

A Bird's Eye View Sparrows Newsletter

February 2020

The Inherent Problems with Forecasting:

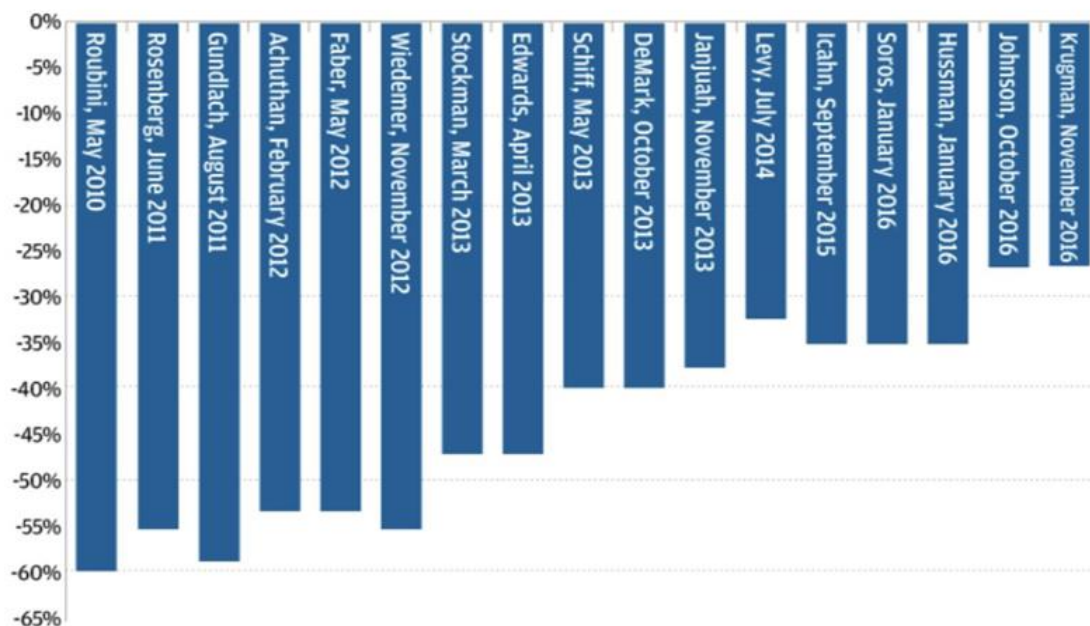
"The growth of the Internet will slow drastically, as the flaw in 'Metcalfe's law'—which states that the number of potential connections in a network is proportional to the square of the number of participants—becomes apparent: most people have nothing to say to each other! By 2005 or so, it will become clear that the Internet's impact on the economy has been no greater than the fax machine." (Paul Krugman 1998).

In what has become an annual ritual, investors will have by now been bombarded with forecasts of where markets will be in twelve months' time. In most cases, the predictions will be as accurate as Krugman's, but the consistent failure of market forecasts tends to be neatly overlooked once the relevant year is over.

No wonder. The chart below highlights the implied cumulative damage to a portfolio resulting from heeding the advice of high-profile forecasters (analysts, economists and strategists) going back to May 2010. For example, Nouriel Roubini, a famous economist, advised selling US equities in May 2010 and warned of an impending 20% fall in share prices; an investor who followed his advice would have dropped some 60% compared to having not reacted to this opinion.

The consequences of listening to the Armageddonists, 2010–2019

Performance impact of shifting \$1 from the S&P 500 to the Barclays Aggregate Bond Index, measured from the week of the Armageddonist comment in Table 1 to November 8, 2019



Source: JPMAM, Bloomberg, November 8, 2019. Using weekly S&P 500 and Barclays Aggregate data.

Here are some examples of forecasts for the close of 2020 against the background of a closing price of 3192.52 for the S&P 500 Index (the "S&P 500") as of December 17th 2019.

Year-end 2020 S&P 500 targets

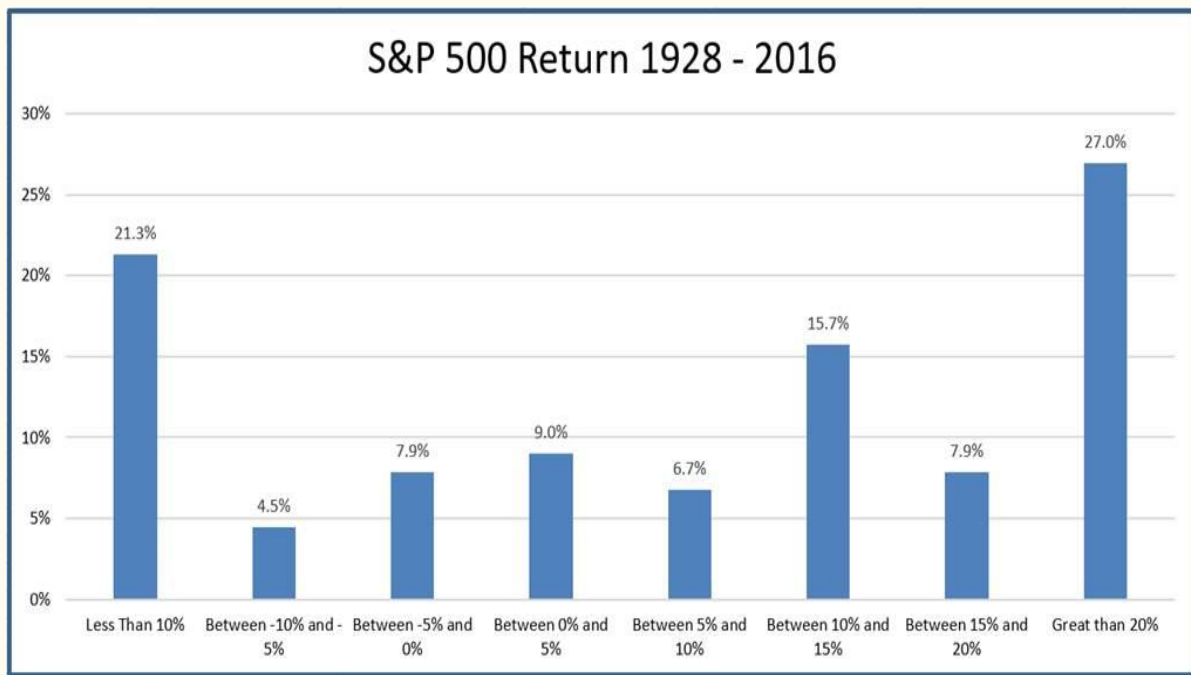
ANALYST	ORGANIZATION	TARGET	IMPLIED GAIN 12/17
Craig Johnson	Piper Jaffray	3,600	▲12.8%
Julian Emanuel	BTIG	3,450	▲ 8.1%
Tony Dwyer	Cannaccord Genuity	3,440	▲ 7.8%
Sam Stovall	CFRA	3,435	▲ 7.6%
Jonathan Golub	Credit Suisse	3,425	▲ 7.3%
David Kostin	Goldman Sachs	3,400	▲ 6.5%
Dubravko Lakos-Bujas	J.P. Morgan	3,400	▲ 6.5%
Brian Belski	BMO	3,400	▲ 6.5%
Lori Calvasina	RBC	3,350	▲ 5.0%
Tobias Levkovich	Citi	3,300	▲ 3.4%
Maneesh Deshpande	Barclays	3,300	▲ 3.4%
Savita Subramanian	Bank of America	3,300	▲ 3.4%
Barry Bannister	Stifel	3,265	▲ 2.3%
Scott Wren	Wells Fargo Institute	3,250	▲ 1.8%
Binky Chadha	Deutsche Bank	3,200	▲ 0.3%
Kristina Hooper	Invesco	3,150	▼-1.3%
Mike Wilson	Morgan Stanley	3,000	▼-6.0%
Francois Trahan	UBS Group	3,000	▼-6.0%

Source: MarketWatch survey

In the 20 years to December 2019 the S&P 500 has generated an average return of 5.54% per annum, with an annualised volatility (standard deviation) of 17.22% (partly as a result of two falls in prices of over 50% in the first 8 years of the new century).

A range of one standard deviation around the mean, which can be expected to occur around 68% of the time, encompasses a returns spectrum of -11.68% / +22.76%, which implies a closing level in 2020 of somewhere between 2819.6 and 3919.1; all of the above Strategists are well inside that range, suggesting that none of them are being very brave!

Simply adding the average return of 5.54% to the December 17th 2019 S&P 500 closing level of 3192 takes the market up to 3369, very close to the average of the 18 forecasts shown above (3315). It appears that much of the forecasting is not much more than an extrapolation of past returns, adding little value for investors as shown in the table below.



In the 90 years of data between 1928 and 2016, the average annualised return for the index was 9.8% but very few years (6) saw gains of between 5 and 10% by year end. 2017-19 saw a continuation of this behaviour, with returns of +21.83%, -4.38% and 31.49% respectively. The wide dispersion of returns over this period and the concentration of extreme values make extrapolation a very unreliable prediction tool.

In the first 15 trading days of 2020 and the S&P 500 rose to 3340 at one point and thus traded above half of all the year-end forecasts made less than one month prior. Of course, several of those forecasts will now be revised upwards: forecasting thus devolves into chasing market performance.

If forecasters want to make a name for themselves they must break away from the consensus. But predicting a two-standard deviation negative event – a 28% fall in the S&P 500 to 2269.9 - has a 2.28% chance (or one in 44 year) chance of happening. To make such a prediction requires extreme confidence in one's ability to predict both the occurrence and timing of such a move. In all likelihood, the prediction will be wrong.

So why do forecasters continue to make these predictions, when they are either so anodyne as to be of no practical use, or so unlikely to happen as to be almost certainly wrong? And why do investors pay attention to such an unreliable process?

The financial media knows that the more outrageous (and preferably negative) the forecast, the more likely it is to gain attention. The number of investment newsletters suggests that some investors even rely on them. Others perhaps take comfort from grazing with the herd, which creates a form of control illusion¹ and an associated feeling of safety.

There is little accountability or career risk in making outlandish predictions and little incentive for financial news media to dwell on the failings. The soothsayers are generally allowed to start each year with a clean slate.

Fortunately, Larry Swedroe of ETF.com regularly writes reviews on historical forecasts² and the research behind their success or failure. The key finding from one of the studies cited is that, in aggregate, the accuracy of forecasts is around 48%, the same as one would expect from tossing a coin.

JK Galbraith once noted that *“There are two kinds of forecasters: those who don’t know, and those who don’t know they don’t know.”* The problem for investors is that it is hard to tell the two types of forecasters apart. It is impossible to determine in advance the accuracy of these guesses.

When the gurus express their market predictions, the wisest course of action may well be to take the advice of a musical guru instead and *“Walk On By” (Dione Warwick)*.

Alistair Meadows



For more information on our philosophy, process or if you just want to challenge these observations, please get in touch.

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¹ <https://www.betterhelp.com/advice/behavior/what-is-the-illusion-of-control-and-what-are-some-examples>

² <https://www.etf.com/sections/index-investor-corner/swedroe-measuring-value-forecasts?nopaging=1>

See also “Evaluation and Ranking of Market Forecasters” by D. Bailey, J. Borwein et al. May 2017. (SSRN ID 2944853), which found similar results.

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