Purchasing Into Market Crashes

Note: This is educational material, not financial guidance for individual investors.
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Since no one knows the future, impossible to predict accurately the final bottom, or the trajectory

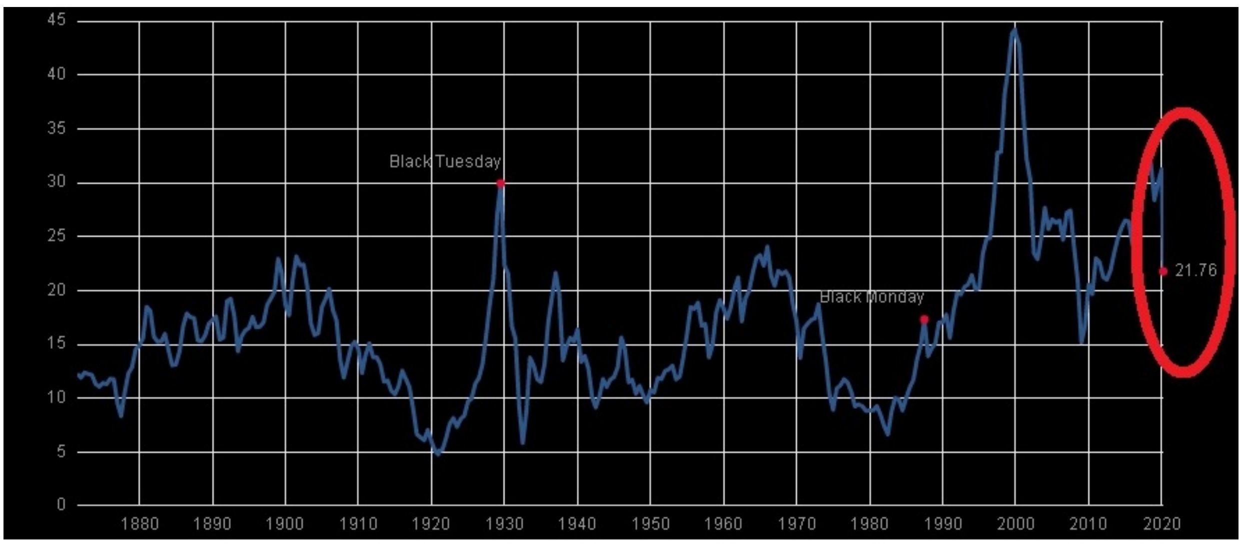
Wise investors use uncorrelated assets to diversify. "Uncorrelated" means they typically move in opposite directions; when stocks go down, often bonds go up.   When the dollar goes up in world market, the price of gold often goes down.   But in financially-based crashes, when participants who bought with borrowed money ("on margin") are forced to liquidate all assets in order to cover margin calls, many different assets can become uncomfortably coupled.   For example, in the 2008 crash, bonds and stocks both went down.

Because of all of the above, it is impossible to prove that one plan is better than another, but many persons recognize that falling markets provide a benefit -- purchases of assets at lower prices.

Case-Shiller CAPE (cyclically adjusted price to earnings ratio):

From Wikipedia:

> 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.



Shiller 10 year CAPE ratio.   It has been pretty high, but it is dropping now!!!

REF: https://www.multpl.com/shiller-pe

The ratio is used to gauge whether a stock is undervalued or overvalued by comparing its current market price to its inflation adjusted historical earnings record. REF:
https://en.wikipedia.org/wiki/Cyclically_adjusted_price-to-earnings_ratio

Note: The 10 year adjusted CAPE is falling rather nicely now!

In the last several years, the stock market has been "high" -- so "high" in fact that the CAPE P/E ratio has been quite high. As a result, the predicted further growth rate for investors, average over the next decade, has been LOW --- estimates of only about 2% per year. **That is a very low number and would damage many peoples' retirement financial calculations, which are often based on an assumed average 8-9% growth in stock values**.

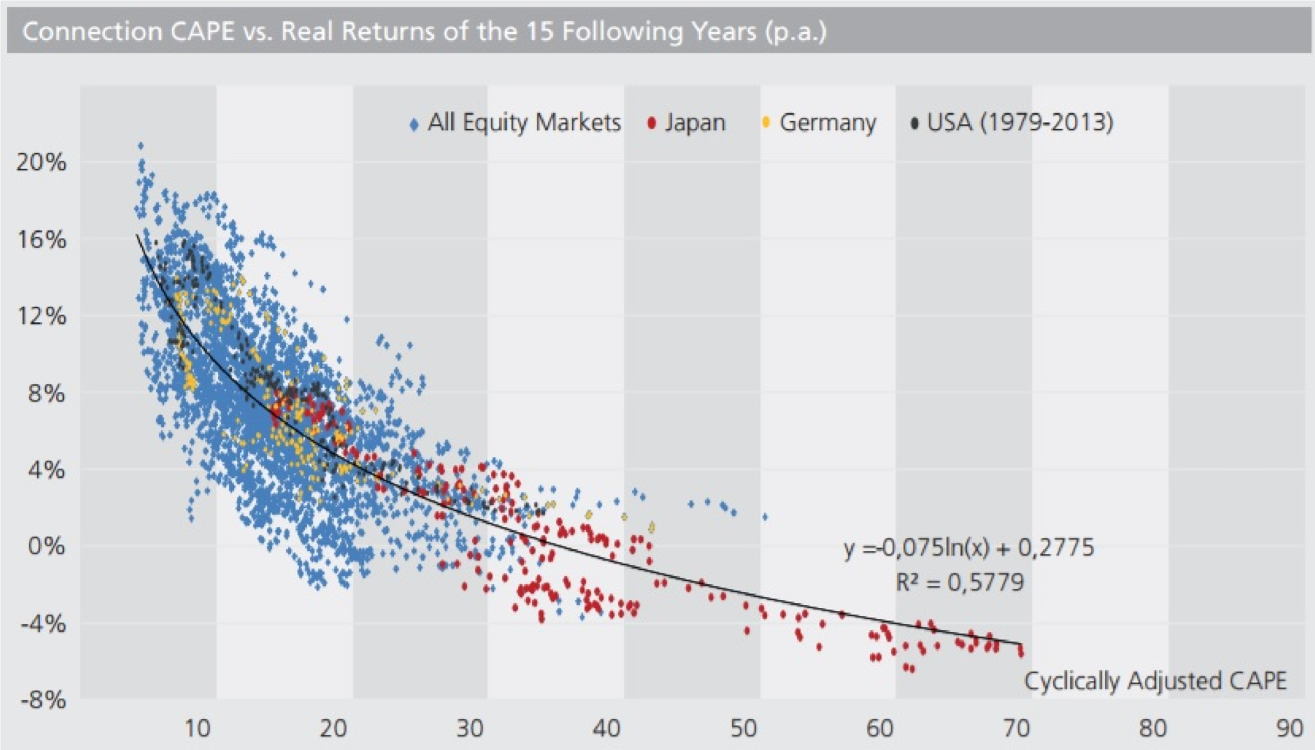


Figure 2: Connection between the CAPE and the returns of the 15 following years in the period 1881-2013 (US) and 1979-2013 (other markets). The USA, Japan and Germany are highlighted as examples in a single period 1979-2013. All returns inflation-adjusted, in local currency, incl. dividend income and annualized. Source: S&P 500: Robert J. Shiller, other countries: Worldscope, Thomson Reuters and own calculations.

Plot that shows when the CAPE is high....returns for the next years are typically low.

REF: https://www.lynalden.com/shiller-pe-cape-ratio/

However the current stock market plunge by 30% or so changes all of that around and provides the potential for significantly greater growth, averaged over the next decade.

The 2000's has been called the "wasted decade" in financial circles because many people had zero growth in their investments during that time. However, quite the opposite happened to people who recognize the 2001-2002 crash as a golden opportunity to move into the stock market at very low prices (the S&P500 went as low as 750).

The Downside

It is difficult to catch a falling knife. While the S&P500 is currently more then 25% below its previous peak, no one knows for certain whether it will rise, or fall, from here. As a result, investing a large amount right now might see further losses before there are gains. Or, failing to invest now might result in a missed opportunity if the market does not go down further.

Many people choose to invest a bit at each stage of a market downturn. The difficulty in planning such a strategy is that no one knows where the bottom will be. Market bottoms are typically marked by "capitulation" -- the point at which people are so discouraged that VERY FEW wish to purchase any assets at all -- and yet that is the precise point of maximum advantage.

Here is a mechanistic diagram of a possible strategy toward moving "into" the current stock market presuming one had $1000 invested in a 50-50 ratio between stocks and bonds as of the end of February:

S&P 500 Level	Fractional Decline From Peak	Desired Stock Fraction	Total Valu Before M	Amt to pur chase	Resulting Stocks	Resulting Cash	Dates
3350.00	0.00	0.50					peak Feb 1
3015.00	0.10	0.50	$1,000		$500	$500	by Feb 28
2680.00	0.20	0.52	$944	$47	$491	$453	by March 1
2345.00	0.30	0.57	$883	$74	$503	$380	
2010.00	0.40	0.63	$811	$80	$511	$300	
1675.00	0.50	0.68	$726	$68	$494	$232	
1340.00	0.60	0.75	$627	$76	$470	$157	
1005.00	0.70	0.80	$510	$55	$408	$102	