Sit Investment Associates

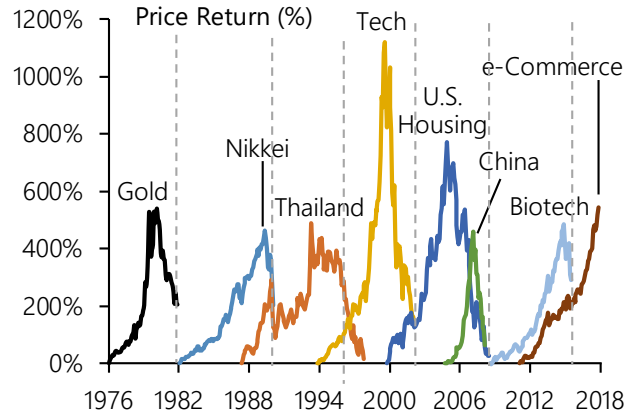
July 2018

Global Investment Outlook and Strategy

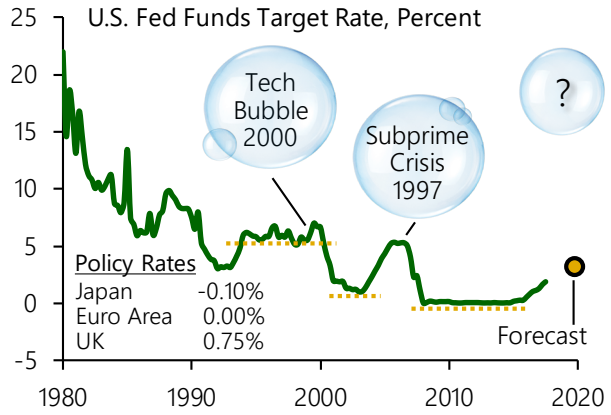
- **Special Topic: Are Global Asset Bubbles a Looming Threat?**
- **The U.S. Economy is Accelerating Amid Global Growth Divergences**
- **Higher U.S. Dollar and Tighter Liquidity Endanger Emerging Markets**
- **Global Growth Prospects Remain Balanced, Trade Tensions Aside**
- **Quality Growth Stocks Will Continue to Outperform as Cycle Persists**

Asset Bubbles Are a Key Feature of Recent Cycles

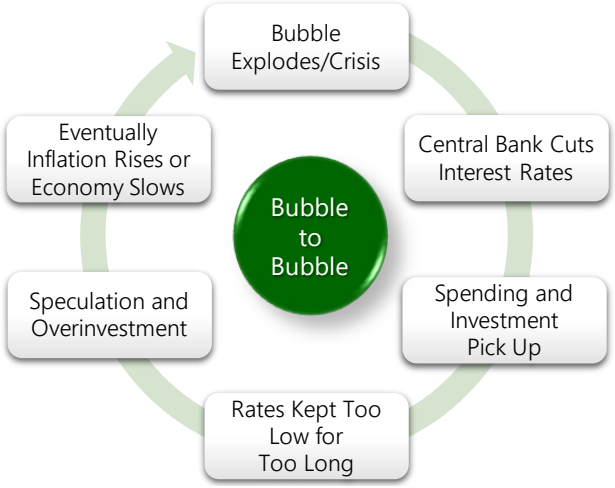
1 Notable Asset Bubbles of the Past 40 Years



3 Low Rates Have Set the Stage for Bubbles

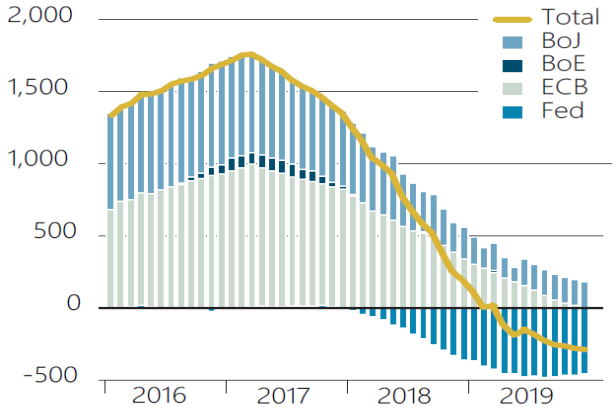


2 The Six Stages of Modern Asset Bubbles



4 Bubbles Susceptible to Declining Liquidity

Global central bank balance sheet expansion, fixed income, 12-month rolling flow ($bn)



Source: Bloomberg, BofA/Merrill Lynch, Wolfe Research, Financial Times, Sit Investment Associates, 6/30/18

A Different Kind of Bubble

Financial markets have surged in the last decade in part due to unprecedented global monetary easing. Investors, however, justifiably monitor excesses, or "bubbles," in the system created by changes in the economic and interest rate backdrop. Often only fully understood in hindsight, we believe it is crucial to assess continuously the underlying conditions for bubble formation as the cycle progresses.

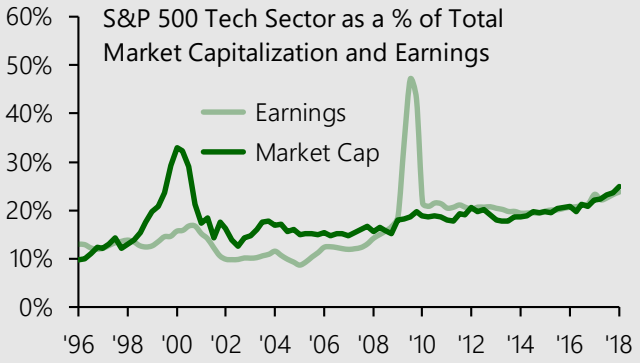
Two previous U.S. economic cycles ended with significant bubbles: the technology sector in 2000 and the housing sector in 2007. While there is no single, widely accepted theory that explains market excesses, there is some consensus that important contributing factors include a mix of free markets, innovation, low interest rates, and ample liquidity (including excess global savings, a key feature of the current macro setting). Moreover, global boom-bust cycles have often also been accompanied by a significant increase in financial leverage. The current economic expansion has resulted in a dramatic increase in global debt, an unsurprising result of unprecedented global monetary easing. This liquidity backdrop is now in the early stages of reversing, potentially exposing vulnerabilities.

The good news for equity investors is that valuation metrics for broad stock indices appear reasonable, with multiples retreating due to rising interest rate and tariff concerns. Price-to-earnings (PE) ratios in developed markets are consistent with longer-term averages and many emerging market valuations are below averages. Yet, we do see signs of excess in U.S. small cap stocks, as companies with high PEs or no earnings have strongly outperformed the overall market in recent years.

Tech stocks have been, by far, the market leaders this cycle. However, it is important to note that the sector currently trades at a relatively modest 15 percent premium to market averages, nowhere near the bubble valuations of 1999-2000. As shown in the adjacent chart, unlike the 1999-2000 period, relative earnings and market cap have tracked each other through this cycle. In addition, the sector's free cash flow generation has been increasing even faster than earnings.

One current similarity to the 2000 peak relates to the narrowness of leadership within the sector and

Outperformance of Tech Sector Justified



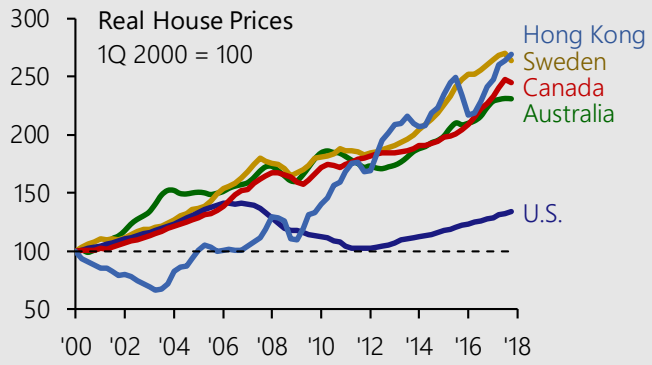
Source: Citi, Sit Investment Associates, 6/30/18

the market overall. We estimate that five FAANG stocks (Facebook, Amazon, Apple, Netflix, and Google) alone have accounted for around one-third of the S&P 500's returns over the past three years. While strong fundamentals have accompanied price appreciation, high valuations and continually rising expectations could undermine universal sentiment that the group is "bullet proof."

Also similar to 2000, there are signs of speculation in the IPO and venture capital markets. Notably, of the 160 IPOs in 2017, 76 percent of companies failed to turn a profit in the twelve months post offering. There also has been extraordinary capital flows into technology start-ups. According to TechCrunch, there are nearly 300 global tech start-ups (most unprofitable) currently valued at $1 billion or more.

Global property markets have also been a frequent source of excesses. There has been a surge in both commercial and residential property values around the world, including speculation in some large U.S. housing markets. However, "bubble risk" appears to be much greater in other countries. As the chart on the next page illustrates, home prices have climbed in an almost uninterrupted trajectory in many large nations over the last two decades, outpacing underlying GDP and consumer income growth. U.S. commercial real estate (CRE) prices are also up +27 percent from their peak in 2007, which is more than double the 2009 low – and there is now a record $4.3 trillion in CRE debt. The Federal Reserve has concerns that elevated prices could threaten financial stability – especially in multi-family, where construction levels have almost tripled over the past six years.

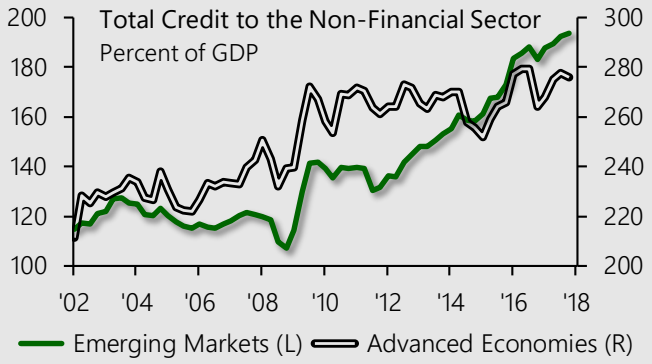
Housing Boom Across the Globe



Source: OECD, BIS, Sit Investment Associates, 6/30/18

"Lower for longer" interest rates have contributed to growing risk. The true bubble this time around may not be in the real economy or markets, but in the debt load itself. Within the U.S., there has been notable rises in corporate, student, and government debt, while consumer credit remains in check. In addition, private equity-linked debt has doubled this cycle to over $1 trillion, with much of this floating rate according to Empirical Research. In Europe, much of the debt increase has been in the government sector, although consumer debt burdens have increased on the heels of booming housing markets in certain regions. Moreover, much of this debt is trading at negative interest rates. Globally, nearly 16 percent of bonds ($8 trillion out of $50 trillion) are trading at negative interest rates according to Deutsche Bank.

Global Debt at Worrisome Levels



Source: BIS, Sit Investment Associates, 6/30/18

The real story, however, has been the build-up of debt in emerging markets. China accounts for over half of this debt accumulation, with corporate debt the main driver. Chinese non-financial corporate debt is approaching $3 trillion, a 20-fold increase in just 10 years. In addition, a recent McKinsey study noted that 25-30 percent of bonds outstanding in China, India, and Brazil have been issued by firms with a high risk of default (i.e., low coverage ratios).

A near-term concern is the accumulation of dollar-denominated debt in emerging markets, which has increased to over $11 trillion since 2009. A combination of a stronger U.S. dollar and higher interest rates will be problematic for many nations, particularly those with external financing needs.

In summary, we do not see the same bubbles (tech in 2000, housing in 2007) in the markets and real economy that were evident during the prior two cycles. Rather, we are concerned by the massive global increase in leverage and what it means when the economic cycle turns. While the "bursting" of the debt bubble is not imminent in our view, there are implications for both the economic outlook and equity strategy. First, higher interest rates applied to the massive amount of debt outstanding is an under-appreciated risk. This may impede central bankers' intent to normalize rate policy. Second, a long period of near-zero interest rates helped to create an unprecedented "wealth effect" with high valuations for everything, including stocks, bonds, real estate, cryptocurrency, art, etc. An unexpected change in inflation expectations would be especially problematic for the above considerations. Our base case remains that structural factors will continue to limit inflationary pressures, but we are carefully monitoring inflection points.

From an investment perspective, we believe equity markets can move higher in the current backdrop of moderate growth and inflation. However, most indebted emerging markets that are vulnerable to rising interest rates and a stronger U.S. dollar merit caution. In terms of individual stocks, a focus on balance sheet strength is of greater importance at this point of the cycle, with technology and health care companies standing out in this regard. Longer term, we view the increasing debt burden (and demographics) as a significant headwind to global growth. This supports our view that an emphasis on high quality growth stocks, including dividend payer, will reward investors over time.

The United States

U.S. economic growth is picking up momentum thanks to pro-growth policies. While fairer trade is a long-term positive, tariffs/trade tensions will mitigate some of the stimulus gains.

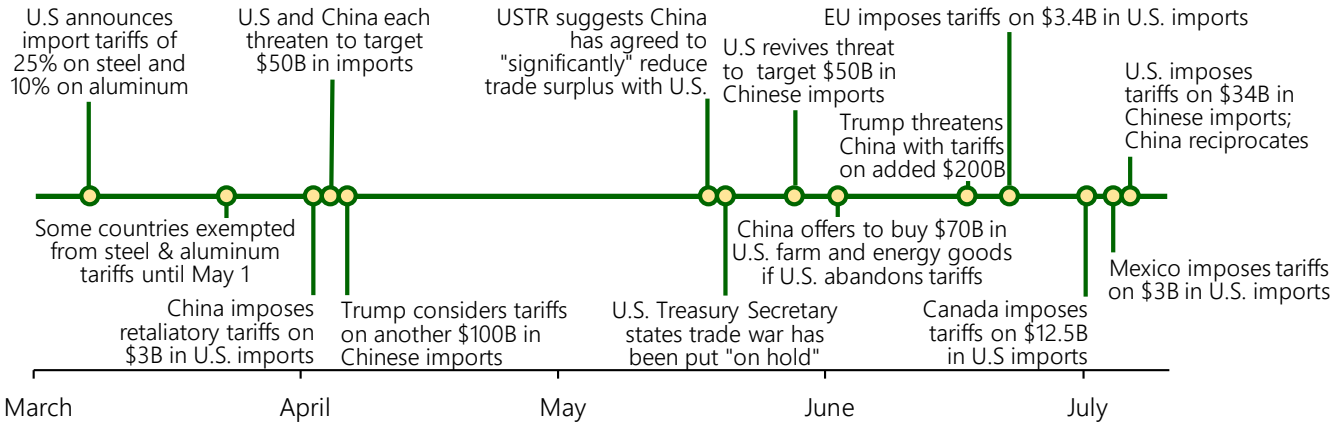
U.S. Economic Growth Accelerating as Fiscal Stimulus Takes Hold

The current U.S. economic expansion, entering its tenth year, remains underpinned by a virtuous cycle of improved confidence and spending. Leading macro indicators suggest U.S. economic momentum will continue to improve into at least 2019, with the knock-on effects of stimulative fiscal policies, deregulation, and still easy financial conditions delivering potential upside surprises. Real GDP growth is poised to rebound sharply to an annualized pace of about +3.5 percent in the second calendar quarter of 2018 from +2.0 percent in the first quarter, driven by gains in consumer spending, fixed investment, and private inventories as well as by a reversal in seasonal adjustment factor distortions. For the full year, we project real GDP growth will accelerate to +2.8 percent in calendar 2018 from +2.3 percent in 2017, assisted by roughly a 50 basis point boost from tax cuts. Modest growth detractors include higher oil prices, interest rates, and U.S. dollar. Newly imposed tariffs should only have a marginally negative impact on GDP growth in 2018. However, continued escalation of trade tensions represents a notable risk to the outlook.

Tariffs Reduce Risk of U.S. Economy Overheating, but Imperil Growth Trajectory

The U.S. and its major trading partners are engaged in a contest of wills, with each new protectionist policy revealed by the Trump administration met with responses in kind. President Trump recently directed the U.S. Trade Representative to identify an additional $200 billion worth of Chinese imports for a +10 percent tariff and alluded to curbs on Chinese access to U.S. technology, signaling the conflict may have entered a new, and possibly more dangerous, phase (Exhibit 1). Trump's negotiating style has often been to take an extreme position and then gradually soften his stance. However, what began as an attempt to address trade imbalances and unfair practices, has ostensibly morphed into what China may view as a bid to preserve U.S. hegemony. China is more dependent than the U.S. on foreign trade, suggesting the country has more to lose from a trade war. Even so, China will resist policies it believes will undermine its long-term strategic goals. The Trump Administration also does not appear to be seeking just a quick political win,

Exhibit 1: Timeline of Key Tariff Announcements Since March 2018



Source: Sit Investment Associates, 6/30/18

indicating a prolonged conflict may be looming. We remain optimistic that pragmatism will prevail before serious economic harm can occur. However, we cannot rule out the possibility that rising trade tensions will start a negative feedback loop in the economy. With that said, the U.S. is much better positioned than most other countries to weather a trade battle given late cycle fiscal stimulus and the economy's lower reliance on trade.

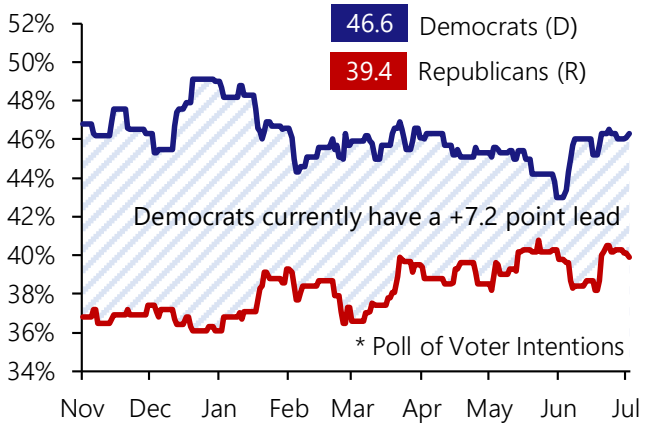
Trade Rhetoric May Be Tempered Ahead of U.S. Mid-Term Elections

The upcoming mid-term elections may motivate the Trump administration to de-escalate the trade conflict, at least in the near term. As illustrated in Exhibit 2, Democrats now hold a 7.2-point lead in a generic Congressional vote, 47.6 to 39.4 percent. However, the gap has narrowed from its peak of 13 points in December 2017 as tax cuts and President Trump's higher approval rating have allowed Republicans to gain ground. The strong economic momentum heading into the November elections bodes well for Republicans, but the impact of tariffs could be a key issue. While 75 percent of Republicans support higher import tariffs based on a recent Quinnipiac poll, the retaliatory measures initiated by U.S. trade partners will intentionally hit the core of Trump's voter base. A pause in the trade dispute could not only help mitigate some of the potential election fallout, but also allow the Trump administration to better assess the consequences (intended and unintended) of the actions implemented thus far and to adjust its strategy accordingly.

Additional Fiscal Stimulus Bound by a Highly Leveraged Federal Balance Sheet

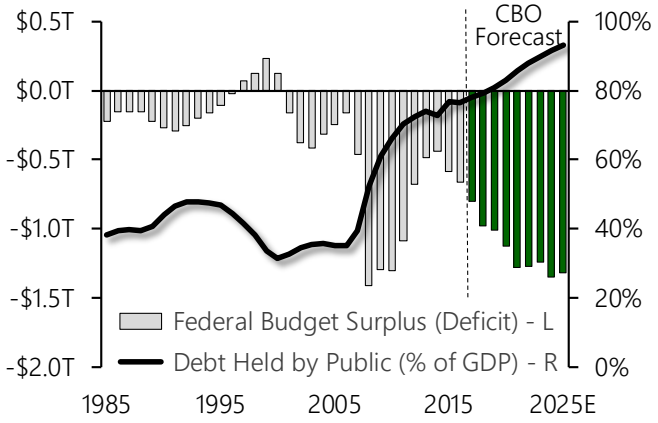
We believe the U.S. economy is in the late acceleration phase of the expansion and view the likelihood of recession within the next 12 to 18 months as low. While the direct positive impact of the Tax Cuts and Jobs Act of 2017 on U.S. GDP growth will wane after 2019, the benefit of second-order effects and deregulation will be longer lasting. Added fiscal stimulus near term would risk overheating the economy and likely motivate the Federal Reserve (Fed) to hike interest rates more aggressively. However, should the shock of a full-scale trade war, bubble burst, or other event drive the economy into a downturn, a highly leveraged federal balance sheet will constrain a fiscal policy response. The Congressional Budget Office recently updated its federal budget outlook, projecting the budget deficit will approach $1 trillion in 2019 (nearly $300 million higher than the agency projected in 2017). As a result, gross debt will steadily swell to $30 trillion in 2025 from $20 trillion in 2017, with debt held by the public expanding to 91 percent of GDP from 78 percent over the same period (Exhibit 3). The Fed, in comparison, has somewhat greater flexibility and could slow or reverse monetary tightening.

Exhibit 2: 2018 Generic Congressional Vote*



Source: RealClear Politics, Sit Investment Associates, 7/5/18

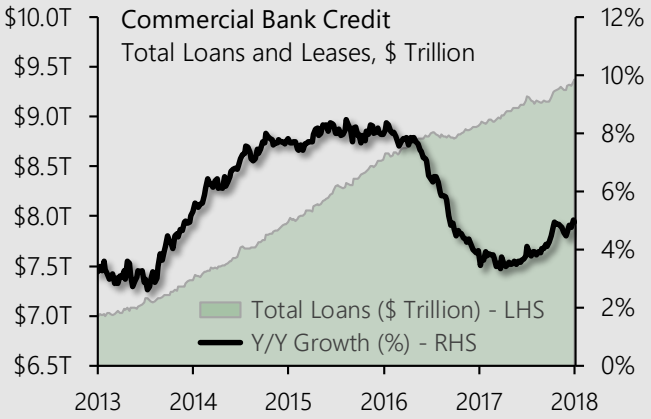
Exhibit 3: U.S. Federal Budget Deficit and Debt



Source: CBO, Sit Investment Associates, 6/30/18

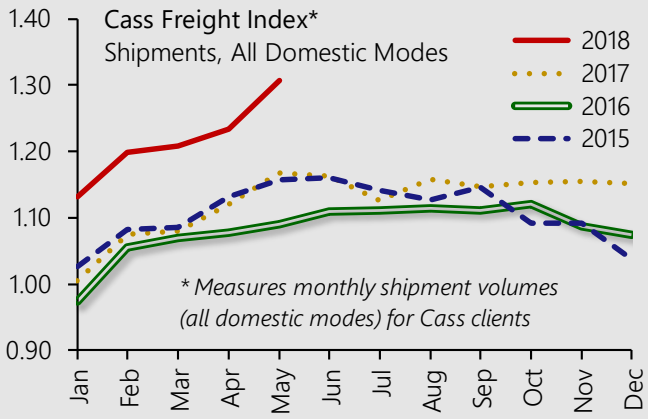
United States: Notable Data Points

Commercial Bank Loan Growth Reaccelerating



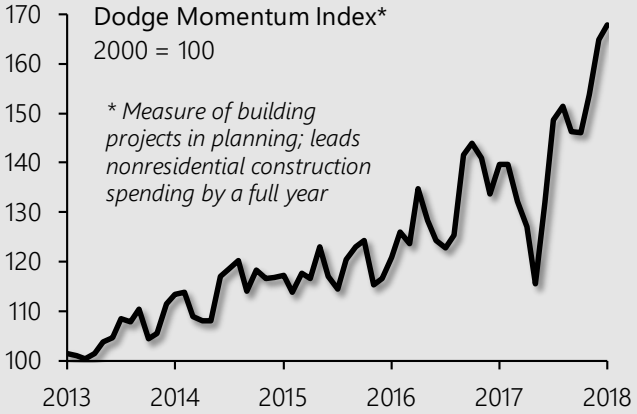
Source: Federal Reserve, Sit Investment Associates, 6/30/18

Freight Demand Signaling Strong GDP Growth



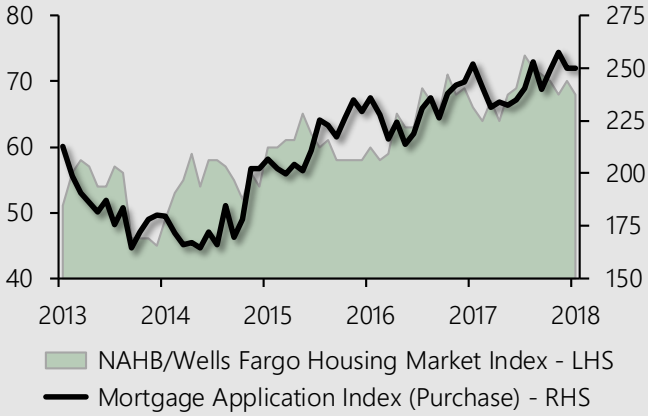
Source: Cass Information Systems, Sit Investment Associates, 6/30/18

Robust Outlook for Construction Spending



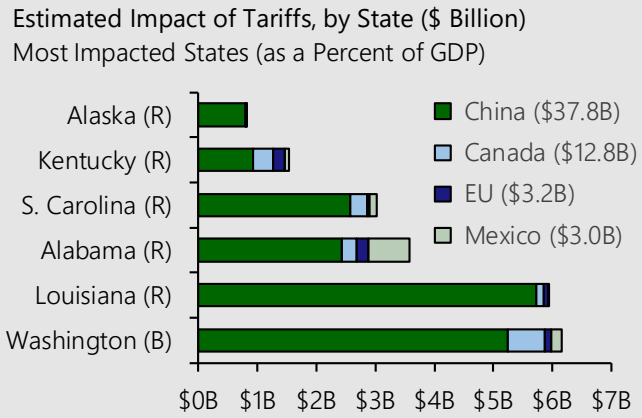
Source: Dodge Data & Analytics, Sit Investment Associates, 6/30/18

U.S. Housing Market Remains Resilient



Source: NAHB, MBA, Sit Investment Associates, 6/30/18

Retaliatory Tariffs Hit Red States the Hardest



Source: Chamber of Commerce, Sit Investment Associates, 7/2/18

Labor Market Tight, but Wage Growth Stalled

Source: Atlanta Fed, Conf. Board, Sit Investment Associates, 6/30/18

Europe

Economic growth moderating in the Euro Area and United Kingdom as currency appreciation, global growth divergences, U.S. trade conflict, and policy uncertainty all take a toll.

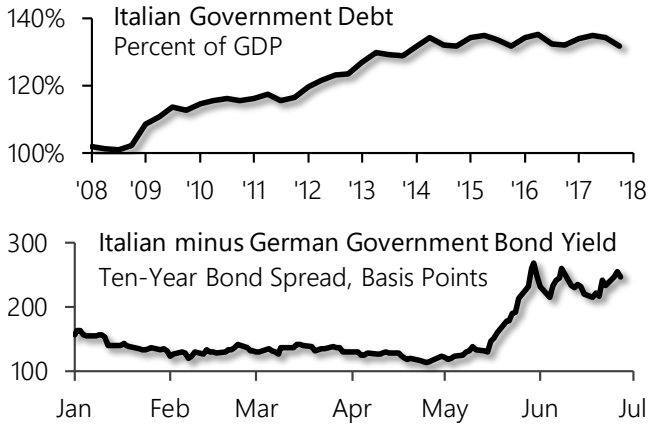
Euro Area Economic Growth Moderating From Relatively Robust Levels

Economic momentum in the Euro Area has moderated somewhat from the brisk pace of late 2017. However, macro indicators continue to imply respectable growth prospects for the region. The manufacturing PMI, a key leading indicator, has decelerated from historically high levels as a strengthening euro has weighed on exports. Increased trade tensions and policy uncertainty have also negatively affected business conditions of late. With exports accounting for nearly 50 percent of GDP, the Euro Area is highly sensitive to global trade. Promisingly, consumers remain in solid shape, with confidence growing, unemployment decreasing, and wages rising. As for the UK, business activity has slowed modestly due to many of the same reasons highlighted above. However, the outlook for consumer spending is a bit more dubious as household balance sheets appear stretched. Absent further escalation of trade conflicts, we estimate real GDP growth will decline 30 basis points year-over-year in 2018 for both the Euro Area and UK to +2.2 percent and +1.5 percent, respectively. While the European Central Bank is keen to normalize policy, the fragility of the expansion suggests an extended accommodative stance.

Political Uncertainty: The One Constant in Europe

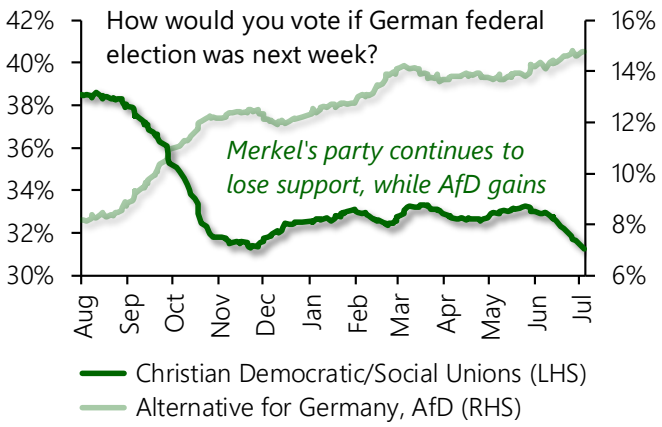
Asymmetrical economic growth, a perceived loss of national sovereignty, and the refugee crises have all helped fuel an upsurge in populism across Europe, upending the postwar political order and cultivating policy uncertainty. The Eurosceptic, anti-establishment Five Star Movement garnered nearly 33 percent of the votes in the March 2018 Italian general election, resulting in a hung parliament. The subsequent coalition government formed by the Five Star Movement and Northern League has fed market worries of an eventual Italian exit from the Eurosystem, driving a spike in bond yields (Exhibit 4). Nonetheless, we assign a low probability to this event given that high Italian government debt would be unsustainable post exit, as sovereign yields would likely increase markedly. Italy will remain a source of policy and headline risk, however. Elsewhere, the upstart nationalist AfD party foiled a majority in the 2017 German federal election, requiring a coalition between Angela Merkel's sister parties and the SPD. A clash on immigration policy has splintered the coalition and now threatens Merkel's chancellorship (Exhibit 5).

Exhibit 4: Italian Debt & 10-Year Bond Spreads



Source: BIS, Tullett Prebon, Sit Investment Associates, 6/30/18

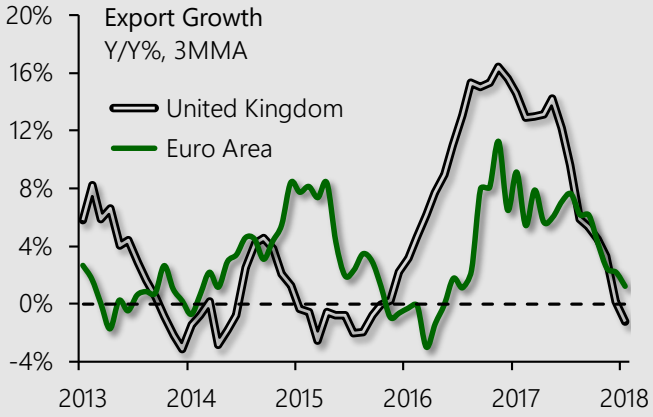
Exhibit 5: Generic German Federal Election Poll



Source: Wahlrecht.de, Sit Investment Associates, 6/30/18

Europe: Notable Data Points

FX Strength Negatively Impacting Exports

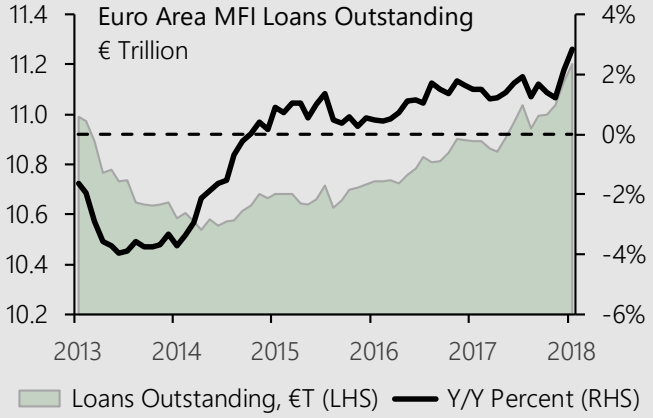


Source: ONS, Eurostat, Sit Investment Associates, 6/30/18

Euro Area PMI Moderating From Record High

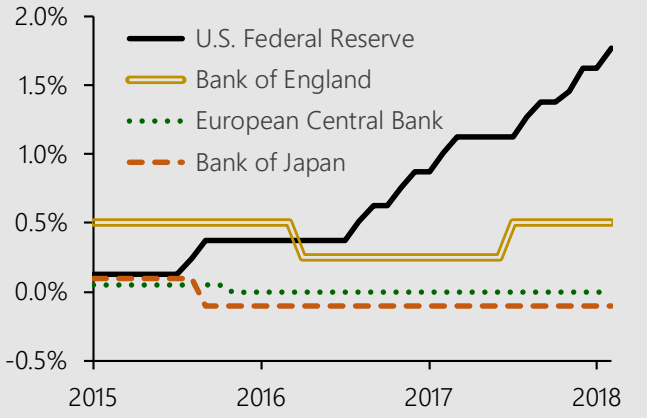
Source: Markit, Sit Investment Associates, 6/30/18

Easing Credit Standards Helping Loan Growth



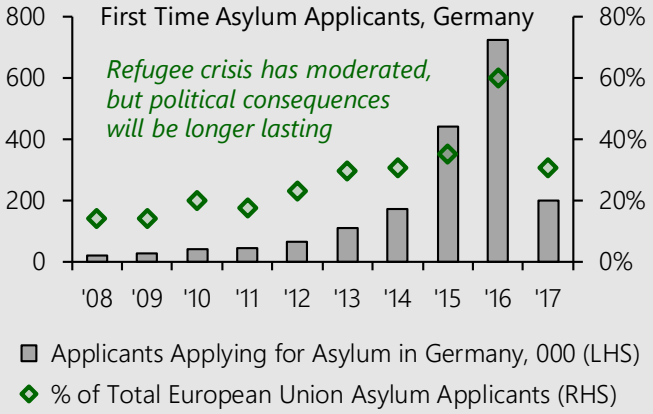
Source: European Central Bank, Sit Investment Associates, 6/30/18

Policy Rates Continue to Diverge as Fed Hikes



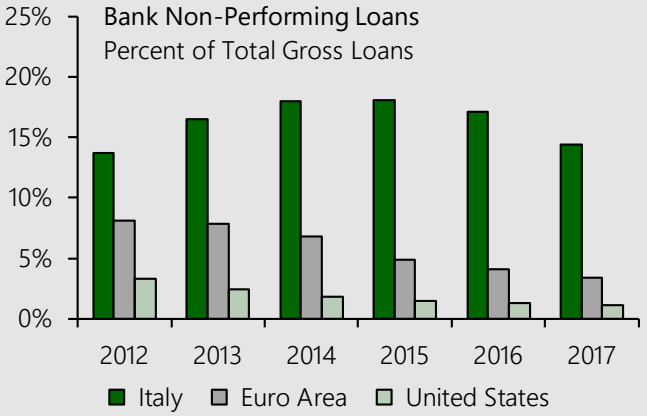
Source: FactSet, Sit Investment Associates, 6/30/18

Political Effects of Mass Migration Will Endure



Source: Eurostat Sit Investment Associates, 6/30/18

Italian Banks Remain a Key Source of Risk



Source: IMF, Sit Investment Associates, 6/30/18

Japan

Japan is running short on options to spur domestic demand following years of stimulus and reform efforts. Therefore, we remain negative on the country's long-term outlook.

Five years of Prime Minister Abe's "three arrows" fiscal policies have had limited success in lifting demand and it is unclear if new initiatives can change the economy's trajectory. Elevated debt and upward pressure on spending due to an aging population limit Japan's fiscal spending options. Pro-growth reform, the so-called "third arrow," have shown little progress in overcoming structural challenges and boosting productivity. Moreover, expanded foreign worker programs pale in comparison to the magnitude of the ongoing labor force decline, as sweeping immigration reform is unlikely. Monetary policy also increasingly appears to have reached its limits. Inflation has barely budged despite the Bank of Japan (BoJ) executing quantitative easing at the most rapid pace among developed nations, directly buying up ETFs and domestic REITs, adopting negative deposit rates, and targeting a suppressed yield curve. Recent actions by the BoJ, including continued warnings of potential adverse policy effects and tapering government debt purchases to more sustainable levels, suggest it has exhausted its policy tools. Overall, the quiver increasingly looks to be empty.

Emerging Markets

Escalating trade tensions, stronger U.S. dollar, rising U.S. interest rates, and higher oil prices continue to weigh on a number of emerging market economies. China is easing policy amid signs of slower growth and Brazil's nascent recovery faces challenges. Conversely, India is poised for better growth post reform. A U.S.-China trade conflict is a key risk for South Korea.

China Is Easing Policy Amid Signs of Weaker Economic Growth. . .

Economic activity data was generally softer than expected in May, indicating the Chinese economy continues to lose momentum. Growth in industrial production, fixed asset investment, and retail sales all weakened during the month, while exports remained firm. Given the deleveraging-induced tight credit conditions over the last several quarters, the slowdown should not be surprising. Partly in reaction to the weak economic data, the People's Bank of China announced a 50 basis point cut in the reserve requirement ratio (RRR) for most commercial banks, releasing roughly RMB700 billion (US$108bn) of liquidity into the system. We would expect more RRR cuts and possible additional fiscal stimulus if policymakers foresee greater-than-expected downside risks. While there is a lower likelihood for a benchmark interest rate cut given ongoing deleveraging efforts, the pace of deleveraging may also slow. We currently maintain our forecast that China's real GDP growth will moderate to +6.5 percent in 2018 from +6.9 percent in 2017.

...and Increasing Risk of a Trade War

While a trade deal remains our base case, the prospect of U.S.-China trade conflict has risen sharply post President Trump's recent proposal for a +10 percent tariff on $200 billion in Chinese imports and China's reply of "qualitative and quantitative"' retaliatory measures. Without predicting which side will "blink first," we would not underestimate China's willingness to protect core interests such as technological aspirations, even if that may mean near-term economic damage. U.S. tariffs on Chinese exports could cut real GDP growth by 10 to 50 basis points, depending on the scale and intensity of the tariffs. Moreover, policymakers have already begun to make preparatory adjustments in case trade tensions escalate. The aforementioned reduction in the RRR took effect on July 5, one day before the first round of planned U.S. tariffs become effective. This latest

easing, along with the weaker than expected macro data and rising trade tensions, is also putting downward pressure on the renminbi, which has turned weaker recently.

India's Economy Is Recovering, but Higher Inflation Is a Key Risk

India's economy continued to recover in the fourth quarter of fiscal 2018 on strength in capex and government consumption, with real GDP expanding +7.7 percent year over year versus +7.2 percent in the previous quarter. Led by improved private consumption and infrastructure spending, we forecast real GDP will increase +7.3 percent year-over-year in fiscal 2019, up from +6.7 percent in 2018. However, higher inflation is a key risk to India's growth outlook, as core inflation increased +6.1 percent year-over-year in May. Accordingly, the Reserve Bank of India (RBI) increased its repo rate by +25 basis points to 6.25 percent and kept a "neutral" stance at its June meeting due to higher inflation and robust economic growth. While we anticipate an additional +25 basis point hike at the RBI's monetary policy committee meeting in August, we do not expect a prolonged interest rate hike cycle.

Optimism Has Improved Post Summit, but U.S.-China Trade Conflict a Key Risk

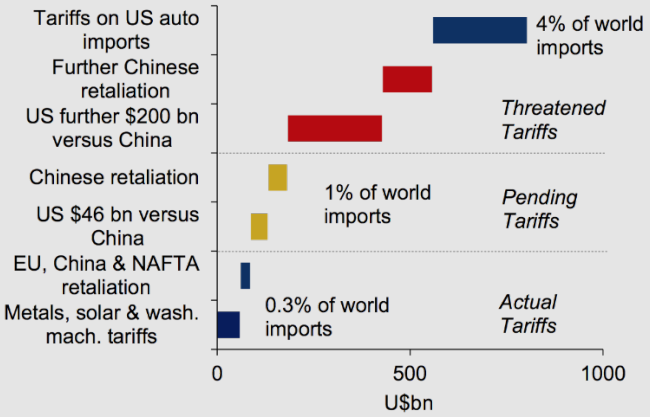
South Korea's real GDP increased +2.8 percent year-over-year in the first fiscal quarter, driven by strength in manufacturing, construction, and services. Exports also continued to be strong and consumption is slowly beginning to contribute to economic growth. Accordingly, we forecast real GDP will increase +3.0 percent year-over-year this year, essentially on par with the growth rate achieved in 2017. Inflation remains benign, with the May CPI of +1.5 percent year-over-year below the central bank's target of +2.0 percent. The low inflation rate has allowed the Bank of Korea to leave its policy rate unchanged at 1.5 percent. The major risk to South Korea's growth outlook is a trade war; not with the U.S. (the U.S. and South Korea agreed to a revised trade agreement in March 2018), but between the U.S. and China, as close to 70 percent of South Korea's exports to China are for intermediate use. Finally, eased military tensions following the historic U.S.-North Korea summit have buoyed confidence, with a deal likely resulting in stronger economic growth throughout the region.

Brazil's Economy Is Recovering More Slowly Than Expected

Brazil's first quarter 2018 GDP grew +1.2 percent year-over-year, boosted by growth from private consumption and investment. However, the 10-day truckers' strike in May resulted in fuel and fresh food shortages and added to the mistrust of political officials. We have revised our 2018 GDP forecast to +2.2 percent from +2.5 percent to reflect the effects of the strike and a slower-than-expected recovery in consumer spending. The unemployment rate also remains high at 12.2 percent (non-seasonally-adjusted). Brazil's central bank left its Selic rate at 6.5 percent in June, after cutting -50 basis points year-to-date. Nonetheless, we believe interest rates have bottomed given the currency's -14 percent depreciation against the U.S. dollar year-to-date. Finally, the presidential elections are on October 7 and the latest poll shows populist, far-right candidate Jair Bolsonaro leading with 19 percent of voter intentions. The major problem for the incoming president will be pension reform, which has been the primary cause for the country's high budget deficit. In Mexico, leftist candidate, Andres Manuel Lopez Obrador (AMLO) of the Morena party won the presidential election by a landslide with 53 percent of the vote, more than 30 percentage points above his closest rival. His Morena party also obtained a majority in both Congress and the Senate, which gives AMLO a stronger political mandate to push forward his agenda (anti-establishment, anti-business, pro-free trade, and assistance for the poor).

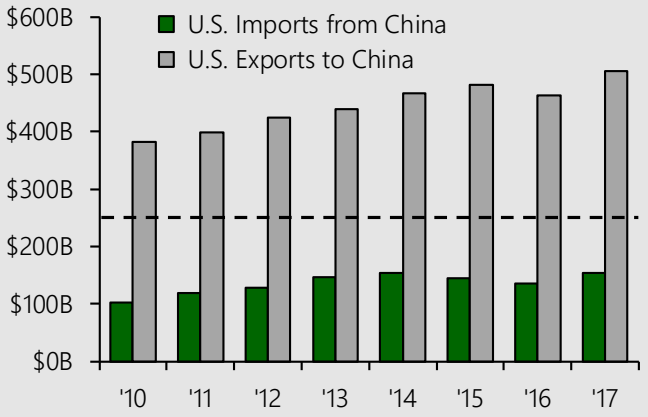
Emerging Markets: Notable Data Points

Tariffs Could Cut Global GDP Growth by 40bp



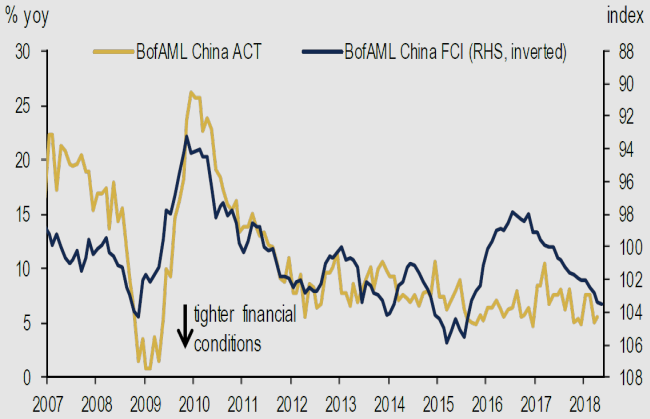
Source: Oxford Economics, Sit Investment Associates, 7/4/18

China Cannot Match U.S. Through Tariffs Alone



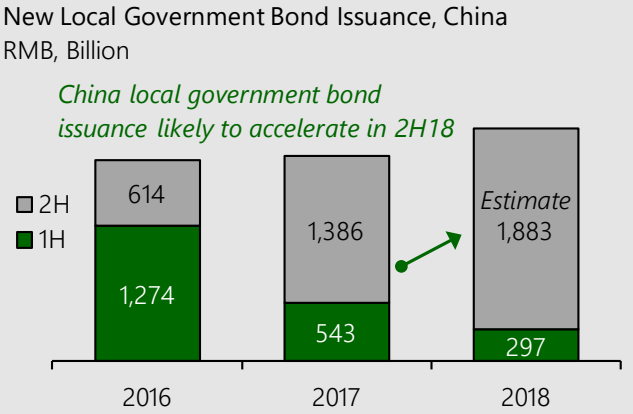
Source: IMF, Sit Investment Associates, 6/30/18

China Growth Slowing Amid Policy Tightening



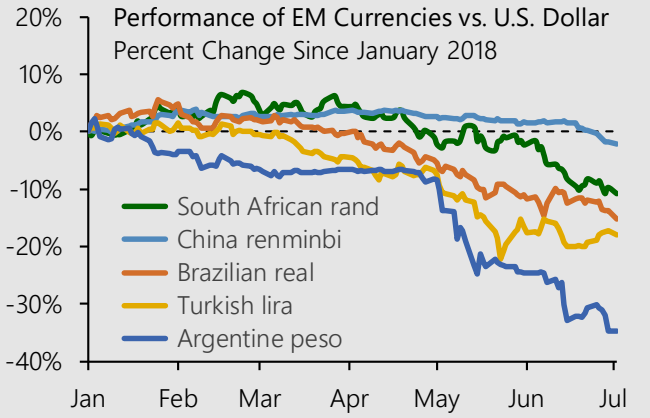
Source: BofA/Merrill Lynch, 6/12/18

But, Fiscal Policy May Help Growth in 2H18



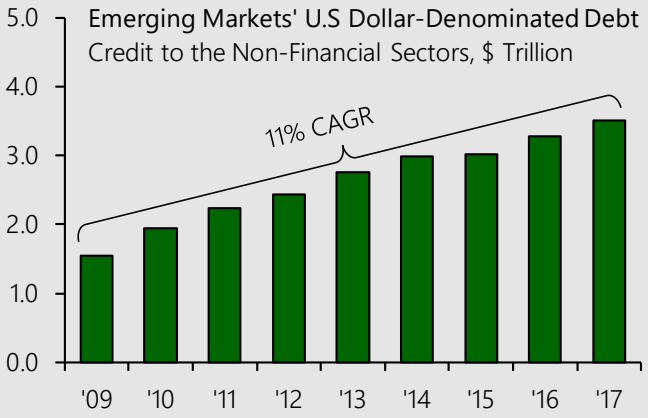
Source: Morgan Stanley, Sit Investment Associates, 6/30/18

Emerging Market Currencies Getting Squeezed



Source: FactSet, Sit Investment Associates, 6/30/18

Stronger U.S. Dollar a Risk for EM Liquidity



Source: BIS, Sit Investment Associates, 6/30/18

Taxable Bonds

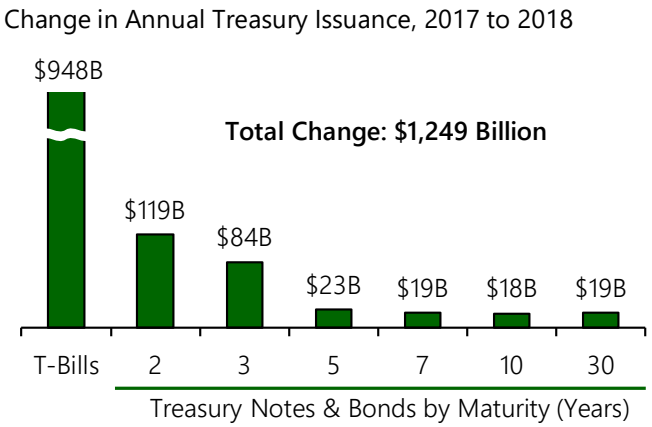
Chairman Powell – Pragmatic Policy at the Federal Reserve

As we anticipated, market consensus now expects four rate hikes in 2018, up from three. Along with a 25 basis point increase in the fed funds rate, Chairman Powell announced two additional changes at the recent Federal Open Market Committee (FOMC) meeting. First, the Federal Reserve (Fed) will hold press conferences after every FOMC meeting starting in 2019. Market participants have come to expect rate increases or other policy changes only at meetings with press conferences. With this change, the Fed hopes to reinforce the concept that every meeting is "live." Powell presented the other change as a technical adjustment. While the FOMC raised the target fed funds rate by 25 basis points, it raised the interest paid on excess reserves by only 20 basis points. We would not be surprised if this gap continues to expand. The Fed currently uses a target range for the fed funds rate (upper bound is now 2.0; lower bound is 1.75). The actual rate has been at the upper end of the range and the Fed would like it to be more in the middle. The Fed has communicated that it intends to use lower rates on excess reserves as a tool to have the actual fed funds rate closer to the middle of the target range.

Reducing Interest on Excess Reserves – Continuing the Path to Normalization

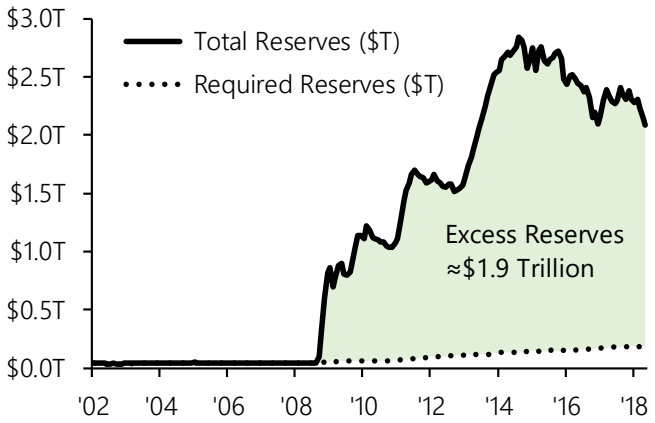
The Treasury has dramatically increased the issuance of T-bills to fund the government and this increase in issuance is putting upward pressure on short-term rates (Exhibit 6). The Federal Reserve sets the target for the federal funds rate, which is the interest rate at which depository institutions lend reserve balances to other depository institutions overnight, on an uncollateralized basis (prior to the financial crisis, there were no upper and lower bounds). However, market forces of supply and demand determine actual interest rates. Banks currently have over $2 trillion of excess reserves held at the Federal Reserve (Exhibit 7). Prior to the financial crisis, banks did not earn any interest on excess reserves. As shown in Exhibit 8, the Federal Reserve has paid banks interest on excess reserves (IOER rate is currently 1.95%, costing American taxpayers roughly $40 billion per year) since October 2008. Essentially, banks have too much money at the Fed and the Treasury does not have enough. There simply has not been much incentive for banks to make loans or buy bonds with excess reserves when they are getting such an

Exhibit 6: U.S. Treasury Issuance



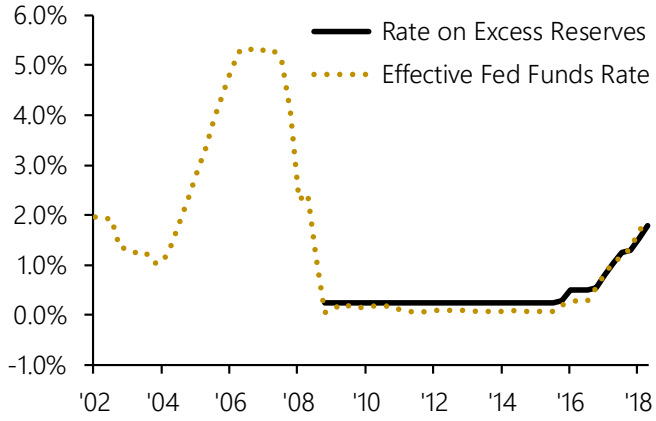
Source: U.S. Treasury, Sit Investment Associates, 6/30/18

Exhibit 7: Reserves of Depository Institutions



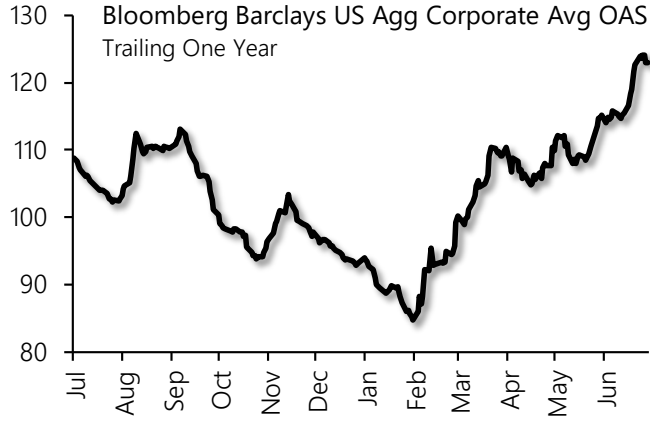
Source: Federal Reserve, Sit Investment Associates, 6/30/18

Exhibit 8: Interest on Excess Reserves



Source: Federal Reserve, Sit Investment Associates, 6/30/18

Exhibit 9: Investment Grade Credit Spreads



Source: Bloomberg, Sit Investment Associates, 6/30/18

attractive government guaranteed rate on their excess cash. Interest rates earned on excess reserves need to be lower than what the banks can earn in T-bills. The Treasury's heavy reliance on T-bills (in combination with the reduction in IOER) may finally push interest rates to the point for the banks to take money from the excess reserves at the Fed and buy T-bills from the Treasury. Lowering the interest rate paid on excess reserves is a continuation of the process of normalization.

What is the Neutral Rate?

In an economy that is accelerating and a central bank that is removing accommodation, there is much debate over the level of the neutral fed funds rate. The technical definition of the neutral is the rate that neither stimulates nor restrains economic growth. It is fair to say the "neutral" rate can change over time, as circumstances change. Yet, this would generally happen over a longer period and involve a very slow evolution of an economy. The Fed has stressed of late its belief that the real rate of return over the next decade is likely to average 0.5 percent, implying that, with inflation expected to be near 2 percent, the new "neutral" level for short-term rates is just 2.5 percent. We prefer to look at market indicators such as Treasury Inflation Protected securities to gauge the market view of a real rate of return and inflation expectations, which are currently suggestive of a neutral rate closer to historical norms (3-4 percent in recent decades). We expect an accelerating economy to push up the real rate even further in the short term.

Taxable Fixed Income Strategy

We continue to position portfolios defensively against rising rates and a flattening yield curve. Additional increases in the fed funds rate, combined with growing T-bill issuance, will continue to put upward pressure on the short end of the curve. Normalization of the Federal Reserve's balance sheet will also continue to impact negatively current coupon mortgages. While housing activity is sensitive to mortgage rates, demand remains underpinned by ongoing improvement in the labor market and overall economic activity. Investment grade corporate bond spreads continued to widen in the second calendar quarter, hitting their widest level since December 2016 of 124 basis points (Exhibit 9). A renewed market focus on tariffs, M&A, supply, and tighter monetary policy pushed spreads wider despite the positive backdrop for corporate fundamentals. We continue to favor higher quality credits going into the second half of 2018. We expect the yield curve to invert by year end and acknowledge that it could happen much

sooner considering that the 7-year and 10-year maturity Treasuries are only 3 basis points away from inversion right now. We do not expect the curve to invert sooner because, given the strength of the economy and rising inflation, any sort of breakthrough in trade negotiations will spike 10- and 30-year yields. Volatility will continue to increase as the Fed draws excess reserves from the financial system, manifesting itself in additional market corrections. Less intervention in the capital markets will provide ongoing trading opportunities.

Municipal Bonds

Tax-Exempt Yield Curve Relatively Unchanged

The AAA tax-exempt municipal bond yield curve ended the second quarter little changed from the first quarter. The spread between 2-year and 30-year spot yields was exactly the same at the end of the first and second quarters at 130 basis points. In terms of specific spot yields, using the MMD AAA GO for tax-exempts, 2-year yields and 30-year yields both decreased 1 basis point to 1.64 percent and 2.94 percent, respectively. The 5-year spot yield did decrease 5 basis points to 1.99 percent, while the 10-year spot yield increased 4 basis points to 2.46 percent. After increasing to a peak yield of 4.09 percent in late April, the Bond Buyer 40-Bond Index, generally comprised of longer bonds, ended the quarter at the same 3.98 percent yield where it started. We expect increases in short-term tax-exempt yields over the remainder of 2018 to lead to an even flatter yield curve.

Lower Credit Quality Outperformed

Credit quality was the most significant driver of performance during the quarter, as lower quality issues outperformed higher quality issues. While this trend was evident in rated issues, it was most pronounced in the high yield space, with the Bloomberg Barclays Municipal High Yield Index earning a total return in excess of 300 basis points during the quarter versus 141 basis points for the BBB index and 72 basis points for the AAA index. Insured bonds also outperformed during the quarter, as did tobacco, hospital, housing, industrial development revenue, and leasing issuers. Intermediate and long bonds generally outperformed shorter bonds, with 7-15-year bonds generally having the strongest returns during the quarter.

Modest Increase in Issuance after Light First Quarter Supply

Municipal market issuance increased during the second quarter to $107 billion from exceptionally light supply of $64 billion in the first quarter. However, issuance in the quarter was modestly less than the $112 billion experienced in the comparable quarter of 2017. We continue to project a meaningful decrease in year-over-year supply in 2018, largely due to the substantial decrease in first quarter issuance this year. Fund flows were light during the quarter with $1.3 billion of net inflows.

Tax-Exempt Fixed Income Strategy

We continue to expect tax-exempt interest rates, particularly for shorter maturities, to rise modestly throughout the remainder of 2018 and the tax-exempt yield curve to flatten further. Our strategy continues to emphasize a combination of higher quality long-term housing issues and bonds possessing both short call provisions and higher coupons to limit extension risk. Our portfolios continue to provide meaningful current income, which has been shown to be the primary driver of total return over a full market cycle. 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.

GLOBAL EQUITIES: ENVIRONMENT AND STRATEGY

U.S. Equities Were the Performance Standouts in the Second Quarter

Investors continue to grapple with a number of issues that could negatively affect global economic growth and corporate earnings, notably protectionist trade policies, increasing inflationary pressures, and a strengthening U.S. dollar. However, U.S. equity investors shrugged off these concerns in the second calendar quarter to drive stocks higher, led by strength in the energy, U.S.-exposed consumer discretionary, and tech sectors (notably FAANG stocks). U.S. growth indices continued to outperform value indices, while the returns of domestic small cap stocks edged out those of large cap multinationals for the quarter. The MSCI Europe Index performed well on a local currency basis, but foreign exchange rates had a negative impact on U.S. dollar gains (Exhibit 10). The MSCI Japan Index, which produced a second quarter return of -2.1 percent in U.S. dollars, lagged developed market peers as growing trade tensions have become a headwind for the export-heavy Japan equity market. The MSCI Emerging Markets Index fell -7.7 percent in U.S. dollars in the second quarter, on weaker global economic growth concerns via protectionist trade policies, higher U.S. interest rates, and stronger dollar. Moreover, higher oil prices weighed on currencies and countries that rely heavily on oil imports.

Exhibit 10: Total Returns of U.S. and International Indices

Percent, as of 6/30/18

Top Quartile Performance within Group

Domestic	2Q 2018	1Q 2018	YTD 2018	Annualized 1 Years	3 Years	5 Years	10 Years
Russell 2000®	7.8	-0.1	7.7	17.6	11.0	12.5	10.6
Russell 2000® Growth	7.2	2.3	9.7	21.9	10.6	13.6	11.2
Russell 1000® Growth	5.8	1.4	7.3	22.5	15.0	16.4	11.8
Russell 2500™ Growth	5.5	2.4	8.0	21.5	10.9	13.9	11.4
S&P 500®	3.4	-0.8	2.6	14.4	11.9	13.4	10.2
Russell MidCap® Growth	3.2	2.2	5.4	18.5	10.7	13.4	10.5

International	*In Local Currency* 2Q 2018	In U.S. Dollars 2Q 2018	1Q 2018	YTD 2018	Annualized 1 Years	3 Years	5 Years	10 Years
MSCI World Index	3.8	2.0	-1.2	0.8	11.7	9.1	10.6	6.9
MSCI India	4.4	-0.6	-7.0	-7.5	6.5	5.3	9.0	5.2
MSCI EAFE	3.9	-0.8	-1.6	-2.4	7.4	5.4	6.9	3.3
MSCI Europe	4.5	-0.9	-1.9	-2.7	5.9	4.9	6.8	3.0
MSCI Japan	1.9	-2.1	0.3	-1.8	10.9	6.6	7.7	3.8
MSCI AC Asia Pacific	0.2	-2.9	-0.3	-3.2	10.2	7.1	7.8	4.8
MSCI China	-3.4	-3.4	1.8	-1.7	21.4	7.3	12.3	6.2
MSCI Mexico	3.9	-3.5	0.9	-2.6	-9.1	-3.5	-3.1	0.4
MSCI Emerging Markets	-3.3	-7.7	1.3	-6.5	8.6	6.0	5.4	2.6
MSCI EM Latin America	-8.0	-17.7	8.1	-11.0	0.2	2.3	-2.1	-3.4
MSCI Brazil	-14.8	-26.4	12.5	-17.2	0.0	3.4	-2.2	-5.8

Source: FactSet, Sit Investment Associates, 6/30/18

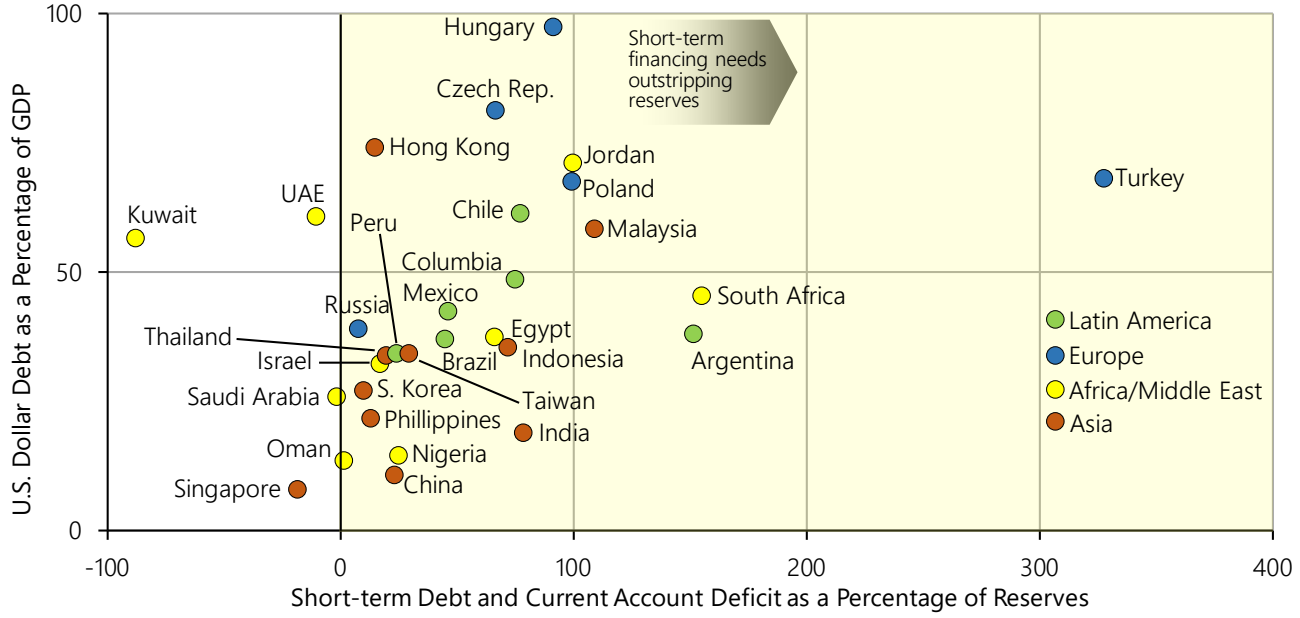
An Appreciating U.S. Dollar is a Notable Risk for Emerging Market Equities

Trade conflicts and policy uncertainty notwithstanding, global economic growth remains on solid footing, with global real GDP projected to expand about +3.0 percent over the next couple of years. Still, the manufacturing PMI, a key leading economic indicator, has begun to moderate from historically high levels in a number of regions outside the U.S. In contrast, U.S. economic growth is expected to accelerate into 2019, with the knock-on effects of fiscal policies delivering potential upside surprises. Moreover, widening global interest rate differentials as the Fed normalizes monetary policy may continue to exert upward pressure on the U.S. dollar in the intermediate term, despite downward forces from the "twin deficits" over the long term. The combination of higher interest rates and stronger U.S. dollar could strain highly leveraged emerging markets reliant on U.S. dollar-denominated debt (Exhibit 11). Thus, U.S. dollar appreciation might be self-perpetuating as investors flee certain emerging markets for the heathier growth prospects and relative safety of the U.S., providing an additional catalyst for domestic equities.

The Trade Conflicts Will Have a Disproportionate Impact on S&P 500 Earnings

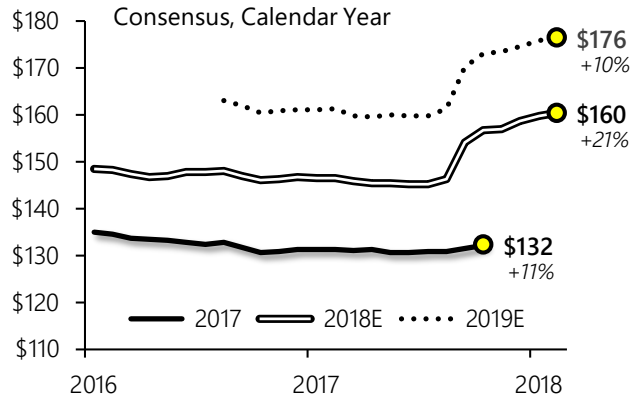
As illustrated in Exhibit 12, bottom-up earnings for the S&P 500 Index are projected to increase +21 percent year-over-year in 2018 (about half the increase from tax reform) and +10 percent in 2019. While U.S. goods exports represent roughly 9 percent of GDP, a trade war would have disproportionately negative impact on the S&P 500 Index given its 43 percent exposure to international sales. The manufacturing sector (broadly defined) also comprises a large portion of the Index's earnings and market capitalization, at over 40 percent as well. Although it is difficult to assess the earnings impact of escalating trade tensions at this point, U.S. equity markets appear to have, at least partially, discounted the threat. As shown in Exhibit 13, price-to-earnings (PE) multiples based on forward earnings have fallen year-to-date – multiple contraction has cancelled out nearly all of the expected earnings growth in 2018. As a result, the S&P 500 Index is now trading at a PE multiple of approximately 16 times next twelve month earnings, a 6 percent discount to its long-term historical average of 17 times.

Exhibit 11: Debt in Emerging Market Economies



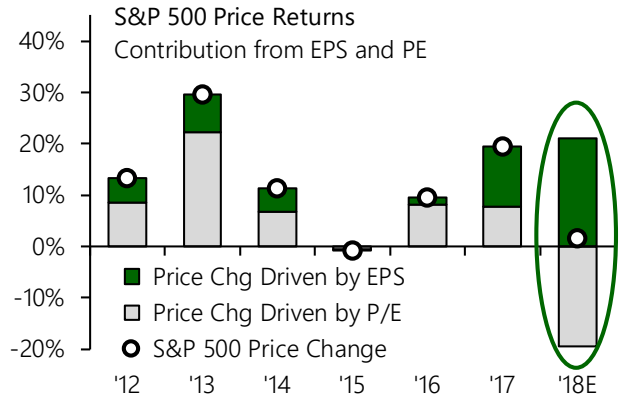
Source: Wall Street Journal, Sit Investment Associates, 6/30/18

Exhibit 12: S&P 500 Bottom-Up EPS Estimates



Source: FactSet, Sit Investment Associates, 6/30/18

Exhibit 13: S&P 500 Price Returns



Source: Cornerstone Macro, Sit Investment Associates, 6/30/18

A "Barbell" Strategy Remains Appropriate Given Macro Backdrop

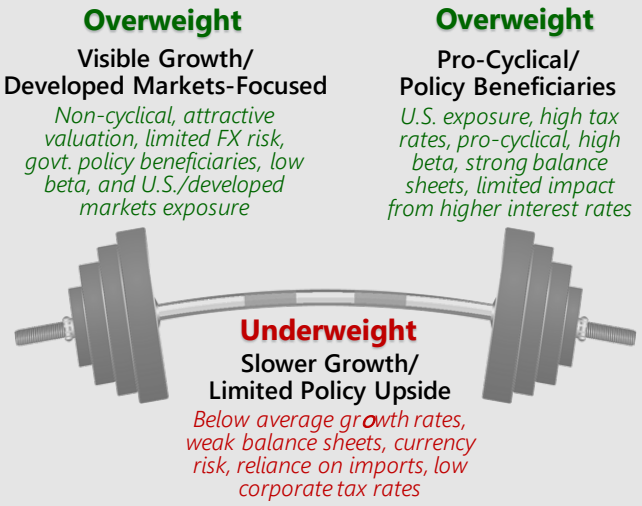
Equity markets will remain volatile as monetary policy normalizes, global trade tensions vacillate, and the U.S. midterm elections approach. However, we anticipate investors will continue to climb the so-called "wall of worry" and bid U.S. stocks higher as the positive effects of supportive fiscal policy and still easy financial conditions persist. We continue to believe a "barbell" approach provides a balanced risk-reward profile for equity portfolios as the economy remains vulnerable to external shocks. One side of the "barbell" emphasizes pro-cyclical exposure tilted towards 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. Despite recent underperformance, we maintain positions in well-capitalized financials, as benign credit and significant capital return outweigh yield curve concerns. We are also more positive on the energy sector (including refiners) due to spending discipline, increasing dividends, and stocks prices that reflect oil in the low $60/barrel range (versus current low to mid $70's). Finally, we still believe in U.S. capex cycle and are adding to select positions in technology, capital goods, and transports on tariff-related volatility.

Within international mandates, we are moving to a slight underweight in Europe, as well as maintaining an overweight stance in Asia (ex. Japan) and underweight position in both Japan and Latin America. While economic conditions have not weakened materially in the Euro Area, there are signs of moderating growth in the manufacturing and services sectors. The United Kingdom also continues to be an area of concern as the sterling's depreciation post Brexit has negatively affected real incomes and consumer spending. While European equity valuations continue to be attractive relative to other global markets, the strengthening U.S. dollar and better growth prospects will likely continue to result in a flow of funds to the United States. The most pressing concern for European equities is an elevated probability of a trade war. Against this backdrop, we believe it is prudent to remain diversified and focused on high-quality growth stocks that have secular and/or niche growth drivers.

We maintain an overweight position in Chinese equities, but are incrementally cautious. Although earnings momentum remains positive for MSCI China and valuation remains inexpensive, challenges include macroeconomic uncertainty amid rising trade tensions, monetary tightening by the U.S. Federal Reserve, and an appreciating U.S. dollar. We are sticking with our "New China" investment strategy and continue to favor names with

Global Equities: Notable Data Points

"Barbell" Strategy = Balanced Risk-Reward



Source: Sit Investment Associates, 6/30/18

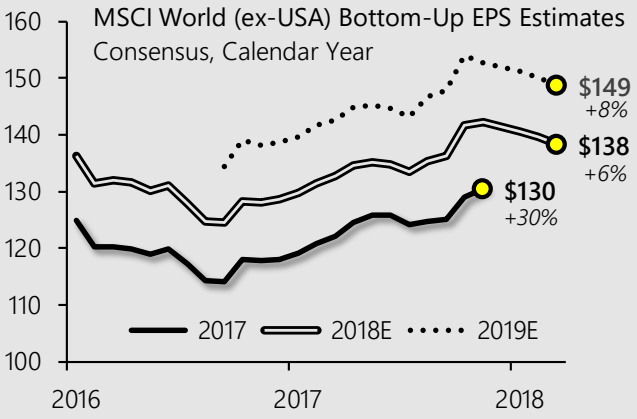
Secular Growth Continues to Outperform

Percent, as of 6/30/18

Thematic Baskets	2Q 2018	1Q 2018	YTD 2018
Secular Growth	14.0	8.9	24.1
High Operating Leverage	10.0	3.0	13.4
High Tax	8.6	0.2	8.8
Strong Balance Sheet	6.3	0.6	6.9
Domestic Exposure	6.1	-1.9	4.1
Rate Sensitive	5.1	1.1	6.2
Revenue Growth	4.8	3.2	8.2
U.S. Inflation Expectations	4.4	-1.2	3.1
Mega Caps	3.2	-4.4	-1.3
High Yielding Blue Chips	2.9	-6.2	-3.5

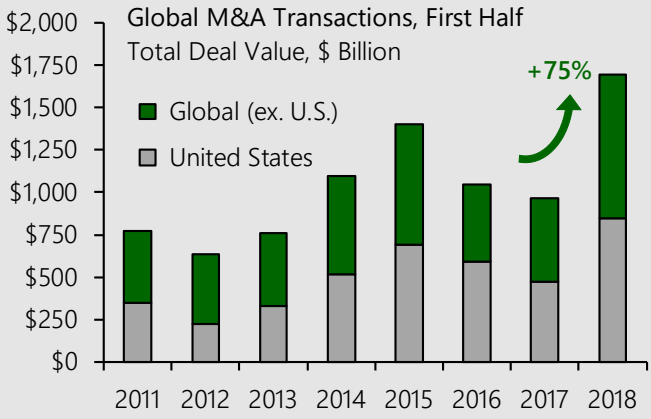
Source: Bloomberg, Sit Investment Associates, 6/30/18

Slight Downward EPS Revisions Outside U.S.



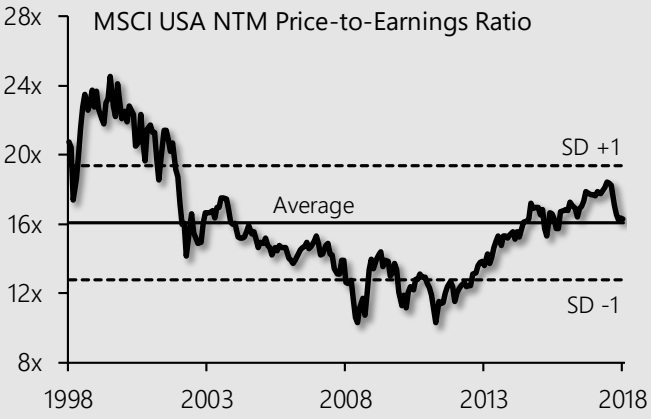
Source: FactSet, Sit Investment Associates, 6/30/18

Global M&A Activity Continues to Accelerate



Source: MergerMetrics, Sit Investment Associates, 6/30/18

U.S. Valuation In Line with Historical Average



Source: FactSet, Sit Investment Associates, 6/30/18

Global Valuation Below Historical Average

Source: FactSet, Sit Investment Associates, 6/30/18

solid earnings growth and strong balance sheets. We are positive on the technology, healthcare, consumer retail/services, and consumer staples given secular growth drivers and strong fundamentals. It is also worth highlighting that MSCI has partially included 226 China large capitalization A-shares in the MSCI Emerging Markets Index – the index weight is expected to increase to 80 basis points in September from 40 basis points in June. While the weight of full inclusion of China A-shares could eventually be 14-17 percent, it would take years, if not decades, in our view. We are not currently involved in China A-shares given our concerns over state intervention in the market, trade restrictions, corporate governance, and retail dominance.

We also maintain an overweight position in Indian and South Korean equity markets. Solid earnings growth and reasonable valuations underpin Indian equity returns. Based on projected earnings growth of +15 percent in 2018, the MSCI India Index trades at forward price-to-earnings ratio of 17.5 times, a -15 percent discount to its five-year average. Our investment strategy in India remains focused on sectors benefiting from a stronger economy, such as consumer, information services, and financials. For South Korea, steady GDP growth of around the +3 percent, easing tensions with North Korea, and attractive valuations provide a favorable investment backdrop. The MSCI Korea Index trades at a 2018 price-to-earnings ratio of 8.8 times on estimated earnings growth of +16 percent. Nevertheless, a U.S. trade war and new tariffs would be extremely negative for the export-driven South Korean economy. However, we are optimistic that a full-scale trade war between the U.S. and China will not occur. Our South Korean equities are in export-related and domestic consumer stocks, including investments in the technology, financial, consumer, and pharmaceutical sectors.

Based on our cautious stance on Japan's growth outlook and its limited options to spur improvement, we continue to underweight Japanese equities. Renewed weakening in the yen amid ongoing divergence in central bank policy has been a support for the export-heavy Japan equity market, but a more uncertain global growth outlook amid growing trade tensions has become a headwind. Valuations broadly remain below comparable developed markets, but this continues to reflect Japan's subpar growth prospects and lower levels of profitability rather than offering an opportunity. Where we do have exposure, we prefer a mix of overseas-exposed names and defensive consumption stocks. Exporters and multinationals with exposure to more dynamic regions overseas and holding a cost advantage from the weakened yen should outgrow domestic peers. Meanwhile, defensive consumption holdings should perform relatively well in a low-growth domestic environment.

We also remain underweight Brazil and Mexico. Brazil's truckers' strike refocused what is wrong with Brazil – government-controlled corporate strategy, mistrust of political authorities, and a slow economic recovery. We are still positive on the secular recovery of the consumer because of higher real wages and low interest rates. Nonetheless, we have trimmed our economically sensitive consumer holdings and healthcare because of economic risk. In Mexico, we have turned more defensive and have cut our exposure to Mexican equities because of risks related to uncertainty over the North American Free Trade Agreement and presidential elections. Although the MSCI Mexico Index trades at moderate valuations, with a 2018 price-to-earnings ratio of 15.3 times on earnings growth of +11 percent, earnings have been revised downward over the last three and six months. In both Brazil and Mexico, we continue to look for quality growth stocks with sales and earnings growth, healthy balance sheets, and dominant market positions to add to portfolios.