

Investing in Today's World
with Thoughts of Tomorrow

Madison
INVESTMENTS



Presented by:
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Wisconsin Coalition of Annuitants
May 11, 2018



Today's Key Takeaways

- Investor Inputs
- Market Recap
- Investment Outlook

Madison

Investor Inputs



Why People Invest (the primary reasons)

- To achieve financial goals
- To increase current income
- To accumulate wealth
- To increase financial security
- To have funds available during retirement



Retirement Concerns

-
-
-
-
- Not having enough to do
- Isolation / loneliness
- Relationship challenges / marital



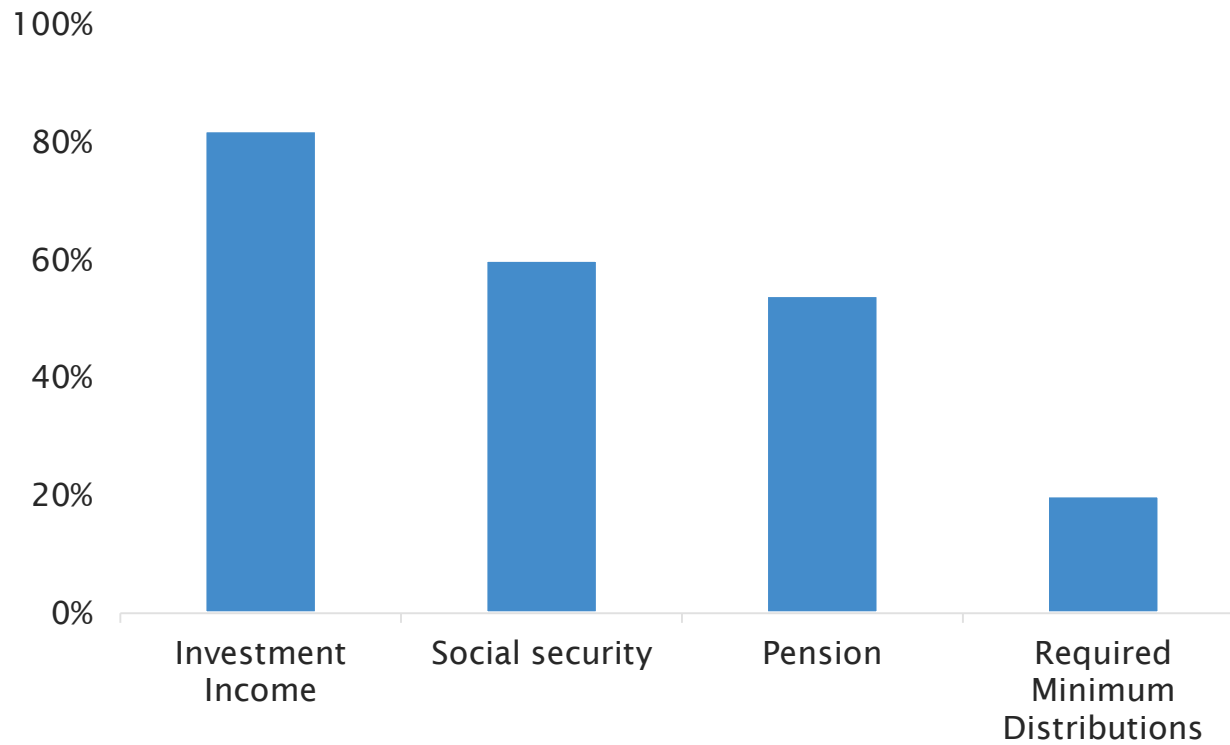
Retirement Concerns

- Unexpected health crisis
- Outliving savings/inflation
- Costs of long-term care
- A stock market crash
- Not having enough to do
- Isolation / loneliness
- Relationship challenges / marital



Retirement Income

Sources of Retirement Income

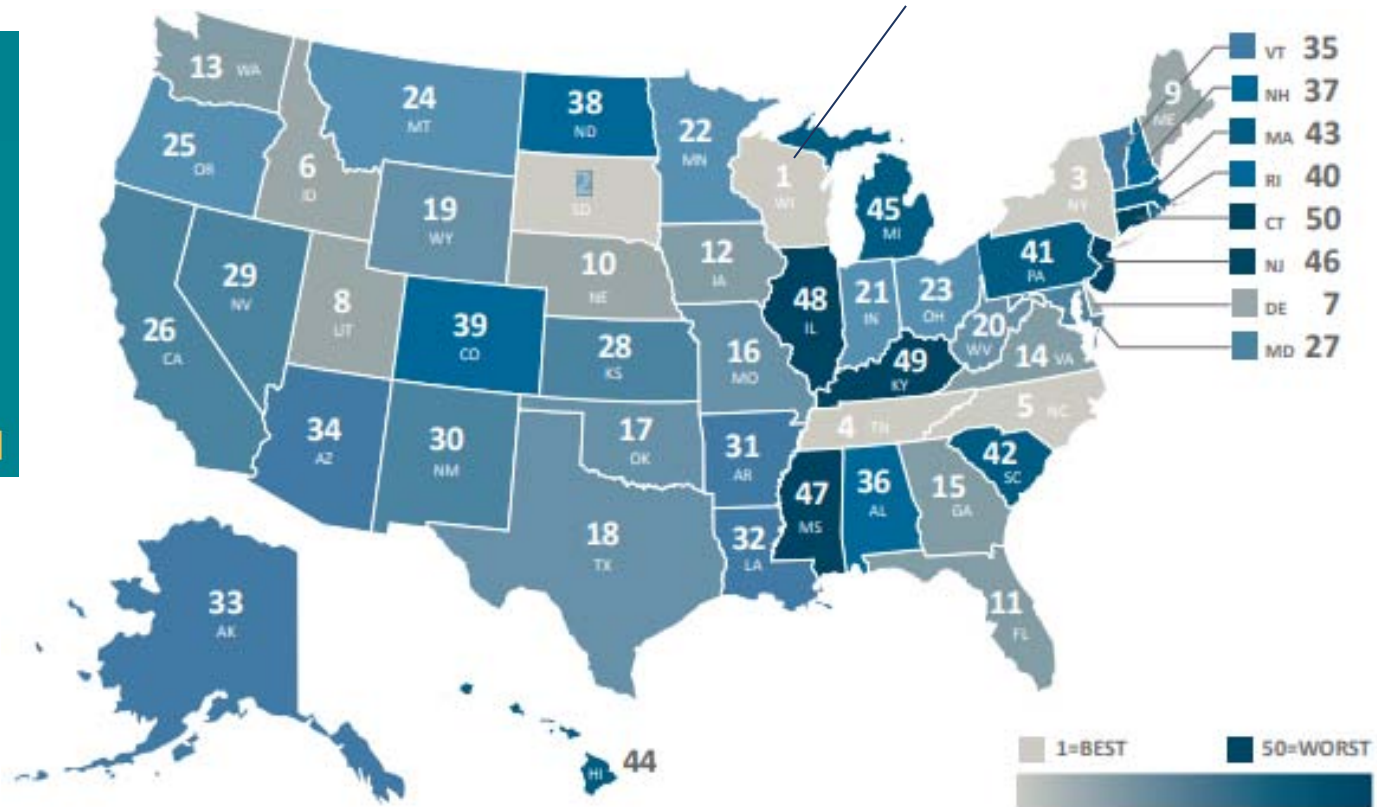


Source: theretirementmanifesto.com

Retirement Concerns

For 2017, the funding ratio for public pension plans in Wisconsin was 61.5%.

Yikes!
UNFUNDED
PUBLIC
PENSION
LIABILITIES
EXCEED
\$ 6 TRILLION

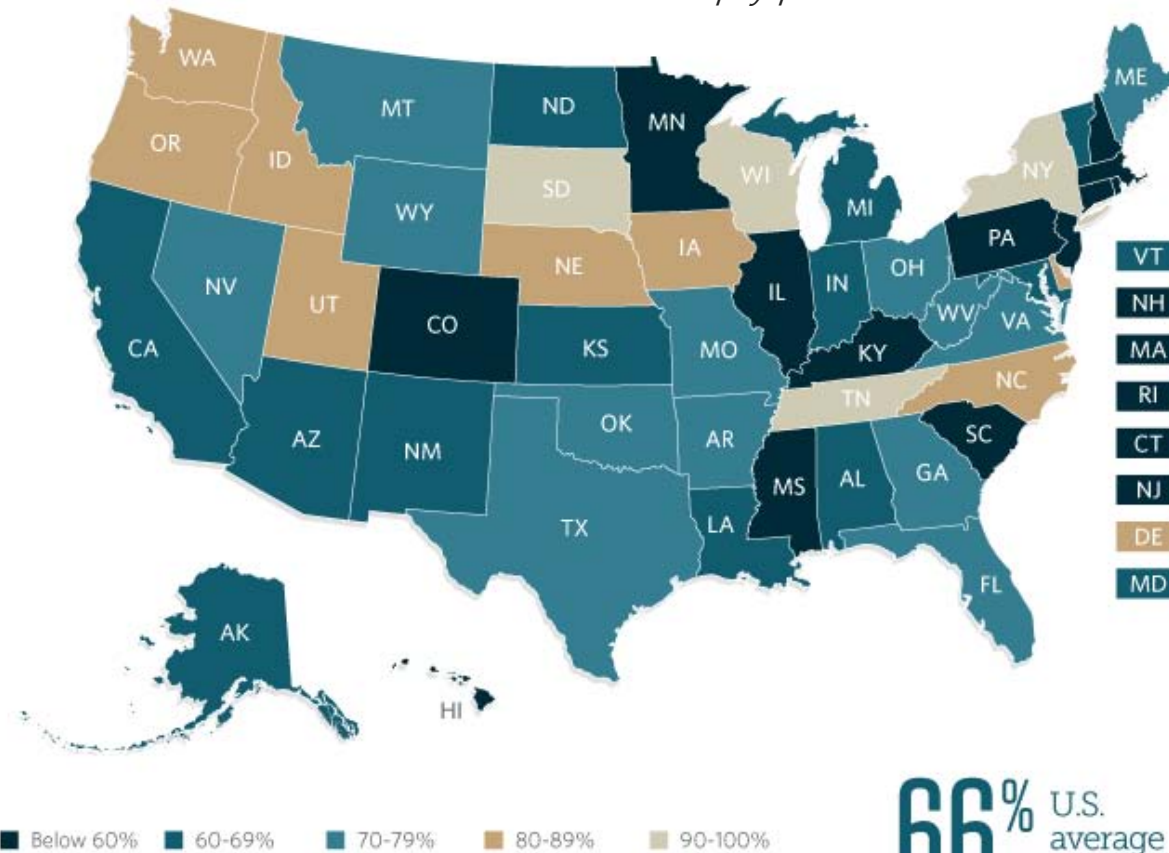


Source: Madison, American Legislative Exchange Council

Retirement Concerns

Funded Ratios for State Pension Plans, 2016

Only 4 states had at least 90% of the assets needed to pay promised benefits.



Source: Madison, American Legislative Exchange Council

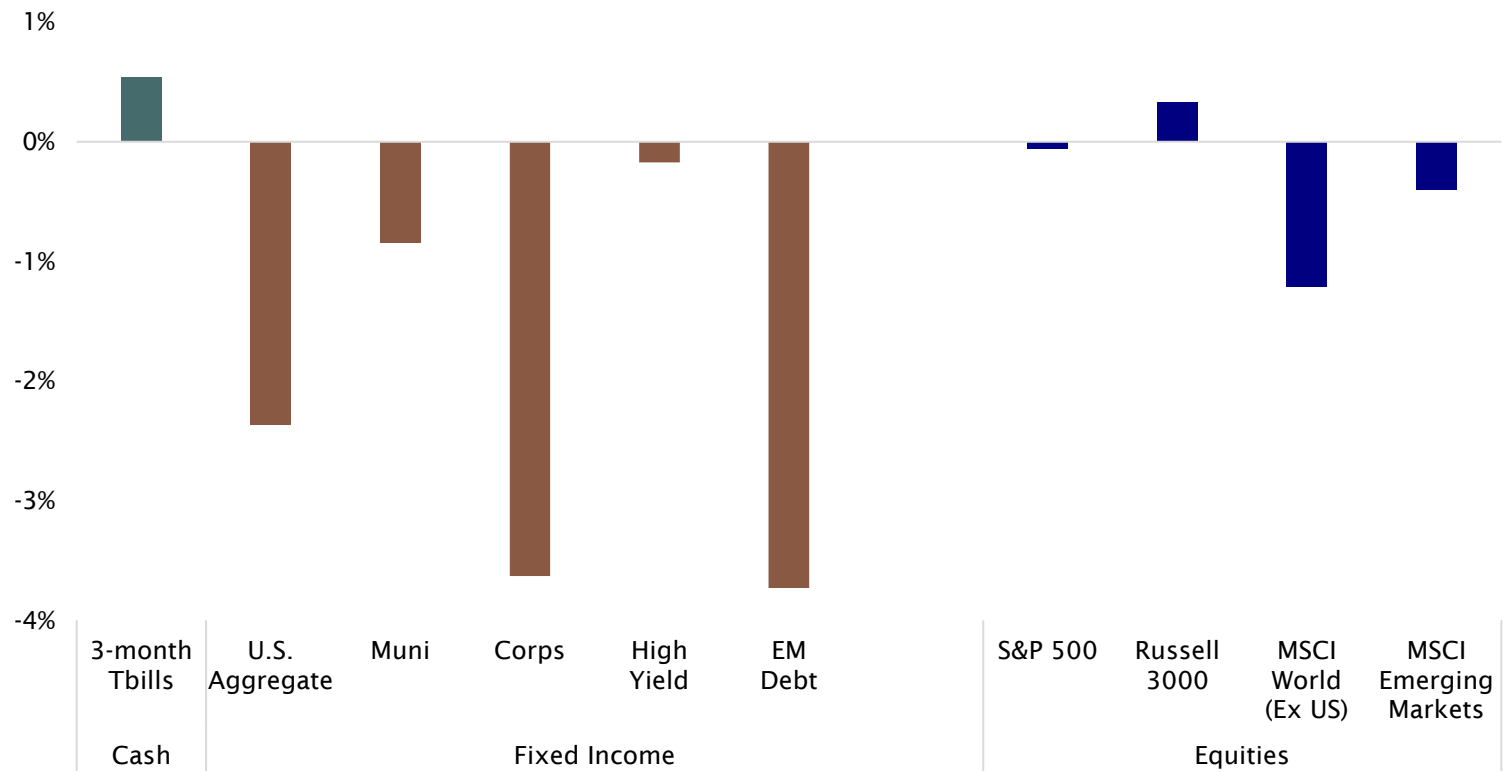
Madison

Market Recap



YTD Performance

Year-to-Date Returns (as of 5-8-18)

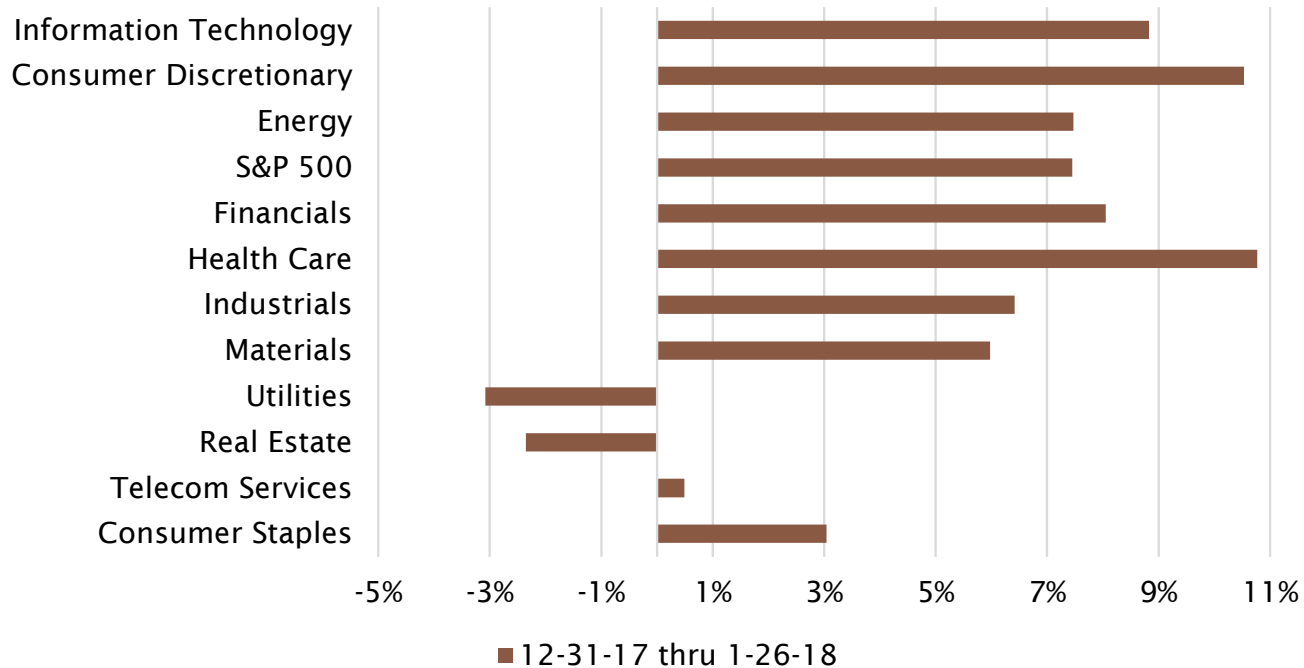


Source: Madison, Bloomberg



Sector Performance

S&P 500 Sector Returns (12-31-17 thru 1-26-18)

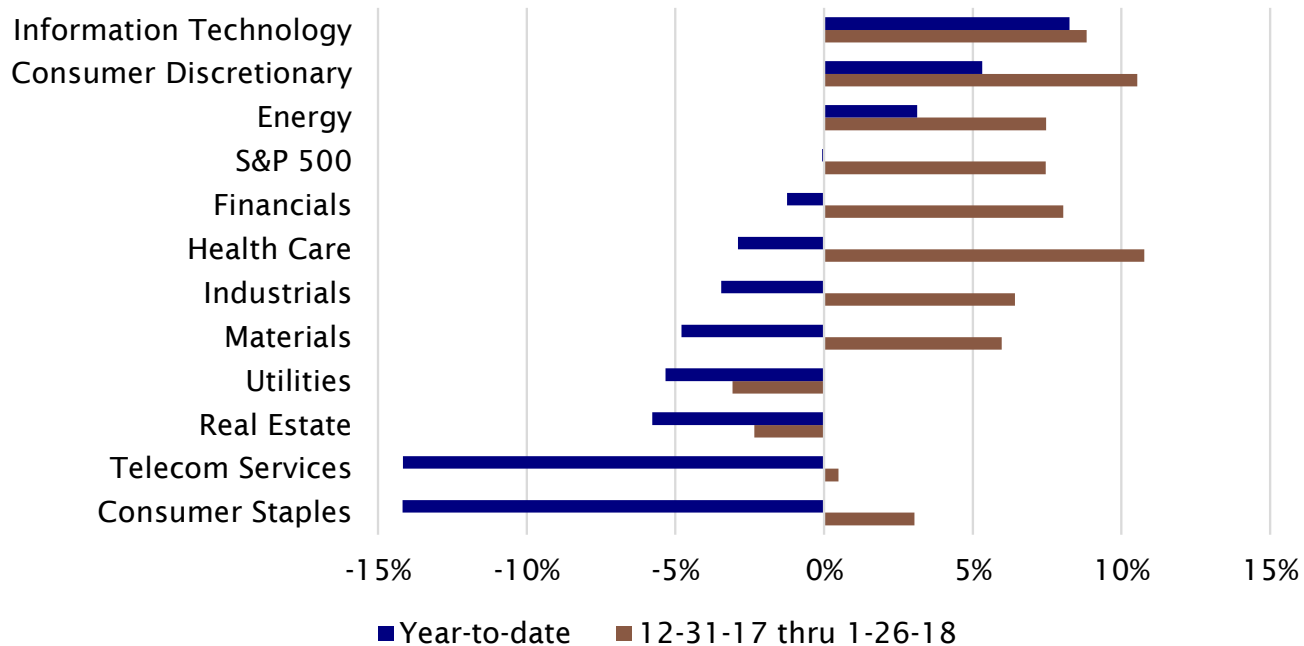


Source: Madison, Bloomberg



Sector Performance

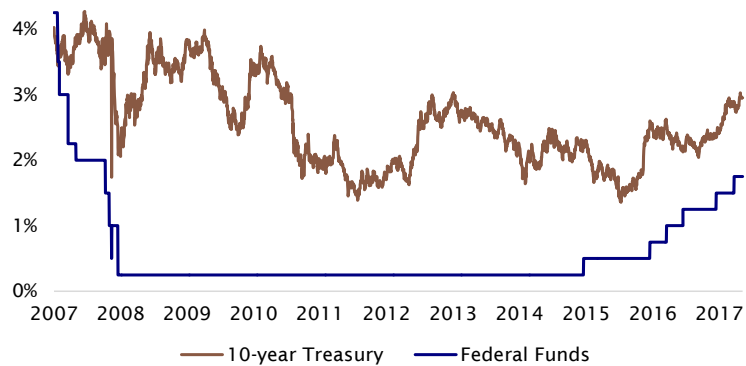
S&P 500 Sector Returns Year-to-Date (as of 5-8-18)



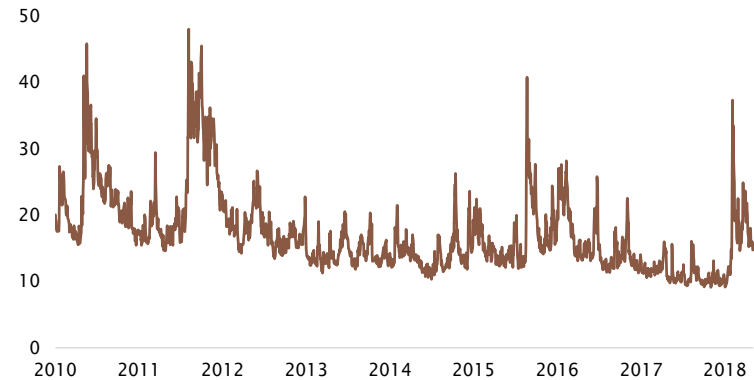
Source: Madison, Bloomberg

Sector Performance (what changed?)

Fed Funds & 10-Year Treasury Yields



Stock Market Volatility (VIX)



Contributing Factors:

- Macroeconomics
- Inflation expectations
- Policy uncertainty
- Financial conditions
- Threat of trade wars
- Shape of yield curve
- Tax reform
- Market volatility

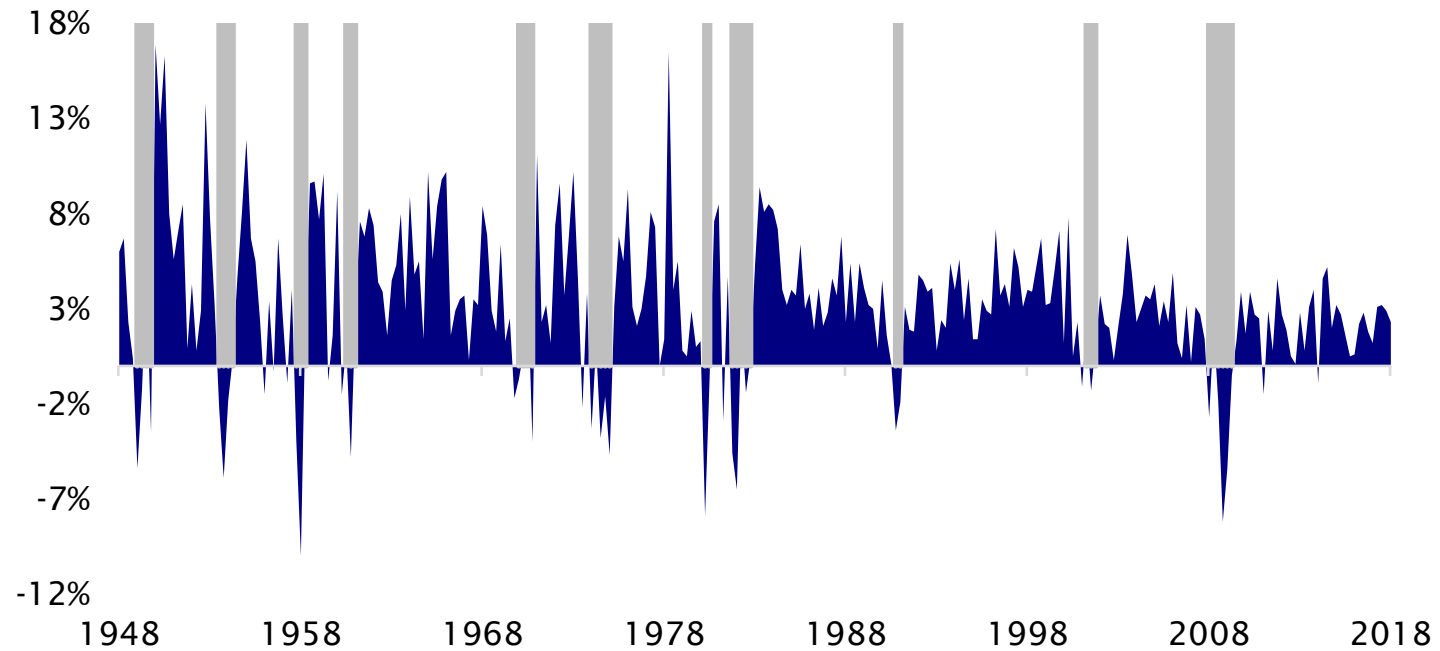


Investment Outlook

Source: Madison, Morningstar

Macroeconomics

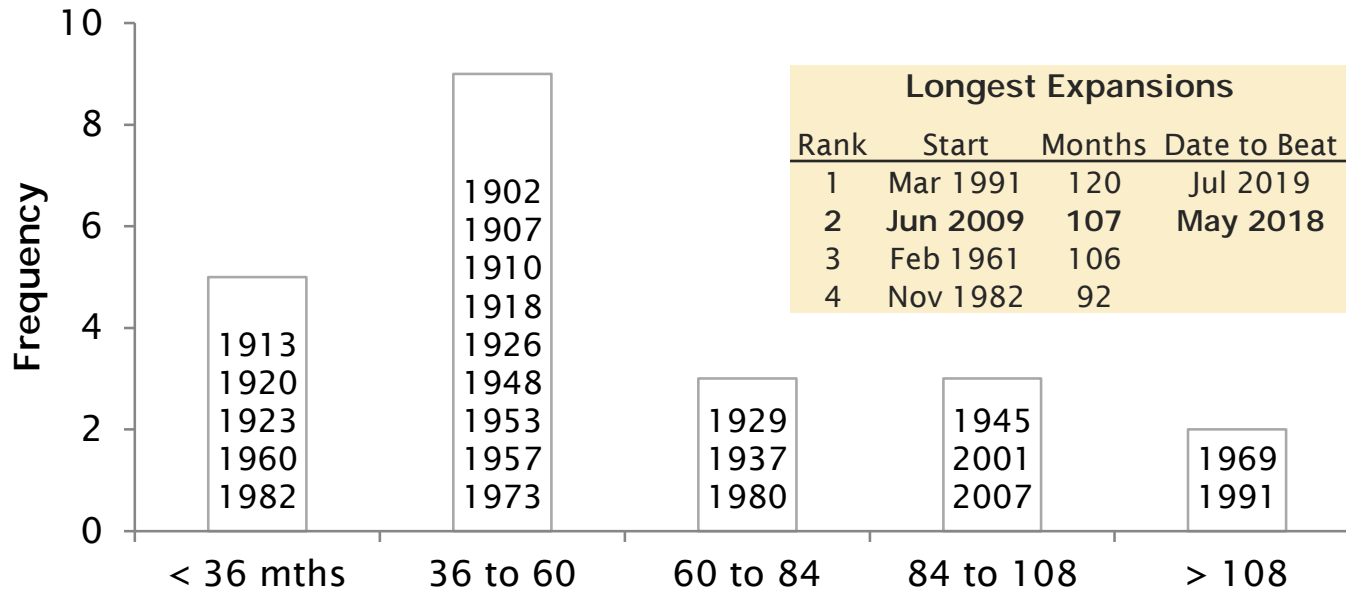
Gross Domestic Product (GDP)



Source: Madison, Bloomberg

Macroeconomics

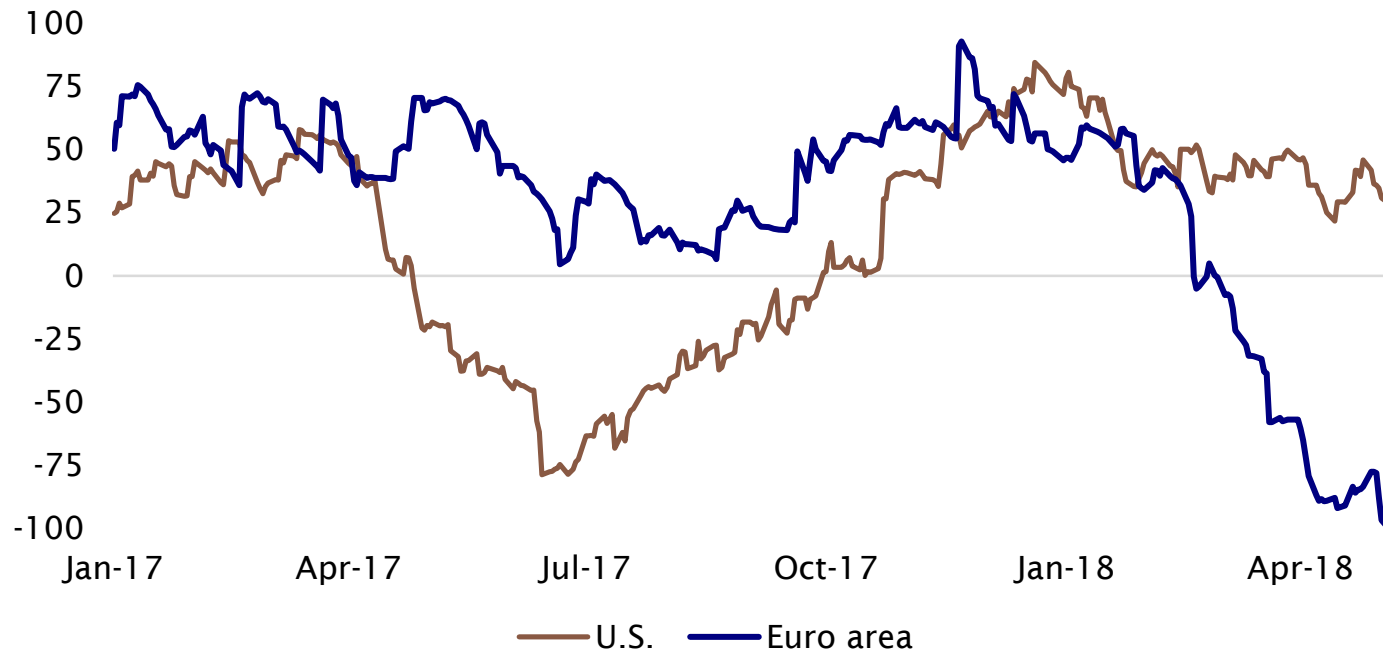
Length of Historical Economic Cycles Year Denotes End of Growth Phase



Source: Madison, National Bureau of Economic Research

Macroeconomics

Economic Surprise Indices



Source: Madison, Bloomberg



Inflation

Consumer Price Index April 2018

| CPI Category | Weight | Cumulative Weight | 1-Year Change |
|-----------------------------|--------|-------------------|---------------|
| Housing ¹ | 42% | 42% | 3.0% |
| Transportation | 17% | 58% | 4.1% |
| Food and Beverages | 14% | 72% | 1.4% |
| Medical Care | 9% | 81% | 2.2% |
| Education and Communication | 7% | 87% | 0.1% |
| Recreation | 6% | 93% | -3.6% |
| Fuels and Utilities | 5% | 98% | 2.2% |
| Apparel | 2% | 100% | 1.1% |

1 - Owners' equivalent rent of residences represents 23.6%.



Inflation

Inflation Expectations

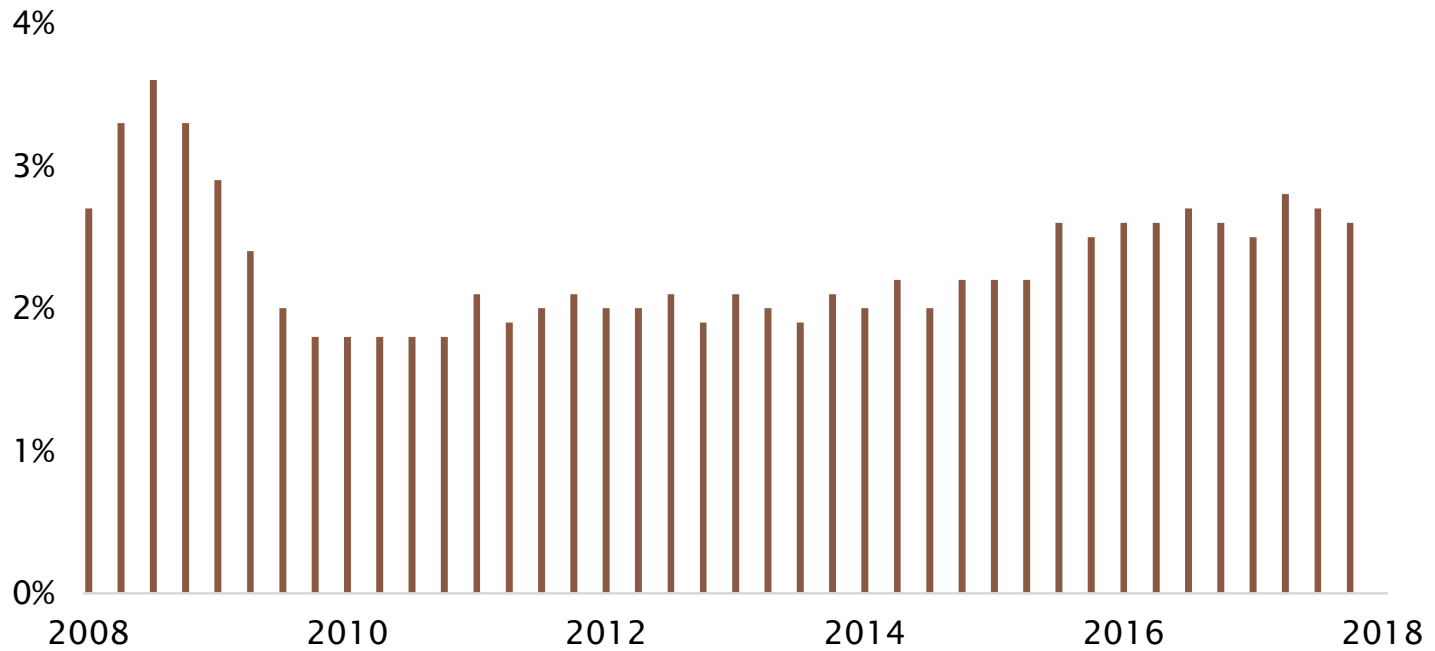


Source: Madison, Bloomberg



Inflation

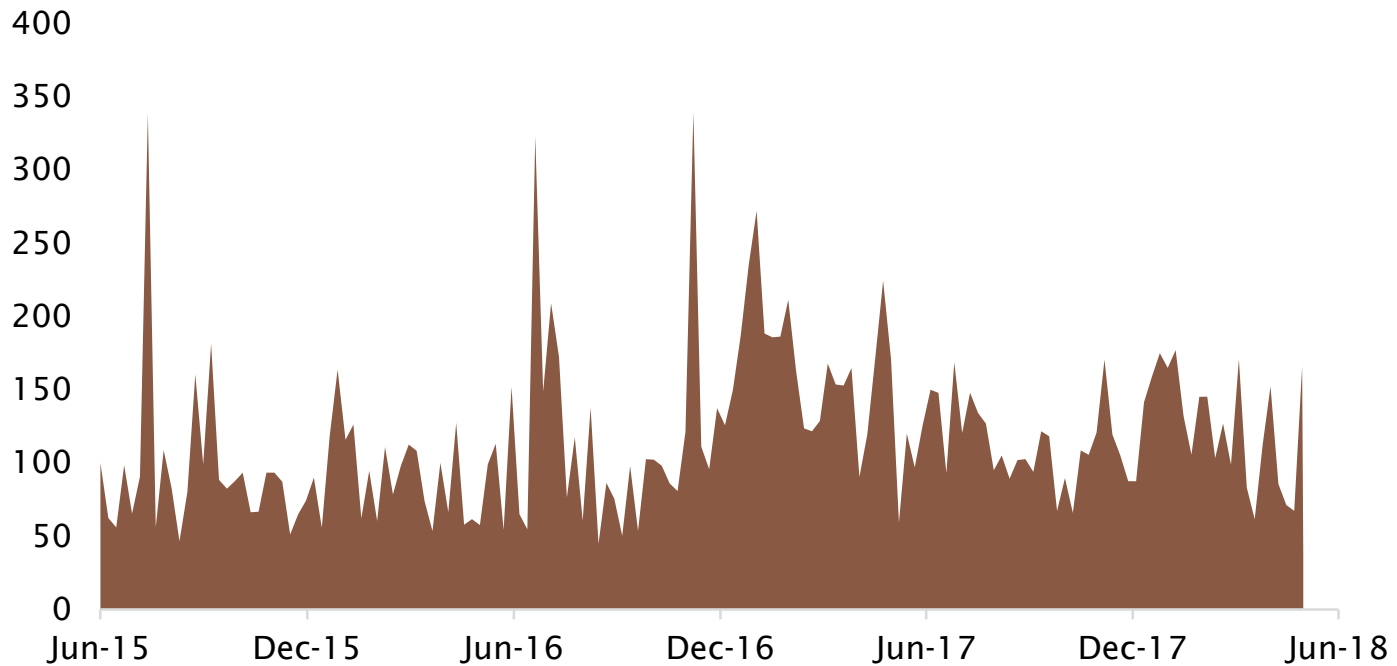
Average Hourly Earnings



Source: Madison, Bloomberg

Policy Uncertainty

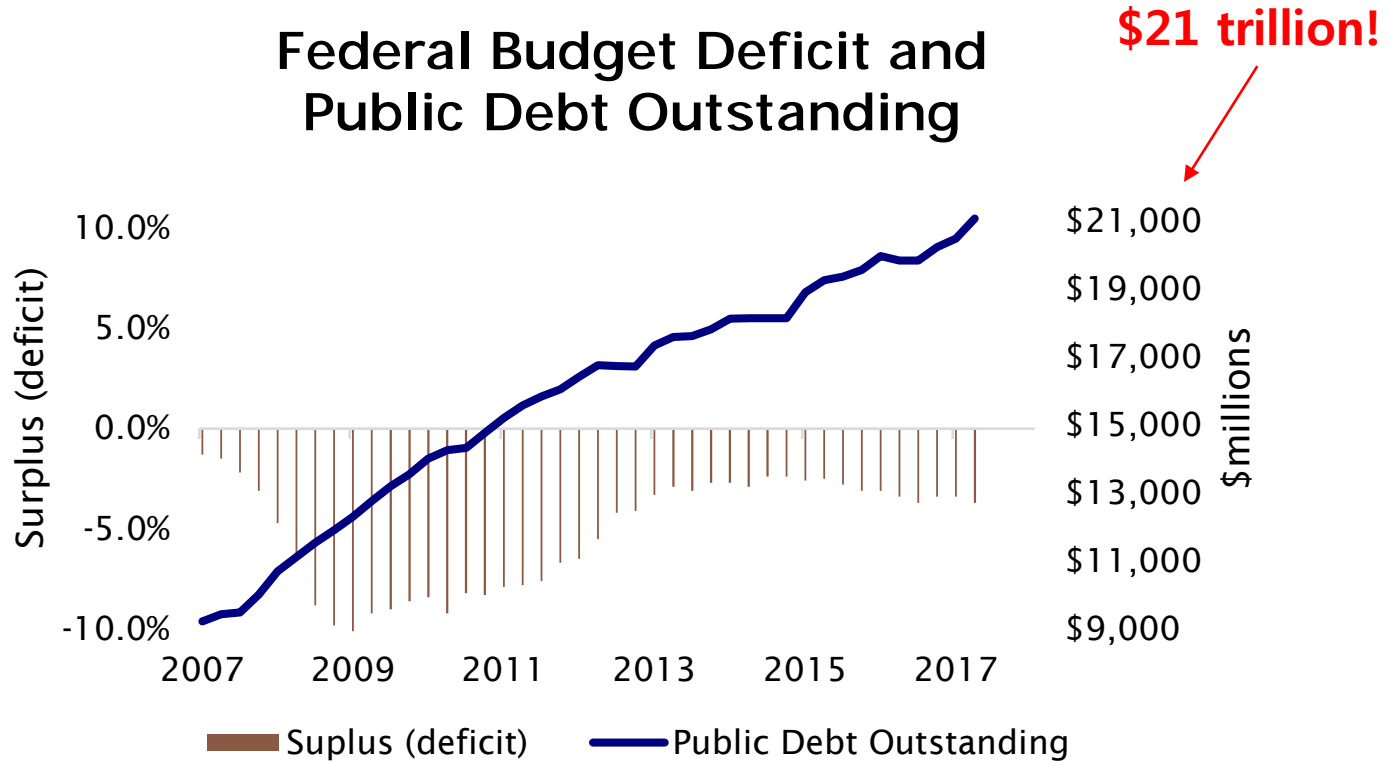
U.S. Policy Uncertainty Index



Source: Madison, Bloomberg

Policy Uncertainty

Federal Budget Deficit and Public Debt Outstanding



Largest Holders of U.S Treasuries: Federal Reserve, China, Japan, Ireland, Brazil, Cayman Islands, U.K. and Switzerland.

Source: Madison, Treasury International Capital System



Central Bank Policy

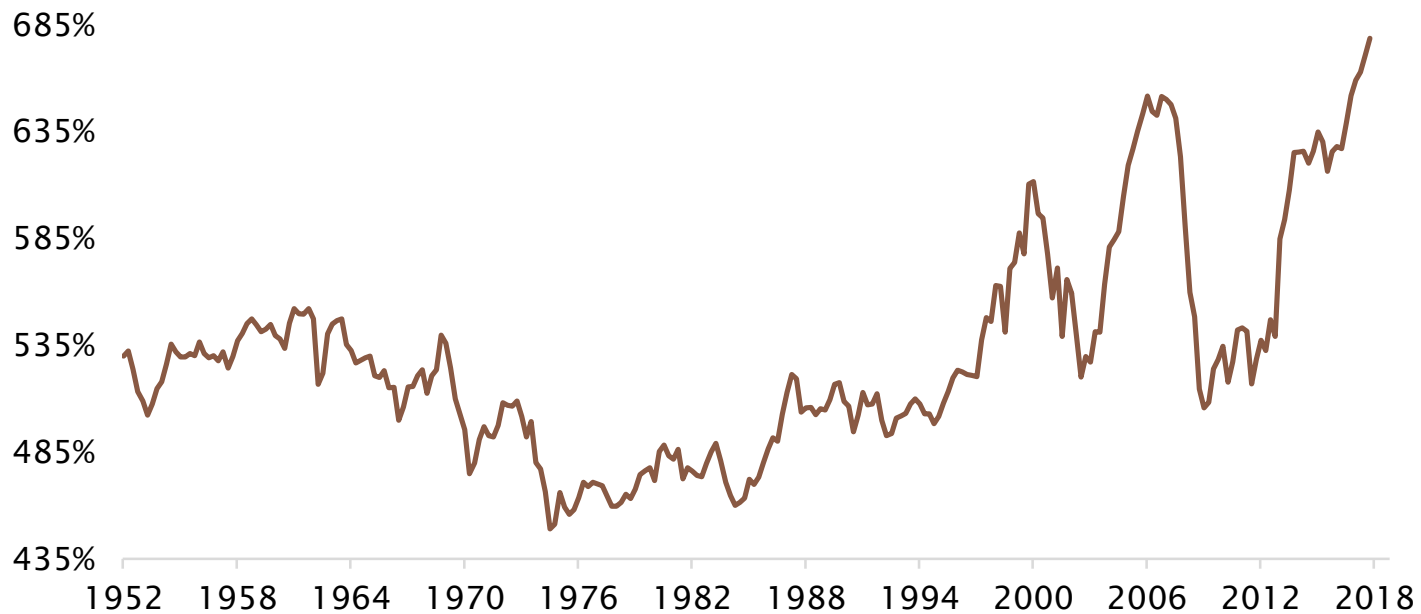
| Country | Policy Rate | 2-year | 10-year |
|-------------|---------------------|--------|---------|
| U.S. | 1.75% | 2.53% | 2.96% |
| Canada | 1.25% | 1.97% | 2.40% |
| Germany | Euro area -0.40% | -0.59% | 0.55% |
| France | | -0.51% | 0.80% |
| Italy | | -0.26% | 1.93% |
| Spain | | -0.34% | 1.31% |
| U.K. | | 0.50% | 0.78% |
| Japan | -0.05% | -0.14% | 0.05% |
| Switzerland | -0.75% | -0.77% | 0.03% |

Source: Madison, Bloomberg



Financial Conditions

Household and Non-Profit Networth as Percentage of Disposable Personal Income

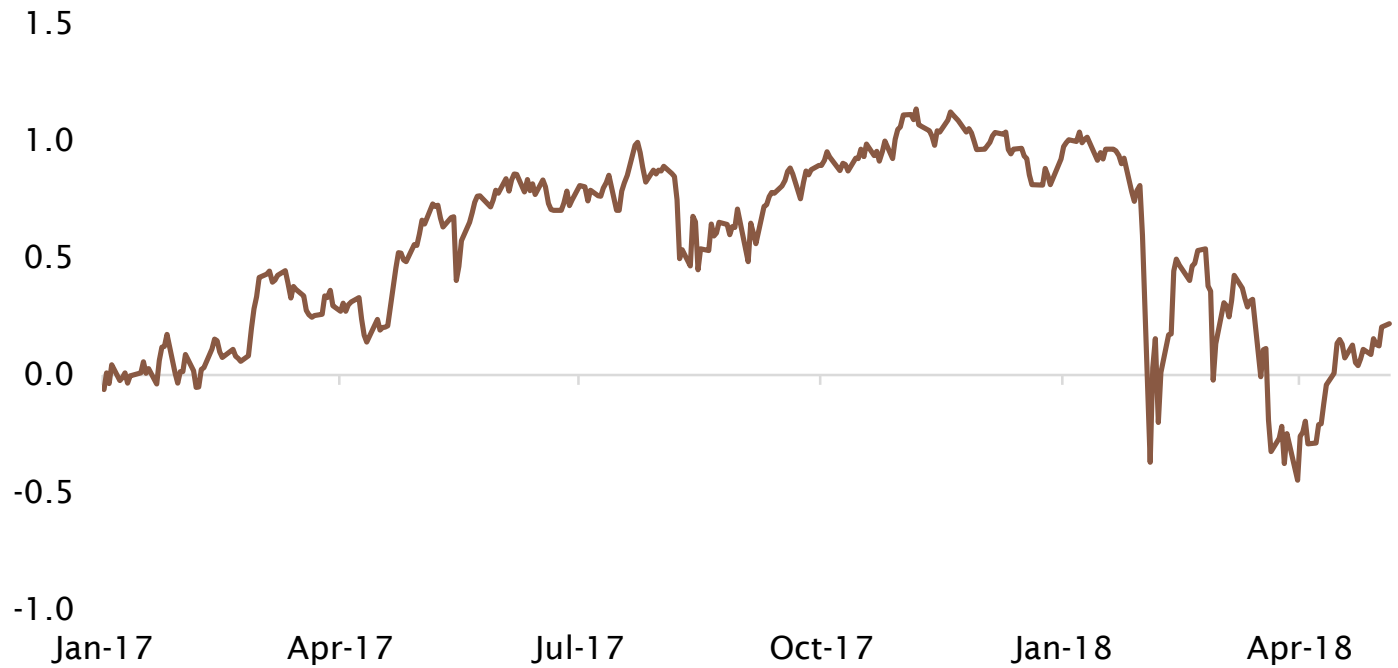


Source: Madison, Bloomberg



Financial Conditions

Financial Conditions Index

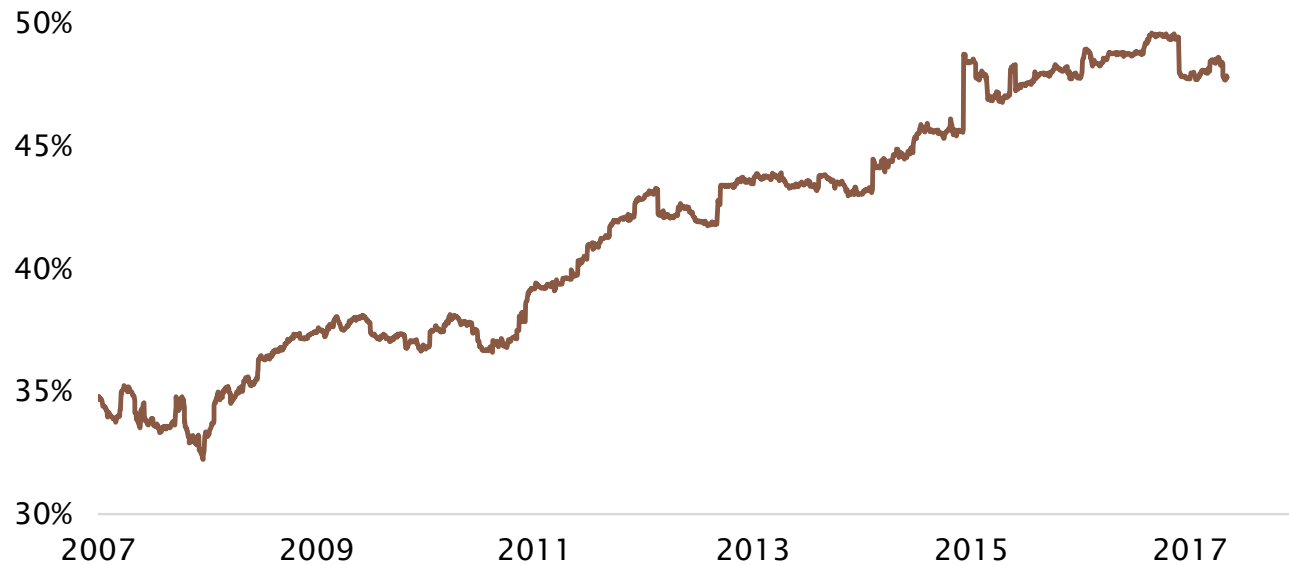


Source: Madison, Bloomberg



Financial Conditions

BBB-rated Corporate Bonds as Percentage of Outstanding Investment Grade Bonds

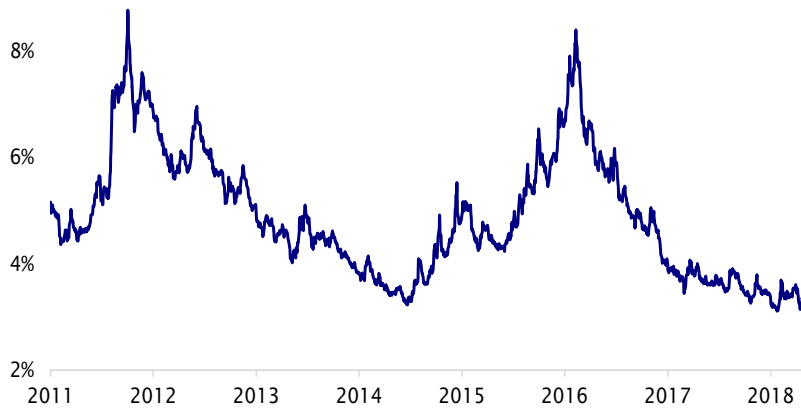


Source: Madison, Bloomberg

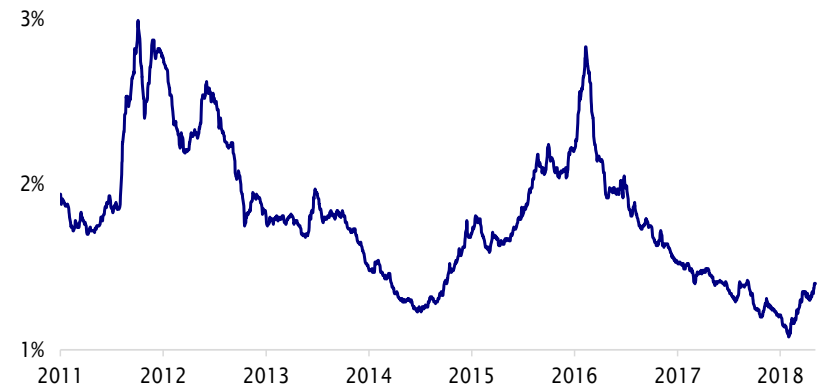


Financial Conditions

Trailing High Yield Option-Adjusted Spread



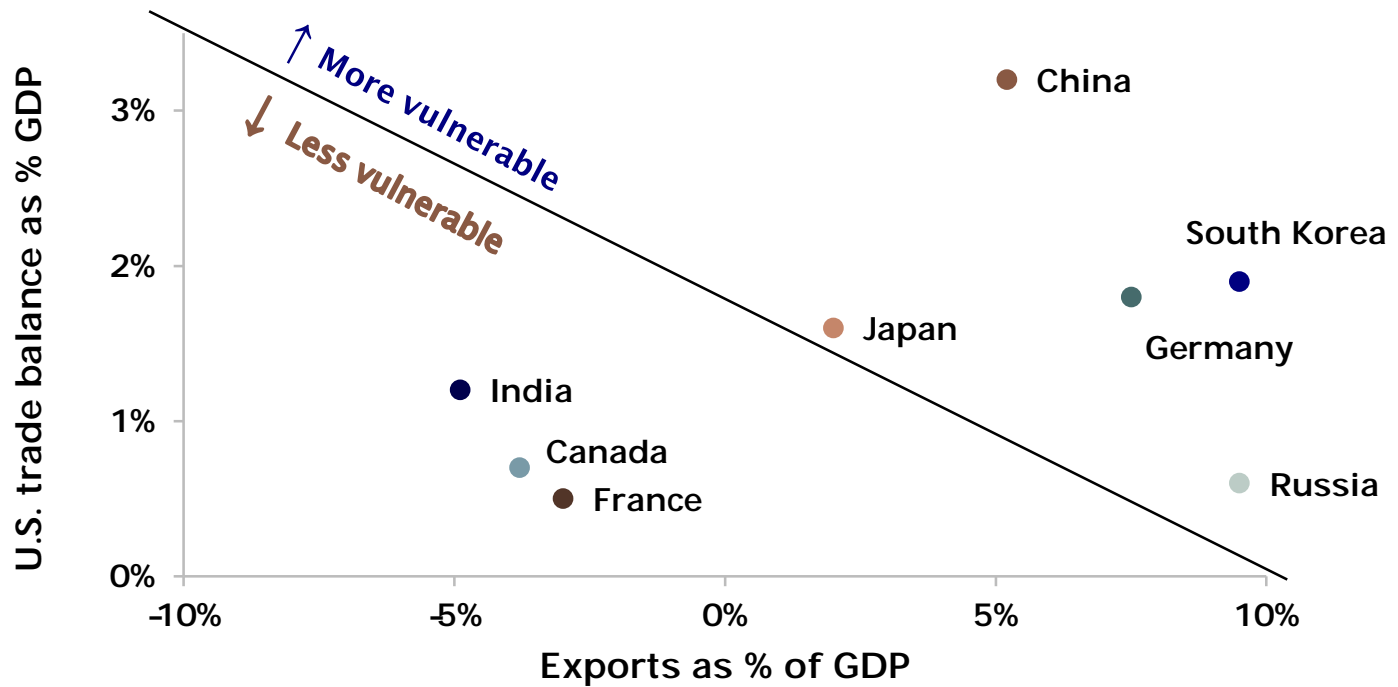
Trailing Baa Option-Adjusted Spread



Source: Madison, Bloomberg

Threat of Trade Wars

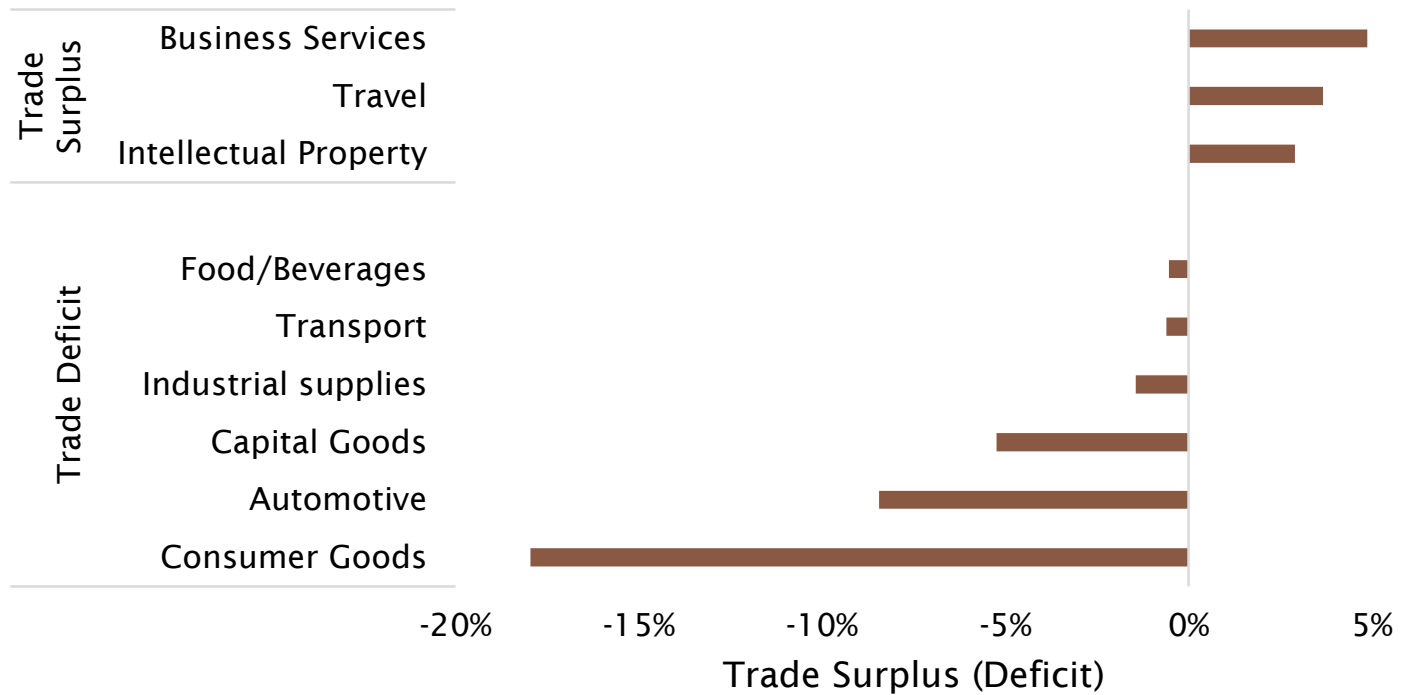
Countries Vulnerable to a U.S. Trade War



Source: Madison, Bloomberg

Threat of Trade Wars

Trade Surplus (Deficit) by Major Category

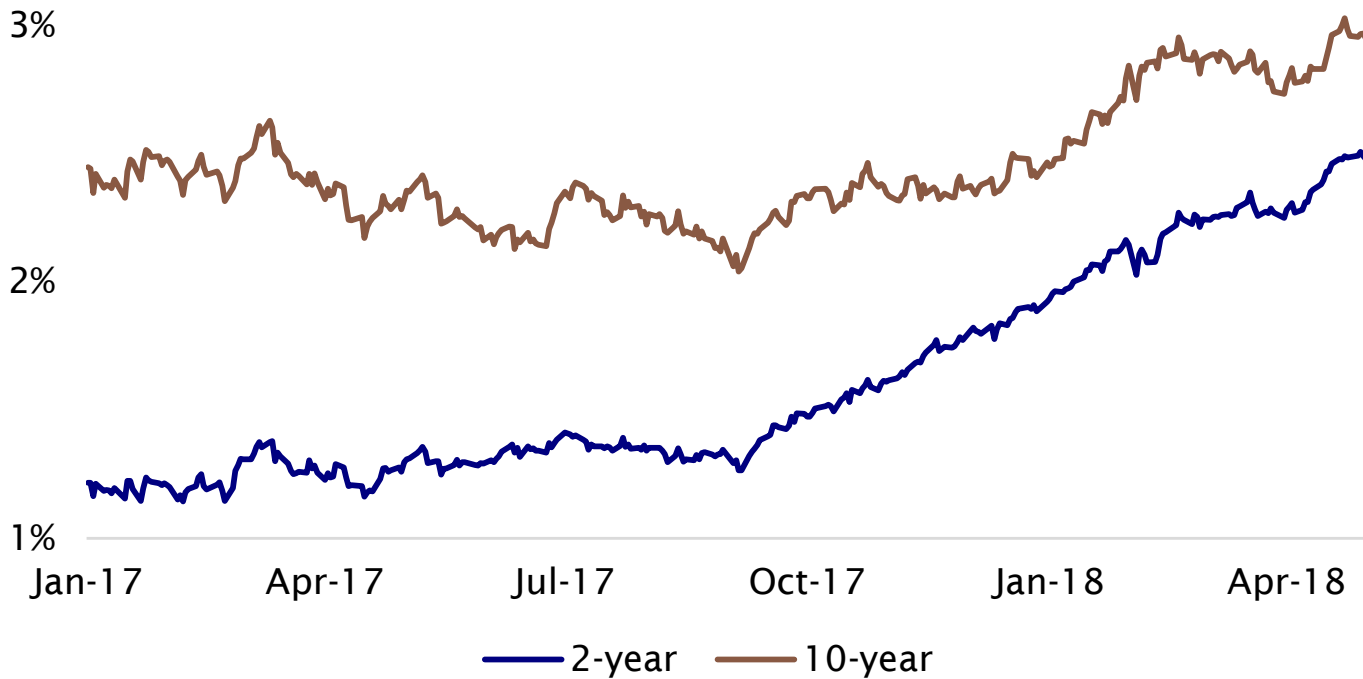


Source: Madison, Bloomberg



Shape of Yield Curve

Treasury Yields

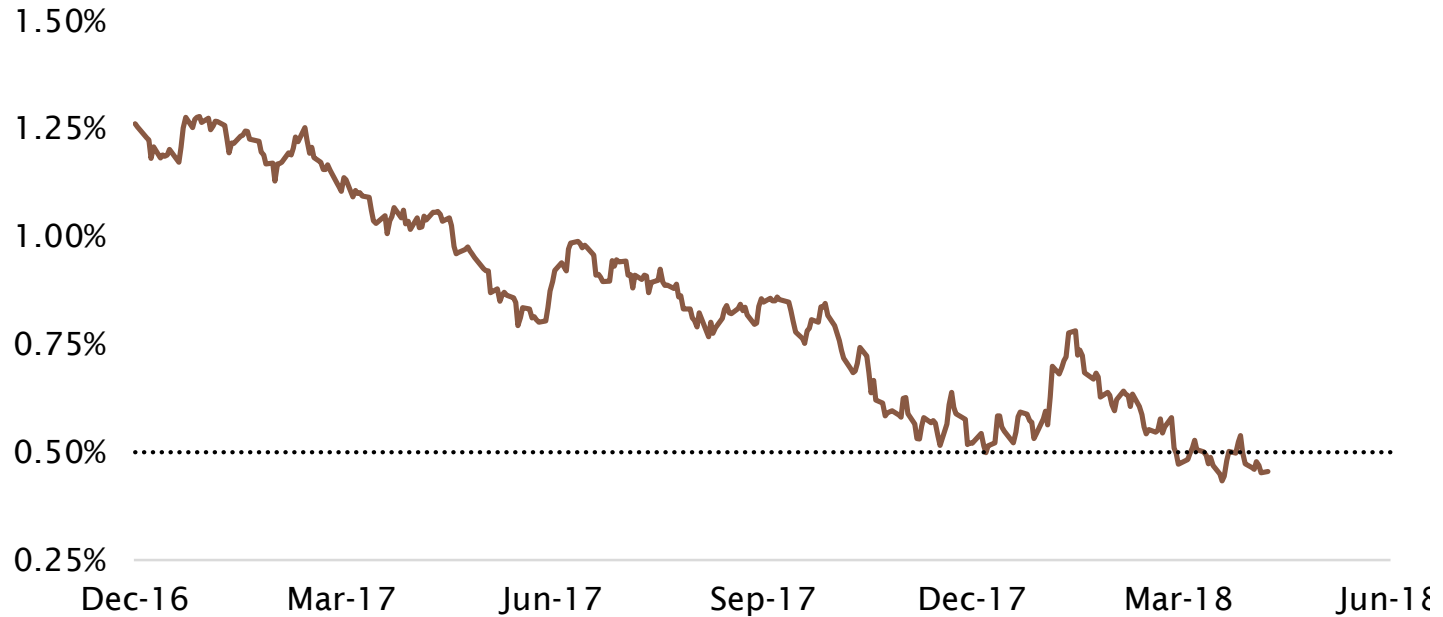


Source: Madison, Bloomberg



Shape of Yield Curve

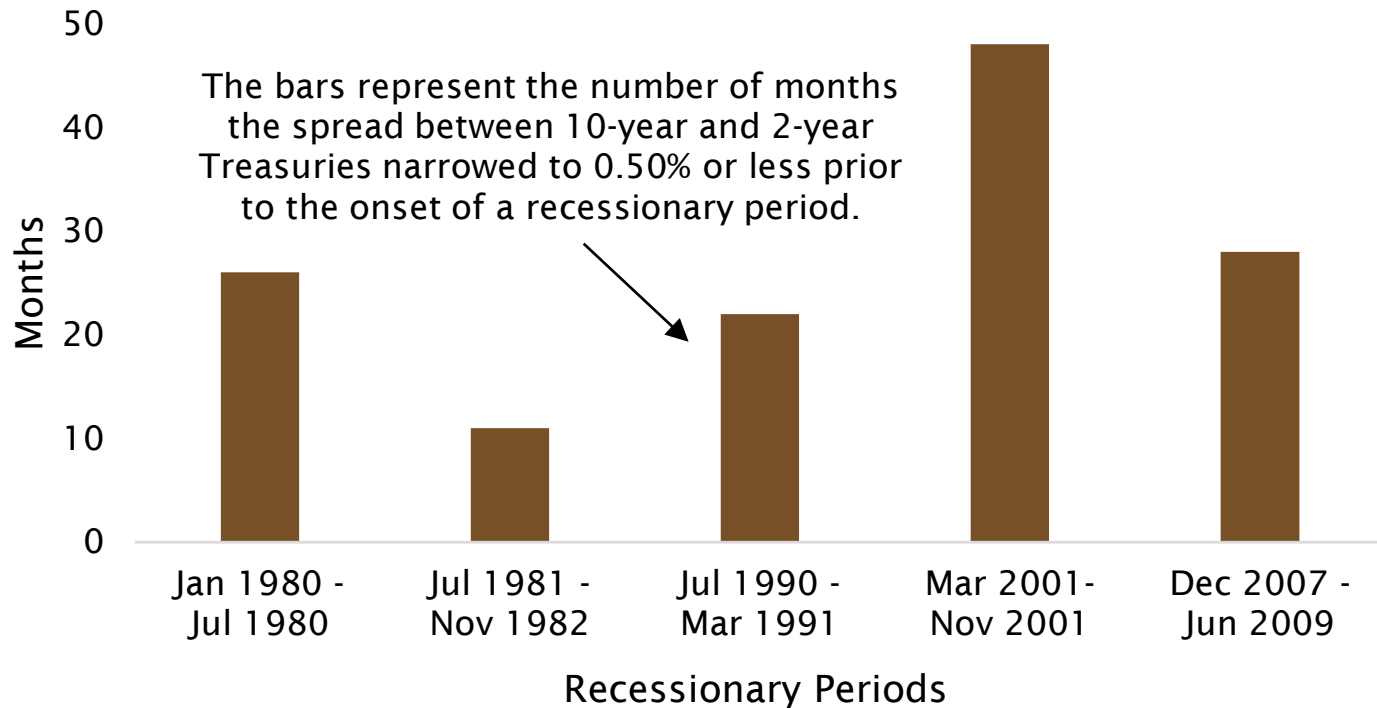
Difference in Treasury Yields 10-year minus 2-year



Source: Madison, Bloomberg

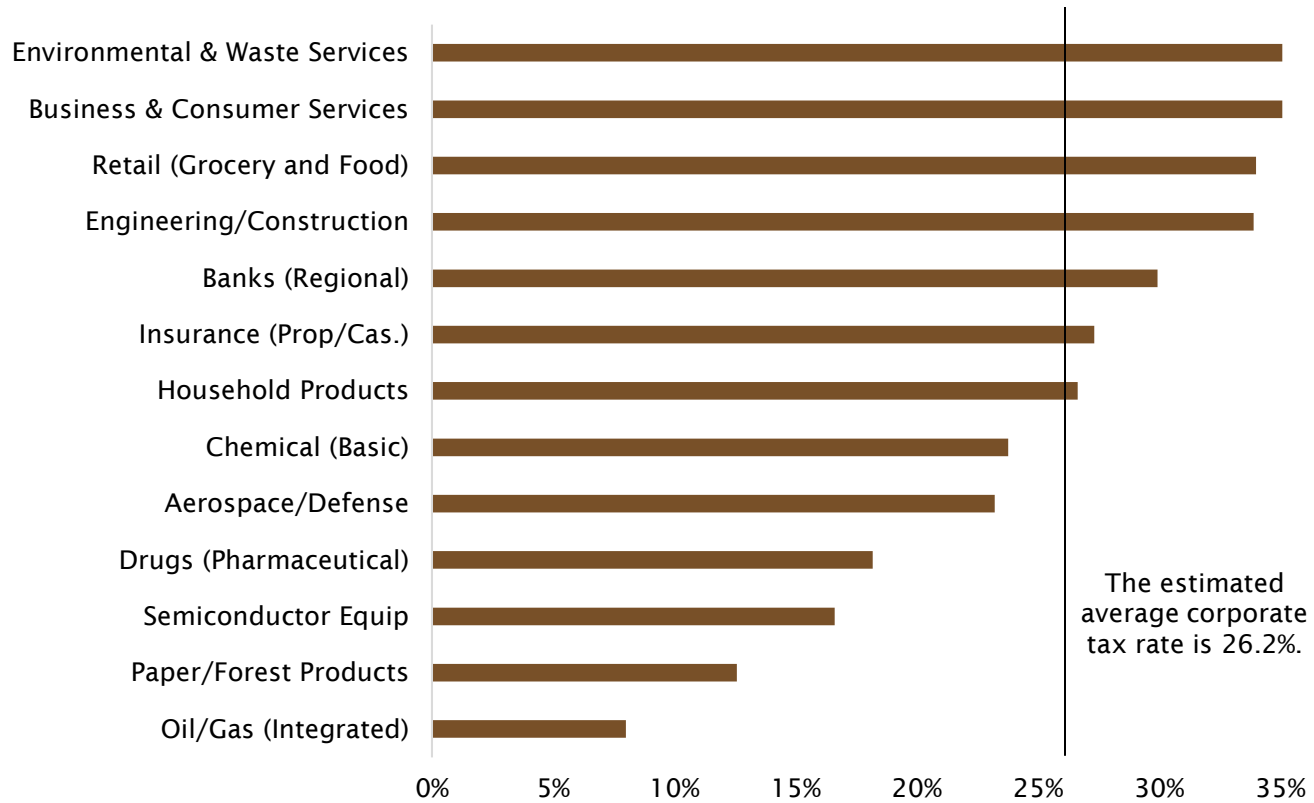
Shape of Yield Curve

History of Flat Yield Curves



Tax Reform

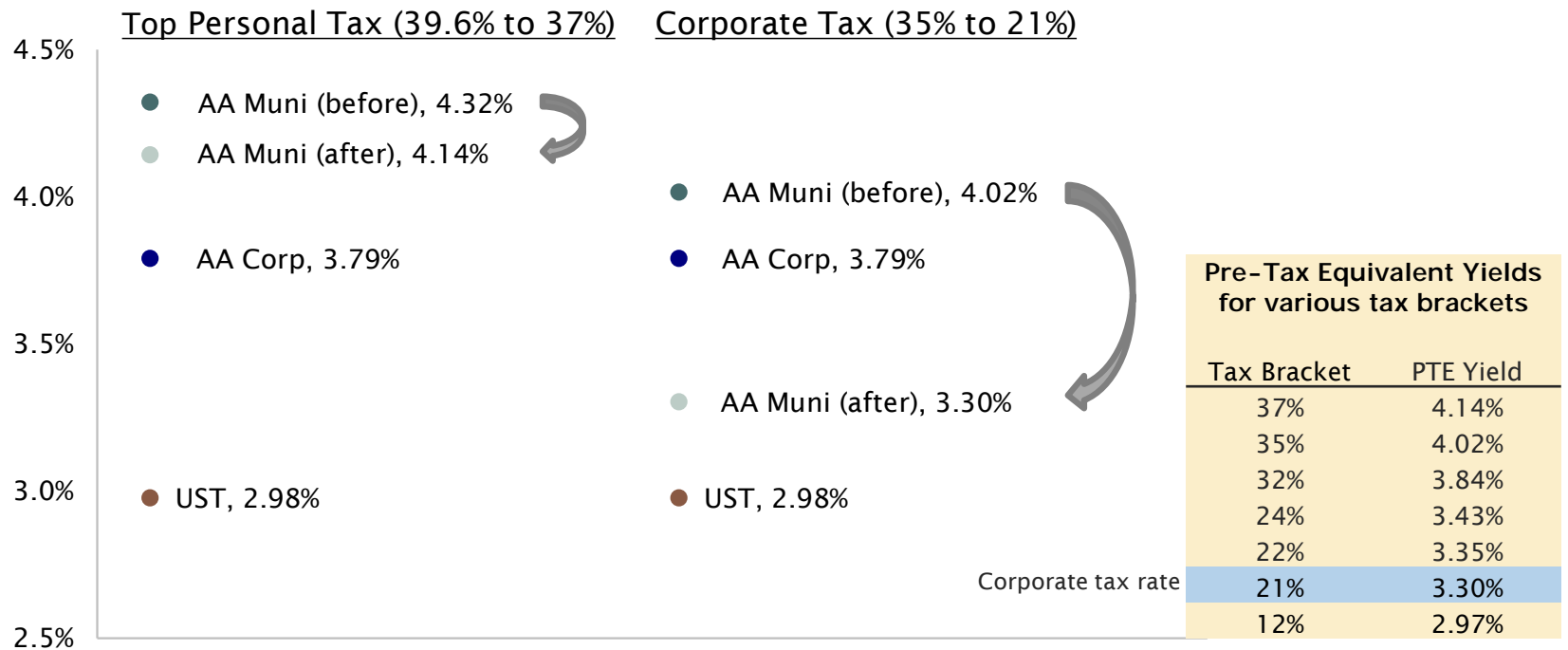
Estimated Effective Tax Rates Across Industries (based upon Stern's January 2017 analysis)



Source: Madison, Bloomberg

Tax Reform

Comparison of Pre-Tax Equivalent Yields (Before and After 2017 Tax Legislation)

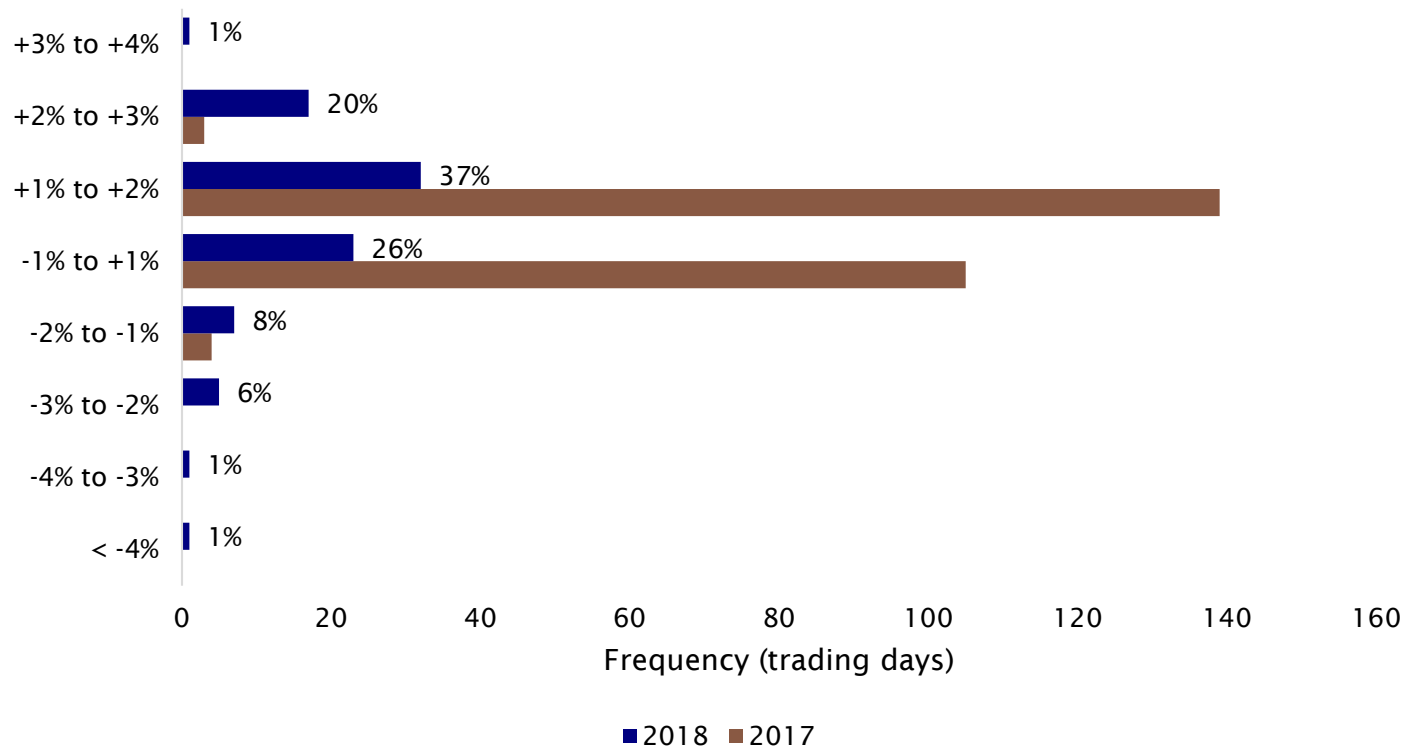


Source: Madison, Bloomberg



Stock Market Volatility

S&P 500 Price Volatility (1-day price change)

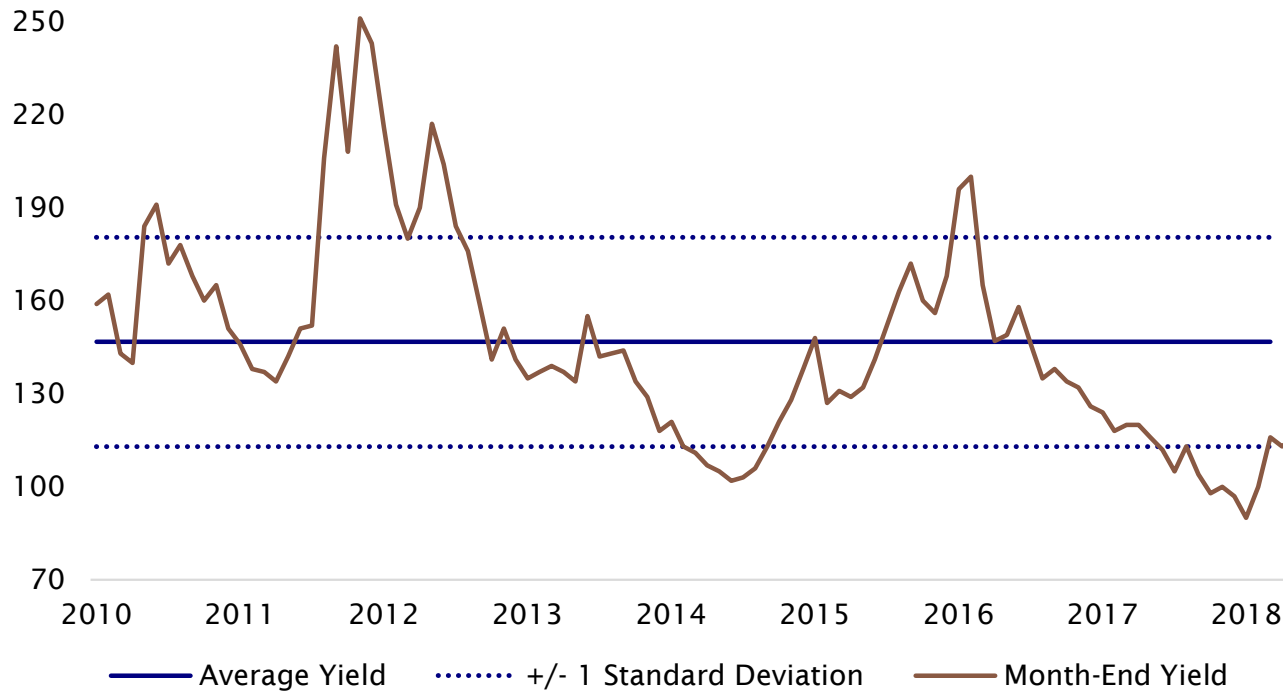


Source: Madison, Bloomberg



Valuations

Investment Grade Corporate Bond Spreads January 2010 through May 8, 2018



Source: Madison, Bloomberg



Valuations

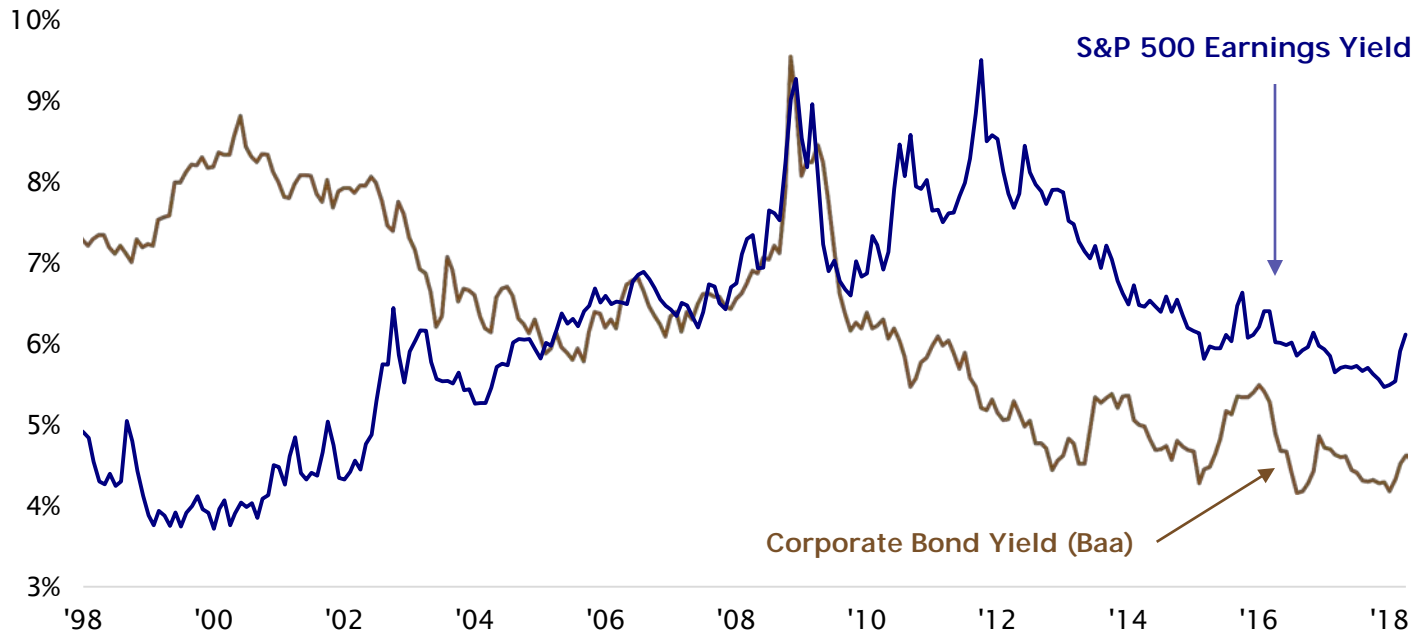
S&P 500® Index: Forward P/E Ratio
(based on next 12 months expected earnings)



Source: Madison, Bloomberg

Valuations

The Earnings Yield for Stocks is Still Compelling Compared to Bond Yields



Source: Madison, Bloomberg



Valuations

S&P 500 Level Implied by Price to Earnings (P/E) Combinations

| Earnings Per Share | Price Earnings Multiple | | | | | | | |
|--------------------|-------------------------|-------|--------------|--------------|--------------|-------|-------|-------|
| | 12X | 14X | 15X | 16X | 17X | 19X | 20X | 22X |
| \$ 178 | 2,136 | 2,492 | 2,670 | 2,848 | 3,026 | 3,382 | 3,560 | 3,916 |
| \$ 176 | 2,112 | 2,464 | 2,640 | 2,816 | 2,992 | 3,344 | 3,520 | 3,872 |
| \$ 174 | 2,088 | 2,436 | 2,610 | 2,784 | 2,958 | 3,306 | 3,480 | 3,828 |
| \$ 172 | 2,064 | 2,408 | 2,580 | 2,752 | 2,924 | 3,268 | 3,440 | 3,784 |
| \$ 170 | 2,040 | 2,380 | 2,550 | 2,720 | 2,890 | 3,230 | 3,400 | 3,740 |
| \$ 168 | 2,016 | 2,352 | 2,520 | 2,688 | 2,856 | 3,192 | 3,360 | 3,696 |
| \$ 166 | 1,992 | 2,324 | 2,490 | 2,656 | 2,822 | 3,154 | 3,320 | 3,652 |
| \$ 164 | 1,968 | 2,296 | 2,460 | 2,624 | 2,788 | 3,116 | 3,280 | 3,608 |
| \$ 162 | 1,944 | 2,268 | 2,430 | 2,592 | 2,754 | 3,078 | 3,240 | 3,564 |
| \$ 160 | 1,920 | 2,240 | 2,400 | 2,560 | 2,720 | 3,040 | 3,200 | 3,520 |
| \$ 158 | 1,896 | 2,212 | 2,370 | 2,528 | 2,686 | 3,002 | 3,160 | 3,476 |
| \$ 156 | 1,872 | 2,184 | 2,340 | 2,496 | 2,652 | 2,964 | 3,120 | 3,432 |
| \$ 154 | 1,848 | 2,156 | 2,310 | 2,464 | 2,618 | 2,926 | 3,080 | 3,388 |
| \$ 152 | 1,824 | 2,128 | 2,280 | 2,432 | 2,584 | 2,888 | 3,040 | 3,344 |
| \$ 150 | 1,800 | 2,100 | 2,250 | 2,400 | 2,550 | 2,850 | 3,000 | 3,300 |

| | | |
|-----------------------------------|-----------------|---------------------|
| March 31 S&P 500 Level | 2,640 | P/E Multiple |
| 2017 Estimated Earnings | \$124.53 | 21.2X |
| 2018 Estimated Earnings | \$156.13 | 16.9X |
| 2019 Estimated Earnings | \$172.62 | 15.3X |

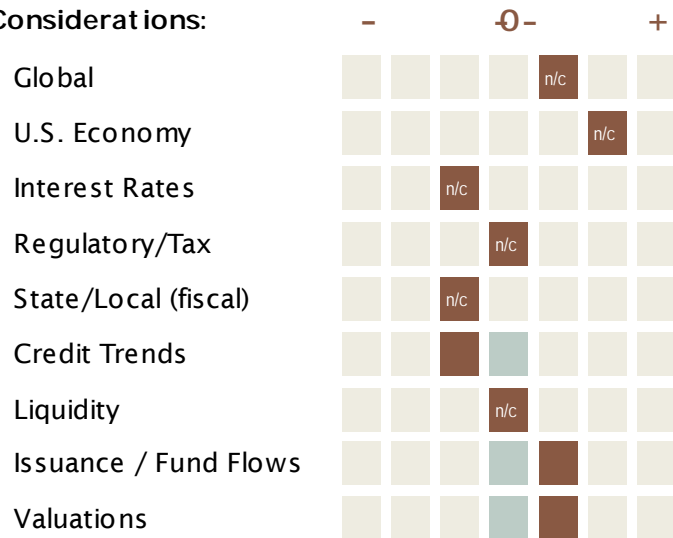
Source: Madison, Bloomberg



Outlook

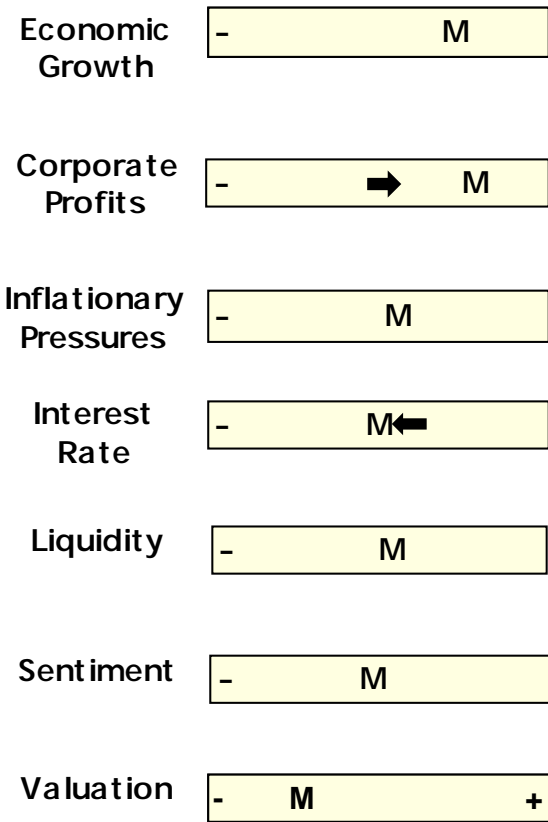
Madison Macro Factor Scorecard (Munis)

Considerations:



- Negative for Munis
 + Positive for Munis
 - Current
 - Prior
 n/c - No change

Our Equity Scorecard



Negative for Equities

Positive for Equities

Source: Madison, Bloomberg