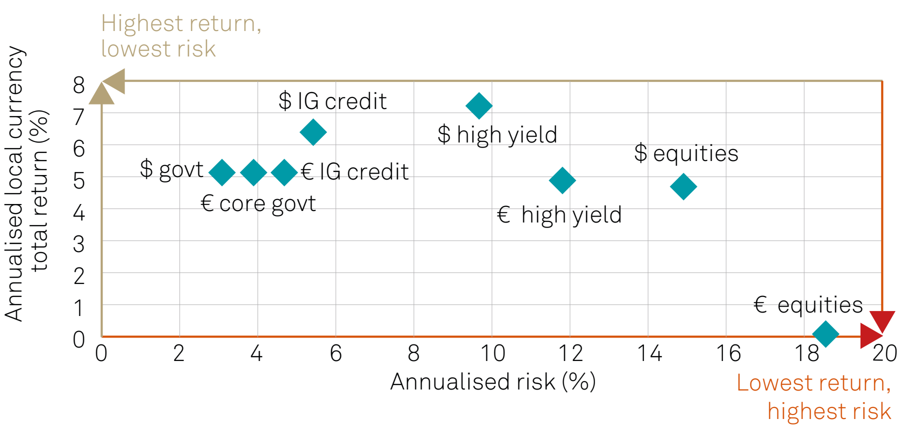
Volatility risk

High yield markets can be sensitive to shifts in market sentiment, due to their 'high beta' nature. Episodes of volatility have been common since the financial crisis and are likely to continue, particularly given considerations such as political risk. For example, following the UK's referendum on EU membership in June 2016, euro high yield credit spreads suddenly widened around 80bp, before recovering almost as sharply.

High yield markets are also vulnerable to default rates. However, at present they are historically benign and given an accommodative monetary environment and supportive global growth backdrop we believe high yield credit will continue to benefit.

However, volatility is inevitable in a world where monetary policy has entered uncharted territory and global politics is increasingly uncertain. Prudent investors seeking income rather than growth should adopt a considered approach to risk, backed up by a rigorous, analytical approach.

HY VERSES OTHER FIXED INCOME ASSETS ON A RISK/REWARD BASIS



Source: Insight Investment, for illustrative purposes only.

About
BNY Mellon

BNY Mellon's multi-boutique model encompasses the skills of 13 specialised investment managers. Each is solely focused on investment management and each has its own unique investment philosophy and process.

BNY メロン・アセット・マネジメント・ジャパン株式会社
BNY Mellon Asset Management Japan Limited

金融商品取引業者：関東財務局長（金商）第 406 号
〔加入協会〕一般社団法人　投資信託協会
　　　　　　一般社団法人　日本投資顧問業協会
　　　　　　一般社団法人　第二種金融商品取引業協会