Economic/Markets Update

October 2019

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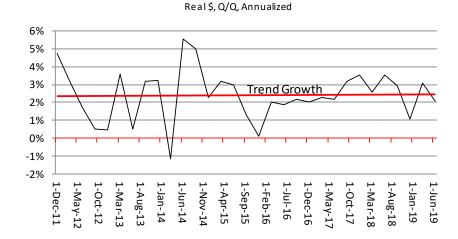
Please refer to the last page of this report for Stifel Fixed Income Capital Markets disclosures

Risks & Opportunities

- **GDP** Global growth and trade uncertainty weigh on business fixed investment and manufacturing. PCE is solid, but housing and autos are stagnant.
- Inflation Cyclical components firm, while acyclical (e.g. technology) are minimally responsive to policy actions.
- Employment Business confidence churns, consumers remain confident, hiring decelerates.
- **Financial Stability** Leverage and valuations pose risk to the system.



GDP Trend Growth Has Been Stable Around 2.25%



GDP

2019Q03	1.78%	2.06%	1.50%
Source: Federal Reserve, St	ifel		

FRB ATL* FRB NYC*

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Note: Federal Reserve data represents "Nowcasts", or contemporaneous modeling of factors that aggregate to GDP. 10/01/19

Median GDP	2019	2020	2021
Fed Projection	1.90%	1.90%	2.10%

Source: Federal Reserve, Stifel

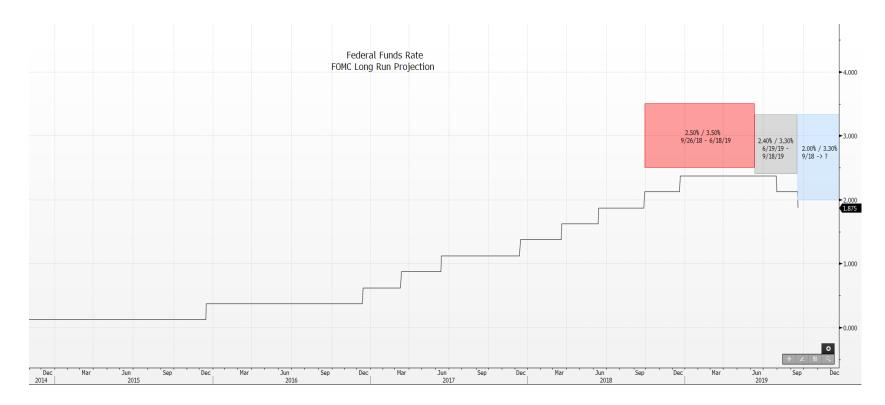
Note: FOMC forecasts are as of September 18, 2019; Summary of Economic Projections

Source: Bureau of Economic Analysis, Bloomberg Finance L.P., Stifel





Fed Lowers the Neutral Rate and Retreats

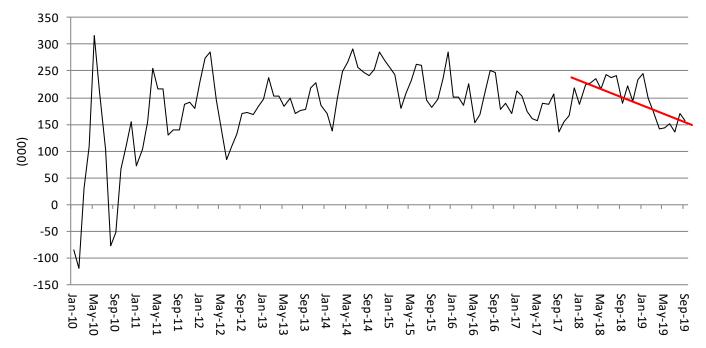


Source: Federal Reserve, Bloomberg Finance L.P., Stifel



Slow Deceleration in Payroll Growth

Nonfarm Payrolls 3M Average



Source: Bureau of Labor Statistics, Bloomberg Finance L.P., Stifel



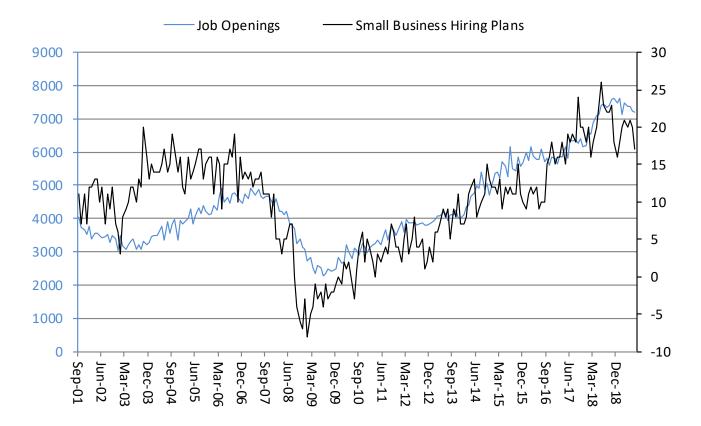
Unemployment Rate(s) Hold Near Secular Lows



Source: BLS, Bloomberg Finance L.P., Stifel



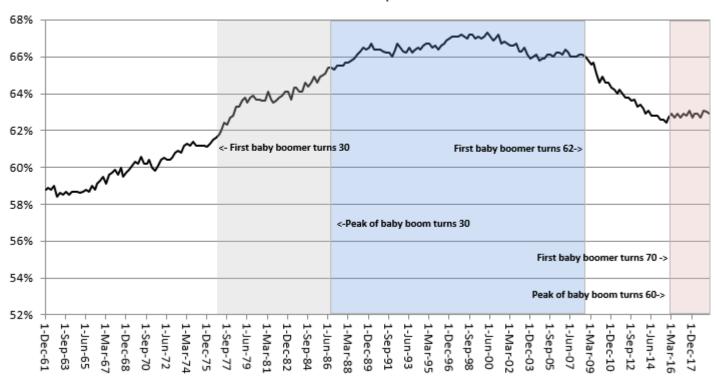
Hiring Metrics Could Be Characterized as "Firm" (but may have peaked)



Source: BLS, NFIB, Bloomberg Finance L.P., Stifel



U.S. Demographic Profile is Part of the Poor Participation Rate Narrative



Labor Force Participation Rate

Source: Federal Reserve, Bloomberg Finance L.P., Stifel



Core PCE Fails to Sustainably Attain Fed's 2.0% Target

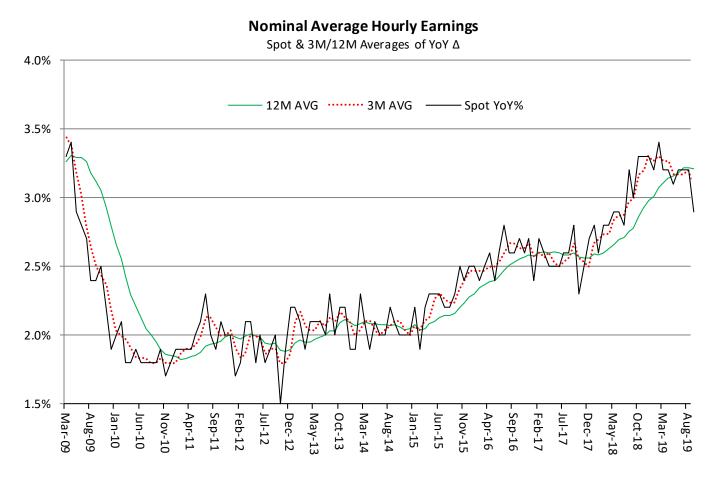
Below Target More Often Than Above Target



Source: Federal Reserve, BEA, Bloomberg Finance L.P., Stifel



Average Hourly Earnings: Starting to Roll Over?



Source: BLS, Bloomberg Finance L.P., Stifel

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Market Measures of Inflation Declined in Q2

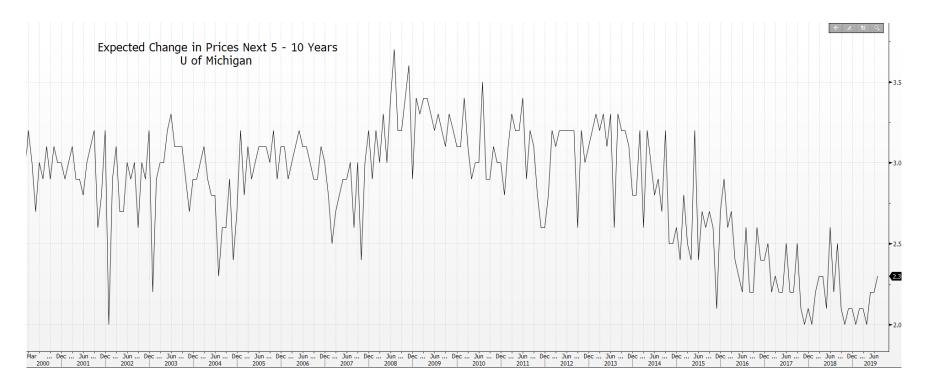
Market Derived Measure



Source: Bloomberg Finance L.P., Stifel



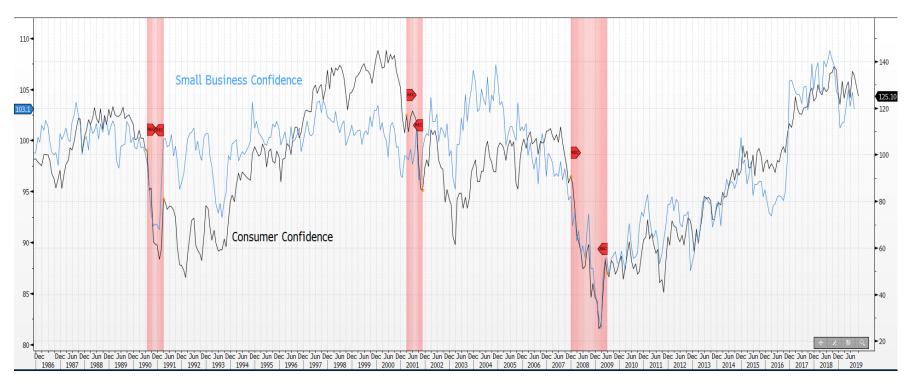
Consumer Expectations for Inflation Remain Subdued



Source: University of Michigan, Bloomberg Finance L.P., Stifel



Confidence is a Leading Indicator

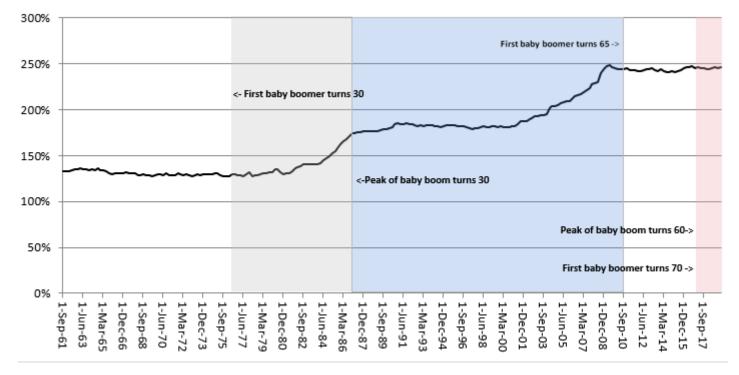


Source: Conference Board, Bloomberg Finance, L.P, Stifel



High Debt Levels in an Ageing Society

Total Debt as a % GDP

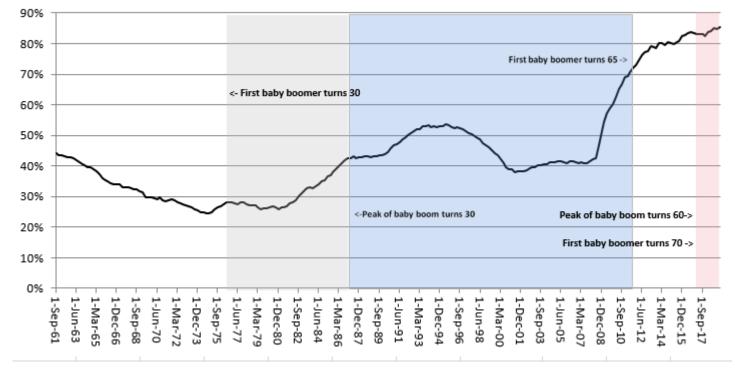


Source: Federal Reserve, Bloomberg Finance L.P., Stifel



Federal Debt Levels are Set to Explode Due to Demographics

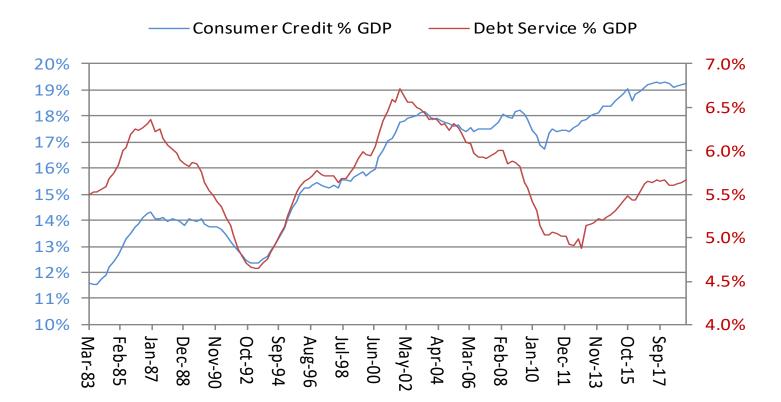
Federal Debt as a % GDP



Source: Federal Reserve, Bloomberg Finance L.P., Stifel



Consumer Debt at Record Levels Relative to GDP; Servicing Costs are Moving Higher

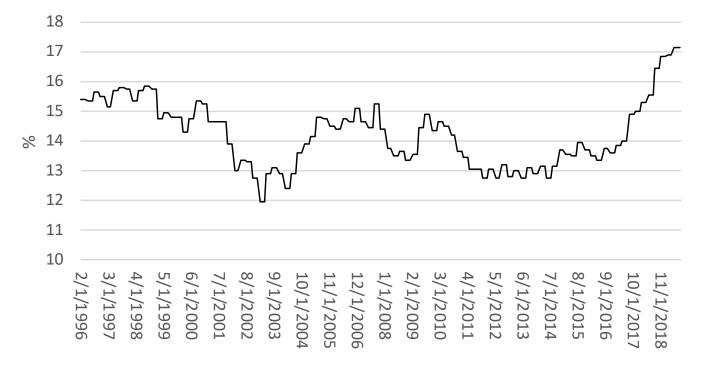


Source: Federal Reserve, BEA, Bloomberg Finance L.P., Stifel



Consumer Cost of Carry is Going Up

Credit Card Assessed Interest Commercial Bank



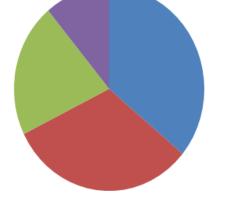
Source: Federal Reserve, Bloomberg Finance, L.P., Stifel



Consumer Debt Breakdown Ex-Mortgages

College, Cars, and Cards

Туре	\$ Billions		%
Student Loan Debt	\$	1,478	36%
Auto Loans	\$	1,297	32%
Credit Card Debt	\$	868	21%
Other	\$	412	10%
Total:	\$	4,055	29%



Student Loan Debt
Auto Loans
Credit Card Debt
Other

Source: Federal Reserve, Bloomberg Finance L.P., Stifel



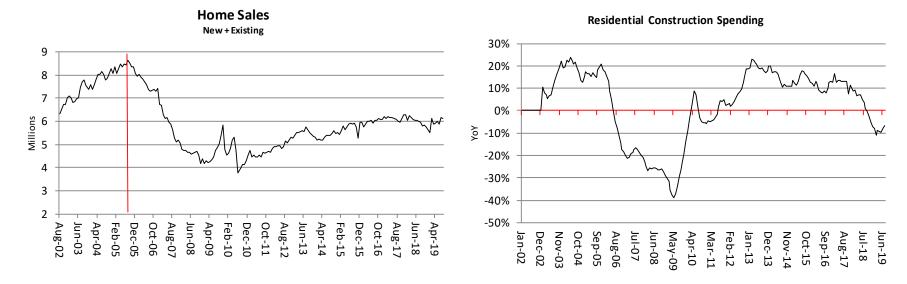
Corporate CFOs Leverage the Balance Sheet



Source: Federal Reserve, Bloomberg Finance, L.P., Stifel



Housing Sales Churn – Residential Construction Spending Collapses

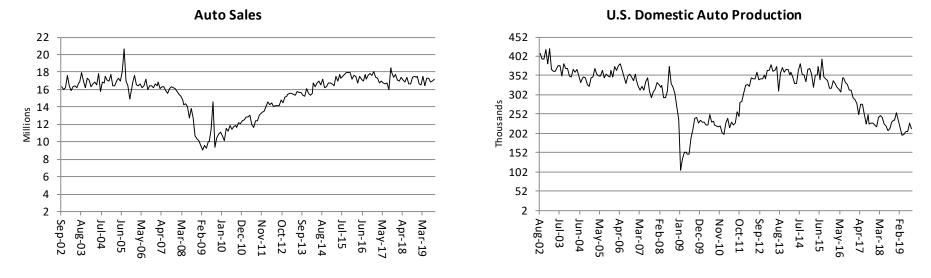


Source: National Association of Realtors, Census Bureau, Bloomberg Finance L.P, Stifel

Source: Census Bureau, Bloomberg Finance L.P, Stifel

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Auto Sales Flat Line and Manufacturers Rein in Production



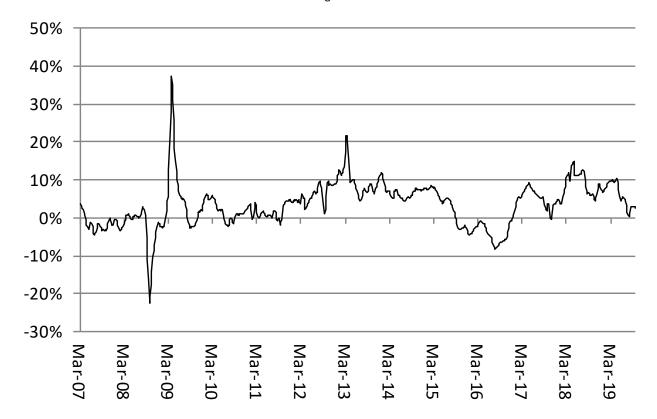
Source: WARD's Automotive Group, Bloomberg Finance L.P, Stifel

Source: Bureau of Economic Analysis, Bloomberg Finance L.P, Stifel



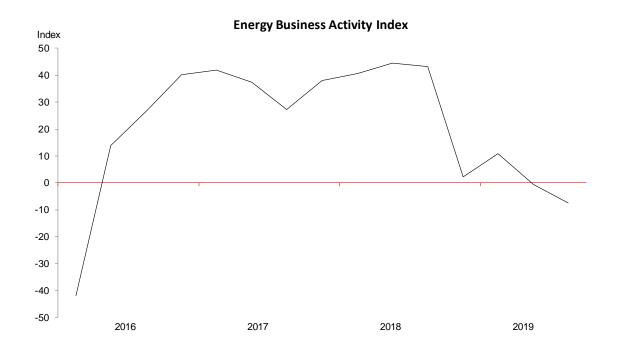
Oil Production – Responding to Diminished Demand?

US CRUDE OIL PRODUCTION 4 Week Average % Δ v 6M Prior



Source: Department of Energy, Bloomberg Finance L.P., Stifel

Energy Sector is on Its Back Foot



"Overall sentiment is very negative due to low natural gas prices and lack of available funding for oil and gas exploration. Investors have been hard hit by catastrophic declines in the price of oil and gas securities. Additionally, many oil shale projects are failing to meet production projections. Oil service companies have no pricing power [and are] delivering services at rock bottom levels. Further cost declines will not be forthcoming. It seems no one has any money for oil and gas projects. Lack of Wall Street participation in oil is very apparent."

Source: Federal Reserve Bank of Dallas

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Trade is Only One Component of the Broader Battle

Intractable Trade Issues:

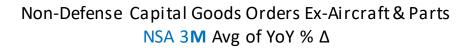
- Unauthorized or forced transfer of technology
- Rampant violation of intellectual property protections
- Over reliance on state sponsorship of industry

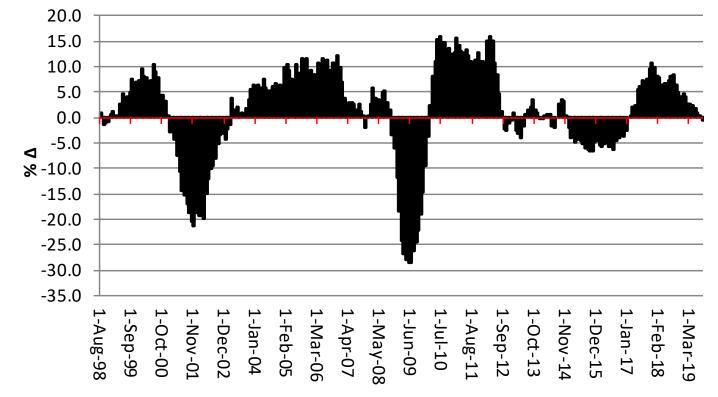
Broader Battle:

- Competition for geopolitical dominance in the Indo-Pacific region.
- U.S. has been unchallenged in the post-World War II era.
- In 2013, China announced the launch of the Belt and Road Initiative, a massive infrastructure project (estimated cost in excess of \$1.2 trillion) designed to "break the bottleneck in Asian connectivity," according to President Xi. The project involves over 60 countries and creates a web of financial, economic, military, and social ties intended to cement China's dominance in the region.



Durable Goods Order Flows are Slowing!



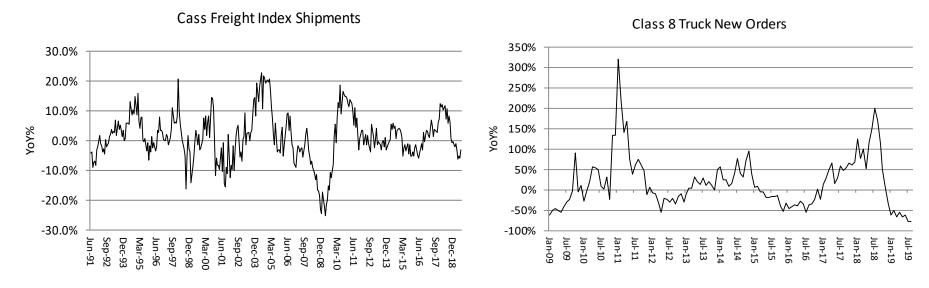


Source: Census Bureau, Bloomberg Finance L.P., Stifel



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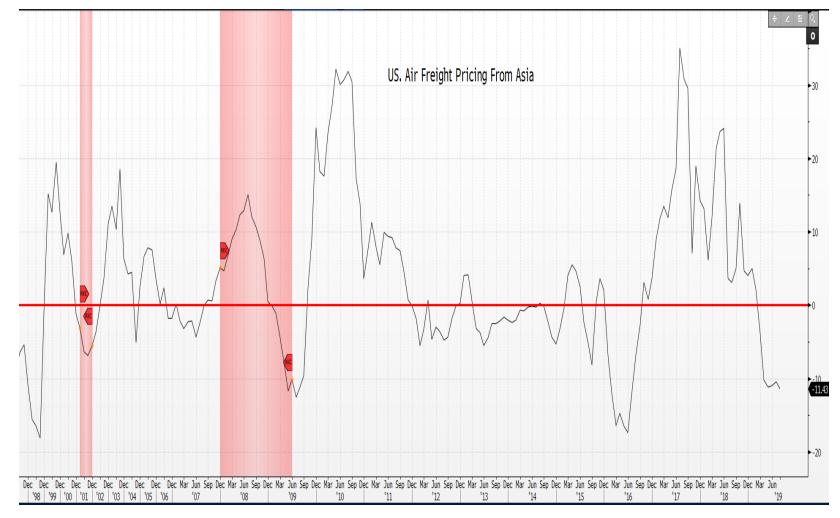
Freight and Trucking Data Shows Signs of Softening



Source: Cass Information Systems, Bloomberg Finance L.P., Stifel

Source: FTR Associates, Bloomberg Finance L.P., Stifel

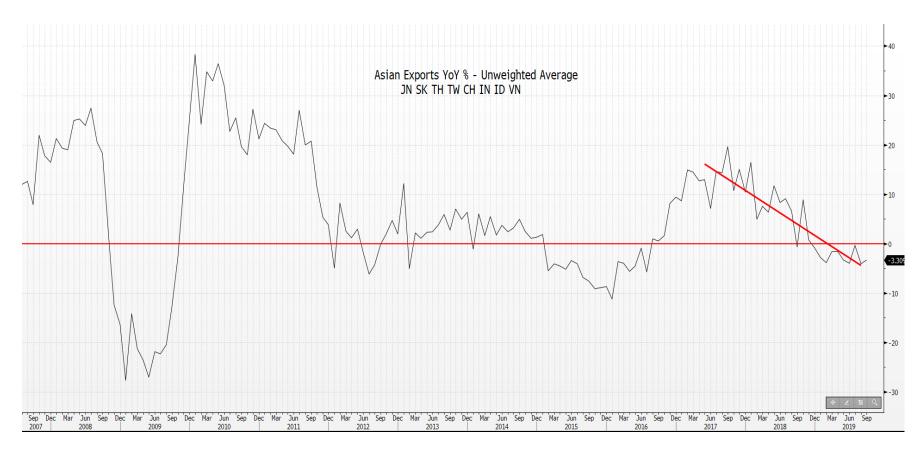




Source: Bureau of Labor Statistics, Bloomberg Finance L.P., Stifel

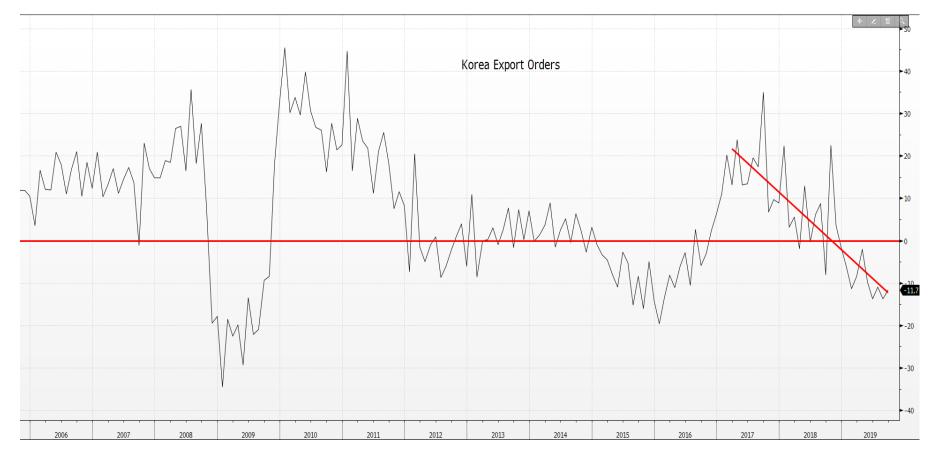


Export Flows in Asia are Contracting YoY



Source: National Statistics Offices, Bloomberg Finance, L.P., Stifel

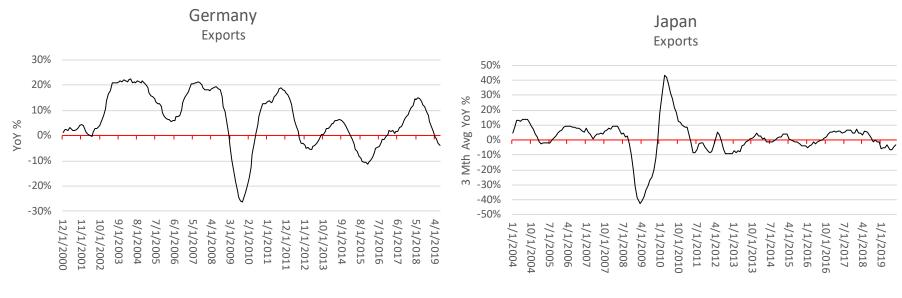
South Korea: World's 5th Largest Exporter, Diversified Export Markets, and High Value Added Products



Source: South Korea Ministry of Trade, Bloomberg Finance L.P., Stifel



Germany (#3 Exporter) and Japan (#4 Exporter) – High Value Added Exports Slowing

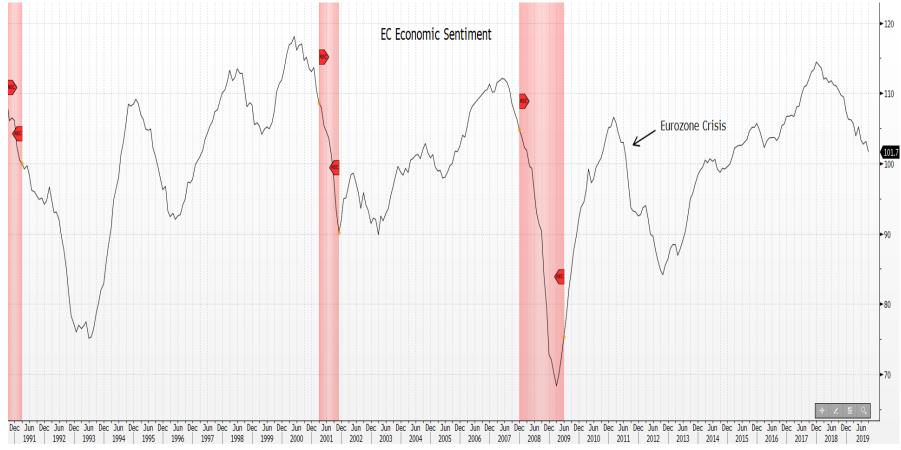


Source: Deutsche Bundesbank, Bloomberg Finance L.P., Stifel

Source: Ministry of Finance, Bloomberg Finance L.P., Stifel



Sentiment is a Precursor to Recession



Source: European Commission, Bloomberg Finance L.P., Stifel

Narrative Economics: "By narrative economics I mean the study and spread of popular narratives, the stories, particularly those of human interest and emotion, how these change through time, to understand economic fluctuations." ~ Robert Shiller

Sources of Narratives:

- Wall Street Economists
- Wall Street Strategists/Analysts
- Professional Money Managers
- The Federal Reserve
- The Administration
- Academia
- Media Outlets

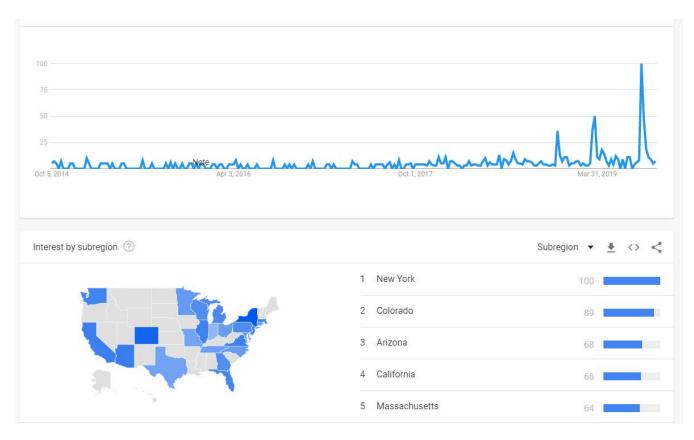
Conduits for Narratives:

- Research reports
- Public Presentations
- Traditional Media
- Social Media

Narrative Examples

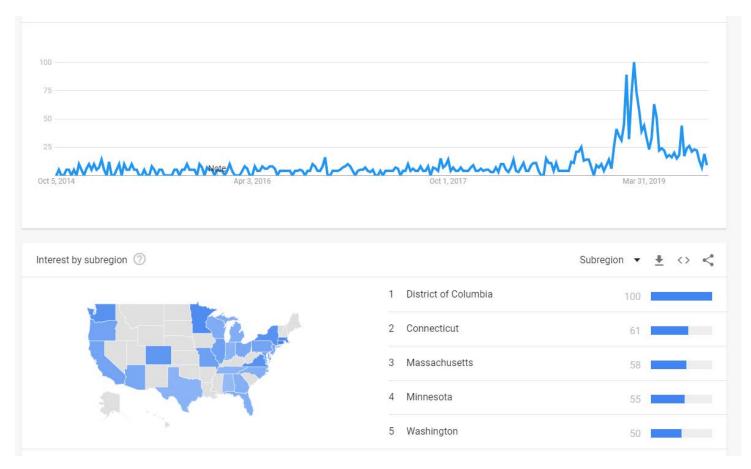
- Street Strategists: An inverted yield curve precedes a recession.
- **The Fed:** QE will force money out of high quality assets, down the credit curve, and into the hands of risk takers who will stimulate economic growth.
- Academia: Modern Monetary Theory provides a free pass for a ramp in fiscal spending that will provide a catalyst to economic growth.
- The Administration: Trade wars are good and easy to win.

An Inverted Yield Curve Precedes a Recession



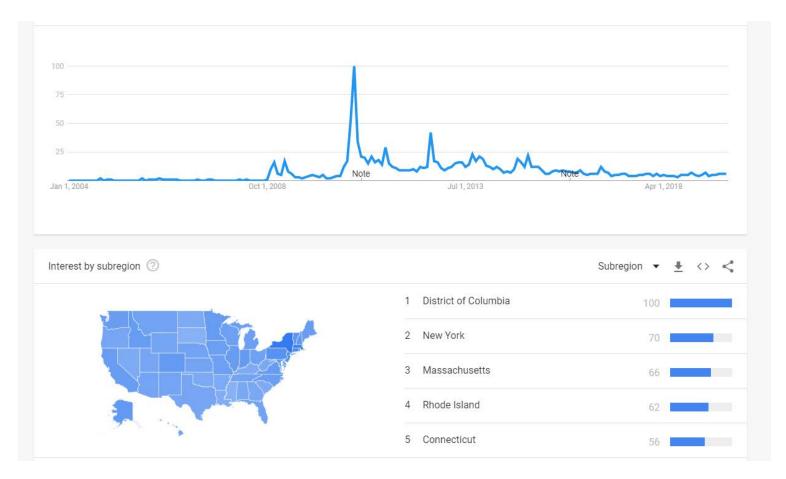
Source: Google Trends

Modern Monetary Theory Facilitates Fiscal Expansion



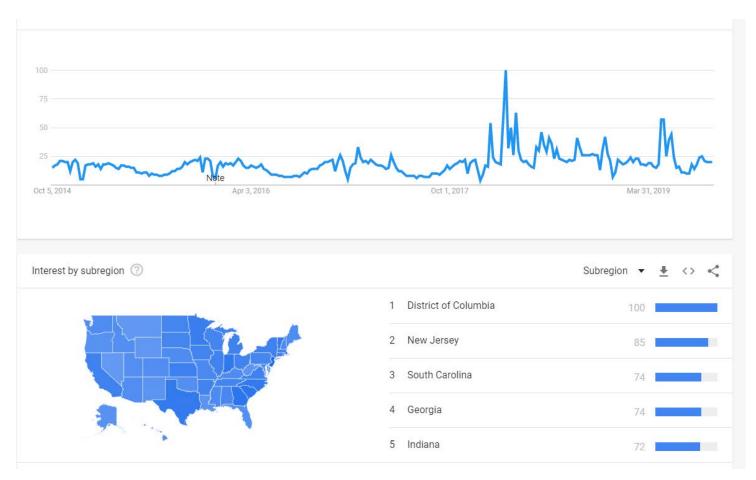
Source: Google Trends

Quantitative Easing



Source: Google Trends

Tariffs



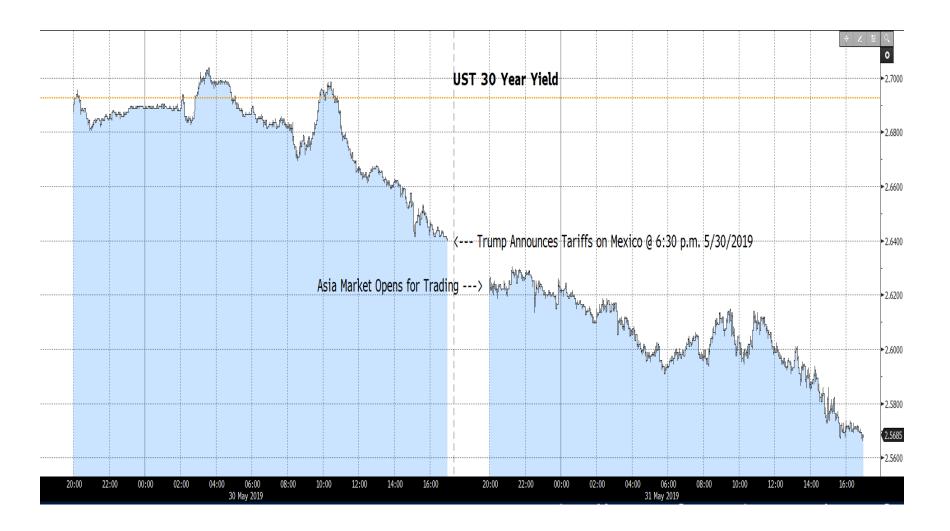
Source: Google Trends

High Frequency Promotion of Narratives Increases Volatility

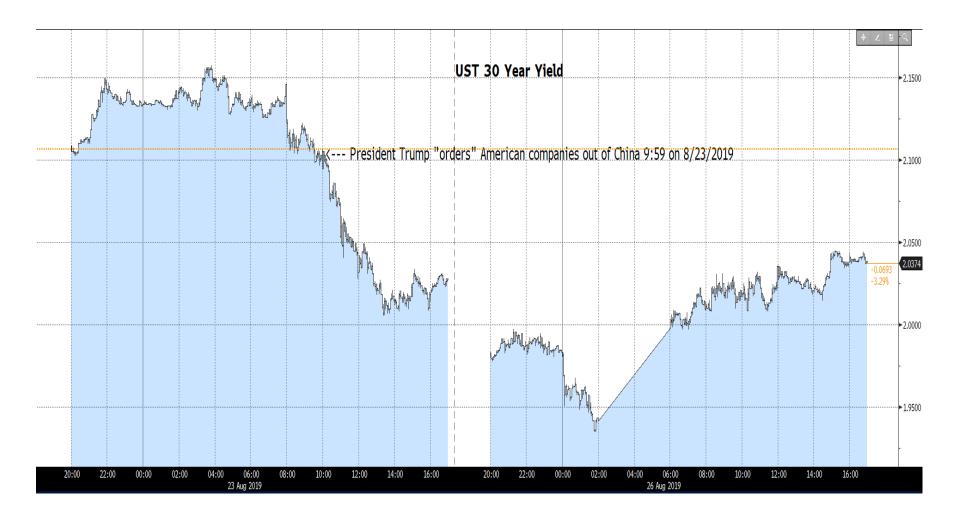
Trump Tweets as a Price Catalyst:

- 17,000+ Tweets¹ since President Trump announced his candidacy
- "Embargoed for Release" is a thing of the past
- Tweets occur on a 24-hour cycle
- Major economic pronouncements are made at random periods of time
- Tweets are the main mechanism by which the president advocates for his agenda

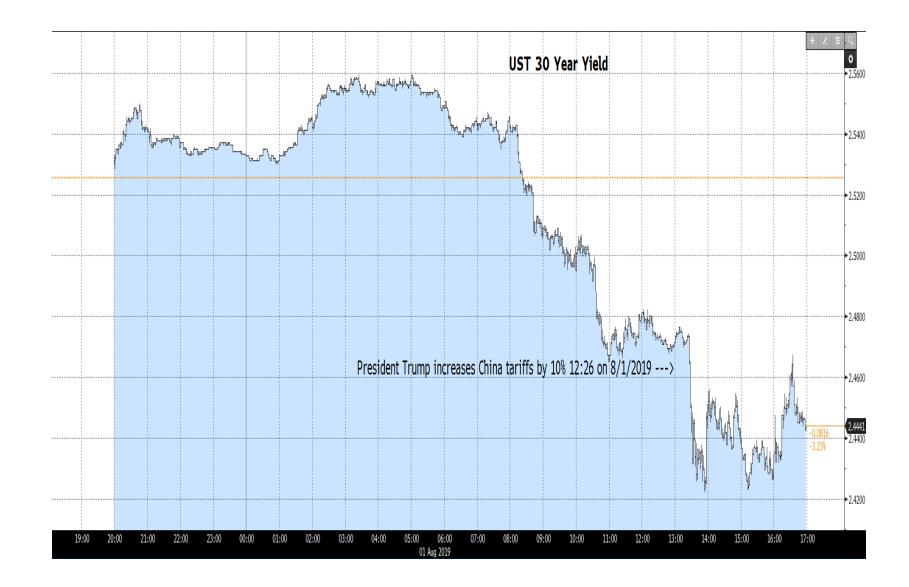
¹trumptwitterarchive.com



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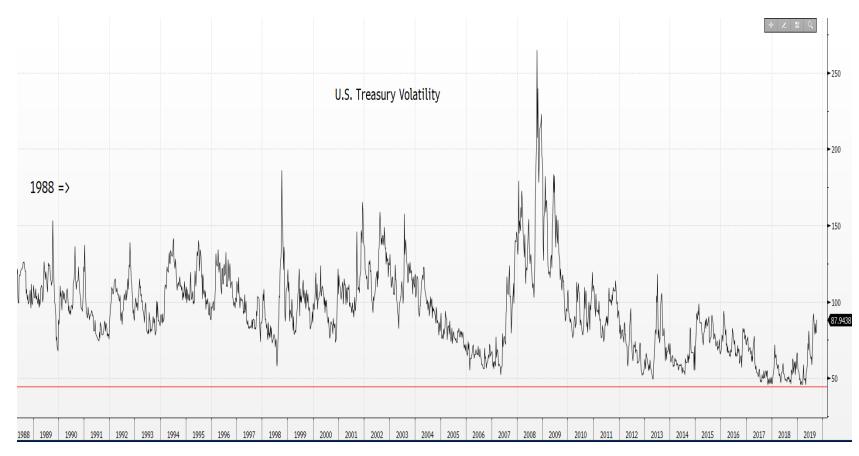


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Volatility is Rising, but Still Remains Moderate in Historic Context



Source: BAML, Bloomberg Finance L.P., Stifel

Key Takeaways

- Be cognizant of the agenda behind the narrative
- Focus on the signal (hard data) not the noise (opinions/pronouncements)
- Develop thematic ideas which are durable and allow the data and the price action to challenge your thought process
- The price action response in the market will often reveal the underlying bias in positions

Questions? Contact Us!

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Addendum



Yield Curve is Pricing One Rate Cut



Source: Bloomberg Finance L.P., Stifel



UST 2-Year Yields at a Major Technical Level



Source: Bloomberg Finance, L.P., Stifel



UST 10-Year Yields: Solid Bull Trend



Source: Bloomberg Finance, L.P., Stifel



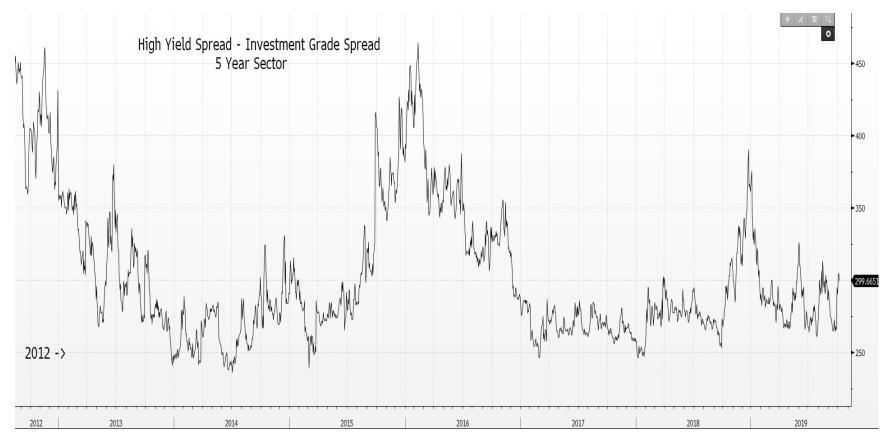
Credit Spreads Narrowed Into September Supply; Widening Now on Economic Concerns



Source: Markit, Bloomberg Finance, L.P., Stifel



Capital Structure Starting to Respond to Fear of Slowing Economy



Source: Markit, Bloomberg Finance, L.P., Stifel

Investment strategies for when rates are <u>falling</u>:

Extend the duration of the portfolio (go longer term, emphasize structure, go into higher quality credits, buy larger issue sizes, buy more fixed-rate investments, and reduce near-term cashflow).

- 1) Buy longer term <u>non-callable</u> "bullet" investments US Treasuries, Agency Notes, Certificates of Deposit, Bank Notes, Corporate Bonds, and Municipal Bonds.
 - If you do buy callable bonds, avoid near-term call dates (generally, minimum 1 year or longer to the next call date, but preferably even longer), deep discount prices preferred.
- 2) Buy 15-, 20- and/or 30-year mortgage-backed securities (MBS).
 - Look for high coupon, very seasoned MBS (factor of .20 or lower) to take advantage of "prepayment burn-out" (statistically, 20% of homeowners are unlikely to refinance, regardless of the interest rate environment).

Investment strategies for when rates are <u>falling</u>: (cont.)

- 4) Buy DUS balloon MBSs (DUS balloons have a prepayment penalty that reduces the risk of prepayments).
- 5) Buy Agency Collateralized Mortgage Obligations (CMOs) with "lock-out" (CMOs that pay interest only for several years, then pay principal and interest in the later cashflow years).
- 6) If you are buying variable-rate investments (floaters or ARMs) look for "hybrids" with a 7/1, 5/1, 3/1 type of structure. Always check to ensure "evenly distributed" or "laddered" re-set dates in the variable-rate portfolio.
- 7) If SBA pools generally fixed-rate securities preferred.

Discount paper is preferred. If rates fall, margin gets squeezed, bonds get called/prepaid so the discount will be amortized over a shorter duration, producing a higher yield

Investment strategies for when rates are <u>rising</u>:

Generally speaking, you want to shorten the duration of the investment portfolio (go shorter term, buy more variable-rate investments, and increase near-term cash flow).

- 1) Sell out of longer-term investments, especially non-callable "bullet" investments.
- 2) Build a solid ladder of short-term bullets & callable bonds.
 - If you are buying callable bonds, near-term call dates preferred, premium price ("cushion bonds") are preferred.
 - Buy step-up securities, preferably with near-term step dates.
- 3) Buy "seasoned" 10 & 15 year mortgage-backed securities (MBS), (premium price is preferred) to add up-front cash flow.

Investment strategies for when rates are rising: (cont.)

- 4) Buy current principal pay Agency Collateralized Mortgage Obligations (CMOs).
 - Also in the an "up interest rate shock" scenario, you want CMOs that have limited extension risk. The more stable and predictable the cashflows the better.).
- 5) If you are buying variable-rate investments (floaters or ARMs) look for investments that reset in one-year or less (monthly, quarterly, semi-annual or annual". Always check to ensure "evenly distributed" or "laddered" re-set dates in the variable-rate portfolio.
- 6) If SBA pools generally variable-rate securities preferred.

Generally speaking, premium paper is preferred. If rates rise, bonds are not called/prepaid as quickly so premiums will be amortized over a longer duration producing a higher yield.

End of Quarter Figures												
	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	- 20	018	2019	2020
Growth indicators												
GDP, QoQ %	3.1%	2.0%	1.5%	1.1%	-0.2%	0.8%	1.9%	1.6%	2.	.7%	1.9%	1.0%
Consumer Spending, %	1.1%	4.7%	2.1%	1.5%	1.0%	2.5%	2.0%	1.9%	2.	3%	2.4%	1.9%
Fixed Investment, %	3.2%	-1.1%	2.6%	1.3%	-2.5%	0.8%	2.5%	2.0%	4.	6%	1.5%	0.7%
Housing Starts, k	1,199	1,253	1,120	1,110	1,080	1,075	1,065	1,060	1,	221	1,171	1,070
Unemployment Rate, %	3.9%	3.6%	3.7%	3.6%	3.6%	3.7%	3.7%	3.7%	3.	.9%	3.7%	3.7%
Nonfarm Payrolls, k	153	178	150	130	110	140	165	170	1	95	153	146
Inflation indicators, YoY%												
PPI	2.2%	1.7%	2.4%	2.5%	2.4%	2.3%	2.3%	1.9%	2.	9%	2.2%	2.2%
PCE	1.4%	1.4%	1.4%	1.6%	1.6%	1.5%	1.5%	1.3%	2.	1%	1.5%	1.5%
Core PCE	1.5%	1.6%	1.7%	1.8%	1.7%	1.6%	1.4%	1.4%	2.	.0%	1.7%	1.5%
Interest rate, %												
FF	2.50	2.50	2.00	1.50	1.00	0.75	0.75	0.75	2	.13	2.13	0.81
3month UST bills	2.39	2.09	1.80	1.45	0.95	0.80	0.85	0.85	2	.05	1.93	0.86
2yr UST notes	2.26	1.76	1.55	1.35	1.20	1.12	1.15	1.15	2	.53	1.73	1.16
5yr UST notes	2.23	1.77	1.40	1.20	1.10	1.10	1.18	1.20	2	.69	1.65	1.15
10yr UST notes	2.41	2.01	1.45	1.28	1.15	1.15	1.20	1.25	2	.84	1.79	1.19
30yr UST bonds	2.82	2.53	2.08	1.86	1.55	1.50	1.70	1.85	3	.05	2.32	1.65
2s to 10s Spread bps	14	25	-10	-7	-5	3	5	10	4	31	6	3

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Lindsey Piegza, Ph.D. - Chief Economist

Source: Bloomberg, Stifel

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