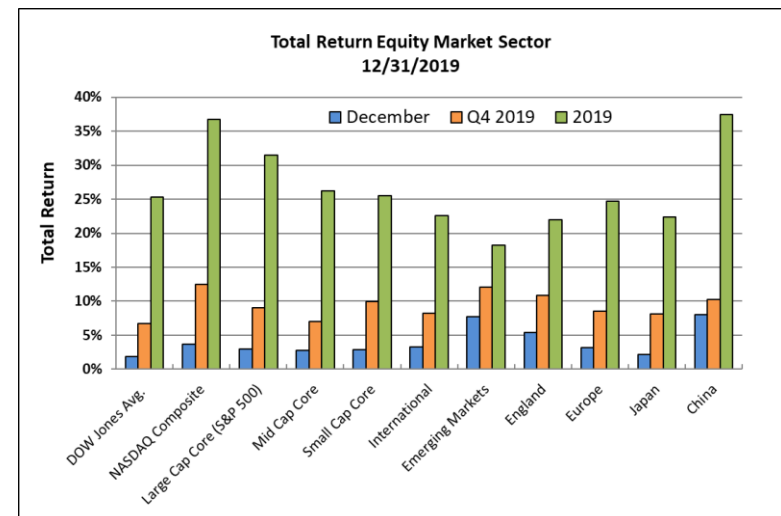
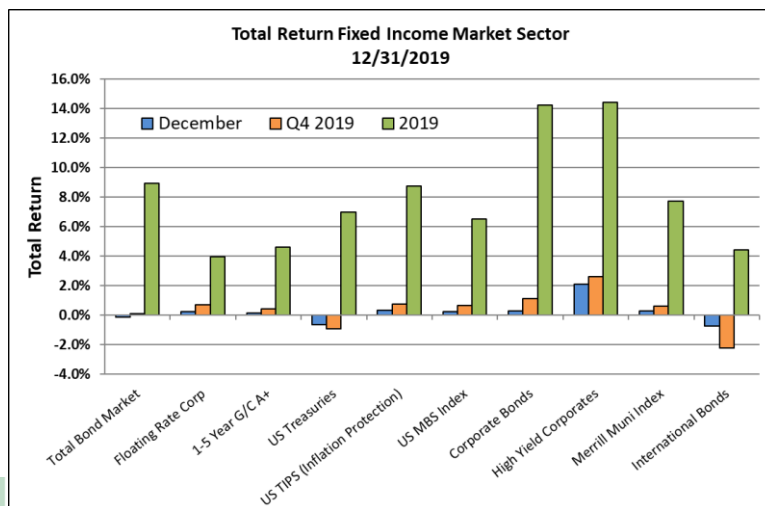

Market Review and Outlook

December 31, 2019

Market Review

December 31, 2019

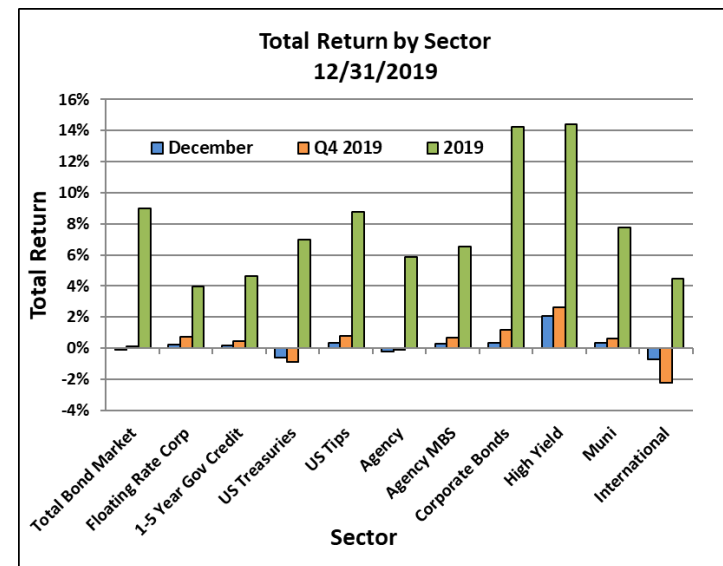
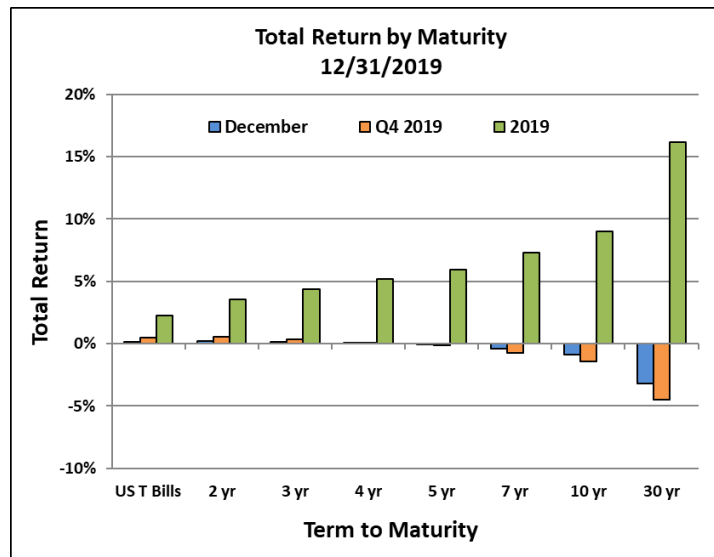
- As 2019 came to a close, virtually all major issues that hung over the market all year came to a resolution: US and China called a truce and made a trade agreement, British conservatives won significant majority assuring Brexit, and the Fed declared policy neutral for the foreseeable future.
- Equity markets rose to record highs as economic fundamentals remained broadly solid and central banks flooded the markets with easy monetary stimulus. Large cap and technology led the charge.
- Interest rates began to rise causing bond market to give back some of its extraordinary gains for the year pushing Treasury returns negative but higher yielding corporate and mortgages generating relatively strong returns.



Market Review

Yield Curve and Sector Returns – December 31, 2019

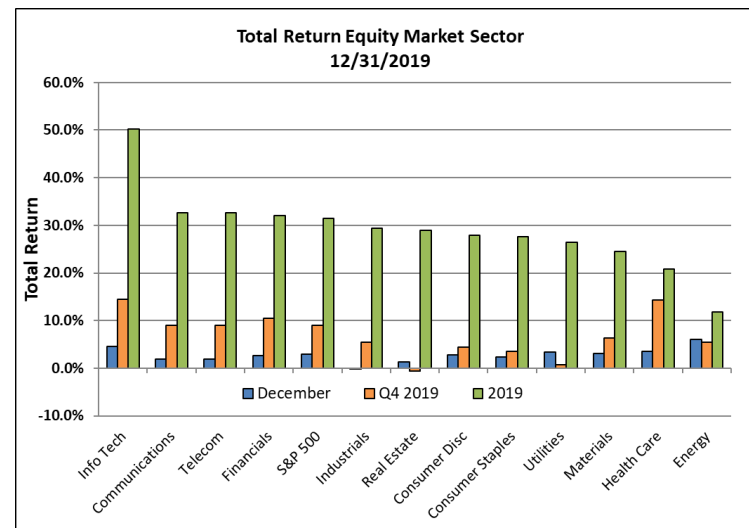
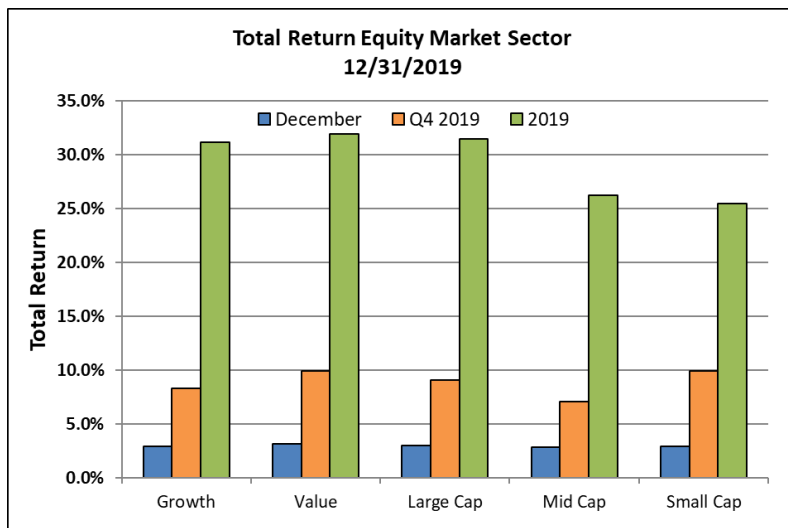
- Total returns on Treasuries in Q4 went negative as interest rates began to normalize to higher levels. Longer duration bonds suffered the greatest loss, giving back some of the extraordinary gains for the year.
- The Fed declared neutral interest rate policy and will be on hold for the foreseeable future, forcing markets to reevaluate the added rate cuts priced into the market.
- Based on economic fundamentals, excess liquidity, and reach for yield, corporate bonds and mortgage backed securities continued to perform well.



Market Review

Equity Market Returns – December 31, 2019

- The strong US economy, reduction in risk events, and ultra easy monetary policy helped propel US stocks to record highs led by large cap and technology stocks.
- Value stocks caught up to growth stocks during the 4th quarter led by financials as interest rates rose.
- High rates halted the upward momentum of REITS and Utilities during the 4th quarter.
- Energy and Health care put in a relatively good performance during Q4 after dragging most of the year.
- After giving way to Value stocks in Q4, Growth stocks seemed poised to take back their leadership in 2020.



Market Environment Summary

December 31

- As 2019 came to a close, many risk issues that hung over the market all year were somewhat resolved.
 - US/China trade talks came to a truce with a “Phase 1” agreement to be signed in January, and USMCA passed in the house.
 - The Federal Reserve declared a neutral policy after easing 3 times and resumed quantitative easing.
 - The UK voted decisively for a significant conservative majority, assuring Britain’s exit from the European Union.
 - Fed induced negative sentiment relating to risk events was overcome by actual positive US Domestic economic data.
- Despite the overhanging risks and contrary to the narrative all year, the US economy maintained a solid pace of growth, fueled by broad based employment and income growth.
- International trade slowed considerably, negatively impacting export oriented economies like Europe.
- The S&P 500 powered through the rhetoric to reach new record highs to close the year, fueled by significantly easier monetary policy and strong fundamentals.
- Interest rates rose again in Q4 amid strong economic fundamentals and the Fed making it clear they were not going to ease to the degree the market expected.
- Markets on the one hand were projecting the risk environment and arguing for, and pricing in an easing of monetary policy, while at the same time sending equity markets to all time highs and credit risk premiums near all time lows.
- Central banks around the world have paused on further easing, citing potential negative consequences such as asset price inflation (bubble), damage to banking systems from negative interest rates, lack of impact, and exhausting tools that might be needed in the future.

Market Outlook for 2020

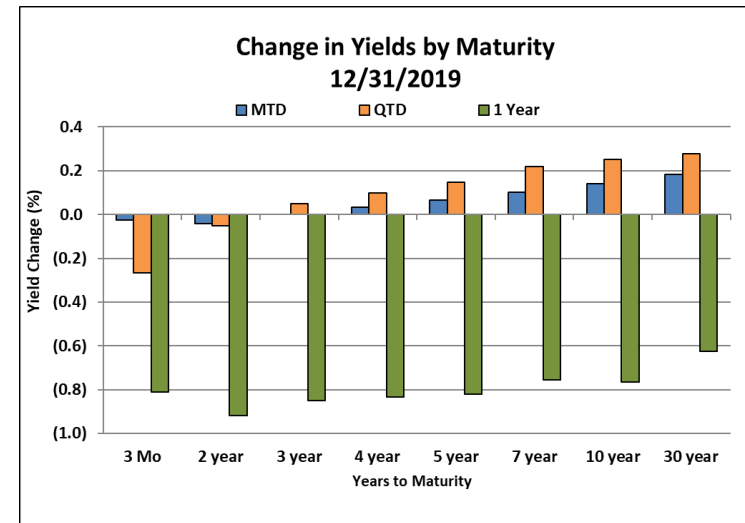
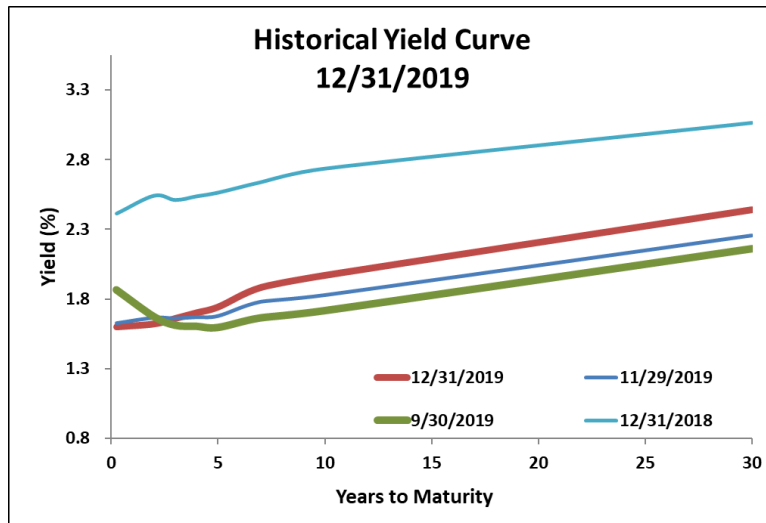
December 31

- We expect continued solid US economic growth in 2020 supported by a continued strong labor market.
- Inflation should continue to migrate higher and maintain a rate slightly above 2%.
- Monetary policy should remain on hold throughout 2020 and perhaps through 2021.
- Interest rates will likely remain in a narrow range, particularly in the short end, while longer term yields may rise with 10 year notes moving to around 2.25%.
- Yield spreads in the bond market should continue to grind tighter as investors search for yield.
- US Equity markets should grind higher as earnings will continue to grow moderately. S&P 500 may reach 3,500 with growth sectors regaining leadership, but income oriented equities fully participating.
- International equity markets may move higher as well, but will continue to be held back by slower economic activity given structural constraints.
- There is a risk that despite a healthy US consumer, pent up demand such as for auto's, may have been satisfied. Housing activity may continue to improve with ripple effect consumption.
- The impetus for continued growth and investment will be the continued evolution taking place in technological developments such as E-commerce and its associated requirements such as logistics, data processing and storage, and Artificial Intelligence.
- Further growth may take place in renewable energy and newer technology such as electronic vehicles which may see final demand. However the quest for faster speeds like 5G will see investment in development but is unlikely to be implemented for some time.

Market Review

Yield Curve – December 31, 2019

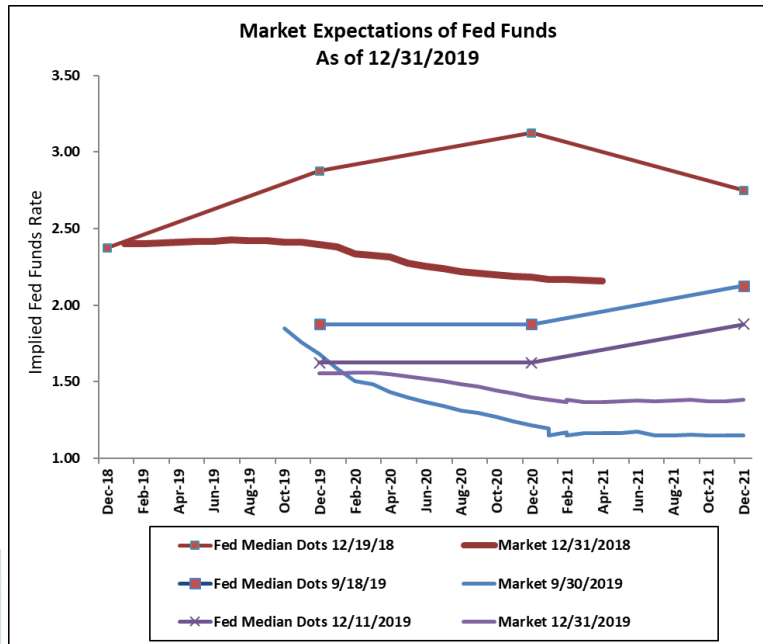
- Interest rose off their lowest levels in years as the Fed declared a neutral policy stance, contrary to what markets had been pricing in.
- The yield curve steepened with longer term rates rising more than short term rates, returning to a positive overall yield curve slope.
- Given the strong US domestic economic environment, a phase 1 trade deal, and a Fed on hold for the foreseeable future, interest rates are likely to return to their higher levels seen before the multitude of potential risk events that did not materialize.
- Foreign central banks are backing off their negative rate posture, taking technical pressure off yields.



Market Review

Monetary Policy – December 2019

- The Fed eased rates a third time, stopped unwinding QE, and declared a neutral policy stance, suggesting they are on hold for the foreseeable future.
- The market has backed off its expectations of multiple additional eases going forward, but continues to price in the prospects of at least one more ease for 2020.
- The Fed has let the market dictate their actions but is now on hold and expected to remain there throughout 2020.

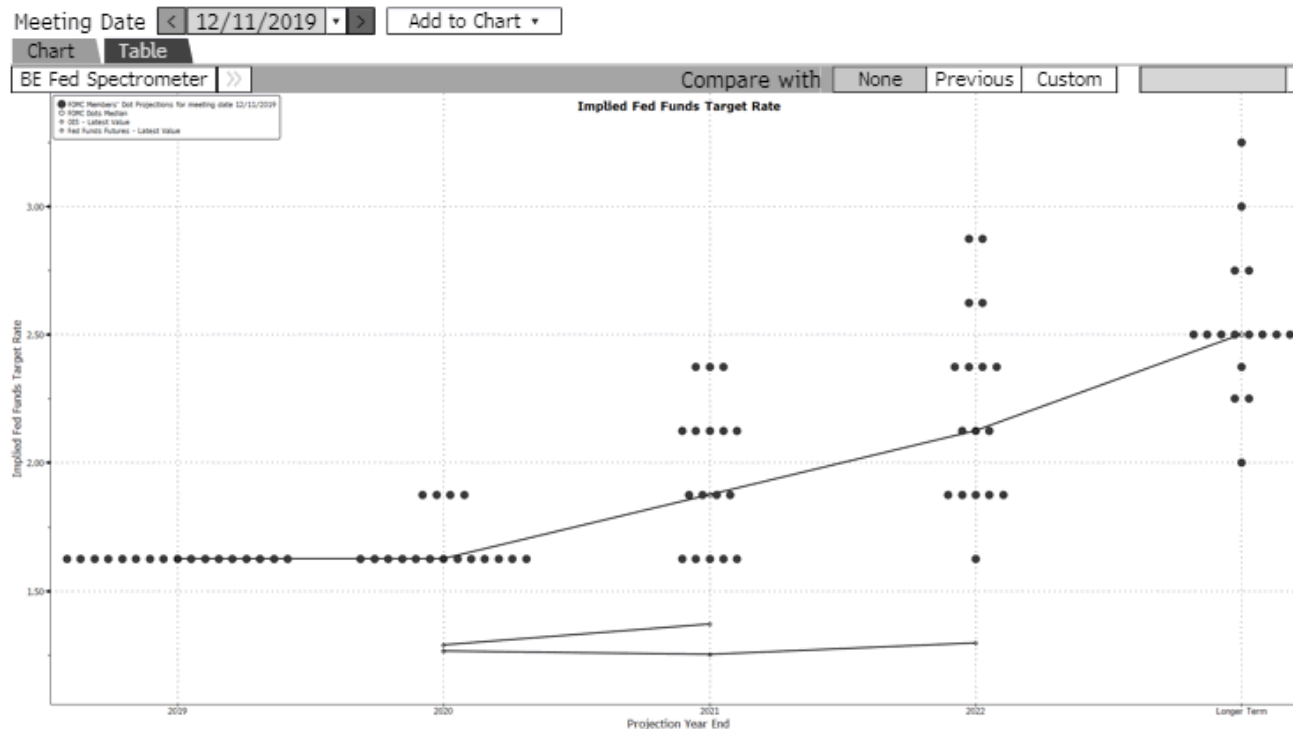


Federal Reserve Median Economic Projections					
As of 12/31/2019					
Change in GDP	Actual	2019	2020	2021	Longer Run
December 2019 Projection		2.2	2.0	1.9	1.9
September 2019 Projection		2.2	2.0	1.9	1.9
Actual Q3 2019 yoy/qoq	2.1/2.1%				
Unemployment Rate					
December 2019 Projection		3.6	3.5	3.6	4.1
September 2019 Projection		3.7	3.7	3.8	4.2
Actual Q3 2019	3.5%				
PCE Inflation					
December 2019 Projection		1.5	1.9	2.0	2.0
September 2019 Projection		1.5	1.9	2.0	2.0
Actual November 2019	1.5%				
Core PCE Inflation					
December 2019 Projection		1.6	1.9	2.0	
September 2019 Projection		1.8	1.9	2.0	
Actual November 2019	1.6%				
Projected Policy Path- Fed Funds					
December 2019 Projection	1.55	1.6	1.6	1.9	2.5
September 2019 Projection	1.9	1.9	1.9	2.1	2.5

Market Review

Monetary Policy – December 2019

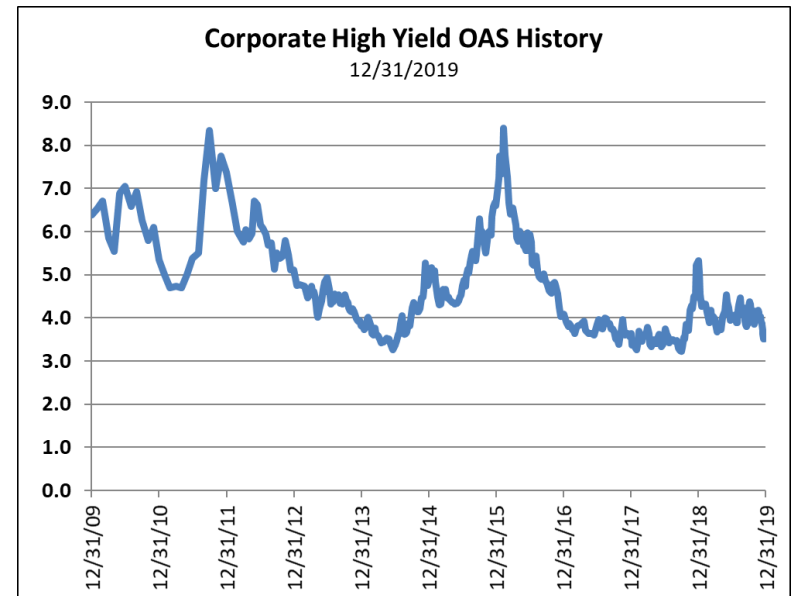
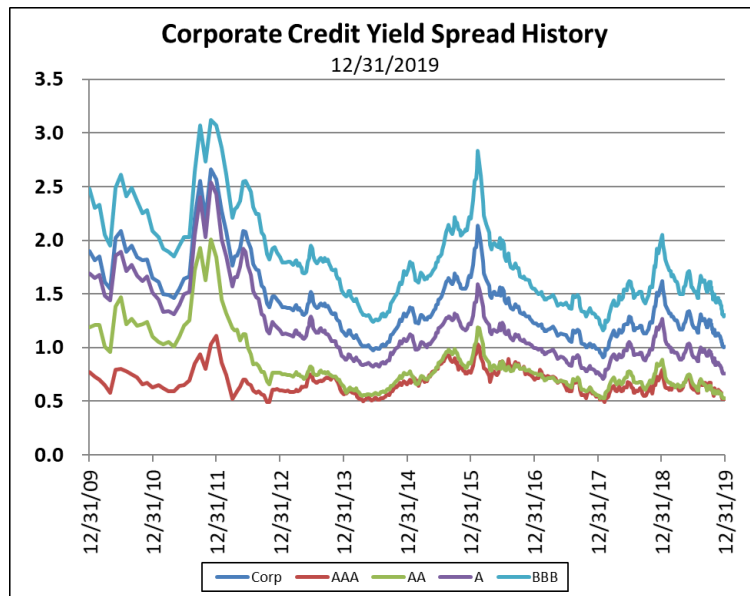
- The Fed Board has become extremely split, with some Governors wanting to not have eased at all, with other looking for more aggressive stimulus.
- The market continues to price in significantly more easing than even the most dovish Fed members.
- The Fed has recently been trying to walk back some of their more dovish comments.



Market Review

Corporate Yield Spreads – December 2019

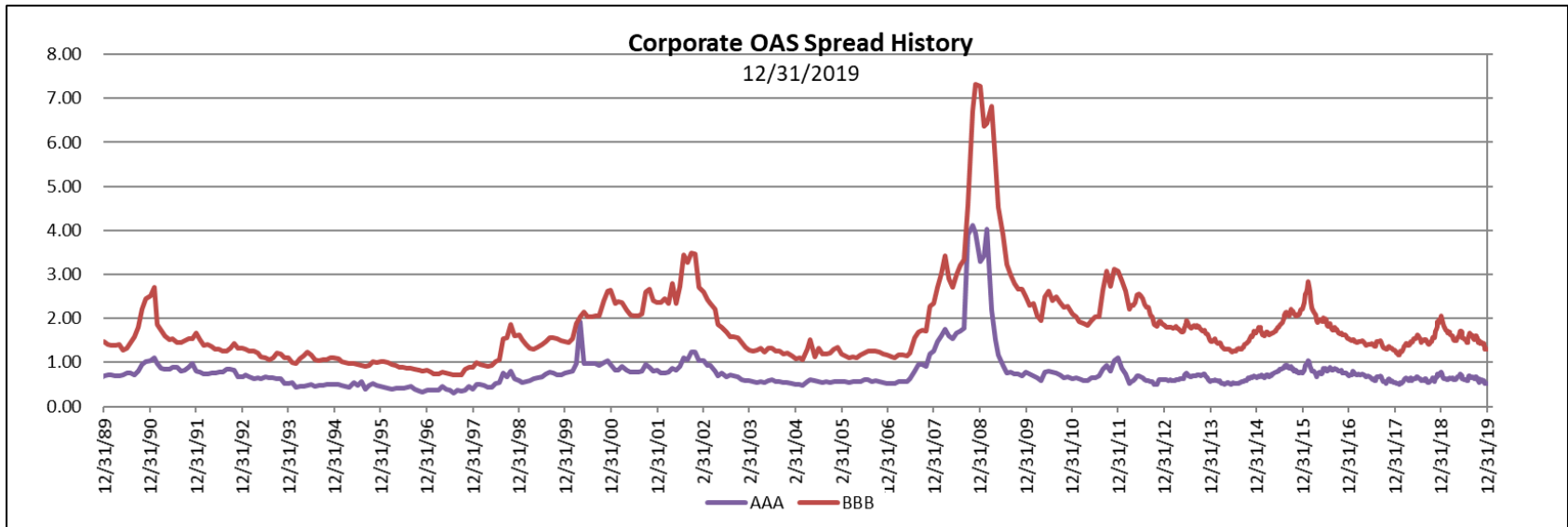
- Corporate yield spreads continued to tighten due to strong economic fundamentals, reduced risk events, and low interest rates pushing investors to search for yield.
- Continued strong economic conditions and corporate earnings continue to conflict with market narrative that has implied significant deterioration in economic fundamentals.
- Corporate credit conditions remain strong and risk of default has not risen to the degree that would push credit spreads wider. Spreads may continue to grind lower into 2020.



Market Review

Corporate Yield Spreads – December 2019

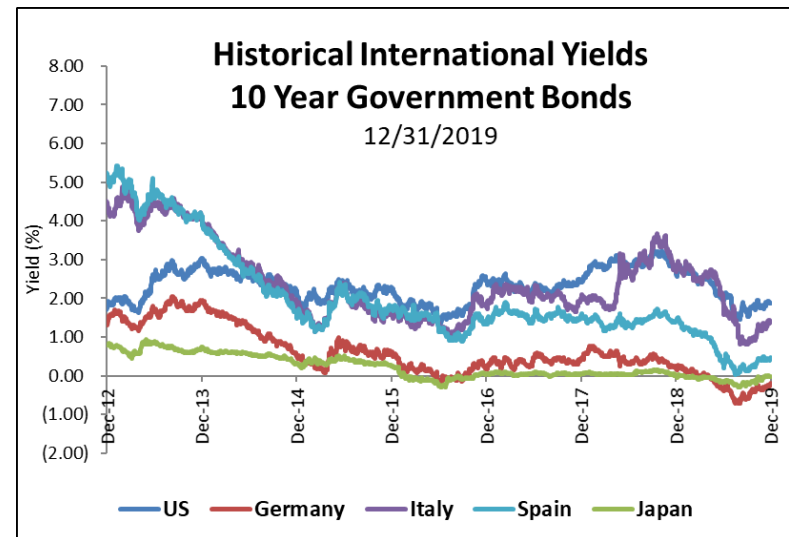
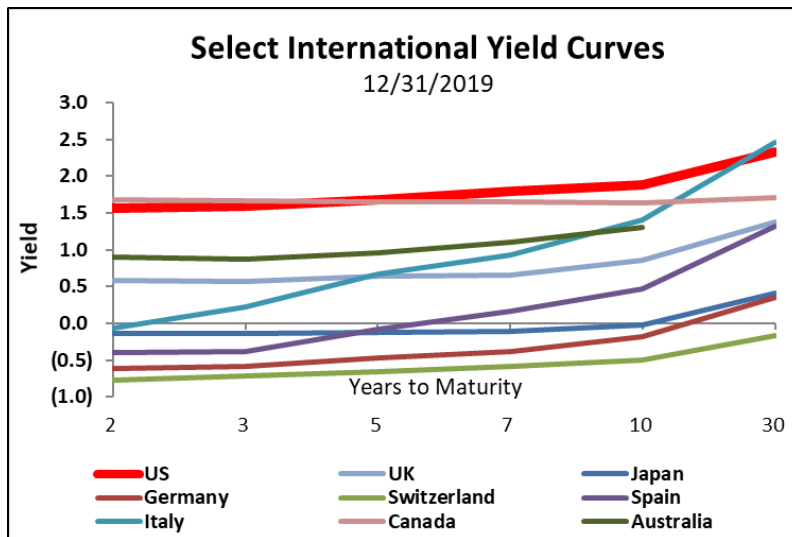
- When looking at corporate credit risk premiums on a longer term basis, it is useful to look at the mid to late 90's environment with similar policy and economic conditions.
- Steady policy after extended monetary ease provided a solid economic foundation, and the economy progressed with steady growth and inflation.
- Credit spreads remained steady and moved tighter as credit risk remained low and investors craved additional income.
- The Fed has been trying to repeat the playbook with an “insurance” ease of policy.



Market Review

International Yield Curves– December 2019

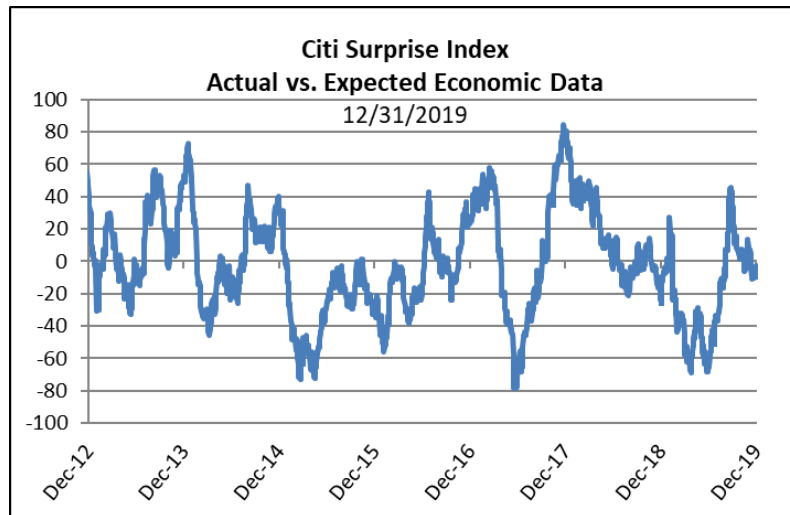
- Global central banks have begun to back off the notion of further push into negative rates territory, evidenced by comments by the new leader of the European Central Bank.
- As risk events were removed, global rates rose from extremely low, and negative levels.
- The US continues as one of the highest yielding developed countries.



Economic Environment

December 2019

- After a bout of stronger than expected information, economic data became bifurcated with employment, services, and consumer activity coming in better than expectations, while manufacturing softened.
- The continued narrative of imminent recession has faded a bit given broad based strength in the US economy, however on a global basis, export and manufacturing activity faded due to trade talks.
- Those countries most dependent on the related dynamics of exports and manufacturing saw the biggest moderation in economic activity.
- Inflation has continued to migrate higher after remaining subdued for a prolonged period.



	GDP YoY % Change		
	One Year		
	Q3 2019	Ago	Change
US	2.10	3.10	(1.00)
Eurozone	1.20	1.60	(0.40)
Germany	0.50	1.10	(0.60)
France	1.40	1.50	(0.10)
Italy	0.32	0.38	(0.06)
UK	1.10	1.60	(0.50)
Canada	1.50	2.30	(0.80)
Mexico	(0.30)	2.52	(2.82)
Australia	1.70	2.50	(0.80)
Japan	1.70	(0.30)	2.00
China	6.00	6.50	(0.50)
Russia	1.70	2.20	(0.50)
Brazil	1.19	1.54	(0.35)

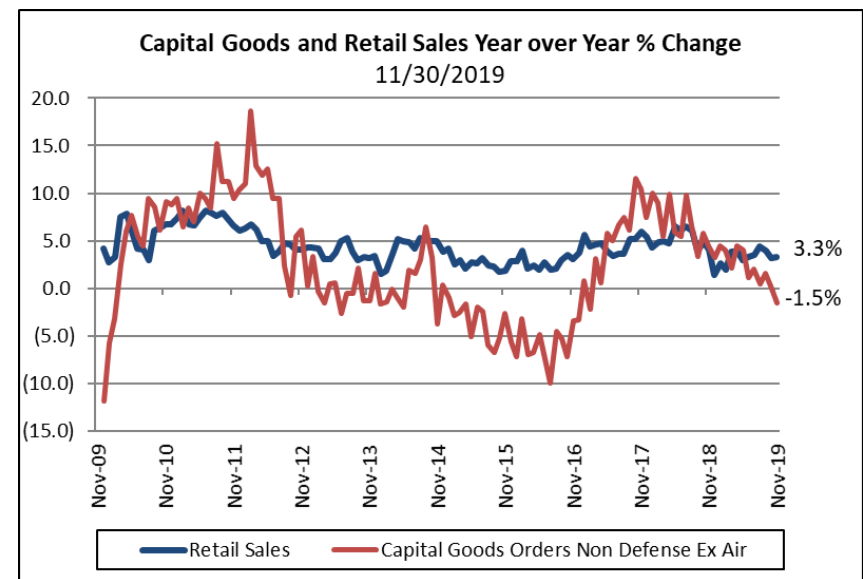
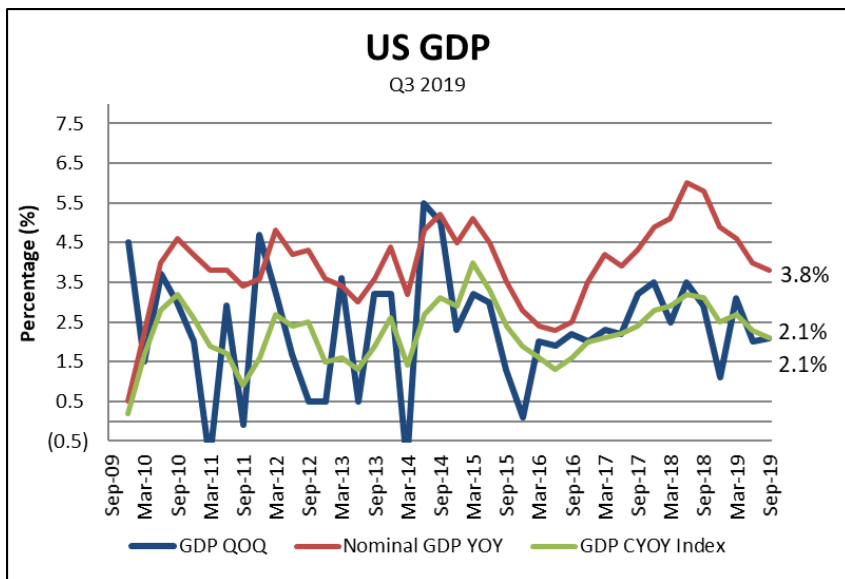
	Inflation YoY % Change		
	One Year		
	Q4 2019	Ago	Change
US	2.10	2.20	(0.10)
Eurozone	1.00	1.90	(0.90)
Germany	1.10	2.10	(1.00)
France	1.00	1.90	(0.90)
Italy	0.20	1.60	(1.40)
UK	1.50	2.30	(0.80)
Canada	2.20	1.70	0.50
Mexico	2.97	4.72	(1.75)
Australia	1.70	1.90	(0.20)
Japan	0.50	0.80	(0.30)
China	4.50	2.20	2.30
Russia	3.50	3.80	(0.30)
Brazil	3.27	4.05	(0.78)

*Inflation as of 11/30/2019

Economic Environment

December 2019

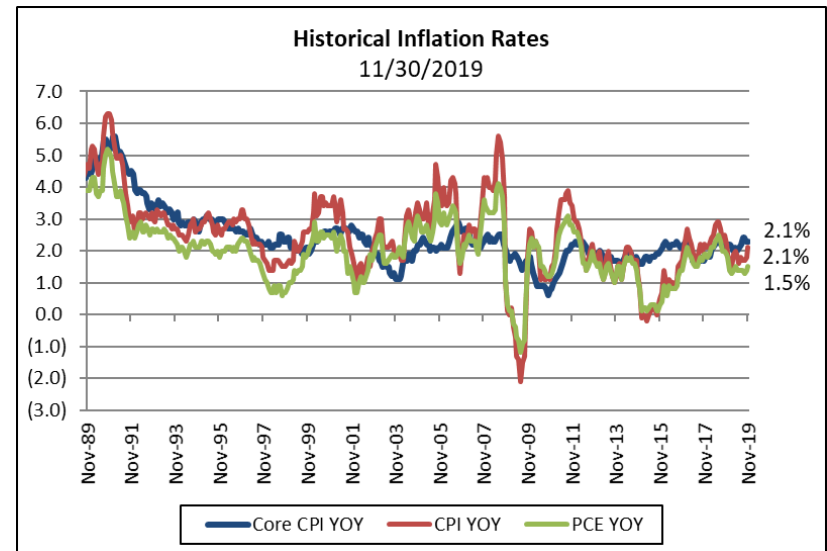
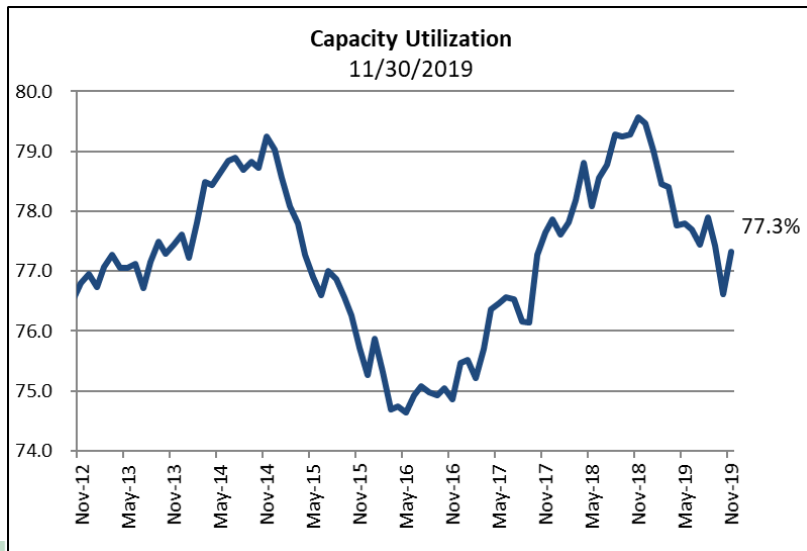
- Economic activity has moderated but remains solid. Year over year comparisons look low due to robust year ago levels.
- Consumption remains strong while investment has decelerated due to extended trade talks.
- Retail sales have ticked up recently while investment may have paused due to trade uncertainties.



Economic Environment

Employment and Inflation – December 2019

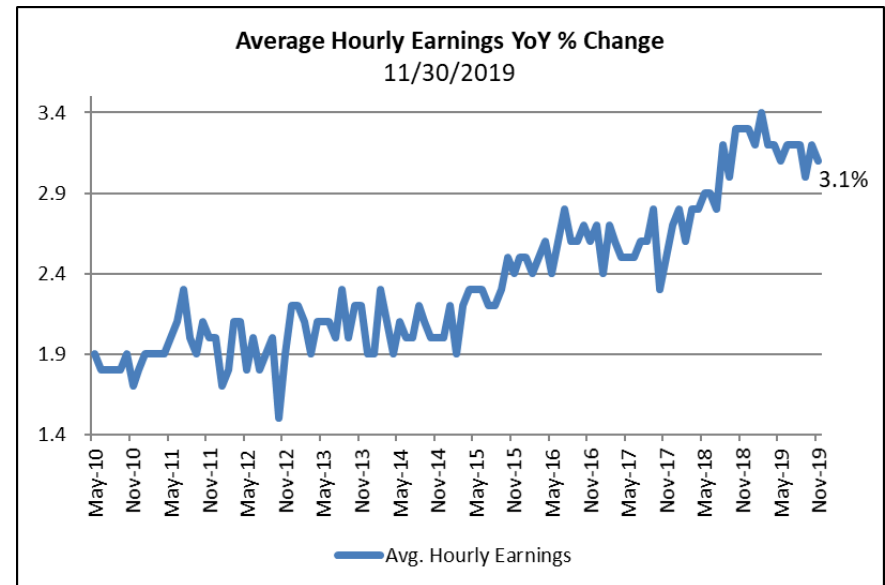
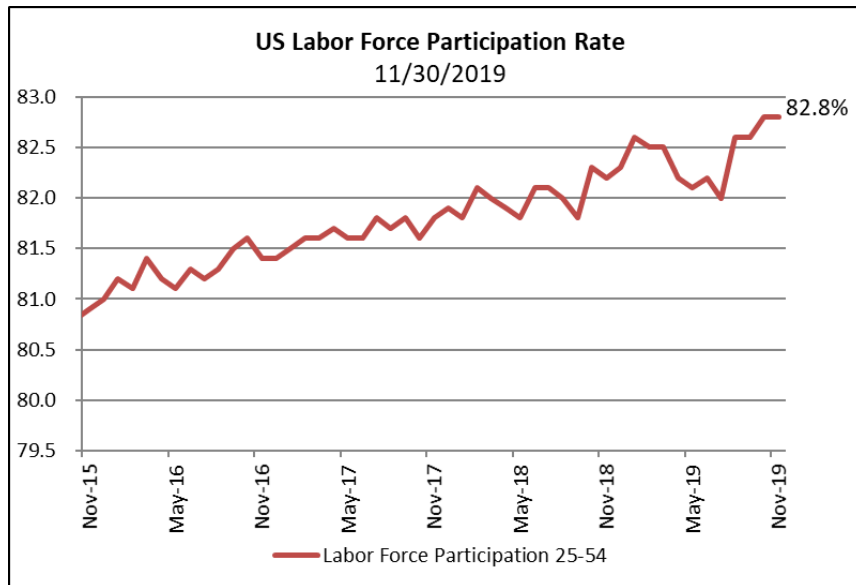
- Inflation, by most all measures, has been maintaining a range between 1.5% and 2% for about two years, essentially in the range of Fed targets.
- While capacity utilization has increased recently, it remains below levels that would normally push prices higher due to tighter resources.
- The YOY Personal Consumption Expenditure Index (PCE), the Fed's favored inflation gauge, also reached the target area of 2%, but has recently dipped. Core PCE is closer to 2%.



Economic Environment

Employment and Inflation – December 2019

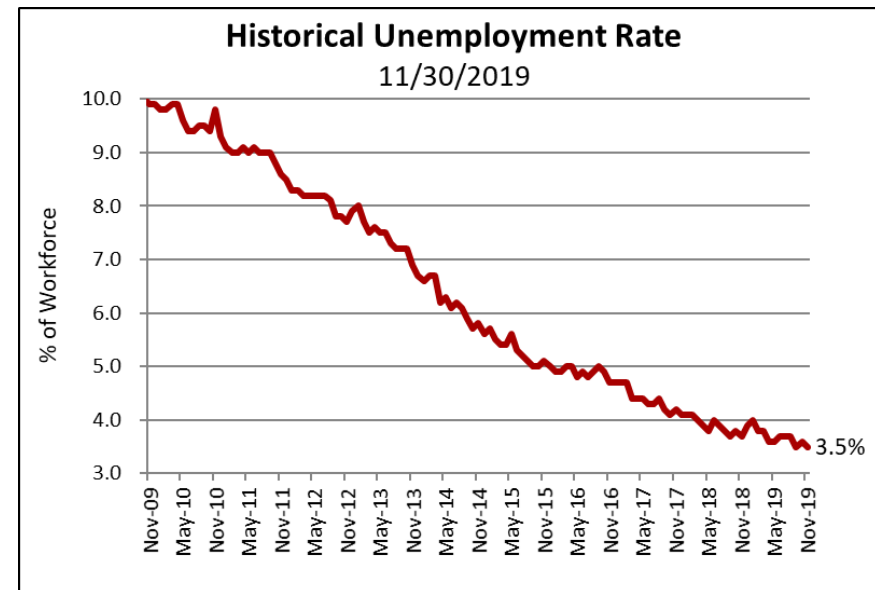
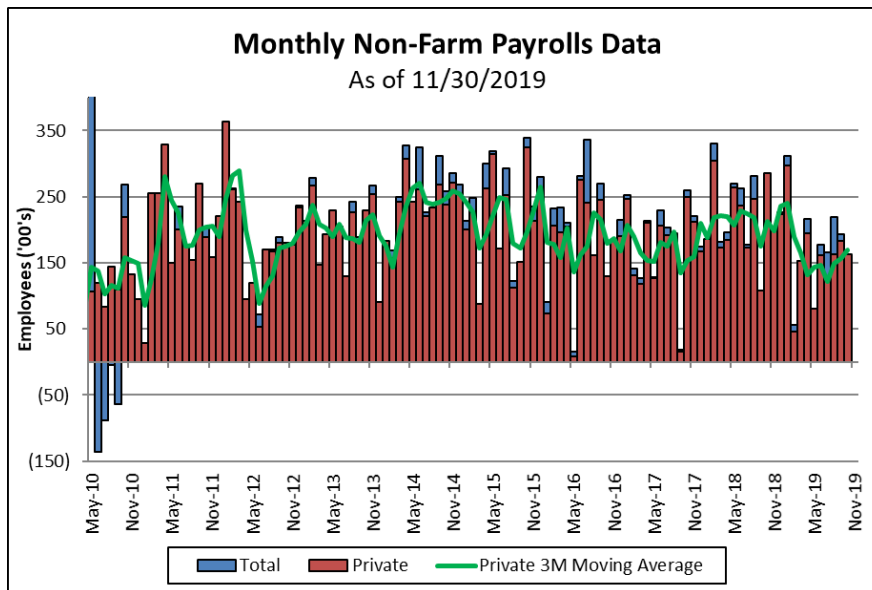
- Like overall capacity utilization, employment utilization (the labor force participation rate) at the prime working age has been rising steadily.
- Average hourly earnings have moderated recently however remain in an upward trend showing strong demand for labor and positive real income growth.



Economic Environment

Employment – Monthly Payrolls – December 2019

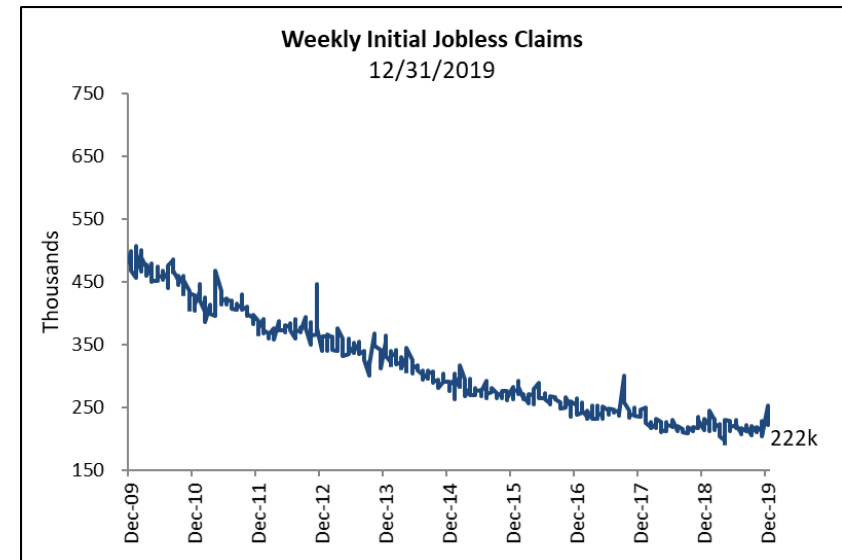
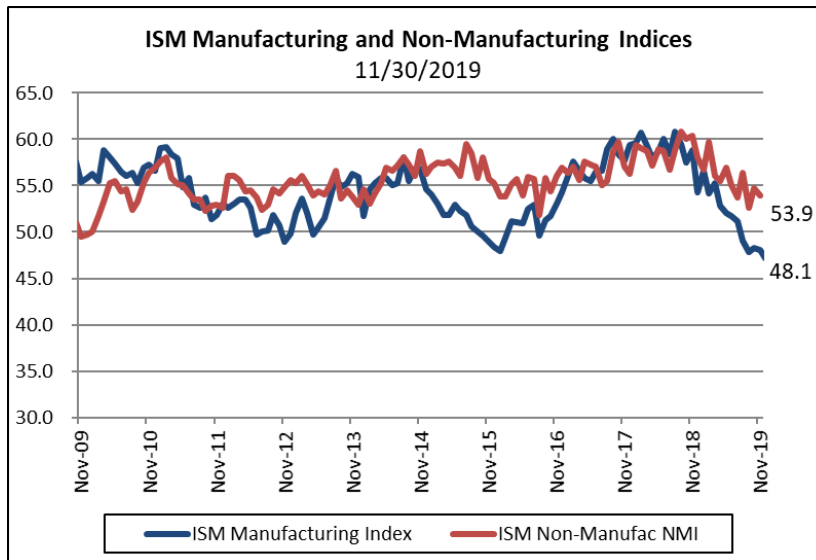
- Monthly additions to payrolls has maintained a solid pace at around 150k per month, albeit down from over 200k last year.
- The unemployment rate has fallen to 3.5%, with record low rates across categories.
- There continued to be more jobs available than job seekers.



Economic Environment

Employment – Monthly Payrolls – December 2019

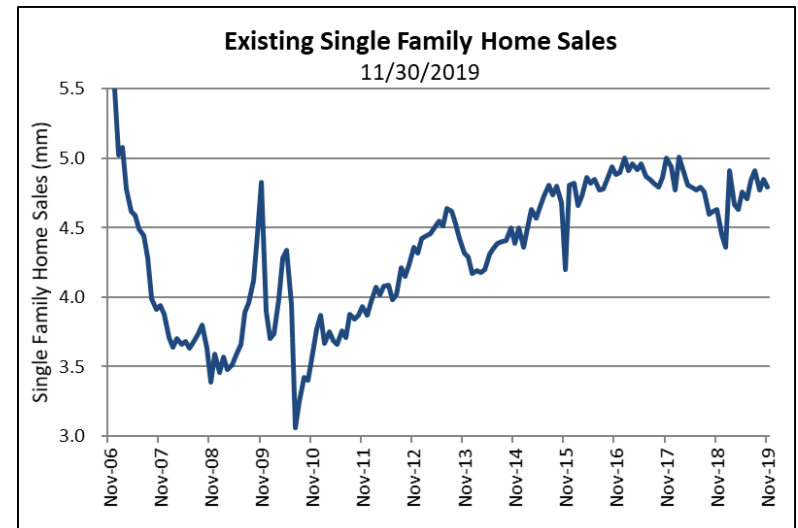
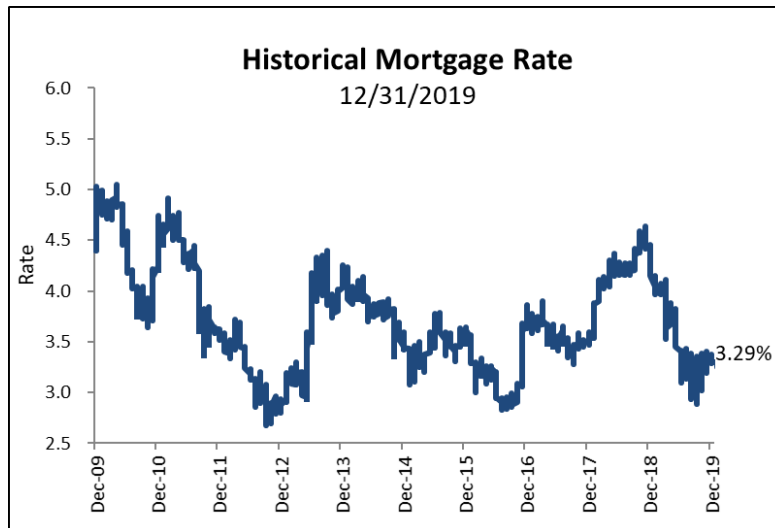
- Consumption, services, and manufacturing activity have recently moderated from a high rate.
- The manufacturing sector, as measured by the manufacturing purchasing manager index has fallen recently likely due to trade talks, and has fallen below 50.
- The Non Manufacturing index has remained at a solid level above 50.
- Initial claims for unemployment remain low, indicating limited layoffs.



Economic Environment

Mortgage Rates and Housing – December 2019

- The recent drop in interest rates has brought mortgage rates down with it, more than 1% from their highs of last year.
- Lower mortgage rates have supported home sales to some degree, and recent moderation in home prices has generated renewed activity in the housing market.
- The strong jobs market has provided a foundation for new household formation.
- Higher income, moderating home price increases, increased inventory, and lower interest rates have led to an increase in home purchases.



Economic Environment

December 2019

- The dynamics of supply and demand in the oil market have begun to settle into a range of equilibrium after a period of increased price volatility.
- US oil production continues to increase and taking over the top spot in oil production. OPEC continues to curb production. Despite sanctions, the supply of oil has recently increased.
- Expectations for oil demand have increased from low expectations.
- The dollar has remained relatively stable recently, and volatility in currency markets may remain low with significantly reduced central bank policy moves.

