

Contents

- Global Investors' SummitMacro conclusions
- 6 Interest rate outlook
- 8 Currency outlook
- **10** Global investment themes
- 13 Energy Unloved, out of favor and potentially attractive
- 16 The bottom line: How multi-sector strategies can help navigate today's challenging, dynamic markets

Global Investors' Summit - Macro conclusions

IFI's November Global Investors' Summit brought together over 80 investors to discuss and debate our outlook and views on global macroeconomic trends. We believe understanding "macro factors" such as growth, inflation and policy help us understand market conditions and asset price action. Below we highlight the major developments we believe are driving these factors in four key regions and how they influence our asset allocation decisions.

This document is for Qualified Investors in Switzerland; Professional Clients only in Dubai, Continental Europe (as defined in the important information) and the UK; for Institutional Investors only in the United States and Australia; in New Zealand for wholesale investors (as defined in the Financial Markets Conduct Act); for Professional Investors in Hong Kong; for Qualified Institutional Investors in Japan; in Taiwan for Qualified Institutions/ Sophisticated Investors; in Singapore for Institutional Investors; for Qualified Institutional Investors and/or certain specific institutional investors in Thailand; in Canada, this document is restricted to Accredited Investors as defined under National Instrument 45-106. It is not intended for and should not be distributed to, or relied upon by, the public or retail investors. Please do not redistribute this document.

US

Growth: We expect 2020 to be a year of growth stabilization, with annual growth returning to around 1.8%, near our estimate of US potential growth. A US-China "Phase 1" deal would likely further improve growth prospects, even in manufacturing. Consumption looks relativity solid and interest rate-sensitive areas of the economy, such as housing, have improved.

Inflation: We expect inflation to look much like it has in the post-crisis period at around 2.2%-2.5% per year. We separate prices into core sticky and flexible prices. The latter have been most affected by tariffs, but their impact should wane by the end of 2020. The Fed has been clear that the current rate of the Personal Consumption Expenditures (PCE) inflation (1.6%-1.8%) is fine and should not lead to rate cuts or hikes.

Policy: We believe the US Federal Reserve (Fed) is done cutting interest rates for the next six months. It has communicated that it is relatively comfortable with the current pace of economic growth and sees limited inflation pressures. For the Fed to cut further, growth must slow significantly. On the other hand, the Fed is unlikely to raise rates in the near future as it has committed to not raising rates unless there is a substantial increase in inflation.

Markets: We expect the 10-year Treasury to rise toward a fair value of around 2.35% over the next year. It could breach fair value if the Fed begins to hike rates, inflation accelerates or supply-demand technicals deteriorate.



Eurozone

Growth: Trade tensions have had a negative impact on European growth and inflation. We expect growth to bottom in 2020 but remain weak at around 1.0%. The US, China and UK are key markets for European exporters, exposing the eurozone to the effects of Brexit, a China slowdown and the risk of US auto tariffs. On the bright side, we expect German car manufacturing to pick up in the fourth quarter and European consumers remain in good shape, based on rising real wages, low inflation and falling unemployment, which should support the service sector.

Brexit is a key risk factor for the UK. Irrespective of the type of deal that is finally decided, it will likely be a headwind for the UK economy over the next decade due to increased friction caused by regulatory and tariff divergence among trading partners. Political uncertainty will also be heightened, including the risk of a potential break-up of the UK if Scotland opts to leave. The reduced probability of a hard Brexit is positive for global risk markets, in our view, and removes some of the negative tail risks for European growth.

Inflation: European inflation of around 1% is a concern. Inflation expectations have continued to collapse, and we expect credit growth to remain anemic. We do not expect a recovery in the market's inflation expectations (as reflected in the pricing of inflation-linked securities) unless global growth takes off, which is not our base case.

Policy: We expect monetary policy to remain on hold, with ECB policy essentially tapped out at negative interest rates of -0.50% and the recent resumption of quantitative easing. There have been calls for fiscal expansion but economic conditions would have to be more dire to heighten the political appetite for increased spending, in our view, and we believe this is unlikely in 2020.

Markets: We believe we have seen the lows in negative government bond yields with manufacturing set to rebound. Improved growth prospects and progress on Brexit could push the euro to 1.15-1.20 by the end of 2020.

China

Growth: Chinese growth has downshifted in the last several years, from 8% in 2012 to around 6% currently. We expect growth next year to be just below 6%. Local investors are somewhat more sanguine and believe the worst may be over for the US-China trade war, but they are wary about a potential tech and financial war. There is optimism that regional trade agreements and China's Belt and Road Initiative could open new avenues for international trade.

Inflation: We expect further monetary easing in the second half of 2020, but for now, rising headline inflation driven by rising food prices, constrains monetary policy. Inflation hit 3.8% in October (versus an official desired level of 3%) and could reach 5%-6% in the first quarter of 2020.

Policy: We expect fiscal policy to be more proactive in 2020, which could result in a higher fiscal deficit, a larger quota for local government special project bonds and a further pick up in credit growth in early 2020. We are watching the proposal of new monetary tools aimed at increasing the money supply, including the medium-term lending facility (MLF), for its potential impact on economic and market performance.

Markets: We see limited room for outperformance of government bonds before the expected peak in inflation in the first quarter of 2020. We expect the renminbi to be event-driven and especially impacted by trade tensions. Credit performance may be uneven with private companies potentially facing difficulties.

Emerging markets (ex-China)

Growth: Consensus growth expectations have been revised down for emerging markets (EM) through the last year. We expect growth in 2020 to improve relative to the disappointing outcomes in 2019. Our confidence in a modest rebound is based on recent improvement in key economic data and optimism over a US-China Phase 1 deal. The composition of exports and terms of trade will likely be important drivers of EM economic performance, especially a country's sensitivity to oil prices.

Inflation: EM inflation is expected to remain benign and edge lower in 2020. Outside of Asia, EM inflation is roughly in line with central bank targets. In Asia, inflation is generally below-target and expected to fall further.

Policy: Most EMs have cut rates in the past year but are likely done cutting for the next 12 months, with the exception of Mexico and Russia, which still plan to cut by sizable amounts, and Brazil and India, which may make marginal cuts. In aggregate, there is generally room for more monetary and fiscal easing if needed among most EMs. We believe EM policy stance will be an important theme in 2020. In our view, countries that can implement countercyclical policies without pressuring their currencies or creating other imbalances will distinguish themselves.

Markets: We see opportunities in EM currencies in 2020 as we expect the US dollar to decline somewhat, but see few opportunities in local interest rates, given the strong rallies this year. Currency valuations across EM appear generally neutral-to-cheap (adjusted for productivity and inflation), but inflation could erode competitiveness for some. Being selective is important, since capital inflows to finance deficits could become scarce. Uncertainty could be fueled by the US presidential election and trade policy. In hard currency markets, we are positive on high yield credits with strong reform anchors like lvory Coast, Senegal, Ukraine and Egypt.

Invesco Fixed Income 2020 outlook						
	US	Eurozone	China			
GDP trend growth	We expect growth to be near potential at around 1.8%. The drag from tariffs should begin to decline by the first quarter of 2020. Consumption growth should slow to a more sustainable level but interest rate sensitive portions of the economy, such as housing, should pick up.	We expect growth to stabilize near trend, around 1.0%. There is some potential for an upside surprise if trade tensions moderate. Easy financial conditions and looser fiscal policies by some governments could also provide a catalyst.	We expect annual growth of just below 6% next year, helped by more proactive fiscal policies.			
Inflation	Core inflation will likely be stable at around 2.2%. Tariff effects, which have propped up core inflation, should roll off. However, factors such as owners' equivalent rent should improve, leading to little net change.	Inflation pressures remain muted but we expect a slight uptick during the year. While it is unlikely that The ECB's 2% target will be met, we expect inflation to move toward 1.5% by year end.	We expect headline inflation to peak at around 5-6% in Q1 2020, led by food prices.			
Monetary policy	The Fed is likely to be on hold in 2020. If it acts in 2020, it is likely to be a cut. If inflation rises significantly, the market may price hikes starting in 2021.	Despite the change in governor, we doubt the ECB will change tack much in 2020. With inflation expected to remain below-target for the foreseeable future, it could be on hold for the entire year.	The PBoC is likely to keep its traditional benchmark interest rates unchanged and maintain relatively stable short-term rates. We expect the MLF to be deployed more frequently to set the benchmark for lending rates.			
Fiscal policy	Fiscal policy should remain roughly neutral.	The political backdrop is changing across Europe which could lead to minor relaxation in fiscal rules. But Europe tends to advance only in a crisis, and with the outlook for 2020 looking benign, meaningful change is unlikely.	We expect fiscal policy easing to result in a higher fiscal deficit and larger quota of local government special project bonds. Infrastructure investment is likely to pick up.			
Government yields	We expect US 10-year yields to end 2020 near fair value of around 2.35%.	We expect 10-year bund yields around 0% by the end of 2020.	We expect 10-year Chinese government bond yields to trade between 3.0%-3.5%.			
Currency	We expect benign global growth in 2020 to lead to a weaker US dollar versus most developed and emerging currencies.	We expect the euro to benefit to from the stabilization of the US dollar but remain in a narrow range between 1.10 and 1.17.	We expect the renminbi to trade around 7.0 versus the US dollar and potentially impacted by trade tensions.			

Global macro strategy (continued) Interest rate outlook

US: Underweight. Long positions in US interest rates offer a poor risk-reward trade-off, in our view. Factors that have driven risk aversion over the past several months have shown signs of improving: global trade tensions, while still highly uncertain, seem to be heading toward temporary resolution, Brexit uncertainty has been greatly reduced and global growth seems to be bottoming. Improved global growth conditions combined with easier financial conditions in the US will likely pave the way for higher interest rates over the next several months. However, sharp increases in rates are unlikely until inflation increases, which we view as unlikely in the medium term.

Europe: Neutral. We have moved from underweight to neutral European duration. Optimism over a US-China trade truce and a Conservative victory in the UK elections have pushed core European government yields higher over the last month. We have also seen further stabilization in survey data with eurozone manufacturing PMIs showing tentative signs of bottoming out, although the hard data continued to surprise to the downside. European Central Bank (ECB) President Lagarde's statement at the Dec. ECB meeting acknowledged signs of stabilisation in the growth slowdown.

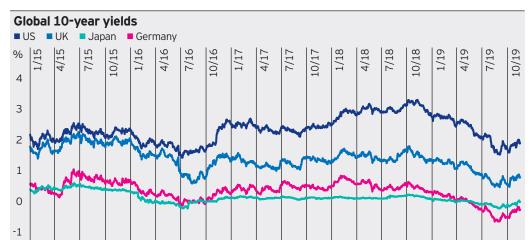
China: Neutral. We are neutral Chinese government bonds but cautious on duration through the first quarter of 2020. Chinese onshore government bonds continue to provide a notable yield pick-up versus major developed market bonds, such as US, German and Japanese bonds. However, we are cognizant of efforts by Chinese policy makers to bolster economic growth with fiscal measures, a potential recovery in risk sentiment and seasonal investment patterns. The spike in headline CPI may limit central bank easing moves in the near term and potentially larger local government special project bond quotas in 2020 could increase supply pressure early next year. We anticipate better opportunities after the first quarter, when inflation may peak and the central bank has more flexibility to conduct monetary easing.

Japan: Neutral. In contrast to the front end of the yield curve, the long end has been very stable over the last month, due to persistent local pension demand. However, the BoJ's determination to steepen the yield curve will likely limit the potential outperformance of longer-term Japanese government bonds, especially if international yields move higher. We expect the yield curve to steepen from current levels.

UK: Underweight. The Conservative party's decisive election victory reduces the probability of Bank of England (BoE) interest rate cuts in the near-term and increases the probability of a near-term bounce in growth, as uncertainty declines. Both developments would likely be supportive of higher yields, especially in the context of reduced global uncertainty.

Canada: Neutral. While global central banks have continued to ease monetary policy, the Bank of Canada (BoC) continues to sit tight. The potential signing of the USMCA (US-Mexico-Canada) trade agreement and the addition of fiscal stimulus are recent positives that have pushed Canadian 10-year sovereign bond yields toward their highs of the last six months as Canadian rates continue to follow global trends.¹

Australia: Underweight. Although domestic data remain relatively disappointing, they have already been priced by the market, with over 30 basis points of interest rate cuts priced over the next 12 months.² Given that the Reserve Bank of Australia (RBA) has signaled that it only has 50 basis points of room for further conventional cuts, short-term yields have relatively little downside, in our view. Quantitative easing could push long-term yields lower but the hurdle to this policy is high - the better global situation and reduced domestic downside risk related to housing make it unlikely, in our view. There is therefore room for a modest upward adjustment in Australian yields from current levels. Underweights versus New Zealand now look attractive, given the market's pricing of divergent RBA and Reserve Bank of New Zealand (RBNZ) policy; the RBNZ is expected to keep rates unchanged while the RBA cuts further.



Source: Bloomberg L.P., data from Jan. 2, 2015 to Dec. 16, 2019. Past performance is not indicative of future results.

Rob Waldner, Chief Strategist and Head of Macro Research, James Ong, Director-Derivative Portfolio Management, Noelle Corum, Associate Portfolio Manager, Reine Bitar, Portfolio Manager, Yi Hu, Head of Asia Credit Research, Michael Siviter, Senior Fixed Income Portfolio Manager, Brian Schneider, Head of North American Rates Portfolio Management, Scott Case, Portfolio Manager, Amritpal Sidhu, Quantitative Analyst

¹ Source: Bloomberg L.P., data from June 16, 2019 to Dec. 19, 2019.

² Source: Bloomberg, L.P., Invesco, as of Dec. 13, 2019.

Currency outlook

USD: Underweight. We have downgraded the US dollar to underweight for three main reasons: Global risk aversion is likely to decline over the next several months as growth expectations stabilize and other factors that have caused global risk aversion, such as trade tension and Brexit uncertainty, are likely to improve. We expect these conditions to lead to US dollar depreciation against most currencies in the near term.

EUR: Neutral. We expect eurozone growth to stabilize around current below-trend levels and the ECB to remain accommodative in the near term. Brexit and trade uncertainties, as well as negative interest rates, should keep the euro range-bound against the US dollar in the near term.

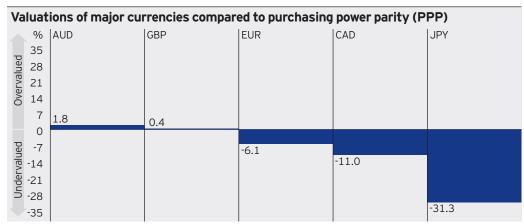
RMB: Neutral. The market has become more optimistic about US-China trade negotiations and the renminbi has appreciated against the US dollar in recent weeks. In the short term, markets will likely focus on details of the "Phase One" deal and progress of the "Phase Two" negotiations. In the medium term, geopolitical headlines have complicated the renminbi's outlook. We expect the currency's performance to be largely event-driven, presenting binary risks. Markets are closely watching trade-related headlines and investors who are preparing to increase allocations to Chinese assets could view renminbi deprecation as a buying opportunity. We believe further progress in US-China trade talks could send the renminbi/ US dollar exchange rate below 7.0.

JPY: Overweight. The long-run return profile for the yen appears skewed to the upside, given attractive valuations. However, reduced downside risks to global growth and yields and relatively persistent Japanese capital outflows probably limit the yen's short-term upside. Nevertheless, we believe the yen remains an attractive hedge to risk assets, especially if positions can be structured to take advantage of the historically low level of implied options volatility.

GBP: Overweight. The Conservative party's decisive election victory ensures the UK will leave the European Union (EU) based on the Withdrawal Agreement negotiated by Prime Minister Johnson in October. Although the ultimate state of UK-EU relations is still undefined, and Johnson has committed to a relatively "hard" form of Brexit and not to extend the transition beyond 2020, the balance of risk is more toward a softening of Johnson's stance. A "no deal" end to the transition would likely harm newly converted Conservative voters in the North and Midlands where much of the UK's manufacturing is located, and could further antagonize Scottish voters increasingly supportive of independence ahead of the 2021 Scottish elections. Sterling has rallied sharply in the last five months and now sits at its post-2016 trade-weighted high. Further upside will likely be dependent on the growth dividend from post-election certainty and the tone of negotiations with the EU over a free trade agreement.

CAD: Neutral. The Canadian dollar has found support from the most recent hawkish BoC meeting, the Finance Minister's proposed tax cut and the potential signing of the US-Mexico-Canada trade agreement. The weak November unemployment number was not sufficient to push the Canadian dollar lower, but it will likely require firm data to remain at current levels.

AUD: Overweight. Resilient commodity prices and better global risk sentiment are supportive of the Australian dollar. It has lagged its normal "beta" to improvements in US-China trade sentiment and equities, suggesting further upside from here. Positioning remains underweight providing further support from current levels, in our view.



Source: Bloomberg L.P., data as of Dec. 16, 2019.

Rob Waldner, Chief Strategist and Head of Macro Research, James Ong, Director Derivative Portfolio Management, Noelle Corum, Associate Portfolio Manager, Michael Siviter, Senior Portfolio Manager, Yi Hu, Head of Asia Credit Research, Brian Schneider, Head of North American Rates Portfolio Management, Amritpal Sidhu, Quantitative Analyst This section highlights the key themes driving Invesco Fixed Income's global credit research process and views. Themes are updated based on evolving trends and expectations.

Global investment themes Global credit themes

Asset class themes

Investment grade (IG): Easy financial conditions are supportive; trade resolution nears but earnings outlook mixed; lower net supply is positive

Rationale

We expect US corporate credit fundamentals to improve across most sectors in the coming year. Although year-to-date 2019 operating results have been pressured by the first-half 2019 government shutdown, extended trade policy uncertainty and a stronger US dollar, earnings growth is still positive. Operating margins remain around historical highs, which supports improved free cash flow metrics. In addition, we are seeing pressure from shareholders to decrease leverage through management incentives.

Macro headline risk is declining as a Phase I trade agreement appears imminent. The ultimate scope and timing of more meaningful US-China trade negotiations remains in question, but progress is visible. Policymakers on both sides have adopted more accommodative measures aimed at supporting economic activity that have dampened the negative effects on fundamentals.

Market technicals remain supportive as net issuance is expected to decline in 2020 while demand remains stable. However, there is uncertainty around this expectation as low US Treasury yields could entice corporate issuers to increasingly tender and refinance higher coupon debt. In addition, low corporate credit yields and elevated equity market volatility could spur additional merger and acquisition (M&A) related issuance. From a demand perspective, foreign investor demand for US IG credit is expected to improve due to the increase in currency-hedged yields.

In Europe, weakening manufacturing data, and political uncertainty continue to plague the fundamental outlook. However, European issuers generally carry less debt on their balance sheets and are benefiting from negative sovereign yields and strong technical demand from yield-starved investors.

IFI strategy

We are constructive on US IG credit, despite challenging valuations. We favor US and Europe over Asia. Key market drivers we are monitoring include 1) the pace at which major central banks respond to slower global growth and the impact on the US dollar and global credit flows 2) potential US fiscal and regulatory policy changes 3) the continued strength and resiliency of the US consumer and 4) the impact and timing of a Phase I trade agreement with China on aggregate demand, margins, and capital investment.

US residential mortgage backed securities (US RMBS): Valuations are favorable, and fundamentals remain supportive

Rationale

US housing data have strengthened in recent months with improving affordability driven by low mortgage rates and a strong labor market. The rate of home price appreciation has accelerated after stabilizing near the long-term average. In the primary market, elevated securitization activity has weighed modestly on credit spreads but this has created value, in our view, relative to comparable fixed income credit sectors.

IFI strategy

We continue to favor AAA rated classes collateralized by non-qualified mortgages for limited spread duration and attractive carry. Given elevated call risk associated with lower benchmark interest rates and strong collateral performance, we prefer on-the-run securities priced near par versus seasoned classes at premium dollar prices. Fannie and Freddie credit risk transfer securities appear attractive relative to the corporate sector, in our view, following recent underperformance.

Asset class themes

US commercial mortgage backed securities (US CMBS): Positioning is key as commercial real estate cycle progresses

Rationale

We expect commercial real estate rent growth and property price appreciation to continue. However, we believe the pace of appreciation will slow as new supply hinders space absorption. Further, we expect growth in e-commerce to remain a headwind for the retail property sector. On a positive note, the lower interest rate environment and favorable lending conditions should support investor demand. Lending conditions remain broadly accommodative across property markets despite moderately tighter credit standards. We expect modest new issuance volumes to be absorbed by investors.

IFI strategy

We believe senior non-agency US CMBS offer attractive carry and, in the near-term, potential for incremental spread tightening. In subordinate CMBS, we believe security selection will become increasingly important as the real-estate cycle continues to extend. We currently prefer seasoned subordinate credits that benefit from embedded property price appreciation and declining spread duration.

US asset backed securities (US ABS): Benchmark ABS spreads grind tighter, tiering in esoteric ABS more pronounced

Rationale

New issue supply has been manageable and dealer inventories remain light relative to this time last year, reflecting solid demand for ABS. Select benchmark and non-benchmark ABS continue to offer compelling relative value compared to corporate bonds. Demand for esoteric ABS has softened somewhat, leading to increased tiering across some of these higher-yielding sub-sectors. Technical trends remain supported by favorable consumer fundamentals, near-term collateral performance expectations, rational late-cycle underwriting and robust structural features. ABS could outperform as new issue supply slows and secondary market activity picks up heading into year-end.

IFI strategy

We see value at the top of the capital structure in liquid, amortizing benchmark and certain non-benchmark sectors which continue to benefit from a slightly inverted yield curve and relatively attractive all-in yields. We also see value in adding certain subordinate exposures where structures quickly de-lever. While the relative value proposition for several benchmark and non-benchmark US ABS remains, we are selective in adding esoteric US ABS at this stage of the economic cycle, given trade uncertainty and a higher correlation to weakening global fundamentals. Esoteric asset classes appear cheap versus corporates, in our view, but some could underperform in the near-term.

Sector themes

Consumer story nuanced globally, monitoring the impact of US fiscal policy

The solid US labor market and consumer confidence support the consumer sector but US consumers are more value and delivery conscious as internet sales typically account for an outsized portion of sales during the holidays. International retail demand remains uneven, especially as trade tensions build and we are carefully watching the European consumer for post-Brexit behavior shifts.

IFI strategy While we favor internet-resistant and value-based US consumer sectors, such as dollar stores and aftermarket auto part retailers, we have reduced our retail positions as we expect better opportunities to invest after the holiday season. We expect US automotive original equipment manufacturers (OEM) to remain pressured. Longer-term, however, we favor the sector on the margin, given our confidence that OEMs will be able to maintain an IG profile based on their balance sheet and financial metrics. In EM, we have turned slightly more defensive due to a relatively muted growth outlook. We prefer investment grade credits with a global footprint and multi-product offering. European auto demand has also come under volume pressure, but we hope the worst of the regulatory impact is now behind the sector. Large European consumer goods companies are fighting low growth with debt funded M&A and capital allocation policies that favor shareholders, leading to the slow deterioration of the overall credit quality of the sector. Given tight spreads and an uncertain outlook, we remain cautious on this sector.

Commodities: Growth slowdown has softened sentiment and demand Rationale

Demand for commodities has softened on global growth deceleration, declining manufacturing and inventory build-ups. Steel markets have been negatively affected by over-heating production in most regions, leading to sharp price declines over the last few quarters. Overall sentiment in commodities is especially negative given late-cycle concerns and increased tariff-related uncertainties amid the ongoing US-China trade dispute.

Shareholder-friendly capital allocation policies, including large dividend pay-outs and share repurchase programs have been neutral for corporate credit profiles, with funding often supported by asset sales and/or free cash flow generation. However, these shareholderoriented policies have had limited incremental deleveraging capacity over the past year as shareholder returns have generally been prioritized over additional debt reduction.

Geopolitical risk remains at the forefront of investors' minds, notably as it relates to oil, following the recent attack on Saudi Arabia's operating facilities. Assuming persistent geopolitical tensions, our team anticipates near-term price volatility, especially given the fundamental risks and concerns noted above.

IFI strategy

We favor copper producers and certain Russian steelmakers, which tend to benefit from better supply/demand dynamics and more attractive bond valuations. We favor selected exploration and production oil companies located in Latin America and Russian oil and gas producers. We also remain constructive on certain US exploration and production companies with low-cost shale assets and US midstream companies focused on cost of capital optimization and active deleveraging to stabilize or maintain investment grade ratings.

Michael Hyman, Head of Global Investment Grade and Emerging Markets Debt, Joe Portera, Head of High Yield and Multi-Sector Credit, Mario Clemente, Head of Structured Investments This section highlights the views of Invesco Fixed Income's credit analysts across a broad range of fixed income assets managed by Invesco.

Global credit strategy

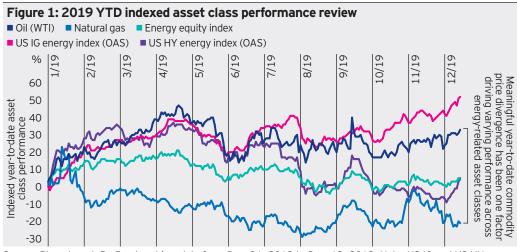
Energy - Unloved, out of favor and potentially attractive

Looking back over the last year, the fourth quarter of 2018 was challenging for many asset classes as global recession fears mounted. Crude oil faced notable pressure with benchmark prices down nearly 40%, ¹ driven by global demand concerns and a relentless rise in US shale oil production. OPEC and key non-OPEC producers came to the rescue in December 2018, announcing a coordinated production cut² to help balance oil markets. As global recession fears eased, oil rallied in the first few months of 2019 and has remained range-bound with continued implicit support of key OPEC and non-OPEC producers.

Fast forward to December 2019, and OPEC has surprised the market again with an even deeper production cut³ to stay ahead of a potentially over-supplied oil market in 2020 and ostensibly to provide a boost for Saudi Aramco's initial public offering. While oil has remained partially supported by this ongoing supply-side management, natural gas prices, on the other hand, have been under significant pressure due to surging US shale gas production, which has led to an oversupplied US market with little relief in sight.

Decoupling of commodities and energy equities, IG and HY energy

Against this backdrop of commodity volatility, energy equities have lacked investor support in 2019 and have largely underperformed the rest of the market.⁴ With investors clamoring for returns and questioning the long-term cash generative capacity of the US energy patch, there has been clear divergence between the relatively weak performance of energy equities (+2.9% year to date (YTD)) versus crude oil (+32.3% YTD), arguably the most important value driver for many energy companies (Figure 1). Furthermore, while crude oil and energy equities have generally de-coupled, there has been a similar divergence between US investment grade (US IG) and high yield (US HY) energy credit performance (Figure 1), with US IG energy credit outperforming, i.e. experiencing greater index spread tightening versus US HY energy credit.⁵ We believe such performance discrepancies may create unique investment opportunities for disciplined and value-oriented investors and Invesco Fixed Income continues to seek attractive risk-adjusted opportunities across the US energy credit universe.



Source: Bloomberg L.P., Barclays Live, data from Dec. 31, 2018 to Dec. 13, 2019. Note: US IG and US HY energy OAS index performance reflect inverse indexed changes. Indices are Russell 1000 Energy Index, Bloomberg Barclays U.S. Investment Grade Energy Index, Bloomberg Barclays U.S. High Yield Energy Index. Oil (WTI) and Natural gas are prices.

Reasons to question US energy equity and credit valuations

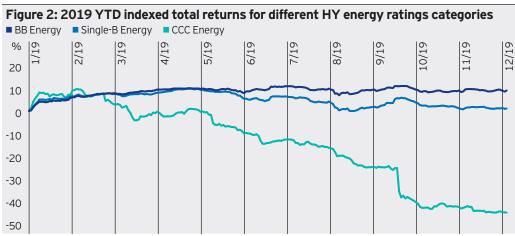
Weak US energy equity price performance in 2019 is understandable. In theory, the price of a company's stock is equal to (simplistically) the present value of its future cash flows. But what happens if a company has not generated positive cash flow for several years? Many domestic exploration and production (E&P) companies have historically spent more cash on drilling and extraction than was generated from operations, which resulted in "cash burn" that was partially or fully debt-financed. Investors seemed willing to fund future production growth at the expense of cash flow generated today but times have changed. Both equity and credit investors are pushing back on this historical growth-driven funding approach, with a preference for free cash generation today in exchange for lower growth in the future. As a result, energy companies' fundamental operating profile and expected long-term viability is now in question as investors seek a shift in spending behavior. This investor pushback has impacted equity and credit valuations in different ways, across energy sub-sectors and across fixed income and equity asset classes (Figure 1).

US IG midstream sector stands out

Within US IG, favorable market technicals have resulted in positive absolute returns for US IG energy, but the sector has underperformed the Bloomberg Barclays US IG credit index year-to-date.⁶ With the benefit of hindsight, this seems plausible, as the erosion in equity prices should theoretically reduce creditor downside protection amid shrinking equity market capitalizations. However, all "energy companies" are not created equal, and we believe there are distinct differences between the credit support embedded in the more commodity-sensitive exploration and production (E&P) sector versus the more volumedriven midstream sector (companies that transport hydrocarbons via pipelines). While we wait to see evidence of the E&P sector's ability to consistently generate free cash, we are more encouraged by the corporate actions taken and positive fundamental changes seen in the US IG midstream sector. These businesses have generally committed to solid investment grade ratings, slower growth, greater cash retention and reduced leverage, resulting in select ratings upgrades. Midstream's search for a lower cost of capital has also included asset sales, dividend cuts, de-levering M&A, corporate simplifications and joint ventures, among other bondholder-friendly actions. In our view, there appear to be (i) more credit support levers embedded in the less commodity-sensitive midstream entities versus their E&P counterparts and (ii) a greater alignment between credit and equity incentives in this sub-sector, which could lead to additional credit-supportive corporate actions in 2020.

While we remain cautious and deliberate about deploying incremental dollars into the US IG energy sector, we remain relatively more constructive on the midstream sector given (i) its firm and proven commitments to IG ratings (backed by balance sheet strengthening corporate activity), (ii) a host of levers that could be utilized to raise capital if needed, (iii) attractive valuation compared to the US IG index following this year's relative underperformance and (iv) generally aligned preferences of credit and equity investors for slower growth, greater cash retention and lower leverage. We expect this sub-sector to remain focused on cost of capital optimization in a way that is accretive, not only to the equity community, but also to bondholders.

US HY energy could rebound on brighter macro outlook - we favor E&P and midstream Within US high yield, the energy sector has been, by far, the worst performing sector this year. Like energy equities, the correlation between US HY energy and commodity prices has broken down this year. Based on a regression analysis by JP Morgan, the US HY energy sector is multiple standard deviations cheap compared to oil and natural gas. However, most of the underperformance is due to CCC energy names (around -45% year-to-date) and, to a lesser extent, single Bs (around 1% year-to-date). BB energy names (+9.2%) have performed more in-line with the overall market (Figure 2).



Source: JP Morgan estimates, data from Jan. 2, 2019 to Dec. 4, 2019.

Global credit strategy (continued)

There are numerous reasons for US HY energy's recent underperformance: (i) an increased number of energy bankruptcies with low creditor recoveries, (ii) investor fatigue due to volatility in recent years, (iii) uncertainty surrounding oil and gas prices due to macro and supply concerns, (iv) dismal energy equity performance as investors push back on previously accepted growth-driven funding models, (v) the perception that access to high yield capital is largely closed except to high quality BB energy companies, impairing the extension of looming maturities in 2021 and 2022, (vi) outsized natural gas exposure for some US HY issuers, and (vii) poor technicals as high yield money managers seek to protect 2019 returns and are unwilling to add energy exposure, while some credit hedge funds push energy shorts into year-end.

If the macro picture improves, or even stabilizes, 2020 could see a reversal of the poor technicals discussed above and US HY energy could gain positive momentum as the perceived access to capital improves, allowing some stressed issuers to potentially refinance and push out near-term maturities. Given this possibility, and the fact that spreads and yields have reached attractive levels in an otherwise tight high yield market, we believe there may be compelling opportunities in US HY energy in 2020. We favor low production cost, single B or double BB E&P's that are expected to generate positive free cash flow (at current prices in the forward markets) and benefit from manageable bond maturities. We also like midstream HY energy credits with diversified assets and minimal exposure to basins that are expected to experience lower volumes, particularly in natural gas.

Conclusion

Following dramatic differentials in 2019 performance across commodities, energy credit and energy equities, and given broader economic uncertainties, investing in US energy credit undoubtedly requires caution. Furthermore, given slowing global economic growth and uncertainty about the impact of other exogenous variables on this industry's key commodities, we expect continued commodity and asset class price volatility to persist, which warrants a vigilant and deliberate investment approach. At Invesco Fixed Income, we believe such volatility and uncertainty may create investment opportunities for meticulous and value-oriented active investment managers. We continue to scour the universe of investment grade and high yield energy credit for opportunities exhibiting creditor-specific catalysts, compelling downside creditor protection and attractive risk-adjusted return potential.

Bixby Stewart, Senior Analyst, Noam Alhadeff, Senior Analyst

¹ Source: Bloomberg L.P., Reflects the 38.0% price change for oil (WTI) from 09/28/18 (USD73.25 per barrel) to 12/31/18 (USD45.41 per barrel).

² Source: OPEC: https://www.opec.org/opec_web/en/press_room/5279.htm, Dec. 7, 2018.

³ Source: OPEC: https://www.opec.org/opec_web/en/press_room/5797.htm, Dec. 6, 2019.

⁴ Based on index price changes for the period 12/31/18 to 12/13/19 for the Russell 1000 Energy Index (+2.9%) vs. the Russell 1000 Index (+26.4%).

⁵ Based on index option adjusted spread (OAS) changes for the period 12/31/18 to 12/13/19 for the US investment grade energy credit index (26.4% OAS tightening) vs. the US high yield energy credit index (3.4% OAS tightening).

⁶ Based on index OAS changes for the period 12/31/18 to 12/13/19 for the US investment grade credit index (33.6% OAS tightening) vs. the US investment grade energy credit index (26.4% OAS tightening).

⁷ Based on 1.73% total returns for the J.P. Morgan Domestic High Yield Energy Index versus 12.7% total returns for the J.P. Morgan High Yield Index, data from Jan. 1, 2019 to Dec. 12, 2019.

⁸ Source: JP Morgan, Credit Market Dysfunction: A Story in (Mostly) Pictures, Tarek Hamid, Jon H Dorfman, CFA, Aaron Rosenthal, CFA, Nov. 1, 2019.



Joe Portera Head of High Yield and Multi-Sector Credit



Ken Hill Senior Portfolio Manager



Megan Ziegenfuse Product Manager

The bottom line

How multi-sector strategies can help navigate today's challenging, dynamic markets

We speak with IFI investors Joe Portera, Head of High Yield and Multi-Sector Credit, Ken Hill, Senior Portfolio Manager, and Product Manager, Megan Ziegenfuse, about why a multi-sector approach to fixed income is so appealing right now. They explain why portfolio construction that incorporates multi-sector strategies can benefit investors in today's challenging markets.

Q: What are the major themes in the marketplace driving institutional investors' approaches to fixed income allocations?

Ken: Yields across the fixed income landscape have remained at historically low levels and in several cases have even become negative. The dwindling supply of high-income producing assets coupled with an increased propensity to save has spurred a global hunt for yield. Moreover, thirty years ago, economies and financial markets were more fragmented and insulated from each other. Today, just about every economy is dependent on the prosperity of others outside its borders. This interdependence has led to higher correlations among many asset classes. When assets are moving in tandem with one another, it's essential to have access to information - in real time - to identify and exploit market dislocations when they occur.

Finally, geopolitical uncertainty has been an underlying theme in fixed income for much of the last two years. Brexit, the US-China trade war and the concurrent slowdown in global trade and economic growth are themes at the center of most macroeconomic conversations. These uncertainties, along with lofty asset values, have led to several bouts of market volatility, including at the end of 2018 when the Fed raised interest rates into slowing global growth, and earlier this year when President Trump escalated the trade war by raising tariffs on China.

Q: Can you expand on how multi-sector credit strategies can help solve the challenges that Ken just touched on?

Joe: Fixed income yields have been declining over the last 15-20 years. In 2001, 7 to 10-year US Treasuries - considered the "safest" assets you can invest in - yielded around 5%. Now investors must move into high yield sectors like bank loans and high yield corporate bonds to achieve a similar or higher yield. This has introduced "risk creep" into client portfolios as managers have taken on more risk to generate income.

Megan: We are also seeing an increasingly interconnected world - which is great when economies are growing and expanding - but higher correlations among asset classes have highlighted the need to diversify return streams in the event that a major geopolitical risk materializes. We believe it is important to have access to a broad fixed income opportunity set to be able to pull different levers to produce solid returns going forward. The ability to quickly respond to market drivers is also critical.

Q: Can you elaborate on the typical characteristics of a multi-sector credit strategy? **Joe:** There are two primary approaches to allocating across fixed income sectors - a fixed approach and an active multi-sector approach.

In a fixed asset allocation, there is typically a lengthy process to put a decision forward, debate and agree upon it and send it to individual managers, to implement. There are two drawbacks to this approach:

- **Speed:** this lengthy process means that by the time an investment decision is implemented, the trade opportunity may have passed.
- **Risk:** There is no real-time way to evaluate the risks across the individual managers. For example, if all of the managers lean toward financials at the same time, the overall portfolio could be heavily weighted toward financials. While this may be fine, there are times when unintended biases can hurt the overall portfolio.

With a true active multi-sector approach, there is an element of "tactical" asset allocation that allows quick movement among asset classes.

- **Speed:** The investment team can make fast, cost-efficient adjustments as market conditions change to shift the portfolio's risk profile among asset classes, sectors, global duration and individual security holdings. This can be done in either the cash markets or derivatives space, depending on the ease, speed and cost of such movements.
- **Risk:** The investment team can evaluate risk across the individual holdings and determine how those risks combine, to either diversify away risks or express them in ways that are intentional.

Q: Can you explain the role these strategies can play in fixed income portfolios?

Joe: We believe there are two major benefits these strategies can provide:

- They can help strengthen clients' overall fixed income portfolio characteristics.
- They can improve portfolios from an operational perspective.

In terms of portfolio characteristics, these strategies can potentially offer higher yields, stronger risk-adjusted returns by using asset classes that exhibit lower correlations to each other, and downside protection through diversified income streams.

Q: Can you expand on the operational benefits you mentioned? What do they mean for clients?

Ken: First, they save time and money. For example, a client could hire four managers to manage USD100 million each at 50 basis points or one manager to manage 400 million at 35 basis points. Increasing the scale of the allocation and forming strategic partnerships helps reduce costs and lessens the amount of operational oversight that would be needed for multiple external managers.

Megan: We think investors should consider multi-sector credit strategies for four reasons – performance, diversification, cost, and convenience. For plans with limited staff or expertise, we believe multi-sector strategies can provide a well-designed solution to a pressing problem: multi-sector managers can respond to changing market conditions in real time and potentially take advantage of market dislocations and opportunities through tactical asset allocation and seek to mitigate risks in a nimble fashion.

Please read the Investment risk section at the end of this publication.

Invesco Fixed Income

Team contributors

Senior Editor - Ann Ginsburg

Atlanta

Rob Waldner

Chief Strategist and Head of Macro Research +1 404 439 4844 robert.waldner@invesco.com

Mario Clemente

Head of Structured Investments +1 404 439 4614 mario.clemente@invesco.com

James Ong

Director-Derivative Portfolio Management +1 404 439 4762 james.ong@invesco.com

Brian Schneider

Head of North American Rates +1 404 439 4773 brian.schneider@invesco.com

Amritpal Sidhu

Quantitative Analyst +1 404 439 4762 amritpal.sidhu@invesco.com

Ken Hill

Senior Portfolio Manager +1 404 439 4861 ken.hill@invesco.com

Ann Ginsburg

Head of Thought Leadership, Fixed Income +1 404 439 4860 ann.ginsburg@invesco.com

Joe Portera

Head of High Yield and Multi-Sector Credit +1 404 439 4814 joseph.portera@invesco.com

Paul English

Head of US IG Research +1 404 439 4819 paul.english@invesco.com

Noelle Corum

Associate Portfolio Manager +1 404 439 4836 noelle.corum@invesco.com

Scott Case

Portfolio Manager +1 404 439 4775 scott case@invesco.com

Bixby Stewart

Senior Analyst +1 404 439 4832 bixby.stewart@invesco.com

Megan Ziegenfuse

Product Manager +1 404 439 4861 ken.hill@invesco.com

Michael Hyman

Head of Global Investment Grade and Emerging Markets Debt +1 404 439 4827 michael.hyman@invesco.com

London

David Todd

Head Global Corporate Credit Research +44 20 3219 2727 david.todd@invesco.com

Michael Siviter

Senior Fixed Income Portfolio Manager +44 20 7034 3893 michael.siviter@invesco.com

Reine Bitar

Portfolio Manager +44 20 7959 1689 reine.bitar@invesco.com

Hong Kong

Yi Hu

Head of Asia Credit Research +852 3128 6815 yi.hu@invesco.com

Invesco Fixed Income (continued)

New York

Noam Alhadeff

Senior Analyst +1 212 323 4814 noam.alhadeff@invesco.com

Recent IFI publications

- 1. Multi-sector asset allocation report Q3 2019
- 2. Asia's US dollar bond market: A new asset class, June 2019, Ken Hu, ClO Asia Pacific, Yifei Ding, Portfolio Manager, Haidan Zhong, Client Portfolio Manager
- 3. Chinese onshore bonds: A market too important to ignore?, June 2019, Yi Hu, Head of Asia Credit Research
- 4. China embarks on Digital Silk Road, May 2019, Adrian Garcia, Senior Credit Analyst
- 5. Progress report on SOFR, May 2019, Justin Mandeville, Portfolio Manager
- Risk management at Invesco: From theory to practice, May 2019, Leyla Greengard, Head of Fixed Income Portfolio Risk

Notes

Notes

Investment risks

The value of investments and any income will fluctuate (this may partly be the result of exchange rate fluctuations) and investors may not get back the full amount invested. Past performance is not a guide to future returns.

Fixed-income investments are subject to credit risk of the issuer and the effects of changing interest rates. Interest rate risk refers to the risk that bond prices generally fall as interest rates rise and vice versa. An issuer may be unable to meet interest and/or principal payments, thereby causing its instruments to decrease in value and lowering the issuer's credit rating. The values of junk bonds fluctuate more than those of high quality bonds and can decline significantly over short time periods.

The risks of investing in securities of foreign issuers, including emerging market issuers, can include fluctuations in foreign currencies, political and economic instability, and foreign taxation issues.

The performance of an investment concentrated in issuers of a certain region or country is expected to be closely tied to conditions within that region and to be more volatile than more geographically diversified investments.

Mortgage- and asset-backed securities, which are subject to call (prepayment) risk, reinvestment risk and extension risk. These securities are also susceptible to an unexpectedly high rate of defaults on the mortgages held by a mortgage pool, which may adversely affect their value. The risk of such defaults depends on the quality of the mortgages underlying such security, the credit quality of its issuer or guarantor, and the nature and structure of its credit support.

Asset-backed securities are subject to prepayment or call risk, which is the risk that the borrower's payments may be received earlier or later than expected.

Commodities may subject an investor to greater volatility than traditional securities such as stocks and bonds and can fluctuate significantly based on weather, political, tax, and other regulatory and market developments.

Important information

This document is for Qualified Investors in Switzerland, Professional Clients only in Dubai, Continental Europe and the UK; for Institutional Investors only in the United States and Australia; in New Zealand for wholesale investors (as defined in the Financial Markets Conduct Act); for Professional Investors in Hong Kong; for Qualified Institutional Investors in Japan; in Taiwan for Qualified Institutions/Sophisticated Investors; in Singapore for Institutional/Accredited Investors; for Qualified Institutional Investors and/or certain specific institutional investors in Thailand; in Canada, this document is restricted to Accredited Investors as defined under National Instrument 45-106. It is not intended for and should not be distributed to, or relied upon by, the public or retail investors. Please do not redistribute this document.

For the distribution of this document, Continental Europe is defined as Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Liechtenstein, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden and Switzerland.

This does not constitute a recommendation of any investment strategy or product for a particular investor. Investors should consult a financial professional before making any investment decisions.

This overview contains general information only and does not take into account individual objectives, taxation position or financial needs. Nor does this constitute a recommendation of the suitability of any investment strategy or product for a particular investor. Investors should consult a financial professional before making any investment decisions. It is not an offer to buy or sell or a solicitation of an offer to buy or sell any security or instrument or to participate in any trading strategy to any person in any jurisdiction in which such an offer or solicitation is not authorized or to any person to whom it would be unlawful to market such an offer or solicitation. It does not form part of any prospectus. While great care has been taken to ensure that the information contained herein is accurate, no responsibility can be accepted for any errors, mistakes or omissions or for any action taken in reliance thereon.

The opinions expressed are that of Invesco Fixed Income and may differ from the opinions of other Invesco investment professionals. Opinions are based upon current market conditions, and are subject to change without notice

As with all investments, there are associated inherent risks. Please obtain and review all financial material carefully before investing. Asset management services are provided by Invesco in accordance with appropriate local legislation and regulations.

This material may contain statements that are not purely historical in nature but are "forward-looking statements." These include, among other things, projections, forecasts, estimates of income, yield or return or future performance targets. These forward-looking statements are based upon certain assumptions, some of which are described herein. Actual events are difficult to predict and may substantially differ from those assumed. All forward-looking statements included herein are based on information available on the date hereof and Invesco assumes no duty to update any forward-looking statement. Accordingly, there can be no assurance that estimated returns or projections can be realized, that forward-looking statements will materialize or that actual returns or results will not be materially lower than those presented.

By accepting this document, you consent to communicate with us in English, unless you inform us otherwise. All information is sourced from Invesco, unless otherwise stated. All data as of Dec. 31, 2019 unless otherwise stated. All data is USD, unless otherwise stated.

Restrictions on distribution

This document has been prepared only for those persons to whom Invesco has provided it. It should not be relied upon by anyone else. Information contained in this document may not have been prepared or tailored for an Australian audience and does not constitute an offer of a financial product in Australia. You may only reproduce, circulate and use this document (or any part of it) with the consent of Invesco.

The information in this document has been prepared without taking into account any investor's investment objectives, financial situation or particular needs. Before acting on the information the investor should consider its appropriateness having regard to their investment objectives, financial situation and needs. You should note that this information:

- may contain references to dollar amounts which are not Australian dollars;
- may contain financial information which is not prepared in accordance with Australian law or practices;
- may not address risks associated with investment in foreign currency denominated investments; and
- does not address Australian tax issues.

Issued in Australia by Invesco Australia Limited (ABN 48 001 693 232), Level 26, 333 Collins Street, Melbourne, Victoria, 3000, Australia which holds an Australian Financial Services License number 239916. Canada

This document is restricted to accredited investors as defined under National Instrument 45-106. All material presented is compiled from sources believed to be reliable and current, but accuracy cannot be guaranteed. This is not to be construed as an offer to buy or sell any financial instruments and should not be relied upon as the sole factor in an investment making decision. As with all investments there are associated inherent risks. Please obtain and review all financial material carefully before investing.

Issued in Canada by Invesco Canada Ltd., 5140 Yonge Street, Suite 800, Toronto, Ontario, M2N 6X7.

Continental Europe, Dubai and the UK

The document is intended only for Qualified Investors in Switzerland and Professional Clients in Continental Europe, Dubai and the UK and is not for consumer use. Marketing materials may only be distributed without public solicitation and in compliance with any private placement rules or equivalent set forth in the laws, rules and regulations of the jurisdiction concerned. This document is not intended to provide specific investment advice including, without limitation, investment, financial, legal, accounting or tax advice, or to make any recommendations about the suitability of any product for the circumstances of any particular investor. You should take appropriate advice as to any securities, taxation or other legislation affecting you personally prior to investment. No part of this material may be copied, photocopied or duplicated in any form by any means or redistributed without Invesco's prior written consent.

Further information is available using the contact details shown:

- Issued in Austria by Invesco Asset Management Österreich-Zweigniederlassung der Invesco Asset Management Deutschland GmbH, Rotenturmstraße 16-18, 1010 Vienna, Austria.
- Issued in Belgium by Invesco Asset Management SA Belgian Branch (France), Avenue Louise 235, B-1050 Brussels, Belgium.
- Issued in Denmark, Finland, France, Greece, Luxembourg, Norway and Portugal by Invesco Asset Management SA, 16-18, rue de Londres, 75009 Paris, France.
- Issued in **Dubai** by Invesco Asset Management Limited. PO Box 506599, DIFC Precinct Building No 4, Level 3, Office 305, Dubai, UAE. Regulated by the Dubai Financial Services Authority.
- Issued in Germany by Invesco Asset Management Deutschland GmbH, An der Welle 5, 60322 Frankfurt am Main, Germany,
- Issued in Ireland by Invesco Asset Management Limited, Perpetual Park, Perpetual Park Drive, Henley-on-Thames, Oxfordshire, RG9 1HH, United Kingdom. Authorised and regulated by the Financial Conduct
- Issued in Italy by Invesco Asset Management SA, Sede Secondaria, Via Bocchetto 6, 20123 Milan, Italy.
 Issued in Netherlands by Invesco Asset Management S.A. Dutch Branch, Vinoly Building, Claude Debussylaan 26, 1082 MD Amsterdam, The Netherlands.
- Issued in **Spain** by Invesco Asset Management SA, Sucursal en España, C/ GOYA, 6 3°, 28001 Madrid, Spain.
- Issued in Switzerland by Invesco Asset Management (Schweiz) AG, Talacker 34, 8001 Zurich, Switzerland.
- Issued in Sweden by Invesco Asset Management SA (France) Swedish Filial, c/o Convendum, Jakobsbergsgatan 16, Box 16404, SE-111 43 Stockholm, Sweden.
- Issued in the United Kingdom by Invesco Asset Management Limited which is authorised and regulated by the Financial Conduct Authority. Invesco Asset Management Ltd, Perpetual Park, Perpetual Park Drive, Henley-on-Thames, RG9 1HH, UK.

Hona Kona

This document is provided to professional investors (as defined in the Securities and Futures Ordinance and the Securities and Futures (Professional Investor) Rules) only in Hong Kong. It is not intended for and should not be distributed to, or relied upon, by the members of public or the retail investors.

Issued in **Hong Kong** by Invesco Hong Kong Limited 景順投資管理有限公司, 41/F, Champion Tower, Three Garden Road, Central, Hong Kong.

Japan

This document is only intended for use with Qualified Institutional Investors in Japan. It is not intended for and should not be distributed to, or relied upon, by members of the public or retail investors.

Issued in Japan by Invesco Asset Management (Japan) Limited, Roppongi Hills Mori Tower 14F, 6-10-1 Roppongi, Minato-ku, Tokyo 106-6114; Registration Number: The Director-General of Kanto Local Finance Bureau (Kin-sho) 306; Member of the Investment Trusts Association, Japan and the Japan Investment Advisers Association.

New Zealand

This document is issued in New Zealand only to wholesale investors (as defined in the Financial Markets Conduct Act). This document has been prepared only for those persons to whom it has been provided by Invesco. Information contained in this document may not have been prepared or tailored for a New Zealand audience. This document does not constitute and should not be construed as an offer of, invitation or proposal to make an offer for, recommendation to apply for, an opinion or guidance on Interests to members of the public in New Zealand. Any requests for information from persons who are members of the public in New Zealand will not be accepted.

Issued in **New Zealand** by Invesco Australia Limited (ABN 48 001 693 232), Level 26, 333 Collins Street, Melbourne, Victoria, 3000, Australia, which holds an Australian Financial Services Licence number 239916. **Singapore**

This document may not be circulated or distributed, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 304 of the Securities and Futures Act (the "SFA"), (ii) to a relevant person pursuant to Section 305(1), or any person pursuant to Section 305(2), and in accordance with the conditions specified in Section 305 of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA. This document is for the sole use of the recipient on an institutional offer basis and/ or accredited investors and cannot be distributed within Singapore by way of a public offer, public advertisement or in any other means of public marketing.

Issued in **Singapore** by Invesco Asset Management Singapore Ltd, 9 Raffles Place, #18-01 Republic Plaza, Singapore 048619.

Taiwan

This material is distributed to you in your capacity as Qualified Institutions/Sophisticated Investors. It is not intended for and should not be distributed to, or relied upon, by members of the public or retail investors. Issued in **Taiwan** by Invesco Taiwan Limited, 22F, No.1, Songzhi Road, Taipei 11047, Taiwan (0800-045-066). **Invesco Taiwan Limited is operated and managed independently. United States**

Issued in the **US** by Invesco Advisers, Inc., Two Peachtree Pointe, 1555 Peachtree Street, N.E., Suite 1800, Atlanta, Georgia, 30309.