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FIXED INCOME STRATEGY • FEBRUARY 2018

Recalibration and repatriation

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The early February spike in equity market volatility came on the heels of fast-rising bond yields. What's behind the quickening pace? Our 2018 fixed income outlook — *Fuel for (over)heating* — offers one possible explanation: U.S. fiscal stimulus, confidence-inducing investment and a steady global expansion conspire to reawaken investor inflation fears. But there is more to the recalibration of rate expectations. Increasing Treasury supply, the weakening U.S. dollar and high oil prices are at play.

Highlights

- **Rate recalibration:** Bumper issuance of government bonds this year is helping push yields higher, and the equity selloff this month is a reminder the pace of rate increases matters. Ill-understood products shorting volatility magnified the downdraft, highlighting the asymmetric risks for investors seeking income.
- **Relevant repatriation:** Low rates in the rest of the world anchor U.S. yields. That has been the story to explain low U.S. rates and a flattening yield curve. Fading confidence in dollar stability now could turn this causality on its head: A weakening dollar may push up rate differentials as non-U.S. investors repatriate assets.
- **Investment conclusions:** We see steadily higher rates and steeper curves favoring short over long maturities in government debt. We like floating rate and inflation-linked securities as buffers against rising rates and inflation. We prefer an up-in-quality stance in credit, favoring investment grade over high yield.

Rapid rate rises

Government bond yields have sprinted higher this year, wiping out 2017 gains for benchmark indexes. The early February equity selloff spilled over into credit markets, with spreads widening across geographies, sectors and quality buckets.

Bond market summary

Sector	View	YTD return	Yield
U.S. aggregate	—	-1.92%	3.06%
U.S. government bonds	▼	-1.91%	2.51%
Short (1-5 years)	▲ ↑	-0.51%	2.24%
Intermediate (5-10)	▼	-2.18%	2.71%
Long (10+)	▼	-6.37%	3.09%
U.S. inflation protected	▲	-2.04%	2.59%
Agency mortgages	—	-1.75%	3.31%
Non-U.S. developed	▼	1.50%	0.89%

Sector	View	YTD return	Yield
U.S. municipal bonds	—	-1.40%	2.62%
U.S. investment grade	—	-2.28%	3.59%
U.S. high yield	—	-1.27%	6.36%
Bank loans	—	0.94%	5.29%
Securitized assets	▲	-1.06%	3.14%
Euro credit	▼	-0.57%	0.87%
Emerging markets	—	-2.51%	5.74%
Asia fixed income	—	-1.33%	4.35%

▲ 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 Feb. 9, 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.

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Revealing asymmetric risk

What's behind the rapid rate rises? Markets appear to have suddenly woken up to the prospect of an inflation comeback in the U.S. Yet this story has been in early drafts for some time. It's a key theme of our *2018 Global investment outlook*. A deeper read includes a chapter on issuance. Supply of Treasury bonds is headed up, and demand is declining. We estimate net supply could increase by some $488 billion, just as an erstwhile reliable buyer, the Federal Reserve, is trimming re-investments. This upsets the supply/demand balance of Treasury bonds and portends higher rates.

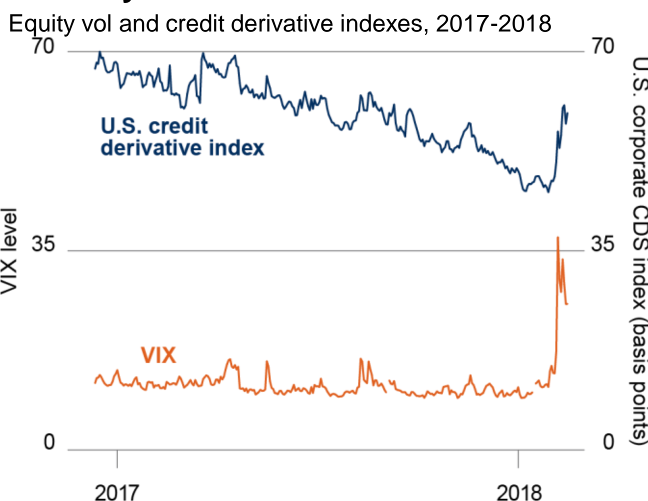
The quickening pace of rising yields reduced the attractiveness of risky assets relative to perceived safe haven assets. A sure way of quickly restoring the balance is an increase in expected equity returns through a lowering of today's prices. Yet the outsized market volatility accompanying the equity selloff exposed a technical aspect foretold in *Turning stocks into bonds*.

An unwind of popular strategies betting against higher volatility magnified the move. Income-seeking investors had flocked to them. These strategies had been generating steady risk-adjusted returns, as evidenced by unusually high Sharpe ratios – until their setback this month. The spike in the U.S. equity volatility gauge was off the charts, with the VIX more than tripling after an extended period of showing no pulse. This undid many strategies predicated on persistent low vol. The impact rippled across global credit markets. The cost of buying protection against default via credit default swaps (CDS) has risen markedly. See the *Volatility shock* chart.

Conclusion: The early February selloff highlights the need for investors to be aware of the downside risks in the pursuit of income. Selling options to generate income can result in consistent risk-adjusted returns during periods of stability. Yet the perceived safety implied by such stability can prove illusory as historical volatility does a poor job of capturing downside risks.

Volatility shock

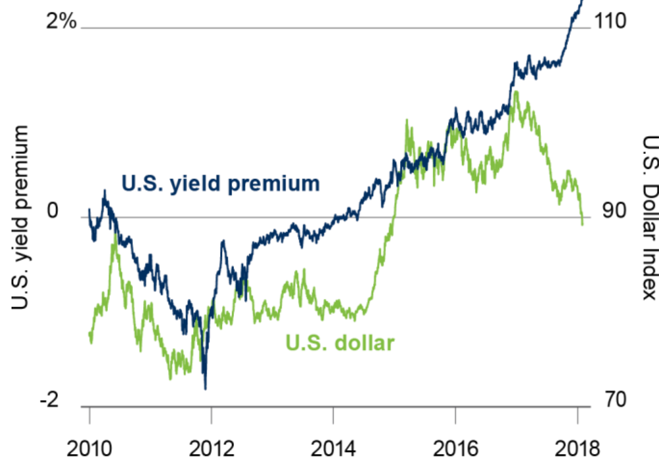
Equity vol and credit derivative indexes, 2017-2018



Source: BlackRock Investment Institute, with data from Bloomberg, February 2018. Notes: Equity volatility is represented by the VIX index; credit derivatives by Markit's U.S. CDX.NA.IG, an index of 125 North American investment grade companies' credit default swaps.

Parting ways

U.S. two-year yield premium and U.S. dollar, 2010-2018



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 Thomson Reuters, February 2018. Notes: The U.S. dollar is based on the U.S. Dollar Index. The U.S. yield premium is calculated as the U.S. two-year government bond yield minus a composite of two-year eurozone, Japan and UK yields that are GDP-weighted. The eurozone yield is based on an average of German, French and Italian two-year government bond yields.

Relevant repatriation

A less obvious culprit behind rising rates in January was the weakening U.S. dollar. This confounded those who had expected a firm bid for the dollar from U.S. companies repatriating funds held abroad thanks to the new U.S. tax legislation. But the bulk of the overseas corporate cash pile is already in U.S dollars, as we explain in *Investing after the U.S. tax overhaul*, so we believe the impact is minimal.

We do see signs of a different sort of repatriation at work. The combination of the U.S. tax overhaul and a possible jump in government spending has boosted our U.S. growth expectations, as detailed in *Heating up, slowly*. But it also has raised investor confidence that the synchronized global expansion can persist, spurring an embrace of risk assets globally. Investors are ditching perceived safe havens such as U.S. Treasuries to chase yield in emerging markets (EM) and returns in global equities.

How about the ever-expanding interest rate differential between the U.S. and other developed markets? The U.S. rate advantage recently hit record highs, as the *Parting ways* chart shows. The connection used to have a simple and appealing intuition: Higher U.S. rates attract global fixed income flows. No longer, in our view.

One reason is that such arguments miss important nuances of how global bond flows work. For one, currency risk matters. Rising hedging costs have reduced the attractiveness of U.S. rates to foreign investors, as detailed in *Fuel for (over)heating*. Result: less foreign buying. This has lifted an anchor holding down yields on longer-dated U.S. rates. Second, hedged flows depend on comparisons of yield curve shapes, rather than differences in 10-year rates.

Co-determined relationships

Many international investors in U.S. bonds accept currency risk and don't hedge as a result. For them, the relevant considerations are both the outlook for the dollar and the attractiveness of U.S. rates over domestic alternatives. This underlies the narrative that high rate differentials attract foreign demand and support a rising value of the dollar. The implied relationship between the two is that "causality" runs from rate differentials to the dollar.

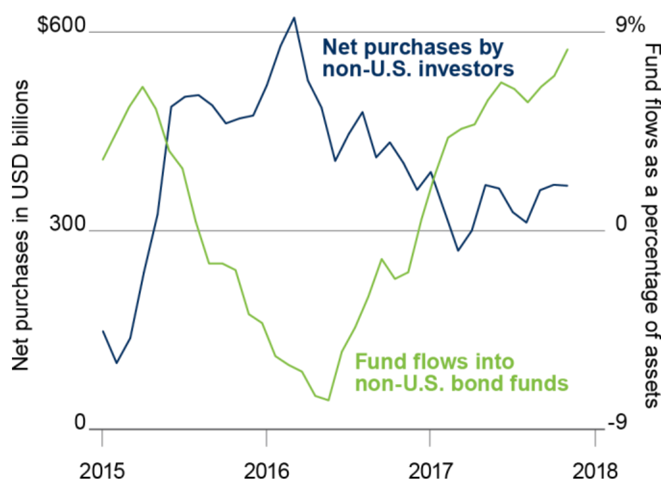
Relationships between assets often are co-determined, however, as they are in real life. This means causality can flip direction. Consider the case of the dollar versus the euro. Causality ran from rate differentials to the dollar from 2000 through the first half of 2017. It appears to have reversed since then, according to our analysis using a Granger causality test. This statistical concept is used to determine whether one time series is useful in forecasting another.

Rate differentials now look to follow the dollar rather than lead it. What could explain such a shift? First, small dollar declines can wipe out any perceived benefit from higher U.S. yields for foreign investors. Other reasons may be prospects for higher returns at home as well as expectations for rising domestic interest rates. Lastly, rising oil prices may have sparked fears over a further dollar slide (see right column).

The upshot: A flow of unhedged U.S. bond investments is headed back to the domestic markets of non-U.S. investors. This trend is showing itself in decreased foreign purchases of U.S. bonds and increased flows into non-U.S. bond funds. See the *Buyers' strike* chart. This type of repatriation is an underappreciated force in dimming the dollar's prospects.

Buyers' strike

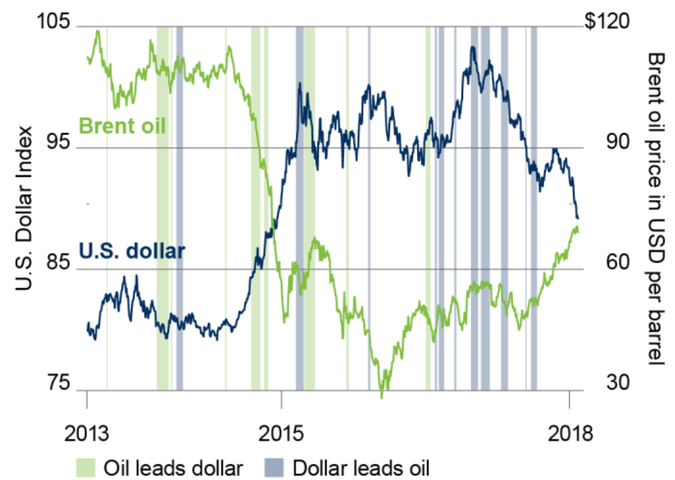
Non-U.S. Treasury buying and bond flows, 2015-2017



Source: BlackRock Investment Institute, with data from the U.S. Treasury and EPFR, February 2018. Notes: The blue line shows rolling 12-month net purchases of U.S. Treasuries, agency mortgages and corporate bonds from private non-U.S. entities. The green line shows rolling 12-month cumulative flows into non-U.S. bond mutual funds and exchange traded products as a percentage of assets.

Change of the guard

U.S. dollar versus Brent oil price, 2013-2018



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 Thomson Reuters, February 2018. Notes: The blue-shaded areas highlight periods when changes in the U.S. Dollar Index tended to lead changes in the Brent oil price by two days, according to a Granger causality analysis using rolling 90-day windows over the period shown. This statistical concept determines whether one time series is useful in forecasting another. The green-shaded areas indicate the relationship ran in the opposite direction, with changes in the oil price leading changes in the dollar index.

The oil factor

The U.S. dollar's relationship with oil prices is similarly fluid as with rates. A falling dollar leads to rising oil prices as more dollars are needed to buy the same quantity of oil, right? The genesis of this narrative stems from the 1970s, when rapidly rising inflation collapsed the value of the dollar and translated into soaring oil prices. The same history, however, can show a reverse causality. Oil embargoes and supply cuts meant the U.S. started to export vastly more dollars to the rest of the world to buy oil, pushing down the currency's value. Yet prospects of the U.S. becoming a net exporter of oil further muddle the relationship between oil and the dollar. Causality in economics is fickle. It has not run in the direction from the dollar to oil since mid-2017, according to the Granger test. See the *Change of the guard* chart. There's no evidence of a reverse causality, but we have seen movement in that direction. Any further rise in oil prices could weigh on the dollar, making crude a contributor to the pullback from U.S. debt by unhedged foreign investors. How likely is this to happen? Supply discipline by traditional oil producers and strong global demand underpin high crude prices. Yet nimble U.S. shale production tends to kick in whenever prices are high, capping the upside. This potentially reduces the role of oil in any further dollar downdraft.

Our bottom line: We see steadily steeper curves and higher rates improving the outlook for short versus long maturities. We particularly like two- to five-year bonds for their yield-duration ratios. Floating rate and inflation-linked instruments are attractive for their potential buffer against rising rates and inflation. We prefer an up-in-quality stance in credit, favoring investment grade over high yield.

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