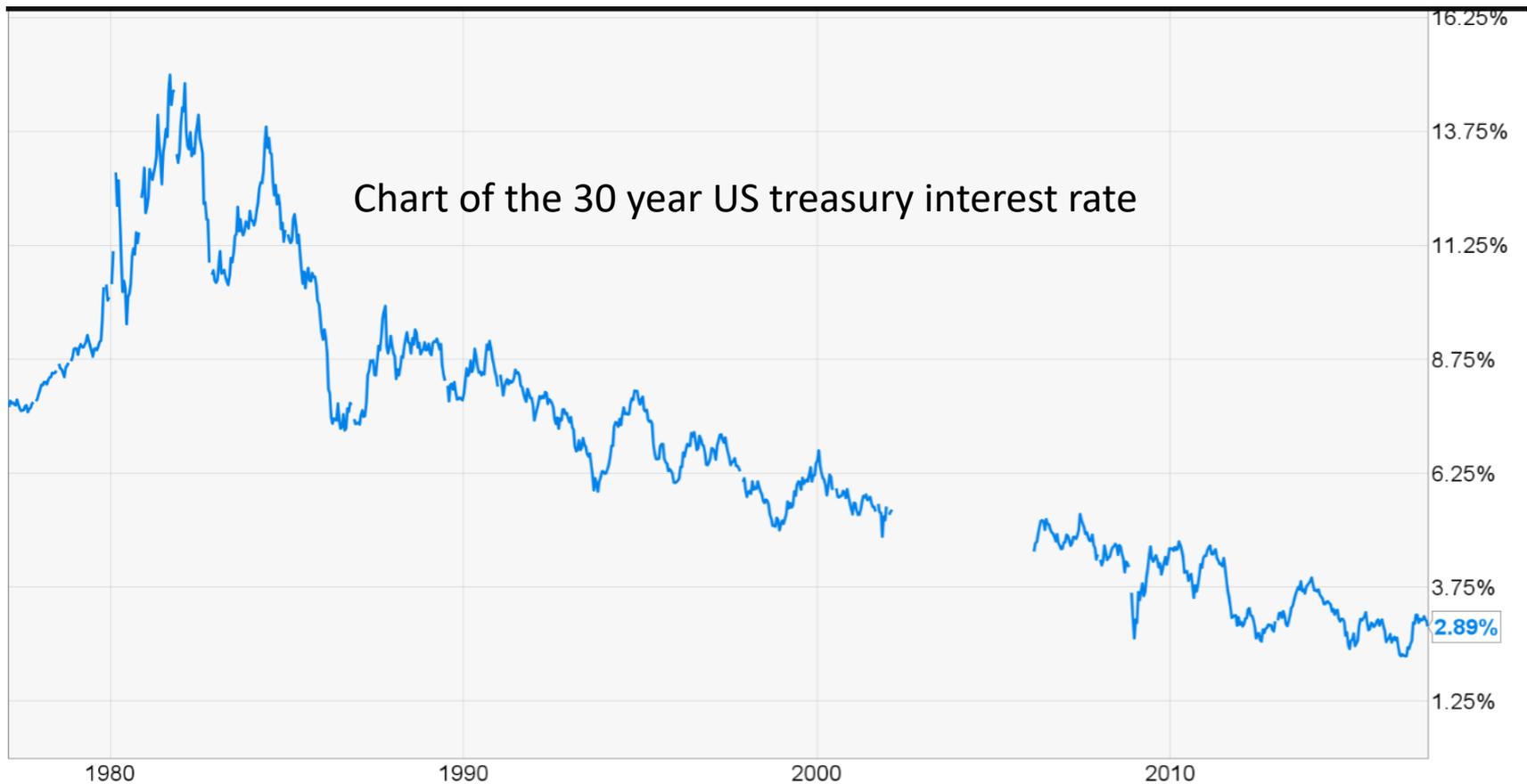


Account/Market Notes

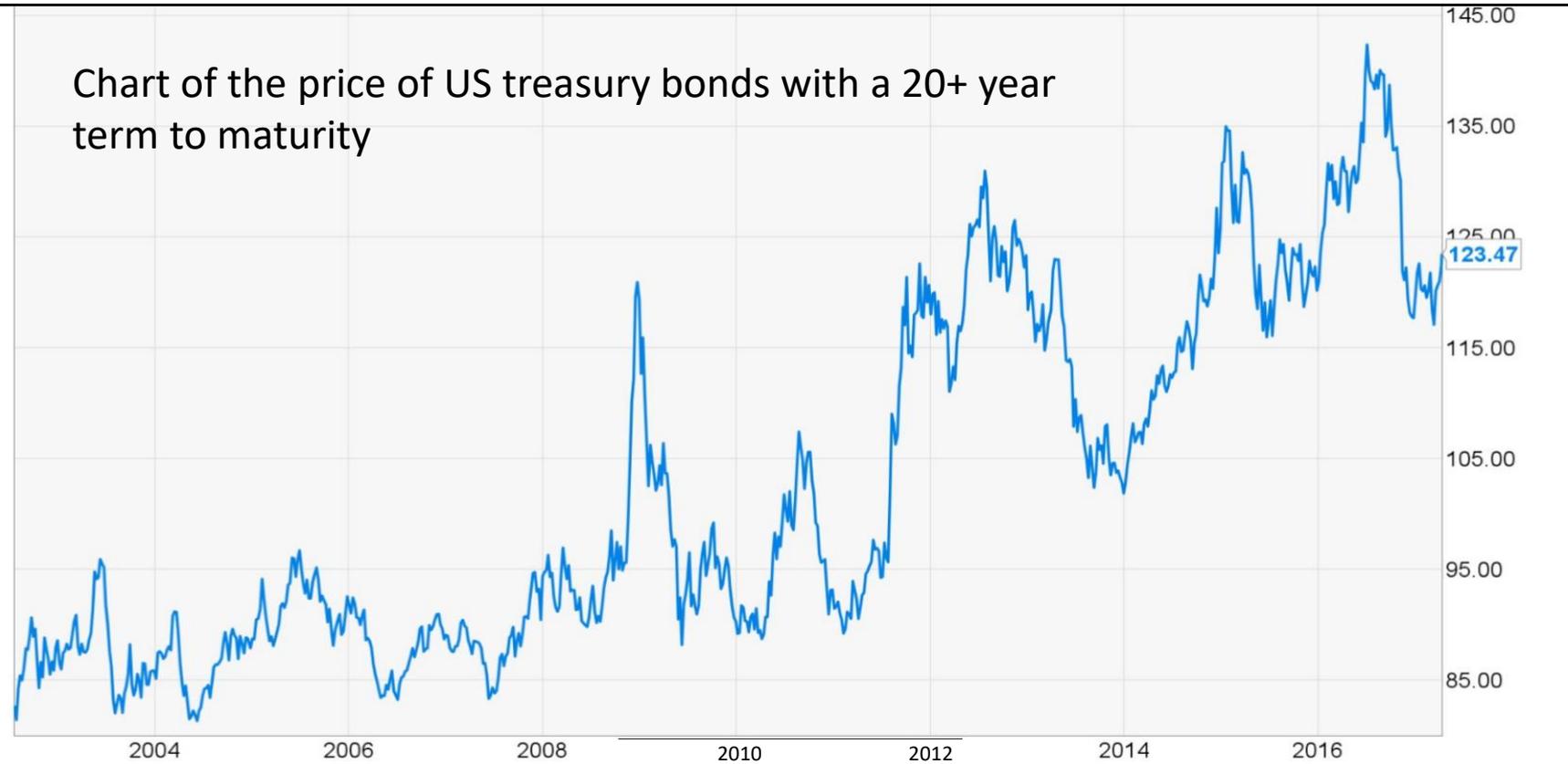
April 22, 2017

A thirty year decline in long term interest rates...

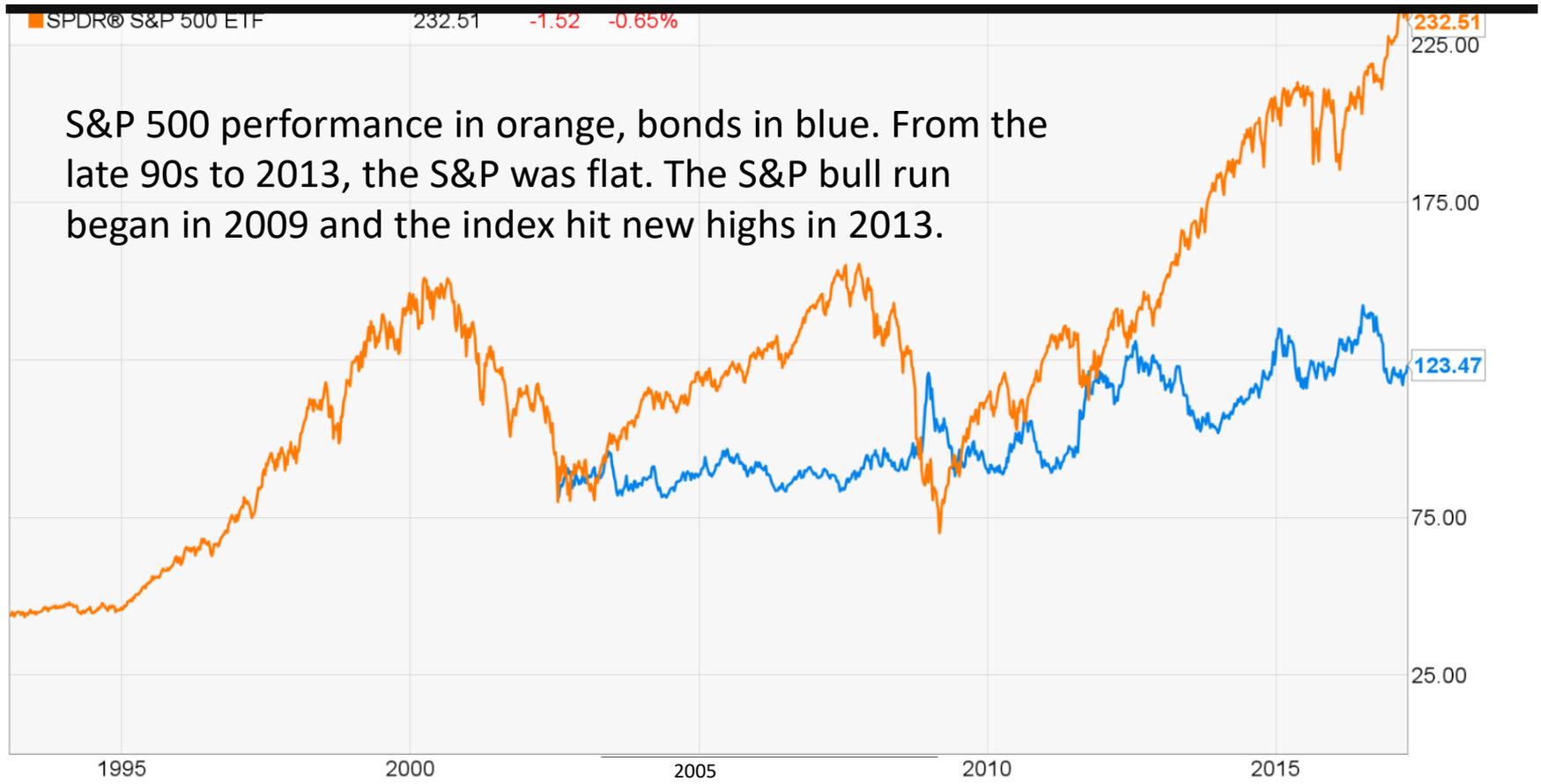


Source: Federal Reserve

...supports a 30 year bull market for bonds



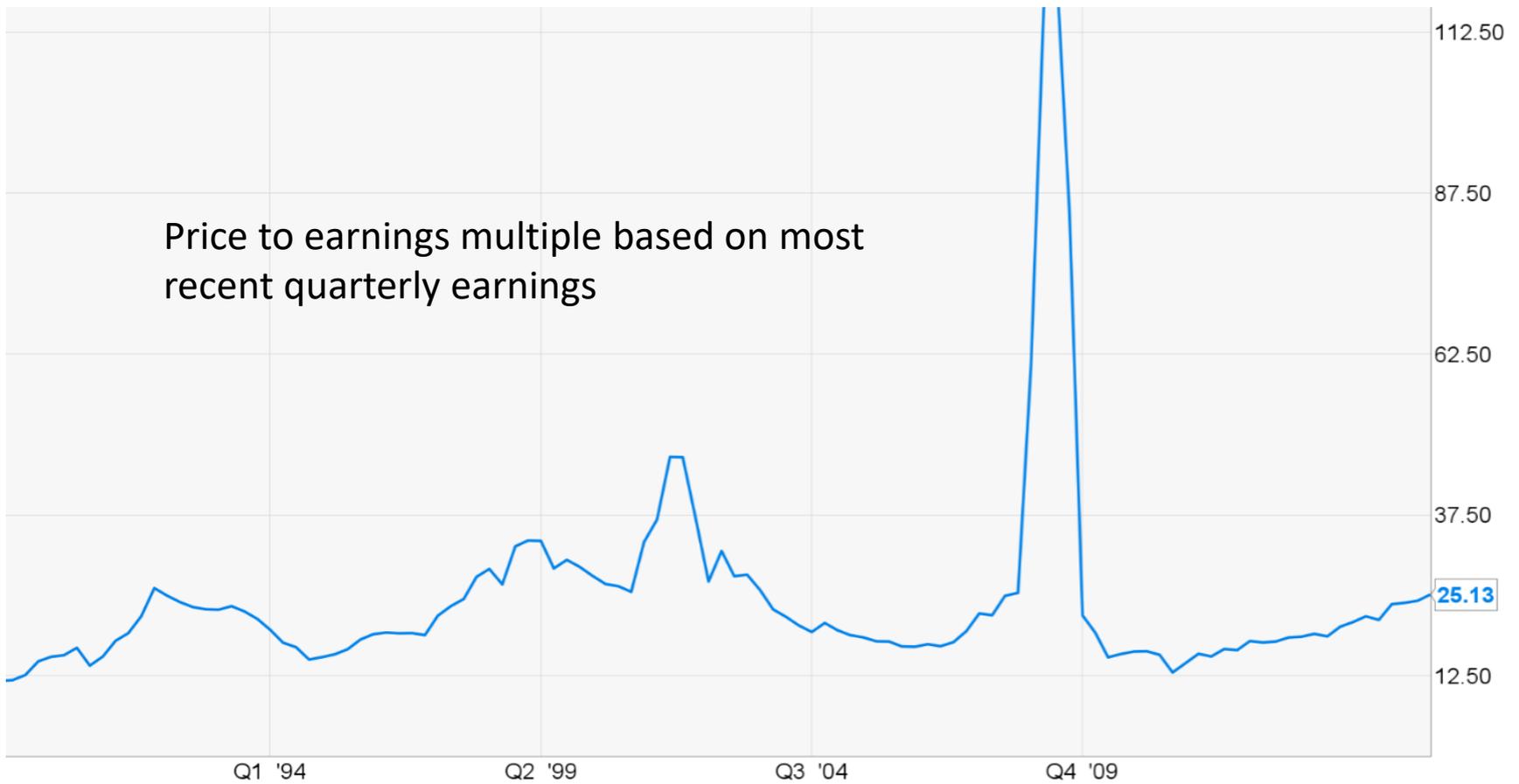
...and a recent bull market for stocks



Stocks now appear expensive on 'cyclically adjusted' earnings, which average earnings over a ten year cycle

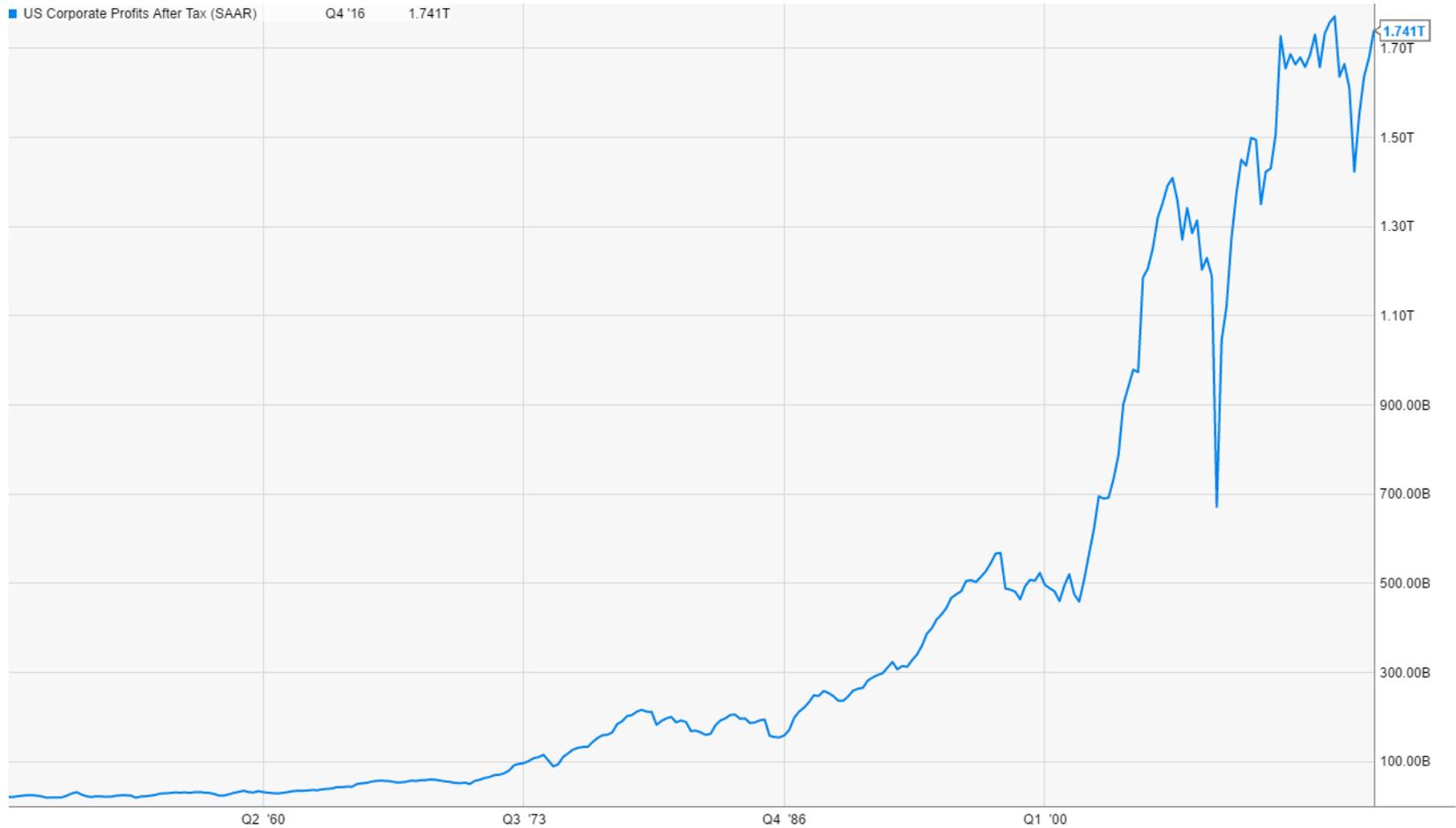


But are not especially expensive relative to current earnings



Source: S&P

The current valuation of the market reflects record corporate profits



Questions for assessing market outlook and risk

- What is the 'normal' interest rate, and when will we get there?
- How sustainable are current levels of corporate earnings? Will corporate profits 'revert to the mean'?
- Or, are margins now sustainable at higher levels as a result of consolidation, business friendly regulation, cheap global labor, and productivity gains?
- If 'this time is different', stocks are not expensive. But if margins are unsustainably high, stocks are expensive (note that this scenario implies a severe 'earnings recession'). If the reality is somewhere in-between, stocks are 'somewhat expensive'.
- In addition, there are individual stocks that are less expensive than the market. Most of our holdings strike me as reasonably valued.

Notes on market risk

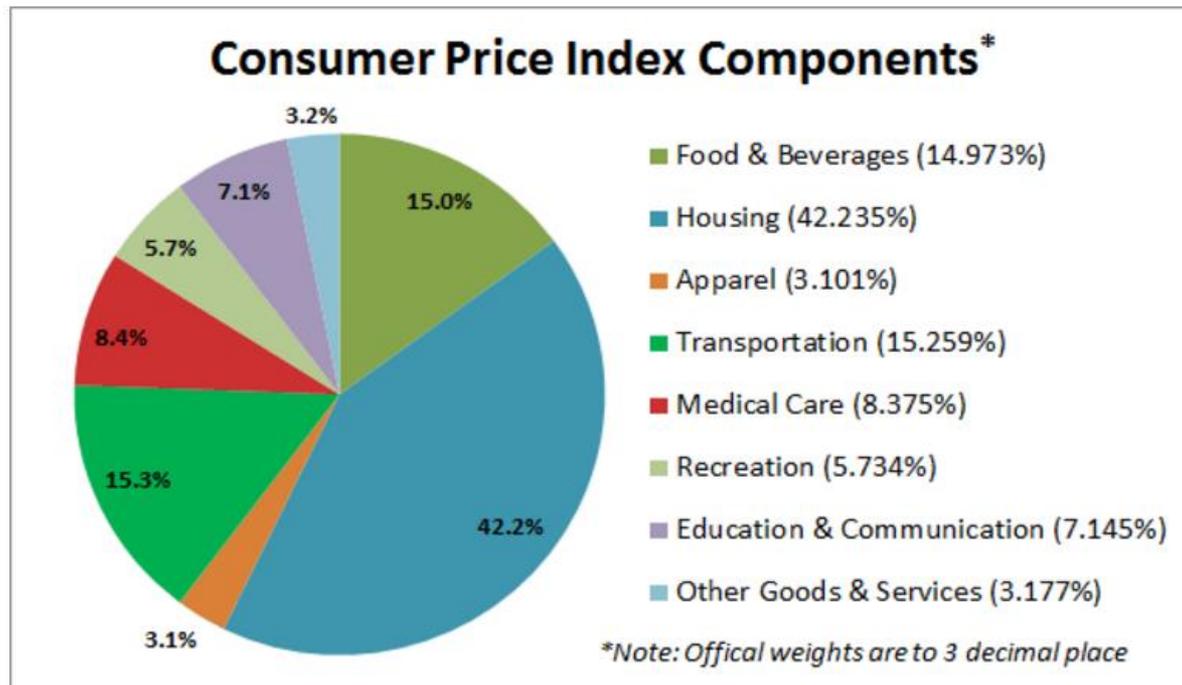
- Today the 30 year treasury is just under three percent. As long as the 30 year treasury is below five percent, and businesses avoid an earnings recession, stocks are reasonably valued, and represent much better value than most bonds.
- We are in a period where political risk appears especially high, both domestically and abroad. This is a wild card going forward. A geopolitical crisis could lead to an earnings recession, if global consumers reduce their purchasing. In recessions, we're better off with bonds.

Are 5% treasury rates likely?

- Interest rates incorporate both economic growth and inflation. Most finance models suggest long term interest rates should approximate expected GDP growth plus inflation.
- Current GDP growth is estimated at 2% while inflation has been hovering just below 2%. That implies we should see somewhat higher interest rates going forward (closer to four percent versus less than three percent today). Unless growth or inflation increases beyond current levels, treasury interest rates should not rise much above four percent for an extended time period.
- There is very little in the current environment to suggest growth or inflation will rise substantially above current levels. However if GDP growth did accelerate, it would support more corporate earnings growth, which would be good for stocks.
- On the other hand, higher inflation would be broadly bad for stocks, as it would not support higher earnings, but would pressure valuations.
- In other words, if rates rise because of faster economic growth, it probably would not hurt stock prices. However if rates rise because of inflation it probably would hurt stock prices.

What are the components of inflation?

Housing, transportation, and food are the biggest components of price inflation. Together, they represent more than 70% of the consumer price index. Within these categories, energy costs represent just under 10% of the index. Current demand for, and prices of housing, food, and transportation do not portend significant near term inflation.



Source: BLS; The most recent reweighting was in December 2015.

Recent inflation data has been weak

Monthly CPI fell in March for the first time since February of 2016

	Seasonally adjusted changes from preceding month							Un- adjusted 12-mos. ended Mar. 2017
	Sep. 2016	Oct. 2016	Nov. 2016	Dec. 2016	Jan. 2017	Feb. 2017	Mar. 2017	
All items.....	.3	.3	.2	.3	.6	.1	-.3	2.4
Food.....	.0	.0	.0	.0	.1	.2	.3	.5
Food at home.....	-.2	-.2	-.1	-.2	.0	.3	.5	-.9
Food away from home (1)..	.2	.1	.1	.2	.4	.2	.2	2.4
Energy.....	2.4	2.5	1.0	1.2	4.0	-1.0	-3.2	10.9
Energy commodities.....	4.4	4.8	2.0	2.4	7.6	-2.8	-6.0	19.8
Gasoline (all types)....	4.6	5.1	2.1	2.4	7.8	-3.0	-6.2	19.9
Fuel oil (1).....	2.4	5.9	-1.2	6.0	3.5	-.4	-.8	24.9
Energy services.....	.6	.4	.0	.0	.3	1.0	-.3	3.4
Electricity.....	.5	.3	.0	.0	.0	.8	-.1	1.6
Utility (piped) gas service.....	.8	.9	.2	.1	1.5	1.5	-.8	10.3
All items less food and energy.....	.1	.1	.2	.2	.3	.2	-.1	2.0
Commodities less food and energy commodities....	-.1	.0	-.2	.0	.4	.0	-.3	-.6
New vehicles.....	.0	.2	.0	.1	.9	-.2	-.3	.2
Used cars and trucks....	-.2	-.1	.2	.2	-.4	-.6	-.9	-4.7
Apparel.....	-.5	.2	-.3	-.4	1.4	.6	-.7	.6
Medical care commodities	.6	.2	-.4	.5	.3	-.2	.2	3.9
Services less energy services.....	.2	.2	.3	.3	.3	.3	-.1	2.9
Shelter.....	.3	.3	.3	.3	.2	.3	.1	3.5
Transportation services	.0	-.1	.5	.5	.6	.7	.4	3.8
Medical care services...	.1	.1	.2	.2	.2	.2	.1	3.4

1 Not seasonally adjusted.

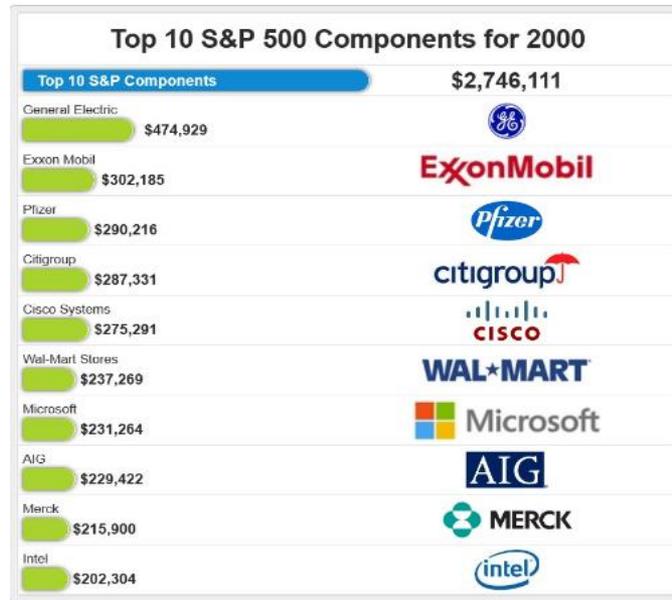
We have an advantage buying fixed income

- We have an advantage buying fixed income securities, as we can buy smaller issuance sizes which are not practical for large fund managers.
- I believe our advantage may be worth as much as one percent of annual performance on a fixed income portfolio.
- This appears small relative to historical equity returns – however in an environment where investment grade fixed income portfolios earn three percent and junk bond portfolios earn six percent, it represents a very substantial performance advantage

Historically we've had a similar advantage buying stock

- Historically we have had success finding significantly underpriced stocks, particularly small company stocks.
- In the last few years, this has become more challenging as a result of the proliferation of retail and professional buyers of small company stocks.
- Occasionally this development can work to the well-informed investor's advantage, by creating periods of excessive selling in response to company developments which may be short term in nature. However buying a company's stock following bad news is a more fraught proposition than simply buying 'cheap' stocks.
- There will still be good opportunities going forward – the emotions which can lead investors to bad decisions have not changed. We are still the potential beneficiary of someone else's mistake.
- For now, the best available opportunities appear to be high quality businesses trading around the market multiple. Google is a good example. Because many of these companies are also large components in the S&P 500, the S&P will likely remain an exacting benchmark in the near term. However, the S&P is ultimately just a portfolio of stocks. Over time, indexes can become skewed toward unattractive investments.

An index does not guarantee good stock picking



Between 2000 and 2009, two of the S&P's largest components, Citigroup and AIG lost most of their value. Other large S&P components such as the drug companies Merck and Pfizer, and the tech companies Microsoft and Intel, performed poorly over this period. Those poor performing large holdings contributed to years of weak performance for the index. An investor who bought the index between 1999 and 2000 would have had to wait more than ten years to realize a substantive gain. During this time period, there were opportunities to earn outsized gains in other securities and other markets.

Extrapolating the recent past into perpetuity is usually a mistake

