Market Review and Outlook
December 31, 2018

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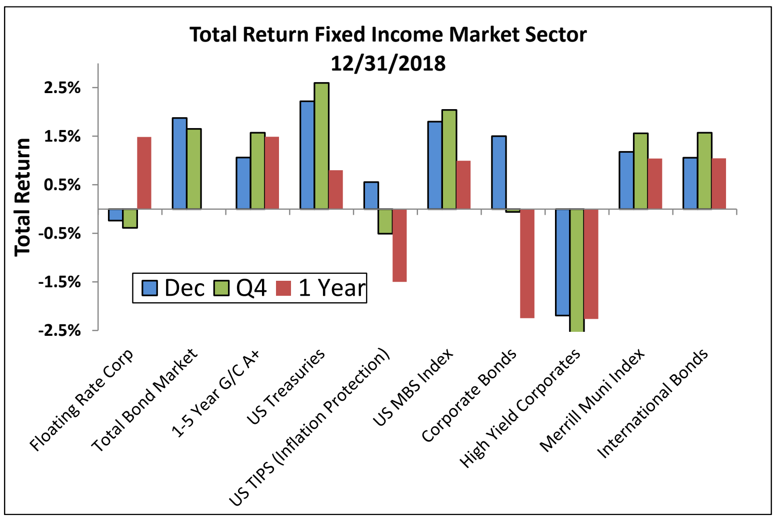
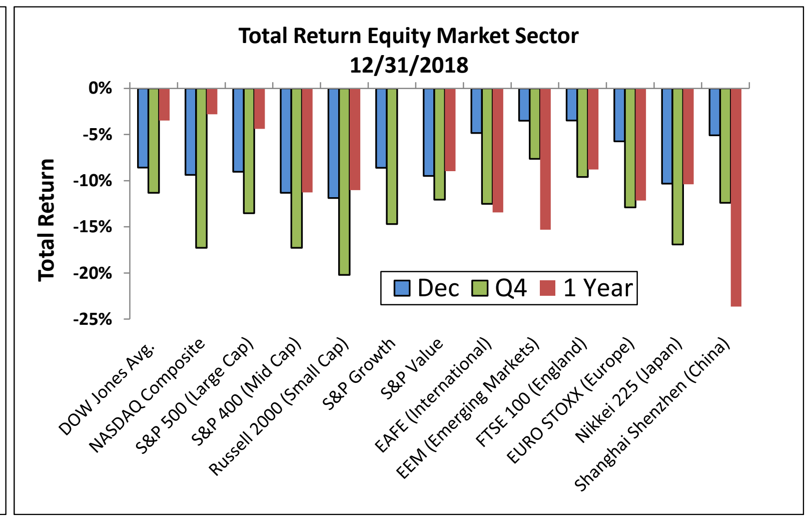
Market Summary

December 2018

- Equity markets "corrected", credit risk premiums widened, and a flight to quality pushed interest rates down from their multi year highs in Q4. Volatility returned to the market amid a fourth rate hike by the Fed, ongoing international trade discussions, a moderation in global economic growth, and a change in Washington.
- The flight to quality drove high quality bonds such as Treasury and Mortgage Backed Securities back to positive returns for the year, while the widening in risk premiums pushed corporate bonds negative.
- Higher rates finally shook the equity markets as expectations grew that a significant economic slowdown was imminent. While global growth moderated, significant economic strength was still evident. Market sentiment dominated behavior and pushed all equity sectors down.
- Prices changed more than the facts.





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Market Environment Summary

December 2018

- A resilient Federal Reserve, a moderation in international economic fundamentals, continued international trade discussions, and a changing congress significantly shifted investor sentiment and "risk assets" sold off significantly.
- Prices changed more than the underlying fundamentals as market values quickly priced in a high probability of recession and at least one Fed easing in 2019 – Unrealistic given the true fundamentals.
- The Fed continued on its planned path of raising short term interest rates by tightenening another 25 bp for a fourth time in 2018. Expectations of this event brought interest rates to new cycle highs, reaching a level that caught equity investors attention, similar to the Q1 experience but greater in magnitude.
- A moderation in International fundamentals, specifically slower growth in Europe and China, paused the notion of synchronized global growth, which the market inferred the US would also slow significantly.
- Tariffs and trade discussions have preoccupied the market, generating significant swings as talks progress.
- Amid the equity market correction and extreme widening of corporate risk premiums, the US economic fundamentals continue to impress with strong growth in employment, wages, consumption and investment.
- The Fed also continued to allow its balance sheet roll off, while also adjusting expectations to 2 additional moves in 2019 from 3, and declaring additional flexibility.

Market Environment Summary

December 2018

- After rates rose to our long held interest rate targets and assessment of fair value (of ten year notes) to around 3.25%, the sell off of risk assets drove rates down toward 2.5% in a massive flight to quality.
- Most sectors of the stock market officially reached "correction" territory with the S&P 500 falling 20% from its highs. Stocks began to rebound from their lows on the back of the Fed adjusting their outlook and strong economic fundamentals, including a robust employment report and positive trade talks.
- Our expectations are for rates to reestablish their levels in a range near 3% - 3.25% and hold there for some time. As we have been contending, the economy may withstand these levels that are higher than recent, but considerably low from a longer term historical perspective.
- The equity market will be driven by earnings growth and continued solid economic fundamentals, and should also be able to withstand the newly established level of rates. Investor sentiment will likely improve with progress on trade talks and the resolution of the partial Government shutdown.
- Higher income is now available in the Fixed income market that has shifted relative value within the bond market and relative to various equity sectors. Corporate credit spreads have widened significantly, providing value as risk of default has not materially increased.
- Higher input costs from labor may impact corporate earnings, but recent drop in energy prices will reduce input costs.
- Higher interest rates, trade agreements, Government shutdown, and geopolitical risks have increased market volatility but are likely to normalize as resolutions become clear.

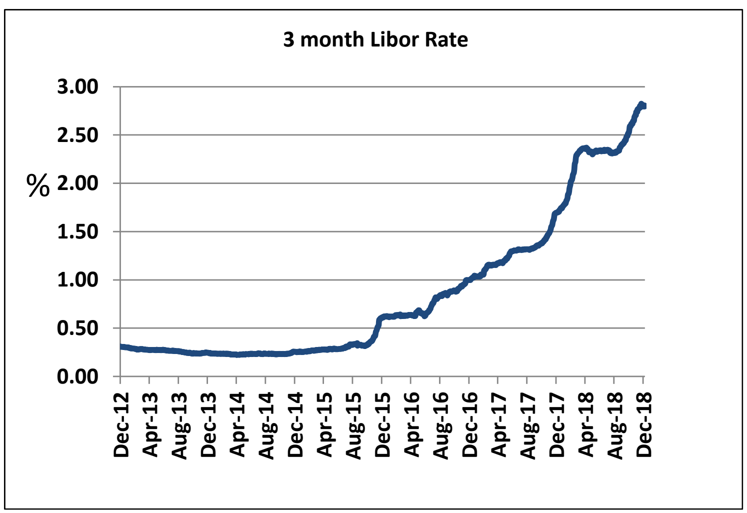
Market Review

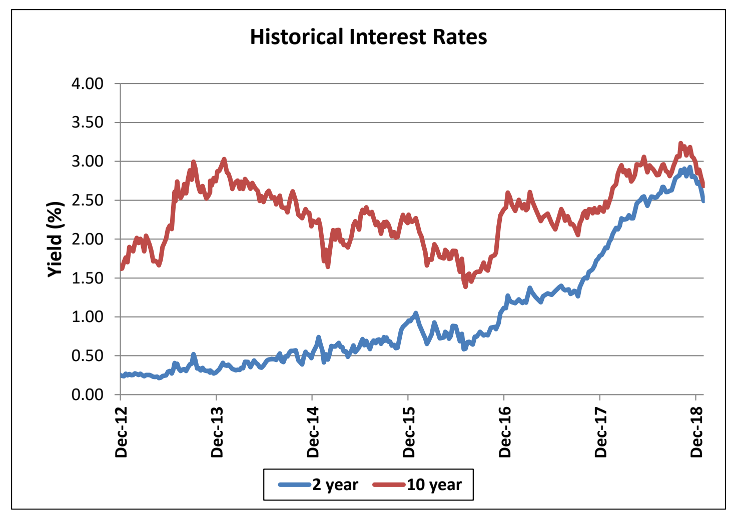
Yield Curve – December 2018

- Reflecting the current and expected Fed activity, 3 month libor has risen significantly. Most floating rate notes are benchmarked off of libor, providing increasing coupons with stable prices.

- Long term rates however turned lower as equity markets corrected, corporate risk premiums widened, and capital flowed into US Treasuries amid a flight to quality.

- Despite the turn in market expectations of a dramatically slowing economy, inferred by the dramatic drop in equities and interest rates, continued economic growth, rising inflation, and increased net issuance will likely cause longer rates to return to previous levels..





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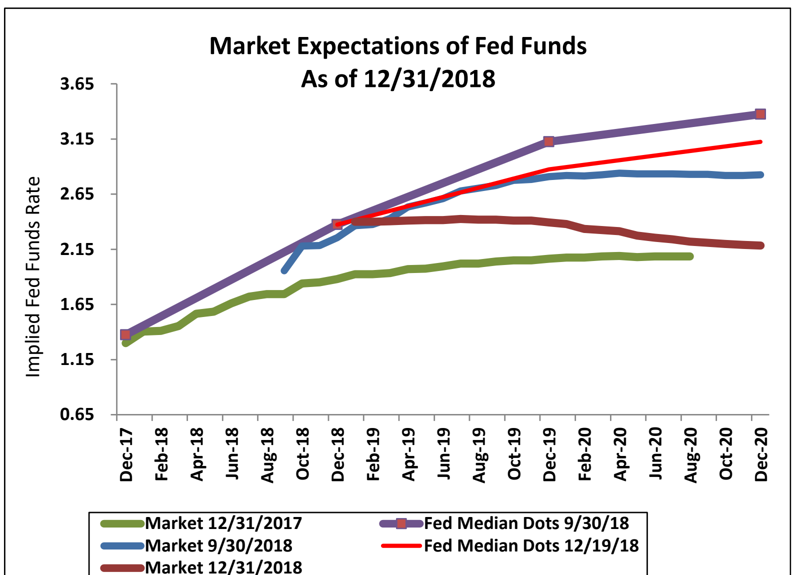
Market Review

Monetary Policy – December 2018

- The Fed raised rates for the fourth time, as expected in December, however given market conditions reduced the number of expected rate hikes to 2 from 3 for 2019 as evidenced by the lower "dot plot".
- The Fed also reduced their estimate of GDP and inflation for next year given the moderation in global growth, uncertain trade environment, and market conditions.
- The recent drop in rates has pushed market implied expectations for the Fed to actually Ease in 2019 with no rate hikes.



Federal Reserve Median Economic Projections
As of 12/19/2018

Change in GDP	Actual	2018	2019	2020	Longer Run
Dec 2018 Projection		3.0	2.3	2.0	1.9
Sept 2018 Projection		3.1	2.5	2.0	1.8
Actual Q2 2018 yoy/qoq	**3/3.4%**				
Unemployment Rate					
Dec 2018 Projection		3.7	3.5	3.6	4.4
Sept 2018 Projection		3.7	3.5	3.5	4.5
Actual Q4 2018	**3.9%**				
PCE Inflation					
Dec 2018 Projection		1.9	1.9	2.1	2.0
Sept 2018 Projection		2.1	2.0	2.1	2.0
Actual Sept 2018	**1.8%**				
Core PCE Inflation					
Dec 2018 Projection		1.9	2.0	2.0	2.0
Sept 2018 Projection		2.0	2.1	2.1	
Actual August 2018	**1.9%**				
Projected Policy Path- Fed Funds					
Dec 2018 Projection	2.375	2.4	2.9	3.1	2.8
Sept 2018 Projection	2.125	2.4	3.1	3.4	3.0

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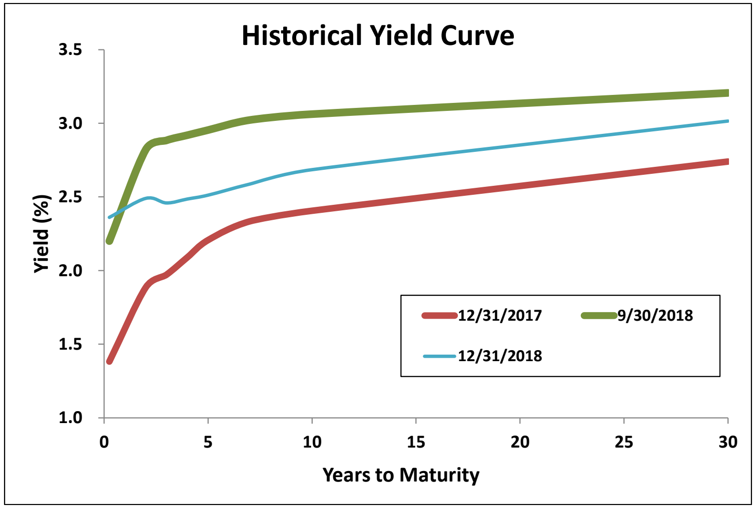
Market Review

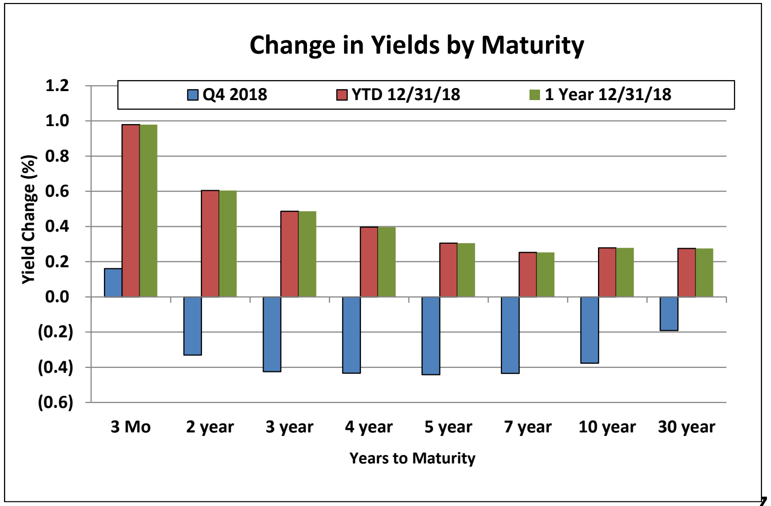
Yield Curve – December 2018

- Interest rates fell from their multi year highs established in Q4 as the Fed remained firm in their plan to normalize interest rates. Interest rates finally reached a level that shifted market sentiment and expectations of a significant decline in economic activity took hold.

- Rates finished the year higher across all maturities, however the dramatic 50 basis point drop in rates toward the end of the quarter began to price in a Fed ease in 2019.

- The flight to quality pushed rates excessively low and will likely return to higher levels as market sentiment and the issues of trade, monetary policy, and Washington normalize given the strength in economic growth.





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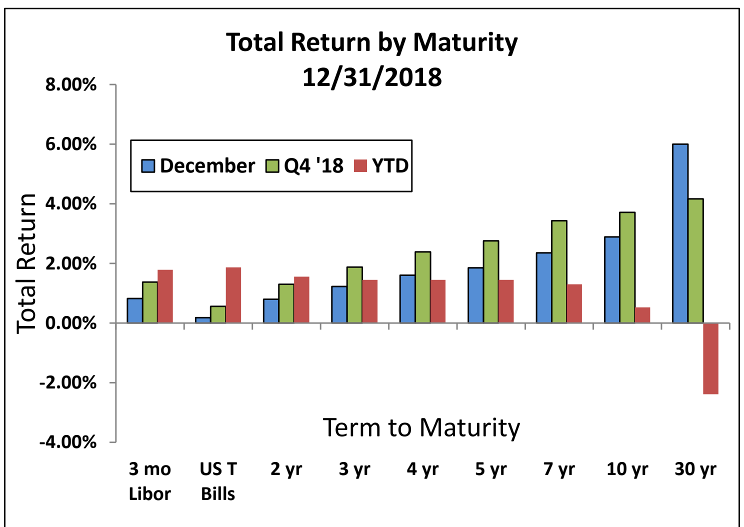
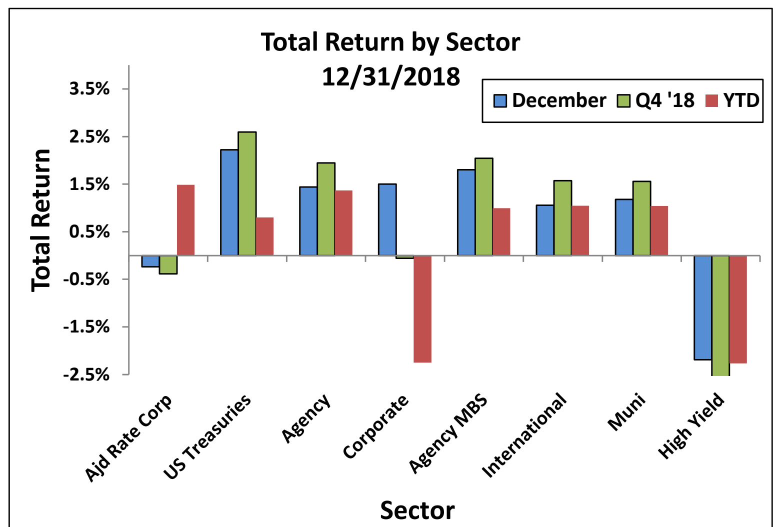
Market Review

Yield Curve and Sector Returns – December 2018

- Total returns in Treasuries were significantly positive in Q4 amid the flight to quality, bringing all maturities except the 30 year to positive total returns for the year as income offset price declines.
- Shorter maturities were the best returners for the year as income outweighed the smaller price declines while longer term price declines offset a greater amount of income.
- Credit spreads widened across the credit spectrum, (yields rising relative to Treasuries) pushing virtually all corporate bonds into negative territory for the year, particularly in lower quality.
- Higher quality Government bonds, municipal securities, and Mortgage Backed securities showed positive returns to finish the year.





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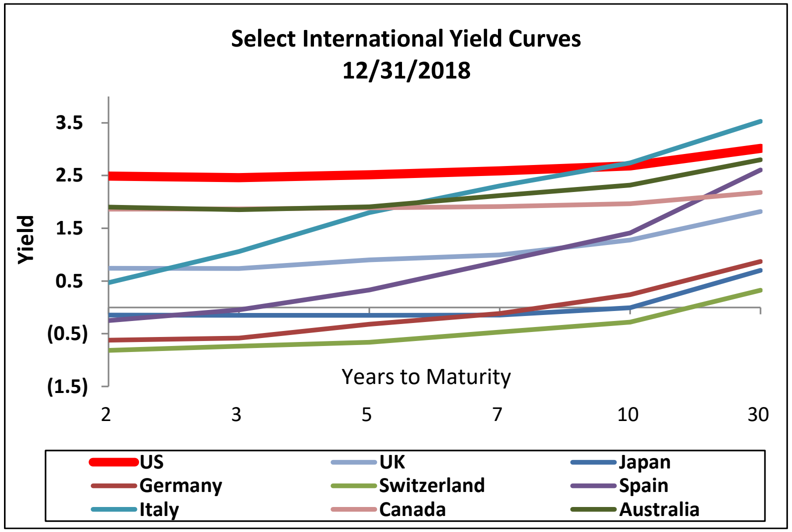
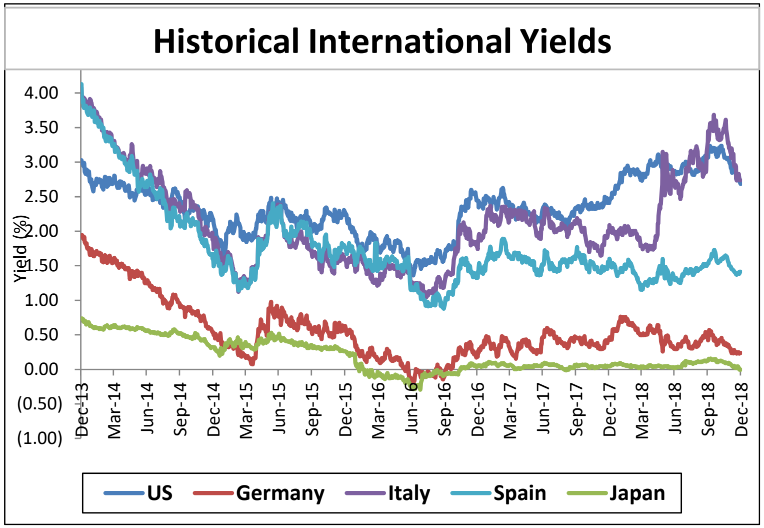
Market Review

International Yield Curves– December 2018

- The US continues as one of the highest yielding developed countries and the yield spread over Europe remained wide in Q4.
- The European Central Bank and Bank of Japan continue aggressive easy monetary policy with negative rates in Europe and a targeted 0% ten year rate in Japan.
- Political events in Italy and their budget discussions with the EU have kept Italian yields relatively high.





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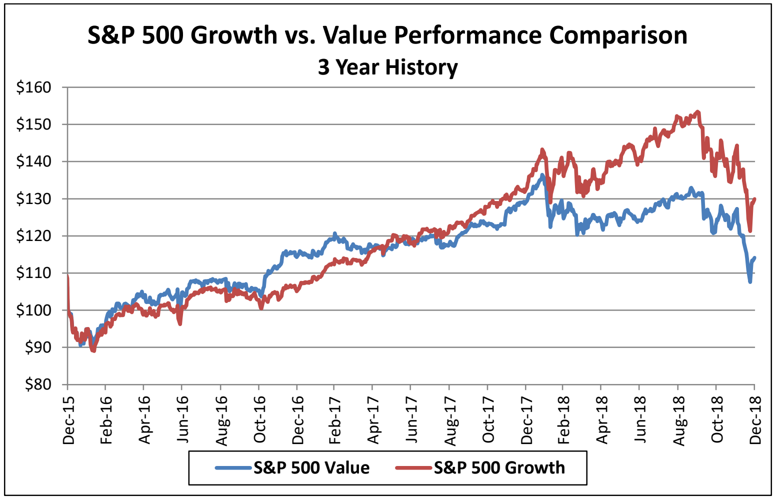
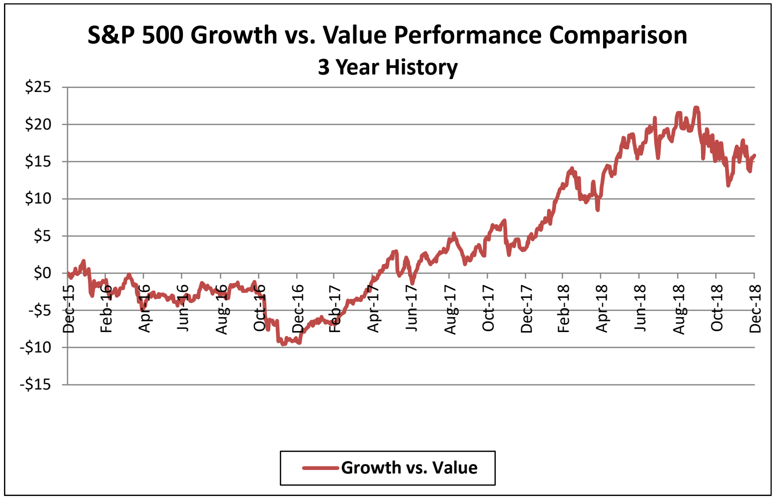
Market Review

Equity Market Returns - December 2018

- In the equity markets, Growth has outpaced Value reflecting innovation and high expectations of business investment going forward.
- The recent volatility has been evident in growth stocks, while Value has remained a bit more stable and made a comeback in Q3, however in the December downturn, all sectors were generally down in unison.
- Dividend paying value stocks have been challenged by higher interest rates.





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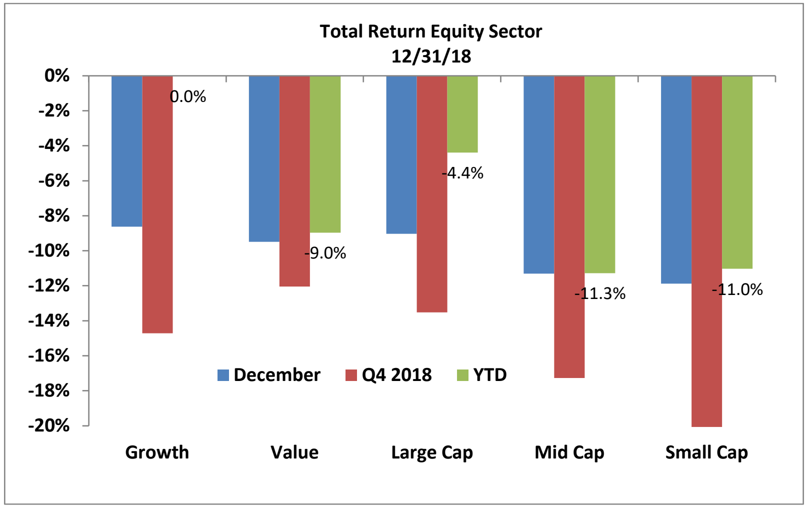
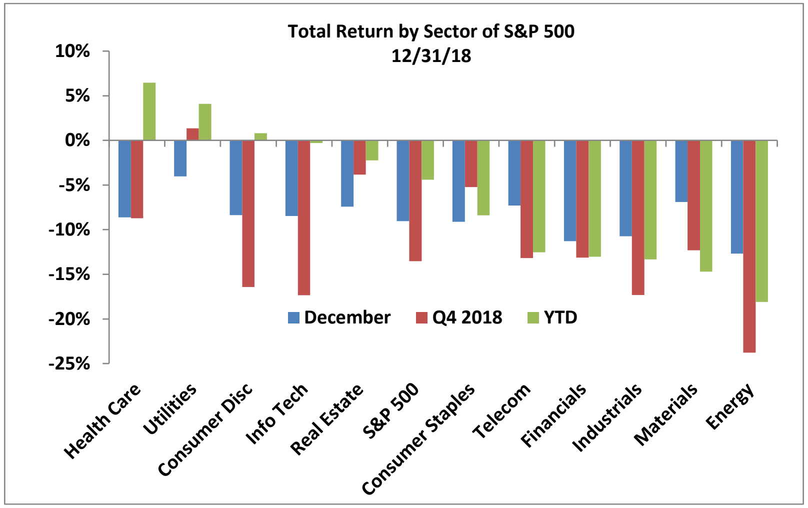
Market Review

Equity Market Returns - December 2018

- In the equity markets during the quarter, virtually all sectors fell in unison due to broad based negative market sentiment, although smaller cap and growth oriented equities fell a bit more.
- For the year growth stocks maintained a significant advantage over value oriented stocks and remained flat for the year, reflecting the underlying strength in fundamentals.
- Health care led sector gains for the year, with economically sensitive technology, consumer discretionary and industrials continuing strong. Energy gave back gains despite recovering oil prices.
- REIT's and Utilities performed a bit better during Q4 as is usually the case in a risk averse market.





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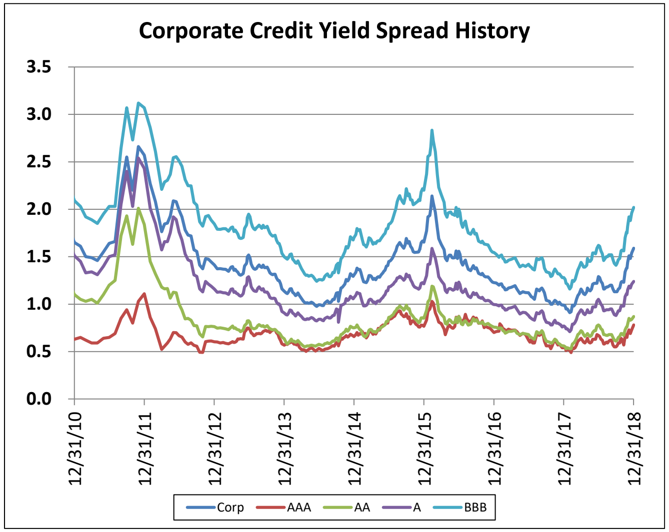
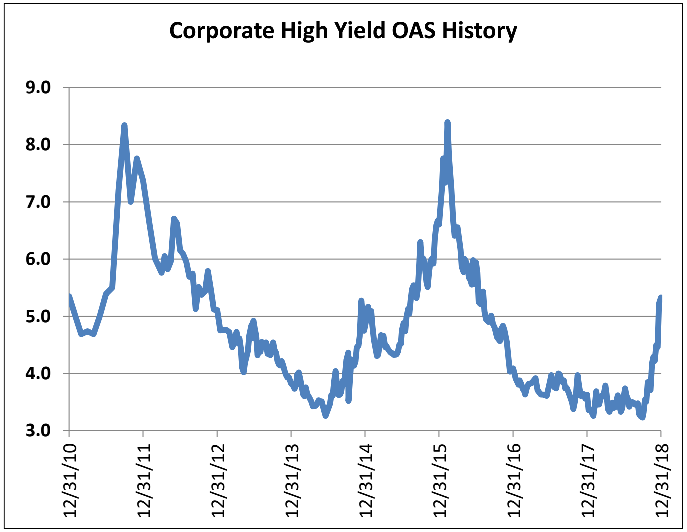
Market Review

Corporate Yield Spreads – December 2018

- The inverse relationship between interest rate risk and credit risk was evident in Q4 as rates fell and credit spreads widened. This relationship had been absent for many years of easy monetary policy.
- Spreads widened despite continued strong economic conditions and corporate earnings. Market sentiment has implied significant deterioration in economic fundamentals and corporate credit.
- Risk of default has not risen to the degree that credit spreads have widened.
- Corporate spreads widened more than treasury rates fell, generating negative total returns.





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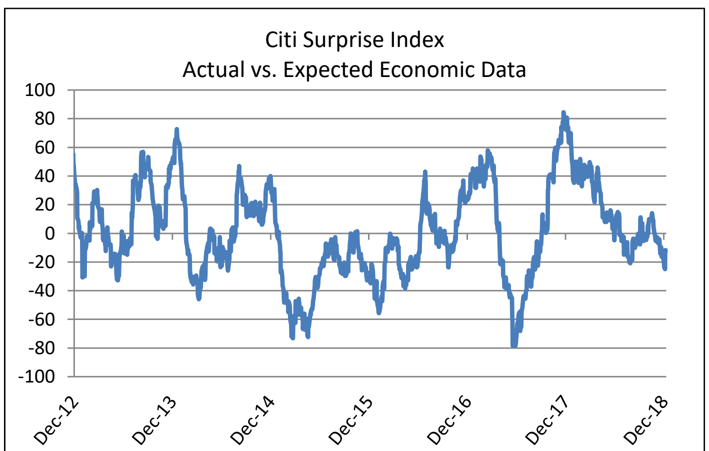
Economic Environment

December 2018

- Despite the implications of the markets, the US economic fundamentals remain solid, bouncing around market expectations on the whole, with employment exceeding expectations and manufacturing moderating.
- Globally, economic activity has moderated somewhat, particularly in European manufacturing and overall Chinese activity.
- Growth remains positive across the globe with global inflation continuing to move up.
- US growth remains solid while recent moderation in some countries has tempered the synchronized global economic growth story. Recent political events, trade tensions, and volatility in Emerging countries has brought some concerns.



GDP YoY % Change			
	Current (Q1)	One Year Ago	Change
US	3.00	2.30	0.70
Eurozone	1.60	2.80	(1.20)
Germany	1.10	2.60	(1.50)
France	1.40	2.70	(1.30)
Italy	0.66	1.75	(1.09)
UK	1.50	2.00	(0.50)
Canada	2.00	3.20	(1.20)
Mexico	2.53	1.51	1.02
Australia	2.80	2.80	0.00
Japan	0.00	2.10	(2.10)
China	6.50	6.80	(0.30)
Russia	1.50	2.20	(0.70)
Brazil	1.27	1.35	(0.08)

Inflation YoY % Change			
	Current	One Year Ago	Change
US	2.20	2.10	0.10
Eurozone	1.90	1.40	0.50
Germany	2.30	1.70	0.60
France	1.90	1.20	0.70
Italy	1.60	0.90	0.70
UK	2.30	3.00	(0.70)
Canada	1.70	1.90	(0.20)
Mexico	4.72	6.77	(2.05)
Australia	1.90	1.80	0.10
Japan	0.80	1.00	(0.20)
China	2.20	1.80	0.40
Russia	3.80	2.50	1.30
Brazil	4.05	2.95	1.10

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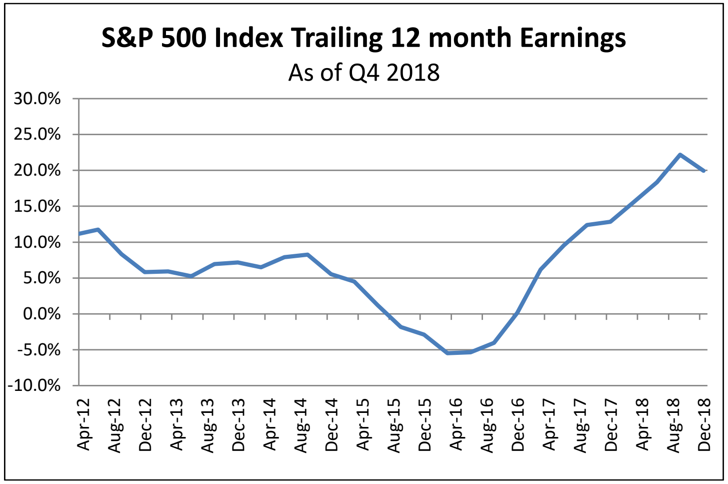
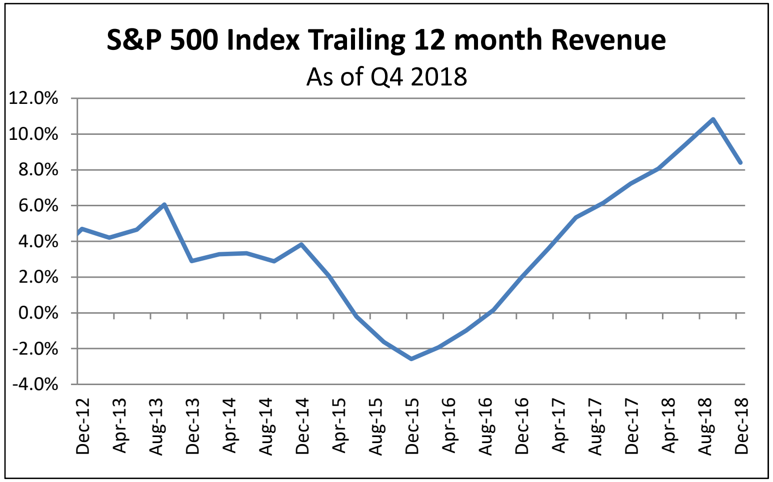
Economic Environment
December 2018

- Top line revenue growth has remained strong, and has flowed through to earnings, particularly on the heels of the recent tax package.
- Top line revenues may continue to grow given the economic backdrop, however cost pressures including labor, and fading of Tax effect will make Year over Year comparisons more difficult.
- The stronger dollar and trade tensions may pressure multinationals due to more expensive exports and currency conversions back to the US Dollar.





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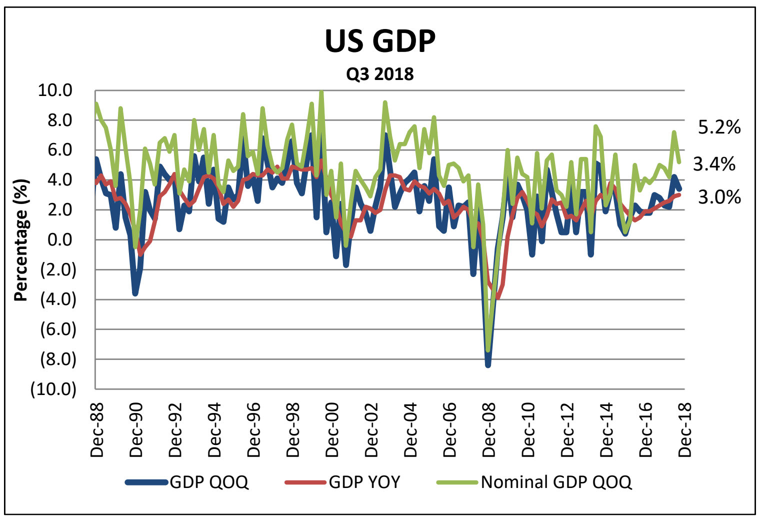
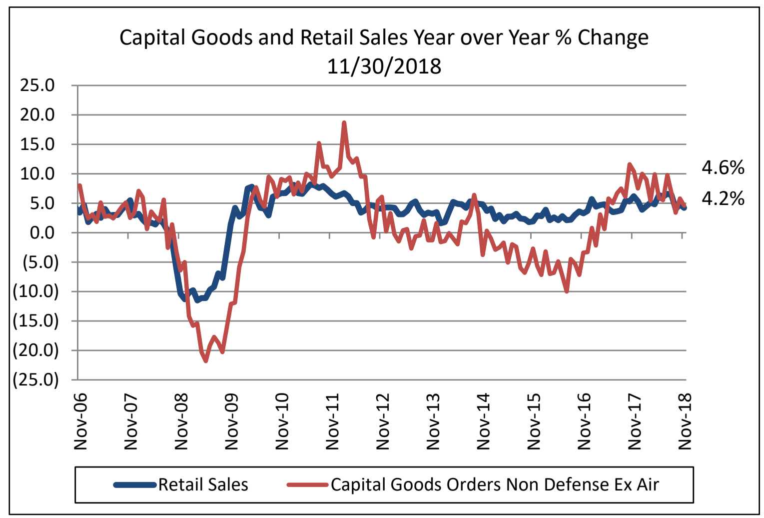
Economic Environment

December 2018

- Economic activity has been maintaining strong growth, in excess of a 3% pace.
- Nominal GDP has reached over 7% and is maintaining levels of over 5% with rising inflation.
- Consumption remains robust due to the strong employment environment while capital spending has moderated since the initial tax cut induced rise.





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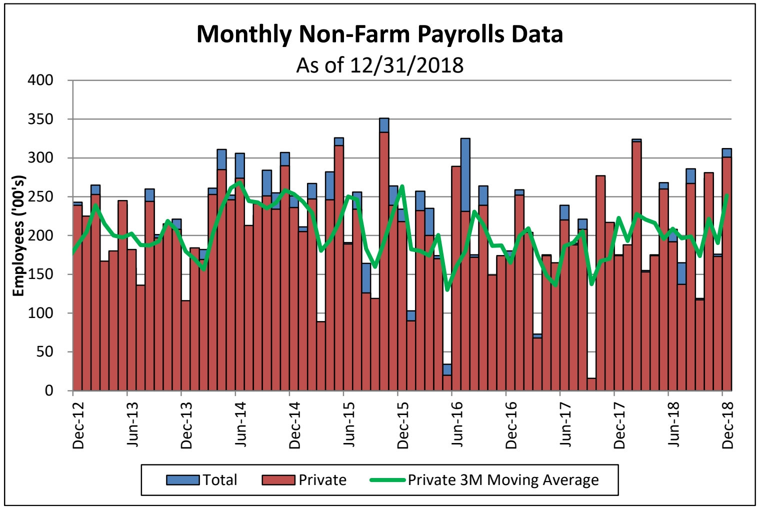
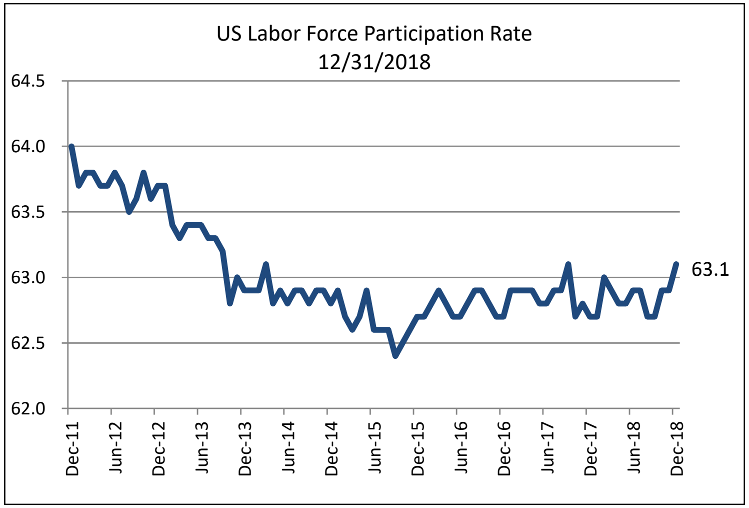
Economic Environment

Employment – Monthly Payrolls – December 2018

- Non-Farm payrolls have maintained solid gains and maintained a steady and healthy pace in Q4 with 3 month average near 200k. Virtually all payroll gains have been in the private sector.
- The labor participation rate has continued to improve, with as many people entering the workforce as are getting hired. In Q4, there continued to be more jobs available than job seekers.
- Weekly initial unemployment claims have been running close to 200,000, lowest since the 70's.
- The unemployment rate recently rose off its lows due to the significant addition of workers into the labor force. Unemployment remains below 4% at 3.9%.





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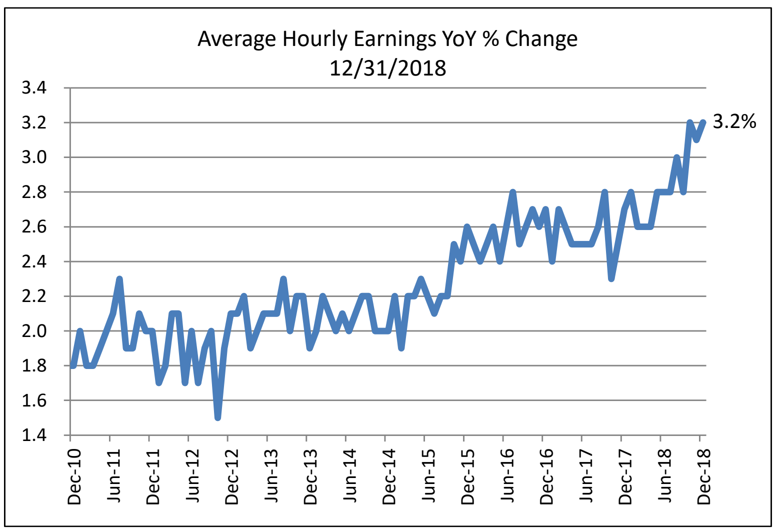
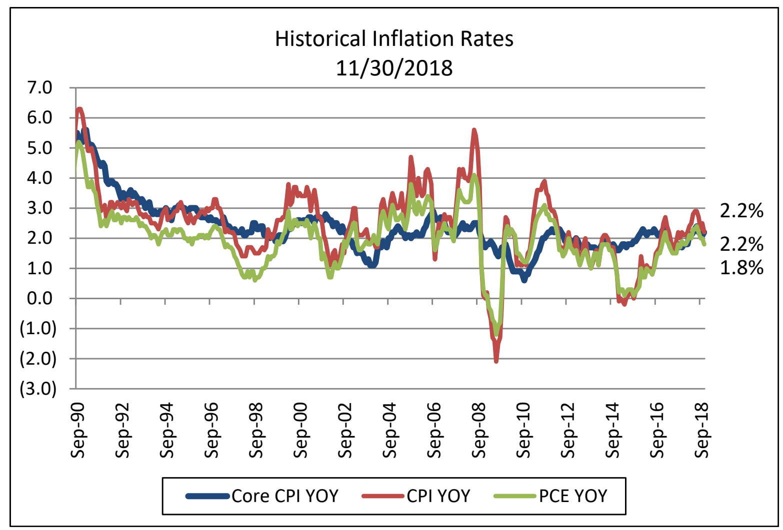
Economic Environment
Employment and Inflation – December 2018

- Average hourly earnings have continued to move higher, evidence of tighter labor market.
- All key inflation measures have reached the Feds targeted 2% level, including core measures that exclude food and energy, and are maintaining that range.
- The YOY Personal Consumption Expenditure Index (PCE), the Feds favored inflation gauge, also remains near their target level of 2%.





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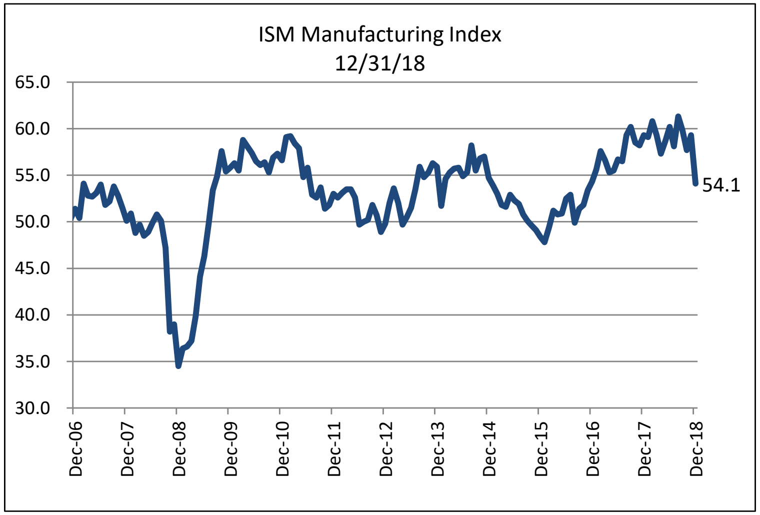
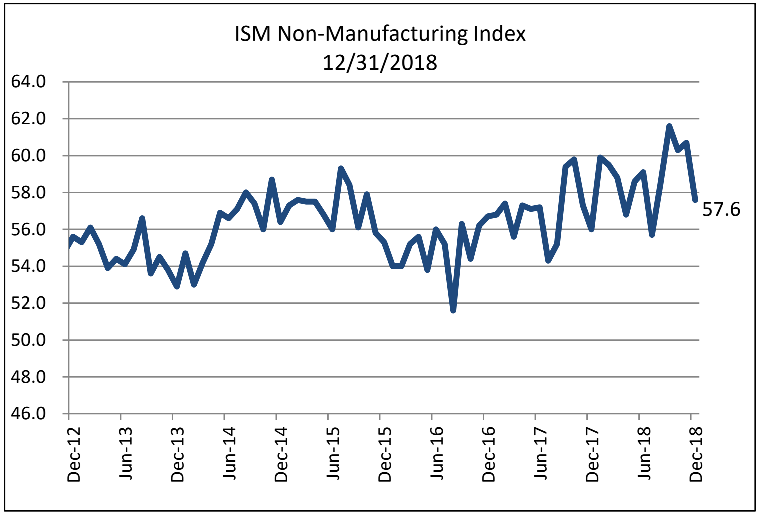
Economic Environment

Investment – December 2018

- Consumption, services, and manufacturing activity have recently moderated from a high rate.
- The manufacturing sector, as measured by the manufacturing purchasing manager index has moderated slightly but remains in a solid growth level of activity including orders, employment, and pricing.
- The Non Manufacturing index has also remained at a strong level, coming off a new record high in Q4.
- The 50 level is what divides expansion/contraction.





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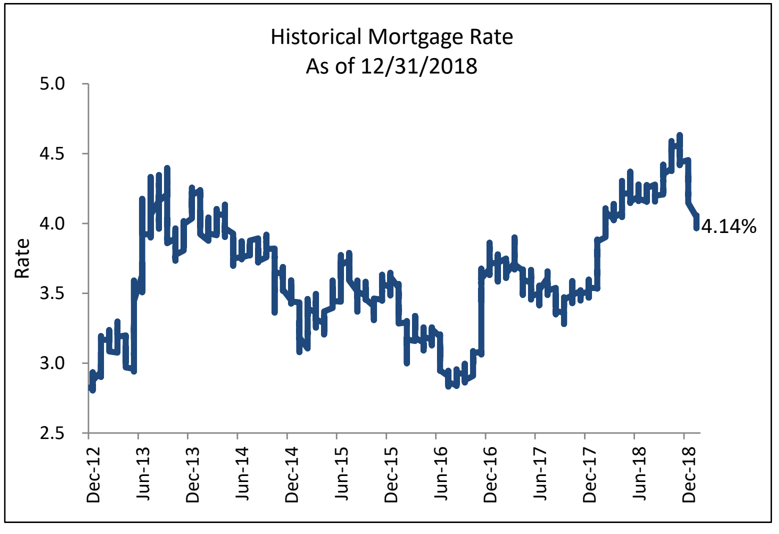
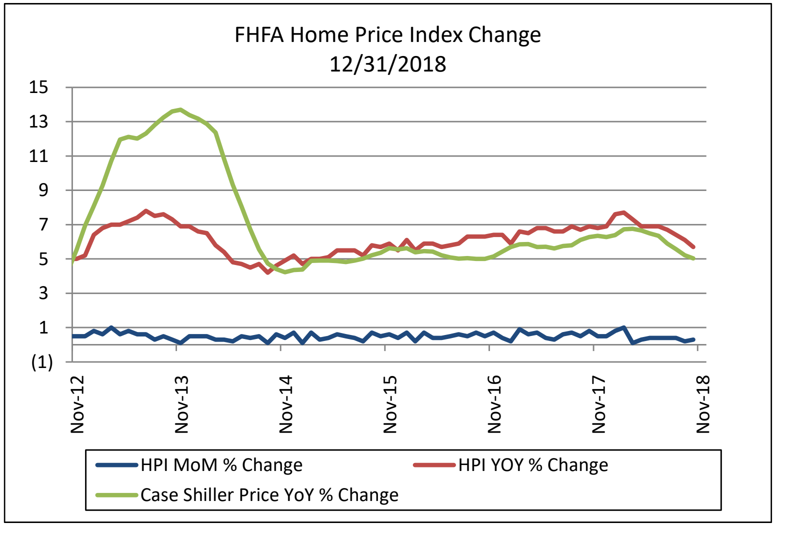
Economic Environment

Mortgage Rates and Housing – December 2018

- Higher mortgage rates and continued home price appreciation has begun to introduce affordability issues to the housing market, with the impact of higher prices outweighing the rate impact.
- After years of significant price increases, home price increases have begun to moderate.
- Continued demand with low rates had provided for continued steady increases in the Home Price Index and reducing available inventory.
- The recent moderation in prices and rise in rates has helped increase inventory and slow the pace of hope price increases.





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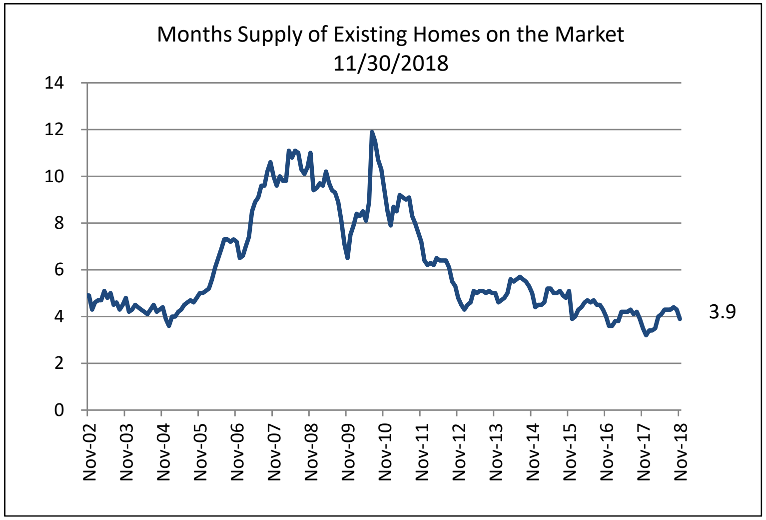
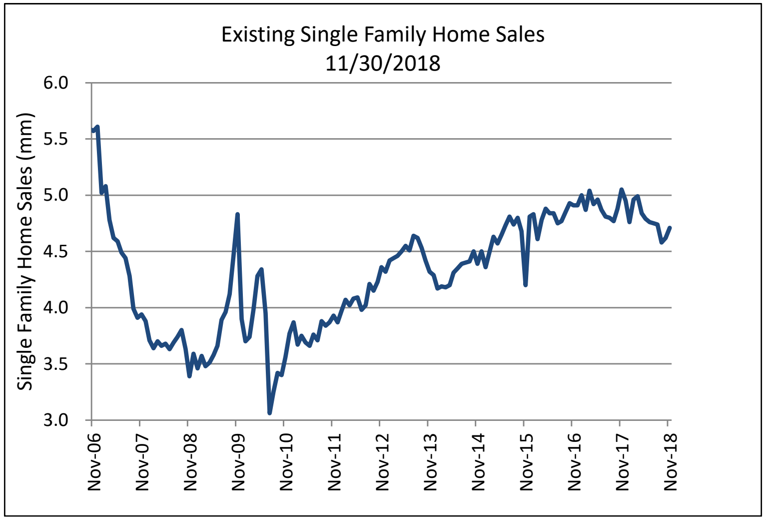
Economic Environment

Mortgage Rates and Housing – December 2018

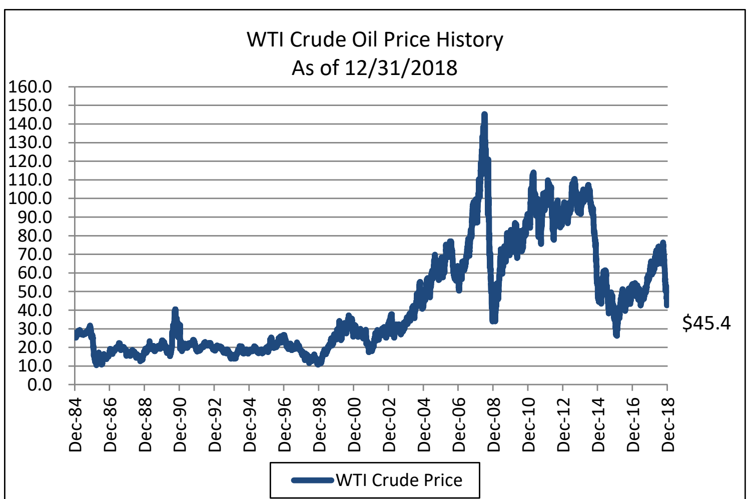
- Despite the higher level of mortgage rates, home purchase activity had remained solid, and has significantly reduced the number of homes for sale on the market – a key factor behind the significant rise in home prices.
- The continued growth in employment continues to translate into greater household formation and home sales, outweighing the higher level of rates this year.
- Home sales have moderated recently, with an uptick in inventory and a moderation in price growth. Affordability issues may be creeping in to housing which will likely temper further price increases.

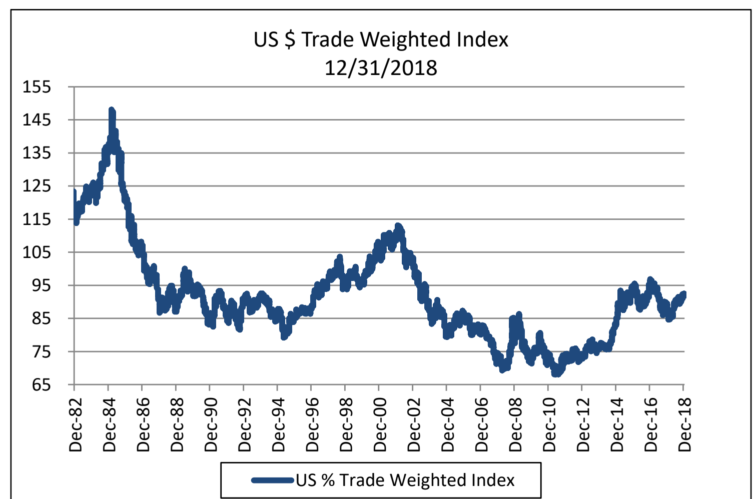




Economic Environment December 2018

- Two continued significant issues continue to be the price of oil and the value of the dollar.
- After a significant rebound in the price of oil based on expected high demand, prices have fallen as those expectations have been reduced, while high production has increased supply, dropping prices.
- The dollar has stabilized in a range recently after a period of appreciation.
- The direction the dollar takes will have implications for emerging markets, earnings of multinational corporate earnings, and trade.





Market Environment Summary
December 2018

- Interest rates have fallen after reaching our long held targets in a massive flight to quality; however, we expect them to return to their higher levels as the market normalizes and reflects true economic fundamentals. Equity markets and credit spreads should do the same.
- The Fed followed through on their planned fourth rate hike, but reduced the number of expected hikes in 2019 and expressed flexibility. Markets have finally recognized the punchbowl was being removed, and are evaluating if economic and corporate fundamentals can support the markets going forward.
- The Fed is also continuing to reduce its balance sheet, unwinding QE, by letting Treasury and MBS holdings run off. This, and the 2/10 spread has much less economic impact than market discussion.
- The current interest rate environment and wider yield spreads provide the most attractive yield opportunities in years, with high quality bond yields around 3.5%.
- The higher rates will surely increase market volatility and challenge some sectors in the equity market.
- Strong employment and income together with lower taxes, stronger corporate investment and earnings may enable the economy and equity markets to withstand a higher interest rate environment.
- The recent drop in Oil prices may provide an economic stimulus via lower gas prices and input costs. .
- Higher interest rates, trade agreements, Government shutdown, and geopolitical risks have increased market volatility but are likely to normalize as resolutions become clear.