

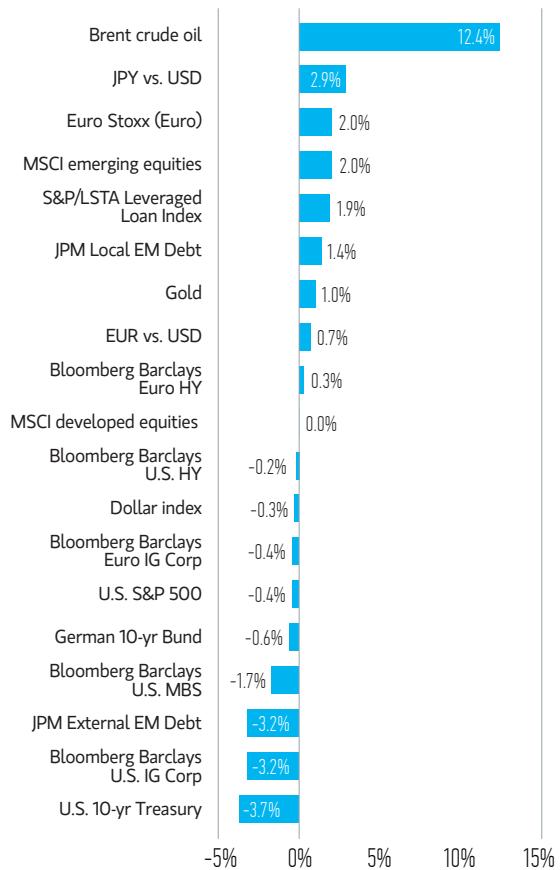
Global Fixed Income Bulletin

Ranges Are Meant to be Broken

FIXED INCOME | GLOBAL FIXED INCOME TEAM | MACRO INSIGHT | MAY 2018

By the end of April, markets—government bonds, credit and equities—were consolidating around current levels as recent economic data is digested. With the exception of the U.S., there has been a notable decline in economic growth indicators since the beginning of the year. Although the latest readings are still consistent with the global economy growing at a healthy rate, markets have begun to worry about the sustainability of the low inflation/strong growth narrative. On the back of this wariness, 10-year U.S. Treasuries have settled into a 2.80-3.00 percent range. The market's split mind is evidenced by its unwillingness to push U.S. 10-year yields above 3 percent, the post-crisis high previously achieved in early 2014. In other words, will the U.S./global economy break out of its 2007-2017 range (i.e., ending secular stagnation) or will the global economy drift back to mediocrity (or worse) in the year(s) ahead. While the better earnings and economic data have not pushed credit spreads tighter, they have helped them stabilize around current levels. However, the risk is new economic data (better or worse) could force the market to revise its expectations again. As they say, ranges are meant to be broken.

DISPLAY 1
Asset Performance Year-to-Date



Note: U.S. dollar-based performance. Source: Thomson Reuters Datastream. Data as of April 30, 2018. The indexes are provided for illustrative purposes only and are not meant to depict the performance of a specific investment. **Past performance is no guarantee of future results.** See page 12 for index definitions.

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DISPLAY 2**Currency Monthly Changes Versus U.S. Dollar**

(+ = appreciation)



Source: Bloomberg. Data as of April 30, 2018. Note: Positive change means appreciation of the currency against the U.S. dollar.

DISPLAY 3**Major Monthly Changes in 10-Year Yields and Spreads**

COUNTRY	10-YR YIELD LEVEL (%)	MONTH CHANGE (BPS)	10-YR SPREAD (BPS)	MONTH CHANGE (BPS)
(Spread over USTs)				
United States	2.95	+21		
United Kingdom	1.42	+7	-154	-15
Germany	0.56	+6	-239	-15
Japan	0.06	+1	-290	-21
Australia	2.77	+17	-18	-5
Canada	2.31	+22	-65	0
New Zealand	2.72	0	-24	-21
(Spread over Bunds)				
France	0.79	+7	23	0
Greece	3.87	-45	331	-51
Italy	1.79	0	123	-6
Portugal	1.68	+7	112	0
Spain	1.28	+12	72	+5
EM	INDEX LOCAL YIELD (%)	MTD CHANGE (BPS)	USD SPREAD (BPS)	MTD CHANGE (BPS)
EM External Spreads			333	+9
EM Local Yields	6.20	+7		
EM Corporate Spreads			245	+4
Brazil	8.29	+6	242	+4
Colombia	6.12	-10	182	+2
Hungary	1.57	+6	115	+5
Indonesia	7.05	+20	182	-2
Malaysia	4.19	+21	122	-4
Mexico	7.50	+11	263	+11
Peru	5.32	+39	152	-4
Philippines	5.30	+23	103	+1
Poland	2.46	-2	59	+4
Russia	7.07	+28	203	+8
South Africa	8.76	+20	254	+4
Turkey	12.80	-0	319	-4
Venezuela	—	—	4344	+155
CREDIT		SPREAD (BPS)	MTD CHANGE (BPS)	
U.S. IG		108	-1	
EUR IG		92	-3	
U.S. HY		338	-16	
EUR HY		292	-19	
SECURITIZED				
Agency MBS		76	-5	
U.S. BBB CMBS		298	-7	

Positive Neutral Negative

Source: Bloomberg, JP Morgan. Data as of April 30, 2018.

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Fixed Income Outlook

In April, U.S. yields sold off while other markets consolidated, following March's volatility. With the exception of the U.S., developed economy growth indicators continued to surprise on the downside even if they continued to point to continued expansion. The March surge in emerging market (EM) growth surprises also subsided but the balance remained in positive territory. A strong earnings season from U.S. corporates reinforced the thesis that the global economy remains in robust health even if there has been a slowdown in the pace of growth since the last quarter of 2017. However, equities struggled to make further headway, with the S&P 500 closing only marginally higher at month-end, while U.S. corporate credit spreads were only marginally tighter.

There has also been a notable divergence in inflation data. U.S. core inflation has risen towards the U.S. Federal Reserve's (Fed's) target, partly for technical factors (base effects in telecommunications) but also because other important components, like shelter, have remained resilient. This should help the Fed stay on the path of gradual policy normalization, and has caused the market to fully price three rate hikes for 2018, one more

than it had at the beginning of the year. In the eurozone, by contrast, inflation data have come in weaker than expected, increasing the risk that the European Central Bank (ECB) will NOT want to end its quantitative easing (QE) program in 2018. In the U.K., a weaker March inflation, as measured by the consumer price index (CPI), contributed to the market reversing its expectations of a May rate hike, although a rate hike this year is still priced with a 70 percent probability. These divergences are pushing the yield spreads between U.S. and European government bonds to multidecade wides, which are likely to persist given the divergences in monetary policy action.

It would appear that the markets, having absorbed the incoming data, are now settling into new ranges. However, it is worth noting how different these ranges are from those that prevailed at the beginning of the year. For example, the consensus analyst view was that 10-year U.S. Treasuries would end 2018 around 2.75 percent. Now the consensus view appears to be we will fluctuate in a 2.80-3.00 percent range with a bias to the upper end of the range. This may happen, until the economic narrative changes again. As they say, ranges are meant to be broken.

	MONTHLY REVIEW	OUTLOOK
Developed Market (DM) Rate/Foreign Currency (FX)	Good economic data and a respite in geopolitical worries led U.S. Treasury yields to rise in the month, leading global yields higher. Given stronger relative U.S. economic data (particularly versus the eurozone and the U.K.), the dollar exhibited across-the-board strength.	For Fed policy, we think three hikes in 2018 still looks to be the most likely scenario. Given the debate around R^* , the equilibrium real short term interest rate, and the unknowns about how rate rises will affect the economy after years of low rates, we believe the Fed will proceed with caution. The Fed must see sustained rise in core personal consumption expenditures (PCE) before revising their monetary outlook. As for U.S. 10-year Treasury yields, we still think that 3 percent is a reasonable guess as to its current "fair value," absent a meaningful upward shift in productivity and potential growth. For currencies, we see a strong dollar as the biggest risk to risky assets, especially EM FX. The dollar's short term outlook is muddled. Greater confidence that U.S. monetary policy will sustain relatively higher rates for longer is offsetting meaningful medium-term dollar negatives (growing twin deficits, overvaluation). As such, we have been relatively neutral on the U.S. dollar, and focused on more dollar-neutral FX positioning.
Emerging Market (EM) Rate/FX	EM fixed income performed poorly in April. U.S. dollar strength led to EM FX weakness and rising U.S. Treasury yields weighed on dollar-denominated debt. Given the pickup in volatility, investors held back from adding to the asset class, but more importantly, and on the plus side, the volatility did not prompt an exodus from the asset class as witnessed in episodes from years past.	After the recent sell-off, EM fixed income valuations, particularly hard-currency debt, look more compelling than in previous months: the index of local yields is currently trading inside that of dollar yields indexes, and the last five years shows us that these episodes have been short-lived and external debt has tended to outperform. We believe that the EM fundamentals generally remain strong and this period of underperformance will end and EM assets will once again begin to outperform.

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	MONTHLY REVIEW	OUTLOOK
Credit	<p>Corporate credit indices were marginally better in April, as both the U.S. and European markets stemmed March underperformance. We witnessed noticeable deviation at the sector level within the U.S. market. Broadly speaking, financials outperformed nonfinancials. Within industrials, energy outperformed while consumer noncyclical sectors underperformed. Credit curves steepened in the United States, with 30 year bonds underperforming relative to short and intermediate maturity credit.</p>	<p>Heading into May, we believe macroeconomic factors (rates, inflation and trade rhetoric) will remain the primary drivers of credit performance and will likely leave spreads rangebound in the near term.</p> <p>We continue to be biased towards financials (especially banks), and remain highly focused on industry and security selection within the nonfinancial arena.</p>
Securitized	<p>Securitized assets had a negative month in April, largely erasing the gains from March as U.S. Treasury yields broke new highs. Credit-sensitive securitized assets spreads held despite the volatility in rates, with spreads tightening across most sectors. Carry continues to be the primary driver of return. Since the announcement of balance sheet normalization in September 2017, the Fed has reduced its mortgage-backed securities (MBS) holdings by \$23 billion.¹</p>	<p>We remain generally constructive on securitized credit opportunities and cautious on more rate-sensitive securitized assets. Despite its underperformance year-to-date in 2018, agency MBS still look expensive from a historical spread perspective, and we expect it to cheapen further as volatility increases and the largest buyer (the Fed) reduces its purchases. In addition, we continue to see attractive opportunities in U.K., Spanish, Portuguese and Greek residential mortgage-backed securities (RMBS).</p>

¹ Source: Federal Reserve. As of April 30, 2018.

Risk Considerations

Fixed income securities are subject to the ability of an issuer to make timely principal and interest payments (credit risk), changes in interest rates (interest rate risk), the creditworthiness of the issuer and general market liquidity (market risk). In the current rising interest rate environment, bond prices may fall and may result in periods of volatility and increased portfolio redemptions. **Longer-term securities** may be more sensitive to interest rate changes. In a declining interest rate environment, the portfolio may generate less income. Certain **U.S. government securities** purchased by the strategy, such as those issued by Fannie Mae and Freddie Mac, are not backed by the full faith and credit of the U.S. It is possible that these issuers will not have the funds to meet their payment obligations in the

future. Public bank loans are subject to liquidity risk and the credit risks of lower-rated securities. **High-yield securities (junk bonds)** are lower-rated securities that may have a higher degree of credit and liquidity risk. **Sovereign debt securities** are subject to default risk. **Mortgage- and asset-backed securities** are sensitive to early prepayment risk and a higher risk of default, and may be hard to value and difficult to sell (**liquidity risk**). They are also subject to credit, market and interest rate risks. The **currency market** is highly volatile. Prices in these markets are influenced by, among other things, changing supply and demand for a particular currency; trade; fiscal, money and domestic or foreign exchange control programs and policies; and changes in domestic and foreign interest rates. Investments in **foreign markets** entail special risks such

as currency, political, economic and market risks. The risks of investing in **emerging market** countries are greater than the risks generally associated with foreign investments. **Derivative instruments** may disproportionately increase losses and have a significant impact on performance. They also may be subject to counterparty, liquidity, valuation, correlation and market risks. **Restricted and illiquid securities** may be more difficult to sell and value than publicly traded securities (liquidity risk). Due to the possibility that prepayments will alter the cash flows on **collateralized mortgage obligations (CMOs)**, it is not possible to determine in advance their final maturity date or average life. In addition, if the collateral securing the CMOs or any third-party guarantees are insufficient to make payments, the portfolio could sustain a loss.

DEFINITIONS

R* is the real short term interest rate that would occur when the economy is at equilibrium, meaning that unemployment is at the neutral rate and inflation is at the target rate.

INDEX DEFINITIONS

The indexes shown in this report are not meant to depict the performance of any specific investment, and the indexes shown do not include any expenses, fees or sales charges, which would lower performance. The indexes shown are unmanaged and should not be considered an investment. It is not possible to invest directly in an index.

The **National Association of Realtors Home Affordability Index** compares the median income to the cost of the median home.

Purchasing Managers Index (PMI) is an indicator of the economic health of the manufacturing sector.

Consumer Price Index (CPI) is a measure that examines the weighted average of prices of a basket of consumer goods and services, such as transportation, food and medical care.

The **JP Morgan Emerging Markets Bond Index Global (EMBI Global)** tracks total returns for traded external debt instruments in the emerging markets and is an expanded version of the EMBI+. As with the EMBI+, the EMBI Global includes U.S. dollar-denominated Brady bonds, loans and eurobonds with an outstanding face value of at least \$500 million.

The **JP Morgan CEMBI Broad Diversified Index** is a global, liquid corporate emerging markets benchmark that tracks U.S.-denominated corporate bonds issued by emerging markets entities.

The **JP Morgan GBI-EM Global Diversified Index** is a market-capitalization weighted, liquid global benchmark for U.S.-dollar corporate emerging market bonds representing Asia, Latin America, Europe and the Middle East/Africa.

The **ISM Manufacturing Index** is based on surveys of more than 300 manufacturing firms by the Institute of Supply Management. The ISM Manufacturing Index monitors employment, production inventories, new orders and supplier deliveries. A composite diffusion index is created that monitors conditions in national manufacturing based on the data from these surveys.

The **Bloomberg Barclays U.S. Mortgage Backed Securities (MBS) Index** tracks agency mortgage-backed pass-through securities (both fixed-rate and hybrid ARM) guaranteed by Ginnie Mae (GNMA), Fannie Mae (FNMA) and Freddie Mac (FHLMC). The index is constructed by grouping individual TBA-deliverable MBS pools into aggregates or generics based on program, coupon and vintage. Introduced in 1985, the GNMA, FHLMC and FNMA fixed-rate indexes for 30- and 15-year securities were backdated to January 1976, May 1977 and November 1982, respectively. In April 2007, agency hybrid adjustable-rate mortgage (ARM) pass-through securities were added to the index.

The **Nikkei 225 Index (Japan Nikkei 225)** is a price-weighted index of Japan's top 225 blue-chip companies on the Tokyo Stock Exchange.

The **U.S. Dollar Index (DXY)** is an index of the value of the United States dollar relative to a basket of foreign currencies, often referred to as a basket of U.S. trade partners' currencies.

Italy 10-Year Government Bonds—Italy Benchmark 10-Year Datastream Government Index.

The **MSCI World Index (MSCI developed equities)** captures large and mid-cap representation across 23 developed market (DM) countries.

Spain 10-Year Government Bonds—Spain Benchmark 10-Year Datastream Government Index.

The **ICE BofAML European Currency High-Yield Constrained Index (ICE BofAML Euro HY constrained)** is designed to track the performance of euro- and British pound sterling-denominated below investment-grade corporate debt publicly issued in the eurobond, sterling domestic or euro domestic markets by issuers around the world.

The **S&P 500® Index (U.S. S&P 500)** measures the performance of the large-cap segment of the U.S. equities market, covering approximately 75 percent of the U.S. equities market. The index includes 500 leading companies in leading industries of the U.S. economy.

The **JPMorgan Government Bond Index Emerging Markets (JPM External EM Debt)** tracks local currency bonds issued by emerging market governments. The index is positioned as the investable benchmark that includes only

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those countries that are accessible by most of the international investor base (excludes China and India as of September 2013).

U.K. 10YR government bonds—U.K. Benchmark 10-Year Datastream Government Index. For the following Datastream government bond indexes, benchmark indexes are based on single bonds. The bond chosen for each series is the most representative bond available for the given maturity band at each point in time. Benchmarks are selected according to the accepted conventions within each market. Generally, the benchmark bond is the latest issue within the given maturity band; consideration is also given to yield, liquidity, issue size and coupon.

German 10YR bonds—Germany Benchmark 10-Year Datastream Government Index; **Japan 10YR government bonds**—Japan Benchmark 10-Year Datastream Government Index; and **10YR U.S. Treasury**—U.S. Benchmark 10-Year Datastream Government Index.

The **ICE BofAML U.S. Mortgage-Backed Securities (ICE BofAML U.S. Mortgage Master) Index** tracks the performance of U.S. dollar-denominated, fixed-rate and hybrid residential mortgage pass-through securities publicly issued by U.S. agencies in the U.S. domestic market.

The **S&P/LSTA U.S. Leveraged Loan 100 Index (S&P/LSTA Leveraged Loan Index)** is designed to reflect the performance of the largest facilities in the leveraged loan market.

The **Bloomberg Barclays Euro Aggregate Corporate Index (Bloomberg Barclays Euro IG Corporate)** is an index designed to reflect the performance of the euro-denominated investment-grade corporate bond market.

The **Bloomberg Barclays U.S. Corporate Index (Bloomberg Barclays U.S. IG Corp)** is a broad-based benchmark that measures the investment-grade, fixed-rate, taxable corporate bond market.

The **ICE BofAML United States High Yield Master II Constrained Index (ICE BofAML U.S. High Yield)** is a market value-weighted index of all domestic and Yankee high-yield bonds, including deferred-interest bonds and payment-in-kind securities. Its securities have maturities of one year or more and a credit rating lower than BBB-/Baa3, but are not in default.

JPY vs. USD—Japanese yen total return versus U.S. dollar.

Euro vs. USD—Euro total return versus U.S. dollar.

MSCI Emerging Markets Index (MSCI emerging equities) captures large- and mid-cap representation across 23 emerging markets (EM) countries.

The **MSCI AC Asia ex-Japan Index (MSCI Asia ex-Japan)** captures large- and mid-cap representation across two of three developed markets countries (excluding Japan) and eight emerging markets countries in Asia.

The **S&P GSCI Softs (GSCI soft commodities) Index** is a sub-index of the S&P GSCI that measures the performance of only the soft commodities, weighted on a world production basis. In 2012, the S&P GSCI Softs Index included the following commodities: coffee, sugar, cocoa and cotton.

The **Dow Jones Commodity Index Gold (Gold)** is designed to track the gold market through futures contracts.

The **JPMorgan Government Bond Index**—Emerging markets (JPM local EM debt) tracks local currency bonds issued by emerging market governments. The index is positioned as the investable benchmark that includes only those countries that are accessible by most of the international investor base (excludes China and India as of September 2013).

The **ICE Brent Crude futures contract (Brent crude oil)** is a deliverable contract based on EFP delivery with an option to cash settle.

The **S&P GSCI Copper Index (Copper)**, a sub-index of the S&P GSCI, provides investors with a reliable and publicly available benchmark for investment performance in the copper commodity market.

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