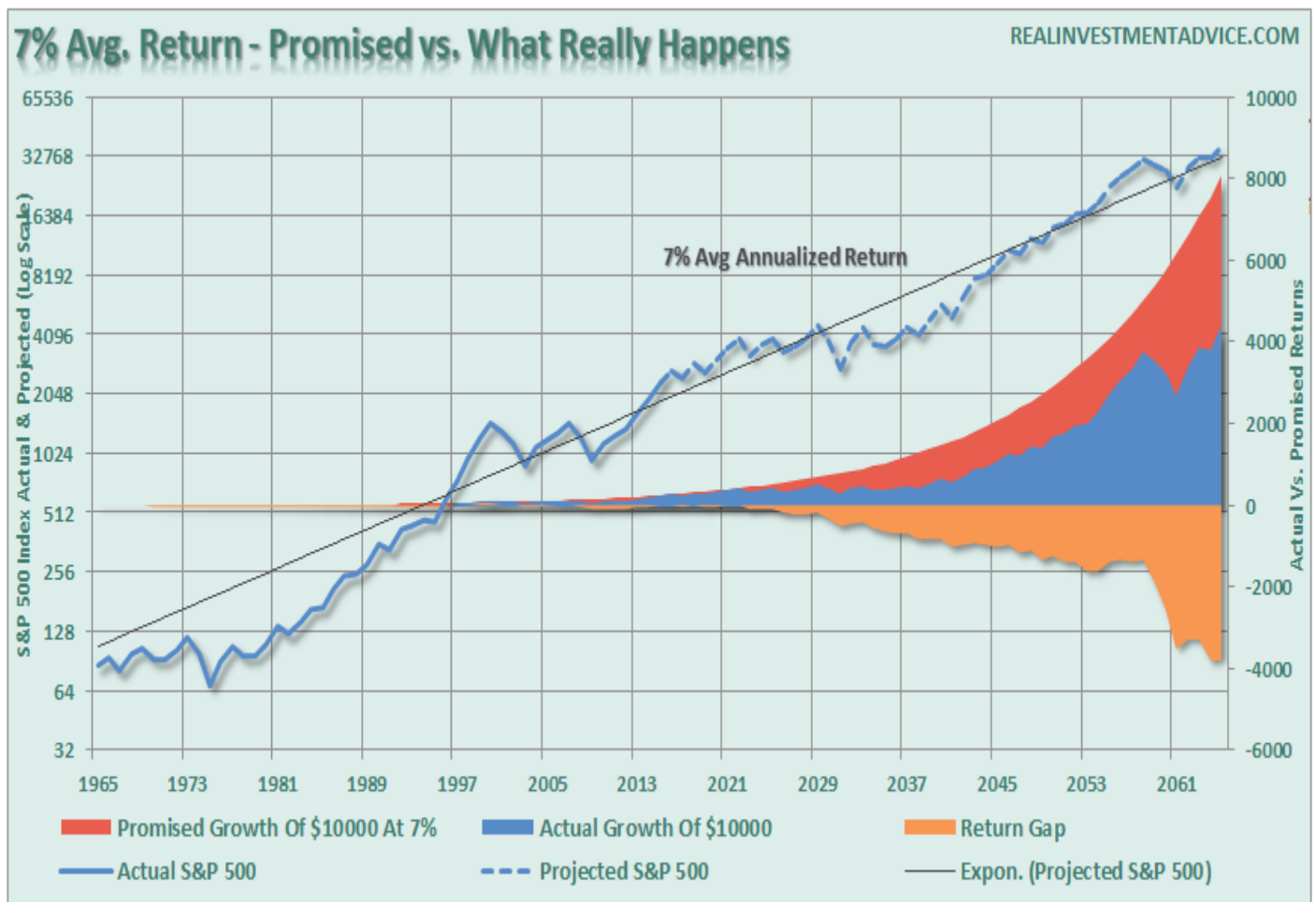


A couple of week's ago I discussed the importance of understanding the difference between compounded annualized returns and real annualized returns. [To wit:](#)

**"The 'power of compounding' ONLY WORKS when you do not lose money. As shown, after three straight years of 10% returns, a drawdown of just 10% cuts the average annual compound growth rate by 50%. Furthermore, it then requires a 30% return to regain the average rate of return required. In reality, chasing returns is much less important to your long-term investment success than most believe. Here is another way to view the difference between what was 'promised,' versus what 'actually' happened. The chart below takes the average rate of return, and price volatility, of the markets from the 1960's to present and extrapolates those returns into the future."**



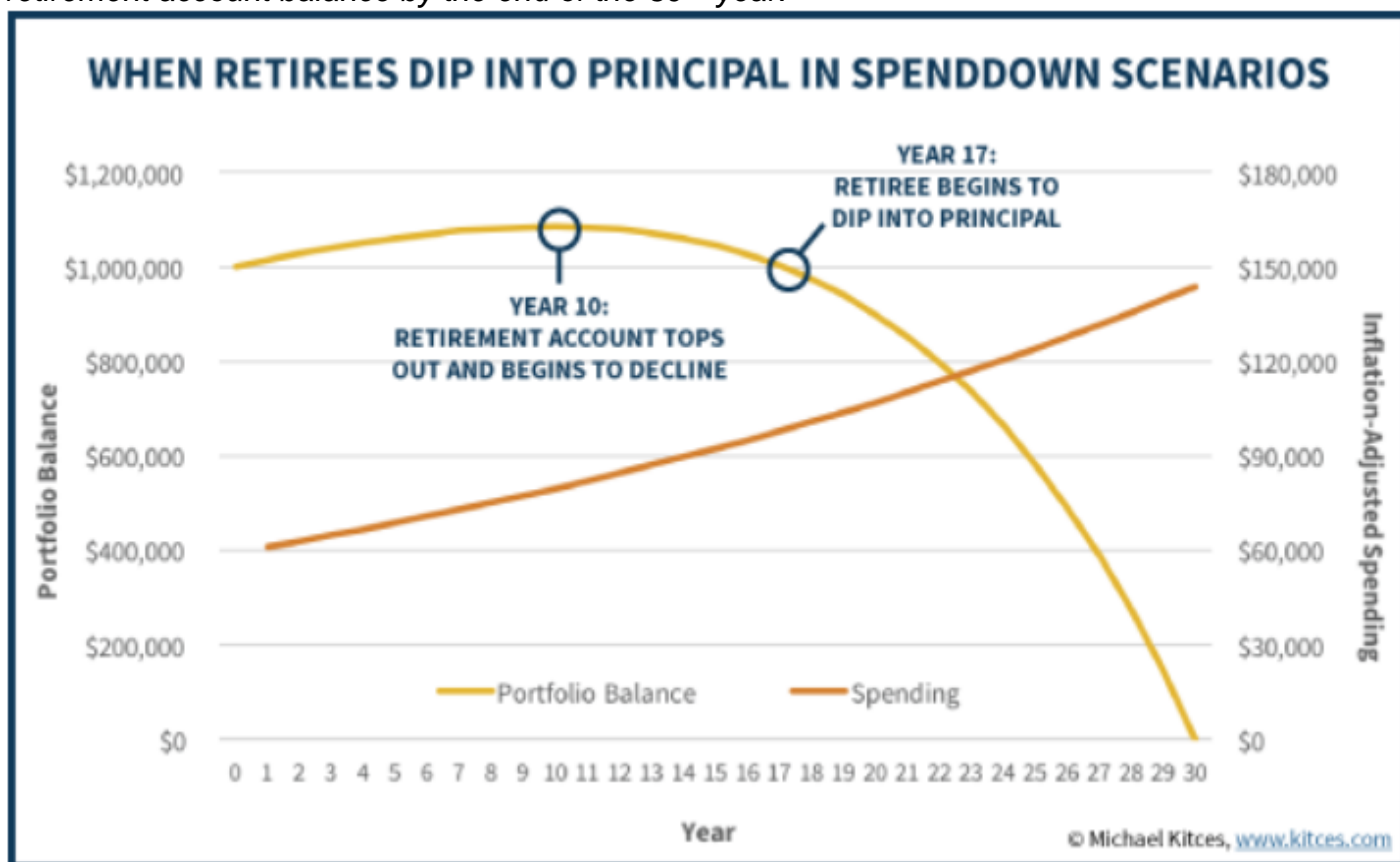
**"When imputing volatility into returns, the differential between what investors were promised (and this is a huge flaw in financial planning) and what actually happened to their money is substantial over the long-term. The second point, and probably most important, is that YOU DIED long before you realized the long-term average rate of return."**

The reason I remind you of this tidbit is due to a very good article recently by Michael Kitces

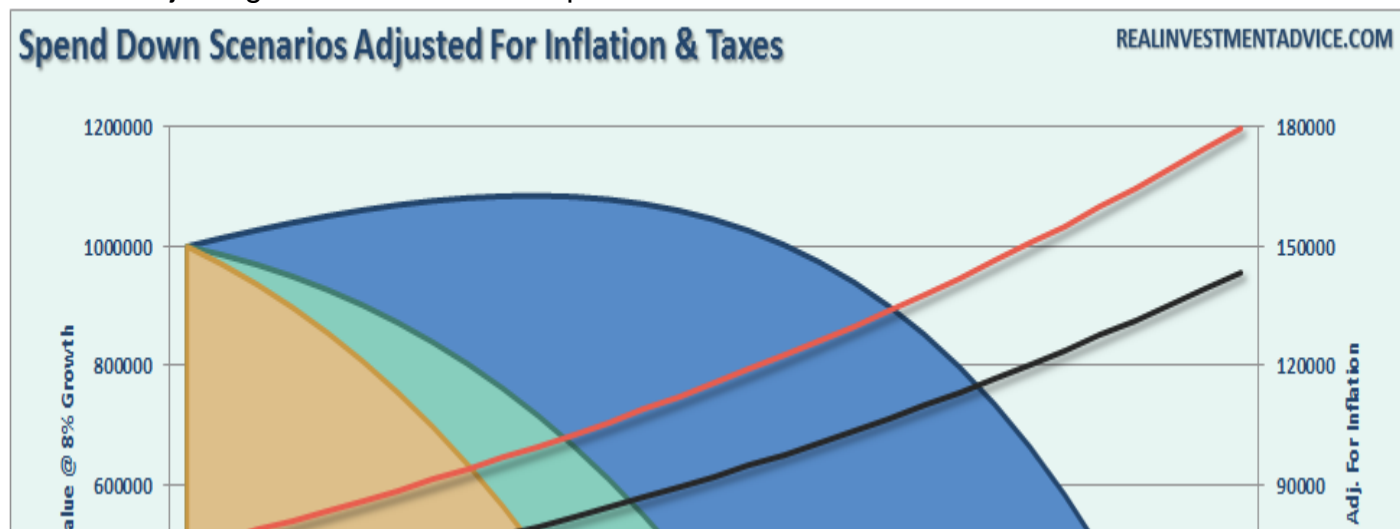
discussing the withdrawal rate in retirement ([Why Most Retirees Will Never Draw Down Their Retirement Portfolio.](#)) •The whole article is very good and worth your reading, however, I want to expand on the following:

*"Given the impact of inflation, it's problematic to start digging into retirement principal immediately at the start of retirement, given that inflation-adjusted spending needs could quadruple by the end of retirement (at a 5% inflation rate). Accordingly, the reality is that to sustain a multi-decade retirement with rising spending needs due to inflation, it's necessary to spend less than the growth/income in the early years, just to build enough of a cushion to handle the necessary higher withdrawals later!"*

For instance, imagine a retiree who **has a \$1,000,000 balanced portfolio, and wants to plan for a 30-year retirement, where inflation averages 3% and the balanced portfolio averages 8% in the long run.** To make the money last for the entire time horizon, the retiree would start out by spending \$61,000 initially, and then adjust each subsequent year for inflation, spending down the retirement account balance by the end of the 30<sup>th</sup> year."



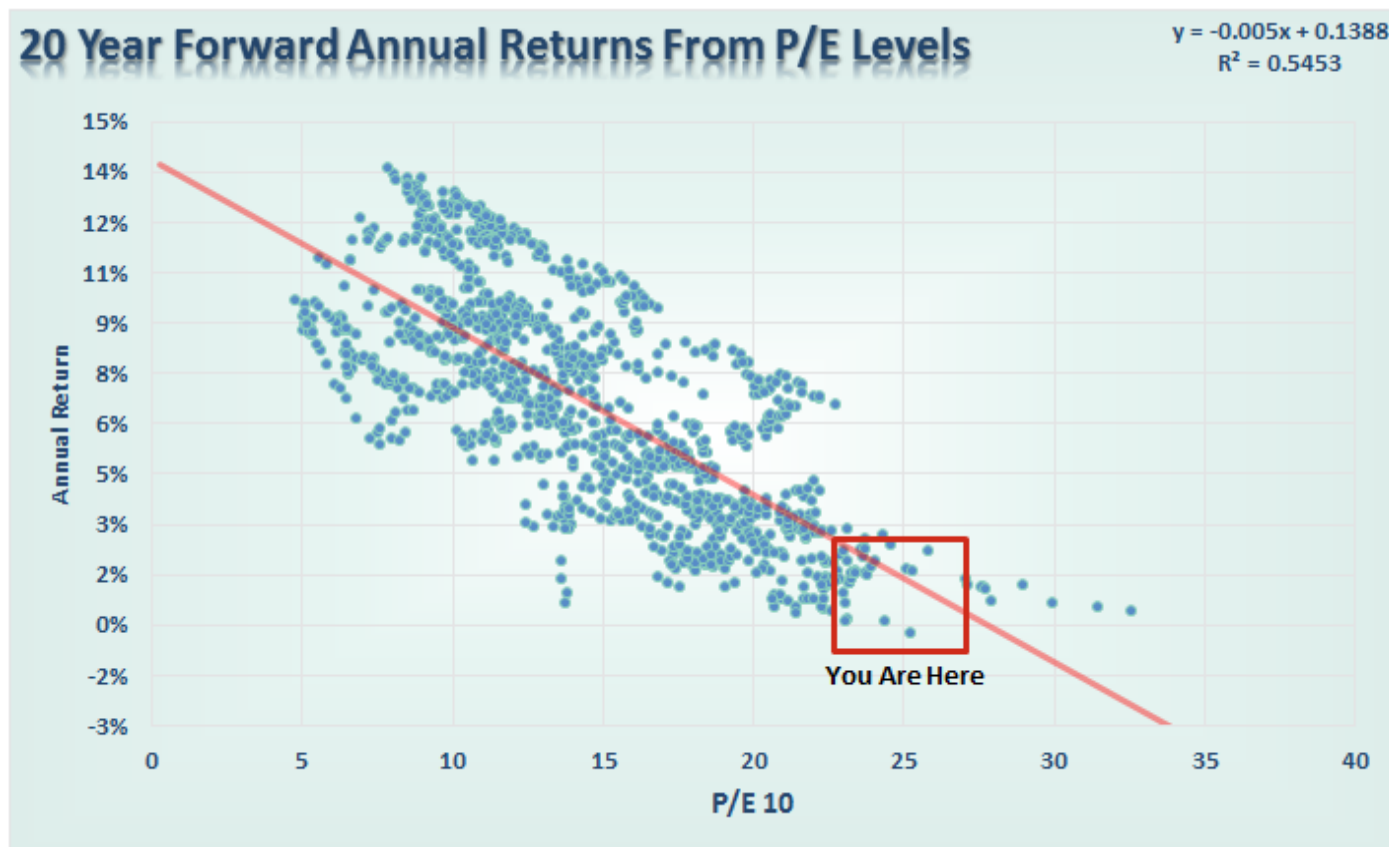
Before we get into the variability of returns and starting market valuations, I want to dig deeper into Kitces' premise above by looking at the impact of inflation-adjusted returns and taxation. The first chart below expands on Kitces' chart above by adjusted the 8% return structure for inflation at 3% and also adjusting the withdrawal rate up for taxation at 25%.



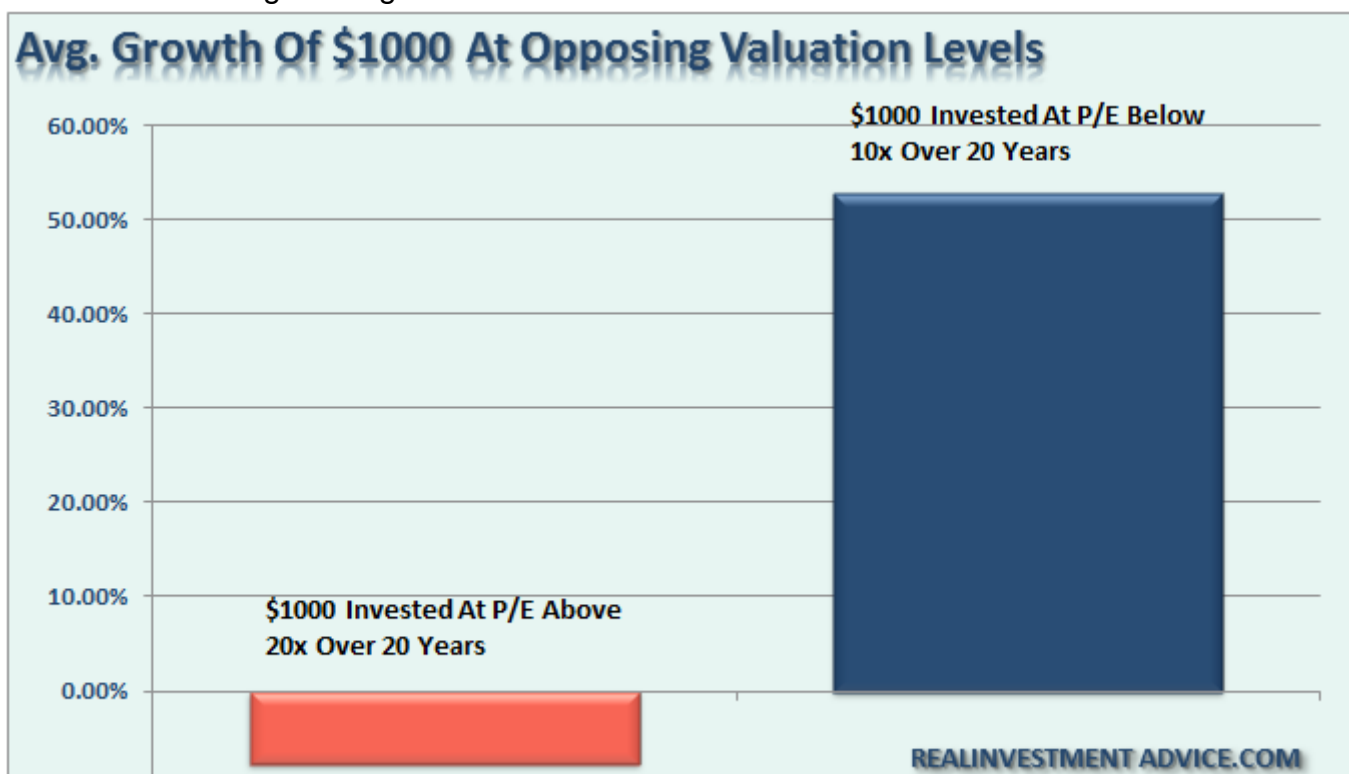
By adjusting the annualized rate of return for the impact of inflation and taxes the life expectancy of a portfolio grows considerably shorter. However, the other problem, as first stated above, is there is a significance difference between 8% annualized rates of return and 8% real returns.

## The Impact Of Variability

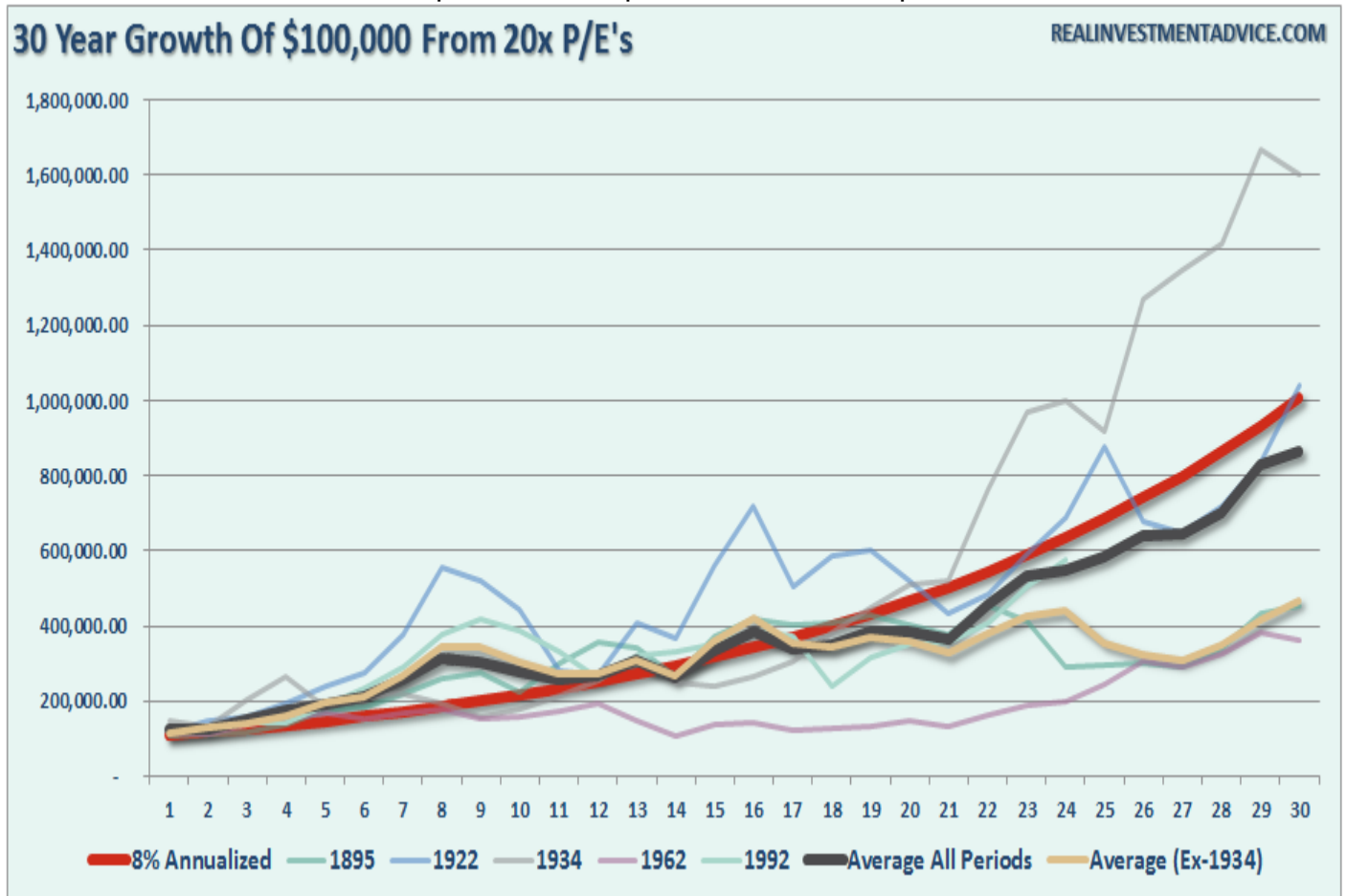
Currently, the S&P 500 (as of 7/11/16) is trading at 2,137 with Q1 trailing reported earnings of \$86.44. ([S&P Data](#)) **This puts the current trailing P/E ratio of the S&P at a rather lofty 24.72x.**• We also know that forward returns from varying valuation levels are significantly varied depending on when you start your investing. As shown in the chart below, from current valuation levels, forward returns from the market have been much closer to 2% rather than 8%.



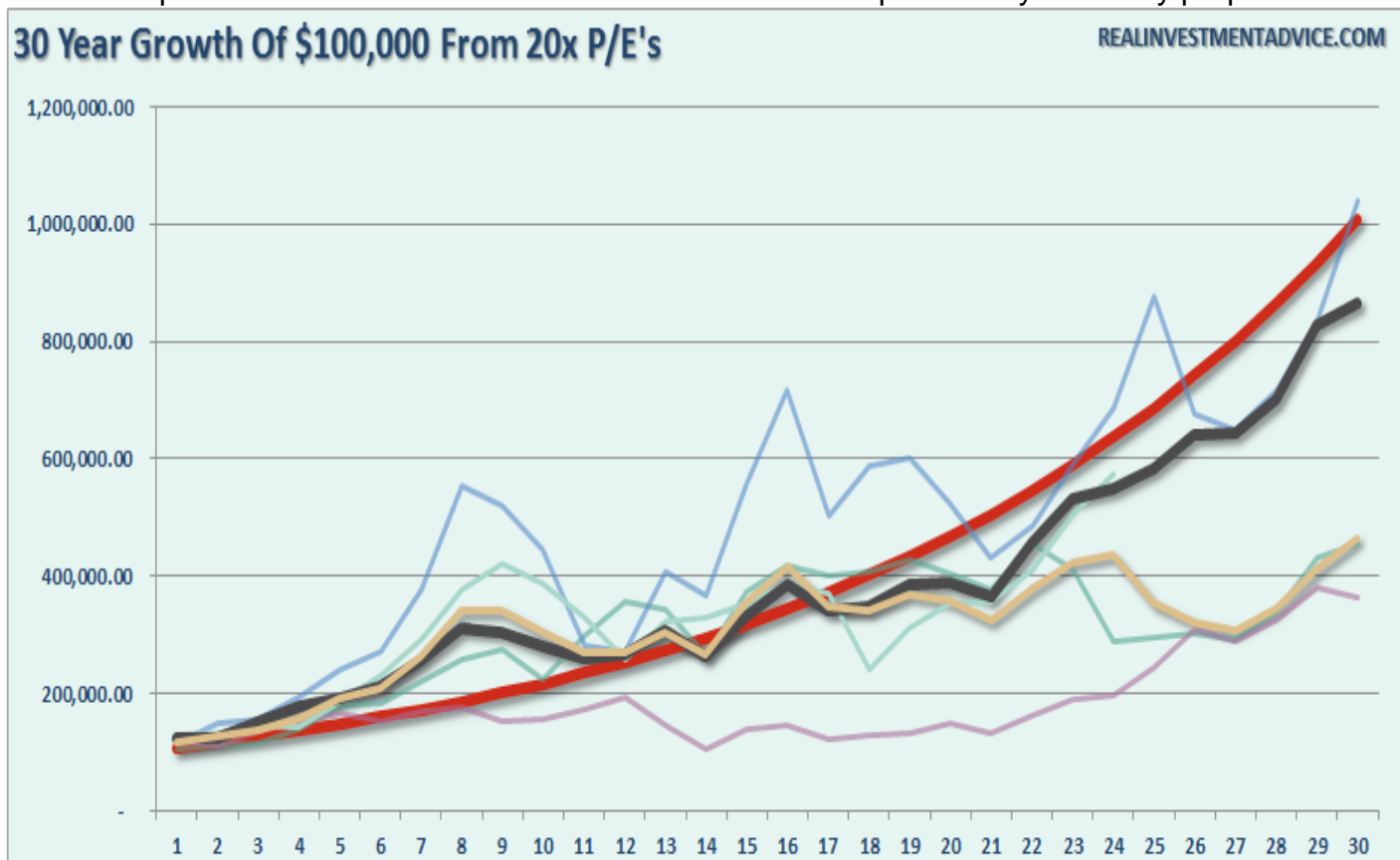
This is better explained by showing the value of \$1000 invested in the markets at both valuations BELOW 10x trailing earnings and ABOVE 20x.



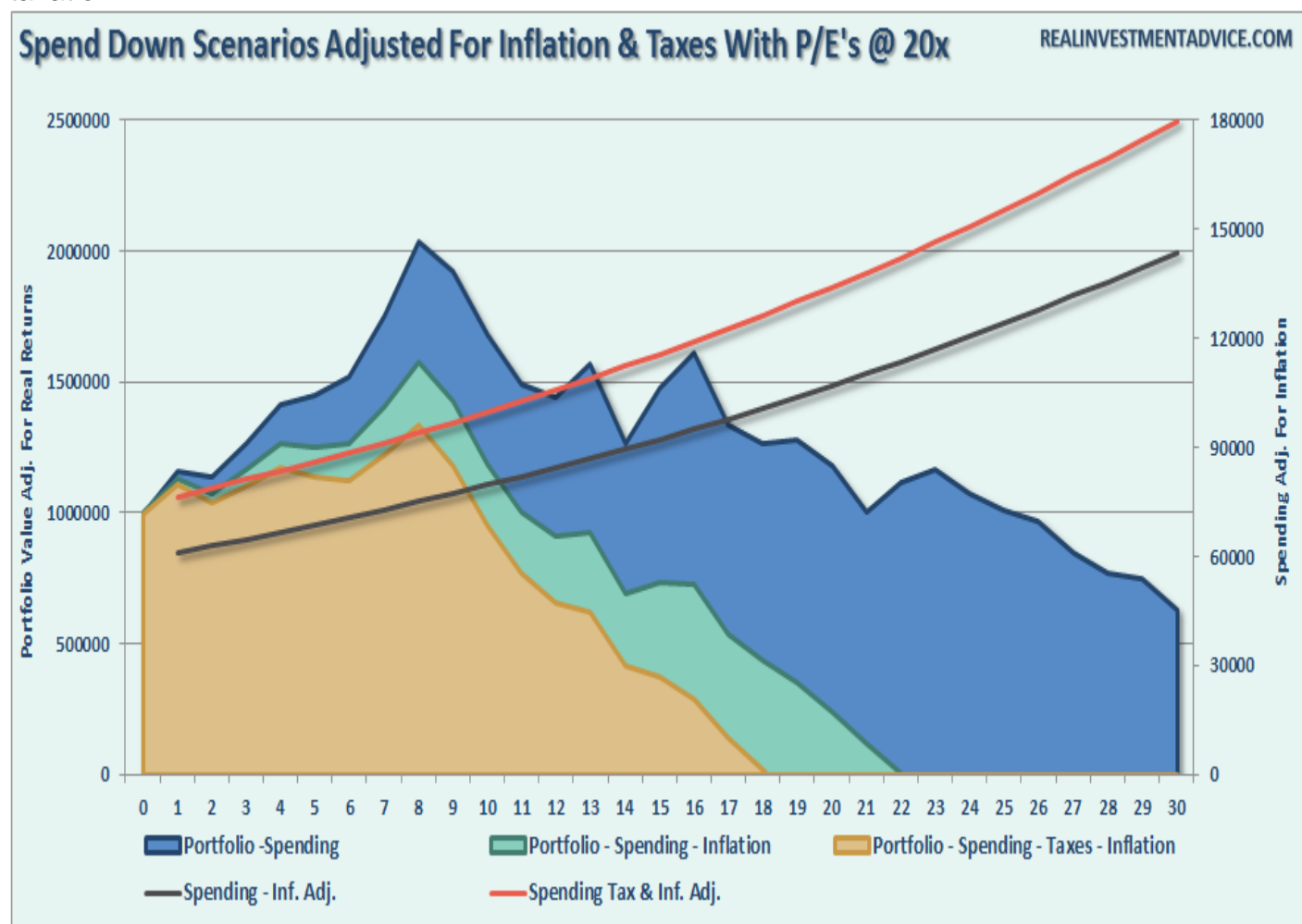
As you can see, WHEN you start your investing, or more importantly in this case your withdrawals, has the greatest impact on your future results. With this understanding let's go back to Kitces' assumptions and change the rate of return from 8% annualized and compounded to real market returns based upon current valuation levels. For this exercise, using Robert Shiller's data, I went back and located points in history when valuations exceeded 20x earnings. I then calculated real forward total returns from those points as compared to an 8% compounded rate.



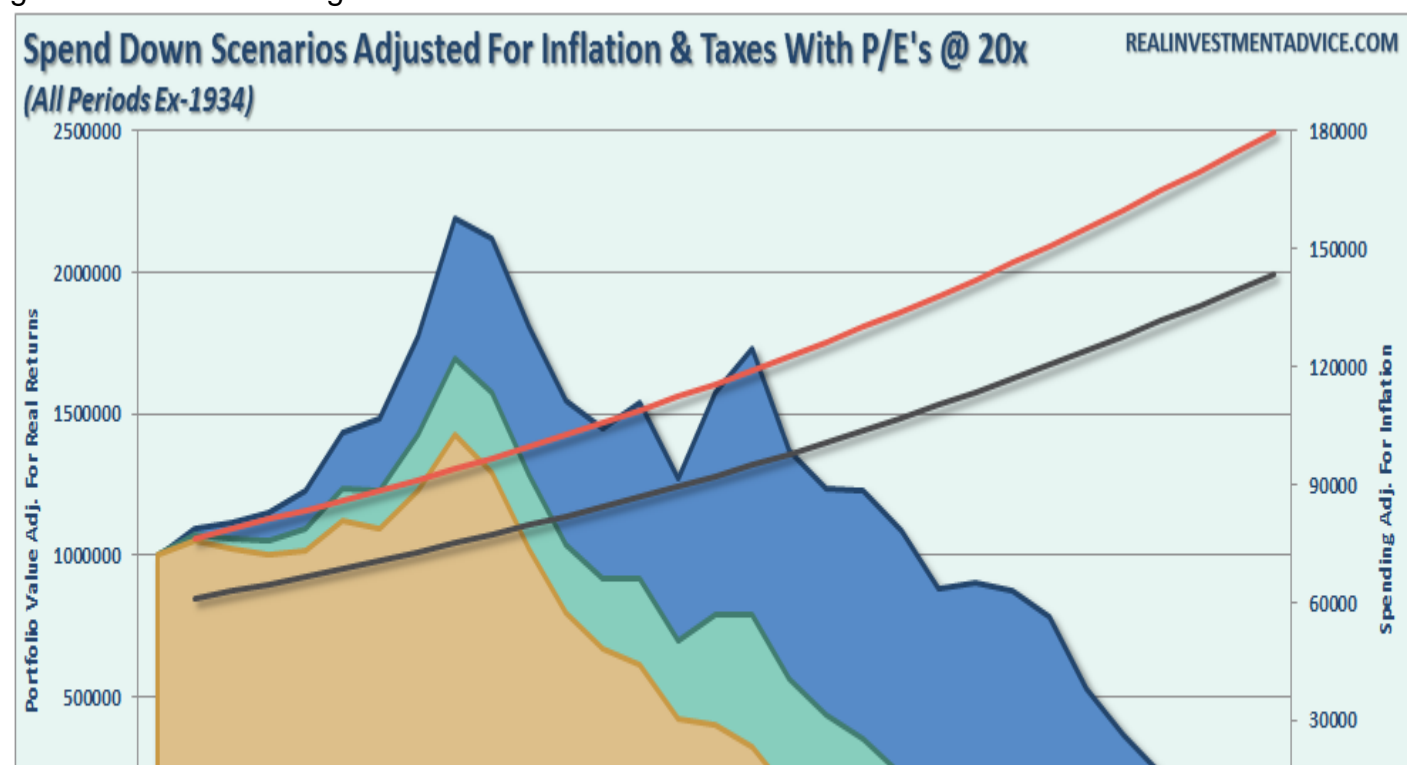
As you can see, with the exceptions of 1922 (*front end loaded returns*) and 1934 (*as the markets left the Great Depression and entered into a post-WWII secular bull market*), returns fared worse than the expected 8% rate. •The next chart removes the 1934 period only for clarity purposes.



The chart below takes the average of all periods above (black line) and uses those returns to calculate the spend down of retiree's in retirement assuming similar outcomes for the markets over the next 30-years. As above, I have calculated the spend down structure to include inflation and taxation.



As you can see, under this scenario, due to the skew of 1934 and front-loaded returns, the retiree would not have run out of money over the subsequent 30-year period. However, once the impact of inflation and taxes are included, the outcome becomes substantially worse. The chart below shows the same as above but with the 1934 period excluded. The outcome, not surprisingly, is not substantially different with the exception of the retiree running out of money one-year short of their goal rather than leaving an excess to heirs.





# Important Considerations For Retiree Portfolios

The analysis above reveals the important points individuals should consider given current valuation levels and a Fed-driven bull market advance over the last 8-years:

- *Expectations for future returns and withdrawal rates should be downwardly adjusted.*
- *The potential for front-loaded returns going forward is unlikely.*
- *The impact of taxation must be considered in the planned withdrawal rate.*
- *Future inflation expectations must be carefully considered.*
- *Drawdowns from portfolios during declining market environments accelerates the principal bleed. Plans should be made during up years to harbor capital for reduced portfolio withdrawals during adverse market conditions.*
- *The yield chase over the last 8-years, and low interest rate environment, has created an extremely risky environment for retirement income planning. Caution is advised.*
- *Expectations for compounded annual rates of returns should be dismissed in lieu of plans for variable rates of future returns.*

As Michael concludes:

***"In fact, spending down the retirement principal early in retirement would be a sign of trouble. Accumulating continued growth throughout the early years of retirement is actually the normal, prudent course of action for anyone who anticipates living a long time, fears the potential impact of future inflation, and therefore recognizes the need for the retirement portfolio to grow in the early years to defend against the uncertainties of a long retirement future."***

He is absolutely correct. In this Central Bank driven world, with debt levels rising globally, interest rates near zero, economic growth weak with a potential for a recession, and valuations high, the uncertainty of a retirement future has risen markedly. This lends itself to the problem of individuals having to spend a bulk of their "retirement" continuing to work. Of course, this could be why 90% of the jobs in the latest BLS employment report went to individuals over the age of 55. Then there is also the tiny fact the majority of American's don't have \$1 million for retirement but actually, most have less than \$250,000. This is another problem in, and of, itself.

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Lance Roberts



Lance Roberts is a Chief Portfolio Strategist/Economist for Clarity Financial. He is also the host of ?[The Lance Roberts Show](#)? and Chief Editor of the ?[Real Investment Advice](#)? website and author of ?[Real Investment Daily](#)? blog and ?Real Investment Report?. Follow Lance on [Facebook](#), [Twitter](#), and [Linked-In](#)