syntrinsic

2019 Capital Markets Forecast

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EXECUTIVE SUMMARY

Long-Term Forecast

Our long-term forecast is designed to create a useful and well-grounded foundation for portfolio construction. During periods of volatility and constantly changing consensus views on the future, we intend to craft a forecast that serves as a ballast to such near-sided views and to act as a place of reason during chaotic times. Looking through recent noise, our updated views were quite similar to last year's cautious optimism.

- Our ten-year global equity return forecast remains 7.25%, with expectations for foreign developed ("EAFE") equities to slightly outperform US equities. Emerging markets ("EM") expectations slightly improved from last year, but not enough to change our return assumptions for the global index.
- We lifted our expectations for global aggregate fixed income returns over the next decade given improvements to yields over last year. We increased return assumptions for US debt the most, with more of the improvements expected later in the forecast period.
- We adjusted listed real estate long-term return assumptions modestly downward. Improvements in cash returns have aided our long-term return outlook for listed hedge fund strategies. A balanced supply-demand dynamic amongst most commodities and our modest downgrade to our long-term inflation outlook resulted in a slight downgrade to commodities.

Near-Term Sentiment

Our sentiment over the next three years remains cautious given the late-cycle nature of this bull market, and seeks to ensure portfolios are highly diversified across asset classes and geographies. However, we caution against dramatic timing of the markets and recommend the aforementioned diversified approach, with a bias towards higher quality holdings, limited leverage, and strong fundamental qualities.

- We upgraded our allocation sentiment for US equities. While the economic cycle and dynamics for earnings are softer than in recent years, they remain positive and appear more attractive on a relative basis. We have become slightly more cautious on foreign developed regions, anticipating a sustained loss in European momentum this year and continued political uncertainty. Offsetting some of those concerns are encouraging signs in Japan. Our neutral view on emerging markets is driven by expectations for a continued soft landing scenario in China offset by significant trade uncertainty and signs of global deceleration.
- While some headwinds remain for fixed income returns, the opportunities for real yield improved throughout 2018. We expect only limited interest rate pressures and have become more cautious of credit risks. We continue to recognize high quality fixed income's role as a diversifier and source of liquidity.
- Our near-term sentiment on listed real estate was downgraded to neutral due to late cycle dynamics. While the underlying supply/demand fundamentals for real estate remain strong, significant property appreciation appears unlikely from here in the near term. We retain a positive/neutral view towards hedged strategies as alpha opportunities and expected portfolio diversification effects remain strong.

Summary of Long-Term Forecast and Near-Term Sentiment

Asset Class / Segment	2019 Long-Term Assumption	2018 Long-Term Assumption	2019 Near-Term Sentiment	2018 Near-Term Sentiment
Global Equity	7.25%	7.25%		
US	6.50%	6.50%	Neutral / Positive	Neutral
Foreign	7.00%	7.00%	Neutral / Negative	Neutral
EM	10.00%	9.75%	Neutral	Neutral
Global Fixed Income	2.50%	2.00%		
Short-Term Bond	3.25%	2.75%	Neutral / Positive	Neutral / Positive
Core Bond	3.75%	3.00%	Neutral	Neutral
Core Plus Bond	4.25%	3.50%	Neutral	Neutral
Int'l Bond	1.25%	1.00%	Negative	Negative
Emerging Bond	6.25%	5.25%	Neutral	Neutral
Listed Real Estate	6.00%	6.50%	Neutral	Neutral / Positive
Commodities	2.25%	2.50%	Neutral	Neutral
Hedged Strategies	4.25%	4.00%	Neutral / Positive	Neutral / Positive

Forecasting Long-Term Returns and Near-Term Sentiment

Syntrinsic forecasts long-term returns, volatility, and correlations across global capital markets in order to better understand the investment options available to construct diversified portfolios with a strong likelihood of meeting a wide range of objectives. The long-term forecasting of capital market returns serves as the foundation of our portfolio construction process, informing high-level asset class views. The following analysis of return expectations assumes a generic time horizon of 10 years, and proves useful for perpetual time horizons because any time period in excess of 10 years likely will include multiple business cycle stages (i.e. recession, recovery, peak) and thus minimize the impact of short-term cyclical factors and increase the importance of longer-term secular factors.

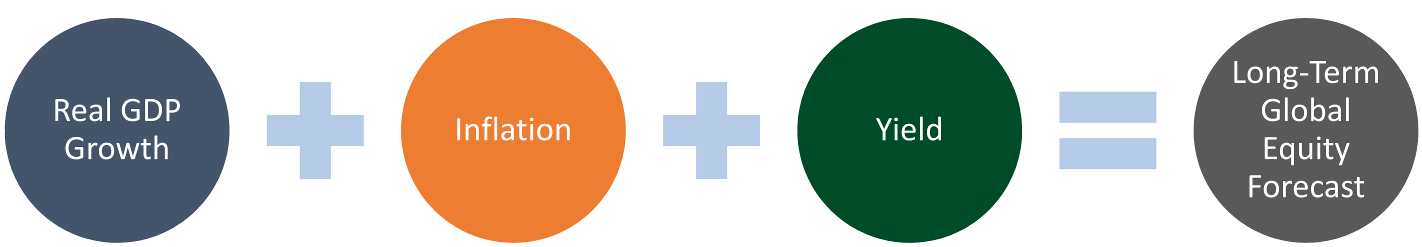
Normally, because near-term performance will seldom reflect long-term forecasts, Syntrinsic assesses near-term market and economic issues that may present opportunities or threats over three year periods. We seek to add value within a market cycle by tactically adding exposure to areas we think will outperform and reducing areas that have a strong likelihood to underperform. Syntrinsic's near-term tactical allocation views are used to adjust, not drive, portfolio allocations.

When using forecasts for planning purposes, it is important to recognize that returns are not guaranteed and are vulnerable to periods of significant deviation from the forecast and even loss. Diversification may help to reduce the size and duration of these periods, but such events are not always avoidable. The value of long-term forecasting is only significant if investors have the patience to allow long-term fundamentals to play out. This analysis excludes effects from market timing (i.e. attempting to buy or sell investments based on short-term movements or outlook).

Long-Term Global Equity Forecast

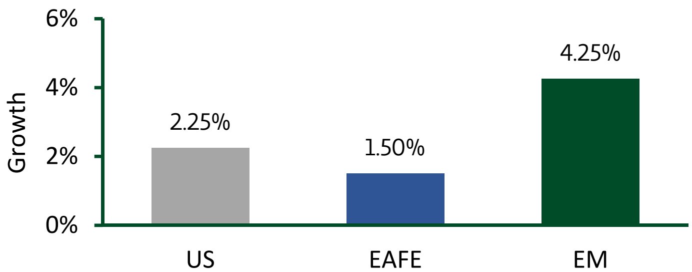
Syntrinsic's public market equity forecasts are based on expectations for real growth, inflation, and yield. While the factors that inform these expectations are dynamic and may change from year to year, the size of such changes normally will be small. We also take into account foreign revenue exposure to local equity markets. More cyclical factors such as expected changes in profitability and valuations are accounted for in our near-term three year outlook, in order to achieve a stable and more useful foundation for portfolio construction.

Exhibit 1: Syntrinsic Global Equity Building Blocks



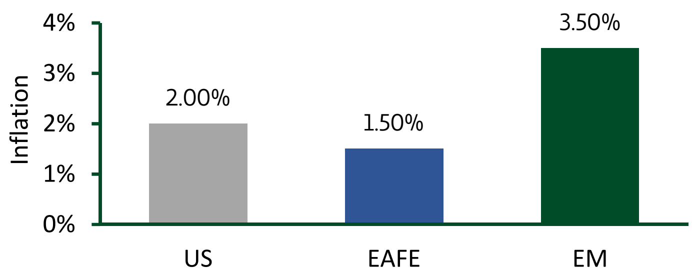
The primary factors to develop return expectations are often referred to as "building blocks," and their aggregation as the "building blocks method." The following assumptions for each building block are based on multi-decade trends evaluated by Syntrinsic and highlight significant factors affecting market returns. Any adjustments in our work made to these trends occur only when we feel a high degree of confidence that such a change is supported by a strong fundamental argument.

Exhibit 2: Syntrinsic Real GDP Growth Assumptions



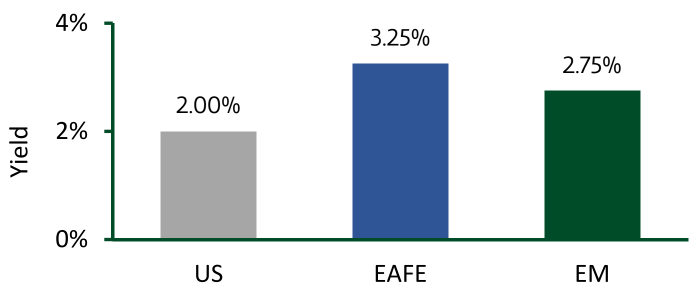
Syntrinsic's real growth assumptions for the US, EAFE, and EM regions remain generally consistent with consensus expectations. Relative to long-term averages, we expect more modest long-term real growth potential based on slowing global trends across demographics, growth, and productivity.

Exhibit 3: Syntrinsic Inflation Assumptions



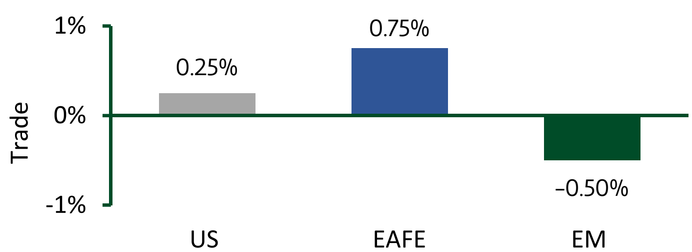
Our inflation assumptions continue to be at a slight discount to long-term historical averages. Despite potential for a near-term cyclical uptick, we believe aging global demographics, ongoing technological innovation and adoption, and continued globalization will anchor inflation on a secular, longer-term basis.

Exhibit 4: Syntrinsic Yield Assumptions



Our expectations for equity dividend yields were consistent across developed markets, using recent trends as a guide. EM yields have been on a positive upward trend, and received a small upgrade.

Exhibit 5: Syntrinsic Trade Effect Assumptions



Our adjustments to the growth building blocks for each region are based on regional revenues sources for the MSCI All-Country World Index. Emerging markets are discounted in our assumptions due to trade ties with developed countries growing more slowly.

Asset Class	Segment	Long-Term Forecast (10 Years)	Rationale
GLOBAL EQUITY FORECAST	Global Equity	7.25%	Syntrinsic estimates global equities should have an average annual return of 7.25%. The forecast assumes market weight to the MSCI All-Country World Index.
	United States Large-Cap	6.50%	We expect real domestic growth to be lower than historical averages, and inflation to remain near the Fed's target. Softer growth expectations are driven by aging demographics and sluggish productivity growth. We expect dividend yields will be consistent with recent levels.
	United States SMID-Cap	7.00%	Historical return premiums for exposure to smaller companies have varied significantly in the US. The average over longer periods of 0.50% is a reasonable assumption.
	Foreign Developed Large-Cap	7.00%	Our expectations for foreign developed growth and inflation remains lower relative to the US. However, regional revenue exposure to both the US and emerging economies, combined with a persistent dividend advantage, support net return assumptions that are slightly higher than the US. We expect inflation to improve from current levels but not to reach historical levels. We assume an unchanged dividend yield.
	Foreign Developed SMID-Cap	8.00%	Historical return premiums for exposure to smaller foreign companies have been more significant than for the US. We believe the average of 1.00% is a reasonable assumption.
	Emerging Markets	10.00%	Relative to historical averages, we expect long-term growth potential will be more mature as these economies have developed. Inflation should be higher than developed markets, but lower than past decades. Dividend yields have seen a trend of improvement over recent years and received a modest upgrade this year.

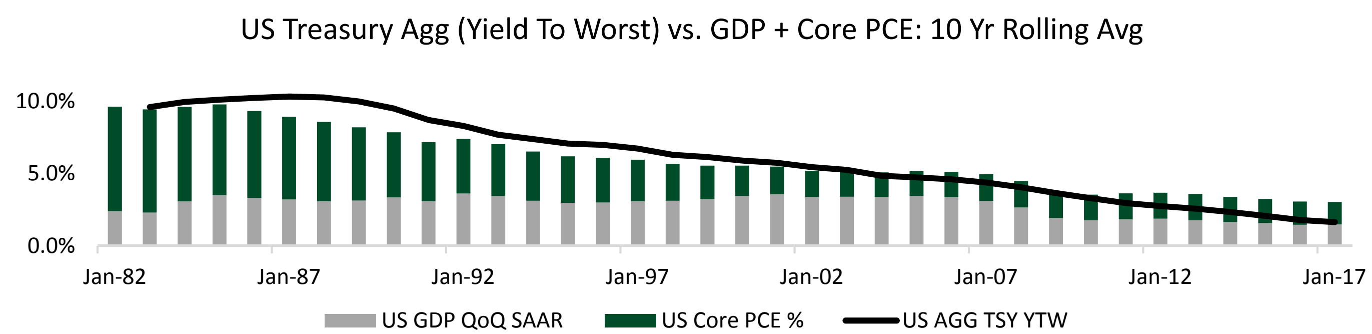
Long-Term Global Fixed Income Forecast

Syntrinsic assumes long-term fixed income returns will be closely aligned with the average yield received. The current yield environment remains low by historical standards, but higher rates throughout 2018 provided some benefit to return expectations. While our forecasting process does allow for modest adjustments to current yields, more cyclical factors are accounted for in our near-term sentiment.

To consider adjustments to current yields, we use a scenario analysis model to provide a reasonable range of assumptions for the future path of interest rates. Our three primary scenarios include a base case with economic activity in line with current expectations, one with more modest growth, and finally, a scenario with economic activity accelerating beyond expectations. All models include the event of a recession over the 10-year horizon.

In an effort to anchor our scenarios with reasonable assumptions, we consider long-term structural divers of interest rates, including our multi-decade expectations for economic growth and inflation. Our long-term view of growth and inflation potential is modest compared to previous decades, and argues for risk-free US rates only modestly higher than today's yields. We use this analysis to add perspective to annual changes in yield, which can be volatile at times.

Exhibit 6: US Treasury Aggregate Index Yield to Worst vs. Syntrinsic Long-Term Yield Building Blocks

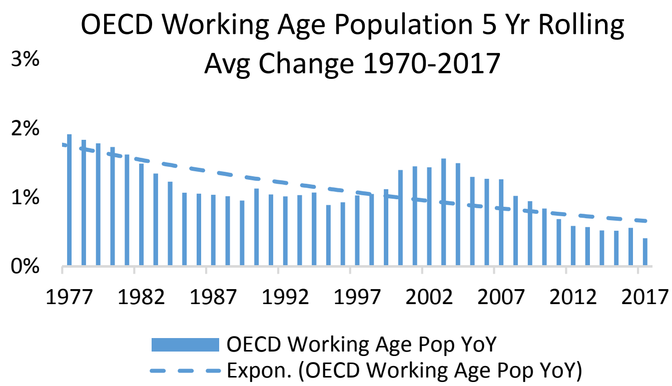


Source: Bloomberg

Exhibit 6 highlights the combination of long-term growth and core inflation (personal consumption expenditures), offering a reasonable guide to justified long-term yields. Following years of unprecedented central bank balance sheet expansion, the average of current yields are below that of the model, which has a historical correlation of 0.98 and R-squared of 0.96.

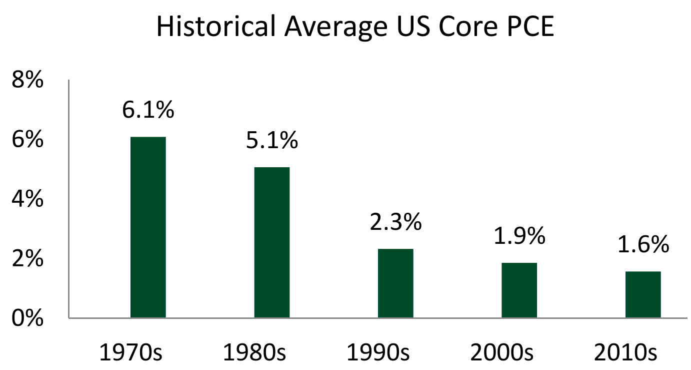
Building on the above guidance, the foundation for only modestly higher interest rates within our scenarios are supported by a balance of factors. The Federal Reserve is nearing their short-term target for rates, but will likely continue running off a portion of their balance sheet at a pace of $60 billion per month. Fiscal expansion in the form of our growing deficit adds additional rate pressure, but significant structural growth issues temper our long-term expectations for rates. These structural limitations are driven by demographic trends of slower growth in working age populations, not just in the US (see Exhibit 7), but also globally. Additionally, we believe the Fed is highly credible in their desire to keep inflation in check, as it has been for decades now, illustrated in Exhibit 8.

Exhibit 7: OECD's United States Working Age Population



Source: OECD, Bloomberg

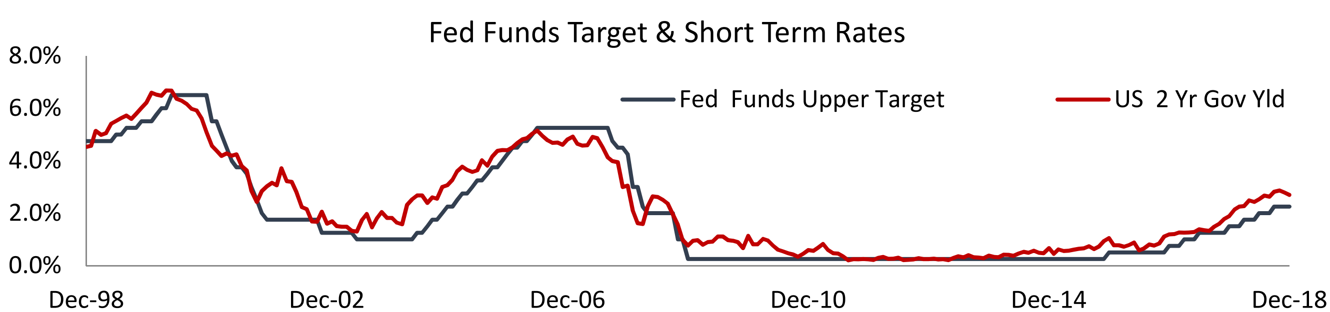
Exhibit 8: US Bureau of Economic Analysis Core PCE



Source: Bureau of Economic Analysis, Bloomberg

US Short-Term bond expectations have risen in close relation to target rate hikes from the US Federal Reserve ("Fed"). In our base case, we expect a cautious continuation of rate hikes towards the Fed's short-term upper target and thus only modestly higher short-term yields occurring during the forecast period. This dynamic creates some headwinds early in the forecast period, but higher yields (and returns) over the full period. Given that, the Fed is closer to their upper target than last year, our analysis offered more modest benefits from reinvesting as rates rise. Thus, we reduced the premium added to average yields to just under 50bps this year, compared to almost 100bps last year.

Exhibit 9: Federal Funds Target Rate v. 2 Yr. US T-Bill Yield



Source: Bloomberg

US intermediate rates also rose during the year, supporting an increase in return expectations for US core and core plus bonds. Similar to short-term bonds, we applied a premium to average yields of just under 50bps. We acknowledge recent credit spreads have been volatile; in order to smooth out the noise, we have taken an average of recent months for below investment grade bonds yields. However, we still discount risker bonds due to higher volatility and an assumption that historical defaults (net of recoveries) will be consistent with recent decades.

Foreign developed and emerging market bonds also experienced higher yields. Our assumptions rose only modestly for foreign bonds issued by developed nations. Similar to last year we kept our premium to yield small at 25bps. However, emerging market bond yields experienced meaningfully higher rates this year, providing an improvement to last year's estimates. We continue to discount EM yields to account for a higher expected level of risk.

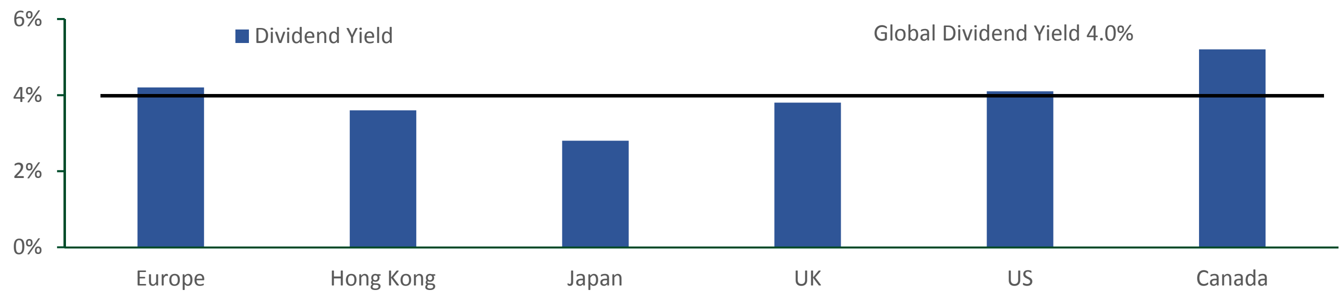
Asset Class	Segment	Long-Term Forecast (10 Years)	Rationale
GLOBAL FIXED INCOME FORECAST	Global Fixed Income	2.25%	The class level return is based on the Bloomberg Barclays Global Aggregate Index, which is biased towards low yielding sovereign bonds from developed countries.
	US Short–Term	3.25%	The yield on US short-term fixed income continues to rise with Fed actions. We increased our forecast because of the higher yields and assume the Fed will continue to tighten policy over the near-term toward the neutral rate.
	US Core	3.75%	We expect a gradual and limited rise in intermediate fixed income rates and have forecasted slightly higher returns accordingly. This rise in yields should increase returns in the later portion of the forecast period. The increase in forecast this year is because of the rise in yields.
	US Core Plus	4.25%	We have increased the core plus fixed income forecast slightly as wider spreads and higher risk-free rate increased yield opportunities. We still expect some additional value (with volatility and defaults) over US Core through a greater opportunity set of issuer quality, structure, and yield.
	Foreign Developed	1.25%	Aggregate foreign yields rose modestly, with variation across regions. We are taking a conservative approach with a forecast only slightly above yield.
	Emerging Markets	6.25%	Differentiation of credit quality, interest rate policy, and yields among EM fixed income issuers is significant. Yields have risen well above developed market averages. The current yield less a conservative assumption for currency, default, and volatility risks remains our midpoint.

LONG-TERM REAL ASSET AND HEDGE FUND STRATEGIES FORECAST

Real Assets

Our starting place for evaluating listed real estate, similar to global equities, is current global yields (Exhibit 10). Yields have slightly compressed over the course of the year, slipping from 4.1% to 4.0%.

Exhibit 10: Global Real Estate Dividend Yields



Source: CBRE Clarion, FactSet and Bloomberg as of 6/30/18

From there, we evaluate underlying real estate supply and demand fundamentals, as well as NOI growth forecasts. In the near-term, earnings forecasts are expected to moderate to about 5%. There continues to be a lack of new real estate supply in the marketplace but demand has largely matched current supply in most markets, limiting significant appreciation this late in the cycle. However, when evaluating over a long-term period, we expect growth to moderate and revert closer to inflation, falling to historic levels of 2% - 3%.

Hedge Fund Strategies

In forecasting hedge fund strategies (i.e. equity hedge, relative value, event driven, and macro) our core building blocks are equity and fixed income beta with additional support from cash returns.

To determine the appropriate beta for the different hedge fund strategies, we analyze the historic beta and correlations to global equity markets, fixed income markets, and the Hedge Fund of Fund universe. We then apply those beta estimates to our long-term return forecasts for equity and fixed income to establish a return forecast for the different hedge fund strategies. The cash component evaluates short rebate and interest earned on cash for hedged strategies. Rising short-term rates have supported this component of return over the last year.

Finally, we assess historic alpha trends to estimate an alpha adjustment to our projected hedge fund strategies returns. The alpha adjustment is based not only on historic trends but also our overall view of hedge fund strategies and market conditions. We believe market conditions for alpha have remain relatively unchanged from last year.

Asset Class	Segment	Long-Term Forecast (10 Years)	Rationale
REAL ASSETS AND HEDGE FUND STRATEGIES FORECAST	Listed Real Estate	6.00%	Our return assumption for listed Real Estate moderated slightly from last year. Forecasted Funds from Operations ("FFO") growth has moderated somewhat but remains attractive for the near-term. We expect FFO growth to continue to gradually decline to historic levels. In addition, yields have fallen slightly over the last year; however, we estimate yields will remain in the 3.0% to 5.0% range. Valuations are not significantly different from long-term averages, leading to our assumption that multiples will not experience significant net change over the ten-year time horizon.
	Commodities	2.25%	Our return assumption moderated slightly from last year due to our downgrade to US inflation assumptions. Commodities have transitioned towards a more balanced supply-demand dynamic, limiting sustainable price gains over the long term. We believe this will limit return potential to not much beyond inflation, which we see successfully managed around the 2.0% Fed target over the long term.
	Hedge Fund Strategies	4.25%	Increased divergence of performance within and across other asset classes will provide opportunities for hedge fund strategies to add modest alpha over the long-term. We expect the elevated competition for alpha to subside over the forecast horizon as competition drives managers from the space while also lowering fees to the benefit of investors. Varying degrees of beta exposure across hedged strategies also could be a source of limited return, which we estimate will range from 0.0% to 3.0%. Additionally, the cash return component for hedged strategies—including short rebate and interest earned on cash—improved over the year, contributing to a small increase in our assumption of long-term returns for the asset class.

Forecasting Near-Term Sentiment

The near-term sentiment process seeks to identify opportunities and risks that are likely to impact performance over a three-year horizon. We base our near-term outlook on a global assessment of economic health and momentum, balanced with our outlook for market fundamentals, technicals, and sentiment.

We begin with crafting our economic sentiment of the three major equity regions, the United States, foreign developed ("EAFE"), and emerging markets ("EM"), with an emphasis on the most relevant EM economies. We seek to balance opportunities and risks to determine the general health and direction of these regions. We seek to understand the drivers of growth and inflation in these economies to build a fair and balanced outlook.

To develop our investment sentiment, we strive to take advantage of the markets' shorter-term considerations that may significantly impact performance of asset classes over the next three years. Central bank policies, factors driving earnings and profitability, valuations, corporate quality, currencies, and investor behavior are just a few of the issues that can materially alter asset class or segment attractiveness.

We consider both our economic sentiment and our investment sentiment for the three major equity regions to inform our allocation sentiment for equities, fixed income, real assets, and hedge fund strategies. Given the nature of near-term volatility and "noise" in the marketplace, Syntrinsic's sentiment is expressed across a qualitative range from positive to negative.

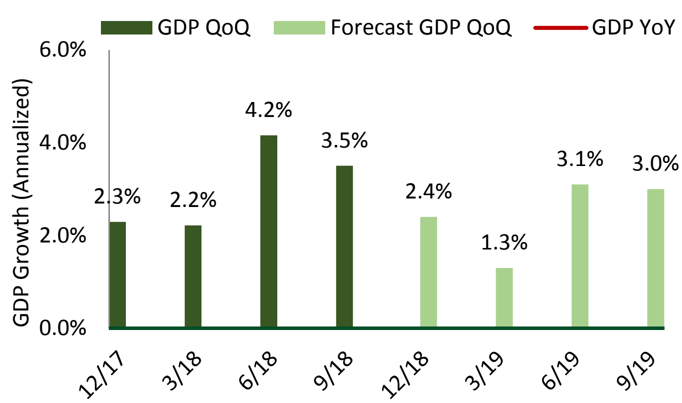
Near-Term Economic Sentiment

United States

Economic Sentiment
NEUTRAL

Our sentiment remains Neutral towards the US economy, as supportive dynamics will likely drive continued growth. Late cycle risks remain, along with US policy risks and moderating global growth. We expect growth in the US to remain positive, but with tax cuts and increased government spending fading through the year. Longer-term, US government deficit spending will be a headwind for growth. US tariff and trade policy remains an uncertainty; however, consumers continue to be in a position to sustain moderate spending. Factors continuing to support a stable consumer include strong labor markets, high levels of consumer confidence, and strong balance sheets.

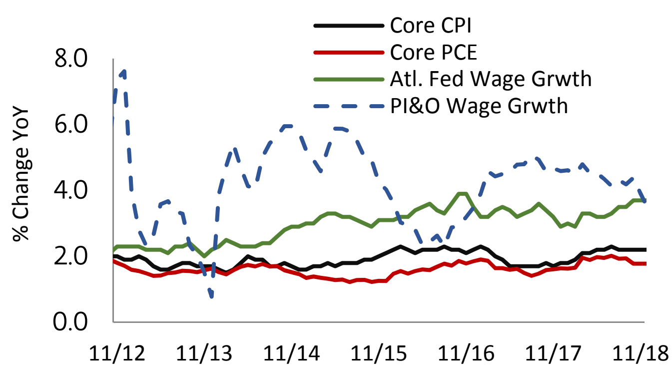
Exhibit 11: Realized & Forecasted US GDP Growth



Source: Bloomberg

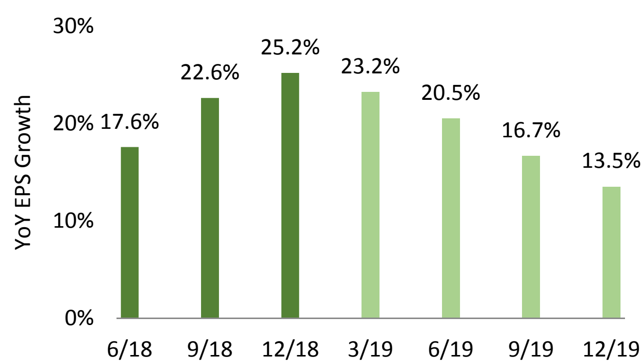
Inflation remains stable and is a limited concern at this time, recently falling slightly below the Fed's target. Trade tariffs may add to cost pressures if unresolved, but the strong dollar has suppressed these effects for now. Most inflation expectations and various inflation gauges remain stable, with many metrics cooling a bit in recent months. An acceleration of Fed hikes remains a risk if inflation were to gain momentum, potentially putting the positive growth environment at risk; however, lower inflation could also allow an easing of anticipated Fed rate hikes in 2019, providing a longer runway for the current cycle.

Exhibit 12: US inflation Measures



Source: Bloomberg

Exhibit 13: S&P 500 Trailing & Forward Estimated EPS



Source: Bloomberg

Overall, corporate profitability continues to be healthy and broad revenue growth remains strong. Earnings growth into 2019 should remain positive but is expected to moderate significantly as tax cut tailwinds fade. In addition, increased labor costs could become a headwind due to tight labor markets. Also, higher borrowing costs will likely negatively affect profits, particularly of more indebted firms. Despite high levels of corporate debt, corporations continue to be in a strong position to service debt. However, moderating growth overseas and trade uncertainty are potential headwinds to corporate profitability into next year.

Foreign Developed

Economic Sentiment
NEUTRAL / NEGATIVE

Our aggregate sentiment for the major foreign developed regions has modestly declined. We have become less constructive on Europe due to a loss of domestic economic momentum, the continued simmering of political issues, and a generally softer global environment offering less of a tailwind. In the UK, uncertainty around Brexit continues. However, we have become more optimistic on Japan, where continued gradual improvements to the local economy should help offset some of the potential headwinds from moderating global growth.

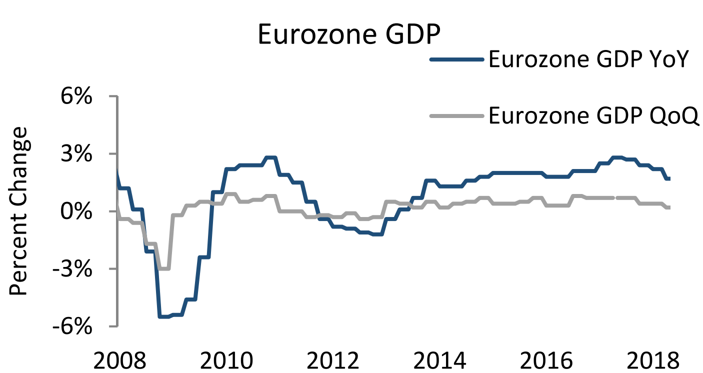
Exhibit 14: Foreign Developed GDP and CPI Estimates

Key Economic Figures	2017	Est. 2018	Est. 2019
Eurozone GDP YoY%	2.4%	1.9%	1.6%
Eurozone CPI YoY%	1.5%	1.8%	1.7%
UK GDP YoY%	1.7%	1.3%	1.5%
UK CPI YoY%	2.7%	2.5%	2.1%
Japan GDP YoY%	1.7%	1.0%	1.0%
Japan CPI YoY%	0.5%	1.0%	1.1%

Source: Bloomberg

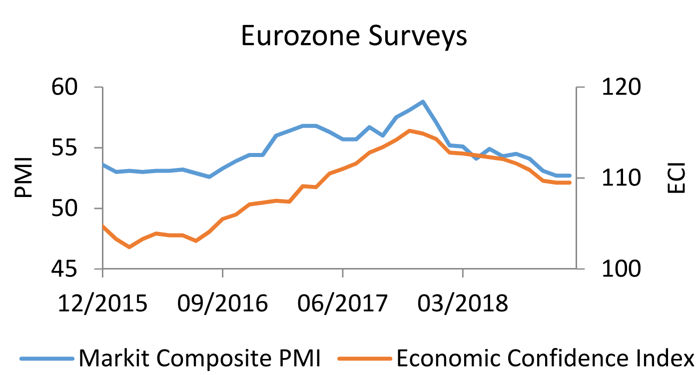
The consistent signs of modest deceleration in Europe have been disappointing, especially compared to the strong momentum coming into 2018. While a reversion towards a more realistic pace of growth was expected, the signs of undershooting trend growth are concerning. Some of the moderation is possibly transitory, and we continue to forecast growth. The loss of local momentum this year still is evident, and combined with softer external conditions supports a view of slight moderation over the near-term. Confidence of consumers and companies were at all-time highs a year ago, and while still supportive to growth, those factors have steadily declined. The external environment continues to create concerns related to trade and politics. Exports account for one-fifth of the Eurozone economy, and more progress on the global trade front could help with confidence and investment. The ECB will have to carefully manage any policy adjustments at a level consistent with economic progress and risks. Political stability is better than recent years, but is still simmering and a potential source of future volatility.

Exhibit 15: Eurozone GDP



Source: Bloomberg

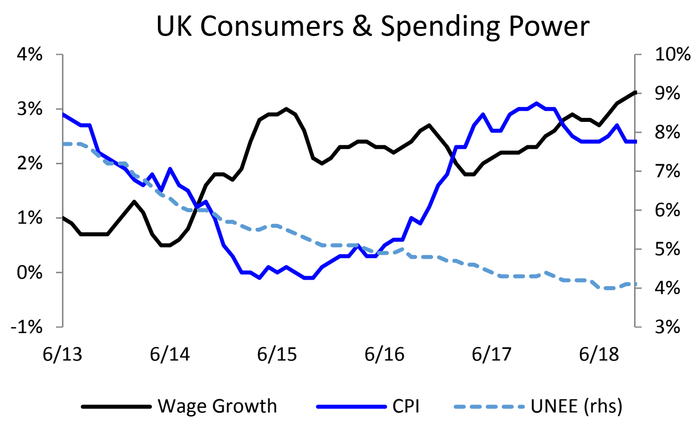
Exhibit 16: Eurozone Business and Economic Surveys



Source: Bloomberg

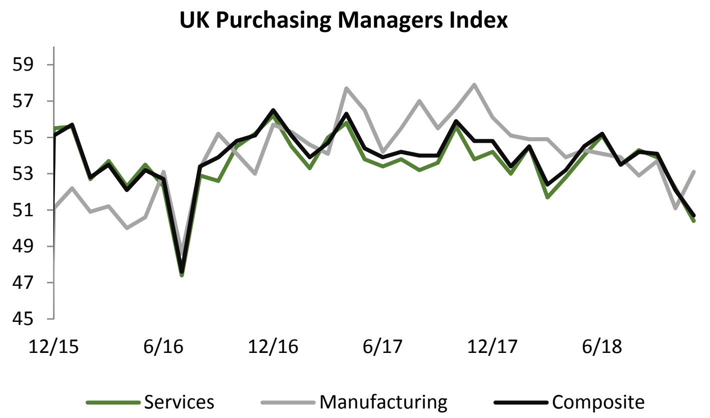
The domestic UK economy has been resilient during the uncertainty of Brexit negotiations. A strong consumer base drove Pre-Brexit strength, and unemployment remains near historical lows. While healthy wage growth has weathered elevated inflation and real spending power is recovering, consumer confidence has been lackluster. Two years after invoking Article 50, corporations continue to indicate an environment of growth, but have seen indications of deceleration toward the end of 2018. Keeping us cautious on a generally strong local economy is the unknown impact over the last two years of business uncertainty, and lack of clarity on Brexit going forward. Longer-term, reports of major multi-national corporations considering locating outside of London worries us as well.

Exhibit 17: United Kingdom Real Wages and Unemployment



Source: Bloomberg

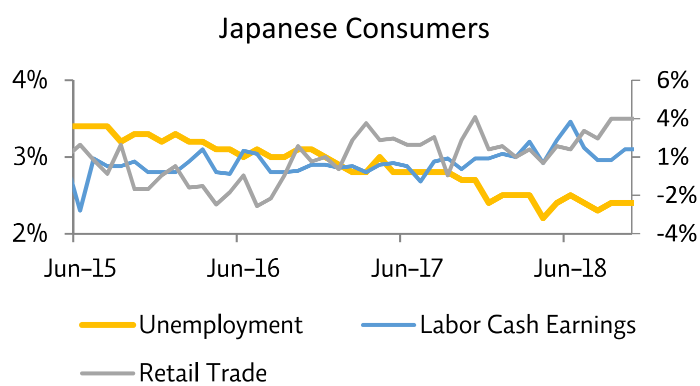
Exhibit 18: United Kingdom Market PMIs



Source: Bloomberg

In Japan, we expect a continuation of modest positive growth. Local conditions have gradually and consistently been improving, and should help to offset softer external global demand conditions. While consumer wage growth and consumption remains soft, they have been on a multi-year trend of improvement with recent data promising. Business surveys have been steady and indications of growth and increased investment encouraging. The Bank of Japan will likely continue highly supportive stimulus measures over the near-term.

Exhibit 19: Nikkei 225 and Yen



Source: Bloomberg

Emerging Markets

Economic Sentiment
NEUTRAL

The uncertainty around trade makes near-term forecasting challenging. Our view seeks to take a conservative approach with the information we have at this time, understanding that conditions can change quickly.

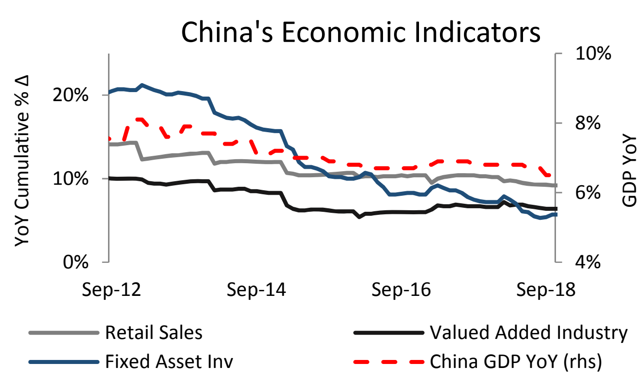
We expect growth across most regions, with mild deceleration driven by a moderation in global conditions and the ongoing transition in China to a consumption based economy. Some select countries may see headwinds from interest rates and currencies, but our expectations for both have become more modest. Current accounts and external debts are mixed, but outside of few well-known countries, appears more manageable. Regionally, we expect Asia to follow the soft landing trend in China while Latin America, including Brazil and Mexico, has some upside potential. The escalation of trade tariffs between the US and China is concerning. We view tariffs as a tax on consumption, with potential to reduce real growth while increasing global inflationary pressures. The longer it takes the two largest economies in the world to find common ground, the greater potential for harm.

Exhibit 20: Consensus Estimates for Emerging Markets GDP, with China Indicators

Key Economic Figures	2017	Est. 2018	Est. 2019
Emerging Markets GDP YoY%	5.0%	5.0%	5.0%
China GDP YoY%	6.9%	6.6%	6.2%
Fixed Asset Investment	7.3%	6.0%	6.0%
Industrial Production	6.5%	6.3%	5.9%
Retail Sales	10.3%	9.4%	9.2%
S. Korea GDP YoY%	3.1%	2.7%	2.5%
Taiwan GDP YoY%	2.9%	2.7%	2.3%
LatAm GDP YoY%	1.8%	1.2%	2.3%

China remains the largest and most important economic and market region within EM and the largest expected single contributor to near-term global growth. Similar to last year, we expect a soft landing path, with potential for bumps along the way. There continues to be evidence that the transition to a consumption driven economy is well under way, and this shift has become a powerful long-term story locally and globally. Our concerns over the rise in Chinese debt continues, with government efforts to reign in risker lending still making progress. The ability of the government and central bank to balance growth and quality will continue to be central to a successful transition. Data towards year-end is indicating a shift towards more accommodation to support growth. The aforementioned trade war with the US is a material concern, but one with unknown and an extremely wide range of possible outcomes.

Exhibit 21: China Debt to GDP



Source: Bloomberg

Outside of China, we expect a more diverse landscape in Asia. Larger, more mature economies with significant trade ties to China and developed nations should expect positive, albeit moderating, conditions. Trade relations between China and the US are also important for these regions. Less mature more local economies will likely have more idiosyncratic paths based on their fundamentals. We have become cautiously optimistic on Latin American based on positive momentum and election results in Brazil and Mexico. Additionally, the USMCA agreement to replace NAFTA puts concerns over trade with the US aside for several years.

NEAR-TERM GLOBAL EQUITY SENTIMENT

Our Near-Term investment sentiment for the three major equity regions is crafted by first developing a near-term outlook for equity performance in each region based on drivers of revenue, profitability, earnings, valuations, currencies, and other factors.

Then, on a relative basis, we determine our Allocation Sentiment by considering both our Economic and Investment Sentiments. This process is nuanced and also based on qualitative factors as, over time, economic and investment factors can vary in importance.

UNITED STATES EQUITY

Economic Sentiment	+	Investment Sentiment	=	Allocation Sentiment
NEUTRAL		NEUTRAL		NEUTRAL / **POSITIVE**

We have upgraded our near-term sentiment towards US Equities to Neutral/Positive, based on a stronger relative outlook for the US compared to other regions.

Earnings growth momentum remains positive, despite expectations for some moderation into 2019 as the benefits from lower corporate taxes fade. Consumers continue to be a strong source of support to positive revenue growth. The tailwind from increased government spending will remain through much of 2019, offering additional support. Meanwhile, a strong dollar, trade uncertainty and moderating growth overseas could serve as a headwind.

Valuations have moderated significantly in 2018, but we still see market performance likely relying primarily on earnings growth. Profit margins remain elevated, with some risk of moderating amid rising compensation costs as well as rising borrowing costs. However, improved productivity could offer some support for earnings despite increased costs, extending the cycle further. High levels of debt are not yet a material concern, as broad corporate ability to service debt costs remains healthy; however, highly indebted firms may come under stress as rates move higher.

FOREIGN DEVELOPED EQUITY

Economic Sentiment	+	Investment Sentiment	=	Allocation Sentiment
NEUTRAL / **NEGATIVE**		NEUTRAL		NEUTRAL / **NEGATIVE**

Foreign developed Equity earnings expectations remain positive after a strong run in 2017/2018, but will likely see a moderation over the near-term based on a loss of momentum domestically and abroad. Despite healthy earnings growth during the year, valuations declined as softer domestic data and external pressures worried investors.

European earnings growth leads foreign developed expectations in 2019/2020. However, domestic conditions have moderated to levels weaker than long-term potential. In addition, unresolved trade tariff threats/actions and political uncertainty in multiple countries continues to be a concern. Currency declines and relatively easy ECB policy should offer some support. Also, valuations have declined and are now slightly below historical averages.

Consensus expectations for the UK indicate a moderation in EPS growth, which is likely Brexit biased. While the domestic economy has been resilient, a lack of clarity on Brexit details over the last two years has hurt near-term investment and local sentiment. Valuations are below historical averages.

Japan is forecasted to see modest, but stable earnings growth. Dividends and buybacks have been improving and are encouraging for President Abe's goal of structural change. Local conditions for consumers continue to crawl in right direction while business condition surveys have been more resilient than elsewhere. Valuations are below historical averages.

Emerging Markets Equity

Economic Sentiment	+	Investment Sentiment	=	Allocation Sentiment
NEUTRAL		NEUTRAL		NEUTRAL

Emerging market corporate earnings are expected to remain positive and relatively healthy compared to developed nations. However, we balance our long-term positive view of these less developed economies growing off a low base, with top-down headwinds from slightly softer global growth, the ongoing "soft landing" transition within China, and the significant wild card of escalating tariffs between China and the US. We are hopeful for a more productive environment in Latin America, with room to improve and optimism around new leadership in Brazil and Mexico. Also, risks from higher rates and currency declines are more modest than recent years.

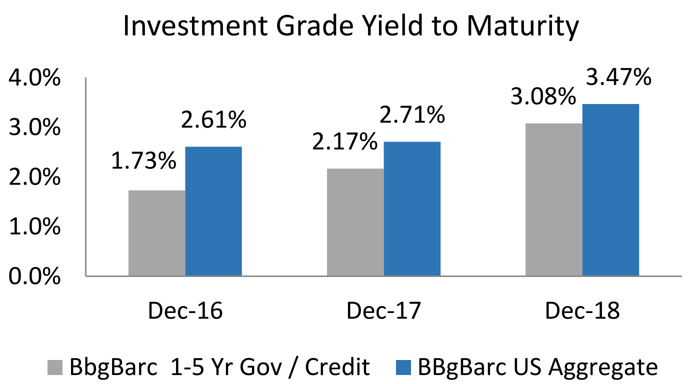
Price multiples have declined to levels well below developed markets; however they are not exceptionally cheap relative to their own history. Multiples also vary greatly across emerging market regions and especially industries, highlighting the diverse landscape and outlook. Companies within industries expected to drive the future growth of emerging markets are very well known, including technology, health care, and consumer names, and trade at much higher valuations than the aggregate index. Quality of corporate balance sheets is another concern but with wide dispersion across industries and mostly in China, where leverage has been rising.

Near-Term Global Fixed Income Sentiment

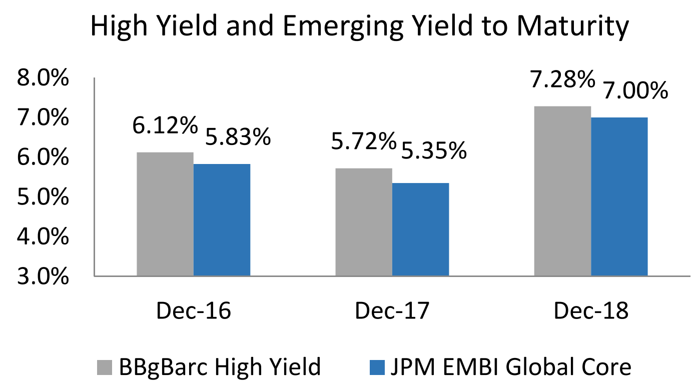
Yield Environment and Expected Interest Rate Risk

While some headwinds remain for fixed income returns, the opportunities for real yields have improved throughout 2018. Higher yields have been seen particularly in the US and emerging markets. The US yield curve rose across maturities, with only slight flattening. Credit sectors have seen not only higher benchmark rates, but also widening of spreads to treasuries. Foreign developed yields have only modestly risen. While near-term performance may see some pressure from modestly higher rates, the outlook will likely provide opportunities to reinvest and reallocate into higher rates.

Exhibit 22: Global Yields



Source: Bloomberg as of 12/12/2018



Source: Bloomberg as of 12/12/2018

We expect modest near-term US interest rate risk, with rates likely to rise, but with some structural limitations keeping absolute levels in check. The core parts of our thesis for higher near-term rates includes:

- A continuation of cautious, and likely less frequent, Fed hikes towards the neutral rate
- The Fed to maintain a $60 billion per month partial reduction in their balance sheet
- Increased fiscal deficit spending over near-term with uncertainty of long-term effects

The rationale that tempers our near-term thesis of higher US rates includes:

- Limited upside to inflation and growth, dampening the justification for higher rates
- Continued adoption and innovation of technology and automation
- Yield starved pensions and insurance firms, and other large buyers of fixed income
- A highly credible Fed that is nearing their target, but willing to raise rates if higher inflation is expected

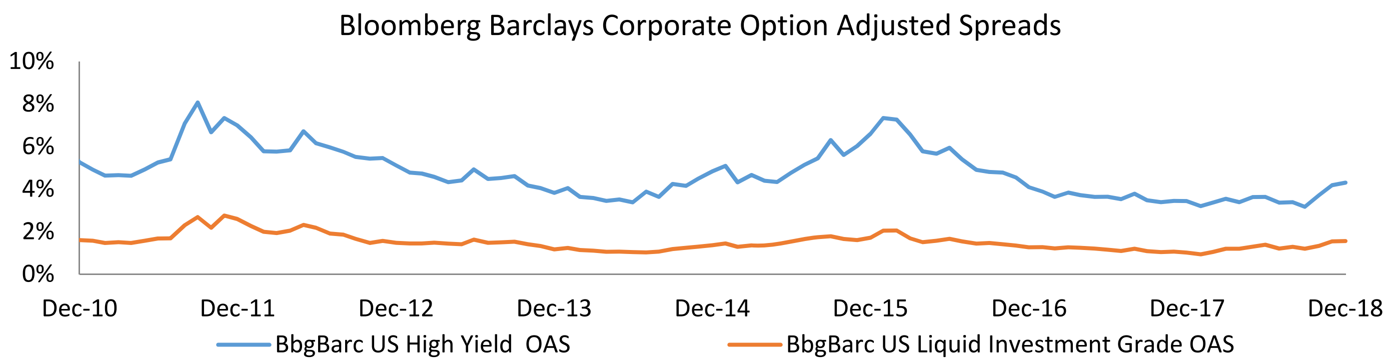
Foreign developed regions are well behind the US, with added political pressures/uncertainty, keeping our expectations for foreign central bank policy relatively modest over the near-term. Growth and inflation potential over the near-term should be positive, but still quite low. Rates remain unattractively low.

Higher emerging markets yields due to higher US rates / USD strength, trade frictions, and geopolitical volatility, appear to have priced in a good portion of these collective issues. Volatility and liquidity risks remain.

Credit Spreads and Credit Risk

Credit spreads widened at year-end, but remain below previous post-GFC highs and well below peaks during the last recession. Asset backed sectors have seen the least amount of spread change, followed by a modest amount of corporate spread widening, and a more significant increase in emerging market debt and high yield spreads.

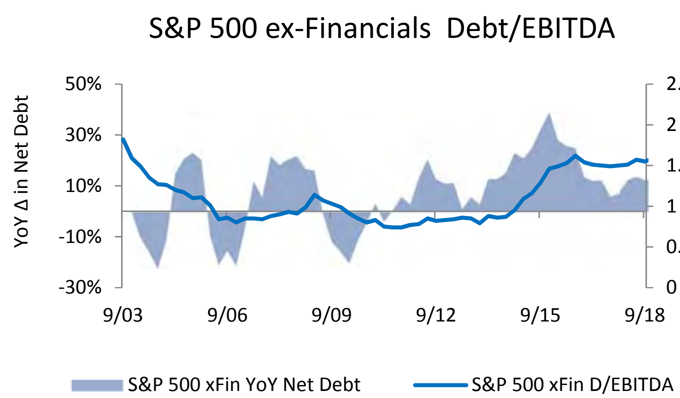
Exhibit 23: Bloomberg Barclays US High Yield and Liquid Investment Grade Option Adjusted Spreads (as of 12/12/18)



Source: Bloomberg

While credit risks became more visible in 2018, we have been more cautious than consensus for some time. Our view remains that while balance sheets appear healthy relative to strong EBITDA, the rise in net outstanding debt will likely become an issue when sales and earnings eventually moderate or decline. It appears reasonable that companies can manage current debt levels in a strong economy, but during the next downturn, less responsible issuers will become apparent. The continued rise in BBB as a percent of the investment grade market is a good illustration of current dynamics.

Exhibit 24: S&P 500 Index Balance Sheet Leverage



Source: Bloomberg

Our discussions with buy-side bottom-up credit analysts indicate mixed feelings on this development. However, all have indicated the importance of cash flow analysis relative to debt levels and stress testing or sensitivity analysis. Given the signs we are late in the cycle, we recommend active management for credit exposure. In addition, we prefer a flexible approach to core plus mandates, which includes high yield and out of benchmark issues. While concerns exist for certain ABS sectors, the bottom-up view is that they offer a short time horizon, favorable structures, and attractive relative yield. Our view is mostly consistent with this but with the preference that ABS exposure is primarily in the most senior tranches.

SHORT-TERM FIXED INCOME

Return Sentiment	+	Risk Sentiment	=	Allocation Sentiment
NEUTRAL / **POSITIVE**		NEUTRAL / **POSITIVE**		NEUTRAL / **POSITIVE**

For conservative allocations, shorter duration bonds look compelling compared to the greater interest rate risk and higher sensitivity to credit spreads of longer maturities. Shorter rates have followed Fed hikes this year and we expect the close relationship to continue. Higher rates have helped the return outlook for short-term bonds, with expectations for further Fed hikes likely to create some headwinds. Our concerns are limited given we believe the Fed is nearing their short-term upper level target. The lower duration positioning should allow for faster reinvestment at higher rates. In addition, the term premium for holding longer dated bonds remains modest between 10 and 2-year treasuries. For more growth-orientated portfolios, we continue to recommend intermediate fixed income with better expected diversification potential (higher duration) to offset equity risk.

Core Fixed Income

Return Sentiment	+	Risk Sentiment	=	Allocation Sentiment
NEUTRAL		NEUTRAL		NEUTRAL

Our core fixed income view is unchanged from last year, despite higher yields. While investment grade credit spreads have risen, they are still consistent with the lower-end of historical averages.

Net corporate leverage has been on the rise, as mentioned earlier, and while not causing us to downgrade sentiment, is being closely watched. Our active managers took notice of this situation last year and have become more selective and more broadly diversified across issuers in that time. Given strong operating earnings and additional benefits from the tax cut, balance sheets and debt coverage are in good shape.

High quality core fixed income remains a key source of diversification in our portfolios. The outlook has slightly improved on the margins with yields rising and the Fed nearing their short-term target. In addition, net corporate issuance is expected to contract next year, supporting supply/demand technicals. As a key diversifier in the portfolio, duration of core fixed income can quickly change from a headwind to tailwind in a market downturn.

Core Plus Fixed Income

Return Sentiment	+	Risk Sentiment	=	Allocation Sentiment
NEUTRAL		NEUTRAL		NEUTRAL

Yields of below investment grade bonds have meaningfully risen due to both a higher risk-free rate and wider credit spreads. We remain cautious, as the potential for downgrades and volatility are likely elevated this late in the credit cycle. Strong earnings are supporting balance sheets and interest coverage, but any drop in operating earnings will likely reveal a more diverse landscape. CMBS and non-agency issues continue to be in high demand but short supply. ABS issuance has grown over the years, with attractive characteristics and mixed fundamentals we recommend active management for exposure. Our approach to core plus fixed income this late in the credit cycle continues to be through opportunistic strategies with flexibility on allocation decisions.

Foreign Developed Fixed Income

Return Sentiment	+	Risk Sentiment	=	Allocation Sentiment
NEGATIVE		NEUTRAL		NEGATIVE

Foreign developed fixed income continues to provide relatively low yield. Foreign central banks are likely to remain generally easy in policy, with potential for the ECB to shift policy tighter over the next few years. The additional risk of political and currency induced volatility adds to our negative sentiment on these unappealing rates.

Emerging Markets Fixed Income

Return Sentiment	+	Risk Sentiment	=	Allocation Sentiment
NEUTRAL / POSITIVE		NEUTRAL / NEGATIVE		NEUTRAL

Following a difficult year, emerging market fixed income now trades above its historical average spread to treasuries. While the yields are much more attractive, continued sources of volatility for EM bonds such as tighter US policy, US dollar strength potential, and unresolved trade policy keeps us neutral.

Near-Term Real Asset and Hedge Fund Strategies Sentiment

Listed Real Estate

Opportunity Set	+	Relative Attractiveness	=	Allocation Sentiment
NEUTRAL		NEUTRAL		NEUTRAL

Strong labor market conditions and positive growth globally continue to support demand for real estate; however, late cycle dynamics in the US and supply largely balanced with demand across the globe will likely limit Net Operating Income growth from here. In addition, rising rates could be a small headwind to near term performance. We have adjusted our opportunity set sentiment to reflect this, downgrading from a positive/neutral view to neutral.

Valuations paint a mixed picture as discounts to NAV have expanded while P/FFO metrics have risen due to comparably weaker earnings growth. Cap rates have compressed a bit but rising bond yields have caused cap rate spreads to fall. Overall, REITs look fair to mildly over-valued. We retain a neutral view towards real estate relative attractiveness sentiment.

While REITs have historically provided somewhat stronger levels of inflation protection than other assets, we believe current inflation risks are well contained. This containment, as well as late cycle economic dynamics and near fair valuations, has caused us to downgrade our allocation sentiment of global real estate to Neutral.

COMMODITIES

Opportunity Set		Relative Attractiveness		Allocation Sentiment
NEUTRAL	+	NEUTRAL	=	NEUTRAL

Still positive global growth remains supportive of stable commodity demand amid a commodity complex roughly balanced between supply and demand. We retain a neutral sentiment towards commodities in the near term.

Demand for many commodities was largely driven by China's strong growth over the last decade. As China's growth continues to moderate, we expect to see a continuation of moderating Chinese commodities demand. Commodities continues to be among the strongest hedges against rising inflation but we do not expect a significant rise in inflationary risks. We retain a neutral sentiment given the opportunity set and relative attractiveness; however, given the unattractive long-term risk-return profile of commodities and limited portfolio diversification benefits, we do not recommend a dedicated allocation to commodities within portfolios.

HEDGE FUND STRATEGIES

Opportunity Set		Relative Attractiveness		Allocation Sentiment
NEUTRAL / POSITIVE	+	NEUTRAL / POSITIVE	=	NEUTRAL / POSITIVE

The opportunity set for hedged strategies remains strong due to elevated levels of asset dispersion and volatility. Higher yields also offer an improved source of return from short rebate and cash investments.

Hedged strategies remain an attractive lower volatility compliment to equity. Although US yields have moved a bit higher since the beginning of the year, we feel the relative attractiveness of Fixed Income and Hedged Strategies has not yet changed enough to justify a change in allocations or sentiment.

In addition, we continue to see value in diversified sources of return that cannot be accessed through traditional stock and bond exposures. We have a strong preference for portfolio diversifying, lower-risk hedged strategies to improve the overall down market performance of the portfolio. We prefer to enhance portfolio returns through traditional equities rather than risk-seeking hedged strategies.

DEFINITIONS

Alpha	The excess risk-adjusted return relative to the risk-adjusted return of the benchmark.
Beta	A measure of the volatility, or systemic risk, of an investment in comparison to a specific market.
Brexit	A term used to describe the potential or actual departure of the United Kingdom from the European Union.
Correlation	The relationship or connection between two things such as an economic event and a market's reaction. The relationship may or may not reflect causation.
Diversification	A portfolio risk management technique that varies investment exposures to varied asset classes, economic factors, or other criteria.
Inflation	A sustained increase in the general prices for goods and/or services, generally across a sector or region.
Volatility	A measure of the historic or anticipated changes in value of an economic factor frequently used to reflect the price uncertainty inherent in a portfolio.

DISCLOSURES

The information in this document is not intended as a recommendation to invest in any particular asset class or strategy or as a promise of future performance.

Given the complex nature of risk-reward trade-offs involved in portfolio construction, we advise clients to consult with financial professionals on specific investment-related decisions. References to future returns are not promises or even estimates of actual returns a client portfolio may achieve. In addition, past performance is not a guarantee of future results.

Assumptions, opinions and estimates are provided for illustrative purposes only and are subject to significant limitations. Expected return estimates are subject to uncertainty and error. Expected returns for each asset class can be conditional on economic scenarios to which actual returns could be significantly higher or lower than forecasted. They should not be solely relied upon as recommendations to buy or sell securities.

Forecasts of financial market trends that are based on current market conditions constitute our judgment and are subject to change without notice. We believe the information provided here is reliable, but do not warrant its accuracy or completeness.

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