



▶ THE FOLLY OF FORECASTING 1-3



▶ OIL AND STOCKS 4-5

Cadence *clips*

FOCUSED ON WHAT MATTERS MOST.

The Folly of Forecasting

Forecasting is difficult, as the saying goes, especially about the future. Last year, none of the 67 economists surveyed by Bloomberg (the organization, not the former mayor) predicted that the yield on the 10-year Treasury note would be lower at the end of the year than the 2.7% it was at in early April, and many were concerned it would rise to 4% or above. With the Federal Reserve’s quantitative easing being expected to end in October, one of the largest buyers of Treasuries would be out of the market and prices were expected to decline, causing yields to rise. But much to forecasters’ embarrassment, the yield declined instead, finishing the year around 2.17%.

Similarly, of the 28 forecasters surveyed by Bloomberg as late as December of last year, 25 of them predicted a price of \$90 per barrel or higher on West Texas Intermediate crude by the end of the year, and none of them predicted a price below \$80 per barrel. Instead, a barrel of West Texas Intermediate finished 2014 around \$53 per barrel.

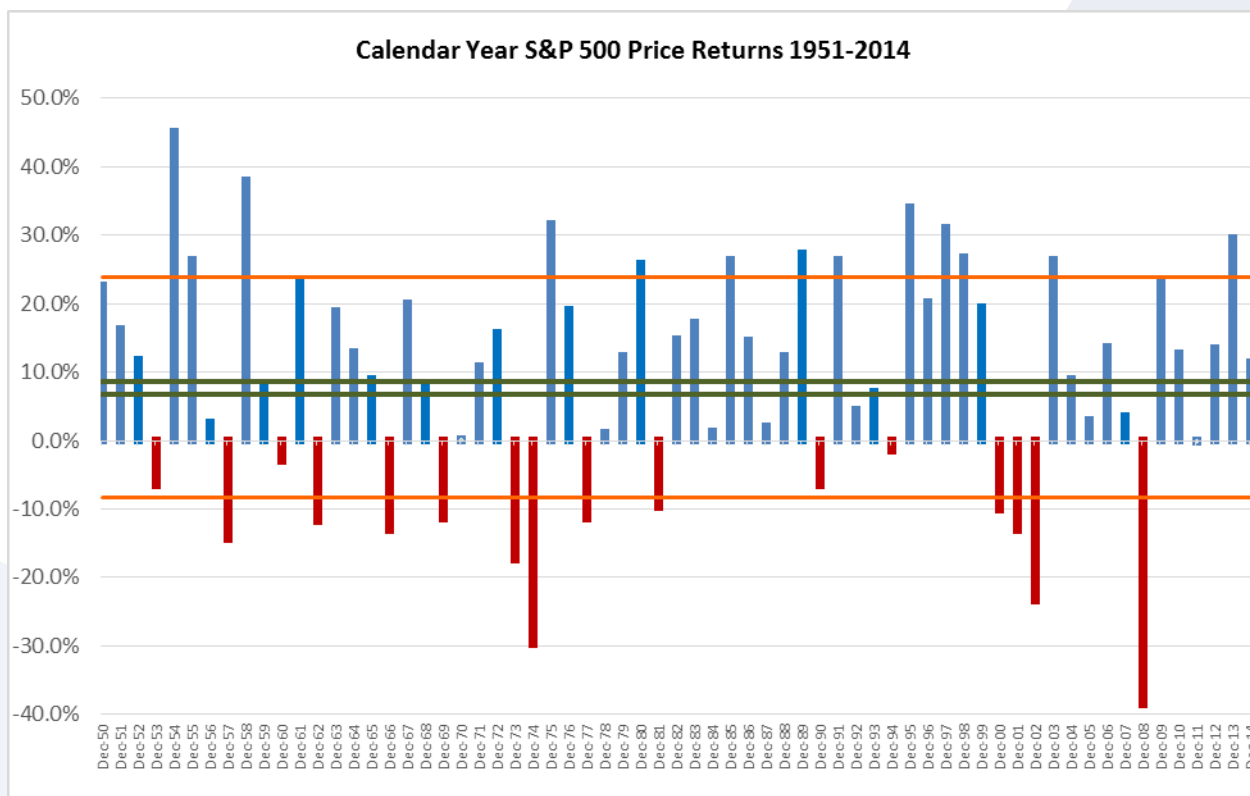
What might explain how experts can get predictions so egregiously wrong? Is it that interest rates and oil prices

are volatile and difficult to predict? That is true, actually, and considering the wealth of information available and the millions to billions spent on monitoring the stock market, it should be easier to predict where the S&P 500 will end each year, shouldn’t it?

Business Insider interviews 14 or so industry professionals about how they think the S&P 500 will perform every calendar year, among other financial benchmarks, and below are the results of the past three most recent calendar years. The predictions were averaged and compared to what the index actually did gain for the year and the amount the average prediction was off each year was then calculated:

Calendar Year	Average Predicted Increase	Actual Price Return	% Price above Prediction
2014	4.8%	11.4%	137.5%
2013	7.6%	29.6%	291.6%
2012	8.4%	13.4%	59.9%

On average, their predictions were 60% lower in 2012 than where the S&P 500 did end the year on a price basis, and that was the GOOD year for them, as they were exceedingly worse in predicting 2013 and 2014. In general, professional prognosticators who speak on behalf of their organizations, like large Wall Street firms, cannot stray too far from their peers' predictions lest they be the ones the furthest off at the end of the year. How would their firms look were they to employ and rely upon such misguided and incompetent economists? Therefore, what you tend to see is the average of their predictions within one percent above or below the S&P 500's average price return since 1950 of 7.7%. That 6.7% to 8.7% before dividends is what people in general assume the S&P 500 will return most years, knowing there are years above or below on occasion. However, the chart below shows just how drastically different price returns on the S&P 500 have actually been since the beginning of the 50's:



Each blue and red bar represents a calendar year return. Any return that falls within the green parallel lines is one that meets most people's expectations of what the stock market should return in a "normal" year; 6.7%-8.7% before dividends, which is roughly 8%-10% with dividends. You'll notice just how large the range of returns, both positive and negative, really is. For an investment that returns 7.7% on average before dividends, the actual annual range of returns, from 45% to -39%, varies so much more than most people realize. In the 65 years from the beginning of 1950 through the end of 2014, only 3 years, or 4.6% of the time, was the actual increase of the S&P 500 index between 6.7% and 8.7%. What we must understand is that this 7.7% return before dividends comes with a very high amount of volatility, such that there really is no "normal" year. In this case, if we did want to define "normal", it might be more like 24% to -8%, as the S&P 500's price return falls within this range around 67% of the time. If anything, a return between 6.7% and 8.7% is the aberration and not the norm, especially considering the S&P 500's calendar year price return is more likely to be above 24% or below -8%, around 33% of the time, than it is to be between 6.7% and 8.7%. It's more normal, therefore, for the S&P 500 to be wildly

It's more normal for the S&P 500 to be wildly above or wildly below its long-term average than it is to be anywhere close to it.

above or wildly below its long-term average than it is to be anywhere close to it. This is why predicting the returns on the stock market is really just guesswork. Certainly educated guesswork for some, yet guesswork nonetheless.

Like barrels of oil and 10-year Treasury interest rates, perhaps any single investment category is just too volatile to predict it will return close to its long-term average. We know that one of the benefits of diversification, especially when including traditionally conservative investments like bonds, is to lower volatility. Therefore, calendar year returns should be more likely to have a “normal” return closer to an average for some period of time. Well, consider how often these diversified portfolios’ calendar year returns were within a plus or minus 1% range around their averages over the past 15 years:

Portfolio		Average Annual Ret.	Years within +/-1%
Stock %	Bond %		
100%	0%	3.6%	0
80%	20%	5.4%	1
60%	40%	5.3%	0
50%	50%	5.5%	1
40%	60%	5.4%	3
20%	80%	5.4%	2

Over the past 15 years, even though all the diversified portfolios returned more and are actually less volatile than the S&P 500, represented here by the “100% Stock” portfolio, they still rarely experienced a calendar year return within a couple percent of their 15 year averages. Were you to be asked each year to predict what those portfolios would return while knowing the 15 year averages of each ahead of time and you predicted anywhere close to those average returns, you would have been wrong the vast majority of those years.

Clearly, prognostication for any given calendar year is difficult, and we would even say foolish. So what lesson should investors learn from these forecasting inaccuracies? That fortune-telling provides a poor basis for investment decisions. Instead, investors should understand how much they cannot afford to lose, and that even well-diversified portfolio returns are going to fluctuate dramatically over shorter periods. By creating and maintaining an appropriate and intelligent investment strategy, and by tolerating the seemingly large positive and negative fluctuations over time, investors have a far better chance of achieving their goals than by believing anyone is capable of predicting where returns are going to fall for any short term period. If there is one thing the crystal balls should be telling us every year, it would be to not expect the average.

Key Takeaways:

- Predicting short-term returns on financial markets is pure guesswork.
- Short-term investment returns are far more likely to be far above or far below their long-term averages than they are to be close to their long-term averages.
- Though diversified portfolios have reduced volatility compared to most asset classes, even they will usually experience short-term returns that are far above or far below their long-term averages.
- Forecasting provides a poor basis for investment decisions.

Oil and Stocks

Coming into this month, we on the investment team felt it would be important and timely to discuss the recent and undoubtedly drastic decline in oil prices. What could it mean for markets over the coming weeks and months? Could it be the first snowflake from an approaching storm or is it in fact a great thing for the economy and markets as a whole? Unfortunately, using history as a guide, the answer isn't so clear cut. This might get confusing for a bit, but stick with it, there's a method to the madness.

The Historical Record

Looking back to 1950, there were three times when the price of West Texas Crude Oil dropped more than 30% over a six month period. Those times were October 2008, March 1991 and February 1986. Let's dig into each one of them separately.

2008

Oil peaked in the summer of 2008 and declined by 30% by October of the same year. We went on to finish the year in both a recession and bear market in stocks. In this case, the slide in oil took place before the worst of the recession and bear market in stocks set in. From October 1, 2008 (where oil broke below the 30% decline level), the S&P 500 fell another 42% where it bottomed on March 6 2009.

1991

In March of 1991, oil had declined by more than 30% over the prior six months. This decline corresponded very closely to the economic recession that took place between the fourth quarter of 1990 and the first quarter of 1991. The stock market traded sideways from March through mid-December of 1991. It's important to note however, that this decline was on the back of a very sharp price spike in August through October of 1990 due to the Iraqi invasion of Kuwait. After the coalition forces declared victory, oil simply came back down to where it was before the conflict began. So the story here may be more about the price spike than the subsequent decline. It's also important to recognize that the 20% decline in the stock market between July and October of 1990 almost perfectly correlated with the spike in oil.

1986

The third greater than 30% decline in oil came in February 1986. This decline came from a more stable price level than did the 1991 decline, but happened much more rapidly. The bulk of the decline came in a matter of days. There was no corresponding recession or bear market in stocks. In fact, the S&P 500 recorded an 18% gain over the following five months.

So What Are We to Make of These Sudden Drops in Oil Prices?

Although history can often teach us valuable lessons that can be applied to the future, in this case, there's probably more to the story than meets the eye. In 1986, consumers still possessed a memory of being financially handicapped by higher interest rates, inflation, and oil prices, such that the sudden decline may have been a welcome and exciting prospect for the future. 1991 seems more a story about how conflicts in oil-producing countries can impact oil prices, the stock market, and even the economy. What was going on in 2008 seems a little less straightforward. West Texas Crude rose from below \$20 a barrel in 2001 to almost \$150 per barrel in July 2008. This rise certainly didn't seem to affect stocks negatively until its final months where the acceleration in the price of oil took place in a declining stock market environment. Although it's possible that stocks sank at least in part due to oil's record setting rise in 2008, it's very hard to prove. In 2008, there were plenty of other things going on between real estate melting down, banks failing, and other recessionary maladies taking

their toll on the economy. Given these three historical periods, there certainly doesn't seem to be any perceptible theme. There are simply too many other factors at work to glean anything useful from these particular events.

So is Falling Oil Good or Bad?

We feel it actually could be both. In general, lower oil prices are good for consumers. Less paid at the pump for gas is a good thing. Cheaper input costs for manufacturers are also good as it can result in lower prices for goods and services. The flip side however is that in such a highly leveraged and interconnected world, rapid price movements in any direction have the potential to wreak havoc. We're living in an age where debt levels are sky high, the number of mutual funds, ETF's, and hedge funds in the marketplace is dizzying, and everyone and their neighbor is reaching for yield or "safe return" as a result of rates being so low for so long. We are in uncharted territory in this respect and this environment creates huge amounts of systemic risk. This is evident in the U.S. oil and gas sector where cheap money has led to veritable binge borrowing in order to fully capitalize on the rapidly growing shale and fracking industries. The problem is that these companies' abilities to repay their loans is dependent on revenue which is directly impacted by the price of oil.

Rapid price movements in major asset classes have a tendency to expose those who've been leaning too far in one direction. There's a Warren Buffet quote that sums it up nicely; "You only find out who's swimming naked when the tide goes out". Any big players whose success depends on high or stable oil prices may very well get exposed by this price decline – and we don't know if their problems will be isolated or spread to other sectors. The move has likely been big enough; we just don't know who's been swimming naked. We'll have to see how things play out.

Key Takeaways:

- Stock market history shows spotty, inconsistent performance when oil prices fall significantly. In the past, one may not have directly affected the other. There were more variables at work.
- Cheap oil is great for the average person, but when it falls too far too fast, there could be negative consequences to the financial system and broader economy. There are many more players today than there were in the past "betting" on the direction of oil prices who may have been caught on the wrong side of this price move. Time will tell to what extent this was the case and what impact, if any, it may have on the economy and markets.

Important Disclosures

This newsletter is provided for informational purposes and is not to be considered investment advice. Cadence Wealth Management, LLC, a registered investment advisor, may only provide advice after entering into an advisory agreement and obtaining all relevant information from a client. The investment strategies mentioned here may not be suitable for everyone. Each investor needs to review an investment strategy for his or her own particular situation before making any investment decision.

All expressions of opinion are subject to change without notice in reaction to shifting market conditions. Data contained herein from third party providers is obtained from what are considered reliable sources. However, its accuracy, completeness or reliability cannot be guaranteed.

Examples provided are for illustrative purposes only and not intended to be reflective of results you can expect to achieve.

