WHITE PAPER

A NEW ERA IN EQUITY VALUATION?

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Early in my career, I was counseled never to pose a question in a business setting unless you were pretty sure that you knew the answer. Well, I am going to violate that advice by discussing an investment conundrum for which I have an opinion but certainly not a definitive conclusion. The answer to this vexing question is very important because it will determine expectations regarding future equity returns and the corresponding appropriate exposure to stocks in a portfolio.

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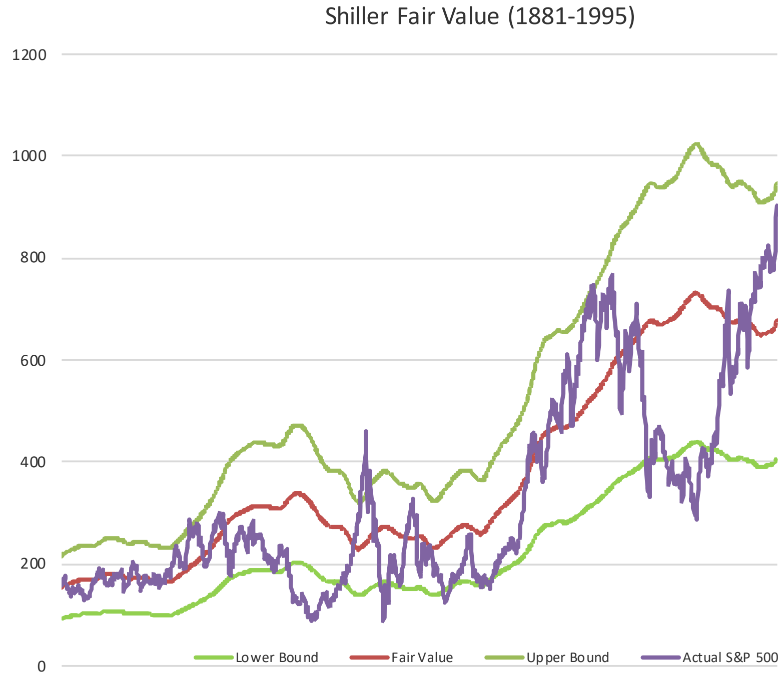
Actual Versus Fair Value

While investment analysts use many different methods to make judgements about markets and to select individual securities, most rely at least in part on an attempt to determine what a specific security or market is "worth." The rationale for this effort is that purchasing an asset at a discount to one's estimation of true or fair value should result in superior returns assuming some analytical skill. With regard to the overall stock market, Nobel Prize winning economist Robert Shiller has long advocated a method of estimating fair value that calls for multiplying the long term average P/E on the market by average earnings per share over the prior ten years. This method smooths out the ups and downs of year to year earnings resulting in a more stable metric which is consistent with the idea that the intrinsic value of the overall market should not fluctuate that much over short time horizons. The following chart illustrates the result of this calculation for the S&P 500 Index for the period 1881-1995.



The red line depicts the fair value as calculated using this method and the two green lines represent plus and minus one standard deviation from fair value. Finally, the purple line is the actual value of the S&P 500. As you will note, this construct did a very good job of capturing the behavior of the US stock market over this long time frame. The S&P actually fluctuated around the fair value and the swings in the market were confined to a reasonable range.

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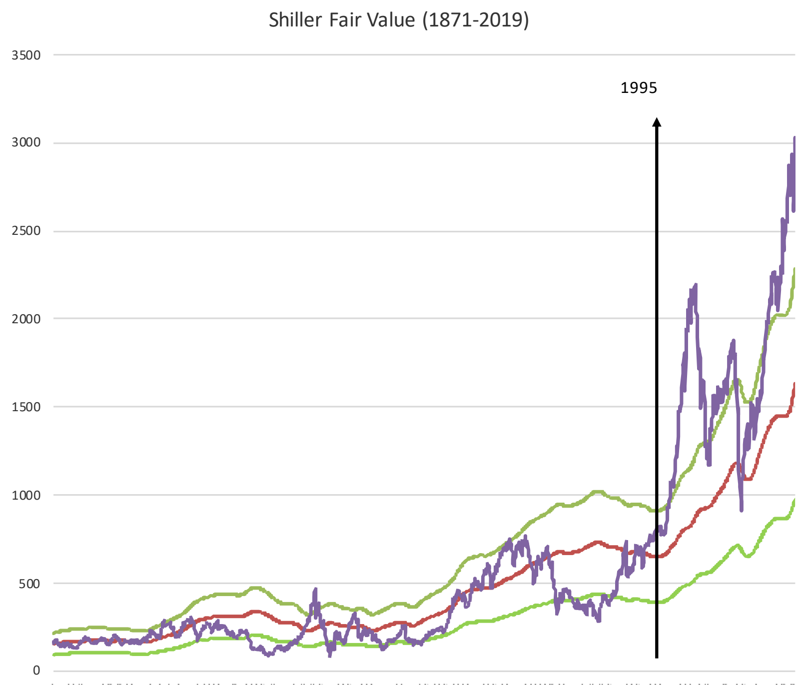
Now, let's extend this analysis through today.



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Wow, clearly something changed beginning in 1995! Since then, the S&P 500 has been above fair value 97% of the time and it has been above fair value plus one standard deviation 71% of the time. This creates a particularly difficult dilemma for us investment types because we must decide whether this is a temporary aberration (even though 24 years have passed) that is likely to return to normal, or a permanent change in valuation levels, what we call a paradigm shift. And, the answer will have a major impact on investment strategy.

P/E and E

Once again, the Fair Value is calculated by multiplying the long term average price earnings or P/E ratio by average earnings over the prior ten years. So, in an effort to figure out what may have changed, let's examine each of these two components.

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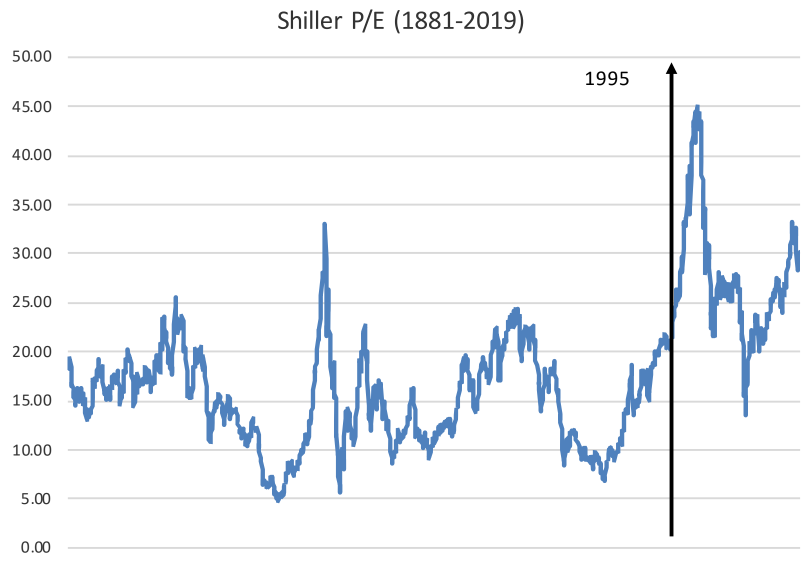
You wouldn't think that there would be any question regarding earnings because they are subject to generally accepted accounting principles or GAAP. But, in fact, companies have a fair degree of latitude in calculating earnings, and analysts often make adjustments to exclude things like one-time write-offs even though they may occur frequently for a given company. So, it is possible that investors make valuation judgments based on their own definition of earnings that exceed the GAAP reported numbers. But, that seems unlikely to explain the behavior of the market since 1995 because the modified definition of earnings would have to be about 25% greater than the GAAP numbers to justify current stock prices.

So, the more likely candidate is the P/E ratio which is basically a measure of investor sentiment. The P/E measures how much investors are willing to pay for one dollar of earnings and that is a totally subjective decision that could be based on any number of variables including interest rates, inflation, expected earnings growth, perceived risk, the economic outlook, politics, world affairs, and so on. And, to demonstrate the impact of sentiment, the S&P 500 is about fifteen times more volatile than would be suggested by changes in fair value. P/E ratios based on current year earnings are tremendously volatile, but as depicted in the following chart, even the Shiller P/E based on ten year average earnings fluctuates considerably over time. And, consistent with the previous chart which suggests a "New Era" since 1995, the Shiller P/E has averaged 27 since then as compared to the very long term average of 17. Today, it is 30 which is in the top five percent of historical experience. **So, the real question is: what might account for investors' very optimistic attitude since 1995 as reflected in higher P/E ratios?**



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Generally Accepted Factors Influencing Valuation

In Finance 100, you learn that the value of any asset is equal to the present value of future cash flows that you will receive by virtue of owning that asset discounted at a rate that reflects current interest rates as well as the perceived risk of the asset. So, the first place to look for an explanation of rising valuation would be a meaningful decline in interest rates. Following the peak in 1981, interest rates did decline steadily, but the ten year US Treasury rate was still at roughly 6% in 1995 versus the long term average of about 4.6%. Moreover, it did not actually fall below the long term average until 2002, and meaningfully below-average rates did not occur until the Global Financial Crisis in 2007-09. While the stock market is actually quite good at divining future economic activity, it seems unlikely that it successfully looked ahead seven to ten years which suggests that we search elsewhere for an explanation.

Another driver of valuation is the profitability of Corporate America as measured by profit margins and expected growth in corporate earnings. In 1995, profit margins were right on their long term average of about 6%, and they subsequently dropped during the economic slowdown of 2000-2003. Thereafter, margins improved dramatically to the current level of just under 10%. But, once again, that did not occur until almost ten years after the first sign of a material change in valuation which brings into question whether the market really has such a good crystal ball. The relationship between rising valuations and earnings growth also seems quite tenuous. Since earnings growth had been quite weak from 1991-94, it was not surprising that it surged from 1995-98 which might have justified increased optimism. But, growth then subsided to more normal levels before turning materially negative in the recession of the early 2000's. Back to the drawing board!

Finally, the P/E ratio takes into account investors' perception of risk so we should take a look at the volatility of the economy and the stock market. The volatility of GDP had declined significantly in the mid 1980's, but then remained relatively constant until very recently when it declined to historically low levels. Similarly, the expected volatility of stocks actually rose from 1995 until 2005 when it leveled off. Thereafter, it surged during the Global Financial Crisis only to be followed by extremely low levels since 2012.

The bottom line is that the factors that are most commonly cited as driving valuation have likely contributed to the perseverance of high P/E's but do not seem to provide a compelling explanation for the initial transition to the "New Era" that we witnessed in the mid to late 1990's. In recent years, there have been several other factors including corporate tax cuts and the tsunami of share repurchases that have undoubtedly contributed to high valuations.

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Moreover, the huge flows into capitalization weighted index funds have resulted in very high valuations for a small number of technology companies. And while these factors are important, there has been one other major shift in the financial landscape that represents my best guess as to what is going on.

Central Banks

While serving as the Chairman of the Federal Reserve from 1987-2006, Alan Greenspan instituted a more activist policy of intervention on the part of the FED that investors nicknamed The Greenspan Put. Specifically, the FED significantly reduced interest rates during market declines associated with events such as the Savings and Loan Crisis, the Gulf War, the Asian Financial Crisis, Y2K, and 9/11. The goal of these actions was to inject more liquidity into the system and to encourage risk-taking in the financial markets in order to prevent further market deterioration. This policy was continued under his successor, Ben Bernanke, and then expanded during the Great Financial Crisis when the FED purchased securities taking its assets from $870 billion in August of 2007 to $4.5 trillion in 2015. There is nothing special about 1995 as the year of transition to the New Era of valuation, but it seems that by that time, the cumulative impact of many interventions by the FED had convinced investors that there was a floor under stock prices because they believed the FED would always step in during a significant downturn. And, it is important to note that similar policies have been implemented by central banks all over the world. The key point is that this insurance policy or Put likely became priced into assets resulting in the higher valuations portrayed in the charts shown on the previous pages.

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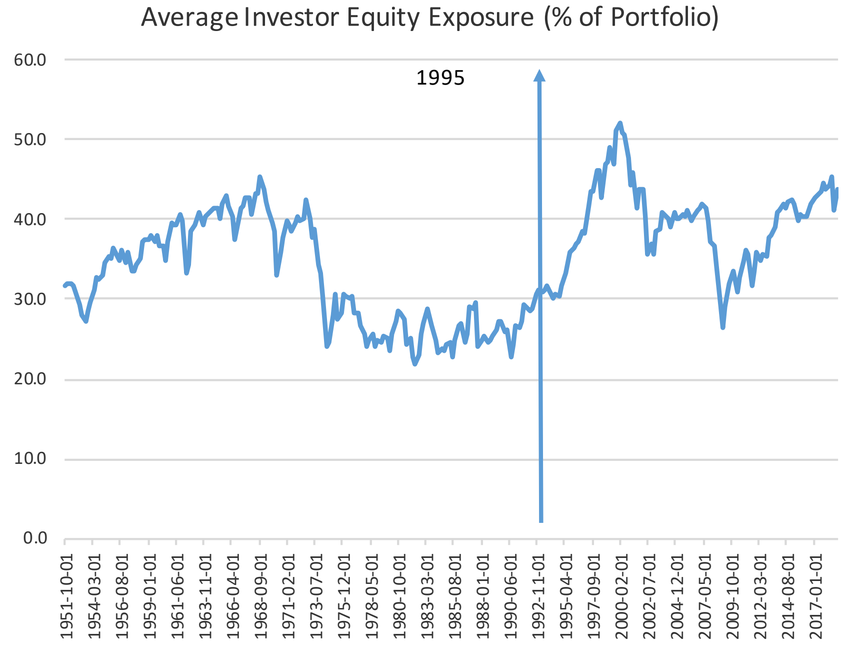
As just one measure of increased confidence which would be a prerequisite for higher valuations, the following chart indicates the equity exposure of the "average investor" and you will note that it rose dramatically coincident with the beginning of the New Era in valuation in 1995 and has remained at high levels.



What Now?

It is important to point out that this policy is quite controversial. Some believe that market declines are healthy because they shake out financial excesses in the system. Further, there is a reasonable argument that the FED Put encourages reckless behavior and may lead to speculative bubbles.

But, the more interesting question is where do we go from here? If the FED is able to fend off future market crises through intervention, then current stock valuations may in fact represent the "New Normal." And, continued high profit margins, low interest rates, and low volatility would only serve to provide additional support. But, there are very real concerns regarding the ability of the FED to stave off a crisis given that interest rates are already very low which does not give it much room to maneuver. Further, the FED has only reduced its balance sheet modestly from the peak which begs the question as to how much additional asset purchasing or Quantitative Easing could occur in the face of a looming recession or other form of crisis. A final concern is that the economic recovery in the US since 2009 has been fairly modest by historical standards despite low interest rates and the FED's large balance sheet.

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Similarly, growth around the world is underwhelming despite the fact that 25% of all of the world's bonds carry negative interest rates. Will we ever be able to wean ourselves from stimulative policies? Could it be that these policies are losing their efficacy? Perhaps fiscal stimulus such as infrastructure spending could step in to carry part of the load but our political system has been unable to come to consensus on such a program. In any case, given all of these concerns, can we still justify high valuations or are we facing a regression to the mean that would result in poor equity returns for a number of years?

Wall Street's best minds are wrestling with these thorny questions so it would be very presumptuous of me to suggest that I have it figured out. But, for whatever it is worth, here's my take. Given that growth around the world is quite moderate despite massive and unprecedented liquidity and financial stimulus, I am skeptical of the ability of central banks to provide much cushion in a crisis situation which will undoubtedly occur at some point. So, I suspect that investors will eventually rediscover risk and reprice securities accordingly. In other words, P/E ratios will come down. But, I see no need for them to regress to long term averages assuming that profitability remains high and interest rates moderate.

Important Notes And Disclosures

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What Does All of this Mean For Returns?

At one end of the spectrum, some investment firms assume that P/E's will regress toward the long term average which results in annualized equity return forecasts for the next seven to ten years of -2% or so. At the other extreme, if one assumes that P/E's and margins remain high and that economic growth remains strong, returns in the 6-7% range seem attainable. However, you should note that even the more optimistic scenario falls well short of historical returns that have averaged about 9.5%. Our view falls in the middle based on the expectation that valuations will moderate somewhat resulting in our annual return forecast on U.S. stocks of 4.2%.

What does that mean for portfolio construction? We are maintaining relatively full equity allocations because bond returns are likely to be even more modest. Within equities, we have a tilt toward high quality companies and private equity. And, we have meaningful allocations to diversifiers whose returns should be largely independent of stock and bond market fluctuations. All of this is an attempt to capture a reasonable percentage of any potential upside in the equity market while also cushioning the portfolio against the downside. As befits our name, diversification and balance are the order of the day.

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