In Conversation with Robert Shiller

Josh Matthews
Managing Partner & Co-Founder
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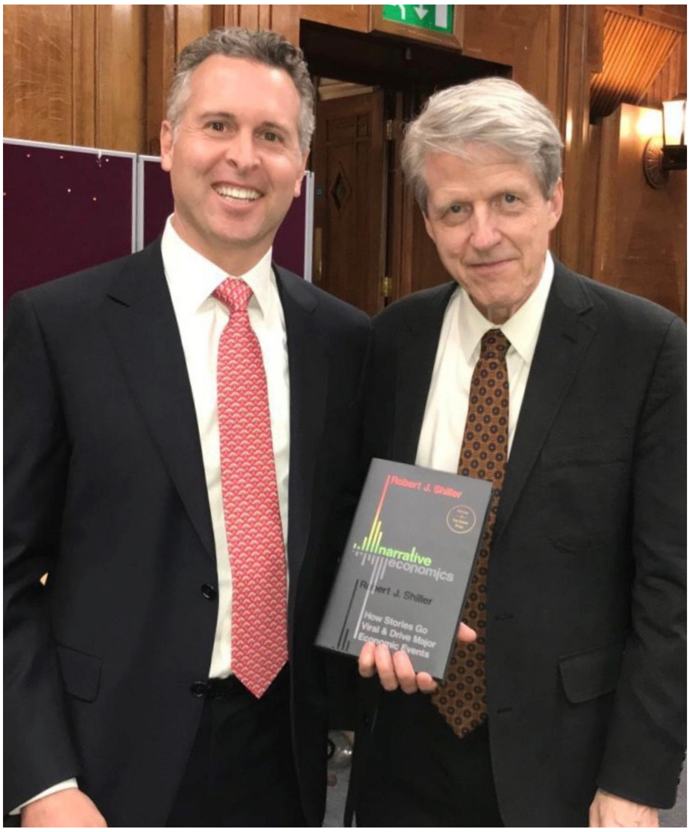
Recently I was lucky enough to be invited to see Professor Bob Shiller speak about his latest idea, Narrative Economics, and to meet with him to get his thoughts on several timely market related matters.

If you are not familiar with Professor Shiller, he serves as the Sterling Professor of Economics at Yale University, created the famous Case-Shiller Home Price Index[1], wrote the New Time Best Seller 'Irrational Exuberance', created the Shiller P/E ratio[2] (often referred to as P/E 10 or CAPE ratio), was named as the Bloomberg 50 most influential people in global finance[3] and won the Nobel Prize in Economics. When we spoke, he was delighted to hear that when we recently expanded, we named our newest meeting room in his honour as testament to his enormous contribution to the world of finance.

Our conversation got off to a quick start...



Q: 'When you were developing the CAPE ratio, what gave you inspiration and how did you come up with the idea?'

A: 'I was a graduate student during the 'Rational Expectations Revolution' and I wrote a paper...that the market is just too volatile for the fundamentals. That led me to wonder, well what is a better model? The prevailing model [at the time] is that the market is the optimal forecast of the present value of future dividends. And that model didn't look right at all, so I thought that I wanted to think about what drives the market. And it becomes a broader question as time goes on, what drives the economy.

[1]The Standard & Poor's Case–Shiller Home Price Indices are repeat-sales house price indices for the United States. There are multiple Case–Shiller home price indices: A national home price index, a 20-city composite index, a 10-city composite index, and twenty individual metro area indices.

[2]The cyclically adjusted price-to-earnings ratio, commonly known as CAPE,[1] Shiller P/E, or P/E 10 ratio,[2] is a valuation measure usually applied to the US S&P 500 equity market. It is defined as price divided by the average of ten years of earnings (moving average), adjusted for inflation.[3] As such, it is principally used to assess likely future returns from equities over timescales of 10 to 20 years, with higher than average CAPE values implying lower than average long-term annual average returns.

[3]"The 50 Most Influential People in Global Finance". Bloomberg. Archived from the original on 2012-07-16.

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There are obvious things like natural resources and exhaustion of resources and technological progress, but I thought there is something else as well, that is more psychological. Behavioural economics is a revolution that affected the whole profession. I thought I was inventing it, but maybe I was being carried along by it. It utilizes psychology to understand market fluctuations.'

Q: 'You are quite well known for your work on the Shiller P/E ratio and I wanted to get your thoughts on where the best and worst value lies in the world's stock markets at the moment.'

A: 'The US recently had the highest CAPE ratio in the world and the UK has a relatively modest CAPE ratio, so this may sound odd, but I would [invest] in the UK over the US. Maybe that's unpatriotic. I wouldn't [invest] in Russia; Russia has the lowest CAPE ratio. In their case, I'm not so sure I would [invest] there. Despite the [Brexit] conflict we're seeing today, this is a most civilised country and it is not expensive, so that's a good place [to invest].'

Q: 'Is there anywhere else where you are currently seeing good value?'

A: 'Our own CAPE product is a kind of value product and I think that 'Value Investing' is still likely to be a solid [investing] principal.'

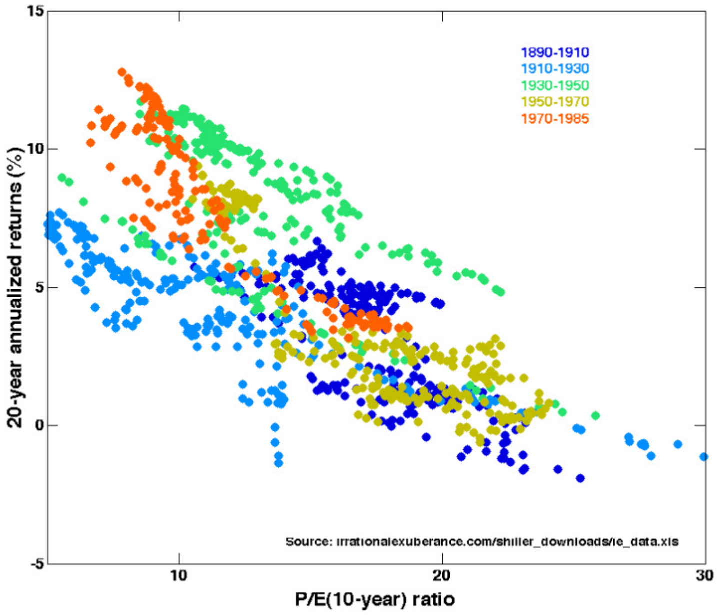
Q: 'What effect does indexing have on the market as a whole?'

A: 'Studies show that when a firm is added to an index, it affects it's market price. [Indexing is] partly responsible for low interest rate as people put money habitually into bond funds, even when [they're] overpriced. On the other hand, active indexing is a good thing...the way you have a procedure that disciplines what you invest in so that you are not playing as loose as you go along.'

Q: 'Do you have any thoughts on the rise of Smart Beta?'

A: 'Smart Beta is an ill-defined concept; it refers [to] investing based on studies within the context typically of [the work done by] Fama-French[4] and that is what we do. We are Smart Beta [investors].'

Many investment firms and academics use the Shiller P/E ratio to give us insight into future expected stock market returns. In Professor Shiller's NY Times bestselling book[5], he illustrates the correlation between current valuations and future expected returns and demonstrates the inverse relationship between current valuations and future expected returns. The lower the current P/E 10 ratio, the higher the expected future returns:



[4]The Fama and French Three-Factor Model (or the Fama French Model for short) is an asset pricing model developed in 1992 that expands on the capital asset pricing model (CAPM) by adding size risk and value risk factors to the market risk factor in CAPM. This model considers the fact that value and small-cap stocks outperform markets on a regular basis. By including these two additional factors, the model adjusts for this outperforming tendency, which is thought to make it a better tool for evaluating manager performance.
[5]Irrational Exuberance (2nd ed.). Princeton University Press figure 10.1

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At MASECO we don't try to predict future market returns over the short term, but current valuations are helpful in providing insight into long term future expected returns.

Asset Class	Shiller P/E	Expected Return (Nominal)
United States	28.5	2.7%
Switzerland	25.4	4.9%
India	21.2	6.0%
Japan	20.7	6.6%
France	20.2	7.0%
Canada	20.1	6.9%
Taiwan	18.9	8.1%
Australia	18.7	8.7%
Indonesia	17.8	8.4%
South Africa	17.2	8.4%
Mexico	16.8	8.9%
Italy	16.4	9.1%
Brazil	16	8.9%
Germany	15.7	8.2%
Hong Kong	15.7	7.5%
Europe	15.3	8.0%
Malaysia	14.8	10.3%
United Kingdom	14.4	9.2%
China	12.6	9.5%
Spain	12.5	10.6%
Emerging Markets	12.2	9.7%
South Korea	10.8	10.8%
Poland	10.4	10.8%
Turkey	7.4	15.1%
Russia	7.1	15.8%

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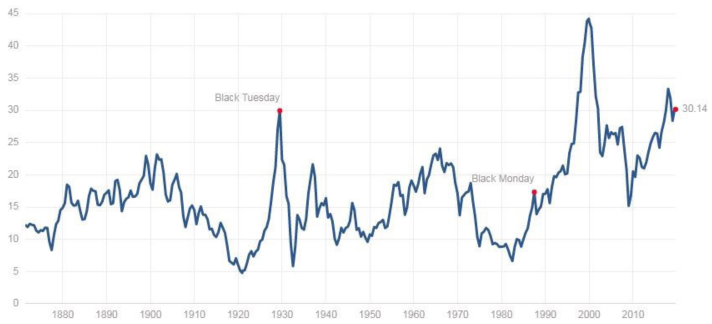
Putting this into historical perspective, you can see the US stock market has been more expensive only twice in history: before the 1929 crash and during the dot com bubble.[7]



That being said, the current P/E ratio of the S&P500 is circa 21.2, which is above average but has been higher many times throughout history and not at extreme levels:

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[6]Source: Research Affiliates, LLC ("Research Affiliates") © Research Affiliates [year]. All intellectual property rights in the Asset Allocation Interactive website and any data thereto are the property of Research Affiliates. Neither Research Affiliates nor any of its affiliates, licensors or contractors shall be liable for any error, omission, inaccuracy, or incompleteness in the Asset Allocation Interactive website or any data related thereto. No further distribution of Research Affiliates data is permitted without Research Affiliates' express consent.

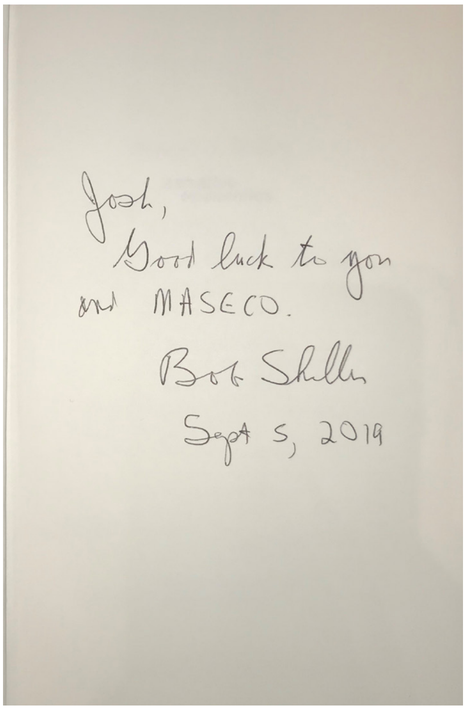
[7]https://www.multpl.com/shiller-pe

[8]Price to earnings ratio, based on trailing twelve month "as reported" earnings. Current PE is estimated from latest reported earnings and current market price. Source: Robert Shiller and his book Irrational Exuberance for historic S&P 500 PE Ratio.

So, what is an investor to do?

My parting question to Shiller was: 'What advice would you give the individual investor today?' Without hesitation he immediately said 'Diversify'.[9] I could not agree more! As we have always discussed with clients and investors, diversification is a key component of our investment philosophy and is 'the only free lunch in finance'.[10] This is rooted in academia and discovered by Nobel Laureate Harry Markowitz, whose efficient portfolio describes how diversification can lower a portfolio's risk for any given level of expected return. This is sometimes referred to as the Efficient Frontier[11] which is an integral part of MASECO's investment philosophy.

After our discussion, Professor Shiller was kind enough to give me a signed copy of his latest book where he wished us all 'good luck'. In exchange, I asked him to keep the



[9] 'Diversify...If the person is retired, they better be careful and diversify. For people looking for a little adventure...and people who are willing to put in the time and energy with normal or higher intelligence, they ought to be able to outperform the markets somewhat...by thinking about the businesses and knowing them. It's not something that appeals to everyone...and it sounds like a nice hobby (chuckle).'

[10] "The only free lunch in finance" is a phrase coined in the 1950s and used often today that refers to portfolio diversification.

[11] https://en.wikipedia.org/wiki/Modern_portfolio_theory