Sit Investment Associates

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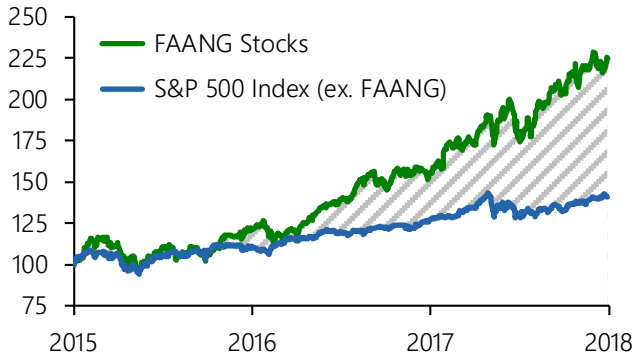
Global Investment Outlook and Strategy

- **Special Topic: Is It Time to Look Beyond FAANG Stocks?**
- **U.S. Economy Firing on All Cylinders; Capex Poised to Sustain Cycle**
- **U.S.-China Trade War a Notable Risk to Global Growth Prospects**
- **Fed Tightening Will Lead to Lower Correlations and Higher Volatility**
- **Quality Growth Stocks at Attractive Valuations Should Outperform**

Relative Valuations Suggest Fading the Momentum Trade As Volatility Returns

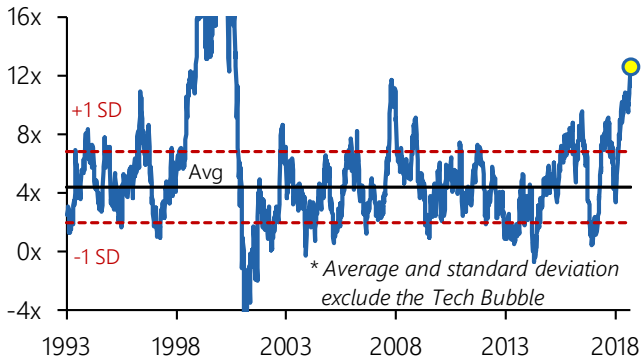
Concentrated Performance Led by FAANGs

Performance of FAANG Stocks vs S&P 500 (ex. FAANG)
Indexed



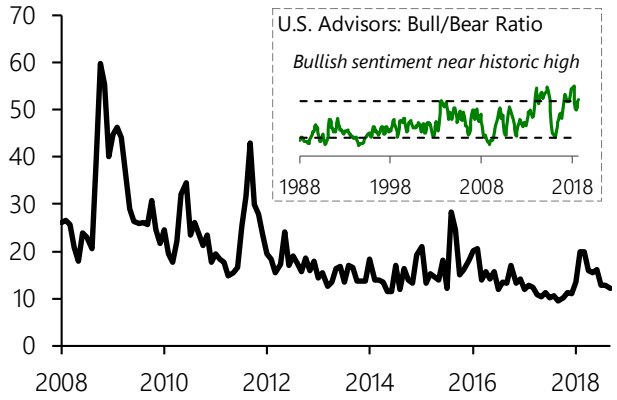
Current Valuation Disparity is Unsustainable

P/E Spreads of Largest 1000 U.S. Stocks
Top Quartile minus Bottom Decile



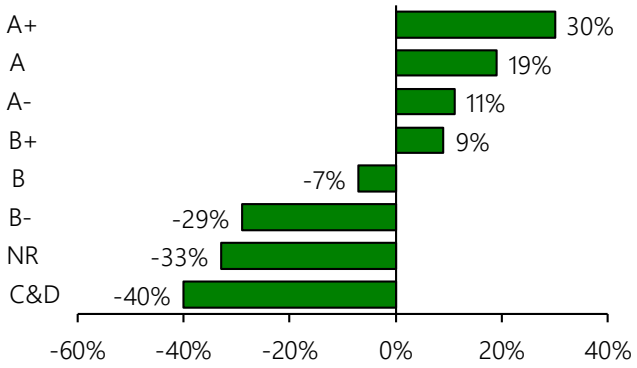
Volatility Will Return as Complacency Ends

CBOE Volatility Index (VIX)



An Uptick in Volatility Favors Quality Stocks

Correlation: Rel. Performance vs 12M Change in VIX Index
By Quality Rank



Source: FactSet, Bloomberg, Wolfe Research, BofA/Merrill Lynch, Sit Investment Associates, 9/30/18

Is It Time to Look Beyond FAANG Stocks?

Most investors are well aware that high growth/ momentum "story" stocks have led U.S. equity market returns in recent years. The almost nonstop rise in the so-called "FAANG" stocks (Facebook, Apple, Amazon, Netflix, and Google) has led the charge. Investor appetite for secular growth stories unfazed by swings in economic growth, interest rates, currency volatility, and trade wars has driven FAANG outperformance. Our client portfolios have had meaningful exposure to the tech sector, including the FAANG stocks, during this strong run. Nonetheless, significant outperformance in this narrow group may be more challenging going forward and risks must be considered. Moreover, we see improving fundamentals for many areas outside of tech given a broad-based improvement in earnings in 2018.

Market returns have been highly concentrated in 2018, and the FAANGs have been a big part of the story. Amazingly, they have contributed over 33 percent of S&P 500 gains through September, almost three times their combined weighting.

Outperformance of the "momentum" style has not been confined to large cap stocks; it is also evident in the small cap universe as well. Within the Russell 2000 Index, high price-to-earnings stocks (>50x) and companies without earnings (which now account for 20 percent of the entire Index) have significantly outperformed the overall benchmark in 2018. This has resulted in a widening spread in relative valuations between the most expensive stocks and the remaining constituents.

"Risk On" Small Capitalization Leadership

Russell 2000 Index - Performance by P/E Quintile
Year to Date, Through 9/28/2018

	Weight	Total Return
Quintile 1: > 54x	16%	15.8%
Quintile 2: 28x - 54x	16%	13.2%
Quintile 3: 20x - 28x	16%	4.2%
Quintile 4: 14x - 20x	16%	7.2%
Quintile 5: < 14x	16%	8.2%
Non-Earners	20%	18.7%
Total Index	**100%**	**11.4%**

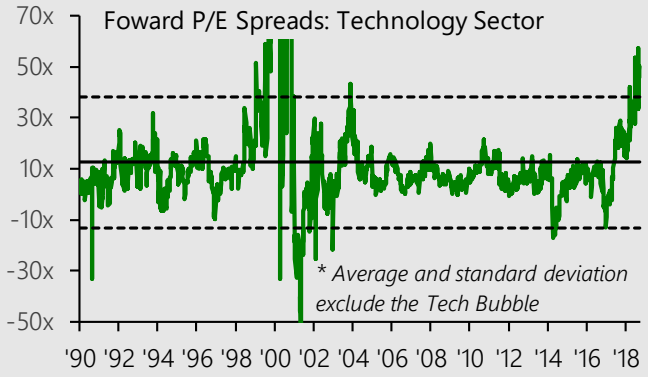
Source: FactSet, 9/30/18

We are strong believers in the long-term growth outlook for the tech sector, as there are numerous drivers (i.e., cloud, artificial intelligence, mobility) that are garnering investor enthusiasm. Growth in these areas will be exceptionally strong for many years to come. The sector's surging performance has also brought about comparisons with the 1999-2000 period. Yet, there are obvious differences. For instance, a notable feature of the prior tech boom-bust was that money-losing start-ups were largely wiped out in the subsequent crash and recession. Many of those business models have since been consolidated into a powerful, highly profitable oligopoly in the FAANGs. Aside from the durability of FAANG business models, which are built on a combination of powerful technology and scalable platforms, the vast majority of other tech firms are solidly profitable and cash generative.

Speculation, however, is likely to accompany any period of major technological innovation. This cycle is strong enough to produce a familiar chorus of "this time is different" enthusiasm. It is always possible that this time will be different. However, whenever there is widespread bullishness, history suggests that investors should be cognizant of risks for several reasons.

First, even the highest growth companies are not great market performers if elevated valuations fully embed future growth prospects – valuation matters, at least ultimately. Investors have crowded into "momentum" equities, leading to lofty valuation premiums for many stocks within the tech sector.

Sizable Valuation Differences Within Tech



Source: Wolfe Research, 9/30/18

Second, while not a major risk currently, investors must be aware that a vast majority of tech firms are subject to cyclical trends in the economy. Cyclical effects often eclipse trends once considered secular, as consumer and business spending wane late in the economic cycle.

Third, a hallmark of the open U.S. economy, competition and the free flow of capital is a notable risk. In recent years, the prospect of growth and outsized returns has driven an unprecedented level of funding for tech start-ups, with many of them competing directly with publicly traded firms. Even within the FAANGs, the companies are making a faster push into each other's businesses, including e-commerce, media content delivery, online advertising, and cloud computing.

The final risk relates to regulation, which remains a complicated and controversial subject when it comes to the large technology companies. Whether the conflict relates to privacy or anti-competitive business practices, there is a high probability that federal, state, and foreign governments' scrutiny will only increase as the companies continue to grow and expand into more and more businesses.

Fundamentals generally remain strong for many of the highflying momentum stocks. However, we suspect that a combination of the aforementioned risks will pose increasing challenges. This will likely be a 2019-2020 event given seasonality and current macro tailwinds. In terms of sector strategy, both global and domestic equity portfolios are generally overweighted to the sector overall, including select FAANG stocks. Reflecting our valuation discipline, we believe semiconductor, IT service providers, and some software companies currently offer an attractive risk-reward profile.

As growth investors, we recognize that discussing cautionary signposts on the key sector (i.e., tech) driving growth stock outperformance represents a contrarian stance. Our experience has led to these conclusions: valuations are important, sentiment can change quickly, and what may seem like infallible stories can hold risks for investors. Sound fundamental analysis is required to separate overvalued "story stocks" from companies with strong future earnings to support current share prices.

The divergence of performance (between tech and non-tech) has come at a time of an improving earnings backdrop for many companies throughout the economy. We estimate, excluding REITs and utilities, over 75 percent of S&P 500 companies will produce double-digit earnings growth in 2018. Moreover, fiscal policy tailwinds such as tax reductions, deregulation, and capital spending incentives are, on balance, more beneficial to sectors outside of technology. Financial stocks look particularly attractive given significantly higher earnings post tax reform, reduced regulatory costs, benign credit conditions, and ample capital. We also believe risk-reward has improved substantially for the energy sector, with current valuations reflecting oil prices close to $60 per barrel rather than the current price of $75. Improved energy-related capital spending is a clear positive for capital goods companies, which also are benefiting from a healthy global manufacturing backdrop, especially in the U.S.

As EPS growth has outpaced price performance for much of the market this year, valuations have compressed in many attractive groups.

P/E Contraction in Attractive Sectors

	NTM P/E		Change
	(12/31/17)	(9/30/18)	in P/E
Integrated Oil	21.0x	15.1x	-5.9x
Pulp & Paper	15.0x	10.6x	-4.5x
Investment Banks/Brokers	16.7x	13.1x	-3.7x
Air Freight/Couriers	18.5x	14.9x	-3.7x
Electronic Production Equip.	13.9x	10.5x	-3.4x
Aerospace & Defense	22.4x	19.2x	-3.2x
Major Telecommunications	13.2x	10.2x	-3.0x
Semiconductors	15.3x	12.9x	-2.3x
Life/Health Insurance	11.0x	8.8x	-2.2x
Managed Health Care	19.2x	17.7x	-1.5x

Source: FactSet, 9/30/18

While rising interest rates are likely responsible for some amount of multiple compression, the fact that higher P/E stocks have been re-valued even higher so far in 2018 has been surprising. Via a higher implied discount rate, investors should pay less for earnings in the "out years." Despite leadership from momentum-oriented stocks thus far in 2018, we expect market breadth to improve and a broader portion of equities to contribute to the market's overall performance going forward. Catalysts include continued strength in earnings, gradually rising interest rates, and positive developments in global trade negotiations, which would generate confidence in the durability of the economic cycle. Industrials, transports, financials, and select consumer stocks stand out as potential beneficiaries.

The United States

The U.S. economy is firing on all cylinders thanks, in large part, to pro-growth policies. Yet, growth is poised to moderate in 2019 as fiscal stimulus fades and monetary policy tightens.

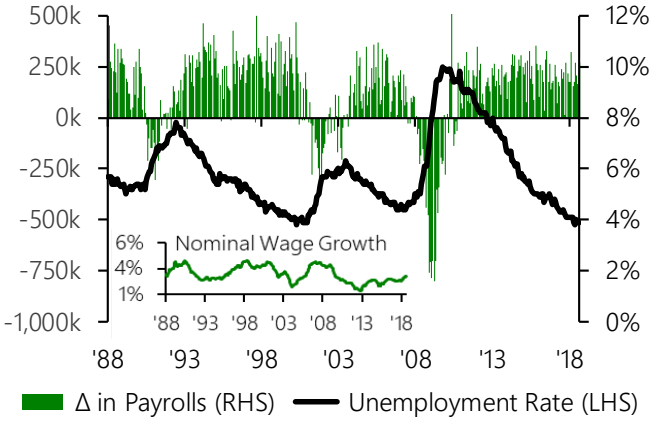
Goldilocks Economy Will Normalize as Fiscal Stimulus Wanes

The combination of unorthodox late cycle fiscal stimulus and deregulation has countered the impact of measured monetary tightening and contributed to a notable acceleration in U.S. economic growth, with real GDP on pace to increase +3.0 percent in 2018 versus the compound annual growth rate of +2.2 percent over the prior five-year period. While leading indicators suggest the economy will remain relatively robust heading into 2019, we anticipate GDP growth will moderate gradually to the low +2.0 percent range by the end of next year as the direct impacts of fiscal stimulus fade, financial conditions tighten, and inflationary pressures mount. In addition, escalating trade tensions, diverging global growth prospects, rising interest rates, and an appreciating U.S. dollar risk dampening the resurgence in domestic business optimism and capital investment. Furthermore, U.S. federal debt held by the public will balloon +37 percent to $20.3 trillion by yearend 2022 according to the Congressional Budget Office, possibly crowding out private investment. Nonetheless, absent shocks, recession within the next 18 to 24 months appears unlikely as we anticipate many of the favorable underpinnings of the expansion will remain intact.

Will the Tight Labor Market Restrain Economic Growth?

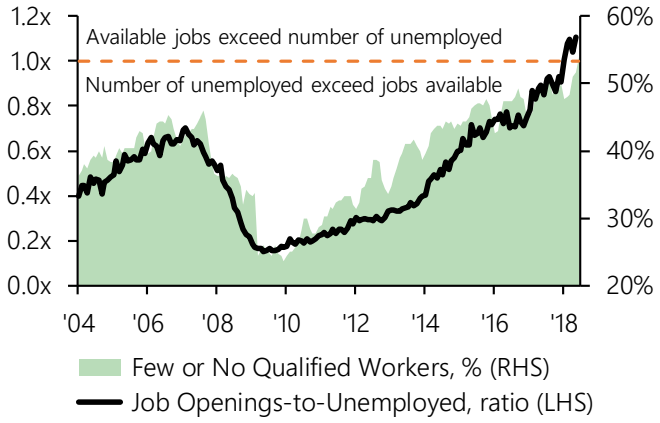
Despite a historically low headline unemployment rate of 3.7 percent, the U.S. economy added to nonfarm payrolls at an average pace of roughly 208,000 jobs per month for the first nine months of 2018, on par with the monthly average of 209,000 over the prior five-year period (Exhibit 1). The participation rate, a steady decrease in which distorted unemployment figures earlier in the expansion, now remains stable at about 63 percent. Importantly, the labor market is broadening to include more low- and middle-wage jobs. Nevertheless, labor shortages are increasingly obvious, with the number of job openings currently exceeding the number of unemployed and over half of businesses stating that there are few or no qualified applicants (Exhibit 2). The aging population is an ongoing headwind for labor force growth and stricter immigration policy is impairing a classic late cycle "relief valve." The tight employment situation is exerting upward pressure on wage

Exhibit 1: Unemployment and Wage Growth



Source: Bureau of Labor Statistics, 10/5/18

Exhibit 2: Job Openings-to-Unemployed Ratio



Source: Bureau of Labor Statistics, NFIB, 10/5/18

growth and limiting the ability of some companies to expand. Efforts to bring people back into the workforce appear be to having incremental success and could help sustain demand for workers in the intermediate term. Investments in productivity-enhancing capital equipment will also alleviate labor constraints and, possibly, extend the expansion.

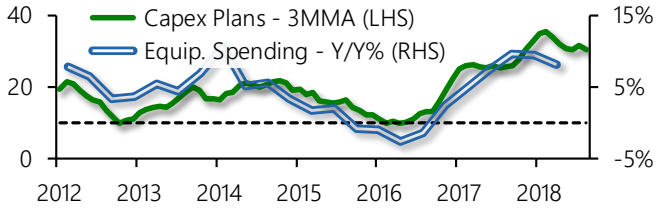
Second-Order Effects of Tax Cuts and Deregulation Should Sustain Expansion

The positive multiplier effects of tax cuts and deregulation on business investment are an essential offset to tariffs and monetary tightening as the direct impact of fiscal stimulus begins to diminish later in 2019 (Exhibit 3). The offshoring of U.S. manufacturing has resulted in lower capital intensity, higher corporate profitability, restrained inflation, and diminished economic cyclicality. However, underinvestment in domestic capital has also lowered GDP growth potential through supply (and demand) destruction. The U.S. may be on the cusp of a sustained upturn in domestic investment driven by corporate tax reform, trade policy recalibrations, rising offshore production costs, aging capital stock, capacity constraints, and technology advances. Surging U.S. business confidence post the 2016 elections has led to a meaningful uptick in capital investment, with equipment spending increasing +8.6 percent year-over-year, on average, for the last four quarters. However, lingering trade policy uncertainty has led to a modest dip in business optimism and capex intentions more recently, though these metrics remain close to historically high levels. While the pending deals with Mexico and Canada alleviate some uncertainty, challenging trade negotiations with China are a key risk to both capex and global growth.

Consumer Spending Will Remain Solid in 2019, but Moderate Marginally

Real consumer spending, which has grown at an annualized rate of +3.0 percent over the last five years, remains a steadfast contributor to GDP growth (Exhibit 4). Spending on durable goods has been particularly robust, growing at a five-year annualized rate of +6.6 percent. Personal tax cuts have provided an additional tailwind for consumer spending, with the Joint Committee on Taxation projecting a $75 billion windfall for households in 2018. However, Empirical Research Partners estimates that consumer tax remittances have been under-withheld to the tune of about $25 billion, suggesting a possible negative hit to spending in early 2019. In addition, growth in durable goods spending continues to slow as unit sales of new light vehicles plateau and rising interest rates negatively impact demand for other big-ticket items. Rising gas prices will also have a dampening effect on discretionary purchases. Still, household balance sheets are in excellent shape and rising wage growth should support ongoing strength in consumer spending.

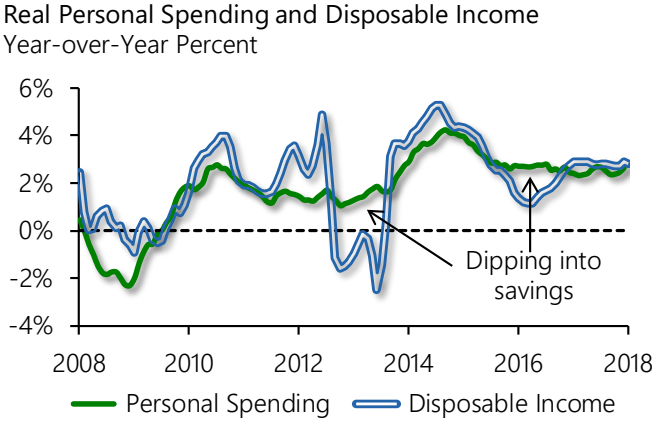
Exhibit 3: Corporate Capital Spending



Capital Usage ($B)	2017	2018E	2019E	'19%
Capital Expenditures	$626	$715	$780	9%
Research & Development	$304	$340	$370	9%
Cash Acquisitions	$320	$345	$400	16%
Share Buybacks	$533	$770	$940	22%
Dividends	$452	$495	$525	6%

Source: Federal Reserve Banks, BEA, Goldman Sachs, 10/4/18

Exhibit 4: Consumer Income and Spending

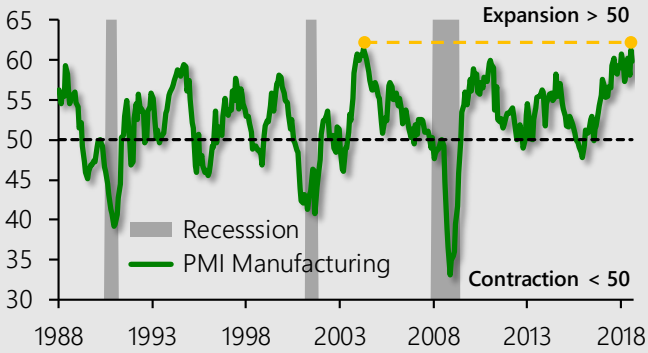


Source: Bureau of Economic Analysis, 9/30/18

United States: Notable Data Points

Manufacturing PMI Recently at 14-Year High

ISM Report on Business: Manufacturing
United States



Source: Institute for Supply Management, 9/30/18

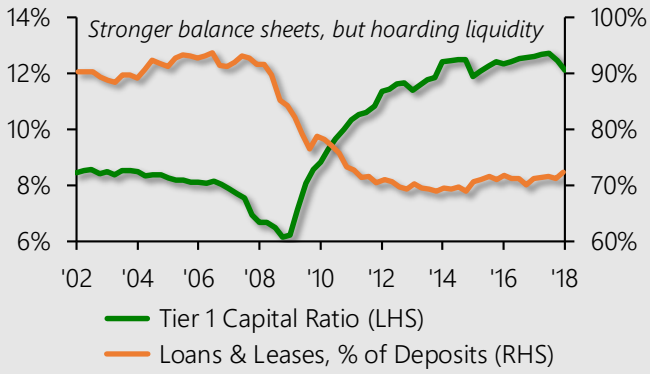
Lack of Economic Slack Is Inflationary

U.S. Output Gap*
Percent of Potential GDP

Source: Bureau of Economic Analysis, CBO, 9/30/18

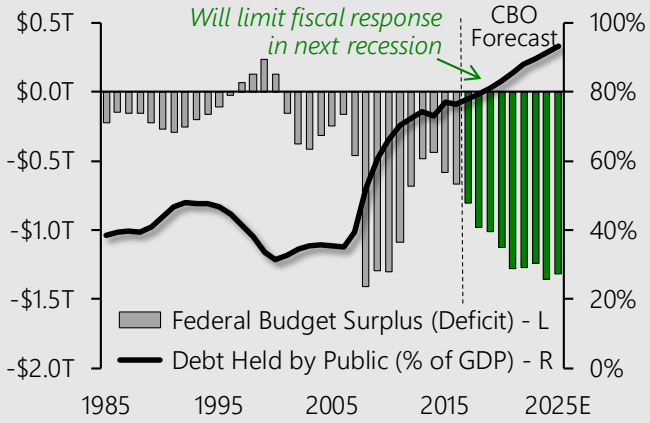
U.S. Banks Better Capitalized Vis-à-Vis 2007

U.S. Banks: Capital and Loan-to-Deposit Ratios



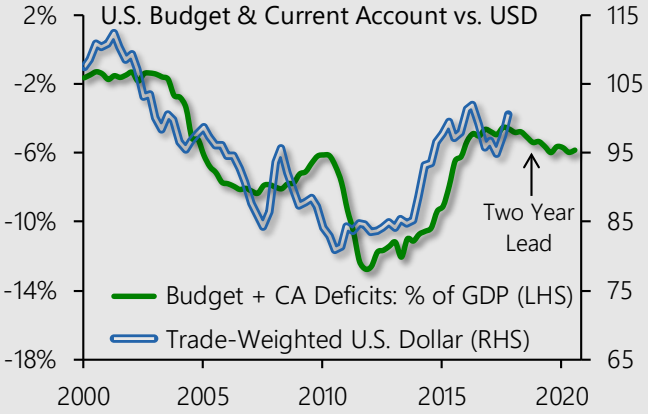
Source: Federal Reserve Bank of New York, FDIC, 9/30/18

Federal Debt Levels Increasingly Problematic



Source: Congressional Budget Office, 6/26/18

"Twin Deficits" Imply U.S. Dollar Stabilization



Source: BEA, U.S. Treasury, Federal Reserve, 9/30/18

Dems Poised to Take House, but Not Senate

2018 Election Ratings

U.S. House of Representatives

Democrats only need to pick up 23 seats to control House; strong bias toward Democrat control

Solid Seats		Likely/Lean Seats		Toss Up or Worse	
D - 182	R - 145	D-10	R-51	D-3	R-44

U.S. Senate

26 seats held by Democrats up for relection vs 9 seats held by Republicans; strong bias toward Republican control

Solid Seats		Likely/Lean Seats		Toss Up or Worse	
D - 14	R - 4	D-7	R-1	D-5	R-4

Source: The Cook Political Report, 9/30/18

Europe

Brexit continues to weigh on UK economic prospects; while a deceleration in global trade has had a notable impact on Euro Area growth, with some signs of recent stabilization.

Brexit-Related Uncertainty Remains an Overhang on the UK Economy

The formal two-year process for the United Kingdom to exit the European Union will end in March 2019, with still little clarity on the final terms of the Withdrawal Agreement and associated economic impact. Negotiation outcomes range from a so-called "soft Brexit" (extra two-year transition period; maintain access to single market) to a "hard Brexit" (no agreement, exit March 2019). Failure to secure majority support for an agreement in the British Parliament may also trigger a General Election and, feasibly, a second EU Referendum. Policy uncertainty, pound depreciation, and inflation post the June 2016 EU Referendum continue to weigh on the economy, with UK real GDP growth on pace to decelerate to +1.4 percent in 2018 from +1.7 percent in 2017 and the five-year annualized rate of +2.0 percent prior to the referendum. As it could push the UK economy into recession and have a notable risk of contagion to the EU (Exhibit 5), we are optimistic that all those involved will seek to avoid a "hard Brexit," even if it entails extending the negotiation timeline (especially in the case of a General Election).

Euro Area GDP Growth Decelerating; Exposed to Ebb and Flow of Global Trade

Euro Area economic growth decelerated in the first half of 2018 from the comparatively robust pace of 2017, as U.S. protectionism, euro appreciation, global growth divergences, political uncertainty, and oil inflation hampered demand. However, a number of macro indicators suggest the business climate stabilized in the third quarter – export demand is recovering, loan growth is accelerating, and the Purchasing Managers' Index generally remains consistent with real GDP growth of +2.0 percent in 2018. Tightening in both the labor market and manufacturing capacity also bodes well for consumer spending and capital investment. In addition, although cost pressures are mounting, relatively benign inflation has permitted monetary policy to remain unexpectedly dovish in view of recent threats to economic growth. Nonetheless, with exports accounting for nearly 50 percent of GDP, the Euro Area is sensitive to escalating trade tensions, slowing growth in China, increasing emerging market pressures, and an appreciating euro. Europe's penchant for political turmoil also represents a risk to the outlook. Yet, we expect some stabilization on these fronts to contribute to a modestly healthy growth profile for the region in 2019.

Exhibit 5: Brexit Scenario Analysis

		2011-pre Brexit Referendum	After Brexit Referendum	2018	2019	2020	2021	2022	2023
No Brexit	GDP	2.0%	1.6%	1.4%	2.2%	1.9%	1.9%	1.8%	1.6%
	CPI	1.9%	2.6%	2.4%	1.8%	1.9%	1.9%	2.0%	2.0%
	Unemployment Rate	4.5%	4.5%		4.1%	4.0%	4.0%	4.0%	4.1%
Hard Brexit	GDP before policy response	2.0%	1.6%	1.4%	-1.3%	1.0%	0.0%	1.1%	1.2%
	GDP with countercyclical policy	2.0%	1.6%	1.4%	0.1%	1.2%	0.0%	1.1%	1.2%
	CPI	1.9%	2.6%	2.4%	4.8%	2.5%	2.2%	1.8%	1.5%
	Unemployment Rate	6.9%	4.5%		4.9%	5.3%	5.7%	5.7%	5.6%
Soft Brexit	GDP before policy response	2.0%	1.6%	1.4%	1.1%	0.2%	1.2%	1.2%	1.3%
	GDP with countercyclical policy	2.0%	1.6%	1.4%	1.2%	0.8%	1.2%	1.2%	1.3%
	CPI	1.9%	2.6%	2.4%	2.8%	2.7%	2.6%	2.4%	2.0%
	Unemployment Rate	6.9%	4.5%		4.2%	4.5%	4.4%	4.3%	4.2%

Source: UBS Global Research, 9/18/18

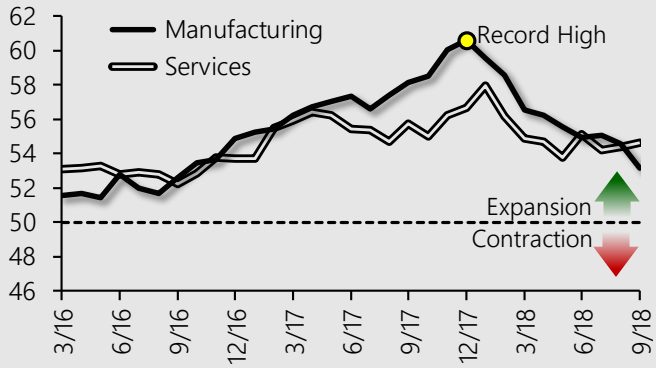
Quantitative Easing Plateauing, but Monetary Policy Will Remain Very Loose

The European Central Bank (ECB) expects to end further expansion of its quantitative easing program in December 2018, but maintain the same level of assets for an extended time thereafter and leave interest rates unchanged at least through mid-2019. However, Mario Draghi's term as President of the ECB will expire in October 2019, implying there could be risk to the current path of measured policy normalization under new leadership. To recall, the Euro Area was in the grips of a sovereign debt crisis when Draghi assumed presidency of the ECB in November 2011. Importantly, his ensuing declaration that the central bank was ready to do "whatever it takes" to preserve the euro marked a shift in policy and short-circuited a negative feedback loop of waning investor confidence, evaporating liquidity, spiking sovereign debt yields, and dimming economic prospects. The ECB has eased monetary policy considerably since late 2011, cutting interest rates to zero and doubling the size of its balance sheet to €4.6 trillion. While the Euro Area economies are generally on better footing vis-à-vis 2011, the risk of policy missteps is high given trade tensions, emerging market pressures, and Italian instability. Spiking Italian sovereign bond yields on the heels of new populist government and fiscal budget woes risk resurrecting fears of another self-fulfilling sovereign debt crisis in the region.

Europe: Notable Data Points

Euro Area PMI Implies '18 GDP Growth of 2%

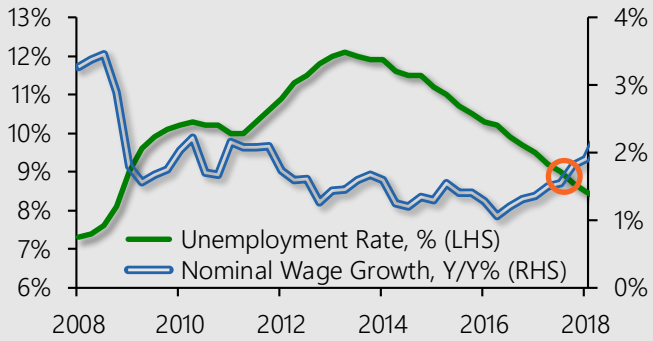
Euro Area Purchasing Managers Index



Source: Markit Economics, 10/3/18

Tighter Labor Market Leading to Higher Wages

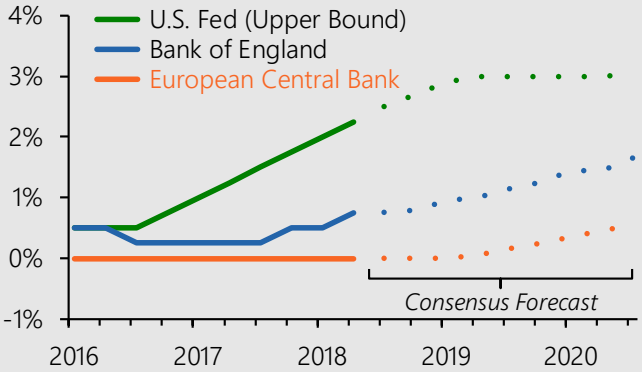
Unemployment Rate vs Wage Growth
Euro Area



Source: Eurostat, European Central Bank, 9/30/18

The ECB Will Remain Highly Accommodative

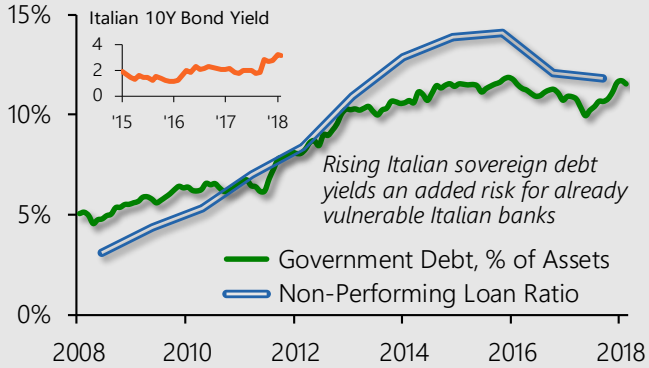
Central Bank Policy Rates



Source: Bloomberg, 9/30/18

Italian Banks Vulnerable to Sovereign Woes

Italian Banks, Debt Holdings and Non-Performing Loans



Source: European Central Bank, FactSet, 9/30/18

Japan

We remain cautious on Japan's growth prospects as the BoJ reaches the limits of monetary easing, fiscal constraints begin to bite, and structural reforms remain marginal.

The Bank of Japan (BoJ) is sending mixed signals, introducing forward guidance to ease further, but also softening the yield curve target and tapering bond purchases as policy concerns mount. Earnings pressure on domestic lenders from a flat curve/near zero rates and an increasingly illiquid government bond market are proving to be drawbacks, suggesting monetary easing is nearing its limit. Meanwhile, fiscal policy is constrained as the government debt balance nears a staggering 200 percent of GDP. Although next autumn's consumption tax hike will address the high debt burden, the policy will come at the expense of growth. The threat of higher borrowing costs adds impetus for further action. Structural reform efforts should remain marginal as Prime Minister Abe turns his attention to revising the pacifist constitution after securing a final three years in office. However, fragmented support at the local level points to limited appetite for contentious policies. All considered, the limited scope for policy to boost growth gives us concern, although we expect modest growth near term amid still-healthy global growth.

Emerging Markets

A looming trade war, rising U.S. interest rates, a stronger U.S. dollar, higher oil prices, and renewed fears about countries with high levels of U.S.-dollar denominated debt and large current account deficits are negatively affecting emerging markets. The Chinese government continues to implement easing measures to preempt/mitigate the impact of tariffs.

China's Economy Is Moderating as Expected

As anticipated, China's economic growth is slowing amid the deleveraging initiatives that began in late calendar 2017. For the first eight months of 2018, investment growth has fallen to a new low of +5.3 percent year over year. Infrastructure investment has been a key drag, largely reflecting the aggressive tightening on local government financing earlier in 2018. Capex growth in the manufacturing and property sectors, on the other hand, have held up relatively well. Consumption also softened on weaker demand for housing and autos, while exports have remained robust so far. The trade surplus with the U.S. remained near record highs in August due to some frontloading of purchases ahead of tariffs. Given elevated trade tensions, we would not be surprised to see slower export growth ahead. The trade dispute with the U.S. clearly is a major external risk to China's economy in our view. However, given recent policy adjustments, we do not expect a hard landing for China's economy. As a result, we are maintaining our real GDP growth estimate of +6.5 percent in 2018. Our forecast of +6.3 percent for 2019 does not fully reflect the impact of tariffs given the low visibility currently.

U.S.-China Trade Conflict to Drag on Long Beyond the U.S. Midterm Elections

U.S.-China trade tensions have increased sharply in recent months and may be moving toward a full-blown trade war. According to the IMF, China's total exports to the U.S. amounted to US$506 billion in 2017, while U.S. exports to China totaled US$155 billion The U.S. is currently imposing tariffs on US$250 billion worth of China's imports and has threatened tariffs on an additional US$267 billion. China has retaliated with levies on a total US$110 billion of U.S. imports. In addition, China canceled trade talks scheduled for late September amid Trump's "threats," though left the door open for negotiations at a later date. So far, both sides have not experienced much negative economic fallout from the trade dispute. Since both countries are unlikely to back down

in the short term, the trade conflict will likely continue well beyond the U.S. midterm elections and could get worse before getting better. It is our belief that, while China is willing to buy more U.S. goods and open up more markets, it is unlikely to abandon its "made in China 2025" industrial policy – although policy changes to protect intellectual property are possible.

China's "Policy Put" Offering Some Buffer in the Near Term

Amid rising U.S.-China trade tensions and the government's objective of overall growth stability, China's policy stance has shifted from net tightening to net easing. On the monetary front, deleveraging efforts appear to have been paused. Financial conditions have improved since July and liquidity has been reasonably ample. On the fiscal front, while reducing taxes and fees is the focus of China's policy, infrastructure spending will likely provide a more direct and immediate impact on growth. After an aggressive fiscal overhaul at the provincial government level earlier this year, local government bond issuance has recently accelerated from depressed levels. This should help alleviate funding constraints and stabilize infrastructure spending going forward. However, it takes time for policy adjustments to flow through the economy and we still need to monitor the implementation. Finally, the renminbi has recently stabilized following a sharp depreciation against the U.S. dollar, as the People's Bank of China reactivated countercyclical factors to manage market expectations and support the renminbi. We do not expect China to engage in competitive currency devaluation to boost exports.

India's GDP Strengthening, but Current Account Deficit and Inflation Are Risks

India's economy gained strength in the first quarter of fiscal 2019, growing +8.2 percent, paced by manufacturing, construction, and private consumption. As a result, we have raised our fiscal 2019 GDP forecast slightly to +7.4 percent, as the recovery broadens to rural incomes and includes strong growth in credit and exports. However, an escalating current account deficit and higher inflation represent notable risks to India's economy. Due to higher oil prices, India's current account deficit will worsen to -2.7 percent of GDP in fiscal year 2019. Moreover, although core inflation moderated to +5.9 percent year-over-year in August, it may reverse on higher input costs to the manufacturing sector. The rupee's depreciation adds to the inflation risk. As a result, the government of India announced rupee stabilization measures in September to attract capital flows and curb the current account deficit. The Reserve Bank of India also increased its repo rate +25 basis points to 6.5 percent in August to help ease rupee depreciation.

U.S.-North Korea Negotiations Have Stalled; Trade Conflict Also Still a Risk

South Korea's economy grew +2.9 percent year-over-year in the second quarter, driven by strength in exports and consumption. We currently forecast 2018 GDP growth of +2.9 percent versus +3.1 percent in 2017. August inflation of +1.4 percent year-over-year was also below the +2.0 percent target, which should allow interest rates to remain at 1.5 percent. The major concern for the economy is a trade war, as close to 70 percent of South Korea's exports to China are for intermediate use. On the political front, nuclear negotiations stalled after the United States and North Korea summit in June. Still, each side has offered conciliatory signals: the United States suspended military exercises with South Korea and North Korea excluded long-range intercontinental ballistic missiles in its military parade celebrating the country's 70th anniversary. On September 19, South Korean President Moon Jae-in and North Korean leader Kim Jong Un signed a broad agreement whereby North Korea agreed to take further steps toward denuclearization and allow international inspectors to observe the process. These are small, but positive steps in cooling tensions in the Korean Peninsula/Asia Pacific region.

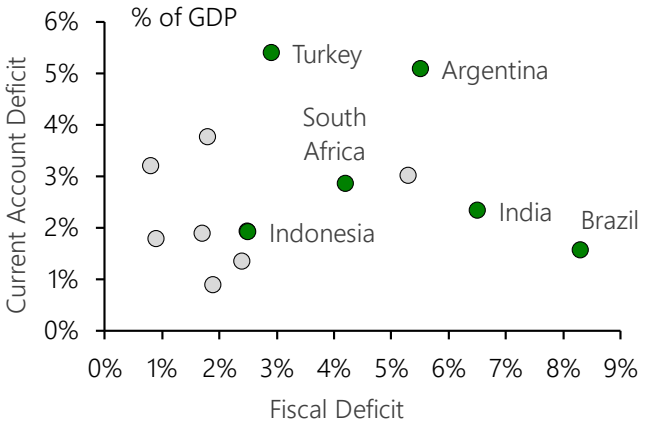
Brazil GDP Revised Lower; U.S., Mexico, and Canada Pass Trade Agreement

Brazil's GDP grew a disappointing +1.0 percent year-over-year in the second quarter on slower-than-expected private consumption and a decline in exports. The unemployment rate of 12.3 percent (non-seasonally adjusted) is still high and retail spending is fragile. Moreover, although the inflation rate of +4.2 percent year-over-year in August is below the central bank's target of +4.5 percent, the weak currency may force Brazil's central bank to increase interest rates. Therefore, we lowered our forecast for GDP growth in 2018 to +1.5 percent from +2.2 percent. In Mexico, second quarter GDP increased +2.6 percent year-over-year, on strength in services and industrials. Still, the recovery in domestic demand has been slower-than-expected, as inflation remains elevated due to energy prices. Inflation of +4.9 percent year-over-year in August is tracking above target of +3 percent. Separately, the U.S., Mexico, and Canada agreed on September 30 to a new trade agreement. While the agreement must pass in each country's congress, it alleviates uncertainty about trade that has been a worry for businesses. The Pena Nieto administration wanted to reach an agreement soon so the Mexican Congress had enough time to ratify the deal before President-elect Andres Manuel Lopez Obrador takes office on December 1.

Recent Emerging Markets Woes Should Remain Contained to "Fragile Six"

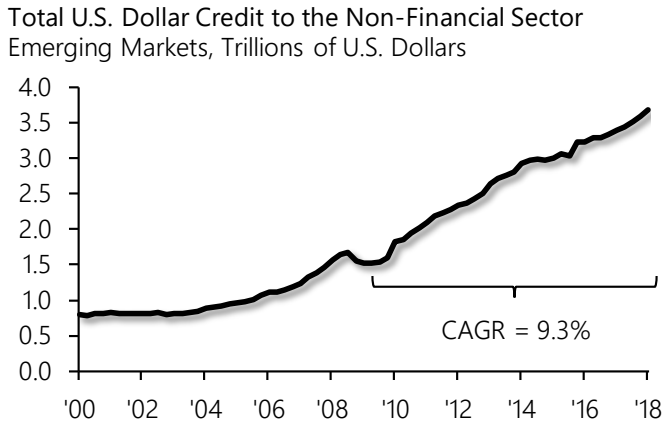
The recent economic troubles in Turkey and Argentina have re-ignited concerns about emerging market (EM) economies, particularly in light of deteriorating PMIs, escalating trade tensions, increasing inflation, appreciating U.S. dollar, rising foreign currency debt, and expanding current account deficits (Exhibits 6 and 7). The growth of many EM countries is dependent on foreign investment and are now vulnerable to capital outflows. We expect risks to remain largely contained to Brazil, India, Indonesia, South Africa, and more specifically, Argentina and Turkey. These two counties have the highest current account deficits as percentage of GDP and are the most susceptible to capital flight. Moreover, unlike the Asian currency crisis in 1997, EMs are better insulated from one another as central banks are more independent, governments are more democratic, and many nations have built up sizable foreign exchange reserves. Lower GDP growth in Turkey and Argentina also should not derail global growth, as these two economies combined represent only 2.0 percent of world GDP. EM economic prospects overall should remain relatively robust, with GDP growth projected to increase +4.7 percent in 2018 and +4.6 percent in 2019 – albeit, trade tensions/tariffs skew risks to the downside.

Exhibit 6: Current Account and Fiscal Deficits



Source: International Monetary Fund, 9/30/18

Exhibit 7: U.S. Dollar-Denominated Debt

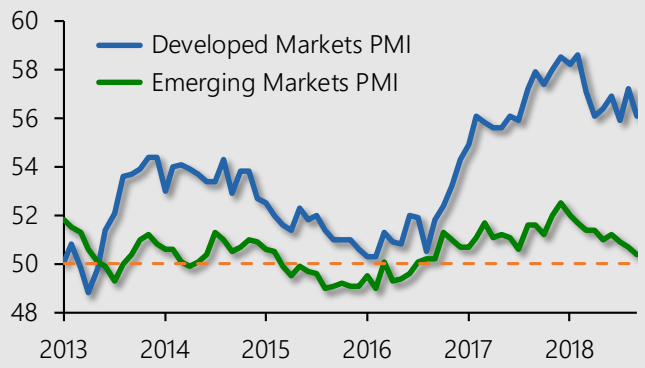


Source: Bank for International Settlements, 9/30/18

Emerging Markets: Notable Data Points

Incremental Global Growth Driven by DMs

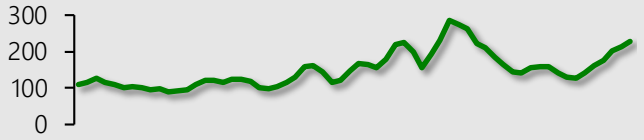
Manufacturing Purchasing Managers' Index



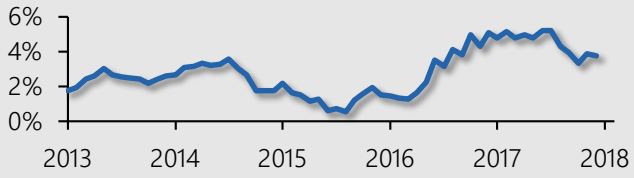
Source: Cornerstone Macro, 10/5/18

Rising Policy Uncertainty Harming Global Trade

World Economic Policy Uncertainty (3MMA)

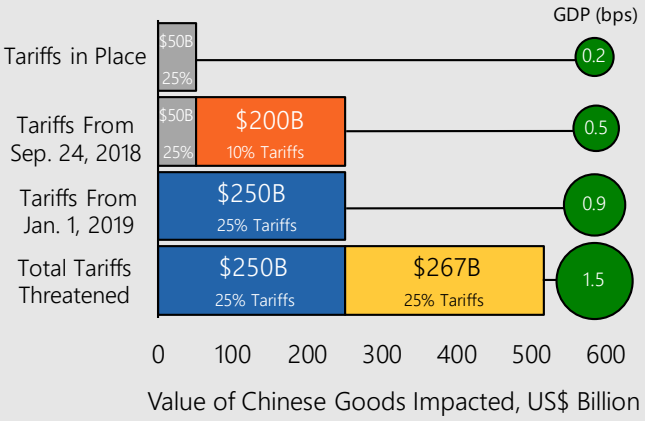


World Trade Volume (3MM, Y/Y%)



Source: Netherlands CPB, Economic Policy Uncertainty, 9/30/18

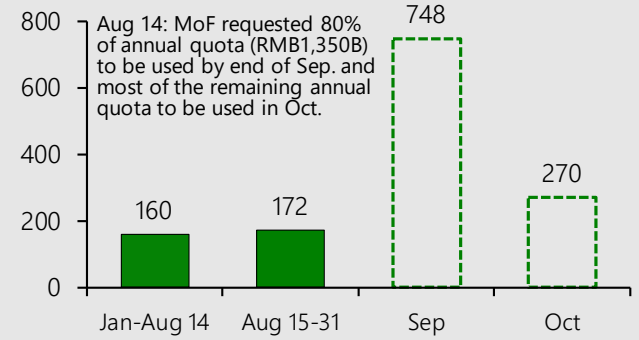
Tariffs Could Reduce China's GDP by 150bp



Source: Bloomberg Economics, 9/30/18

But, Fiscal Spending Will Lessen Tariff Impact

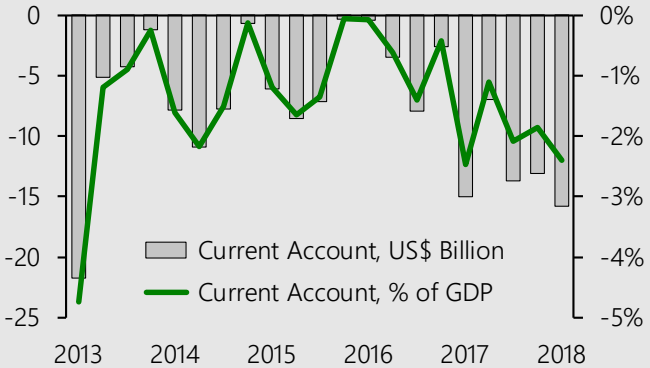
Net Issuance of New Local Govt. Special Bonds
RMB, Billion



Source: Morgan Stanley, 9/27/18

India's Current Account Deficit Deteriorating

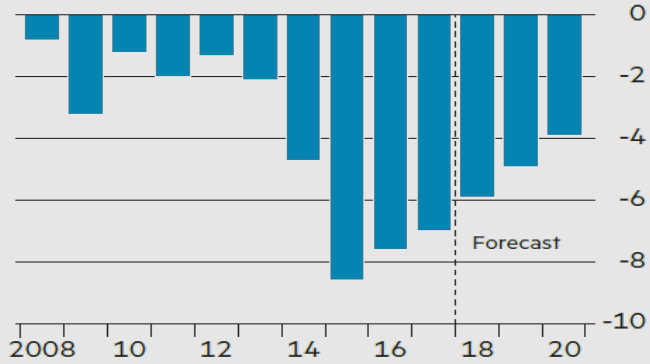
India Current Account



Source: Reserve Bank of India, Ministry of Statistics, 9/30/18

Brazilian Budget Deficit Still Too High

Central government budget balance, as a % of GDP



Source: Financial Times, 9/14/18

Taxable Bonds

Monetary Policy: Slow and Steady Wins the Race

The Federal Open Market Committee unanimously agreed in September to raise the fed funds rate by 25 basis points, for the eighth time this tightening cycle, to 2.25 percent. We forecast the fed funds rate will stabilize at 3.0 percent in June of 2019, as the Federal Reserve (Fed) continues to wind down its balance sheet. Chairman Powell highlighted the "bright moment" the country finds itself in; strong economic growth, strong employment, and modest inflation. The Committee still views current monetary policy as generally accommodative and is not signaling any change in the normalization path. Furthermore, Powell reiterated that the economy does not need stimulative monetary policy, but avoided saying what he would consider a neutral rate and resisted relying purely on economic models to determine said rate. Powell's awareness of the flaws in models, policy, and human nature is welcomed change from prior academia-oriented chairpersons. We believe 3 percent is the neutral rate.

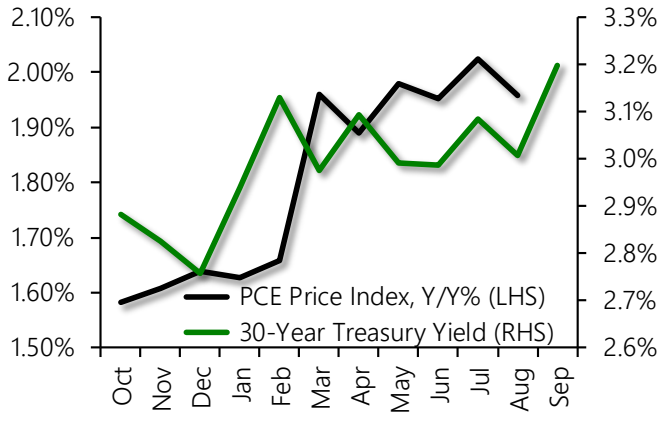
Inflation Expectations Are Gradually Increasing

U.S. wage growth has been over +2 percent for the last three years and is currently approaching +3 percent on a year-over-year basis. Employers are also increasing benefits and bonuses. With the unemployment rate currently at 3.7 percent, the lowest reading since the 1960s, combined with the tax cuts, it is no wonder consumer confidence is near an all-time high. Inflation expectations generally drive the 30-year Treasury bond yield, which is up roughly 45 basis points year to date. The core personal consumption expenditure price index, the Fed's favored inflation metric, has been slow to react to the strong growth and inflationary pressures (Exhibit 8). The 2-year Treasury bond, which is much more influenced by the fed funds rate, is up 93 basis points (Exhibit 9). We expect to see the curve flattening to continue as the Fed increases rates to hold inflation (and 30-year yields) in check. We also see the potential for yield curve inversion, with little threat of recession in the face of strong economic activity.

An Inverted Yield Curve is Not a Concern

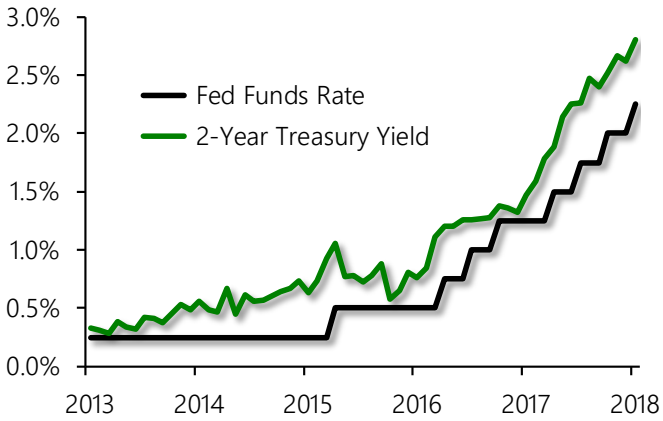
There has been a lot commentary regarding inverted yield curves causing recession. Yield curve inversions, in and of themselves, do not cause recession and many are the

Exhibit 8: PCE Prices vs 30-Year Treasury Yield



Source: Bureau of Economic Analysis, FactSet, 9/30/18

Exhibit 9: Fed Funds vs 2-Year Treasury Yield



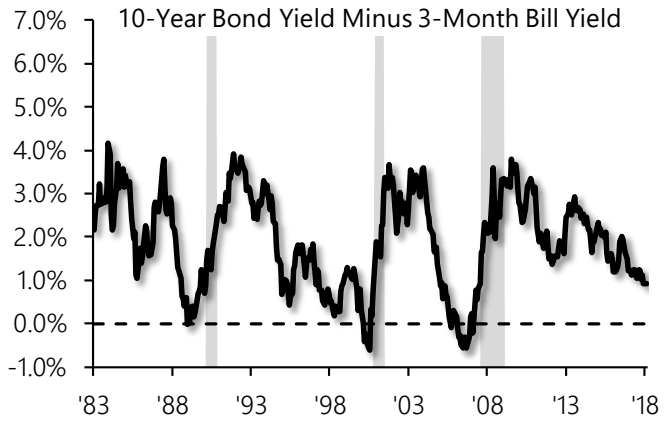
Source: FactSet, 9/30/18

result of economic weakness coming first and causing investors to anticipate an interest rate cut from the Fed. Inversions are unusual and happen at different parts of the curve at different times even within the same interest rate cycle. No yield curve inversion is like the other and rarely does the entire Treasury yield curve invert (Exhibit 10). When a cut in rates by the Fed seems clear, the one- and two-year maturities will "lead" the cuts creating an inversion in the short end, resulting in a yield curve that resembles a checkmark. When the Treasury was buying back long bonds, the 10- to 30-year maturities were inverted when the rest of the curve was steep, so we had a hump or rainbow shaped curve. We find the link between inversions and recessions to be weak, and it is best to focus on solid economic data. We have been watching the 7- to 10-year portion of the yield curve because we are calling for a "V-shaped" yield curve in 2019. We have recently found a portion of the yield curve where a shorter maturity bond has a higher yield than a longer maturity bond. The Treasury maturing February of 2027 is yielding 3.052 percent, while the May 2027 Treasury is yielding 3.046 percent. This 8.5-year part of the curve is the area of the yield curve that we expect to be the bottom of the "V". Short-term yields will continue to march higher due to the Fed raising rates, but also from a massive Treasury supply/demand imbalance as the Fed accelerates its reduced demand for bonds to $600 billion a year next month while the Treasury continues to issue an additional trillion of short-term bonds a year.

Taxable Fixed Income Strategy

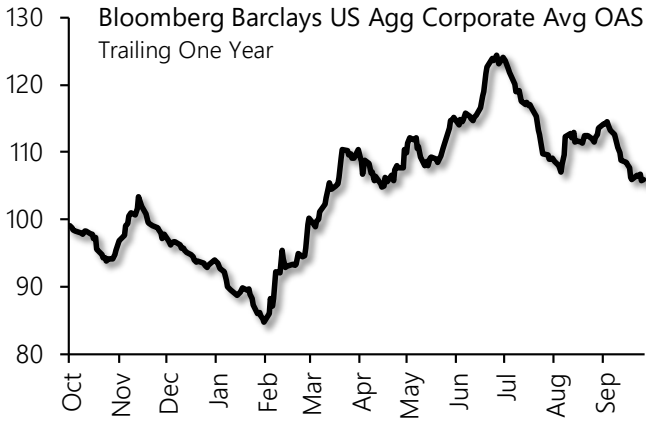
We continue to position portfolios defensively against rising interest rates and the forming of a "V-shaped" yield curve over the coming months. Short-term yields will rise due to (1) Fed rate increases, (2) an additional $1 trillion of shorter-term Treasury supply, and (3) falling demand for 2- to 5-year Treasuries as the Fed reduces its balance sheet. Longer-term yields will rise due to both increased inflation expectations and reduced defined benefit plan contributions after the September 15 deadline eliminated the ability to deduct contributions at the old 35 percent corporate tax rate. Economic strength is supporting corporate bond spreads (Exhibit 11). Higher mortgage rates have not materially slowed housing activity, but slower mortgage prepayments and further reduction in the Fed's balance sheet will negatively impact current coupon mortgages. While labor shortages will most likely lead to increased wage costs, we are seeing more companies with pricing power. Therefore, we continue to favor higher quality credits going into the last quarter of 2018.

Exhibit 10: U.S Treasury Spread



Source: FactSet, 9/30/18

Exhibit 11: Investment Grade Credit Spreads



Source: Bloomberg, 9/30/18

Municipal Bonds

Municipals Outperform Treasuries in Challenging Third Quarter

As shown in Exhibit 12, the Bloomberg Barclays Municipal Bond Index reported a -0.15 percent return in the third quarter. Year to date, the overall Municipal Index has a -0.40 percent return. In the third quarter, long duration bonds (22+ years) had the weakest performance at -0.48 percent. By comparison, the 30-year Treasury returned -3.27 percent return. Short/ intermediate maturities of 1-, 3-, 5-, and 7-years all had slightly negative returns. The best performance was for 10-year bonds at +0.06 percent. By comparison, the 10-year Treasury had a -1.09 percent return for the quarter. For year to date, there have been increasingly weaker total returns the further out the municipal curve: +0.95 percent for 1-year, +0.64 percent for the 3-year, +0.10 percent for 5-year, -0.66 percent for 10-year, -0.74 percent for 20-year, -1.13 percent for the Long Bond (22+ years). This compares favorably to year-to-date Treasury returns of -0.58 percent for the 3-year, -1.35 percent for the 5-year, -3.73 percent for the 10-year, and -6.55 percent for the 30-year. Municipal performance is also consistent with an adjustment to reduced demand for tax-exempt bonds by banks (which prefer longer bonds) following tax reform, and strong demand by individual investors (who generally prefer short-intermediate bonds). Lower quality credits continue to perform better, with Baa rated bonds recording +0.21 percent in the third quarter and +0.61 percent returns year to date, versus -0.30% percent in the third quarter and -0.77 percent year to date for Aaa bonds. The Municipal High Yield Index again outperformed in this quarter at +0.76 percent, although not as robustly as its year-to-date return of +4.45 percent.

Tax-Exempt Yield Curve Flattens Moderately as Yield Rise

The spread between 2-year and 30-year spot yields on the AAA General Obligation MMD curve ended the third quarter at 122 basis points, flatter by 8 basis points than in the prior two quarter ends. Although close to spreads seen this spring, the municipal yield curve is at its flattest since late 2007. The absolute level of yields rose significantly this quarter, primarily in September. The 2-year spot yield experienced the sharpest increase (33 basis points) to close at 1.97 percent, its highest month-end level since December 2008. The 30-year tax-exempt spot yield rose 25 basis points to 3.19 percent, highest since November 2016. The 10-year spot yield rose a lesser 12 basis points to 2.58 percent, which reduced the 2-10 spread to 61 basis points from 82 basis points, while widening the 10-30 by 13 basis points to 61 basis points. The yield on the Bond Buyer 40-Bond Index, comprised of mainly long bonds, rose by 16 basis points to 4.14 percent, a high for 2018. Additional increases in short-term rates are likely to flatten tax-exempt yields further. Note, however, that the municipal yield curve has never inverted.

Bond Issuance Normalizing, but Still Lower Due to Decline in Refunding

New long-term municipal bond issuance was $84.2 billion in 3Q18, 8.7 percent below 3Q17. That brings 2018 year to date volume to $249.4 billion, 14.9 percent below the total for the same period in 2017. Lighter issuance volume in 2018 has been widely anticipated in the wake of federal tax law changes that eliminated tax-exempt advance refunding capability. Final 2018 new issuance should come in well below the $436 billion in 2017 – the second largest in municipal market history – which was boosted by a surge in issuance late last year ahead of the tax bill. While pure refunding activity declined to a very low 17.8 percent of the primary market, "new money" issuance has been robust, and is the most since 2010. On balance, moderate supply should continue to be supportive of the market. Municipal mutual funds experienced mainly positive inflows until the September yield hikes, a trend we will be watching.

Tax-Exempt Fixed Income Strategy

It is our view that tax-exempt interest rates will rise modestly further, and the tax-exempt yield curve will flatten slightly more through year-end. Our strategy remains focused on high quality medium to long term housing bond issues and other bonds possessing both shorter call provisions and higher coupons to limit extension risk. Our portfolios continue to provide meaningful current income, which has been the primary driver of total return over a full market cycle, particularly in rising rate environments. We expect to maintain most portfolio durations near their current levels and, as always, view diversification as a key tenet in managing portfolio credit risk.

Exhibit 12: U.S. Fixed Income Total Returns

Percent, as of 9/30/18

				Annualized			
Bloomberg Barclays Indices	**3 Months**	**6 Months**	**9 Months**	**1 Year**	**3 Years**	**5 Years**	**10 Years**
Aggregate	0.02 %	-0.14 %	-1.60 %	-1.22 %	1.31 %	2.16 %	3.77 %
Treasury	-0.59	-0.49	-1.67	-1.62	0.23	1.34	2.68
Corporate	0.97	-0.02	-2.33	-1.19	3.12	3.53	6.35
CMBS	0.46	0.39	-0.93	-0.58	1.47	2.21	5.63
Asset-Backed	0.49	0.91	0.52	0.51	1.17	1.51	3.69
Mortgage Pass-Through	-0.12	0.12	-1.07	-0.92	0.98	2.03	3.36
US Aggregate (AAA)	-0.34	-0.19	-1.36	-1.27	0.59	1.64	3.00
US Aggregate (AA)	0.34	0.13	-1.22	-0.62	1.96	2.66	4.69
US Aggregate (A)	0.68	-0.18	-2.67	-1.56	2.55	3.33	6.21
US Aggregate (BAA)	1.35	0.12	-2.04	-0.84	3.97	3.92	6.92
US Aggregate Govt. - Intermediate	-0.11	-0.05	-0.78	-1.18	0.19	0.93	2.22
US 1-3 Year Government	0.20	0.41	0.26	-0.01	0.38	0.57	1.20
US Aggregate Govt. & Credit (1-3 Y)	0.33	0.62	0.41	0.20	0.73	0.83	1.67

				Annualized			
Bloomberg Barclays Indices	**3 Months**	**6 Months**	**9 Months**	**1 Year**	**3 Years**	**5 Years**	**10 Years**
Municipal	-0.15 %	0.72 %	-0.40 %	0.35 %	2.24 %	3.54 %	4.75 %
1-Year Municipal	-0.02	0.57	0.95	0.57	0.71	0.71	1.30
3-Year Municipal	-0.12	0.53	0.64	-0.13	0.75	1.05	2.15
5-Year Municipal	-0.20	0.67	0.10	-0.60	1.16	1.85	3.37
7-Year Municipal	-0.11	0.85	-0.36	-0.58	1.61	2.62	4.20
10-Year Municipal	0.06	0.96	-0.66	-0.14	2.18	3.42	4.91
15-Year Municipal	-0.05	0.91	-0.62	0.66	2.88	4.46	5.76
20-Year Municipal	-0.14	0.79	-0.74	1.03	3.06	4.84	6.07
Long (22+ years)	-0.48	0.44	-1.13	1.07	3.39	5.44	6.34
High Yield	0.76	3.84	4.45	6.36	6.29	6.36	6.51
Muni Aaa	-0.30	0.43	-0.77	-0.26	1.50	2.56	3.82
Muni Aa	-0.20	0.61	-0.51	0.13	1.90	3.20	4.53
Muni A	-0.08	0.83	-0.26	0.63	2.89	4.20	5.43
Muni Baa	0.21	1.62	0.61	2.03	3.97	5.47	5.24

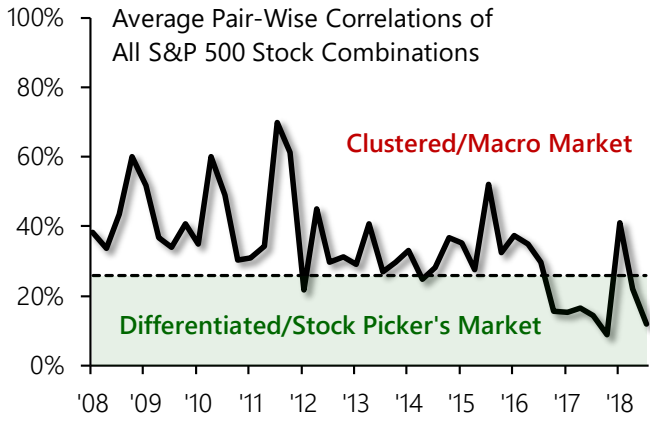
Source: FactSet, 9/30/18

Global Equities: Environment and Strategy

The current bull market in domestic equities has become the longest in U.S. history, with the S&P 500 Index rising 3,492 consecutive days through the end of the quarter without a 20 percent or greater decline (beating the previous record of 3,452 days from October 1990 to March 2000). Despite this remarkable record, domestic equities are much more reasonably valued than they were toward the end of the 1990-2000 run. At its March 2000 peak, the S&P 500 Index traded at a forward price-to-earnings multiple of 27 times compared to 17 times currently. Importantly, the U.S. economy is on very solid footing, helped by pro-growth policies, and there is a low likelihood of recession within the next 18 to 24 months. Nonetheless, inflationary pressures are mounting and year-over-year earnings comparisons will become difficult for a number of industries heading into 2019, underscoring the importance of selecting stocks of companies with pricing power and visible market demand. Moreover, equity markets over the last nine years have largely been in "risk on" mode due to unprecedented monetary easing. We believe the current Fed tightening cycle will lead to higher volatility and lower correlations, providing better prospects for stock picking (Exhibit 13). An emphasis on quality growth and dividend paying stocks trading at attractive valuations will serve investors well going forward.

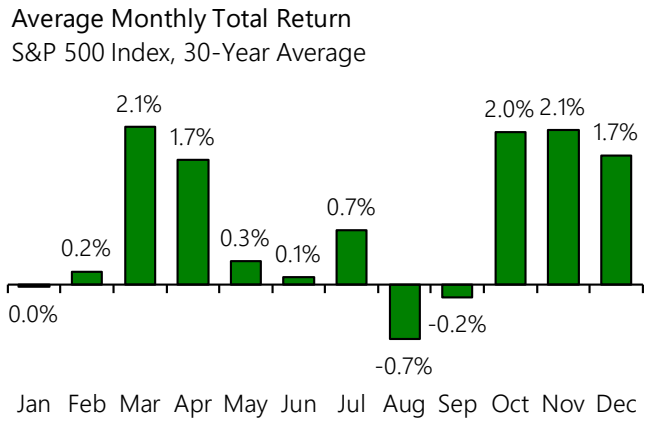
The U.S. midterm election will likely also contribute to increased market volatility, which may be further intensified by elevated trade tensions with China should President Trump follow through on threats of additional tariffs. Moreover, the slowing Chinese economy, rising interest rates, higher energy prices, and appreciating U.S. dollar continue to exert adverse pressure on a number of emerging market economies (namely, those with high levels of U.S. dollar-denominated debt). The risk of specific emerging market troubles spreading to major economies appears limited and the benefits of recent policy easing in China may carry through to other developing countries. Still, we anticipate that domestic equities will continue to outperform most international peers, at least in the intermediate term, due to robust U.S. corporate earnings growth and the U.S. economy's "safe haven" attributes. Despite strong year-to-date returns, it is worth noting that U.S. stocks often generate some of their best performance in the final quarter of the year (Exhibit 14). While not our base case, a reversal in U.S. dollar strength, successful Chinese stimulus, slower-than-anticipated Fed tightening, and/or stability in oil prices could lead to a flow of funds back into emerging market equities, highlighting the need for nimbleness.

Exhibit 13: Pair-Wise Stock Correlations



Source: BofA/Merrill Lynch, 9/30/18

Exhibit 14: Seasonality of U.S. Equity Returns



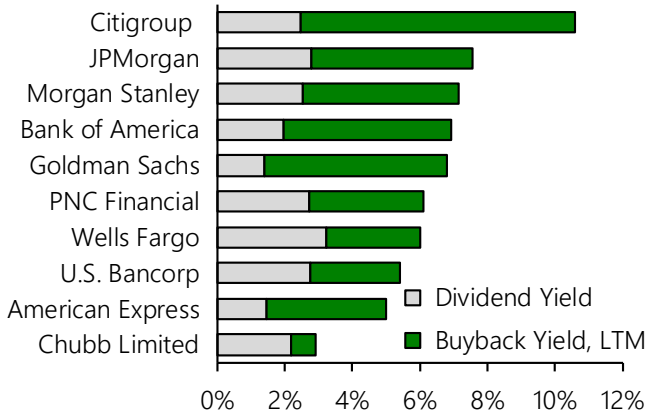
Source: FactSet, 9/30/18

In terms of domestic portfolio positioning, we continue to believe a "barbell" approach provides a balanced risk-reward profile for equity portfolios as the U.S. economy, despite underlying strength, could be vulnerable to external shocks. One side of the "barbell" emphasizes pro-cyclical stocks tilted toward capital spending and inflation beneficiaries, while the other side focuses on secular/traditional growth companies that possess visible earnings growth, strong balance sheets, and attractive valuations. We maintain positions in well-capitalized financials, as benign credit conditions and significant capital return outweigh yield curve concerns (Exhibit 15). Moreover, we still believe in the U.S. capex cycle and are adding to select positions in technology, capital goods, and transports on tariff-related volatility. Finally, we are positive on the energy sector due to spending discipline, increasing dividends, and equity valuations that reflect oil in the $55-$60 per barrel range as opposed to the current $75 price (Exhibit 16). We believe oil price risks skew to the upside because of still-strong global oil demand growth combined with looming supply constraints (reduced Iran exports due to U.S. sanctions, still-plummeting Venezuela output, and scant global spare oil production capacity). All of these factors suggest earnings estimates for the sector should upwardly revise in the months ahead.

Within international mandates, portfolios are slightly underweight Europe, overweight Asia (ex-Japan) and underweight both Japan and Latin America. We expect modest growth in Europe for the remainder of 2018 and 2019, but believe in the context of a global portfolio that Asia and the U.S. have better growth prospects through 2019. As a result, we are maintaining a modest underweight in Europe with a bias towards the Euro Area over the UK. Within the Euro Area, it appears the business climate has stabilized, but emerging market concerns, trade tensions, and political headwinds have the potential to dampen growth prospects. Moreover, ongoing Brexit negotiations will continue to add to uncertainty for the UK in the intermediate term. While European equity markets are attractive relative to many global peers, we believe exposure to the aforementioned risks may cause funds to flow elsewhere. Given that we are in a period of rising uncertainty, we believe it is best to remain diversified and invested in high-quality growth stocks that have both secular and/or niche growth drivers.

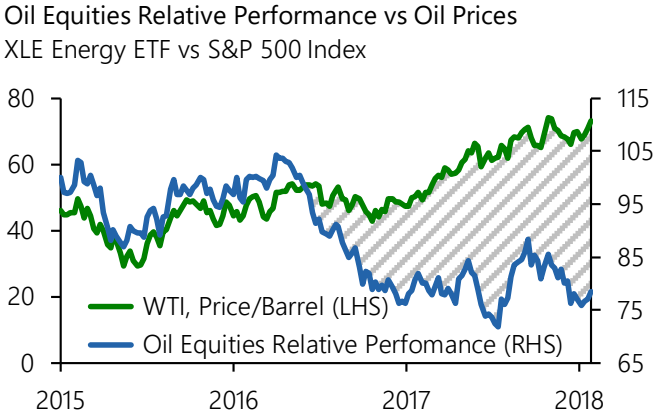
Though valuations are below historical levels, we are cautious on China given escalating trade tensions with the U.S. and the likelihood of further cuts in corporate earnings. Implementation of favorable government policy measures are positive developments, but we still need to monitor their effectiveness. We prefer defensive and domestically

Exhibit 15: Bank Dividend and Buyback Yields



Source: FactSet, 9/30/18

Exhibit 16: Oil Equity Performance vs Oil Prices



Source: FactSet, 9/30/18

focused equities for emerging market portfolios, while retaining our "new economy" exposure for global portfolios. Investments in "new economy" stocks, which are geared toward domestic demand, remains our key long-term strategy despite recent underperformance on macro concerns. In addition, we are incrementally cautious on healthcare stocks given growing policy uncertainty, while remaining relatively positive on the energy sector. We prefer stocks with secular drivers, low global macro sensitivity, stable cash flow, a good dividend yield, and strong balance sheets.

We remain positive on Indian and South Korean equities. Corporate earnings growth in India is strong, with double-digit growth projected in both 2018 and 2019, and market valuations are reasonable. Though the MSCI India Index trades at a forward price-to-earnings ratio of 19.6 times, a +20 percent premium to its 15-year average, earnings are accelerating from depressed levels. Moreover, its forward price-to-book of 2.9 times is only an 8 percent premium to its 15-year average. Our India investments are in sectors that benefit from a stronger economy – consumer, financials, information services, and energy. In South Korea, export growth should remain strong as long as a trade war and tariff impacts are minimal. South Korea's economy is growing at about +3 percent and valuations are attractive. The MSCI Korea Index's earnings growth is forecast at +15 percent in 2018 and +9 percent in 2019, with a forward price-to-earnings ratio of 8.1 times (-13 percent discount to its 15-year average). South Korean holdings are in technology, financial, consumer, pharmaceutical, and material stocks.

We remain underweight Japanese equities given our continued cautious view on the country's growth prospects. Policymakers are running short on options to tackle Japan's growth-constraining structural challenges, which continue to weigh on earnings growth. Thus, we prefer to hold multinationals and exporters exposed to favorable regions of the globe. The investment focus remains on companies with attractive fundamentals, such as operating in faster-growing end markets, holding key competitive advantages in terms of tech/market positioning, or offering operational improvement potential. A mix of defensive domestic consumption names balance our holdings in Japan, including those operating in the health care and consumer staples markets. We believe these holdings should perform well in a low-growth environment. Across all holdings, we prefer quality companies with strong management teams, healthy profitability, and solid balance sheets.

In Latin America, we continue to underweight Brazil and Mexico. Although the Central Bank of Brazil's measure of GDP growth surprised positively at +2.6 percent year-over-year in July, other economic data such as industrial production and retail sales indicate continued soft growth. We believe Brazil's next president (will have difficulty pushing any reform agenda through Congress and we consequently expect Brazil's economic recovery to continue at a slow pace. However, interest rates have bottomed and higher rates will help improve bank margins and profitability. As a result, we are positive on the financial sector, but remain underweight consumer stocks. The MSCI Brazil Index is trading at a 2018 price-to-earnings ratio of 10.1 times, in-line with its 15-year average, on earnings growth of +30 percent. In Mexico, the revised trade agreement between the U.S. and Canada helps resolve trade uncertainty. The higher minimum wage of $16 per hour for autoworkers will be positive for consumer spending. Yet, we are wary about the incoming Mexican President Andres Manuel Lopez Obrador's future policies, particularly regarding spending and taxes. The MSCI Mexico Index is trading at a 2018 price-to-earnings ratio of 15.4 times, down from its recent peak multiple of 18 times, on earnings growth of +13 percent. We continue to invest in stocks with strong balance sheets, sales and earnings growth, and market positions.