Second Quarter 2019 Chartbook

Data as of February 28, 2019

Key Takeaways

- Economic growth is fading, but the risk of a recession in the nearterm remains low.
- The Fed has gone from a headwind to a tailwind for equities, but earnings growth this year is projected to slow.
- With economic growth and inflation slowing, there is more downward pressure on bond yields. Credit spreads are at risk of widening if market volatility picks up.
- Risks
 - Political risk in Europe
 - Slowing global growth
 - Policy mistake by the Federal Reserve

Second Quarter 2019 Outlook

Economy – Pace of Growth Slowing, but Recession Unlikely



Economic growth accelerated in the U.S. last year, but we are more likely to see the pace of growth slowdown in the coming quarters based on recent trends in the economy. At the same time, we still project a low probability of a recession in 2019. Higher interest rates following four rate hikes in 2018 combined with the fading impact of tax reform will, in our view, create a headwind for economic growth. Additionally, the US economy is at risk of feeling an impact from slowing growth globally. After all, nearly 40% of S&P 500 revenues are from overseas. In recent months, we have seen a slowdown in several areas including housing activity, manufacturing, core capital goods orders, and retail sales. For now, the labor market remains strong, outside of February's below trend growth in new jobs. Moreover, we have not seen a rapid decline in consumer confidence, which is a good sign for a bounce in future retail sales. Overall, our current outlook remains that the U.S. and global economy are likely to slow this year, but there is still life in this expansion for the remainder of 2019.

Equities – More Accommodative and Patient Fed



Stocks have rebounded strongly since bottoming in late December during the fourth quarter correction. All major equity categories are in positive territory this year including all 11 S&P 500 sectors. Valuations remain at a reasonable level, especially when compared to the extended levels reached in January 2018. Stocks are also benefitting from a more dovish Fed. Rising interest rates were a major headwind for equities last year, but the Fed is unlikely to hike rates this year. There are growing headwinds, however, including slowing economic growth globally and in the US, along with a sizeable expected drop in earnings growth this year. FactSet Research is projecting earnings growth of only 3.9% in 2019 and Q1 earnings are projected to be negative. Market volatility was muted in the first two months of 2019 and we do not think that trend is likely to continue because of weaker projected earnings and the slowdown in economic growth. International markets have lagged the US at the start of 2019, but there is an opportunity overseas if we see signs of the trade war winding down. Moreover, foreign stocks could benefit from cheaper valuations.

Fixed Income – Slower Growth Outlook is Stifling Yields



The environment for bonds in the first few months of the year has been more favorable than in 2018, where several bond asset classes finished with a negative total return. Last year, Treasury yields moved higher, the yield curve flattened, and high yield spreads widened in Q4. This year, intermediate Treasury yields have remained range bound, the yield curve has held steady, and high yield spreads have narrowed. We anticipate recent trends in the fixed income market to extend into the second quarter. Slower growth, a more patient Fed, and muted inflation is likely to keep downward pressure on intermediate Treasury yields. Although economic growth is anticipated to slow, a recession is not likely in the near-term. Based on that premise, credit spreads are not as likely to widen significantly over the next few months barring an unforeseen shock. Short term bonds continue to offer value as well. The gap in yields between short term and intermediate bonds is small, but short-term bonds have less interest rate risk.

U.S. Economic Risk Overview

Indicator	Recession Risk	Trend Signal						Trend					—	Latest
ISM Manufacturing PMI	LOW	•	59.3	57.9	58.7	60.0	58.4	60.8	59.5	57.5	58.8	54.3	56.6	54.2
ISM Non-Manufacturing PMI	LOW	•	58.8	56.8	58.6	59.1	55.7	58.5	61.6	60.3	60.7	58.0	56.7	59.7
Industrial Production YoY Growth	LOW	•	3.6%	3.8%	3.0%	3.5%	4.1%	5.5%	5.7%	4.3%	4.3%	3.9%	3.9%	3.5%
Building Permits YoY Growth (3 Mo. Avg.)	LOW	•	4.4%	5.4%	7.5%	8.1%	4.9%	3.2%	-0.7%	0.3%	-2.9%	-1.6%	-1.8%	-0.4%
Unemployment Rate	LOW	=>	4.0%	3.9%	3.8%	4.0%	3.9%	3.8%	3.7%	3.8%	3.7%	3.9%	4.0%	3.8%
Temporary Help Employment YoY	LOW	=>	2.6%	3.3%	2.5%	2.0%	1.8%	2.1%	2.5%	2.7%	2.5%	2.8%	2.4%	2.2%
Real Retail Sales YoY Growth (3 Mo. Avg.)	LOW	•	2.7%	2.3%	2.4%	2.8%	3.0%	3.4%	3.4%	3.0%	2.5%	1.9%	1.2%	0.7%
U. of Michigan Consumer Sentiment	LOW	•	101.4	98.8	98.0	98.2	97.9	96.2	100.1	98.6	97.5	98.3	91.2	93.8
Philly Fed Leading U.S. Index	LOW	•	1.5	1.5	1.5	1.5	1.5	1.4	1.2	1.4	1.4	1.4	1.1	1.1
Treasury Yield Curve (10yr - 2yr)	MODERATE	=>	0.47%	0.46%	0.43%	0.33%	0.29%	0.24%	0.24%	0.28%	0.21%	0.21%	0.18%	0.21%
1														

Recession Riskometer

LOW

Economic Trend Signal

Commentary



Sources are listed on pages 36-37. Data as of 2/28/2019.

Feb-14

Eeb-15

The dials on the left show our combined estimate of near-term recession risk and direction of economic growth, based on the average reading of ten economic indicators. The Recession Riskometer focuses on producer sentiment, output and manufacturing growth, employment, consumer strength and leading economic indicators. At this time, nine out of ten recession risk indicators signal a low risk of recession. The Treasury yield curve 10yr-2yr spread is under 0.25%, signaling a moderate, or rising risk of recession. Although the risk of a recession remains low, there is a slowing trend in the economy. Economic data has weakened in recent months and this is likely the result of rising interest rates and slowing global demand. Economic growth is likely to slow in the coming quarters relative to the pace of last year's expansion, but we do not foresee the pace slowing to the point where it reaches stall speed in 2019.

The overall economic trend signal is now negative. It was positive most of last year before flipping to stable at year-end. At present, none of the indicators are in a positive trend, three indicators are in a stable trend, and seven indicators are in a negative trend. The negative reading for the economic trend signal is indicating that our key recession risk indicators are decelerating. This is suggesting that economic growth is slowing.

U.S. Economic Risk Indicators

ISM Manufacturing PMI Sep-18 Oct-18 Nov-18 May-18 56.6 58.7 60.0 58.8 54.3 Indicator Recession Risk 20 Yr. Percentile 60.0 57%

Eeb-16

The ISM Manufacturing PMI index dropped from 56.6 in January to 54.2 in February and has been decelerating since last summer. The current reading is still in expansion territory and the index is in the 57th percentile - over the last 20 years the PMI reading has been lower 57% of the time. The Manufacturing PMI has been in expansion territory for 30 consecutive months. A reading over 50 indicates expansion, and in the mid 40's suggests recession.

ISM Non-Manufacturing PMI



The ISM Non-Manufacturing Index, a barometer for services activity, climbed to 59.7 in February, and has been range bound for several months. This indicator has expanded 109 straight months and is higher than 97% of all readings over the last 20 years. It is a concern if we see a sharp drop in this indicator. A reading over 50 indicates expansion, and in the mid 40's suggests recession. page 4

U.S. Economic Risk Indicators

Industrial Production - YoY Change



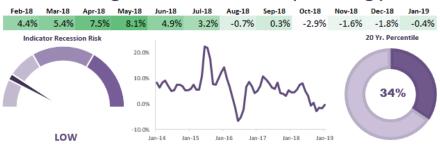
YoY Industrial Production growth fell to 3.5% in February and has trended lower since reaching a peak last September. Despite the slowdown in growth, the most recent YoY figure is still higher than 77% of all monthly readings over the last 20 years and is currently growing above levels that historically have signaled recession risk. Industrial Production Index measures real output for manufacturing, mining, and utilities. The YoY change in Industrial Production signals a high risk of recession when it falls into negative territory. There is a low recessionary risk when greater than 1%.

U3 Unemployment Rate



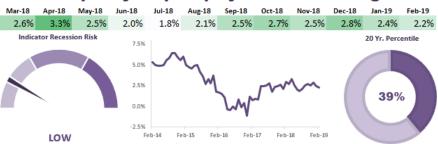
The unemployment rate fell to 3.8% in February from 4.0% in January. This indicator has held steady between 3.7% and 4.0% for the last 12 months. Outside of a weak payroll figure in February, jobs growth has remained strong. Caution is advised if the trend of a low unemployment rate reverses and this indicator begins to move higher. The U3 Unemployment Rate measures the percentage of people without jobs who are actively seeking work. This is often the officially quoted unemployment rate.

Building Permits YoY Growth (3 Mo. Avg.)



The 3-month average of building permits was -0.4% YoY in January. The current reading is lower than 66% of all monthly readings over the past 20 years, but is still signaling a low risk of recession. Overall, housing activity weakened in 2018, but there are signs that activity may stabilize this year. Building Permits are a measure of the issuance of permits to build new housing units. Building permit growth is a measure of the total year-over-year percentage change in building permits (3-month average). This indicator signals a high recession risk when growth falls below -15% YoY.

Temporary Help Employment - YoY Change



The year-over-year change in temporary help employment fell to 2.2% in February. YoY growth in temporary help employment has remained in a stable trend over the last 12 months. The current reading is currently lower than 61% of all months over the past 20 years. This indicator continues to signal a stable labor market, but caution is warranted if it falls towards flat YoY growth. Temporary help employment figures are viewed favorably if they are positive and trending higher. Changes in temporary help numbers are often used as a predictor of changes in future employment.

U.S. Economic Risk Indicators



The three-month average of Real Retail Sales grew by only 0.7% YoY through January. This reading is higher than just 22% of all readings over the last 20 years. We are seeing signs of slowing retail sales growth, but it has not fallen to a level that historically is associated with a recession. Real retail sales growth is a measure of the total year-over-year change in retail and food sales adjusted for inflation using the Consumer Price Index. Real retail sales typically decline heading into a recession, and a weaker reading is a concern for the economy.

Philly Fed Leading U.S. Index



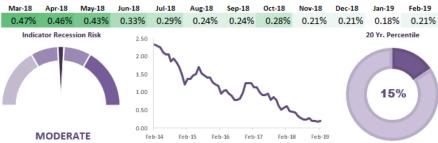
The Philly Fed Leading Index increased slightly from 1.11 in November to 1.14 in December. The leading index remains at a level that indicates stable economic growth in future months, but this indicator did weaken in the final two months of 2018. The Philly Fed Leading Index is in the 37th percentile – it is higher than 37% of all months over the last 20 years, The Philly Fed Leading Index is a composite index of several U.S. economic indicators that lead the economy. This indicator historically has declined into negative territory in recessions and rises back into positive territory in expansions.

U. of Michigan Consumer Sentiment



The University of Michigan Consumer Sentiment index increased slightly to 93.8 in February from 91.2 in January. This indicator is currently in the 71st percentile, meaning it is higher now than 71% of all months over the last 20 years. Strong consumer confidence is a positive signal for future consumer spending, but it is a concern if this indicator is trending lower. The index uses surveys to gather information on consumer expectations regarding the economy.

Treasury Yield Curve (10 Yr. Minus 2 Yr.)



The 2-10 yield curve spread was at 0.21% at the end of February, a level that signals a moderate risk of recession. Spreads typically narrow to this level later in an economic cycle, but we have not yet reached a level that immediately precedes a recession historically. Additionally, the 2-10 spread has leveled off over the last several months. The difference (spread) between the yields of the 10-Year and 2-Year maturity Treasury bonds is one of the early and reliable predictors of a recession. Under normal conditions the 10-Year/2-Year spread is positive, and as recession nears the spread flattens and turns negative. This indicator will shift to high recession risk when the spread is below zero.

Equity Valuation Overview

Price/Earnings (P/E)											
			St. Dev	. From							
Index	Current	15 Yr. Avg.	15 Yr.	Mean	Percentile (15 Yrs.)						
S&P 500	19.2	17.3		0.7	79%						
S&P 500 Growth	24.2	19.8		1.2	88%						
S&P 500 Value	15.6	15.3		0.1	51%						
S&P MidCap 400	18.2	19.1		-0.4	27%						
S&P MidCap 400 Growth	22.2	21.4		0.2	62%						
S&P MidCap 400 Value	15.3	17.1		-0.9	19%						
S&P SmallCap 600	19.2	19.4	ļ	-0.1	47%						
S&P SmallCap 600 Growth	22.8	21.0		0.5	70%						
S&P SmallCap 600 Value	16.5	18.0		-0.7	18%						
MSCI EAFE	14.2	14.5	l	-0.1	38%						
MSCI EAFE Growth	18.9	17.7		0.4	58%						
MSCI EAFE Value	11.3	12.1		-0.4	34%						
MSCI Emerging Markets	12.1	12.8		-0.3	36%						
MSCI Europe	14.9	14.3		0.2	55%						
MSCI Pacific	13.3	15.1		-0.7	19%						
MSCI ACWI	16.2	15.6		0.3	52%						

	Price/	Book Value (P/B)	
			St. Dev. From	
Index	Current	15 Yr. Avg.	15 Yr. Mean	Percentile (15 Yrs.)
S&P 500	3.1	2.6	1.3	93%
S&P 500 Growth	5.1	4.0	1.3	87%
S&P 500 Value	2.2	1.9	1.0	85%
S&P MidCap 400	2.2	2.2	-0.2	36%
S&P MidCap 400 Growth	3.1	3.1	0.0	37%
S&P MidCap 400 Value	1.7	1.7	-0.2	39%
S&P SmallCap 600	2.0	2.0	-0.1	39%
S&P SmallCap 600 Growth	2.8	2.7	0.2	49%
S&P SmallCap 600 Value	1.5	1.6	-0.3	36%
MSCI EAFE	1.5	1.8	-0.5	41%
MSCI EAFE Growth	2.7	2.7	0.1	64%
MSCI EAFE Value	1.1	1.4	-0.7	25%
MSCI Emerging Markets	1.6	1.8	-0.5	40%
MSCI Europe	1.7	2.1	-0.6	39%
MSCI Pacific	1.4	1.5	-0.4	38%
MSCI ACWI	2.1	2.2	0.0	58%





Commentary

The two charts above show equity valuations based on the average Price-to-Earnings (P/E) and Price-to-Book (P/B) ratios for commonly used equity benchmarks. To the left, current valuations are compared to their 15-year average, and we show how far (as measured by standard deviation) the current valuation is from the average. Valuations within 0.5 standard deviations are close to historic norms, a reading around 1.5 indicates high valuation, and figures above 2 are near historic highs. The percentile figure shown next provides a ranking of each index valuation relative to its 15-year history. As an example, if the percentile is 80%, valuation is higher than 80% of all other observations for that index over the past 15-years and lower than 20% of the observations.

As measured by Price-to-Earnings, valuations for the major equity categories have come down quite a bit since they peaked last year. Growth stocks still have a P/E that is above their historical average, despite the pullback in valuations globally. U.S. Large cap stocks were close to their 15-year average P/E at the start of the year, but they are now slightly above because stock prices rebounded in the first two months of the year. Domestic Mid and Small Cap Value along with International Developed and Emerging Market stocks are trading at a discount to their historical average. Valuations in U.S. equities are unlikely to drift too high relative to their historical average because of the normalization of interest rates by the Fed. International equities could benefit this year from low valuations and the potential for less trade tensions globally. A reversal of dollar strength could also assist foreign equities.

Based on Price-to-Book, valuation metrics remain elevated for most U.S. large cap equity categories, but they are close to historical averages for most domestic small and mid cap categories. International equities continue to trade at a deep discount compared to U.S. equities based on P/B. This metric is less forward looking than the P/E metric, but is also supportive of a view that international stocks have a lower valuation base and may have more growth potential after years of underperformance.

Sector Valuation Overview

	Price/Ea	rnings (P/E)		
			St. Dev. From	
Index	Current	15 Yr. Avg.	15 Yr. Mean	Percentile (15 Yrs.)
S&P 500	19.2	17.3	0.7	79%
S&P 500 Consumer Discretionary	23.6	18.8	1.7	97%
S&P 500 Consumer Staples	19.6	19.2	0.2	55%
S&P 500 Energy	15.2	14.5	0.1	73%
S&P 500 Financials	14.1	14.4	-0.1	50%
S&P 500 Health Care	24.9	20.6	1.0	88%
S&P 500 Industrials	18.5	18.0	0.2	52%
S&P 500 Information Technology	19.9	20.6	-0.1	49%
S&P 500 Materials	20.4	18.3	0.5	74%
S&P 500 Real Estate*	33.1	N/A	N/A	N/A
S&P 500 Utilities	19.8	16.6	1.0	82%
S&P 500 Communication Services	17.2	18.8	-0.2	59%

	Price/Boo	k Value (P/B)		
			St. Dev. From	
Index	Current	15 Yr. Avg.	15 Yr. Mean	Percentile (15 Yrs.)
S&P 500	3.1	2.6	1.3	93%
S&P 500 Consumer Discretionary	5.6	3.3	2.0	98%
S&P 500 Consumer Staples	4.4	4.1	0.5	67%
S&P 500 Energy	1.7	2.2	-1.0	10%
S&P 500 Financials	1.4	1.4	0.0	64%
S&P 500 Health Care	4.1	3.4	1.0	89%
S&P 500 Industrials	4.7	3.2	2,2	99%
S&P 500 Information Technology	6.4	4.1	2.9	99%
S&P 500 Materials	2.6	2.9	-0.6	26%
S&P 500 Real Estate*	3.3	N/A	N/A	N/A
S&P 500 Utilities	2.1	1.8	1.1	85%
S&P 500 Communication Services	3.1	2.3	1.4	88%

Commentary

These charts show sector valuations based on the average Price-to-Earnings (P/E) and Price-to-Book (P/B) ratios for the sectors within the S&P 500 index. Valuations are compared to 15 year averages, and we show by how many standard deviations the current is from the average. The percentile figure shown next provides a ranking of each index valuation relative to its 15-year history. As an example, if the percentile is 80%, it is greater than 80% of all other observations over the past 15 years and lower than 20% of observations.

Cyclical sectors — All 3 cyclical sectors (financials, consumer discretionary, and materials) slightly lagged the S&P 500 in the first two months of the year, but returns were still positive. Valuations for consumer discretionary stocks remain significantly above their historical average for P/E (1.7 st. dev above) and P/B (2 st. dev above). Financials and materials have valuations that are closer to their historical norms for both P/E and P/B. Financials could benefit in future months if the yield curve widens, following a long period of compressing yields. Materials and consumer discretionary stocks might benefit if economic growth comes in stronger than expected over the next few quarters.

Within the Economically-sensitive sectors, energy has the most compelling valuations. The P/E for energy is narrowly above the 15-year average and P/B is 1 st. dev. below its average. Tech stock valuations have come down, but the P/B for the tech sector is still high at nearly 3 st. dev's above the 15-year average. The new communications sector is harder to analyze because the sector recently combined tech-oriented firms with telecommunications companies. The industrials sector is off to a strong start this year, and this sector has a P/E close to its historical average. Industrials, technology, and energy sectors are all outperforming the S&P 500 YTD.

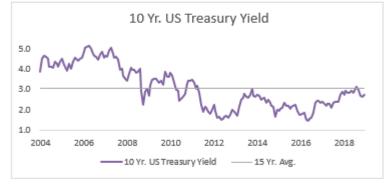
The defensive sectors (Utilities, Health Care, and Consumer Staples) have underperformed this quarter after providing strong relative returns during the fourth quarter sell-off. Valuations for consumer staples are close to their 15-year average for P/E and P/B. Health Care and Utilities, however, have valuations above their historical average. Healthcare experienced strong earnings growth in 2018, which drove valuations higher. Utilities and Consumer Staples remain sensitive to movements in interest rates, and may struggle if long term rates experience a sharp increase. Conversely, these sectors can provide downside protection during market downturns.

Fixed Income Overview

	Yield	d		
			St. Dev. From	
Index	Current	15 Yr. Avg.	15 Yr. Mean	Percentile (15 Yrs.)
BofAML US Treasury Bill 3 Mon USD	2.43	1.28	-0.7	20%
BBgBarc Treasury 1-3 Yr USD	2.53	1.73	-0.5	26%
BBgBarc US Treasury 7-10 Yr USD	2.68	2.95	0.3	52%
BBgBarc US Treasury US TIPS USD	2.87	3.08	0.1	41%
BBgBarc Municipal USD	2.53	3.13	0.7	68%
BBgBarc GNMA USD	3.31	3.80	0.4	53%
BBgBarc US Corp IG USD	3.91	4.30	0.3	51%
BBgBarc US Corporate High Yield USD	6.54	7.92	0.5	69%
BBgBarc US Aggregate 1-3 Yr USD	2.69	2.21	-0.3	37%
BBgBarc US Agg Bond USD	3.21	3.37	0.1	46%
BBgBarc Global Treasury Ex US USD	0.78	1.89	1.2	84%
JPM EMBI Global Diversified USD	6.15	6.38	0.2	51%

		Treasu	ıry Yield (Curve		
3.0						
2.0						
1.0						
0.0 3 Mo.	6 Mo.	1 Yr.	2 Vr	5 Yr.	10 Yr.	30 Yr
3 100.		3 Mo. /				

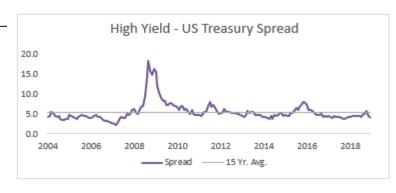
	Treasury S	preads		
			St. Dev. From	
Index	Current	15 Yr. Avg.	15 Yr. Mean	Percentile (15 Yrs.)
BBgBarc Municipal USD	-0.08	0.71	1.0	85%
BBgBarc GNMA USD	0.70	1.38	1.2	89%
BBgBarc US Corp IG USD	1.30	1.87	0.8	85%
BBgBarc US Corporate High Yield USD	3.93	5.49	0.7	88%
BBgBarc US Agg Bond USD	0.60	0.95	0.7	78%
BBgBarc Global Treasury Ex US USD	-1.83	-0.53	1.8	99%
JPM EMBI Global Diversified USD	3.54	3.96	0.4	69%



Commentary

The Yield chart above shows current yields for several commonly used fixed income benchmarks, compared to their 15-year average. The Treasury Spreads chart shows spreads of credit-sensitive bond sectors relative to Treasury bonds. We also show by how many standard deviations the current yield is from its average, and how often has it been as high or as low for the past 15 years.

The 10-year U.S. Treasury yield has remained range bound between 2.55% and 2.75% in the first quarter. There is a less upward pressure on yields so far this year because of muted inflation, a more cautious Fed, and signs of slowing growth. If inflation starts to come in higher than expected, the ceiling for bond yields is likely to move higher. The yield curve has remained stable this year, with less upward pressure from shorter-dated bonds because the Fed is signaling a pause in rate hikes for now. High yield bonds could experience further spread compression in Q2 based on the increased appetite for risk from investors this year. International bonds continue to look unattractive based on the relatively low yields at this time.



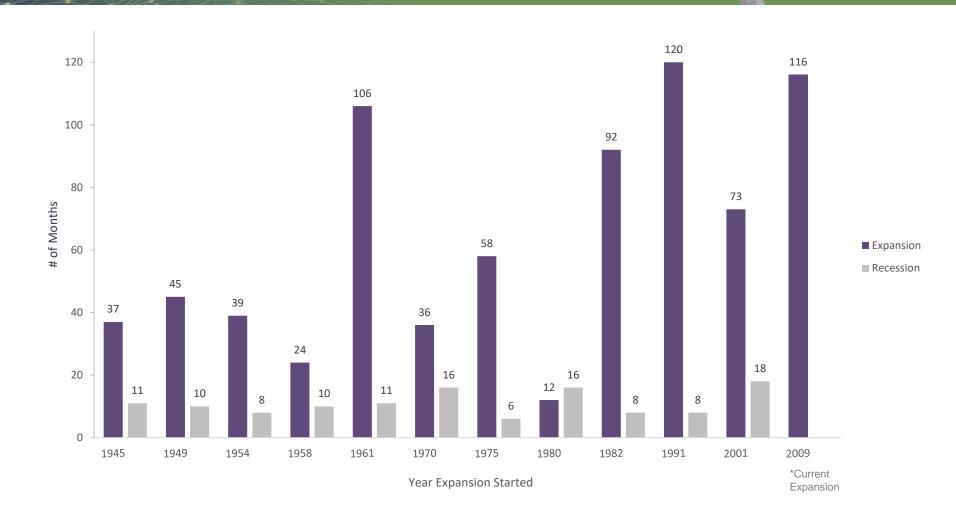


Appendix

U.S. Economic Overview

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Employment	As of	Latest	Previous	1 Yr. Ago	3 Mo. Avg.	12 Mo. Avg.	1 Mo. Diff.	1 Yr. Diff.	Percentile (10 Yrs.)	1 Yr. Trend 5 Yr. Trend			Trend		\longrightarrow	Latest
US Nonfarm Monthly Payrolls ('000)	Feb-19	20		330					15%		108	277	196	227	311	20
US Total Nonfarm Payrolls - YoY Change	Feb-19	1.7%	1.9%	1.6%	1.8%	1.7%	-0.2%		61%		1.8%	1.8%	1.8%	1.8%	1.9%	1.7%
U3 Unemployment Rate	Feb-19	3.8%	4.0%	4.1%	3.9%	6 3.9%	-0.2%	-0.3%	98%	~~~	3.7%	3.8%	3.7%	3.9%	4.0%	3.8%
U6 Unemployment Rate	Feb-19	7.3%	8.1%	8.2%	7.7%	7.6%	-0.8%	-0.9%	100%		7.5%	7.5%	7.6%	7.6%	8.1%	7.3%
Quit Rate	Jan-19	2.3%	2.3%	2.0%	2.3%	6 2.3%	0.0%		94%		2.3%	2.3%	2.3%	2.3%	2.3%	2.3%
Job Openings: Total Nonfarm ('000)	Jan-19	7,581	7,479	6,591	7,562	7,292	102	990	98%		7,342	7,392	7,593	7,626	7,479	7,581
Initial Jobless Claims ('000) 4 Wk. MA - Month End	Feb-19	229		223				6	90%		207	214	224	219	220	229
KC Fed LMCI Momentum Indicator	Jan-19	0.9		1.1					62%		1.4	1.4	1.3	1.3	1.1	0.9
Labor Force Participation Rate	Feb-19	63.2%	63.2%	63.0%	63.2%	62.9%	0.0%	0.2%	53%		62.7%	62.9%	62.9%	63.1%	63.2%	63.2%
Employment to Population Ratio	Feb-19	60.7	60.7	60.4	60.7	7 60.5	0.0	0.3	99%		60.4	60.6	60.6	60.6	60.7	60.7
													Trend			,
Consumer	As of	Latest						1 Yr. Diff.	Percentile (10 Yrs.)	1 Yr. Trend 5 Yr. Trend				_		Latest
Retail Sales - YoY Change	Jan-19	2.3%	1.6%	4.2%	2.7%	6 4.7%	0.6%	-1.9%	18%	- mummy	6.4%	4.0%	4.6%	4.0%	1.6%	2.3%
Vehicle Sales (Mil. Units, annualized)	Feb-19	16.5		16.9					55%		17.4	17.6	17.4	17.5	16.7	16.5
Personal Savings Rate	Dec-18	7.6%	6.1%	6.2%	6.7%	6.7%	1.5%	1.4%	79%	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	6.4%	6.4%	6.4%	6.4%	6.1%	7.6%
													Trend			
Production	As of	Latest	Previous	1 Yr. Ago	3 Mo. Avg.	12 Mo. Avg.	1 Mo. Diff.	1 Yr. Diff.	Percentile (10 Yrs.)	1 Yr. Trend 5 Yr. Trend						Latest
Industrial Production - YoY Change	Feb-19	3.5%	3.9%	3.7%			-0.3%	-0.1%	75%		5.7%	4.3%	4.3%	3.9%	3.9%	3.5%
Capacity Utilization	Feb-19	78.2%		77.2%					83%		78.5%	78.5%	78.8%	78.7%	78.3%	78.2%
Core Capital Goods Orders - YoY Change	Jan-19	4.1%	2.1%	6.2%	4.1%	5.8%	2.0%	-2.0%	59%		7.9%	1.4%	3.9%	5.9%	2.1%	4.1%
													Trend			,
Housing & Construction	As of	Latest	Previous		3 Mo. Avg.	12 Mo. Avg.	1 Mo. Diff.	1 Yr. Diff.	Percentile (10 Yrs.)	1 Yr. Trend 5 Yr. Trend						Latest
Building Permits ('000)	Jan-19	1,345	1,326	1,366	1,331	1,311	19		97%		1,249	1,270	1,265	1,322	1,326	1,345
Housing Starts ('000)	Jan-19	1,230	1,037	1,334	1,158		193		90%		1,280	1,237	1,209	1,206	1,037	1,230
New Home Sales ('000)	Jan-19	607	652	633	629		-45		86%		601	609	552	628	652	607
S&P/Case-Shiller Home Price Index (20 city) - YoY Change	Dec-18	4.2%		6.3%					37%		5.9%	5.6%	5.2%	5.0%	4.6%	4.2%
Total Construction Spending - YoY Change	Jan-19	0.3%	-0.7%	3.7%	0.3%	3.8%	1.0%	-3.4%	26%		6.0%	3.8%	3.4%	1.3%	-0.7%	0.3%
													Trend			
Survey Data	As of	Latest	Previous	1 Yr. Ago	3 Mo. Avg.	12 Mo. Avg.	1 Mo. Diff.	1 Yr. Diff.	Percentile (10 Yrs.)	1 Yr. Trend 5 Yr. Trend						Latest
ISM Manufacturing PMI Composite	Feb-19	54.2		60.8					45%		59.5	57.5	58.8	54.3	56.6	54.2
ISM Manufacturing PMI New Orders	Feb-19	55.5		64.2					34%		61.8	57.4	62.1	51.3	58.2	55.5
ISM Non-Manufacturing PMI Composite	Feb-19	59.7		59.1	58.1	1 58.7	3.0		95%		61.6	60.3	60.7	58.0	56.7	59.7
ISM Non-Manufacturing PMI New Orders	Feb-19	65.2							100%		61.6	61.5	62.5	62.7	57.7	65.2
U. of Michigan Consumer Sentiment	Feb-19	93.8	91.2	99.7	94.4	97.5	2.6	-5.9	75%		100.1	98.6	97.5	98.3	91.2	93.8
													Trend			
Inflation	As of	Latest						1 Yr. Diff.	Percentile (10 Yrs.)	1 Yr. Trend 5 Yr. Trend						Latest
Consumer Price Index (CPI) - YoY Change	Feb-19	1.5%		2.2%			0.0%	-0.7%	41%		2.3%	2.5%	2.2%	1.9%	1.6%	1.5%
Personal Consumption Expenditure (PCE) - YoY Change	Dec-18	1.7%		1.8%					63%		2.4%	2.2%	2.0%	2.0%	1.8%	1.7%
Producer Price Index (PPI) - YoY Change	Feb-19	1.8%		2.9%					N/A		2.8%	3.2%	2.6%	2.5%	2.0%	1.8%
Average Hourly Earnings - YoY Change	Feb-19	3.4%	3.1%	2.6%	3.3%	3.1%	0.3%	0.8%	99%		3.0%	3.3%	3.3%	3.3%	3.1%	3.4%
													Trend			
GDP	As of	Latest	Previous	1 Yr. Ago	2 Qtr. Avg.	4 Qtr. Avg.	1 Qtr. Diff.	1 Yr. Diff.	Percentile (10 Yrs.)	1 Yr. Trend 5 Yr. Trend			Helia		\longrightarrow	Latest
Real GDP - QoQ (SAAR)	Q4-18	2.6%	3.4%	2.3%	3.0%	6 3.1%	-0.8%	0.3%	56%		2.8%	2.3%	2.2%	4.2%	3.4%	2.6%
Real GDP - YoY Change	Q4-18	3.1%	3.0%	2.5%	3.0%	6 2.9%	0.1%	0.6%	92%		-0.7%	0.3%	-2.9%	-1.6%	-1.8%	-0.4%
													Trend			
Other	As of	Latest	Previous	1 Yr. Ago	3 Mo. Avg.	12 Mo. Avg.	1 Mo. Diff.	1 Yr. Diff.	Percentile (10 Yrs.)	1 Yr. Trend 5 Yr. Trend			Helia		\longrightarrow	Latest
Treasury Yield Curve (10 Yr. Minus 2 Yr.) - Month End	Feb-19	0.21%	0.18%	0.62%	0.20%	6 0.30%	0.03%	-0.41%	1%		0.24%	0.28%	0.21%	0.21%	0.18%	0.21%
Philly Fed Leading U.S. Index	Dec-18	1.14	1.11	1.45	1.22	2 1.38	0.03	-0.31	17%		1.15	1.44	1.35	1.40	1.11	1.14

Post-WWII Economic Expansions and Subsequent Recession Length



Percent of Active Managers Beating Category Benchmark

			Perforn	nance			Standard D	eviation
Category	3 Mo.	YTD	1 Yr.	3 Yr.	2018	2017	1 Yr.	3 Yr.
Domestic Large Cap Core	29%	35%	20%	18%	33%	33%	42%	51%
Domestic Large Growth	54%	56%	40%	33%	44%	35%	47%	57%
Domestic Large Cap Value	47%	40%	33%	43%	40%	78%	58%	64%
Domestic Mid Cap Core	19%	27%	24%	21%	28%	23%	48%	36%
Domestic Mid Cap Growth	27%	34%	31%	40%	40%	42%	48%	39%
Domestic Mid Cap Value	47%	59%	24%	42%	41%	53%	32%	30%
Domestic Small Cap Core	37%	31%	24%	11%	31%	28%	73%	61%
Domestic Small Cap Growth	53%	45%	69%	56%	73%	46%	50%	59%
Domestic Small Cap Value	70%	66%	16%	11%	20%	59%	42%	49%
Foreign Large Core	19%	42%	46%	10%	42%	30%	50%	53%
5 5	30%	54%	55%	40%	53%		40%	41%
Foreign Large Growth	29%	54% 57%	31%	12%	19%	35% 58%	33%	51%
Foreign Large Value								
Global Equity	47%	55%	52%	33%	49%	46%	35%	39%
Emerging Markets	42%	50%	38%	20%	29%	43%	40%	53%
Intermediate Govt/Corp	42%	71%	20%	70%	30%	61%	79%	63%
World Bond	37%	94%	88%	78%	58%	17%	83%	91%
Municipal - Short Term	27%	34%	27%	47%	5%	50%	73%	63%
Municipal - Intermediate	3%	9%	2%	20%	15%	14%	91%	97%
Municipal - Long Term	16%	52%	10%	14%	18%	12%	96%	90%
Municipal - High Yield	6%	16%	24%	91%	57%	87%	60%	54%
High Yield Bond	23%	27%	13%	11%	38%	32%	58%	81%
Bank Loan	47%	37%	14%	27%	25%	28%	63%	50%
Short Govt/Corp	18%	74%	16%	80%	27%	76%	76%	70%
Emerging Markets Bond	39%	50%	15%	72%	36%	72%	34%	34%
Specialty - TIPS	43%	52%	6%	45%	30%	41%	56%	51%
Multisector Bond	43%	89%	27%	94%	29%	90%	26%	32%
Real Estate	66%	60%	3%	30%	14%	66%	76%	92%
Global Real Estate	75%	28%	4%	71%	31%	96%	61%	86%
Specialty - Natural Resources	38%	9%	6%	17%	28%	63%	91%	86%
Equity Long/Short	39%	5%	10%	0%	38%	5%	92%	90%
Market Neutral	61%	61%	33%	61%	39%	70%	0%	0%
Managed Futures	29%	92%	58%	56%	31%	91%	72%	59%
Multialternative	8%	7%	21%	7%	63%	5%	85%	84%

Commentary

This chart shows the percentage of active managers beating their category benchmark in each of the Morningstar categories listed. We also show the percentage of active managers that have lower risk, or standard deviation, relative to their Morningstar category benchmark.

A darker background color indicates that actively managed funds are outperforming, with over 67% of non-index funds beating the category benchmark. The lightest color indicates that active management is lagging, with 33% or lower of active managers beating the category benchmark. The middle shade indicates close to average results. For risk, as measured by standard deviation, a darker color indicates risk lower than 67% of the peer group average risk, and the lightest color indicates risk higher than 33% of the peer group benchmark risk.

Looking at performance, active managers have mixed results in the last three months. In recent months, there has been solid outperformance for active managers in Small Cap Value, Real Estate, Global Real Estate, and Market Neutral. More than half of managers are outperforming within Domestic Large Cap Value and Small Cap Growth. Year-to-date (2/28), managers have done better versus their benchmark in a higher number of categories. Active security selection has done well historically in wide dispersion markets and volatile markets. Volatility has been muted in 2019, but dispersion within sectors is wide over the first two months of the year. The gap between the best and worst performing S&P 500 sector is 12.5% YTD. The gap between large value and large growth, however, is only 1.7%.

The relative advantage of actively managed funds is more evident when looking at risk levels. When comparing standard deviations to category benchmarks, active funds tend to more consistently show lower risk characteristics. At present, this is true for the one- and three-year timeframes shown here.

Above 67%
Between 33% and 67%
Below 33%

Asset Class Historical Return Heat Map

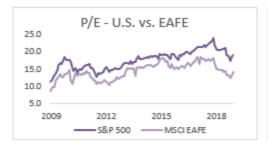
Asset Class	YTD	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
US Large Cap	11.48	-4.38	21.83	11.96	1.38	13.69	32.39	16.00	2.11	15.06	26.46
US Large Cap Growth	11.90	-0.01	27.44	6.89	5.52	14.89	32.75	14.61	4.65	15.05	31.57
US Large Cap Value	11.01	-8.95	15.36	17.40	-3.13	12.36	31.99	17.68	-0.48	15.10	21.18
US Mid Cap	15.14	-11.08	16.24	20.74	-2.18	9.77	33.50	17.88	-1.73	26.64	37.38
US Small Cap	15.45	-8.48	13.23	26.56	-1.97	5.76	41.31	16.33	1.02	26.31	25.57
International Developed	9.32	-13.36	25.62	1.51	-0.39	-4.48	23.29	17.90	-11.73	8.21	32.46
Emerging Market Equities	9.03	-14.25	37.75	11.60	-14.60	-1.82	-2.27	18.63	-18.17	19.20	79.02
REITs	12.49	-4.22	3.76	6.68	4.48	32.00	1.22	17.12	9.37	28.07	28.46
Commodities	6.51	-11.25	1.70	11.77	-24.66	-17.01	-9.52	-1.06	-13.32	16.83	18.91
Gold	2.60	-2.81	12.79	7.75	-10.88	-1.75	-28.65	6.08	9.63	28.72	22.86
Intermediate-Term Treasurys	0.35	0.90	2.55	1.05	1.63	9.00	-6.04	4.16	15.59	9.37	-6.03
Long-Term Treasurys	-0.61	-2.00	8.98	1.43	-1.59	27.48	-13.88	3.36	33.84	9.38	-21.40
TIPS	1.33	-1.26	3.01	4.68	-1.44	3.64	-8.61	6.98	13.56	6.31	11.41
Mortgage-Backed Securities	0.75	1.02	1.86	1.56	1.39	5.97	-2.12	2.42	7.90	6.67	5.37
Corporate IG Bonds	2.57	-2.51	6.42	6.11	-0.68	7.46	-1.53	9.82	8.15	9.00	18.68
High Yield Corporate Bonds	6.26	-2.08	7.50	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21
Emerging Market Debt	5.07	-4.61	9.32	10.19	1.23	5.53	-6.58	18.54	8.46	12.04	28.18
US Aggregate Bonds	1.00	0.01	3.54	2.65	0.55	5.97	-2.02	4.21	7.84	6.54	5.93
60-40 Allocation	7.29	-2.63	14.52	8.23	1.05	10.60	18.62	11.29	4.40	11.65	18.25

For each time frame, the heat map colors range from green (stronger relative performance) to red (weaker relative performance). There is a box around the return of the best performing asset class in each time period.

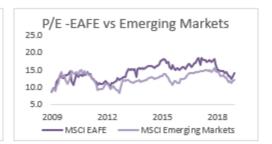
S&P 500 Historical Returns

_	January	February	March	April	May	June	July	August	September	October	November	December	Annual	
YTD	8.01	3.21											11.48	YTD
2018	5.72	-3.69	-2.54	0.38	2.41	0.62	3.72	3.26	0.57	-6.84	2.04	-9.03	-4.38	2018
2017	1.90	3.97	0.12	1.03	1.41	0.62	2.06	0.31	2.06	2.33	3.07	1.11	21.83	2017
2016	-4.96	-0.13	6.78	0.39	1.80	0.26	3.69	0.14	0.02	-1.82	3.70	1.98	11.96	2016
2015	-3.00	5.75	-1.58	0.96	1.29	-1.94	2.10	-6.03	-2.47	8.44	0.30	-1.58	1.38	2015
2014	-3.46	4.57	0.84	0.74	2.35	2.07	-1.38	4.00	-1.40	2.44	2.69	-0.25	13.69	2014
2013	5.18	1.36	3.75	1.93	2.34	-1.34	5.09	-2.90	3.14	4.60	3.05	2.53	32.39	2013
2012	4.48	4.32	3.29	-0.63	-6.01	4.12	1.39	2.25	2.58	-1.85	0.58	0.91	16.00	2012
2011	2.37	3.43	0.04	2.96	-1.13	-1.67	-2.03	-5.43	-7.03	10.93	-0.22	1.02	2.11	2011
2010	-3.60	3.10	6.03	1.58	-7.99	-5.23	7.01	-4.51	8.92	3.80	0.01	6.68	15.06	2010
2009	-8.43	-10.65	8.76	9.57	5.59	0.20	7.56	3.61	3.73	-1.86	6.00	1.93	26.46	2009
2008	-6.00	-3.25	-0.43	4.87	1.30	-8.43	-0.84	1.45	-8.91	-16.79	-7.18	1.06	-37.00	2008
2007	1.51	-1.96	1.12	4.43	3.49	-1.66	-3.10	1.50	3.74	1.59	-4.18	-0.69	5.49	2007
2006	2.65	0.27	1.24	1.34	-2.88	0.14	0.62	2.38	2.58	3.26	1.90	1.40	15.79	2006
2005	-2.44	2.10	-1.77	-1.90	3.18	0.14	3.72	-0.91	0.81	-1.67	3.78	0.03	4.91	2005
2004	1.84	1.39	-1.51	-1.57	1.37	1.94	-3.31	0.40	1.08	1.53	4.05	3.40	10.88	2004
2003	-2.62	-1.50	0.97	8.24	5.27	1.28	1.76	1.95	-1.06	5.66	0.88	5.24	28.68	2003
2002	-1.46	-1.93	3.76	-6.06	-0.74	-7.12	-7.80	0.66	-10.87	8.80	5.89	-5.87	-22.10	2002
2001	3.55	-9.12	-6.34	7.77	0.67	-2.43	-0.98	-6.26	-8.08	1.91	7.67	0.88	-11.89	2001
2000	-5.02	-1.89	9.78	-3.01	-2.05	2.47	-1.56	6.21	-5.28	-0.42	-7.88	0.49	-9.10	2000
1999	4.18	-3.11	4.00	3.87	-2.36	5.55	-3.12	-0.49	-2.74	6.33	2.03	5.89	21.04	1999
10 Yr. Avg.	1.26	2.59	2.55	1.89	0.21	-0.23	2.92	-0.53	1.01	2.02	2.12	0.53	12.15	
25 Yr. Avg.	0.55	0.36	1.48	1.98	0.88	-0.07	0.95	-0.48	0.03	1.59	1.89	1.04	11.09	
40 Yr. Avg.	1.27	0.68	1.38	1.72	1.24	0.39	1.05	0.44	-0.35	1.11	1.96	1.43	12.64	
% Positive (10 Yrs.)	60%	80%	80%	90%	70%	60%	80%	60%	70%	60%	90%	70%	90%	
% Positive (25 Yrs.)	60%	60%	68%	80%	68%	64%	56%	64%	60%	64%	80%	76%	80%	
% Positive (40 Yrs.)	63%	63%	70%	73%	70%	63%	53%	65%	55%	65%	75%	75%	83%	

Equity Valuation Charts



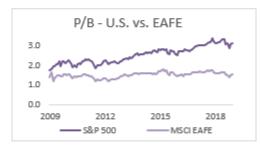






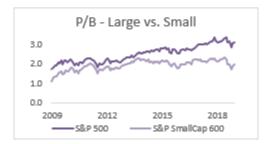










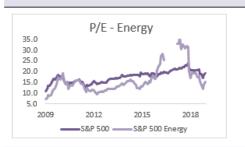






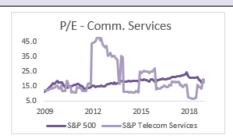
Sector Valuation Charts

Economically Sensitive Sectors

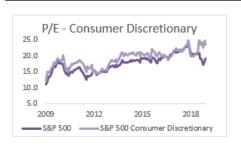








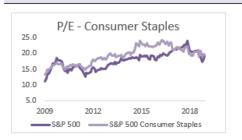
Cyclical Sectors



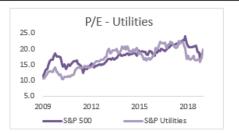




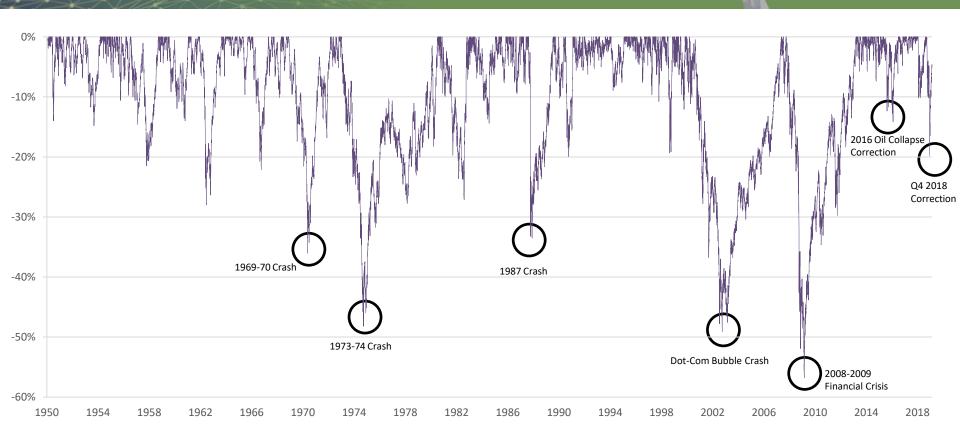
Defensive Sectors



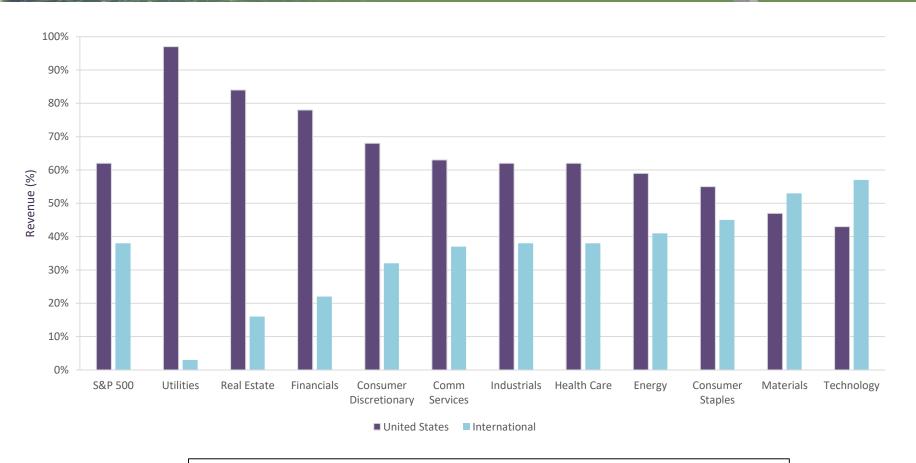




S&P 500 Drawdowns (1950-2019)



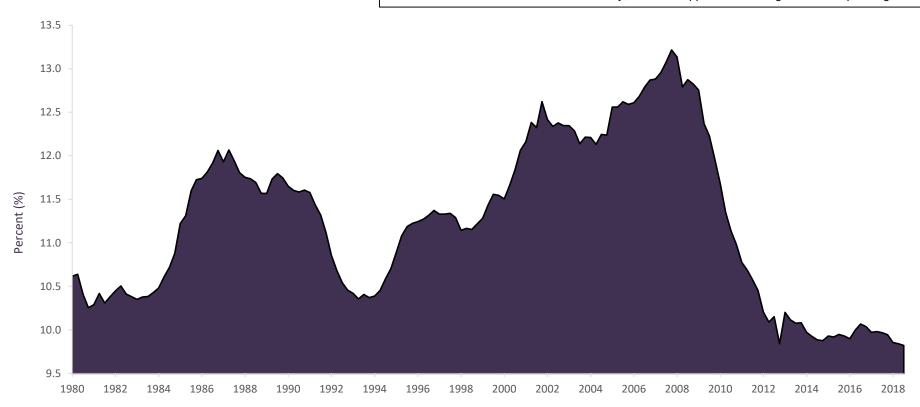
S&P 500: Sector Revenue Exposure



38% of the revenue for S&P 500 firms is from outside of the United States. This highlights the sensitivity of U.S. corporations to the health of the global economy and trade disputes. As shown in the chart, technology and materials are the two sectors that source the highest percentage of their revenue from outside of the U.S. Utilities and Real Estate source the highest percentage of revenue from the U.S.

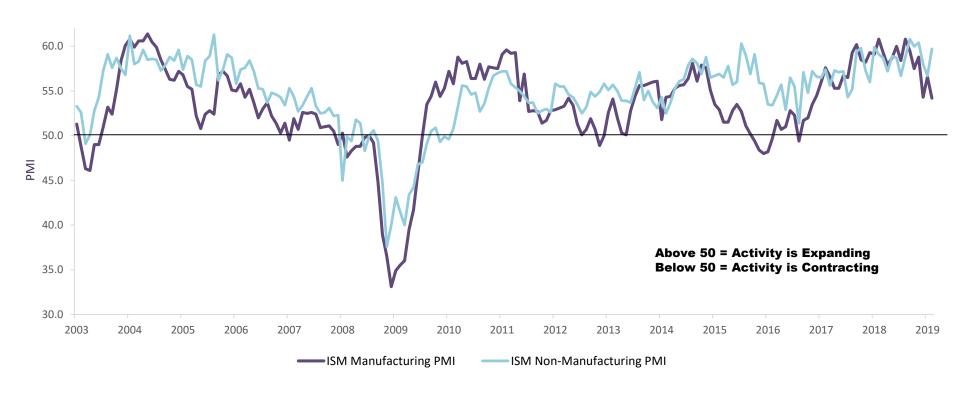
Household Debt Service Payments as a % of Disposable Income

The last three economic expansions were driven by an explosion of consumer debt. As shown in the chart below, the percentage of household debt payments relative to disposable income is now at an historic low. Low interest rates this cycle have kept debt service levels at a low rate. Overall, the consumer balance sheet remains healthy, which is supportive of strong consumer spending.

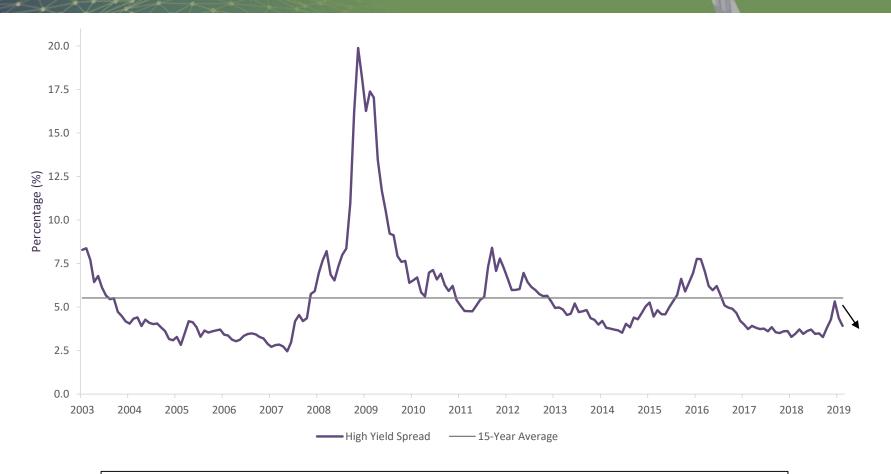


ISM Manufacturing PMI & Non-Manufacturing Index

U.S. manufacturing activity has experienced decelerating growth since peaking last summer. At the same time, services activity, as measured by the ISM non-manufacturing index, has remained at a healthy level. In February, the non-manufacturing index climbed higher as new order growth hit a 13 month high and the ISM manufacturing PMI registered its lowest reading since November 2016. Positively, both indicators remain in expansion territory.



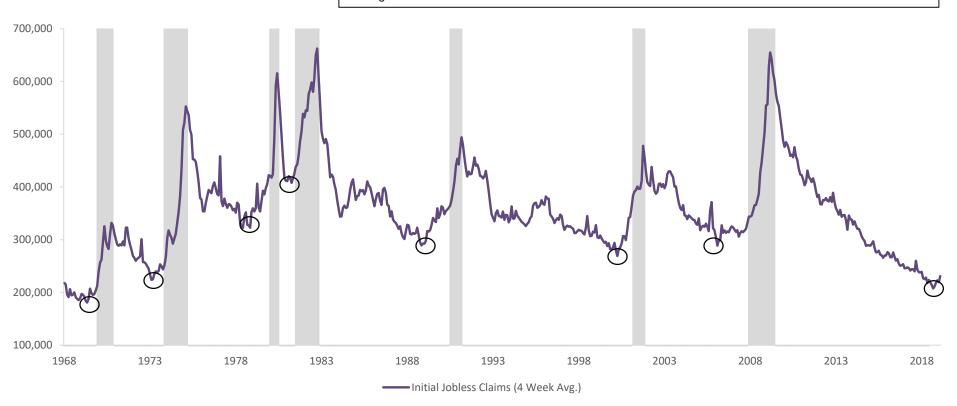
High Yield Bond Spreads Narrowing



The spread between high yield bonds and Treasurys has fallen this year to its month-end level of 3.9%. Spreads have tightened by more than 140 bps over the first two months of 2019. What is this telling us? It is a signal that investors have a greater appetite for risk. This is in contrast to the fourth quarter, where spreads came close to reaching their 15-year average of 5.5%

Initial Jobless Claims

There has been a record 101 straight months of positive jobs growth and labor market gains have been strong for several years. One area of concern, however, is the upward trend in initial jobless claims. The 4-week average of initial jobless claims bottomed six months ago in September. This indicator bottomed an average of 12 months ahead of the last seven recessions.



Disclosures

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Disclosures (cont.)

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Additional risks are associated with international investing, such as currency fluctuations, political and economic instability, and differences in accounting standards. Emerging markets involve heightened risks related to the same factors as well as increased volatility and lower trading volume.

Definitions

The **Recession Riskometer** is the average reading of ten economic indicators – Unemployment, ISM Manufacturing and Non-Manufacturing Indexes, Industrial Production Growth, Building Permits Growth, Temporary Staffing Employment Growth, Real Retail Sales Growth, Consumer Confidence as measured by the University of Michigan, Philadelphia Federal Reserve's Leading Indicator for the U.S. Index, as well as the difference between 10- and 2-year Treasury rates.

The Economic Trend Signal measures the average of whether each of the ten indicators in the **Recession Riskometer** are improving, neutral or declining in their most recent reading as compared to historical data.

The U3 Unemployment Rate measures the percentage of people without jobs who are actively seeking work. This is often the officially quoted unemployment rate. The U6 Unemployment Rate expands the definition of U3 by including "discouraged workers", or those who have stopped looking for work because current economic conditions make them believe that no work is available for them, other "marginally attached workers", or those who would like and are able to work, but have not looked for work recently, as well as part-time workers who want to work full-time, but cannot due to economic reasons.

The ISM Manufacturing Index is based on surveys of over 400 manufacturing firms across 20 industries by the Institute of Supply Management. Equal weight is given to responses in five areas - new orders, production, supplier deliveries, employment and inventories. Generally, a reading over 50 indicates expansion, and a reading in the low 40's suggests recessionary conditions. Changes in the index are also helpful in gauging the direction of economic growth.

The ISM Non-Manufacturing Index is based on surveys of over 350 non-manufacturing firms in 17 industries representing over 80% of the U.S. economy by the Institute of Supply Management. The survey shows the percentage of managers reporting higher activity, lower activity or no change in the following areas: business activity, new orders, employment, supplier deliveries, backlog of orders, new export orders, inventory change, inventory sentiment, imports, and prices.

Industrial Production and Capacity Utilization is measured monthly by the United States Federal Reserve, based on hours worked by industrial-sector employees. The report shows total amount of US industrial production as a percentage compared to a baseline year. It also offers percentage changes from month to month and year to year, and a breakdown of production by industry grouping.

Building Permits are a measure of the issuance of permits to build new housing units (single and multi-family units). Building Permits Growth is a measure of the total year-over-year percentage change of the 3-month average of building permits. This indicator leads housing construction and provides a signal for potential weakness in the housing sector when it is declining.

Definitions (cont.)

The US Bureau of Labor Statistics surveys the temporary staffing industry is surveyed in its Professional and Business Services. They produce a report on Temporary Help Employment - changes in this figure are often used as a predictor of changes in future employment. Changes in Temporary Help Employment is a coincident economic indicator.

Real Retail Sales Growth is a measure of the total year-over-year change in retail and food sales adjusted for inflation using the Consumer Price Index. Real Retail Sales figures provided are the year-over-year change of the 3-month average. By neutralizing the impact of inflation, the year-over-year change in retail and food sales provides a better view into consumer spending strength because growth in this figure indicates stronger demand without the impact of rising prices. Real Retail and Food Sales typically decline heading into recession, and a weaker read is a concern for the economy.

The University of Michigan Consumer Sentiment Index is survey of consumer confidence conducted via telephone surveys to gather information on consumer expectations regarding the overall economy.

The Philly Fed U.S. Leading Index is a composite index of several U.S. economic indicators that lead the economy including housing permits, initial unemployment insurance claims, and Treasury yield spreads. This index is often used as a proxy to gauge where the economy is heading over the next several months because it measures the strength of leading indicators. The Leading U.S. Index historically has declined into negative territory during recessions and rises back into positive territory during expansions.

The difference (spread) between the yields of the 10-Year and 2-Year maturity Treasury bonds. Often referred to as the 10-Year/2-Year spread, this metric is one of the early and reliable predictors of recession. Under normal conditions the 10-Year/2-Year spread is positive, as investors demand higher risk premium for longer -term bonds. Spreads are usually wider early in an economic recovery and narrow as growth sets in. As recession becomes more likely, spreads tend to move toward zero or turn negative - this occurs because in periods when economic growth slows inflation decreases and demand for credit declines, pushing long term rates lower.

A Price/Earnings (P/E) ratio is a measure for equity analysis. It is calculated by dividing the current market price of a stock by its earning per share.

A Price/Book (P/B) ratio is a measure for equity analysis. It is calculated by dividing the current market price of a stock by the most recent book value per share.

The yield curve is a graphical representation of several yields or interest rates across different bond maturities. Typical maturities include 3-month, 6-month, 1-year, 2-year, 5-year, 10-year and 30-year.

The High-Yield - US Treasury spread is the percentage difference in current yields of various classes of high-yield bonds compared against U.S. Treasury bonds.

Definitions (cont.)

Percentile is a method of ranking a metric versus its history by measuring the percentage of group observations equal to or lower than it. As an example, if a metric scores in the 80th percentile, it is greater than 80% of all other group observations over the stated time period and lower than 20% of the group observations.

Standard deviation is a statistical method used to gauge asset risk based on measuring the dispersion in returns relative to the average over a specified period of time.

The Global Industry Classification Standard (GICS) is a classification system for equities, it is used by various equity indexes to classify domestic and international stocks and breaks equites down to 11 sectors, which Morningstar breaks down into three groups as described below. Stocks in Energy, Industrials, Information Technology and Telecommunication Services are classified as Sensitive. Consumer Discretionary, Financials and Materials are defined as Cyclical, and Consumer Staples, Health Care and Utilities are classified as Defensive.

Sensitive - The sensitive super sector includes industries which ebb and flow with the overall economy, but not severely so. Sensitive industries fall between the defensive and cyclical industries as they are not immune to a poor economy but they also may not be as severely impacted by a poor economy as industries in the cyclical super sector. In general, the stocks in these industries move closely to the direction of the economy.

Cyclical - The cyclical super sector includes industries significantly impacted by economic shifts. When the economy is prosperous these industries tend to expand and when the economy is in a downturn these industries tend to shrink. In general, the stocks in these industries expand faster when the economy is growing and also contract faster in a recession.

Defensive - The defensive super sector includes industries that are relatively immune to economic cycles. These industries provide services that consumers require in both good and bad times, such as healthcare and utilities. In general, the stocks in these industries are not very sensitive to the direction of the economy.

A drawdown is a measure of the decline from a peak point for an investment or an index. It is typically quoted for a specified period of time, and measured as the percentage between the peak and the subsequent trough in value. The duration of a drawdown indicates the time elapsed before the investment returns to the starting peak value.

A simple moving average of an investment or an index calculates its average price for a set period to the most recent price. The moving average is updated each successive period by deleting the price from the earliest date and adding the newly available most recent price. The result is a trend line for price movements, which may be an indicator of market sentiment. Generally, if the moving average is trending higher and the investment or index price rises above the moving average, sentiment is considered to be bullish, as prices are likely to continue higher, and it may be a good time to buy. If the moving average trend slopes downward, and the investment price is below the moving average, this may be a bearish, or sell signal, as prices may continue to move down.

Index Definitions

The S&P 500 is an index of 500 stocks chosen for market size, liquidity and industry grouping (among other factors) designed to be a leading indicator of U.S. equities and is meant to reflect the risk/return characteristics of the large cap universe.

The S&P Growth Index is a float adjusted, market capitalization weighted index of 317 stocks drawn from the S&P 500 Index that exhibit strong growth characteristics. S&P Dow Jones Indexes uses three factors to measure growth: sales growth, the ratio of earnings change to price, and momentum.

The S&P Value Index is a float adjusted, market capitalization weighted index of 364 stocks drawn from the S&P 500 Index that exhibit strong value characteristics. S&P Dow Jones Indexes uses three factors to measure value: the ratios of book value, earnings and the sales to price sales metric.

The S&P MidCap 400 provides investors with a benchmark for mid-sized companies. The index, which is distinct from the large-cap S&P 500®, measures the performance of 400 mid-sized companies, representing more than 7% of available market cap.

The S&P MidCap 400 Growth Index represents the growth companies of the S&P MidCap 400 Index which itself is composed of mid-cap stocks from the broad U.S. equity market. Growth companies are identified by three factors: book value to price ratio, earnings to price ratio, and sales to price ratio.

The S&P MidCap 400 Value Index represents the value companies of the S&P MidCap 400 Index which itself is composed of midcap stocks from the broad U.S. equity market. Value companies are identified by three factors: book value to price ratio, earnings to price ratio, and sales to price ratio.

The S&P SmallCap 600 measures the small-cap segment of the U.S. equity market. Introduced in 1994, the index is designed to track the performance of 600 small-size companies in the U.S, reflecting this market segment's distinctive risk and return characteristics. The index measures a segment of the market that is typically known for less liquidity and potentially less financial stability than large-caps, the index was constructed to be an efficient benchmark composed of small-cap companies that meet investability and financial viability criteria.

The S&P SmallCap 600 Growth Index represents the growth companies of the S&P S&P SmallCap 600 Index which itself is composed of small cap stocks from the broad U.S. equity market. Growth companies are identified by three factors: book value to price ratio, earnings to price ratio, and sales to price ratio.

The S&P SmallCap 600 Value Index represents the value companies of the S&P SmallCap 600 Index which itself is composed of small-cap stocks from the broad U.S. equity market. Value companies are identified by three factors: book value to price ratio, earnings to price ratio, and sales to price ratio.

The MSCI EAFE is designed to measure the equity market performance of developed markets (Europe, Australasia, Far East) excluding the U.S. and Canada. The Index is market-capitalization weighted.

The MSCI EAFE Growth index represents large and mid-cap securities exhibiting overall growth style characteristics across Developed Markets countries around the world, excluding the U.S. and Canada.

The MSCI EAFE Value index represents large and-mid cap securities exhibiting overall value style characteristics across Developed Markets countries around the world, excluding the U.S. and Canada.

The MSCI Emerging Markets is designed to measure equity market performance in global emerging markets. It is a floatadjusted market capitalization index.

The MSCI Europe Index is a free float-adjusted market capitalization index that is designed to measure developed market equity performance in Europe.

The MSCI Pacific Index captures large and mid-cap representation across five Developed Markets (DM) countries in the Pacific region. With 470 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

The MSCI ACWI is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets. The MSCI ACWI consists of 46 country indexes comprising 23 developed and 23 emerging market country indexes. The developed market country indexes included are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the United Kingdom and the United States. The emerging market country indexes included are: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Peru, Philippines, Poland, Qatar, Russia, South Africa, Taiwan, Thailand, Turkey and United Arab Emirates.

The S&P 500® Consumer Discretionary Index comprises those companies included in the S&P 500 that are classified as members of the GICS® Consumer Discretionary sector.

The S&P 500® Consumer Staples Index comprises those companies included in the S&P 500 that are classified as members of the GICS® Consumer Staples sector.

The S&P 500® Energy Index comprises those companies included in the S&P 500 that are classified as members of the GICS® Energy sector.

The S&P 500® Financials Index comprises those companies included in the S&P 500 that are classified as members of the GICS® Financials sector.

The S&P 500® Health Care Index comprises those companies included in the S&P 500 that are classified as members of the GICS® Health Care sector.

The S&P 500® Industrials Index comprises those companies included in the S&P 500 that are classified as members of the GICS® Industrials sector.

The S&P 500® Information Technology Index comprises those companies included in the S&P 500 that are classified as members of the GICS® Information Technology sector.

The S&P 500® Materials Index comprises those companies included in the S&P 500 that are classified as members of the GICS® Materials sector.

The S&P 500® Real Estate Index comprises those companies included in the S&P 500 that are classified as members of the GICS® Real Estate sector.

The S&P 500® Telecommunication Services Index comprises those companies included in the S&P 500 that are classified as members of the GICS® Telecommunication Services sector.

The S&P 500® Utilities Index comprises those companies included in the S&P 500 that are classified as members of the GICS® Utilities sector.

The Bank of America Merrill Lynch U.S. Treasury Bill 3 Month index measures the performance of a single issue of outstanding treasury bill which matures closest to, but not beyond, three months from the rebalancing date. The issue is purchased at the beginning of the month and held for a full month; at the end of the month that issue is sold and rolled into a newly selected issue.

The Bloomberg Barclays U.S. Treasury: 1-3 Year Index measures the performance of U.S. Treasury securities with remaining maturities of one to three years.

The Bloomberg Barclays U.S. Treasury: 7-10 Year Index measures the performance of U.S. Treasury securities that have a remaining maturity of at least seven years and less than 10 years.

The Bloomberg Barclays U.S. Treasury: U.S. TIPS Index includes all publicly issued, U.S. Treasury inflation-protected securities that have at least one year remaining to maturity, are rated investment grade, and have \$250 million or more of outstanding face value.

The Bloomberg Barclays U.S. Municipal Bond Index is an unmanaged, market-value-weighted index of investment-grade municipal bonds with maturities of one year or more.

The Bloomberg Barclays GNMA Index measures the performance of Government National Mortgage Association (GNMA or "Ginnie Mae") bonds. It is a subset of the Bloomberg Barclays U.S. Aggregate index.

The Bloomberg Barclays U.S. Corporate (Investment Grade) Bond Index measures the investment grade, fixed-rate, taxable corporate bond market. It includes USD-denominated securities publicly issued by U.S. and non-US private-sector industrial, utility and financial issuers. Certificates of deposit are also included. Launched in July 1973, securities included must be rated investment grade (Baa3/BBB-/BBB- or higher). Eligible senior and subordinated corporate securities must have at least one year until final maturity, but in practice the index holdings has a fluctuating average life of around 10.75 years. The index is unhedged and rebalances monthly.

The Bloomberg Barclays U.S. Corporate High-Yield Index measures the market of USD-denominated, non-investment grade, fixed-rate, taxable corporate bonds. Securities are classified as high-yield if the middle rating of Moody's, Fitch, and S&P is Ba1/BB+/BB+ or below, excluding emerging market debt.

The Bloomberg Barclays U.S. Aggregate 1-3 Years Index consists of publicly issued investment grade corporate, US Treasury and government agency securities with remaining maturities of one to three years.

The Bloomberg Barclays Capital U.S. Aggregate Bond Index, which was originally called the Lehman Aggregate Bond Index, is a broad based flagship benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. The index includes Treasuries, government—related and corporate debt securities, MBS (agency fixed-rate and hybrid ARM pass-throughs), ABS and CMBS (agency and non-agency) debt securities that are rated at least Baa3 by Moody's and BBB- by S&P. Taxable municipals, including Build America bonds and a small amount of foreign bonds traded in U.S. markets are also included. Eligible bonds must have at least one year until final maturity, but in practice the index holdings has a fluctuating average life of around 8.25 years. This total return index, created in 1986 with history backfilled to January 1, 1976, is unhedged and rebalances monthly.

The Bloomberg Barclays Global Treasury ex U.S. Bond Index consists of those securities included in the Barclays Global Aggregate Bond Index that are Treasury securities, with the U.S. excluded. The Barclays Global Aggregate Bond Index is comprised of several other Barclays indexes that measure fixed income performance of regions around the world.

The JP Morgan Emerging Markets Bond Index (EMBI) Global Diversified measures the performance of fix-rate for external-currency denominated debt instruments including Brady bonds, loans, Eurobonds in emerging markets. Countries covered are Argentina, Brazil, Bulgaria, Mexico, Morocco, Nigeria, the Philippines, Poland, Russia, and South Africa. It covers more of the eligible instruments than the EMBI+ by relaxing somewhat the strict EMBI+ limits on secondary market trading liquidity.

The Bloomberg Commodity Index is a broadly diversified index that measures 22 exchange-traded futures on physical commodities in five groups (energy, agriculture, industrial metals, precious metals, and livestock), which are weighted to account for economic significance and market liquidity. No single commodity can comprise less than 2% or more than 15% of the index; and no group can represent more than 33% of the index. However, between rebalancings, group weightings may fluctuate to levels outside the limits. The index rebalances annually, weighted 2/3 by trading volume and 1/3 by world production.

The Bloomberg Barclays US Treasury 20+ Year index represents the 20+ Year component of the Barclays US Treasury Index. Included securities must have at least 20 years to final maturity regardless of call features, and least \$250 million par amount outstanding. They must be rated investment grade (Baa3/BBB- or higher) by at least two of the following ratings agencies: Moody's, S&P, Fitch.

The Dow Jones U.S. Select REIT Index tracks the performance of publicly traded REITs and REIT-like securities and is designed to serve as a proxy for direct real estate investment, in part by excluding companies whose performance may be driven by factors other than the value of real estate. The index is a subset of the Dow Jones U.S. Select Real Estate Securities Index (RESI), which represents equity real estate investment trusts (REITs) and real estate operating companies (REOCs) traded in the U.S.

The S&P GSCI Gold Index, a sub-index of the S&P GSCI, provides investors with a reliable and publicly available benchmark tracking the COMEX gold future. The index is designed to be tradable, readily accessible to market participants, and cost efficient to implement. The more widely tracked S&P GSCI index is recognized as a leading measure of general price movements and inflation in the world economy. The index represents commodity market beta is world-production weighted and is designed to be investable by including the most liquid commodity futures.

Federal funds rate is the interest banks charge one another when lending reserve balances on an overnight basis. Typically banks with reserve capital above the minimum required to be held at the Federal Reserve will lend the excess to banks who need to meet minimums.

Treasury yield is the return on investment of U.S. government's debt obligations. Short-term Treasury bills offer no interest payments and are issued at discount from face value. The yield of the three-month Treasury bill is the difference between the discount price and face value, expressed as an annualized percentage rate.

Longer-term Treasury notes are issued for maturities from 1-10 years and offer an interest (or coupon) payment. They may be purchased at premium or discount from face value. The yield on 1- and 2- year Treasury notes is based on their coupon payment and face value, adjusted upward if the note was purchased at discount, and downward if the note was purchased at a premium. It is also expressed as an annualized percentage rate.

page 34

Asset Class Indexes

Asset Class

US Large Cap

US Large Cap Growth

US Large Cap Value

US Mid Cap

US Small Cap

International Developed

Emerging Market Equities

REITs

Commodities

Gold

Intermediate-Term Treasurys

Long-Term Treasurys

TIPS

Mortgage-Backed Securities

Corporate IG Bonds

High Yield Corporate Bonds

Emerging Market Debt

US Aggregate Bonds

60-40 Allocation

Index

S&P 500

S&P 500 Growth

S&P 500 Value

S&P Midcap 400

S&P SmallCap 600

MSCI EAFE

MSCI Emerging Markets

DJ US Select REIT

Bloomberg Commodities

S&P GSCI Gold

Bloomberg Barclays US Treasury 7-10 Yr

Bloomberg Barclays US Treasury 20+ Yr

Bloomberg Barclays US Treasury US TIPS

Bloomberg Barclays GNMA

Bloomberg Barclays US Corporate IG

Bloomberg Barclays US Corporate High Yield

JPM EMBI Global

Bloomberg Barclays US Aggregate Bond

60% S&P 500, 40% Bloomberg Barclays US Aggregate Bond

Data Sources

Economic Indicator

Nonfarm Monthly Payrolls ('000)

Total Nonfarm Payrolls - YoY Change

U3 Unemployment Rate

U6 Unemployment Rate

Quit Rate

Job Openings: Total Nonfarm Payroll

Initial Jobless Claims ('000) 4 Wk. MA - Month End

KC Fed LMCI Momentum Indicator

Labor Force Participation Rate

Employment to Population Ratio

Temporary Help Employment

Retail Sales - YoY Change

Vehicle Sales (Mil. Units, annualized)

Personal Savings Rate

Real Retail Sales (3MMA) - YoY Change

Industrial Production - YoY Change

Capacity Utilization

Core Capital Goods Orders - YoY Change

Building Permits ('000)

Housing Starts ('000)

Source

- U.S. Bureau of Labor Statistics
- U.S. Employment and Training Administration

Federal Reserve Bank of Kansas City

- U.S. Bureau of Labor Statistics
- U.S. Bureau of Labor Statistics
- U.S. Bureau of Labor Statistics
- U.S. Bureau of the Census
- U.S. Bureau of Economic Analysis
- U.S. Bureau of Economic Analysis

Federal Reserve Bank of St. Louis

Board of Governors of the Federal Reserve System (US)

Board of Governors of the Federal Reserve System (US)

- U.S. Bureau of the Census
- U.S. Bureau of the Census
- U.S. Bureau of the Census

Data Sources (cont.)

Economic Indicator

New Home Sales

S&P/Case-Shiller Home Price Index (20 city) - YoY Change

Total Construction Spending - YoY Change

ISM Manufacturing Composite PMI

ISM Manufacturing New Orders

ISM Non-Manufacturing Composite PMI

ISM Non-Manufacturing New Orders

U. of Michigan Consumer Sentiment

Consumer Price Index (CPI) - YoY Change

Personal Consumption Expenditure (PCE) - YoY Change

Producer Price Index (PPI) - YoY Change

Average Hourly Earnings - YoY Change

Real GDP – QoQ (SAAR)

Real GDP - YoY Change

Treasury Yield Curve (10-Yr. Minus 2-Yr.)

Philly Fed Leading U.S. Index

Source

U.S. Bureau of the Census

S&P Dow Jones Indices LLC

U.S. Bureau of the Census

Institute for Supply Management

Institute for Supply Management

Institute for Supply Management

Institute for Supply Management

University of Michigan

U.S. Bureau of Labor Statistics

U.S. Bureau of Economic Analysis

U.S. Bureau of Labor Statistics

U.S. Bureau of Labor Statistics

U.S. Bureau of Economic Analysis

U.S. Bureau of Economic Analysis

Federal Reserve Bank of St. Louis

Federal Reserve Bank of Philadelphia