

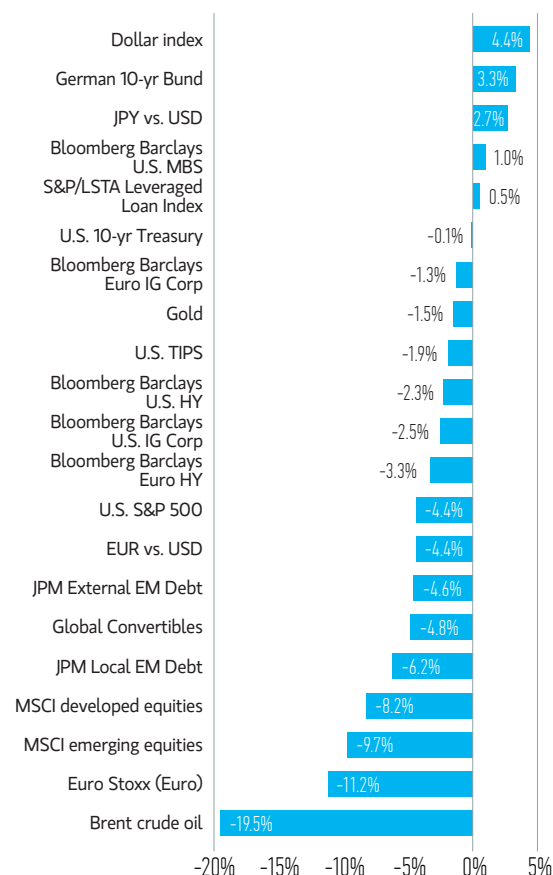
Brave New Year

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

It was an exciting end to the year with most markets moving in diametrically opposite directions from earlier in the year. The December dramatic drop in 10-year U.S. Treasury yields and pricing out of all U.S. rate hikes in 2019 was driven in large part by the poor performance of risky assets: high-yield and leveraged loans, the previous darlings of the bond market; and equities which saw their largest monthly drop in many years. It was not one specific event driving this shift—it was a plethora of problems: disappointing macro data across developed economies; political troubles (U.S./China trade, government shutdowns); poor sentiment; market mispositioning; and of course, poor liquidity, enhanced by end-of-year balance sheet constraints. It is a struggle to find good news; which of course may mean it cannot get worse! We will have to see. We do know that despite the U.S. Federal Reserve (Fed) raising rates eight times in the past two years, the U.S. 10-year Treasury yield has only moved up 24 basis points (bps) (post dramatic Q4 rally). A flattening of the yield curve of historic proportions certainly belies confidence that the U.S. economy can sustain growth much above levels prevalent post the global financial crisis. The risk of a more dramatic economic slowdown from tightening too quickly remains remote, in our opinion. We think that moderate growth, stable inflation, and a patient Fed is an excellent recipe for engineering a soft landing for the U.S. and global economy, and good performance of risky assets.

DISPLAY 1

Asset Performance Year-to-Date

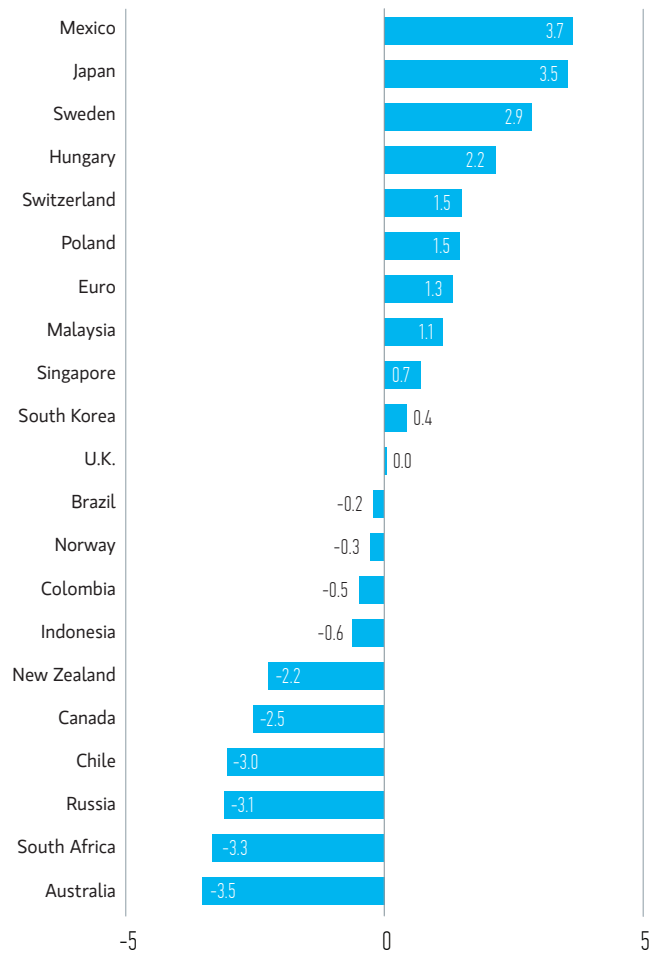


Note: USD-based performance. Source: Thomson Reuters Datastream. Data as of December 31, 2018. The indexes are provided for illustrative purposes only and are not meant to depict the performance of a specific investment. **Past performance is no guarantee of future results.** See pages 6 and 7 for index definitions.

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

(+ = appreciation)



Source: Bloomberg. Data as of December 31, 2018. 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	2.68	-30		
United Kingdom	1.28	-9	-141	+22
Germany	0.24	-7	-244	+23
Japan	0.00	-9	-268	+21
Australia	2.32	-27	-37	+3
Canada	1.97	-30	-72	0
New Zealand	2.37	-19	-32	+11
(Spread over Bunds)				
France	0.71	+3	47	+10
Greece	4.40	+13	416	+20
Italy	2.74	-47	250	-40
Portugal	1.72	-11	148	-3
Spain	1.42	-9	117	-2
EM	INDEX LOCAL YIELD (%)	MTD CHANGE (BPS)	USD SPREAD (BPS)	MTD CHANGE (BPS)
EM External Spreads			433	+15
EM Local Yields			6.38	-18
EM Corporate Spreads			352	+25
Brazil	8.15	-40	273	+8
Colombia	6.51	-21	228	+18
Hungary	2.21	-11	148	+6
Indonesia	8.16	+6	237	+15
Malaysia	4.09	-7	161	+14
Mexico	8.72	-53	357	+10
Peru	5.73	-2	168	+6
Philippines	6.30	-3	120	+10
Poland	2.27	-19	81	+9
Russia	8.41	0	254	+15
South Africa	9.59	+3	361	+8
Turkey	16.88	-10	429	-34
Venezuela	—	—	6845	+590
CREDIT			SPREAD (BPS)	MTD CHANGE (BPS)
U.S. IG			153	+16
EUR IG			152	+3
U.S. HY			526	+108
EUR HY			494	+25
SECURITIZED				
Agency MBS			89	-6
U.S. BBB CMBS			301	+33

Positive Neutral Negative

Source: Bloomberg, JP Morgan. Data as of December 31, 2018.

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Fixed Income Outlook

Investors hoping for a “Santa Claus rally” in December were disappointed, with developed market (DM) equities experiencing their worst month since September 2011, while investment-grade credit spreads sold off to their widest levels since the first half of 2016. On the face of it, one might have thought value-minded investors would be encouraged by the sell-off and the opportunity to buy equities at lower valuation multiples and be paid more to take on corporate default risk, but the situation is more complex than that. Economic data, especially in developed economies, generally surprised to the downside in the fourth quarter of 2018, and while company earnings generally held up well through the year, expectations for 2019 have been revised steadily lower. In addition, many of the main macro risks—trade tensions between the U.S. and China, populist politics in Europe, concerns about the slowing Chinese economy—remain unresolved.

However, the other significant development over the last month is the policy response to the weakening growth data and financial markets performance. The trend toward monetary policy normalization, which was firmly on track in the first half of the year, appears to be stuttering to a halt, and, in some cases, reversing. Inflation everywhere remains subdued, so central banks can take their time with normalizing policy, reducing the risks of a policy accident from tightening too much, too soon.

The Fed delivered more rate hikes in 2018 than the market had initially expected—four rather than three—but now finds itself in the situation where policy rates are approaching neutral, the risks to tightening much further seem greater, and the need to do so not particularly pressing. Inflationary pressures did recover through 2018, but U.S. core inflation measures have at most returned to the target level, rather than over-shooting. U.S. job creation surged far more than expected in December, but the unemployment rate rose at the same time, as discouraged workers rejoined the workforce, suggesting there is still slack in the U.S. labor market, which will moderate inflationary pressures.

In Europe, the European Central Bank (ECB) ended its quantitative easing (QE) program, but the path and pace of raising interest rates is expected to be an extraordinarily slow one. While the ECB is sticking with its view that the weakness in the eurozone economy is transitory and

that tighter and more rigid labor markets will lead to rising underlying inflationary pressures, there is very little evidence of this translating into higher consumer prices, with core CPI unchanged at 1 percent year over year in December. As in the past, the ECB may have to push out the timing of its policy normalization.

Possibly the most significant change in monetary policy came from the People's Bank of China (PBoC), as the required reserve ratios (RRR) were cut to support the slowing Chinese economy. Interestingly, though, while emerging markets (EM) were a major source of market volatility in the first half of 2018, they managed to outperform DM in the second half of 2018. This improved resilience makes sense to us given most emerging economies are in better shape than many investors feared; those with imbalances took corrective actions to address them; and, with valuations undemanding, there are attractive investment opportunities. A slower pace of Fed rate hikes, which may lead to a weaker U.S. dollar, could add further support to the asset class.

Despite these rather large changes in asset prices, analysts', including our own, macro and corporate forecasts for 2019 have not changed nearly as dramatically. Yes, growth will moderate in 2019. But will it collapse? No, in our opinion. And, for the U.S. in particular, this is a good thing. If U.S. growth continues at the third quarter pace, there is no doubt in our minds that this would lead to higher inflation and possibly more aggressive Fed rate hikes and a higher probability of recession in 2020 and beyond. So the silver lining of the market's reappraisal of U.S. and global growth and inflation dynamics is that there is substantially less pressure for central banks to either normalize policy (eurozone, Japan, China) or continue to raise rates (U.S.). The risk of a more dramatic economic slowdown from a too-quick pace of tightening or a collapse in household or corporate confidence remains remote, in our opinion. We think that moderate growth, stable inflation and a patient Fed is an excellent recipe for engineering a soft landing for the U.S. and global economy and good performance of risky assets. The notable resilience of EM in the second half of the year (dramatically so in December) is further supportive of the global economy and of the EM asset class. Risky asset prices have overshot their fundamental values.

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MONTHLY REVIEW

OUTLOOK

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

Safe-haven yields fell in December, following the initial euphoria after the G20 meeting in Buenos Aires, falling inflation expectations, and a continuation of the flight-to-quality from mid-November. During the month, the U.S. and China agreed on a truce for the next 90 days wherein the U.S. would push back increasing tariffs on more than \$200 billion of Chinese goods from 10 to 25 percent as had been planned in January, and China committed to purchase a “very substantial” amount of farm, energy and industrial goods in order to reduce the trade gap with the U.S. The market reaction was short-lived as news shortly emerged that Huawei’s CFO was arrested in Canada at the request of the U.S. government for alleged violations of Iranian sanctions.

U.S. growth is likely to be lower in 2019 as the fiscal impulse wears off and the lagged effect of higher rates bite, but it will not collapse. Recent speeches from Fed policymakers give us further confidence that they are cognizant of the risk of overtightening and the need to move (at some point in the near future) to a more data-dependent policy. The Fed wants to contain inflation risk; it does not want to cause a hard landing/recession. In the shorter term, despite the dip lower toward the end of December, we believe that the 10-year U.S. Treasury yield is likely to spend a majority of the time between 2.75 and 3.25 percent for the next several months. Fed tightening is on hiatus.

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

EM fixed income assets posted positive performance in the final month of the year, partially offsetting losses incurred throughout the year. During the month of December, falling U.S. Treasury yields aided longer-duration, higher-quality bonds in the dollar-denominated sovereign and corporate market, while local bond performance drove domestic debt returns. Over the month, energy and base metal prices continued to fall as Brent oil ended at almost \$54/barrel and copper and aluminum prices weakened over 3 percent. Soft commodities returns were mixed, with corn and wheat prices rising versus losses for coffee, sugar and cotton. While base metal prices fell, prices for gold, silver and palladium rose in the period. Investors continued to withdraw investments from the EM debt asset class in December, primarily from hard-currency strategies. The year ended with institutional investors adding roughly \$20 billion to the asset class,¹ while retail investments were roughly flat.

After a challenging year for EM fixed income, we hold a constructive outlook for 2019, driven by attractive valuations, a potentially benign global backdrop of moderate growth/subdued inflation, and a Fed that is likely approaching the end of its tightening cycle. We believe these factors and growing twin deficits in the U.S. limit the scope for material USD appreciation which would be beneficial to EM borrowers. Our historical analysis indicates that EM fixed income tends to outperform when EM economies are closing negative output gaps and converging toward potential growth, as they are currently doing.

¹ Source: JP Morgan. Data as of December 31, 2018.

MONTHLY REVIEW

OUTLOOK

Credit

Global investment-grade spreads widened in December, ending the worst year for investment-grade spreads since the 2011 European sovereign crisis. The Bloomberg Barclays U.S. Corporate Index widened by 16 bps in December to end the year at 153 bps over government bonds, with BBB credits leading the market lower. For the year, spreads closed 60 bps wider with lower quality credit like subordinated financials and BBB nonfinancials underperforming. As measured by excess returns, the Bloomberg Barclays U.S. Investment Grade Index's -3.15 percent annual return was the second worst since 2008. As in prior months, the drivers of credit remained macroeconomic concerns and worries about how slowing economic growth would impact company fundamentals (especially leverage in BBB credit). Compounding these worries were poor technicals headed into year-end, the most notable symptom being limited risk appetite in the dealer community.

Entering 2019, our outlook remains broadly unchanged. With the additional widening in December, spreads are now back to early to mid-2016 levels and pricing in an elevated risk of a material economic slowdown or recession. We believe an awful lot is currently baked into valuations, and hence we see value in both investment-grade and high-yield credit spreads. While December's underperformance adds ammunition to some commentators' view that credit markets are in "crisis," we see known dangers that are already priced into the market. We believe this creates opportunities for carry and limited capital gains through active positioning.

Securitized

Widening securitized credit spreads and rallying interest rates continued in December. Securitized credit spreads have now widened for three consecutive months and finished wider for 2018 across most sectors. Fundamental securitized credit conditions remain sound, with low default rates, healthy consumer balance sheets and stable housing markets, but increasing volatility, greater concerns over the future health of the U.S. economy, and widening spreads in other credit sectors are combining to put pressure on securitized credit spreads. Agency mortgage-backed securities (MBS) performed well again in December with spreads tightening and rates rallying, and agency MBS returns moved into positive territory for 2018 for the first time all year.

We enter 2019 with a positive outlook on the securitized markets. With LIBOR and U.S. Treasury yields higher across the curve in 2018, and with securitized spreads wider on everything from agency MBS to credit sensitive asset-backed securities (ABS), we begin 2019 with materially higher securitized investment yields and a still-positive fundamental credit environment. Market volatility has increased and could still increase further, but, ultimately, we expect fundamental value and credit performance to dominate returns for 2019.

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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 **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 **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.

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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 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 market 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 EFF 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.

The **Thomson Reuters Convertible 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.

The **MSCI All Country World Index (ACWI, MSCI global equities)** is a free float-adjusted market capitalization weighted index designed to measure the equity market performance of developed and emerging markets. The term "free float" represents the portion of shares outstanding that are deemed to be available for purchase in the public equity markets by investors. The performance of the Index is listed in U.S. dollars and assumes reinvestment of net dividends.

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