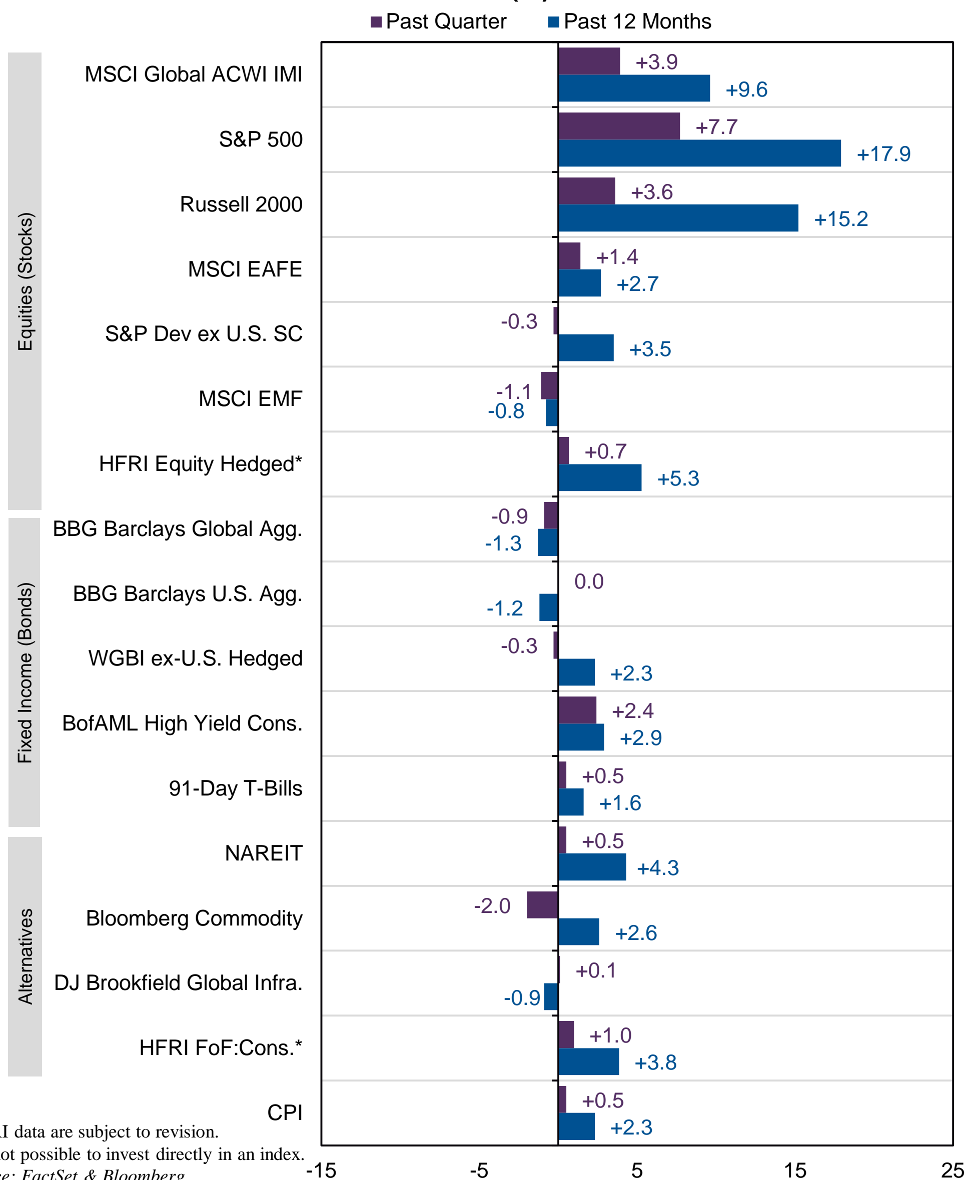
Capital Markets Review

Summary

As of September 30, 2018



*HFRI data are subject to revision.
It is not possible to invest directly in an index.
Source: FactSet & Bloomberg

The signal and the noise

- Global economic growth, though slowing, continued expanding at an above-trend pace providing support for risk assets. Risks around trade policies served to restrain markets, however. U.S. GDP growth is expected to be close to 3% in the third quarter, supported by robust consumer spending. Strength in corporate earnings is expected to persist with growth of +19% projected in the third quarter.[1] While international economic growth has slowed since the start of the year, recent data are more constructive and suggest a leveling to slight increase in growth.
- Trade tensions swayed between conflict and resolution during the quarter. The U.S. added tariffs on $200 billion of Chinese goods with discussions expected to resume soon. Negotiations with Canada and Mexico on a trilateral trade deal moved toward conclusion by the end of September. Additionally, the U.S. and South Korea signed an updated trade agreement. Both produced only minor changes to prior accords, generating limited disruption to global supply chains and implying a path to resolution with Europe, Japan and possibly China.
- Political risk remained an issue over the quarter. Uncertainty surrounding Italy's budget as well as a bridge collapse weighed on markets. Similarly, the U.K.'s BREXIT saga moved in fits and starts but generally maintained a conciliatory tone. Resolution is expected, but monitoring is warranted.
- Turmoil lingered in emerging economies. Some blame has been attributed to an appreciating dollar and the threat of a funding crisis. While this may be playing a role, the most significant factors appear to be uncertainty over trade policies and country specific vulnerabilities in Turkey, Argentina and to a lesser extent South Africa and Brazil.
- Global monetary policy proceeded along a gradual normalization path through changes in rates and forward guidance, largely meeting expectations. The Federal Reserve's ("Fed") preferred measure of inflation reached 2% on a year-over-year basis in May, and policymakers are confident that inflation will remain contained making minor changes to forward guidance while raising rates 25 basis points in September. This was the third increase for the year with one more rate increase expected by year-end.
- For the seventh consecutive quarter, the U.S. yield curve flattened, with rates ending the quarter near or at year-to-date highs. Strong fundamentals and slight tail risk reductions led to spread tightening across most sectors, with the exception of emerging markets where country specific problems and trade risks were an issue.
- Emerging market equities trailed developed markets throughout the quarter. Increasing political and trade tensions weakened international developed markets in August, but growth helped generate positive returns for the quarter. U.S. markets outperformed international, as strong fundamentals outweighed uncertainty and tail risks.
- While energy prices rose (+4.4% QTD), commodities overall declined, as trade uncertainty hurt agricultural and industrial metals prices. Higher energy prices benefited income instruments like MLPs, which climbed +7.0% during the quarter.

[1] **Source: Bloomberg and FactSet**

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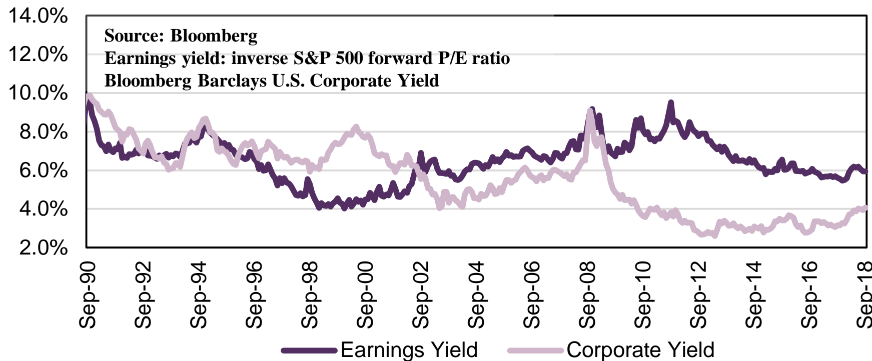
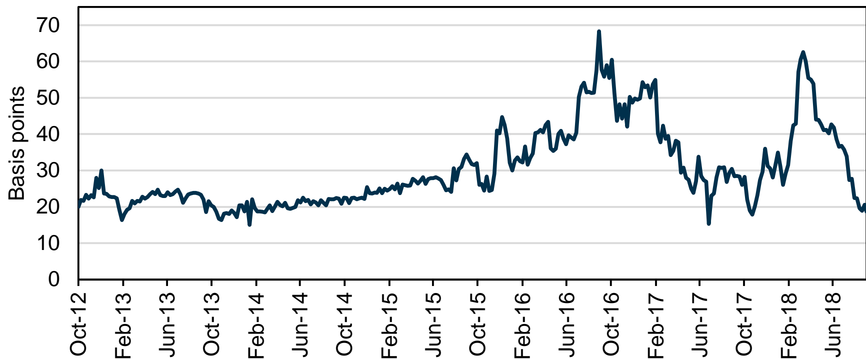
Asset Class Outlook

As of September 30, 2018

Equities remain attractive to credit

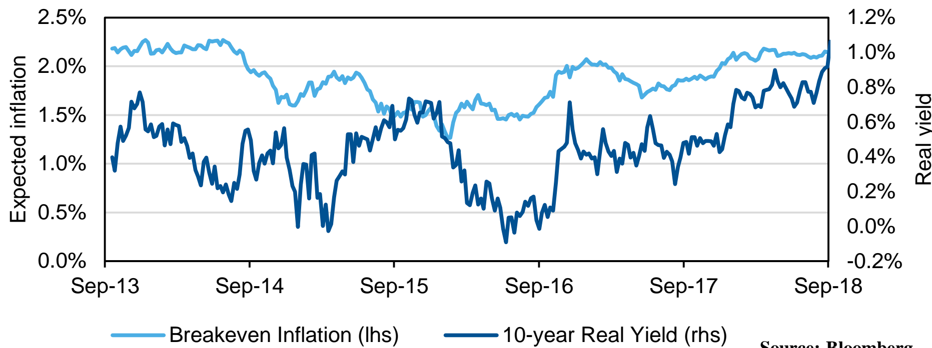


3-month Ted-Spread normalizes



Source: Bloomberg

Real yields rise, inflation expectations steady



Equities

- Global growth remained at or above trend during the past quarter, albeit at a slightly slower pace and less evenly across countries. The U.S. led growth, with forecasters anticipating real annual GDP growth close to 3% in the second half of 2018, providing continued support for earnings. The FactSet consensus estimate for full-year 2018 S&P 500 earnings growth is 20%. Economic growth is expected to slow modestly in 2019, as the effects of the fiscal stimulus fade and monetary accommodation declines. S&P 500 earnings estimates for full-year 2019 remain strong at just over 10%. As the first chart to the left suggests, current S&P 500 earnings yields continue to appear attractive relative to corporate bond yields. Other developed markets present less favorable conditions, as growth in some regions is slow, with heightened uncertainty as a result of BREXIT negotiations and the Italian budget problems. While emerging markets have struggled, risks remain relatively concentrated in countries such as Turkey and Argentina. The resolution to trade conflicts with Canada, Mexico, and South Korea should lend stability in these markets. Additionally, the modest concessions in these new agreements will hopefully provide negotiators with a road map to a resolution with China. We continue to recommend investing in markets with the strongest economic and earnings growth while avoiding the ongoing risks in developed markets where growth may be slowing.

Fixed Income

- Strong growth has allowed the Fed to continue normalizing policy, raising rates another 25 basis points in September. Rate increases combined with ongoing economic strength and hawkish commentary from Fed Chair Powell pushed 10-year Treasury rates above 3.15% in October, an increase of 30 basis points in just over a month. Despite the rise in yields, corporate spreads remained low, reflecting strong corporate cash-flows, low debt service costs, and extremely low default rates (currently 2.0% versus 30-year average of 3.8%). Current economic data suggests conditions likely will remain intact over the near-term; however, some signals have raised concerns. Earlier this year, a common measure of funding market liquidity, the Ted-Spread, spiked to a little over 60 basis points from just 30 basis points at the beginning of the year. The spread has recovered to normal levels, as a host of temporary technical factors have been resolved. Concern also grew over the flattening U.S. yield curve, often viewed as a signal of slowing growth. This trend also appears to have reversed itself, as the curve steepened 10 basis points in September and further in October. The bottom line is that financial conditions remain accommodative and do not yet present a risk to growth. The recent rise in yields improves the ability of longer duration investments to provide ballast to portfolios in the event of a material market downturn.

Real Assets

- Nominal interest rates rose during the quarter due to an increase in real yields, which reflects improving growth prospects. While expectations for real growth improved, inflation expectations held steady near the Fed's 2% target. Inflation continues to be constrained by trends in technology and innovation, globalization, demographics, and changing consumption patterns. With inflation expected to remain low, equities provide any necessary inflation protection. Inflation hedging assets with diversifying income streams such as global infrastructure are preferable to higher volatility commodities.

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Key Market Risks

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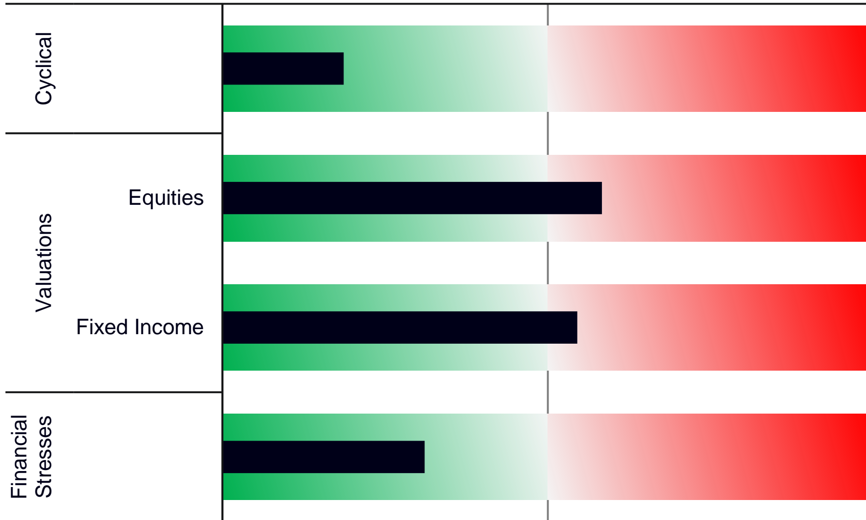
Current Risk Levels

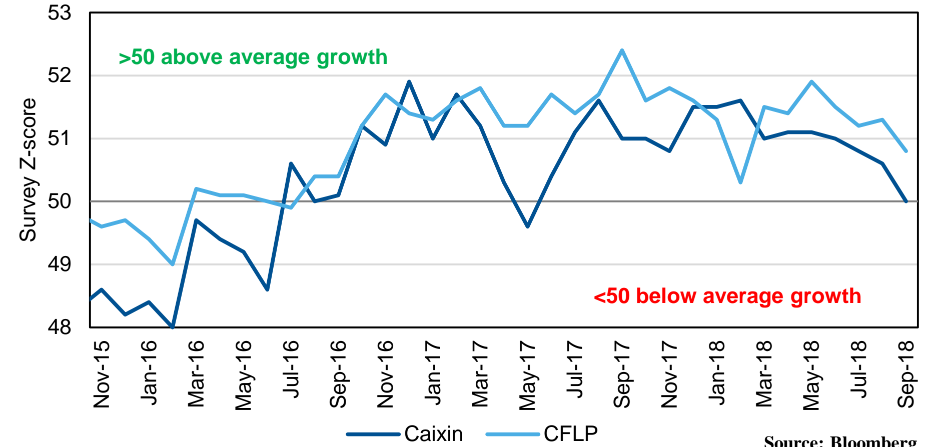


Source: Bloomberg, FactSet, Recession Alert, & Pavilion Analysis

Italian German 10-year yield spread

Source: Bloomberg

China manufacturing surveys



Source: Bloomberg

Although cyclical risks are low, policy risks remain on center stage

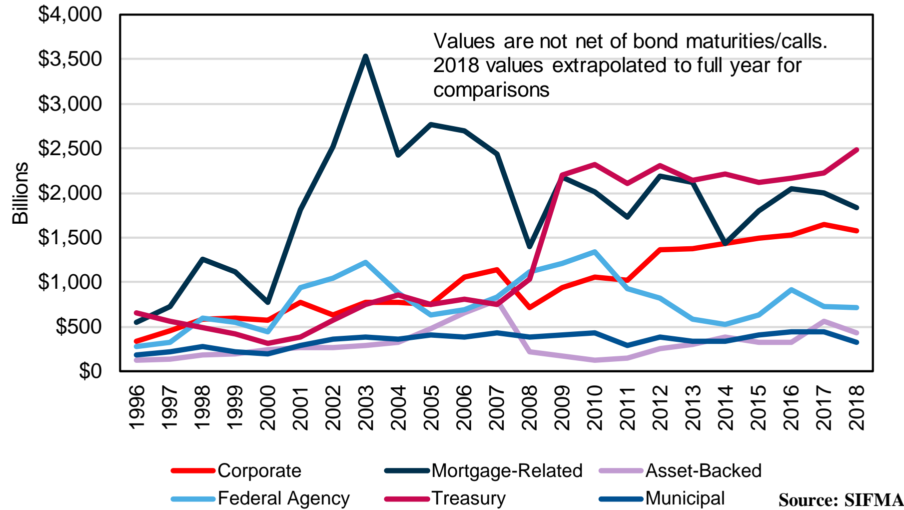
- **At some point, financial conditions will tighten:** Financial conditions in the U.S. and across other developed markets remain accommodative, but these conditions are unsustainable indefinitely. Higher U.S. yields have reduced the economy's ability to absorb shocks such as energy price spikes, a global trade slowdown, or credit market deterioration. Tightening is expected to be gradual and not restrictive, but higher rates leave a lower margin of safety with external risk monitoring becoming increasingly important.
- **Europe in general, Italy specifically, faces challenges:** European challenges do not seem to stop. While the Greek debt crisis appears to have been resolved, Italy is facing challenges. The new Italian government is at odds with European leaders and in potential violation of the European Stability Pact by seeking to provide economic stimulus, which would increase its deficit. This threatens the amount of Italian debt the European Central bank ("ECB") can purchase as part of the quantitative easing program. Italian bond yields rose, driving up Italian debt costs and increasing the risks for banks holding Italian debt, particularly Italian banks. Although progress is being made, the inability to negotiate a soft BREXIT plan further complicates the investment environment. In our view, European risk assets continue to deserve a higher risk premium.
- **China:** Trade tensions are not alone in creating problems for China. Slowing growth as well as a hardware hacking scandal have created a very difficult environment. The chart above depicts manufacturing output in China, as measured by two different surveys of purchasing managers. The challenge will be to maintain these indices above the 50 mark. China's currency has depreciated an amount almost equivalent to the level of tariffs that have been implemented, benefiting trade. Additionally, the central bank has provided stimulus by reducing reserve requirements, which should boost credit creation. Chinese economic data deserves close observation over the coming quarters to determine whether these measures will be sufficient to maintain growth.

Capital Markets Review

Economy

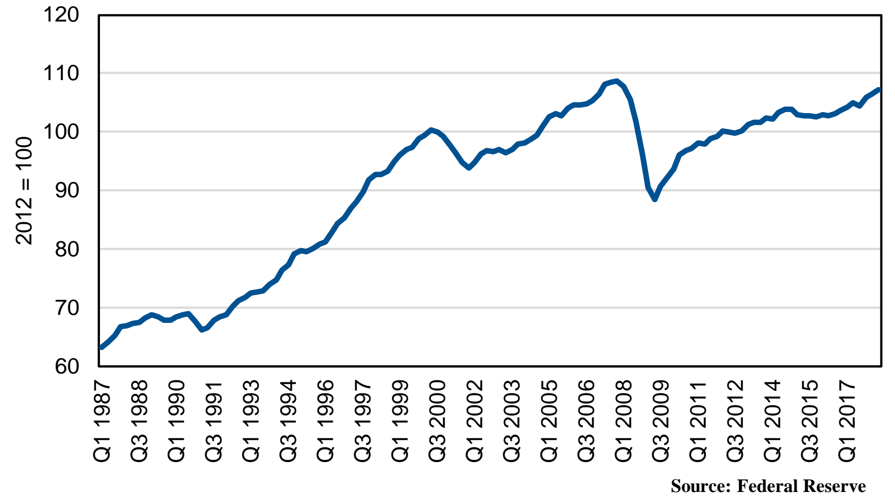
As of September 30, 2018

Bond Issuances



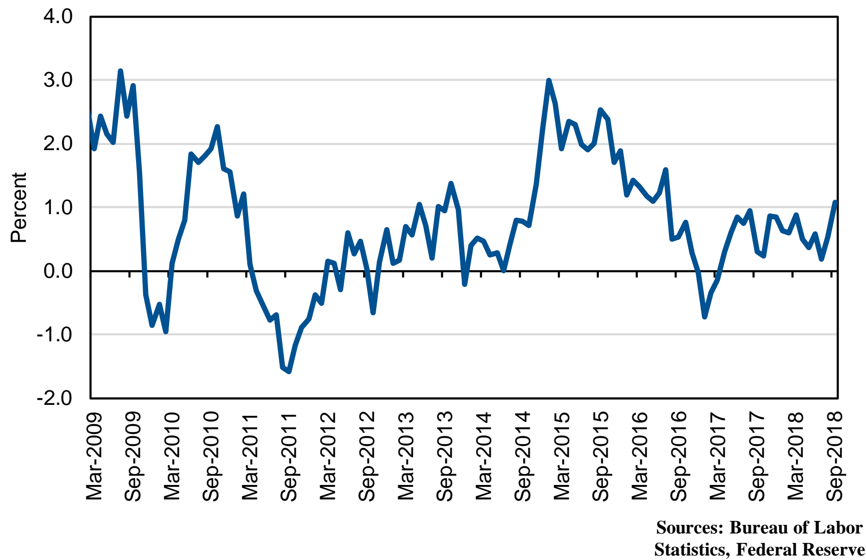
Source: SIFMA

U.S. Manufacturing Output



Source: Federal Reserve

Real Wage Growth



Sources: Bureau of Labor Statistics, Federal Reserve

U.S. economy resilient, global economy less certain

- Trade continued at the forefront of policy decisions during the quarter. NAFTA was reconfigured into the USMCA, with changes to tariff thresholds, wage minimums, and subsidization. A trade dispute mechanism was retained, helping bring Canada to the final deal. Tariffs on Chinese goods were expanded further and contributed to unease across many sectors, especially agriculture, manufacturing, and technology. Emerging market economies bore the brunt of trade fear repercussions, as unsettled trade policies limited the ability of corporations to effectively plan long-term and manage short-term commodity price fluctuations.
- The unemployment rate fell to 3.7% in September, making it more difficult to fill positions absent wage incentives. Wages are slowly ascending, though new positions have lower wages than those paid to retiring workers, weighing on wage increases. Inflation at quarter end was 2.3%, and has yet to exhibit a consistent tendency to rise. While the Federal Reserve has maintained its policy of gradually increasing borrowing rates, investors are becoming wary of the process of policy normalization
- Corporate profits and consumer confidence continued to advance, despite certain sectors having been hurt by trade and tariff uncertainties. Although U.S. third quarter GDP is forecast to grow between a 3% and 4% annualized rate, the IMF cut its growth forecast slightly for 2018 and 2019 reflecting an anticipated slowdown in the U.S. and other developed markets, most notably the E.U. Bond issuance remained strong, especially for Treasuries, while mortgage related issuances fell.

Capital Markets Review

Equities

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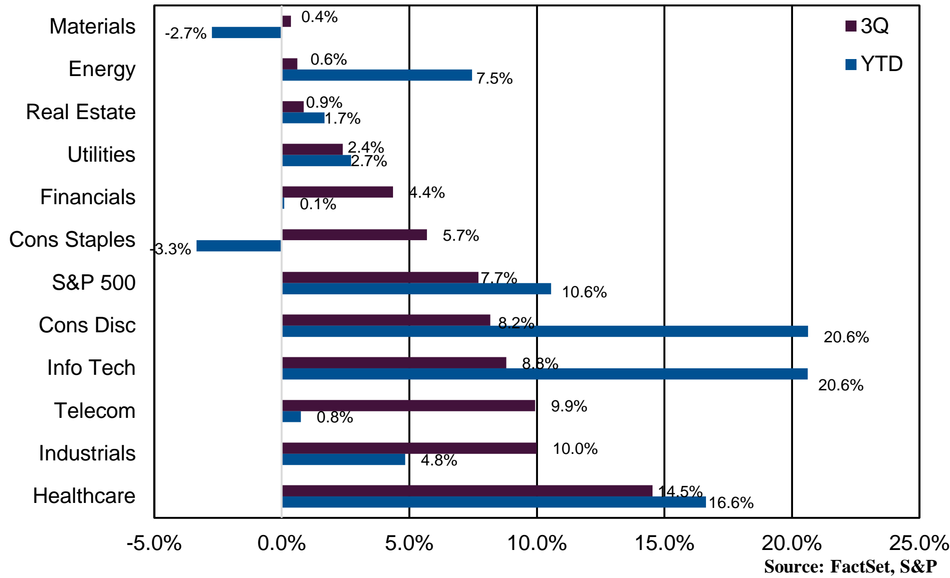
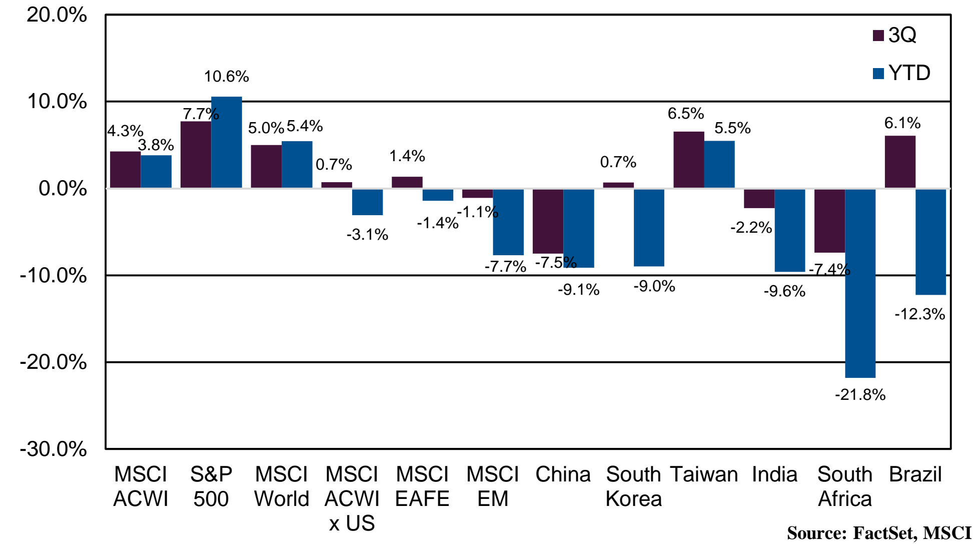
Third Quarter and YTD S&P 500 Sector Returns



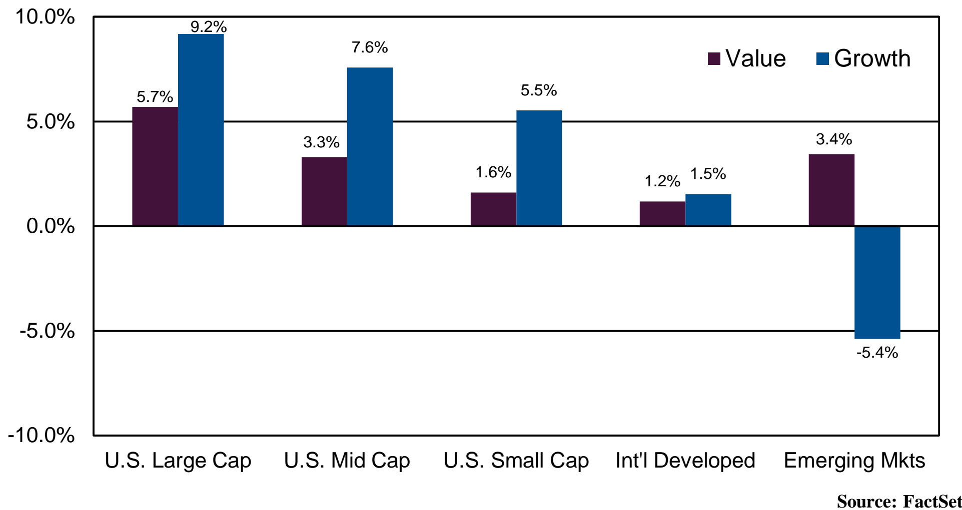
Source: FactSet, S&P

Third Quarter and YTD World Equity Market Returns



Source: FactSet, MSCI

Growth Outperformed Value in the U.S. During the Third Quarter



Source: FactSet

U.S. growth continues to do well while emerging markets struggle

- The S&P 500 Index returned +7.7% during the third quarter, bringing the YTD return to +10.6%. All sectors exhibited positive returns during the quarter with Healthcare the strongest performer. Year-to-date, Consumer Discretionary and Information Technology have been the best performing sectors, followed by Healthcare, while Materials and Consumer Staples are the only sectors with negative returns for the year-to-date period.
- The U.S. equity market experienced the strongest performance during the third quarter. International developed markets were marginally positive while emerging market equities continued to be challenged during the third quarter, returning -1.1%. Year-to-date, U.S. equity returns far surpassed the -1.4% and -7.7% returns of international developed and emerging market equities, respectively. Currency losses of nearly 5% had a significant impact on emerging market returns YTD. The local currency return to emerging market equities was -2.9% YTD. China and South Africa were particularly weak during the quarter while Taiwan and Brazil were stronger markets. The U.S.-China trade war rhetoric continues to weigh on the Chinese equity market while the U.S. stock market remains at or near highs.
- Growth continued to outperform the Value during the third quarter within the U.S. International developed equities saw a very slim performance differential between styles. Within emerging markets, Value significantly outperformed Growth (nearly 9%), in a reversal of the past several year's trend. The emerging markets Growth style also was the only segment to exhibit negative returns during the third quarter.

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Fixed Income

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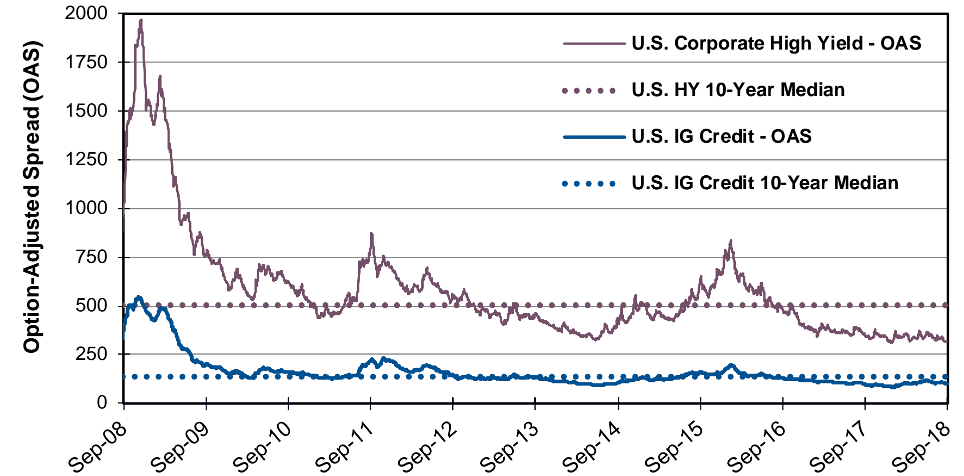
Duration – Adjusted Excess Returns to Treasuries (bps)

	2011	2012	2013	2014	2015	2016	2017	1Q18	2Q18	3Q18
Aggregate	-114	226	93	10	-53	138	121	-31	-23	53
Agency	-25	166	1	10	-133	121	148	6	-15	44
MBS	-106	91	98	40	-5	-11	52	-39	15	17
ABS	52	246	24	53	44	95	92	-19	17	30
CMBS	47	841	97	108	-28	236	158	-7	0	76
Credit	-322	693	226	-18	-169	442	335	-68	-91	168
High Yield	-240	1394	923	-112	-577	1573	610	-17	96	246
EMD (USD)	-537	1503	-32	-120	3	880	627	-26	-242	211

Best Period | Second Best Period | Worst Period | Second Worst Period

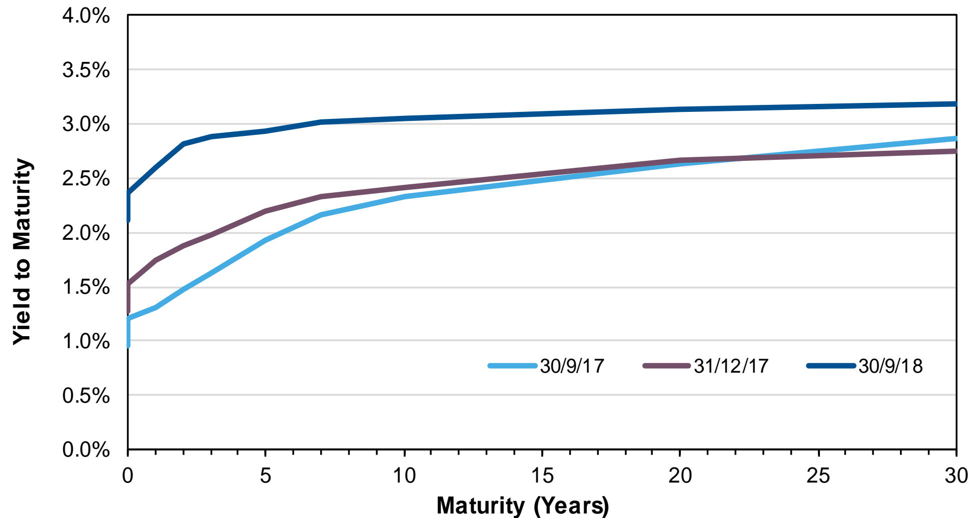
Source: Bloomberg

Trailing Ten-Year Credit Spreads



Source: Bloomberg

U.S. Treasury Yield Curve Change



Source: U.S. Dept. of The Treasury

Rates higher amid solid economic growth

- The Fed raised rates 0.25% at the September Federal Open Market Committee ("FOMC") meeting, setting the Federal Funds Rate target at 2.00% to 2.25%. Strong economic data led to higher yields across the entire maturity spectrum even with significant uncertainty surrounding trade. Despite higher Treasury rates, most spread sectors were able to generate positive returns on the quarter. While U.S. Treasuries (-0.59%) posted a negative total return, TIPS (-1.05%) posted the lowest quarterly return within fixed income as inflation expectations remained subdued.
- Investment-grade corporate spreads tightened 17 basis points ("bps") in the quarter, to +106 bps, as an uptick in institutional demand and steady retail inflows absorbed robust issuance. Lower quality, shorter duration credit outperformed as high yield (+2.40%) outpaced investment grade (+0.97 %) corporates. and was the top performing sector overall on the quarter.
- Within structured products, CMBS (+0.46%) was the top performer as the sector continued to benefit from favorable supply/demand technicals. Non-Agency CMBS tightened 13 bps on the quarter to +73 bps, making it one of only two investment grade sectors to tighten on a year-to-date basis.
- Emerging markets debt (USD) posted its first positive quarterly return on the year (+1.79%). The asset class rallied towards the end of the quarter as Turkey's central bank hiked rates to defend its currency and emerging market contagion fears abated.

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Alternative Investments

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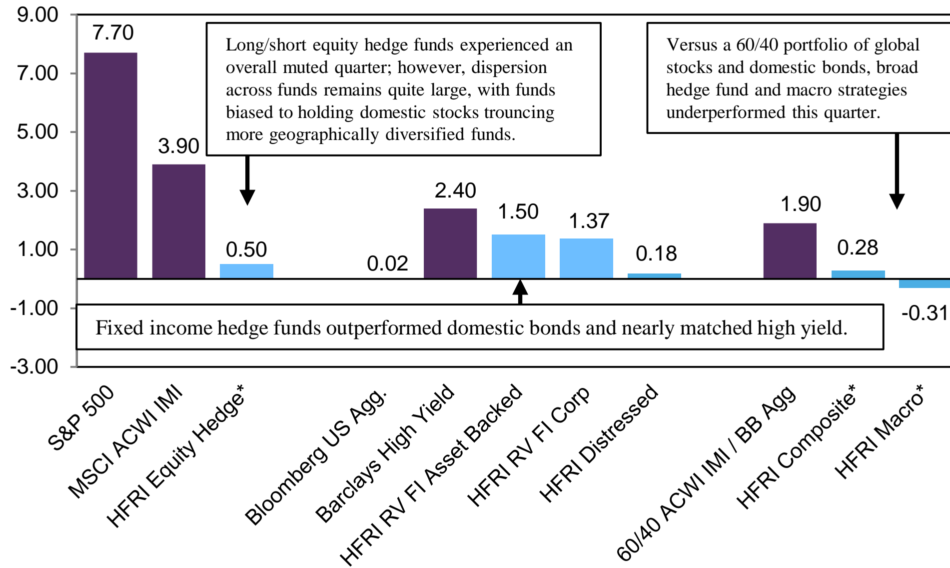
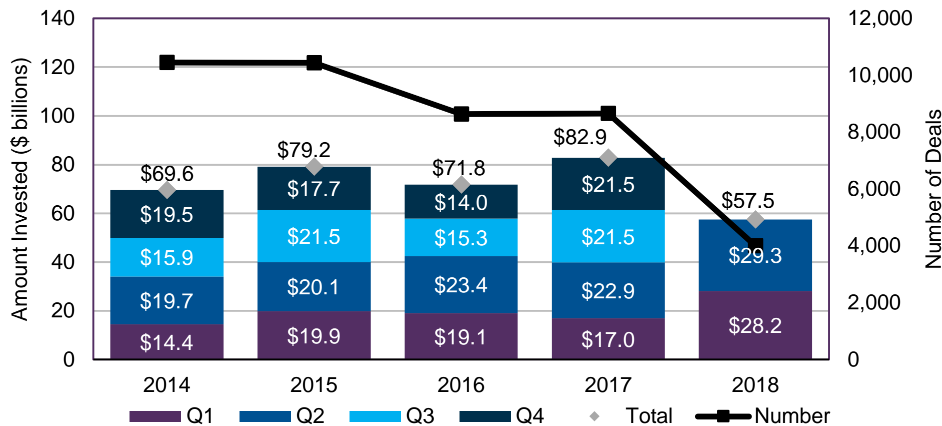
Hedge Funds vs Long-Only: Total Returns 2018 Q3 (%)



*Asset-weighted is used instead of fund-weighted, as it is available and more indicative of the universe.

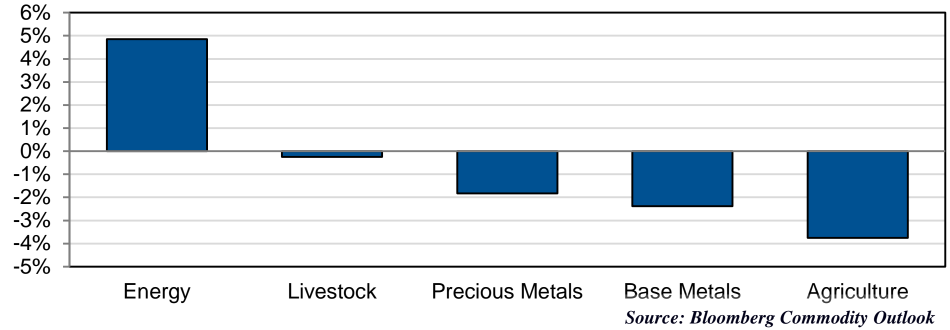
Sources: Hedge Fund Research, FactSet

U.S. Venture Capital Deal Flow[1] - All



Sources: S&P Capital IQ, PitchBook
[1] Through June 30, 2018

Bloomberg Commodity Index Attribution – 2018 YTD



Source: Bloomberg Commodity Outlook

Global alternatives rise with risk assets

- **Hedge Funds:** Hedge fund strategies generally experienced muted performance during the quarter. Domestic growth stocks helped equity-focused strategies, although long European and EM equity exposures proved to be headwinds to performance. Within long/short equity, funds struggled to generate alpha during the quarter, and total alpha for the year continues to lag the previous year. Net exposures across equity long/short funds have generally decreased as funds added to their short positioning. Fixed income fund performance was driven largely by structured credit and certain relative value arbitrage strategies, while both macro discretionary and systematic strategies generated flat to negative returns on average during the quarter. Mergers & acquisitions activity slightly slowed down during the quarter and the notable break of a large merger deal between NXP and Qualcomm was a headwind to the performance of many event-driven funds.
- **Real Assets:** Year-to-date, the energy sector, driven by crude oil, is up +17.6% versus other commodities such as metals, which are down -11.4%. We have seen growing oil demand and tighter supplies push the price of oil to nearly 4-year highs. That said, there continues to be a significant disparity between crude oil strength and broader commodities, which may not be sustainable.
- **Private Capital Markets: U.S. Venture Capital Deal Flow:** The U.S. venture capital market deal flow for the second quarter of 2018 was the strongest second quarter, on a deal value basis, in the past four years and was the strongest, on a deal count basis, in the past two years. The first half of 2018 saw a total of 94 financings completed, of at least $100 million, and 42 unicorn financings (defined as any company with an enterprise value over $1 billion), which is on pace to beat 2017's total unicorn financings of 72. The increase in the size of financings could largely be due to the fact that companies are entering the venture capital lifecycle much later, with the median age of angel/seed, series A, Series B, Series C and Series D+ investments rising to new heights of 3.1, 3.9, 5.2, 6.8 and 8.2 years, respectively.

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Index Returns

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		Quarter	Calendar YTD	1 Year	2 Years	3 Years	5 Years	10 Years
Equity Markets								
Broad Global Equity	MSCI All Country World IMI	3.9	3.7	9.6	14.1	13.5	8.7	8.5
Broad U.S. Equity	Dow Jones Industrial Average	9.6	8.8	20.8	23.1	20.5	14.6	12.2
Broad U.S. Equity	Russell 3000 Index	7.1	10.6	17.6	18.1	17.1	13.5	12.0
Technology Equity	NASDAQ Index	7.4	17.5	25.2	24.4	21.7	17.7	15.7
U.S. Large Cap Equity	S&P 500 Index	7.7	10.6	17.9	18.3	17.3	13.9	12.0
U.S. Large Cap Equity	Russell 1000 Index	7.4	10.5	17.8	18.2	17.1	13.7	12.1
U.S. Large Value Equity	Russell 1000 Value Index	5.7	3.9	9.5	12.3	13.6	10.7	9.8
U.S. Large Growth Equity	Russell 1000 Growth Index	9.2	17.1	26.3	24.1	20.6	16.6	14.3
U.S. Mid Cap Equity	Russell Mid Cap Index	5.0	7.5	14.0	14.6	14.5	11.7	12.3
U.S. Mid Cap Value Equity	Russell Mid Cap Value Index	3.3	3.1	8.8	11.1	13.1	10.7	11.3
U.S. Mid Cap Growth Equity	Russell Mid Cap Growth Index	7.6	13.4	21.1	19.4	16.6	13.0	13.5
U.S. Small Cap Equity	Russell 2000 Index	3.6	11.5	15.2	18.0	17.1	11.1	11.1
U.S. Small Cap Value Equity	Russell 2000 Value Index	1.6	7.1	9.3	14.8	16.1	9.9	9.5
U.S. Small Cap Growth Equity	Russell 2000 Growth Index	5.5	15.8	21.1	21.0	18.0	12.1	12.7
International Equity	MSCI EAFE Index	1.4	-1.4	2.7	10.6	9.2	4.4	5.4
International Equity	MSCI EAFE Index (Hedged)	2.3	0.5	4.2	10.6	7.7	5.7	4.4
International Equity	MSCI ACWI ex-U.S. Index (inc. Emerging Mkts)	0.7	-3.1	1.8	10.3	10.0	4.1	5.2
International Value Equity	MSCI ACWI ex-U.S. Value Index	1.7	-3.7	0.4	10.5	9.3	2.9	4.5
International Growth Equity	MSCI ACWI ex-U.S. Growth Index	-0.3	-2.5	3.1	10.1	10.6	5.3	5.8
International Small Cap	S&P Developed ex-U.S. Small Cap Index	-0.3	-2.6	3.5	11.5	11.8	7.4	8.6
Emerging Markets	MSCI Emerging Markets Index	-1.1	-7.7	-0.8	10.2	12.4	3.6	5.4
Bond Markets								
Core Plus Bond	Bloomberg Barclays Aggregate Bond Index	0.0	-1.6	-1.2	-0.6	1.3	2.2	3.8
Global Bonds	Bloomberg Barclays Global Aggregate Index	-0.9	-2.4	-1.3	-1.3	2.0	0.8	2.9
Total Bond Market	Bloomberg Barclays Universal Bond Index	0.3	-1.4	-1.0	0.0	2.0	2.5	4.2
Long Duration Bonds	Bloomberg Barclays Long Credit Index	1.3	-5.2	-2.2	0.3	5.2	5.7	8.4
Short-Duration Bonds	BofA Merrill Lynch U.S. Treasury (1-3 Year)	0.2	0.3	0.0	0.1	0.4	0.6	1.1
Global Bonds	Citigroup-WGBI ex-U.S. Index (Unhedged)	-2.2	-3.1	-1.6	-2.4	2.4	-0.2	2.0
Global Bonds	Citigroup-WGBI ex-U.S. Index (Hedged)	-0.5	1.2	2.3	0.5	3.0	4.0	4.1
Treasury Inflation Protection	Bloomberg Barclays 1-10 Year TIPS Index	-0.4	-0.2	0.3	0.1	1.6	0.9	2.5
Municipal Bonds	Bloomberg Barclays Municipal Bond Index	-0.2	-0.4	0.3	0.6	2.2	3.5	4.8
Cash	91-Day T-Bills Index	0.5	1.3	1.6	1.1	0.8	0.5	0.3
Alternatives								
Commodities	Bloomberg Commodity Index	-2.0	-2.0	2.6	1.1	-0.1	-7.2	-6.2
U.S. Public Real Estate	FTSE NAREIT All Equity REIT Index	0.5	1.8	4.3	3.4	9.0	9.6	7.8
Global Listed Infrastructure	DJ Brookfield Global Infrastructure Comp. Index	0.1	-1.2	-0.9	3.2	7.0	5.4	9.5
Diversified Hedge Funds	HFRI FoF Conservative Index	0.9	2.6	3.8	4.2	2.9	3.0	2.2
Long/Short Equity	HFRI Equity Hedge Index	0.5	1.7	5.1	8.0	7.3	5.1	5.2
Inflation								
Inflation	CPI	0.2	2.4	2.3	2.3	2.0	1.5	1.4

Returns for periods greater than one year are annualized.