

"Fortune's Formula"

I reflected on mathematics, probabilities, and odds over the weekend after again reading the book "Fortune's Formula: The Untold Story of the Scientific Betting System That Beat the Casinos and Wall Street," by William Poundstone. The book centers on Claude Shannon, who in the late 1940s had the idea computers should compute using the now familiar binary digits 0s and 1s such that 1 means "on" and 0 means "off." Shannon's information theory is what lies behind computers, the Internet, and all digital media. As the book notes – when asked to characterize Shannon's achievement, USC's Solomon Golomb said, "It's like saying how much influence the inventor of the alphabet has had on literature." In 1956 Claude Shannon and John L. Kelly turned their skills to how to mathematically "win" at the casinos and eventually on how to "win" in the stock market. Those mathematical insights were subsequently employed by the phenomenally successful hedge fund Princeton-Newport Partners. While there were many formulas for their success (edge/odds; $G_{max} = R$; etc.), the manner in which Shannon rebalanced portfolios was elegantly simple. To reprise some lines from the book:

Consider a stock whose price jitters up and down randomly, with no overall upward or downward trend. Put half of your capital into the stock and half into a 'cash' account. Each day, the price of the stock changes. At noon each day, you "rebalance" the portfolio. . . . To make this clear: Imagine you start with \$1000, \$500 in stock and \$500 in cash. Suppose the stock halves in price the first day. This gives you a \$750 portfolio with \$250 in stock and \$500 in cash. That is now lopsided in favor of cash. You rebalance by withdrawing \$125 from the cash account to buy stock. This leaves you with a newly balanced mix of \$375 in stock and \$375 in cash. The next day, let's say the stock doubles in price. The \$375 in stock jumps to \$750. With the \$375 in the cash account, you have \$1,125. Look at what Shannon's scheme has achieved so far. After a dramatic plunge, the stock's price is back to where it began. A buy-and-hold investor would have no profit at all. Shannon's investor has made \$125.

I have often written about portfolio rebalancing as one of the keys to successful investing. And, while Shannon's simplistic example is too short-term oriented for me, I am intrigued with it. For example, say you put \$100,000 into a cash account and similar \$100,000 into Raymond James' "Analysts' Best Picks" (ABPs) and then rebalanced the portfolio every other month, or at the end each quarter, using Shannon's methodology. The results might just be eye-popping. As a sidebar, Shannon's rebalancing methodology could likewise be employed with this scale-in buying approach. I think these types of strategies can improve the odds of success for most investors. And, for much of this year I have suggested another investment strategy for those investors that are . . . well, not invested. The strategy was first proffered by my friends at the Riverfront organization, but has been repeatedly scribed in these missives. To wit:

First, identify the quantity of cash to be put to work – example: 20%. Second, break the trade into digestible chunks – example: break it into four parts, 5% each. Third, implement the first trade today – example: invest 5% into equities today. Fourth, set a date for implementing the second trade – example: two months from today invest the second 5%. Fifth, implement third and fourth segments if market pullbacks occur – example: invest the remaining 10% of the cash on market pullbacks. And six, after the date of the second trade occurs, return to step one with the remaining cash – example: two months from today, if the market never provides the opportunity to buy on a pullback, break the remaining 10% up into 3-4 parts and follow a strategy similar to the one utilized for investing the first 10%.

Hereto, I think this approach can improve the odds of success for most investors. Speaking of odds, what are the current "odds" for the stock market? Last week I gave 10 presentations to groups of 100 to 400 individual investors and found it surprising that most believed this current rally is artificially induced and will lead to a market "crash." While it is true the Federal Reserve has flooded the system with money, which is clearly part of the equation for higher stocks, it should not be overlooked that earnings for the S&P 500 (SPX/1588.85) have doubled over the past four years. Also not to be overlooked is that the Fed is likely to continue its quantitative easing for the foreseeable future and therefore stocks can continue to elevate. And, that's just what the SPX did again last week, sporting a 2.29% gain as it traded to a new all-time intraday high of 1593.37 before falling back on Friday to close at 1588.85. The early morning Friday Fade was triggered by weak revenue-growth numbers from some of the large cap banks, worse than expected retail sales, and surprisingly poor consumer

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sentiment data. Also surprising was Thursday's release of the sentiment survey by the *American Association of Individual Investors*, which showed a 45% drop (35.5% down to 19.3%), despite the fact the SPX was making new all-time highs (see chart on page 3).

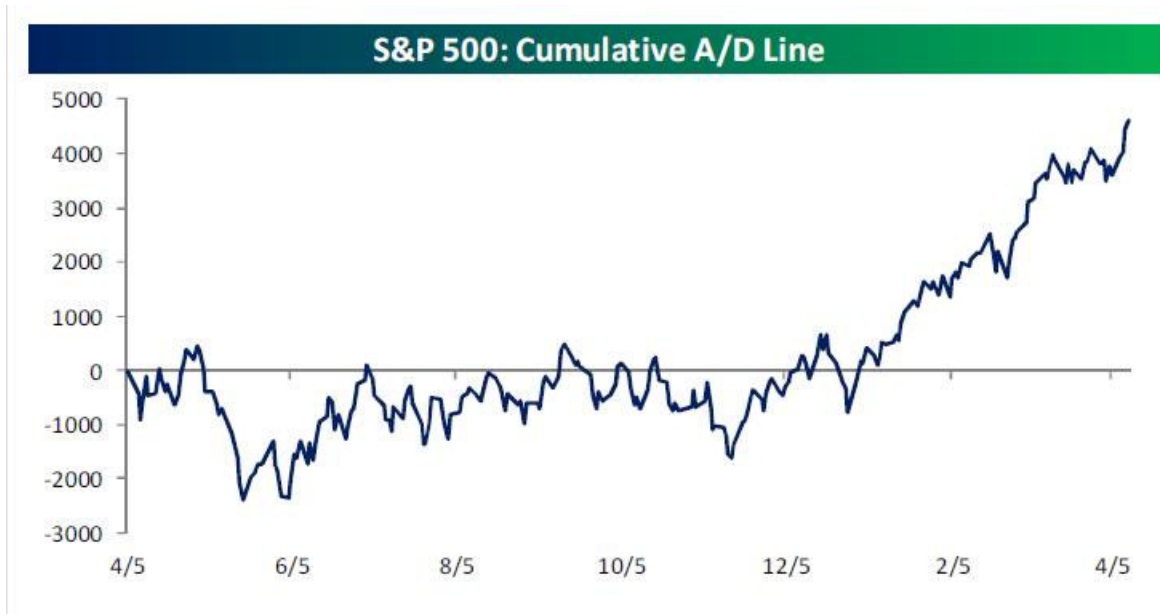
When the equity markets are in a "bull move" one thing investors watch is the Advance/Decline numbers to see if the rally has good participation, or if it is being driven by merely a few key stocks like it was in late 1999 and early 2000. As can be seen in the chart on page 3, after being range-bound for much of 2012 the S&P 500 Cumulative A/D Line has broken out on the upside and is at a new rally high. Also confirming that the markets have more room on the upside is the Selling Pressure Index that resides at new multi-month lows. However, the Buying Power Index is lagging, suggesting last week's rally was more about a lack of sellers rather than earnest buying. Speaking to sectors, Healthcare (+3.29%), Consumer Services (+3.14%), Consumer Goods (+2.72%), and Telecommunications (+2.29%) were the best performers and 8 of the 10 macro sectors are trading in overbought territory. Along that same line, the SPX is still pretty stretched on a short-term basis, trading roughly 10% above its 200-day moving average. Meanwhile, the market's daily internal energy level was somewhat depleted by last week's rally, and the weekly internal energy indicator is only halfway charged up. Putting it all together suggests that while the equity markets may pause/pullback, there is nothing in the "tea leaves" suggesting a repeat of the double-digit declines that began in the spring of the last three years.

While the equity markets have treated us pretty well this year, the commodity markets have not, punctuated by Friday's massive breakdown in gold. Many attribute Gold's Gotcha to the Goldman Sachs' "sell gold short" missive, but I think Shahab Jalinoos has a better guess:

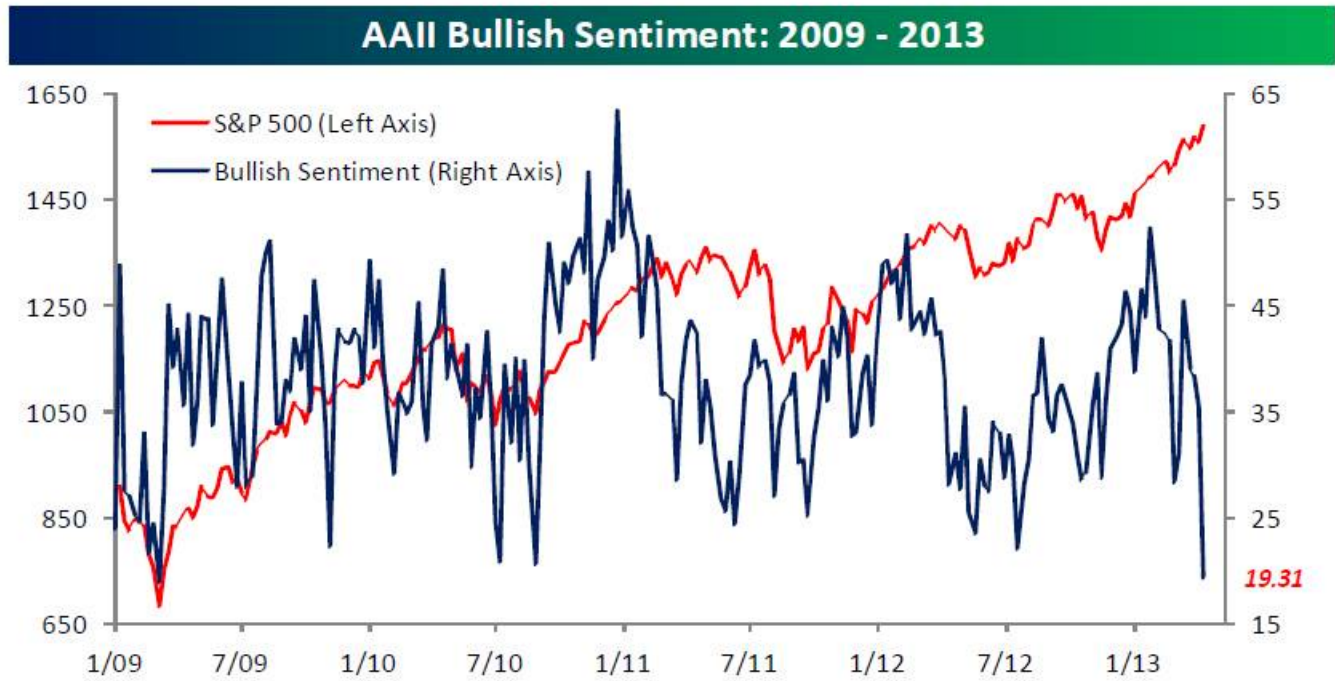
Draghi made clear today that he wrote a letter to Cyprus president Anastasiades making 'very, very clear' that EU treaties establish that the decision on how to use the proceeds of any Cyprus CB (Central Bank) gold sales must be made by the CB itself, not the government. He added 'What's important, however, is that what is being transferred to the government budget out of the profits made out of the sales of gold should cover first and foremost any potential loss that the central bank might have from its ELA.' Net result: people are viewing this as establishing a precedent that ELA losses can/should be covered by gold sales, which is important given that other risky countries like Portugal have large gold reserves. The ELA is the Emergency Lending Assistance: it's when national central banks in Europe lend money to banks against collateral too weak for the ECB itself to accept, but with permission from the ECB the credit risk taken by the national CB and by extension the national government.

A number of weeks ago I thought gold was into a bottoming formation and recommended purchase. Obviously that was a mistake. While the bullish fundamentals remain in place for gold, the price action is terrible and I would cut those losing gold positions in half. Why only half? Because the last time the Gold Miners Bullish Percent Index hit zero was in late 2008, right before the gold miners embarked on a decent rally.

The call for this week: The "buying stampede" is at a legendary 70 sessions and quite frankly I have never seen anything like this in 42 years in this business and more than 50 years of watching the markets. As they say, "Markets can do anything," and this one certainly is! Indeed, it has now been more than 100 sessions without so much as a pullback of 5% or more, the third longest stint since 2002. This morning, however, China's growth risks are in focus as Q1 economic data falls short, leaving the preopening SPX futures down about 8 points. So maybe we will finally see a pullback, but it should not be all that much.



Source: Bespoke Investment Group.



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Underperform (Sell)	6%	1%	6%	20%	0%	0%	0%	0%

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