

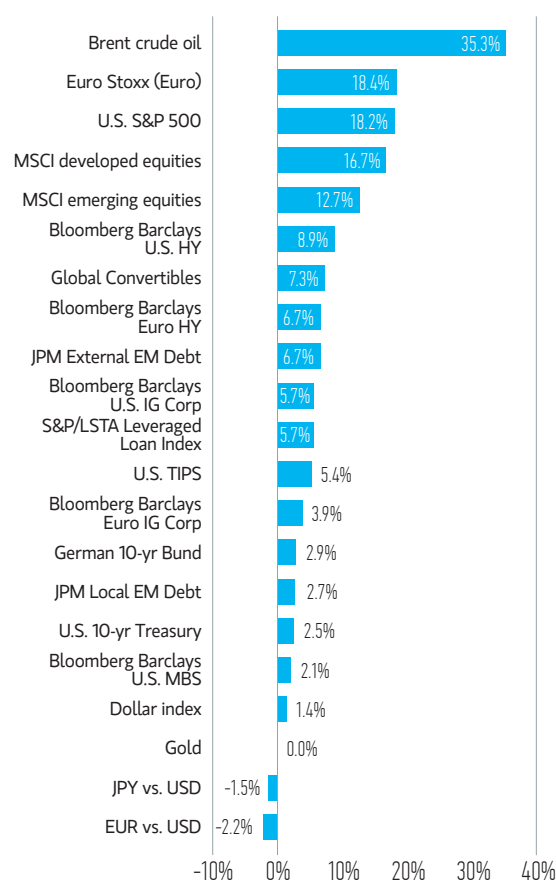
And the Beat Goes On...

FIXED INCOME | GLOBAL FIXED INCOME TEAM | MACRO INSIGHT | MAY 2019

Fixed income had a mixed month. Government bonds, both developed and local currency emerging, saw yields rise, which is not a surprising development after their strong rally in March. However, credit-oriented bonds—investment grade, high yield and external emerging market—had a strong month, with yields falling and spreads tightening. What's behind this? Economic data turned out better than expected, with a particular emphasis on an improvement in China and the U.S., suggesting the global slowdown that was so evident in the second half of 2018 and the first quarter of this year was coming to an end. U.S. first quarter gross domestic product (GDP) turned out much stronger than expected, although some of the growth was borrowing from the second quarter in terms of inventory buildup. Central banks continued to play their supportive role by not doing anything to suggest policy would not be supportive in the quarters ahead.

With the U.S. economy back in a not-too-hot, not-too-cold mold, the U.S. Federal Reserve (Fed) on hold, other G10 central banks in a bias-to-ease mode and Chinese growth bottoming, the outlook for risky assets looks reasonable. Valuations in most developed government bond markets look a bit stretched with, at the margin, a bit more upside than downside yield potential, reflecting a market bias for easier monetary policy which may not materialize. In any event, with most economies and policies looking to be on a fairly even keel, we should expect volatility to stay low and risky assets (high yield, emerging markets) to be well supported, at least outside of idiosyncratic factors specific to those companies or countries. In other words, the risks of economic weakness are diminished but not enough to get central banks to worry about too strong growth. And the beat goes on...if only those pesky trade issues would go away!

DISPLAY 1
Asset Performance Year-to-Date

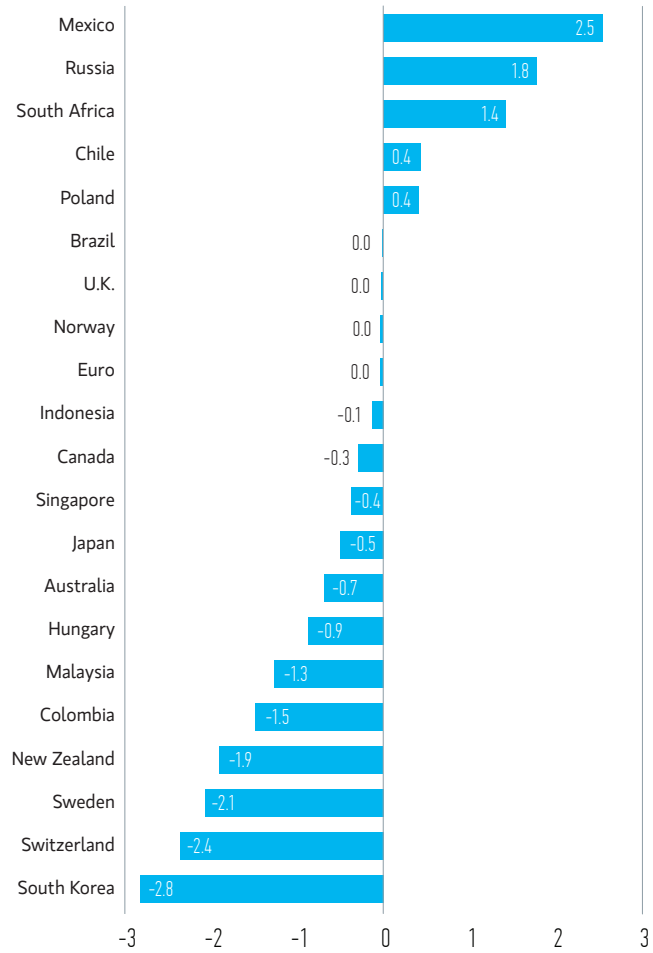


Note: USD-based performance. Source: Thomson Reuters Datastream. Data as of April 30, 2019. The indexes are provided for illustrative purposes only and are not meant to depict the performance of a specific investment. **Past performance is no guarantee of future results.** See pages 6 and 7 for index definitions.

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DISPLAY 2
Currency Monthly Changes Versus U.S. Dollar

(+ = appreciation)



Source: Bloomberg. Data as of April 30, 2019. Note: Positive change means appreciation of the currency against the USD.

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	2.50	+10		
United Kingdom	1.19	+19	-132	+9
Germany	0.01	+8	-249	-1
Japan	-0.04	+4	-254	-6
Australia	1.79	+1	-71	-8
Canada	1.71	+10	-79	0
New Zealand	1.90	+10	-60	0
EUROPE (Spread over Bunds)				
France	0.37	+5	36	-3
Greece	3.37	-37	336	-45
Italy	2.56	+7	254	-2
Portugal	1.12	-14	110	-22
Spain	1.00	-10	99	-18
EM	INDEX LOCAL YIELD (%)	MTD CHANGE (BPS)	USD SPREAD (BPS)	MTD CHANGE (BPS)
EM External Spreads			363	-8
EM Local Yields			6.24	+10
EM Corporate Spreads			286	-12
Brazil	8.23	+3	245	-3
Colombia	6.35	+19	176	-8
Hungary	2.12	+29	100	-16
Indonesia	7.92	+19	180	-16
Malaysia	3.83	+4	126	-5
Mexico	8.20	+7	292	-16
Peru	5.30	-5	126	-4
Philippines	5.20	-14	79	-11
Poland	2.42	+14	44	-13
Russia	7.92	-15	199	-28
South Africa	9.39	-1	306	-9
Turkey	21.17	+162	502	+7
Venezuela	-	-	5546	+322
CREDIT			SPREAD (BPS)	MTD CHANGE (BPS)
U.S. IG			111	-8
EUR IG			107	-16
U.S. HY			358	-33
EUR HY			347	-29
SECURITIZED				
Agency MBS			84	+7
U.S. BBB CMBS			255	-13

Positive Neutral Negative

Source: Bloomberg, JP Morgan. Data as of April 30, 2019.

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Fixed Income Outlook

Data releases, policy adjustments and policy pronouncements all point in the direction of continuity: economic recovery, stable/low inflation, stable to easy monetary policy. We believe the biggest challenge to continued good performance of corporate and securitized credit and emerging market debt is valuation. The markets cannot keep rallying at the pace we have seen so far this year. Our strategy has been to look for opportunities to reduce exposures where we think assets have become fully valued and rotate into markets/sectors/companies where there is still upside potential. For example, in countries like Australia and New Zealand, there is still a reasonable probability central banks will cut rates this year. This is in contrast to the situation in the U.S., Canada and the eurozone where probabilities of rate cuts are much lower. As a result, we think holding above average interest rate risk in the Antipodean countries as being more attractive than holding it in the U.S. We think relative opportunities such as these are a better way to position portfolios than in taking a lot of outright interest rate risk.

That said, our argument is not about being bearish on rates. It is a more nuanced view that markets are too optimistic (pessimistic?) about central banks willingness to ease. If we are right and global economic conditions turn out to be the right temperature, pressure to dial up easing measures will diminish, pushing government bond yields higher. However, especially given investors may remain worried about future risk events, we are not anticipating a substantial rise in yields and do not view interest rate management as the key to investment success in the months ahead.

What is likely to be key to performance is managing exposure to credit and other nongovernment sectors. In these areas the macroeconomic backdrop should continue to be supportive and if valuations were more attractive we would be a lot more bullish and have portfolios with a lot more risk. However, valuations look average to modestly expensive in many sectors. We have therefore been adjusting portfolios in ways that can benefit from earning a yield advantage without taking on too much systematic risk. In other words, our risk profile is modestly aggressive and focused on situations, like those in Australia and New Zealand noted above, where specific idiosyncratic factors can justify a meaningful overweight position. Our positions in securitized credit, emerging markets, BBB and high yield exposures are being managed similarly. Carry is your friend, but do not confuse carry with capital gains, the majority of which are probably behind us.

We cannot avoid talking about outstanding risks which remain aplenty, even if they look somewhat diminished. The list is lengthy: unresolved U.S.-China trade talks; upcoming U.S./European Union(EU)/Japan trade negotiations; Brexit; oil; a raft of European elections; and of course the anticipated economy recovery in the second half of the year which is still an expectation rather than a fact. Indeed, the global purchasing manager index (PMI) continues to fall and has fallen continuously for several quarters. Economic surprise indices might be rebounding but on average economic data are still printing weaker than consensus expectations. Stabilization is not the same as a tailwind, suggesting we want to be in a position to take advantage of any reversal of risk appetite and underperformance of risky assets.

MONTHLY REVIEW

OUTLOOK

**Developed
Market (DM)
Rate/Foreign
Currency
(FX)**

In April, investor confidence continued to rally as markets continued to fare well and volatility declined. U.S. Treasury yields rose across the curve and investors took on more risk, particularly as U.S. Q1 GDP figure beat expectations. Globally, economic data was satisfactory as the “Goldilocks” conditions returned. Government bond yields also rose in other developed markets, while the U.S. dollar (USD) strengthened marginally against the main developed economies.

Following a surprisingly strong performance in the first quarter, U.S. growth is likely to be lower for the remainder of 2019, as the fiscal impulse wears off and the lagged effect of higher rates bite, but not collapse. Central banks have become more accommodative, and we expect the lack of inflationary pressures will mean this continues, although both rate cuts and hikes from the main central banks look unlikely at present. Recent speeches from Fed policymakers give us further confidence that the Federal Open Market Committee is committed to being “patient” and “flexible” on future rate hikes. At this point we do not think it is likely that the Fed will either hike or cut rates in 2019. The European Central Bank (ECB) has also distanced itself from speculation that it would introduce a tiered deposit system, which would open the door to further rate cuts, but it has also indicated very clearly to the market that no rate hikes are likely until well into 2020. Similarly, the U.K. Monetary Policy Committee is likely to remain on hold for as long as Brexit remains unresolved, even though labor market data would support rate hikes.

**Emerging
Market (EM)
Rate/FX**

It was a mixed picture once again for EM fixed income assets during the month. With a few exceptions, EM currencies continued to weaken versus the USD, while local bond and external debt returns were positive. Within the hard currency segment, investment grade outperformed high yield as U.S. Treasury yields edged higher, and corporates outperformed sovereigns. Commodity prices were also mixed during the period, as energy prices rose, while precious metals and agricultural commodity prices declined. The Institute of International Finance (IIF) estimated that portfolio flows into EM were \$38 billion for the month, with \$14 billion flowing into equities, and \$24 billion into debt.

Our constructive outlook for EM assets is based on the following factors. First, Q1 real GDP data releases in both the U.S. and China point to stabilization in global growth, which could potentially spill over to other countries, thus boosting risky assets in general. Furthermore, this incipient global growth pickup is taking place amid subdued inflationary pressures, implying that key central banks see no pressing need to lessen their dovish stance and therefore rendering EM yields more attractive versus developed markets. In addition, uncertainty over trade issues may diminish significantly in May provided ongoing U.S.-China trade talks conclude successfully, despite other matters still pending (most notably, potential U.S. tariffs on cars/aircraft from the EU, and obstacles to the United States-Mexico-Canada Agreement (USMCA) ratification by national Congresses). Additionally, our USD weakness thesis, which has failed to materialize so far this year, could ultimately prove correct, given a dovish Fed and provided that the tentative rebound in Chinese growth can spill over to Europe and EM economies. Finally, to the extent that growth stabilizes and eventually accelerates, it should bode well for EM credit, particularly high-yield sovereigns, which have underperformed investment grade credits over the last year.

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MONTHLY REVIEW

OUTLOOK

Credit

Supportive economic data, strong earnings and positive technicals all helped drive spreads tighter in April. The Bloomberg Barclays U.S. Corporate Index narrowed by 8 basis points in April to end the month at 110 basis points over government bonds, with financials and BBB nonfinancial credits outperforming.¹ European investment grade outperformed the U.S. market again by tightening 14 basis points in April to 107 basis points, as measured by the Bloomberg Barclays Euro-Aggregate Corporate Index.² High yield bond prices continued to grind higher in April alongside equities amid a better-than-expected earnings season and an accommodative Fed. Spreads tightened 34 basis points to end the month at 380 basis points, while yields decreased by 31 basis points to 6.12%.³

Accommodative monetary policy, economic data that is not too hot nor too cold, decent corporate earnings and strong demand for credit are all supportive for the markets looking forward. However, while the backdrop is broadly supportive, valuations are no longer as cheap, with spreads now sitting below long run averages. We therefore continue to de-risk most portfolios by reducing higher beta exposures such as BBBs, high yield and convertible bonds. We still find credit attractive, given the rather benign macro backdrop, but we believe the bulk of capital gains for the year are behind us.

Securitized

Credit-oriented securitized assets performed well in April, while agency mortgage-backed securities (MBS) underperformed slightly. The Bloomberg Barclays U.S. MBS Index was down 0.06% in April, but still outperformed the Bloomberg Barclays U.S. Treasury Index by 22 basis points.⁴ The duration of the Bloomberg Barclays U.S. MBS index lengthened 0.33 years to 4.36 years during April.⁵ The Fed's MBS portfolio shrank by \$10 billion during the month to \$1.583 trillion and is now \$54 billion lower year to date.⁶ Non-agency residential mortgage-backed securities (RMBS), European MBS, and U.S. asset-backed securities (ABS) spreads tightened again in April.

Mortgage and securitized markets are off to a good start in 2019, benefitting from both lower interest rates and tightening spreads. Going forward, we expect returns to be more a function of cash flow carry, rather than rates or spread changes, as we expect interest rates to remain largely range-bound for the remainder of 2019 and expect spreads to stabilize at current levels. From a fundamental perspective, we believe the U.S. economy is strong with healthy consumer and real estate market conditions, and we remain overweight credit-oriented securitized investments and underweight agency MBS. We expect agency MBS to continue to outperform Treasuries but underperform credit-oriented securitized opportunities.

¹ Source: Bloomberg Barclays, as of April 30, 2019.

³ Source: Bloomberg Barclays, as of April 30, 2019.

⁵ Source: Bloomberg, as of April 30, 2019.

² Source: Bloomberg Barclays, as of April 30, 2019.

⁴ Source: Bloomberg, as of April 30, 2019.

⁶ Source: Federal Reserve Bank of New York, as of April 30, 2019.

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 **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 Global Aggregate Corporate Index** is the corporate component of the Barclays Global Aggregate index, which provides a broad-based measure of the global investment-grade fixed income markets.

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 **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.

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

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

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 **Hang Seng Index** includes the largest and most liquid stocks listed on the Main Board of the Stock Exchange of Hong Kong.

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

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

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 **ICE BofAML U.S. 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 domestic or euro domestic markets by issuers around the world.

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.

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

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 **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).

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

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 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.

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

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

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

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

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

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 **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 **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.

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.

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

The **Thomson Reuters Convertibles Global Focus USD Hedged Index** is a market weighted index with a minimum size for inclusion of \$500 million (US), 200 million euro (Europe), 22 billion yen, and \$275 million (Other) of convertible bonds with an equity link.

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.

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.

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