

Select Committee on Capital Financing & Investments

NOVEMBER 12TH, 2019

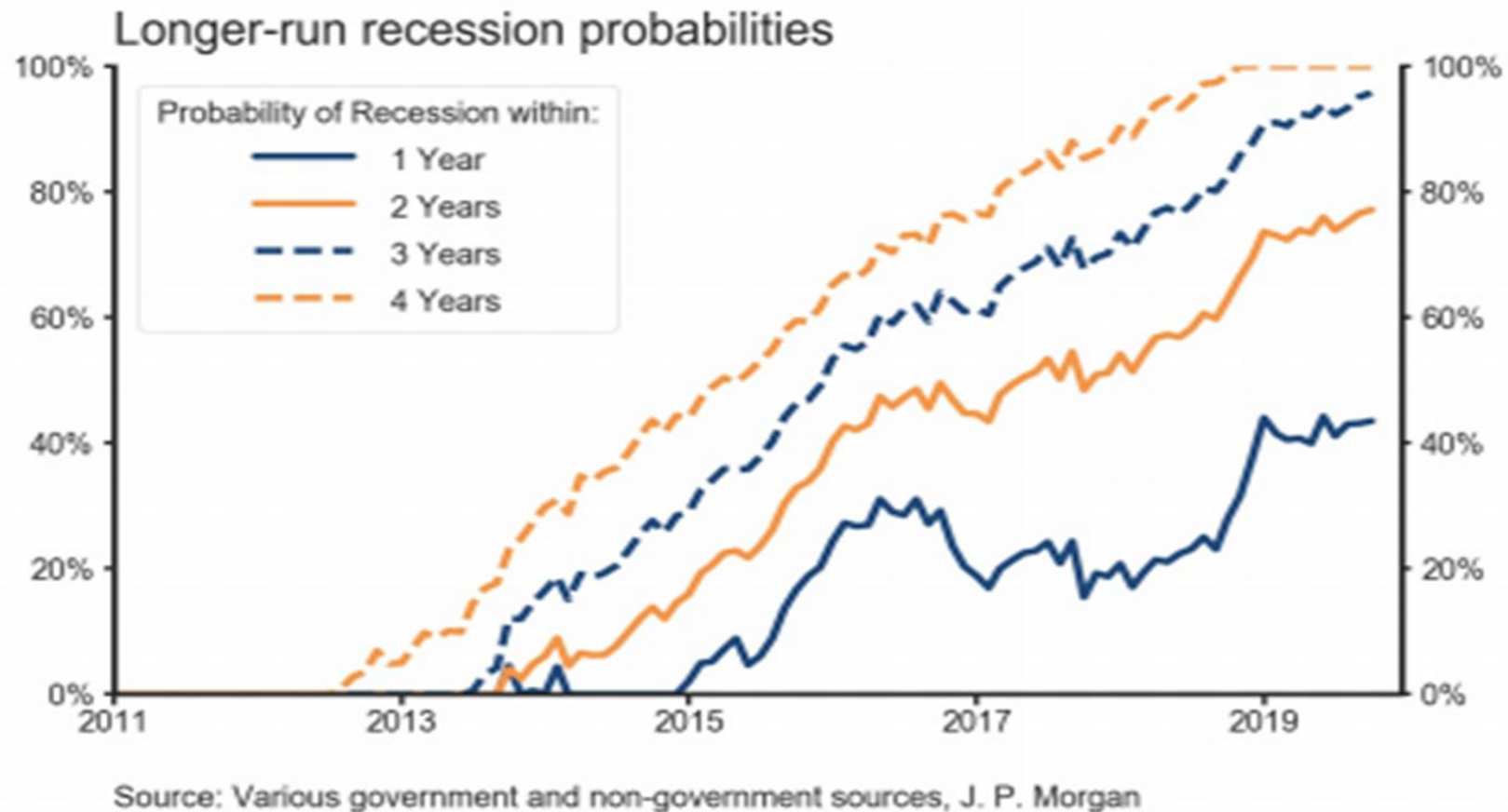
PATRICK FLEMING

WYOMING TREASURER'S OFFICE

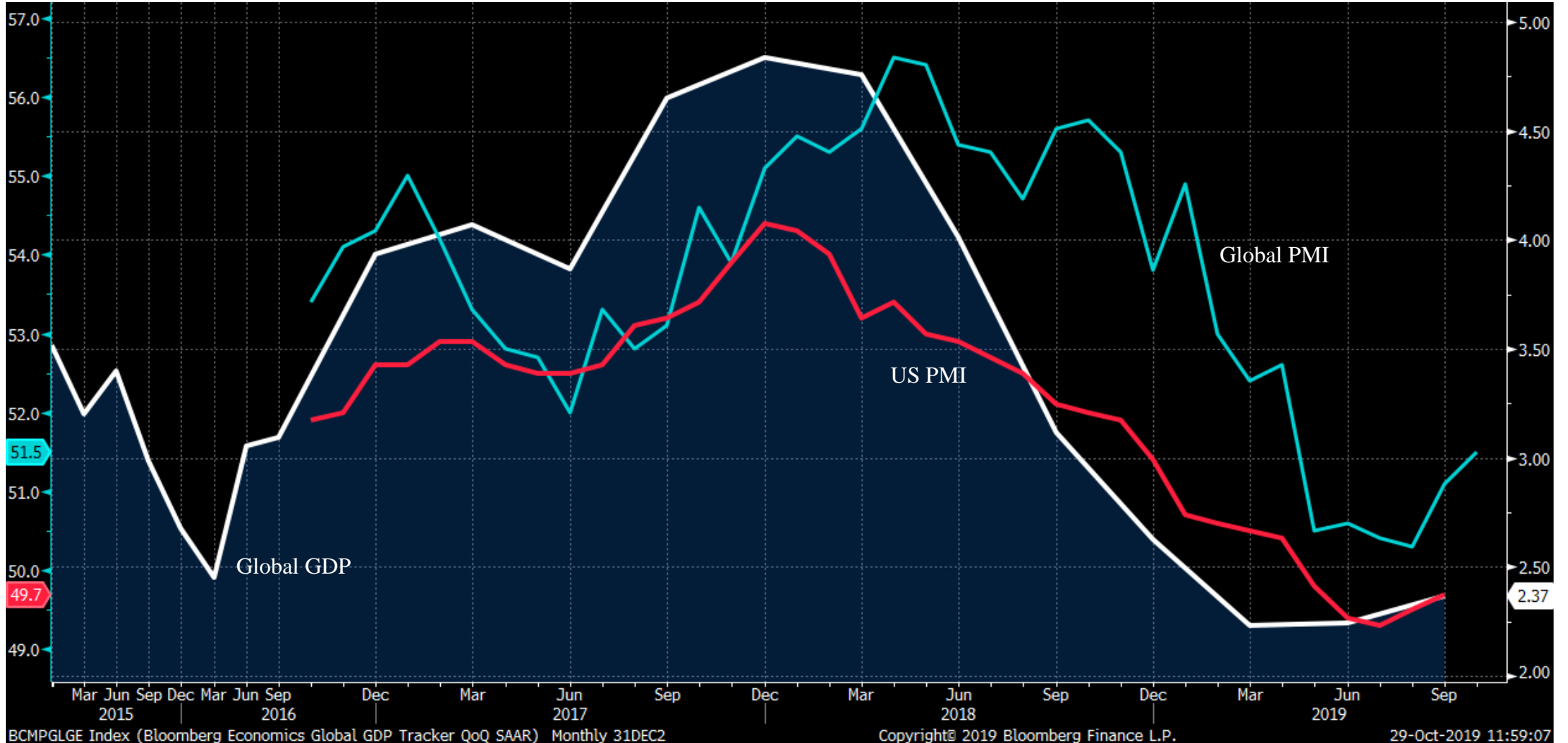


Is Winter Coming?

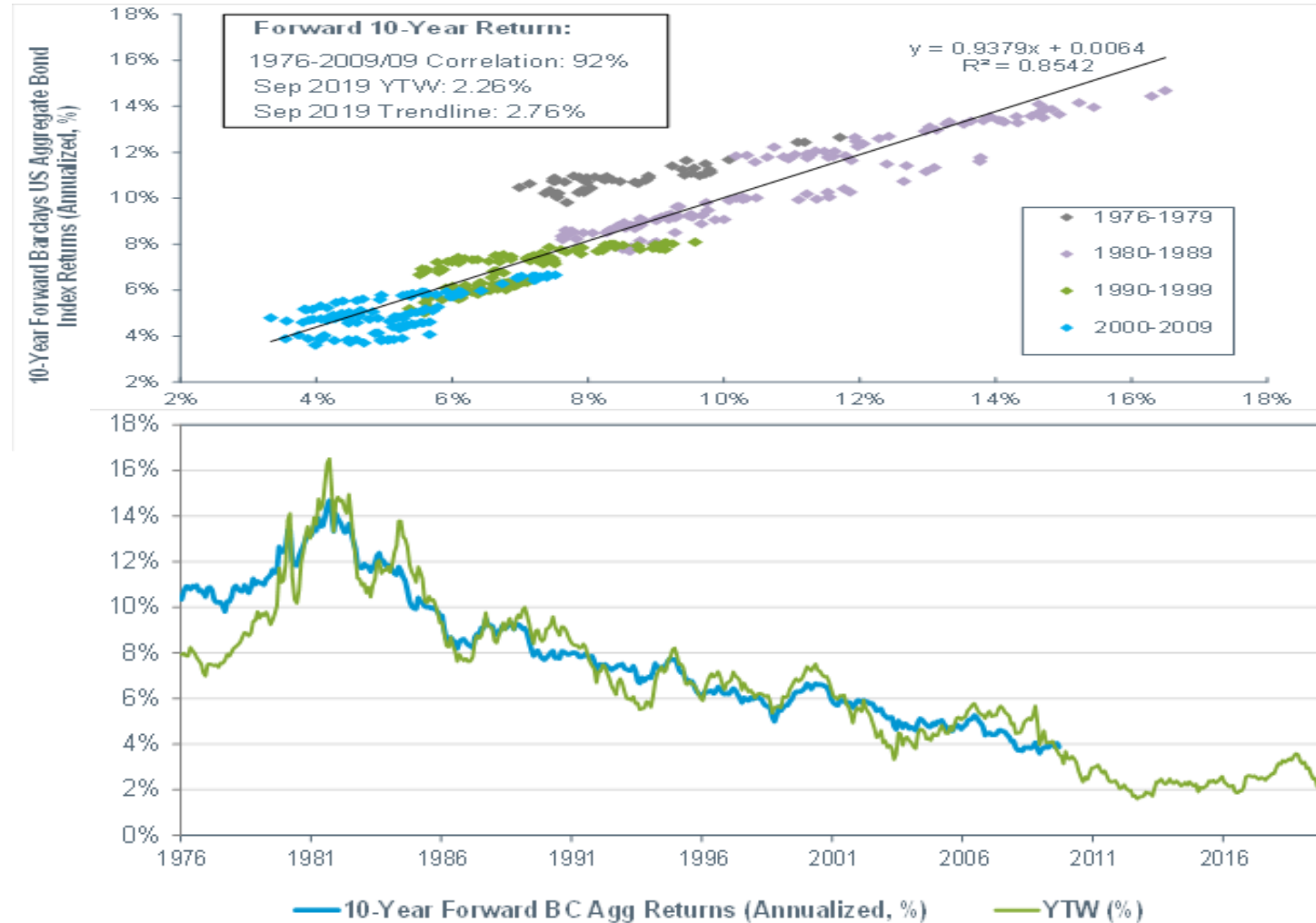
After the longest expansion in U.S. history, most economists and the Federal Reserve are predicting a recession in the near future.



Global and U.S. growth has slowed precipitously.

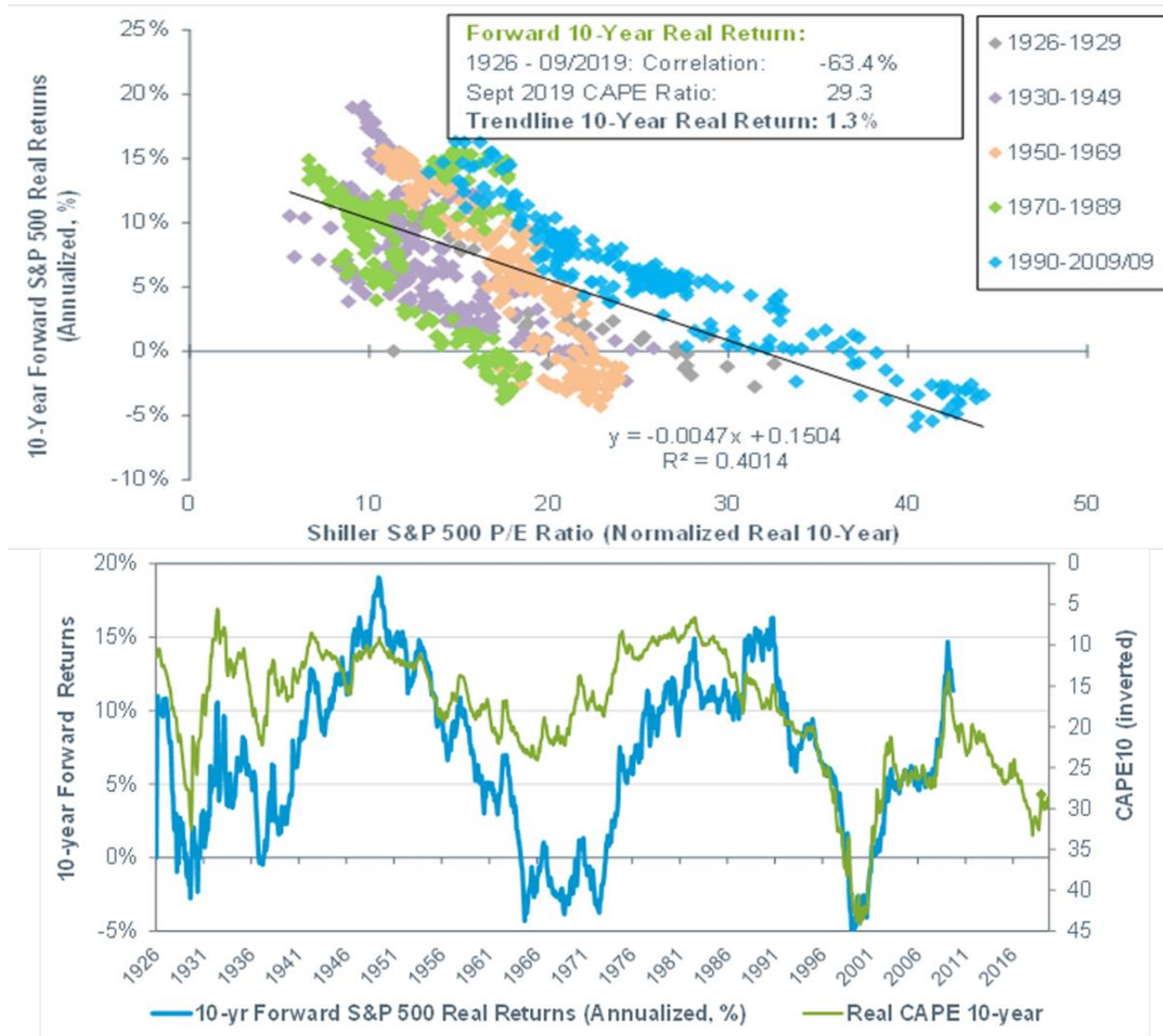


While 10-year forward bond expectations continue to decline.



Source: RVK

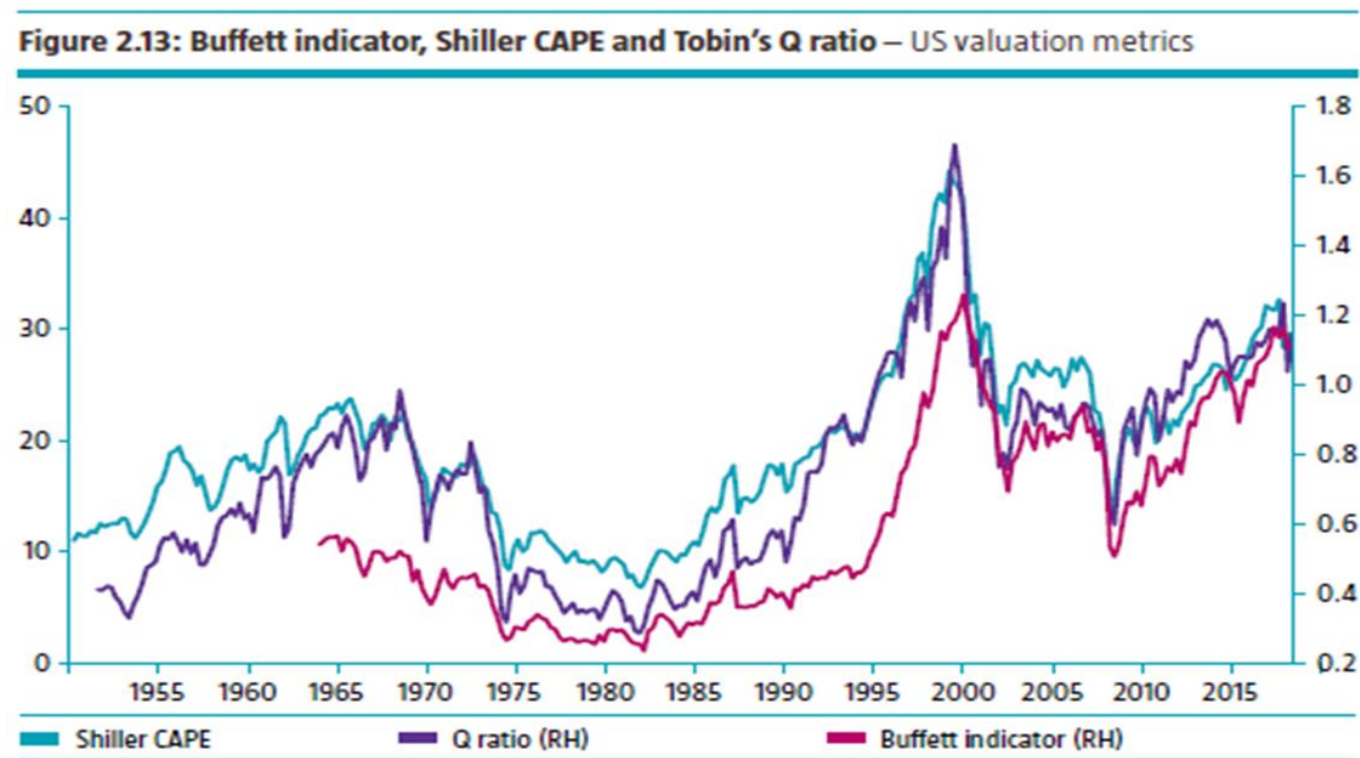
10-year forward equity return expectations are very low.



Source: RVK

The best long term U.S. equity valuation metrics are overvalued, implying lower returns in the years ahead.

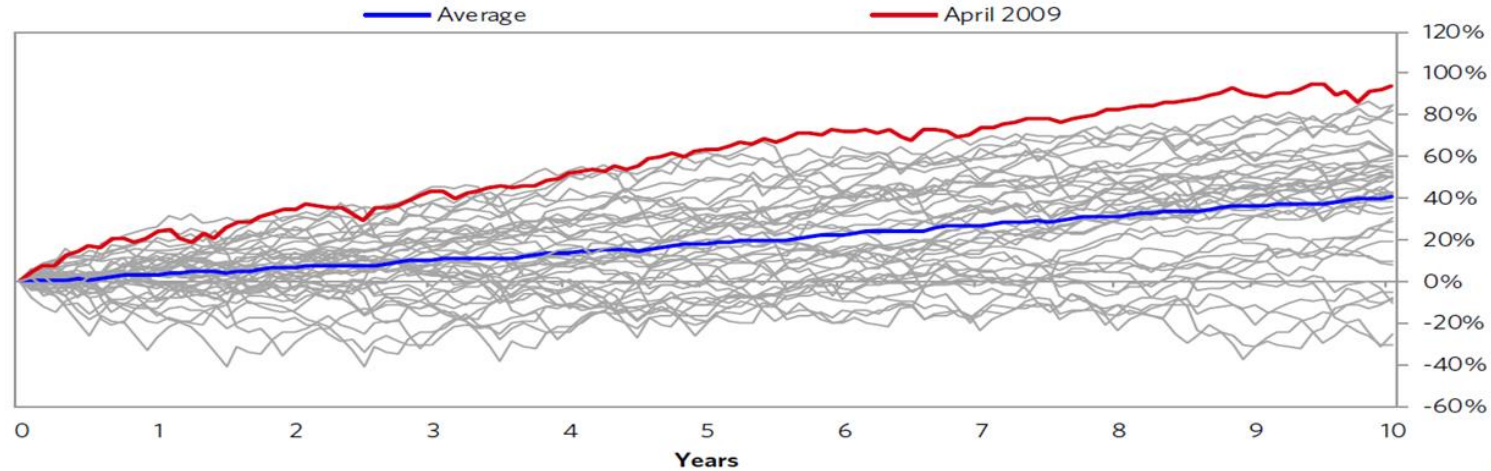
When the CAPE ratio is in the top quintile, as it is now, it implies a market probability of a real loss of 57.9%, with an average loss of 17.5%. The implied 7-10 year return is -1.8%.



Source: Refinitiv Datastream, Robeco

The historical 60% stocks, 40% bonds portfolio has yielded a 5% real return for the last 50 years. Now, the expected 10-year real yield is approximately zero.

US 60/40 Portfolio Cumulative Excess Returns, All 10-Year Periods since 1970 (In)



USA 60/40 Excess Return (Ann)



What about the other side of the equation? Reward to Risk

As the expected return declines, the future reward to risk ratio declines as well. For instance, over the last 10 years an investor in Preferred Stocks would receive \$1.92 for every dollar invested. For the next 10 years, an investor would expect to earn 43 cents for every dollar invested. Risk adjusted returns are poor.

Asset Class	WSTO Past 10 Year Return / Risk Ratio	WSTO future 10 Year Return / Risk Ratio
Preferred Stock (Cohen & Steers)	1.92	0.43
Private Equity	1.83	0.37
Bank Loans (Credit Suisse)	1.71	0.53
Core Fixed Income	1.59	0.63
Core Real Estate	1.5	0.48
Long Duration Fixed Income (Logan Circle)	1.41	0.33
Diversified Hedge Funds	1.17	0.62
Internal Intermediate Government Fixed Income	1.12	0.65
US Equity Composite	1.1	0.38
LPs (Harvest)	0.82	0.39
Non-Core Real Estate	0.69	0.36
Int'l Equity Composite	0.51	0.42

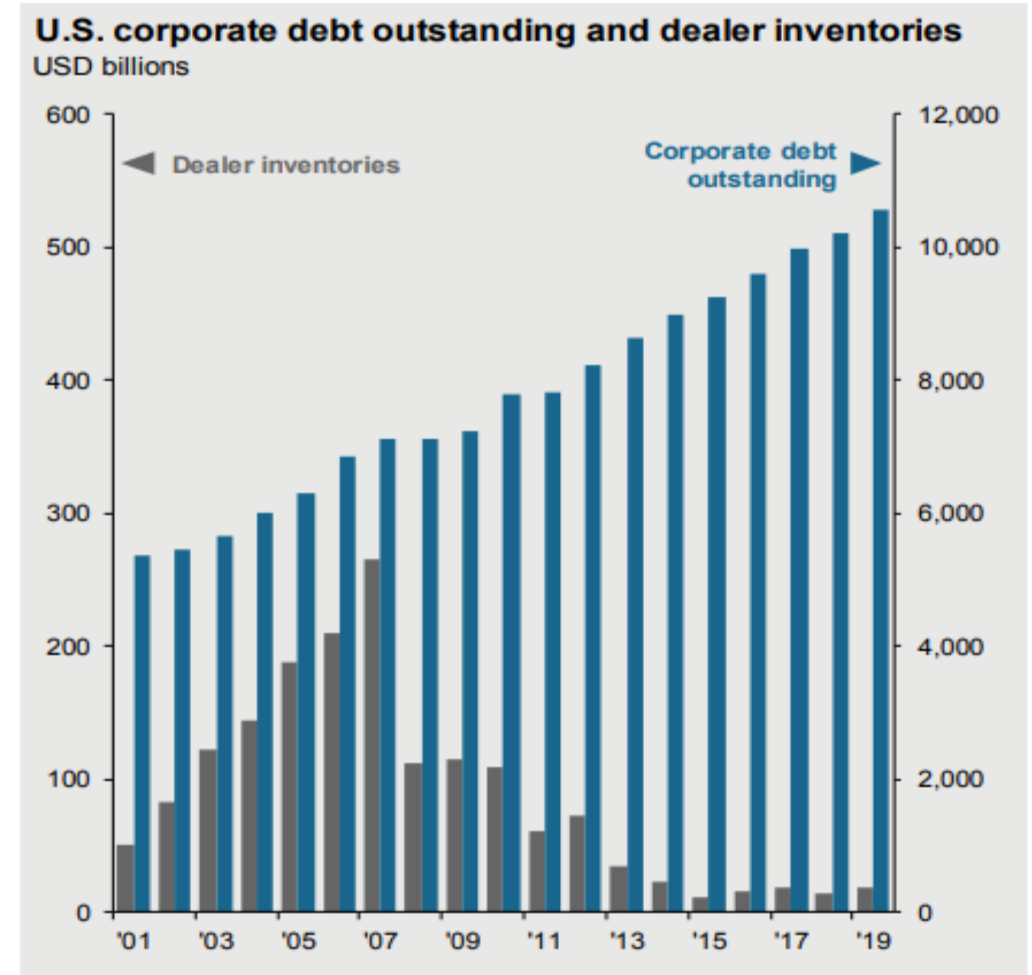
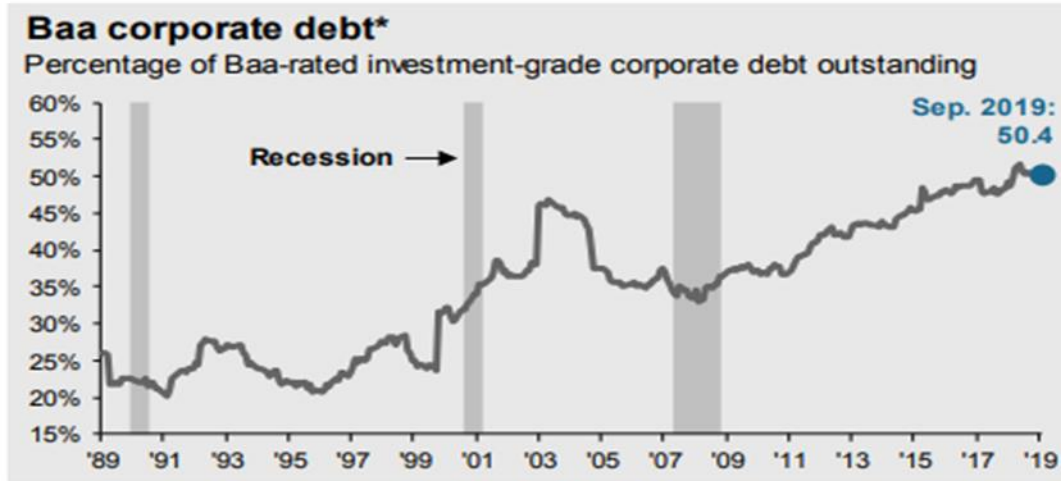
What are we doing at WSTO to prepare for lower returns and a potential recession?

We are focusing on the things we can control!

1. Asset allocation is estimated to be over 90% of performance. SLIB sets the asset allocation but the IFC, RVK and STO spend a significant amount of time looking for the best risk-adjusted returns. Please put March 18th in your calendar for our asset allocation meeting in Cheyenne.
2. The STO has changed 42 managers over the past two years!
 - Moved from two asset allocations: permanent and non permanent, to 10 separately managed asset allocations. This significantly reduced the risk by tenure matching the State's liabilities with similar assets.
 - Instituted new managers that perform better overall but are conservative and have a history of outperforming during down and volatile markets. We also try to mitigate risks that are not well understood. (see next page)
 - Liquidated poorly performing managers.
3. Reduced fees. By managing assets internally we reduced fees by approximately \$24mm. When returns are expected to be muted, lower fee managers have a higher tendency to outperform. Also, the fee as a percent of the total return increases.

Example: Additional risk that is not captured in the normal risk analysis.

Source: J.P. Morgan



BBB credit interest rate spread over U.S. Treasuries are expensive.



STO is excited about the future!

After four years, we are close to finishing our buildout and restructuring. We are hopeful that within the coming year, we will be able to respond to the changing markets and move our funds promptly. We are excited that the Treasurer, State Loan and Investment Board and the Legislature are working together towards one goal to help us modernize the STO. This is extremely important as our accounting, risk and portfolio management systems are antiquated and do not allow us to move assets in a timely manner. This should help our performance and risk-adjusted returns.

Thank you,

WSTO Investment team