FOR INSTITUTIONAL, PROFESSIONAL, WHOLESALE, QUALIFIED INVESTORS AND QUALIFIED CLIENTS. FOR PUBLIC DISTRIBUTION IN THE U.S. ONLY

FIXED INCOME STRATEGY • AUGUST 2018

The flattening that really matters

Jeffrey Rosenberg
Chief Fixed Income Strategist,
BlackRock Investment Institute

The flattening U.S. yield curve is in the spotlight. Is the curve set to invert – and foreshadow a recession as it often has in the past? We explain why comparisons with past flattening episodes may be a case of apples and oranges. And we argue that when it comes to flattening, investors are focused on the wrong curve: It is the flattening in return expectations between low- and high-risk assets that really matters.

Highlights

- We caution against comparing the shape of today's U.S. Treasury yield curve to the past and using it as a recessionary signal in isolation. Post-crisis ultra-easy monetary policies, a structural rise in risk aversion, and the run-off of maturing bonds on the Federal Reserve's crisis-era balance sheet may make the slope of the yield curve less informative than it has been historically, we believe.
- We highlight a simple historical relationship between the slope of the U.S. yield curve and the "unemployment gap" – a measure of labor market slack. Both have dropped to multi-year lows, consistent with their historical behavior in the latter stage of economic cycles. This argues for building resilience into portfolios.
- The flattening that really matters, in our view, is the one taking place in the securities market line (SML). This shows the risk-return tradeoff across assets. Expected returns on lower-risk assets have risen alongside the Fed's policy rates, reducing the need to stretch for yield into higher-risk sectors. This has triggered volatility in the fixed income market – and underpins our defensive stance: a preference for U.S. short duration and higher-quality credit.

Market recap

The 10-year Treasury yield tested 3% again in early August. Short-maturity Treasuries have significantly outperformed longer bonds this year to date – as seen in the table below -- reinforcing our preference for the short end.

Bond market summary

Sector	View	YTD return	Yield
U.S. aggregate	—	-1.50%	3.34%
U.S. government bonds	▼	-1.42%	2.82%
Short (1-5 years)	▲	-0.33%	2.70%
Intermediate (5-10)	▼	-1.88%	2.90%
Long (10+)	▼	-4.56%	3.08%
U.S. inflation protected	▲	-0.48%	3.04%
Agency mortgages	—	-0.95%	3.47%
Non-U.S. developed	▼	-2.23%	0.97%

Sector	View	YTD return	Yield
U.S. municipal bonds	—	-0.11%	2.69%
U.S. investment grade	—	-2.35%	3.97%
U.S. high yield	—	1.42%	6.27%
Bank loans	—	2.99%	5.19%
Securitized assets	▲	-0.85%	3.52%
Euro credit	▼	-0.22%	0.96%
Emerging markets	—	-3.11%	6.28%
Asia fixed income	—	-1.97%	5.01%

▲ Overweight — Neutral ▼ Underweight 🡅 Upgrade 🡇 Downgrade

Past performance is not a reliable indicator of current or future results. It is not possible to invest directly in an index. Source: Bloomberg, as of August 3, 2018. Notes: Performance and yields are represented by the S&P Leveraged Loan Index (bank loans); J.P Morgan EMBI Global Diversified Index (EM hard-currency debt), J.P. Morgan Asia Credit Index (Asia fixed income), and the respective Barclays Bloomberg indexes for the remaining sectors. Yields are yield to maturity, except U.S. high yield and municipal bonds (yield to worst). Performance is measured in total returns and in U.S. dollars, except for Euro credit (euros). Our TIPS view reflects relative performance vs. nominal U.S. Treasuries. Indexes used are not intended to be indicative of any fund or strategy's performance.

BLACKROCK®

BII0818U-566307-1788992

Not your parents' yield curve

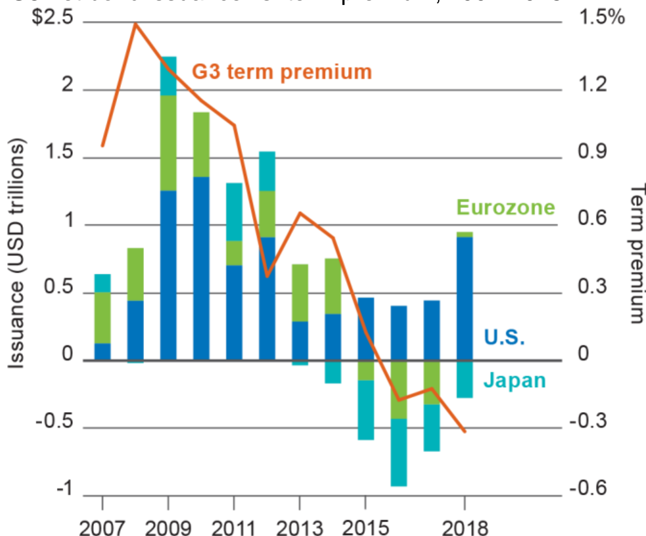
The flattening U.S. yield curve has sparked much debate. Is the curve still a useful perceived recession indicator? It has inverted before every recession since WWII, yet we caution against using the flattening yield curve in isolation as a signal. A flatter yield curve was the *intention* of post-crisis ultra-easy monetary policies. Once short-term rates dropped to zero, global central bankers looked to provide further easing by lowering long-term rates. That influence on the long end has yet to fade – even as the Fed normalizes policy. Market anticipation over a Bank of Japan policy tweak that allowed long-term Japanese bond yields to move in a wider range initially led to steeper yield curves globally.

The Fed's gradual balance sheet run-off implicitly is holding down long-end yields. The Fed is maintaining its long-term bond holdings, rather than actively selling them. And it is still reinvesting a portion of its maturing bond holdings, while allowing the rest to run off at maturity. A shift in the mix of issuance has also helped flatten the yield curve as new supply ramps up to fund tax cuts and spending increases. Bills (up to 52-week maturities) made up 42% of gross new issuance in the first half, a turnaround from muted bill issuance in recent years, according to U.S. Treasury data as of end-July. Yet this mix could change. A recent Treasury advisory report suggested issuing more long-term bonds.

Another reason to expect flattening pressures to ease: Net global bond issuance (after central bank purchases) is set to return to positive territory in 2018, driven by the surge in new U.S. paper. See the *Back in black* chart below. Such issuance levels have historically come with a much higher term premium (orange line) – or excess yield compensating investors for holding longer-term bonds. This suggests there could be pressure on the curve to steepen, although a structural rise in risk aversion since the 2008 crisis could slow any rise in long-term rates. See The safety premium driving low rates of November 2017.

Back in black

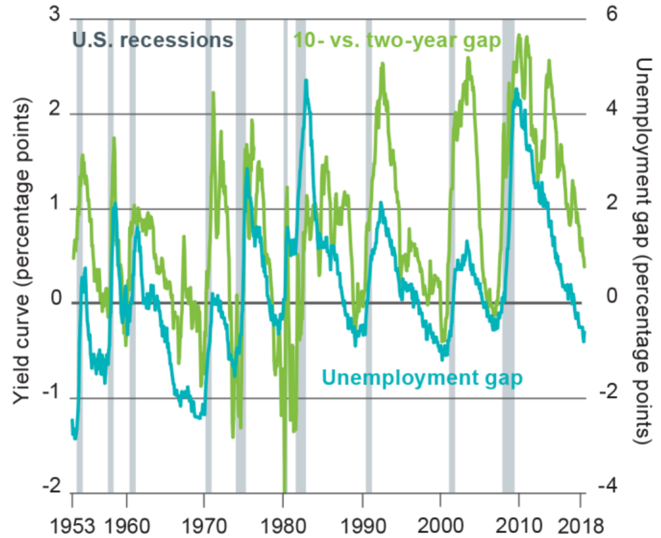
G3 net bond issuance vs. term premium, 2007-2018



Source: BlackRock Investment Institute, with data from Morgan Stanley, July 2018. The orange line is a GDP-weighted average of the term premia of U.S., Japan and Germany 10-year government bonds, based on the ACM model developed by New York Fed economists Tobias Adrian, Richard Crump and Emanuel Moench. Issuance is net of central bank purchases. 2018 figures are full-year estimates.

Mind the gap

U.S. yield curve vs. unemployment gap, 1953-2018



Source: BlackRock Investment Institute, with data from Bloomberg and Congressional Budget Office (CBO), July 2018. Notes: The teal line represents the (U3) U.S. unemployment rate minus the non-accelerating inflation rate of unemployment (NAIRU), as estimated by the CBO. The yield curve is represented by the gap between 10-year and two-year constant-maturity U.S. Treasury note yields, based on Federal Reserve data. The one-year Treasury yield is used instead of the two-year for pre-1962 curve calculations.

Beyond the flattening yield curve

What about the link between the yield curve and economic indicators? We find the spread between the 10- and two-year U.S. Treasury yield has historically followed a similar track to the unemployment gap (the difference between the actual and "natural" rate of unemployment – a hypothetical level of unemployment below which inflation rises).

At the trough of the economic cycle, high unemployment tends to lead to a larger unemployment gap. The natural rate changes slowly due to structural forces such as productivity and demographics. Monetary policy is usually highly accommodative in these periods. Short-term rates fall relative to long-term rates, widening the 10- to two-year yield gap (steepening the yield curve). See the *Mind the gap* chart above. Conversely, the yield curve has historically flattened in the latter stages of the economic cycle, as the unemployment gap narrows. The relationship was less stable during the mid-1960s to mid-1980s, due to high volatility of realized inflation. Yet overall, the coincident move in these indicators since the global financial crisis has been consistent with their behavior since the mid-1950s. The unemployment gap has fallen from a peak in 2009 to a 17-year low, as the chart shows, on the back of a strong labor market. And the yield curve has flattened in line with this, also reflecting the Fed's policy normalization.

History suggests the yield curve can stay flat for years before eventually inverting, as it did in the late 1990s. And our BlackRock Growth GPS still points to steady global growth ahead. The key message: We see reasons to believe the yield curve may be a less useful economic signal than in the past, but with the unemployment gap telling a similar late-cycle story, it makes sense to fortify portfolios.

A flattening securities market line

The only thing more persistent than the flattening yield curve has been market fears about the yield curve. But this attention may be misdirected. We highlight another "curve" that is arguably of greater importance to investors: the securities market line that illustrates the tradeoffs between risks (volatility) and returns across asset classes.

The two SMLs on the *The other kind of flattening* chart represent the yields of the broad fixed income market, adjusted for risk, for 2012 – in the midst of the Fed's quantitative easing campaign – and 2018. The 2018 trend line (green) is much flatter than the 2012 line (blue), as yields on lower-risk assets such as U.S. Treasuries have significantly increased alongside the Fed's interest rate increases. In some cases the volatility of higher-risk assets has climbed, while their yields have fallen (see global ex-U.S. bonds). The result: a flattening of return expectations across the risk spectrum that means investors today have far less incentive to stretch for yield.

For much of the post-crisis period, global monetary policies encouraged an explicit flattening of the SML. A process dubbed "portfolio rebalance" by former Fed Chair Ben Bernanke illustrates how this would help stabilize markets and stimulate growth: As the Fed bids up prices of Treasuries and mortgage-backed securities and pushes down their yields (effectively lowering yields on the lower-risk, or "short" end of the SML), investors react by moving out the risk spectrum. Eventually, the Fed hits the zero bound in interest rates (pulling down the yields on the least risky assets to zero or negative) and investors push down the yields of riskier assets. This causes the SML to flatten.

Building ballast

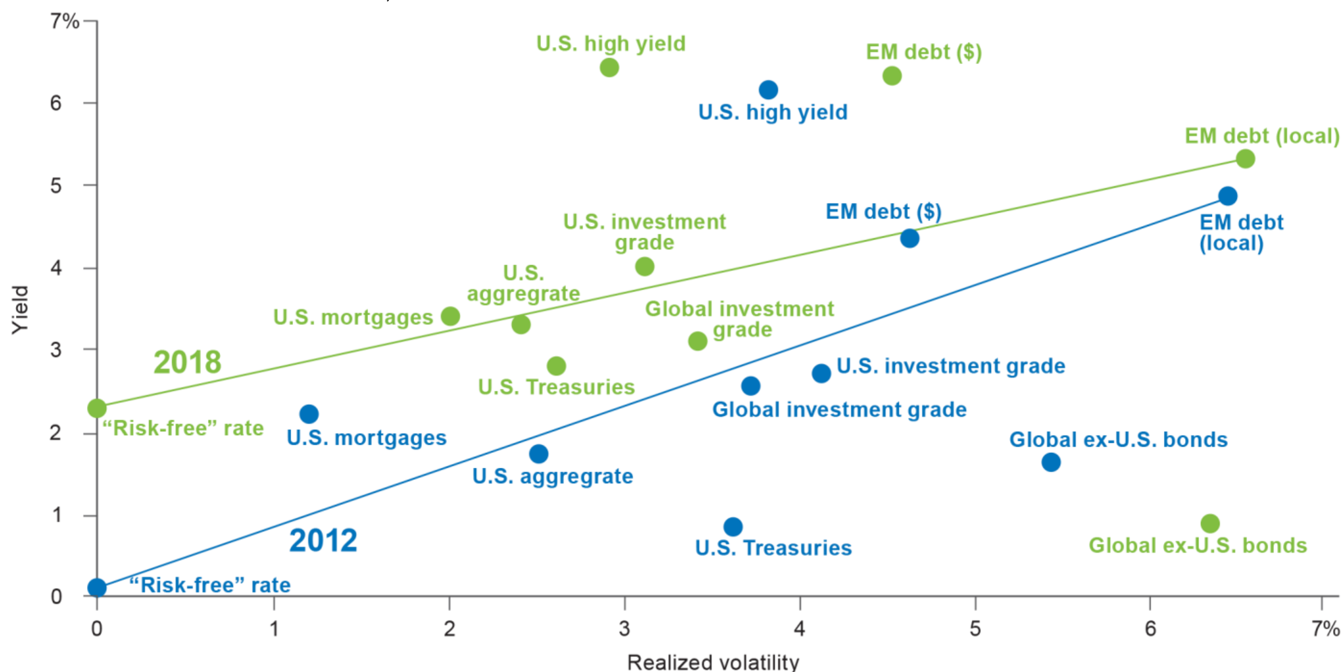
The critical question today: What happens to markets as this process goes in reverse? We are seeing early signs of a shift. Yields on some perceived "safe" assets, such as short-term U.S. Treasuries, have risen, contributing to bursts of volatility in global fixed income markets. Why? Attractive yields on these assets – now above U.S. inflation – are heating up the competition for capital. As more money pours into lower-risk U.S.-dollar denominated assets, demand for the U.S. dollar has risen – and demand for riskier assets has declined. All else equal, riskier investments need to offer higher returns (meaning lower prices) to appeal to investors.

The renewed appeal of cash is primarily a U.S. story for now. Eurozone investors, for example, still face negative rates at home and a hefty cost of hedging for venturing into U.S. dollar assets. This could change as other central banks such as the European Central Bank and Bank of Japan start winding back their own easy monetary policies.

The bottom line: Portfolio rebalancing in reverse is a tricky process. The Fed's gradual normalization process and clear signaling of its policy intent are aimed at avoiding financial market disruption. But the volatility we've seen so far this year – also a result of rising economic uncertainty driven by trade disputes and potential U.S. economic overheating – suggests a more cautious approach to fixed income investing is warranted. We advocate building ballast into fixed income portfolios. We prefer an up-in-quality stance in credit as an offset to equity exposure in portfolios. And we prefer short-duration debt and floating-rate exposures in this rising interest rate environment.

The other kind of flattening

Fixed income securities market line, 2012 vs. 2018



Past performance is not a reliable indicator of future results. Indexes are unmanaged. It is not possible to invest directly in an index. Source: Blackrock Investment Institute based on data from Bloomberg, July 2018. Notes: The chart shows the relationship between the yield and realized volatility of various fixed income assets in December 2012 and July 2018, periods when the "risk-free" rate differed. We use one-year realized total return volatility as a proxy for risk, and yield as a proxy for expected returns. We use the U.S. one-year overnight indexed swap (OIS) rate as a proxy for the "risk-free" rate, and assume zero volatility in this "risk-free" rate. We use Bloomberg Barclays indexes for all asset classes represented, except for U.S.-dollar emerging market debt, for which we use the J.P. Morgan EMBI Global Diversified Index.

BlackRock Investment Institute

The ***BlackRock Investment Institute*** (BII) provides connectivity between BlackRock's portfolio managers, originates research on markets, economics, portfolio construction and cross-asset themes such as geopolitics; develops investment views on behalf of BlackRock; and publishes insights. Our goals are to help our portfolio managers become even better investors and to produce thought-provoking investment content for clients and policymakers.

General Disclosure: This material is prepared by BlackRock and is not intended to be relied upon as a forecast, research or investment advice, and is not a recommendation, offer or solicitation to buy or sell any securities or to adopt any investment strategy. The opinions expressed are as of [Month Year] and may change as subsequent conditions vary. The information and opinions contained in this material are derived from proprietary and nonproprietary sources deemed by BlackRock to be reliable, are not necessarily all-inclusive and are not guaranteed as to accuracy. As such, no warranty of accuracy or reliability is given and no responsibility arising in any other way for errors and omissions (including responsibility to any person by reason of negligence) is accepted by BlackRock, its officers, employees or agents. This material may contain 'forward looking' information that is not purely historical in nature. Such information may include, among other things, projections and forecasts. There is no guarantee that any forecasts made will come to pass. Reliance upon information in this material is at the sole discretion of the reader. This material is intended for information purposes only and does not constitute investment advice or an offer or solicitation to purchase or sell in any securities, BlackRock funds or any investment strategy nor shall any securities be offered or sold to any person in any jurisdiction in which an offer, solicitation, purchase or sale would be unlawful under the securities laws of such jurisdiction. Past performance is not a reliable indicator of current or future results and should not be the sole factor of consideration when selecting a product or strategy.

In the U.S., this material is intended for public distribution. **In Canada**, this material is intended for permitted clients only, is for educational purposes only, does not constitute investment advice and should not be construed as a solicitation or offering of units of any fund or other security in any jurisdiction. **In the EU** issued by BlackRock Investment Management (UK) Limited (authorised and regulated by the Financial Conduct Authority). Registered office: 12 Throgmorton Avenue, London, EC2N 2DL. Registered in England No. 2020394. Tel: 020 7743 3000. For your protection, telephone calls are usually recorded. BlackRock is a trading name of BlackRock Investment Management (UK) Limited. This material is for distribution to Professional Clients (as defined by the FCA Rules) and Qualified Investors and should not be relied upon by any other persons. **For qualified investors in Switzerland**, this material shall be exclusively made available to, and directed at, qualified investors as defined in the Swiss Collective Investment Schemes Act of 23 June 2006, as amended. **Issued in the Netherlands** by the Amsterdam branch office of BlackRock Investment Management (UK) Limited: Amstelplein 1, 1096 HA Amsterdam, Tel: 020 - 549 5200. **In South Africa**, please be advised that BlackRock Investment Management (UK) Limited is an authorised Financial Services provider with the South African Financial Services Board, FSP No. 43288. **In Dubai**: This information can be distributed in and from the Dubai International Financial Centre (DIFC) by BlackRock Advisors (UK) Limited – Dubai Branch which is regulated by the Dubai Financial Services Authority ("DFSA") and is only directed at 'Professional Clients' and no other person should rely upon the information contained within it. Neither the DFSA or any other authority or regulator located in the GCC or MENA region has approved this information. This information and associated materials have been provided for your exclusive use. This document is not intended for distribution to, or use by, any person or entity in any jurisdiction or country where such distribution would be unlawful under the securities laws of such. Any distribution, by whatever means, of this document and related material to persons other than those referred to above is strictly prohibited. **For investors in Israel**: BlackRock Investment Management (UK) Limited is not licensed under Israel's Regulation of Investment Advice, Investment Marketing and Portfolio Management Law, 5755-1995 (the "Advice Law"), nor does it carry insurance thereunder. **In Singapore,** this is issued by BlackRock (Singapore) Limited (Co. registration no. 200010143N) for use only with institutional investors as defined in Section 4A of the Securities and Futures Act, Chapter 289 of Singapore. **In Hong Kong**, this material is issued by BlackRock Asset Management North Asia Limited and has not been reviewed by the Securities and Futures Commission of Hong Kong. This material is for distribution to "Professional Investors" (as defined in the Securities and Futures Ordinance (Cap.571 of the laws of Hong Kong) and any rules made under that ordinance.) and should not be relied upon by any other persons or redistributed to retail clients in Hong Kong. **In South Korea**, this material is issued for the exclusive use of the recipient who warrants by receipt of this material that they are a Qualified Professional Investors. **In Taiwa**n, Independently operated by BlackRock Investment Management (Taiwan) Limited. Address: 28F., No. 100, Songren Rd., Xinyi Dist., Taipei City 110, Taiwan. Tel: (02)23261600. **In Japan**, this is issued by BlackRock Japan. Co., Ltd. (Financial Instruments Business Operator: The Kanto Regional Financial Bureau. License No375, Association Memberships: Japan Investment Advisers Association, the Investment Trusts Association, Japan, Japan Securities Dealers Association, Type II Financial Instruments Firms Association.) For Professional Investors only (Professional Investor is defined in Financial Instruments and Exchange Act) and for information or educational purposes only, and does not constitute investment advice or an offer or solicitation to purchase or sells in any securities or any investment strategies. **Issued in Australia and New Zealand** by BlackRock Investment Management (Australia) Limited ABN 13 006 165 975 AFSL 230 523 (BIMAL) for the exclusive use of the recipient who warrants by receipt of this material that they are a wholesale client and not a retail client as those terms are defined under the Australian Corporations Act 2001 (Cth) and the New Zealand Financial Advisers Act 2008 respectively. BIMAL is the issuer of financial products and acts as an investment manager in Australia. BIMAL does not offer financial products to persons in New Zealand who are retail investors (as that term is defined in the Financial Markets Conduct Act 2013 (FMCA)). This material does not constitute or relate to such an offer. To the extent that this material does constitute or relate to such an offer of financial products, the offer is only made to, and capable of acceptance by, persons in New Zealand who are wholesale investors (as that term is defined in the FMCA). This material has not been prepared specifically for Australian or New Zealand investors and may contain references to dollar amounts which are not Australian or New Zealand dollars and financial information which are not prepared in accordance with Australian or New Zealand law or practices. **In China:** This material may not be distributed to individuals resident in the People's Republic of China ("PRC", for such purposes, excluding Hong Kong, Macau and Taiwan) or entities registered in the PRC unless such parties have received all the required PRC government approvals to participate in any investment or receive any investment advisory or investment management services. **For Other Countries in APAC:** This material is provided for your informational purposes only and must not be distributed to any other persons or redistributed. This material is issued for Institutional Investors only (or professional/sophisticated/qualified investors as such term may apply in local jurisdictions) and does not constitute investment advice or an offer or solicitation to purchase or sell in any securities, BlackRock funds or any investment strategy nor shall any securities be offered or sold to any person in any jurisdiction in which an offer, solicitation, purchase or sale would be unlawful under the securities laws of such jurisdiction. **In Latin America and Iberia, for institutional investors and financial intermediaries only (not for public distribution).** This material is for educational purposes only and does not constitute investment advice or an offer or solicitation to sell or buy any shares of any fund or security and it is your responsibility to inform yourself of, and to observe, all applicable laws and regulations of your relevant jurisdiction. If any funds are mentioned or inferred in this material, such funds may not been registered with the securities regulators of Argentina, Brazil, Chile, Colombia, Mexico, Panama, Peru, Portugal, Spain Uruguay or any other securities regulator in any Latin American or Iberian country and thus, may not be publicly offered in any such countries. The securities regulators of any country within Latin America or Iberia have not confirmed the accuracy of any information contained herein. No information discussed herein can be provided to the general public in Latin America or Iberia. The contents of this material are strictly confidential and must not be passed to any third party. ©2018 BlackRock, Inc. All Rights Reserved. **BLACKROCK** is a registered trademark of BlackRock, Inc. All other trademarks are those of their respective owners.

BLACKROCK®

BII0818U-566307-1788992