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FIXED INCOME STRATEGY • JANUARY 2018

Fuel for (over)heating and more of my favorite themes

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Cold winter weather provides some inspiration for the lead theme for the 2018 fixed income outlook: *fuel for (over)heating*. The heat of global economic acceleration may lead to this narrative gaining traction in 2018, with significant implications for the global rates outlook. Fiscal stimulus in the U.S. from tax reform and potential spending increases represent an upside risk to the *room to run* theme from our 2018 Global Investment Outlook released in December.

Both cases support further policy normalization from the Federal Reserve. We see higher rates as the likely result, but potentially with a greater impact out the curve than in past years. Our fixed income asset views for 2018 center on strategies to limit the costs in a rising-rate environment of providing diversification for broad portfolios. This means an up-in-quality stance, with bonds serving as portfolio shock absorbers, and equities the primary focus of risk taking.

2018 fixed income outlook themes

- **Fuel for (over) heating:** Fiscal stimulus from tax cuts and spending plans – on top of a U.S. economy operating at full employment and both the U.S. and a handful of other developed economies operating above capacity – may provide fuel for an overheating debate in 2018. We believe the Fed would likely delay any pre-emptive action, keeping to a moderate pace of rate hikes in 2018. But an inflation acceleration could finally result in an increasing inflation risk premium.
- **Ahead of the curve:** Global yield curves flattened in 2017 but we see several reasons for this trend to halt – and perhaps even to reverse in 2018. Upside risks to growth may fuel inflation expectations and a steepening in the long end. Factors that have caused excess demand relative to supply in longer-maturity bonds appear to be shifting. Among them, central banks are pulling back on their degree of support just as fiscal stimulus implies rising issuance. This supply shift is particularly significant in the U.S. We identify how shifts in past sources of demand – ranging from global investor purchases of U.S. debt to pension fund and hedging flows – may be easing the pressures that have caused yield curves to flatten.
- **Late-cycle blues:** Credit valuations reflect dynamics of rising leverage and increased issuer friendliness but also low defaults and low uncertainty. As a result we see credit primarily as a source of income, with limited potential for price appreciation from spread compression.
- **Emerging challenges:** Emerging market (EM) debt remains a favored sector in a world of exceptionally low developed market rates. Local-currency debt appears well supported in an environment of low currency volatility. However, the outlook appears increasingly challenged as more EM central banks move to tighten policy.

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Fuel for (over)heating

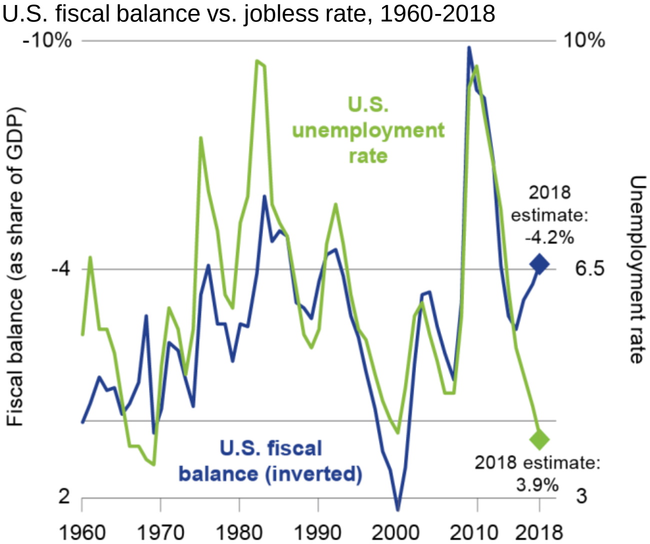
The lead theme for the 2018 fixed income outlook considers the implications of upside risks to the economic outlook. Possible catalysts: fiscal stimulus in the U.S. from tax cuts and spending, strengthening global growth, and a less-than-expected slowing in China's economy. The main beneficiary could be accelerating inflation expectations. Our 2018 Global Investment Outlook sees stable growth with ample *room to run*. Consensus growth expectations have risen since last year, however, implying greater downside from any disappointments – and underlying our *reduced reward for risk* theme. U.S. fiscal plans, however, point to significant upside potential in consensus growth forecasts for 2018, we believe. Key for fixed income investors is the contribution this may make to our *inflation comeback* theme – supportive of ongoing policy normalization, higher nominal rates and better relative performance of inflation-protected securities.

The *Fuel for (over) heating* chart highlights the unusual nature of expanding fiscal support at this stage of the economic cycle: The fiscal deficit is set to widen even as the unemployment rate touches multi-decade lows. Our investment preferences for 2018 are broadly pro-risk, but with more tempered return expectations. Our fixed income views stem from a broad portfolio perspective, leading us to favor higher-quality bonds as an offset to our preference for equities. The key role of bonds: defense and diversification.

We see the Fed forging ahead with normalization in 2018. Increased speculation on the next steps for the European Central Bank (ECB) and Bank of Japan (BoJ) is sure to follow. The Fed is guiding market expectations for three rate hikes, but we see this as a compromise between those arguing for a slower pace (or anticipating a reason to pause) and those arguing for a quarterly pace (implying four). Stable growth and accelerating inflation could lead to four rate rises in the absence of reasons to justify a pause, we believe.

Fuel for (over)heating

U.S. fiscal balance vs. jobless rate, 1960-2018



Source: BlackRock Investment Institute, with data from Bloomberg and Congressional Budget Office (CBO), December 2017. Notes: Fiscal deficits are based on CBO data. The deficit share for 2018 is based on a BlackRock estimate of the deficit (USD $829bn) and the CBO's nominal GDP forecast. The 2018 jobless rate is based on the median economic projections of Federal Reserve Board members and Bank presidents as of the December FOMC meeting. Forward looking estimates may not come to pass.

Our base case – and two "what-ifs"

Hypothetical return scenarios for 2018

Market scenarios	Room to run	Overheating	Recession fears
10-year U.S. Treasury yield move	+46 bps	+104 bps	-46 bps
U.S. IG spread move	-10 bps	+25 bps	+50 bps
U.S. core bonds	0.3%	-3.9%	3.8%
Euro core bonds	-2.1%	-4.8%	2.2%
EM hard-currency debt	3.5%	-6.6%	-1.6%
EM local-currency debt	5.5%	-6.1%	-4.0%

Source: BlackRock Investment Institute, with data from Bloomberg, December 2017. Notes: U.S. investment grade (IG) is represented by the Bloomberg Barclays US Aggregate Corporate Index, core fixed income by the Bloomberg Barclays U.S. Aggregate Bond Index. euro core fixed income by the Bloomberg Euro Aggregate Index, EM $ debt by the J.P Morgan EMBI Global Diversified Index, and local currency EM debt by the JP Morgan GBI EM Index. The U.S. 10Y move in the base case *room to run* scenario is based on the median Bloomberg consensus analyst forecast (2.92%) for end-2018 as of December 19, 2017, versus the actual 10-year yield on the same day. The *overheating* scenario assumes a rise in the 10-year yield to 3.5%; *recession fears* assumes a decline to 2.00%. We use a similar methodology in estimating changes of euro rates (German rates) as well as credit spreads. We calculate hypothetical returns of the index by multiplying the interest rate changes and the index duration. Also included in the total return estimation is the estimation of return from spread changes (we use spread duration of the index sectors and multiply them by the estimated rate spread movement). We use each index's yield as a proxy of its one-year carry. All returns are in U.S. dollar terms except for euro core bonds (in euros). It is not possible to invest directly in an index. Forward-looking estimates may not come to pass. Estimates are subject to limitations such as changing economic and market conditions.

A consensus bearish for bonds

What are the implications for fixed income returns? We summarize them in the table above, considering three different scenarios. The first, *room to run*, represents a base case with U.S. 10-year yields rising in line with the current consensus. Credit spreads across investment grade bonds and agency mortgages started the year at narrow levels. This leaves little room for spread compression to absorb the entirety of rate increases, pointing to slightly positive total returns in these assets. Core U.S. fixed income barely breaks even, while euro fixed income fares even worse.

Core bonds in both regions offer substantially more positive return potential under the (unlikely) *recession fears* scenario, which assumes a re-emergence of growth headwinds.

The *overheating* scenario would be most troubling for fixed income assets. A rapid increase in rates (roughly 100 basis points) would hit spread markets, delivering moderately wider spreads as opposed to the tightening that has often historically occurred when rates rise gently. Diversification would be challenged as the strong correlation of global rates and spreads means similar trends across global markets.

Emerging markets (EMs) would have a more negative reaction to *overheating*, with rising U.S. yields spilling over to local yields. The *recession fears* scenario, meanwhile, would undermine local returns from falling FX returns. Local EM exposures would fare best in the base case scenario, however, offering some of the greatest return potential in fixed income in a world with room to run. All of this illustrates the large risk/return trade-off in this higher-risk asset class.

Ahead of the curve

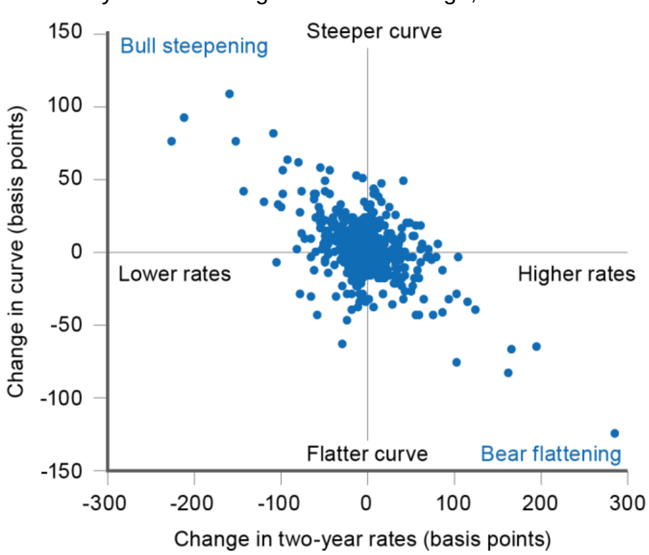
Persistent U.S. yield curve flattening in 2017 sparked great consternation among market participants. The flattening almost perfectly pivoted around the 10-year point: Shorter-term rates rose while yields on longer maturities fell. This relationship between two-and 10-year yields tracks the historical precedent: Higher two-year yields have led to flatter curves. See the *Bull steepening, bear flattening chart.*.

The bear flattening at the front end of the curve last year reflects this historical relationship. This flattening gained force as the market priced in the Fed's tightening path (bringing rates up on the short end) while subdued inflation expectations kept rates low on the long end. In the long end the move has evolved into a bull flattening, with long-term rates actually falling over 2017. This has toppled the curve relationship seen in the past, prompting a number of novel interpretations. The key concern: Bull flattening historically has been associated with late-cycle dynamics, whereby the Fed pushes up short-term rates to a level that eventually triggers a recession. The yield curve first flattened and then inverted before the last two recessions.

We don't see the current flattening as an omen of recession, but instead see technical factors at work: 1) Pension fund demand for long-term bonds ahead of tax cuts and federally mandated pension expense changes (see right column); 2) foreign demand for U.S. bonds based on yield differentials; and 3) buying from "risk parity" strategies that ramp up portfolio allocations to bonds to offset equity risk. On this last point, we calculate that nearly 40% of all curve flattening in 2017 occurred on days when investors were "buying the dip" in equities. Other explanations include global quantitative easing flattening term premia, lower "neutral" rates, and a global savings glut and preference for liquidity. See The safety premium driving low rates of November 2017.

Bull steepening, bear flattening

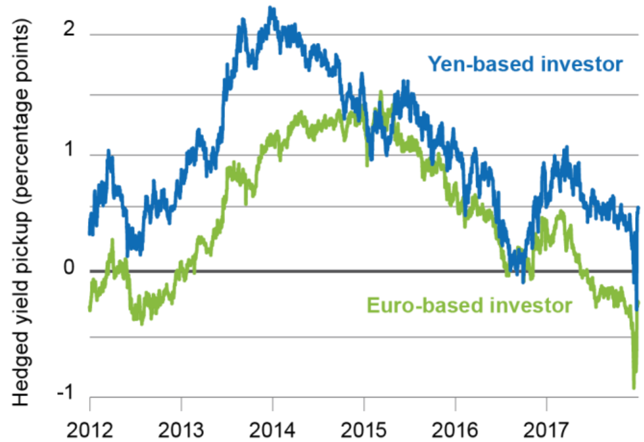
U.S. two-year rate change vs. curve change, 1977-2017



Source: BlackRock Investment Institute, with data from Bloomberg, December 2017. Notes: The horizontal axis shows the quarterly change in the U.S. two-year yield. The vertical axis shows the quarterly change in the steepness of the yield curve, represented by the gap between 10- and two-year yields. Each dot represents a monthly historical data point, starting in 1977.

Diminishing attractions

Hedged U.S. yield pickup in euros and yen, 2012-2017



Source: BlackRock Investment Institute, with data from Macro Risk Advisors, January 2018. Notes: The hedged yield pickup is the gap between the 10-year U.S. Treasury yield and the domestic 10-year yield (Japanese government bonds for yen; German bunds for euro) after hedging costs (the gap between U.S. and foreign three-month Libor plus the cross currency swap basis).

Curve technicalities

Foreign demand for higher-yielding U.S. bonds has been a long-cited culprit in keeping long rates down. But the U.S. curve is likely to stay flatter relative to global peers as long as the ECB and BoJ lag the Fed in lifting policy rates. This lowers the appeal of U.S. assets for foreign investors funding purchases in their local currency. The yield pickup for a foreign investor investing in 10-year U.S. Treasuries, for example, equals the differential with local 10-year rates in the investor's base currency, minus hedging costs. These costs effectively consist of the difference between short rates across the two currencies plus a component reflecting the relative supply/demand imbalance for U.S. dollars in the relevant foreign currency. The latter spiked in late 2017, reflecting year-end dollar funding pressures. The result was enough to entirely wipe out the advantage of investing in U.S. Treasuries for yen- or euro-based investors. See the *Diminishing attractions* chart above. The imbalance has since normalized, yet the trend is clear: The yield pickup for foreigners buying U.S. Treasuries has been on a steady decline since the Fed started normalizing. This is illustrated in Japanese Ministry of Finance data showing a decline in Japanese purchases of foreign bonds last year from peaks in 2015 and 2016.

And the outlook for other curve-flattening factors is evolving. A pulling forward of pension fund demand reflects both an investor desire to avoid higher Pension Benefit Guaranty Corporation variable fees in 2018 and the appeal of taking higher pension expenses against higher 2017 tax rates. The latter may extend into 2018, given that companies have until the extended Sept. 15 tax filing deadline to claim this expense against 2017 taxes.

Bottom line: Factors that have capped long-term U.S. yield rises are losing their potency. A flatter U.S. curve implies less foreign demand for longer-dated U.S. fixed income, reducing the downward pull on long-term rates. This is one factor leading us to favor shorter- rather than longer-maturity U.S. rates exposure in 2018.

The challenge of heaping supply

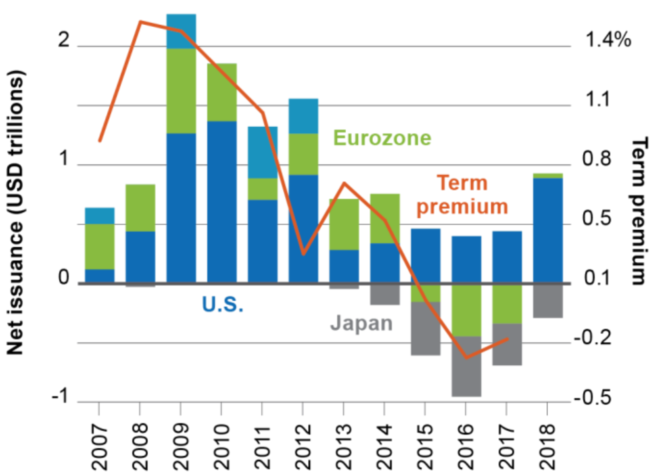
The term premium – the extra yield investors demand for holding long-dated bonds – has long been moribund. It could come back to life in 2018. The reason? Supply of Treasury debt is going up at the same time as the Fed's shrinking balance sheet reduces demand. The combined effect of Fed normalization and rising fiscal deficits means the private sector will have to absorb as much as $1.25 trillion in newly issued Treasuries in 2018, we estimate, based on an analysis of federal tax and spending plans and the Fed's plans for balance sheet runoff. This would be more than double the amount of "net net" issuance (net issuance net of Fed purchases) in 2017. We also see net net issuance in the eurozone swinging positive in 2018. Overall, G3 net issuance is set to rise to the highest level since 2012, mostly driven by the U.S. See the *Signs of steepening* chart below.

Putting it all together: greater supply coming alongside reduced central bank support and potentially lower demand from foreigners. The outlook for pension fund and risk-parity hedging flows is more uncertain. So overall we see these factors as reasons for curve steepening. Yet considerable global savings may limit both the extent of any curve steepening and the degree of increases in rates.

We believe rising inflation expectations – a core theme for 2018 – should also manifest themselves in steeper long-end curves. This improves the outlook for the front end, floating rate instruments and Treasury inflation-protected securities (TIPS) and leads us to favor shorter-maturity rate exposure over the long end to start 2018. Compressed valuations in agency mortgage-backed securities and the tail risk from the uncertain impact of Fed balance sheet normalization keep us neutral on the asset class.

Signs of steepening

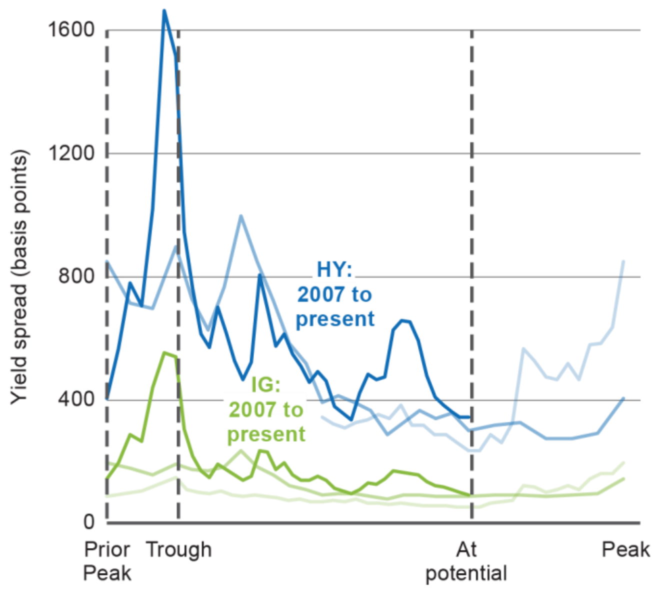
G3 term premium versus net issuance, 2007-2018



Source: BlackRock Investment Institute, with data from Morgan Stanley and Goldman Sachs, November 2017. Notes: The bars show net government bond issuance for the U.S., eurozone and Japan, net of central bank purchases via quantitative easing programs. The figures for 2018 are estimates. We assume ECB purchases of €30 billion per month, with no purchases after September 2018. We estimate BoJ purchases in line with the average pace of net purchases as of September 2017. The term premium represents the GDP-weighted average of G3 term premiums calculated based on the Adrian, Crump and Moench (ACM) model. See. For reference see the August 2008 staff report from the Federal Reserve Bank of New York: Pricing the Term Structure with Linear Regressions.

Beyond potential

Comparing U.S. economic and credit cycles, 1990-2017



Source: Blackrock Investment Institute, with data from Bloomberg, National Bureau of Economic Research (NBER) and Congressional Budget Office, December 2017. Notes: The figure lines up U.S. credit spreads with economic cycles at key points based on their peaks, troughs and the point when potential output is reached. The dark lines represent the current cycle. The lighter ones represent the past two cycles in each asset class, starting in 1990 and 2000. For details on the methodology see https://www.blackrockblog.com/cycles-in-context/

Late cycle blues

Sustained global expansion with inflation slowly moving back toward trend provides a positive backdrop for credit in the form of low default rates and stable default expectations. But valuations reflect this dynamic, as evidenced by tight spreads across both high yield and investment grade. Credit spreads have historically tightened through economic expansions. Once the cycle matures and economic spare capacity has been used up, they tend to trough, our analysis of past cycles shows. See the *Beyond potential* chart above. This implies less upside potential at this stage of the cycle, with U.S. GDP performing above potential.

The extended cycle implied by our *room to run* theme means investors may expect coupon income but with lower total returns than in recent years. Spreads are compressed both in absolute terms and across the quality spectrum, underscoring our preference for up-in-quality exposures. Our outlook for policy normalization and potentially four Fed rate increases this year lead us to prefer floating rate bank loans over high yield bonds, given loans' improving income profile and built-in buffer against rising rates.

In Europe, ongoing ECB purchases of corporate bonds leaves spreads tight, not unlike in the U.S. But the impact down the capital structure limits the attractiveness of subordinated yields, which stand below equity dividend yields. We see better risk/reward from owning equities. One caveat: Euro credit is starting to look more attractive to U.S. dollar-based investors. Absolute yields are paltry, but rising rate differentials mean U.S. investors are actually paid to hedge into euros (a mirror image of the rising hedging costs for euro-based investors purchasing U.S. assets).

Emerging challenges

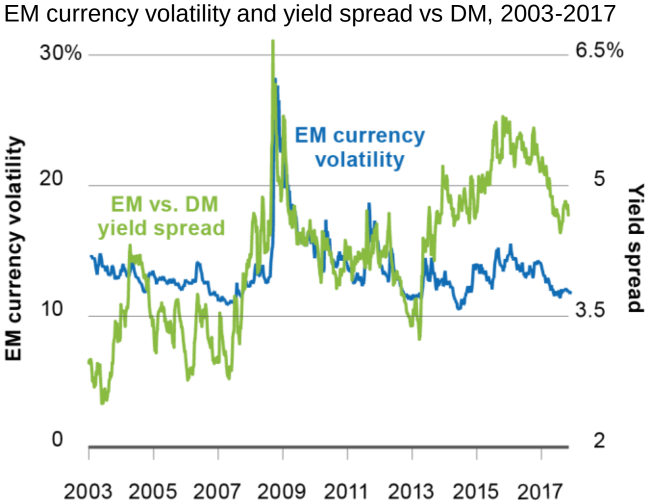
Our broad asset class views favor EM equity over EM debt. This partly reflects tight hard-currency debt spreads, which curb the upside given limited scope for further spread compression – and create a vulnerability to any rapid rate moves. Yet our base case of gradual Fed rate increases looks favorable for EMD. This is especially pertinent for local currency EM exposures, as reflected in our hypothetical return scenarios on page 2.

Risks to this view include an “overheating” state where faster increases in U.S. rates lead to a quicker shift toward tightening by EM central banks, along with higher local yields. EM policy is already undergoing a sea change from 2017. Then, six of the 18 central banks we analyzed were easing, with only three hiking. We see five easing and 11 increasing rates in 2018. Tighter policy prospects reduce our return expectations relative to 2017. However, still wide yield differentials versus developed markets make this a preferred destination for fixed income flows in the context of a stable economic backdrop that should keep FX volatility — a main risk to these strategies — on the lower end of its historical range. See the *Still wide yield differentials* below.

Of particular interest in 2018: Asian credit. Chinese issuance has been rapidly rising in hard-currency indexes, leading to the share of China-related debt rising from 22% in 2009 to 57% as of January 2018, based on the JACI index. Onshore RMB-denominated markets have yet to enter broad indexes, but the gradual opening of these markets and potential issuance volume create new sources of return — and risk. China growth in 2017 surprised to the upside despite policy tightening. A reduced focus on strict nominal growth targets may signal a new emphasis on financial stability, centered on quality of growth over quantity. Longer-term challenges include a substantial overhang in leverage and sector overcapacity, but supply-side and financial sector regulatory reforms have begun to address the problems.

Still wide yield differentials

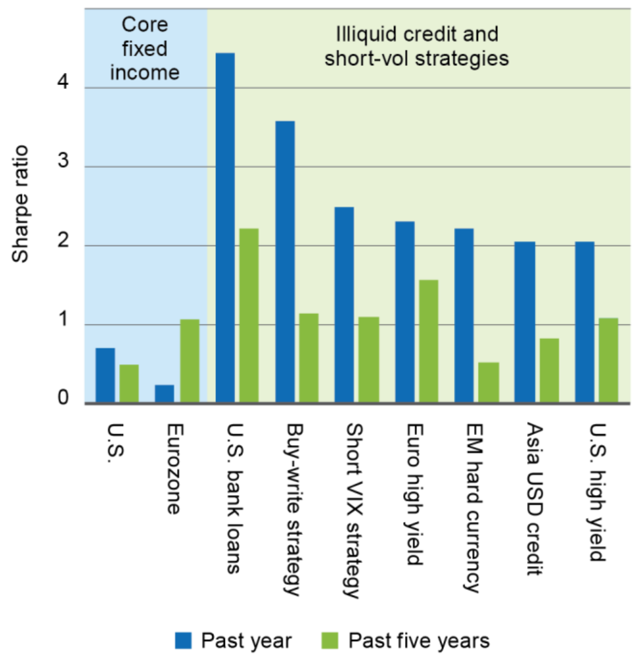
EM currency volatility and yield spread vs DM, 2003-2017



Past performance is not a reliable indicator of future results. It is not possible to invest directly in an index. Source: BlackRock Investment Institute, with data from Bloomberg, December 2017. EM currency volatility is represented by the JP Morgan Emerging Market Volatility Index. The yield spread between EM and developed market (DM) debt is calculated as the yield differential between the JP Morgan GBI-EM Global Diversified Index and the JP Morgan GBI Global Index.

Abnormal reward for risk

Sharpe ratios by asset class, 2012-2017



Past performance is no guarantee of future results. It is not possible to invest directly in an index. Source: BlackRock Investment Institute, with data from Bloomberg, January 2018. Notes: The Sharpe ratio is the average weekly excess return divided by the volatility of returns. Indexes used (from left to right): Bloomberg Barclays U.S. Aggregate, Bloomberg Barclays Euro Aggregate, S&P/LSTA Leveraged Loan, CBOE S&P 500 BuyWrite, S&P 500 VIX Short-Term Excess Return MCAP, Bloomberg Barclays Pan-European High Yield, J.P. Morgan EMBI Global Diversified (Spread Return), J.P. Morgan JACI Diversified (Spread Return), Bloomberg Barclays US Corporate High Yield.

Sweet rewards

High returns and historically low volatility combined to deliver abnormally high risk-adjusted returns in 2017, reflected in outsized Sharpe ratios. See the chart above. This is unlikely to repeat in 2018, as suggested by our *reduced reward for risk* theme. Some of the highest Sharpe ratios last year were seen in less liquid areas of the credit markets and in short-vol strategies, as discussed in Turning stocks into bonds of November 2017. These exposures represent a key area of financial vulnerability in 2018.

Volatility measures in 2017 were exceptionally low even relative to past low-volatility regimes. We see no case for mean reversion, given the benign economic outlook. But acceleration in U.S. inflation may lead to a new source of fundamental uncertainty: How do markets react to central bank normalization when the inflation outlook no longer clearly supports the “go slow and run hot” policies that defined the years following the global financial crisis? And there is no shortage of risk scenarios to incite higher volatility in 2018. Chief among them: U.S. midterm elections, potential trade disputes, and the perennial hot spots — North Korea and the Middle East. The surprise of 2017: Despite similar foreboding, volatility moved much lower.

Our bottom line: *Fuel for (over) heating* sees upside growth and inflation potential with equities the main beneficiary and bonds playing a key diversification role. We favor shorter duration, inflation protection and high quality as key themes.

Fixed income themes and tactical asset views, January 2018

2018 themes	Asset class	View	Rationale
Fuel for (over) heating	U.S. inflation protected	▲	We expect U.S. inflation to rise back toward the Fed's 2% target. Potential upside surprises in wages and growth further support the case for TIPS. And attractive valuations add to the rationale for favoring TIPS over nominal bonds.
	Non-U.S. developed	▼	U.S. growth and increasing rate differentials point to a mildly stronger USD. We expect little policy change from the ECB or BoJ, but near-zero yields and unattractive valuations skew risks for yields to the upside.
Ahead of the curve	U.S. government bonds	Overall ▼ 1-5Y — 5-10Y ▼ 10+Y ▼	Sustained growth, rising inflation and fiscal stimulus from tax reform suggest ongoing Fed normalization with potential for a quarterly pace of rate hikes. Front-end valuations appear more attractive versus the long end, where technical factors suppressing rates may ease amid surging net issuance of Treasuries.
	Agency mortgages	—	Relatively tight valuations, prospects for a more uncertain rate outlook and potential debate around the role of MBS on the Fed's balance sheet temper the advantages of liquidity and high quality, leaving us neutral the sector.
Late cycle blues	U.S investment grade	—	Late-cycle credit valuations leave less room for upside. An extended cycle with room to run suggests returns should come from carry, rather than spread compression. Thus we expect lower returns than in past years. Within credit we prefer up-in-quality exposures as ballast to equity risk.
	U.S. high yield	—	Valuations appear fair, reflecting the late-cycle environment, stable growth and a benign default outlook. We believe sector provides a good source of higher income, but we prefer to take risk in equities.
	Bank loans	—	The Fed's ongoing policy normalization, and the potential for four Fed rate increases in 2018, lead us to prefer the lower duration risk of bank loans over high yield bonds. But tight valuations and fewer lender protections keep us neutral overall on the sector.
	Securitized assets	▲	We favor shorter duration and higher quality exposures in securitized assets exposed to the U.S. consumer, residential markets and commercial real estate, given improving U.S. growth, strong property prices and solid consumer balance sheets.
	Euro credit	▼	Ongoing ECB purchases have compressed spreads across sectors and credit-quality buckets. Negative rates have crimped absolute yields – and rising rate differentials make currency hedged positions increasingly attractive for U.S. dollar investors. Subordinated financial debt appears less attractive versus equities after a strong 2017.
Emerging challenges: Equities over debt	Emerging markets	—	Our base case of gradual Fed rate increases is favorable for local-currency EM exposures, but we have reduced our return expectations as EM central banks increasingly tighten monetary policy in response. Local-currency yields remain attractive relative to those in the developed world. Solid fundamentals and strong inflows should keep EM currency volatility in check.
	Asia fixed income	—	Regional growth and inflation dynamics are supportive of credit. China's rising representation in the region's bond landscape reflects its growing credit market. Higher quality growth and a focus on financial sector reforms are long-term positives, but any China growth slowdown would be a near-term challenge.

▲ Overweight — Neutral ▼ Underweight

Source: BlackRock Investment Institute, January 2018. Notes: All views are from a U.S. dollar perspective. Subject to change. Asset views represent an assessment of the market environment at a specific time and are not intended to be a forecast or guarantee of future results. This information should not be relied upon by the reader as research, investment advice or a recommendation.

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BII0118U/E-371716-1132077