MARKET INSIGHTS

The Sentimental Investor

Staying disciplined in a skeptical market

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OVERVIEW

- Despite a U.S. business cycle that is in its sixth year of expansion, many are still skeptical about investing in the stock market. While such skepticism is a sign of a healthy market, it also means that investors are likely underweight equities—and could miss out on stocks' potential returns over the long run.
- Investing when the market dividend yield and term spread—financial proxies for sentiment—are high historically has resulted in strong returns over long horizons. The current levels of these measures suggest that the expected excess return for stocks is still attractive.
- Meanwhile, surveys of sentiment show that while consumers and investors feel better about the economy and markets, sentiment levels are still well below prior peaks.
- Investors have to overcome their behavioral biases—including herd behavior, the availability heuristic, and loss aversion—in order to invest when others are skeptical. This requires discipline and has historically been rewarded.

Introduction

With the U.S. business cycle maturing, geopolitical risk rising and stocks close to record highs, many investors are skeptical about the market. This skepticism, reflected in financial measures and sentiment surveys, is a sign of a healthy market that is far from the irrational exuberance that often characterizes market peaks. At the same time, this means that many investors are failing to achieve proper equity allocations in their portfolios.

For most investors, stocks are not an all-or-nothing proposition but instead are important across all phases of financial planning. What changes over time is the expected return from the stock market, which depends crucially on investor sentiment and risk tolerance.[1] By definition, market valuations around average levels imply that subsequent returns will be lower than they were earlier in the cycle. However, we estimate that expected long-run returns continue to be attractive.

As a result, investors who are underweight equities should continue to strive toward a proper portfolio allocation based on their goals. What prevents many investors from doing this are behavioral biases that lead to a fear of current market levels, above-average valuations and the sense that they missed their opportunity to invest. The evidence we will consider suggests that stocks at current levels can continue to perform well over the long run, benefiting investors who have the discipline to overcome these biases.

[1]All returns in this paper refer to excess returns above short-term T-Bills, which are currently close to zero.

Great expectations

Economic and market conditions vary across the business cycle, influencing investor sentiment and risk tolerance. When these measures are both low, such as during a recession, investors are less willing to accept risk, resulting in cheaper valuation ratios. Investors are similarly unwilling to lock up their capital for long periods of time, leading to an elevated term spread in the bond market.[2] As a result, these measures reflect how investors feel about the economy and the stock market. The U.S. market has clearly exhibited these effects over the past five years of the recovery.

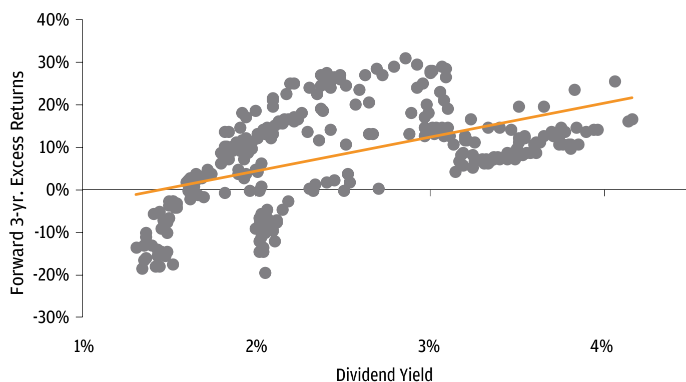
It is well established that buying stocks when valuation ratios are attractive and when the term spread is high results in superior returns over long time horizons.[3] As proxies for fear, investing when others are skeptical based on these two factors has historically been rewarded. Although there are innumerable forces that affect the stock market, this simple strategy can explain a large proportion of historical returns over three- to five-year horizons.

One of the valuation ratios that best forecasts expected returns is the dividend yield of the market (related metrics such as earnings yield produce similar results). Since the market dividend yield is simply the index dividend level divided by the index price, its value is high when prices are low. It is also easily comparable across time since dividends tend to grow in a stable fashion. With S&P 500 corporate profitability strong and dividend payout ratios still low, current dividend levels appear to be sustainable.[4]

Exhibit 1 shows that there is a positive relationship between the market dividend yield and subsequent long-run returns. Dividend yields and subsequent returns tend to be elevated during recessions and early recoveries when there is significant investor risk aversion. As the market recovers and prices rise, dividend yields normalize and forward returns fall as well.

EXHIBIT 1: THE MARKET DIVIDEND YIELD AND SUBSEQUENT RETURNS ARE CORRELATED

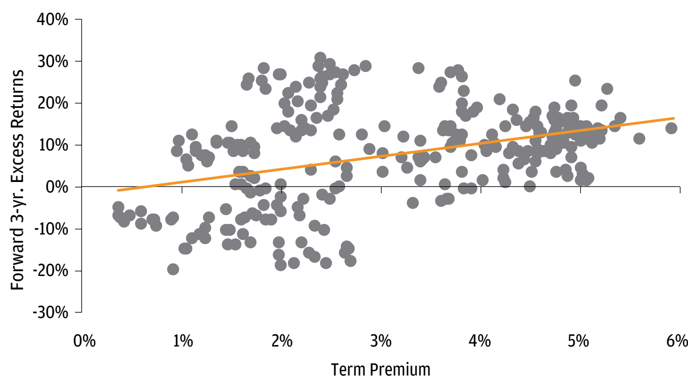
S&P 500 Dividend Yield and forward 3-yr. excess returns



Source: Standard & Poor's, J.P. Morgan Asset Management. For illustrative purposes only. Data are as of 8/31/2014.

EXHIBIT 2: THE TERM SPREAD AND SUBSEQUENT RETURNS ARE CORRELATED

Term spread and forward 3-yr. excess returns



Source: Federal Reserve, Standard & Poor's, J.P. Morgan Asset Management. For illustrative purposes only. Data are as of 8/31/2014.

The same relationship for the term spread is shown in Exhibit 2, which displays a similar pattern: The term spread is highest during recessions and falls as the cycle progresses. Eventually, as the business cycle reaches its end, the yield curve typically flattens, which results in a low term spread.

What do the current market dividend yield and term spread tell us about return expectations over the next several years? As shown in Exhibit 3, a model based on these two factors suggests that the long-run expected return for stocks is still approximately 9.3% on an annualized basis. This is because the dividend yield is only slightly below average (Exhibit 4) while the term premium remains elevated (Exhibit 5). An annualized expected return of 9.3% is slightly above the average over the past 25 years, suggesting that stocks are still attractive, especially for those who are still underweight within their portfolios.

The price of **equity securities** may rise or fall because of changes in the broad market or changes in a company's financial condition—sometimes rapidly or unpredictably. These price movements may result from factors affecting individual companies, sectors or industries, such as changes in economic or political conditions. Equity securities are subject to "stock market risk" meaning that stock prices may decline over short or extended periods of time. **Diversification** does not guarantee investment returns and does not eliminate the risk of loss. **Past performance** is no guarantee of future results.

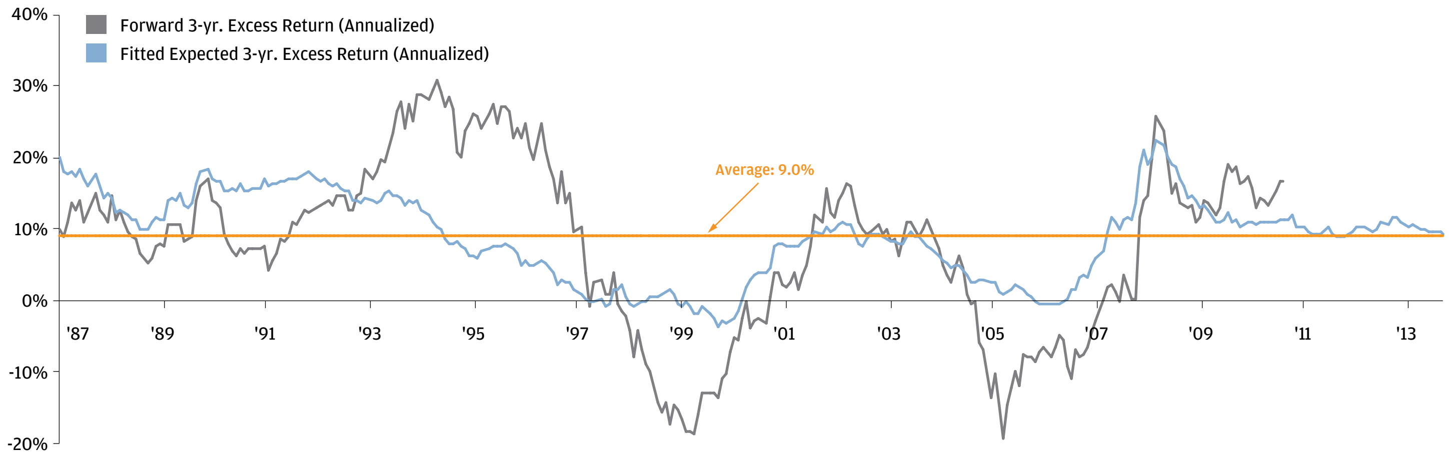
[2]The term spread refers to the steepness of the yield curve. This is a function of the expected future path of interest rates and the term premium. It turns out this bond market measure is correlated to forward stock market returns.

[3]Eugene F. Fama and Kenneth R. French, "Business conditions and expected returns on stocks and bonds," *Journal of Financial Economics*. Vol. 25, Issue 1 (1989): 23-49. Consistent with their methodology, we measure the term spread using the difference between AAA bond yields and T-Bills

[4]For more information, please reference the following *Guide to the Markets* slides: "Corporate Profits and Leverage" and "Deploying Corporate Cash."

EXHIBIT 3: LONG-RUN EXPECTED RETURN FOR THE STOCK MARKET IS STILL ATTRACTIVE

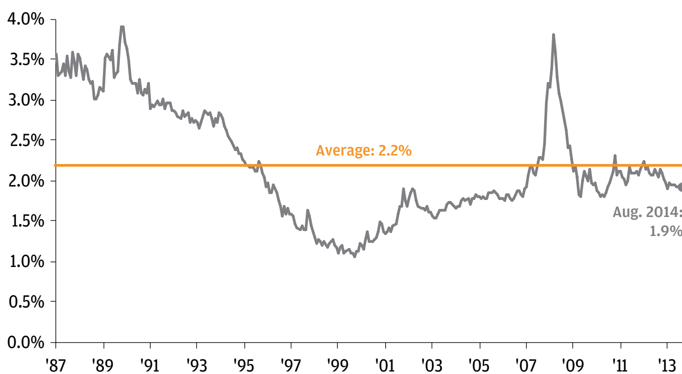
Expected 3-yr. excess returns on the S&P 500 based on Dividend Yield and Term Spread



Source: Federal Reserve, Standard & Poor's, J.P. Morgan Asset Management. For illustrative purposes only. Data are as of 8/31/2014.

EXHIBIT 4: THE MARKET DIVIDEND YIELD IS SLIGHTLY BELOW AVERAGE

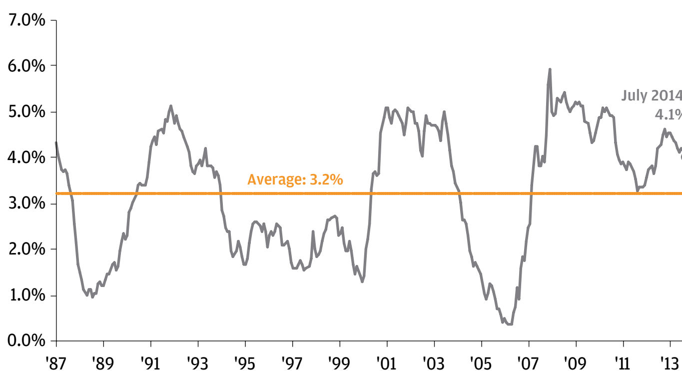
S&P 500 dividend level divided by S&P 500 price since 1987



Source: Standard & Poor's, J.P. Morgan Asset Management. For illustrative purposes only. Data are as of 8/31/2014.

EXHIBIT 5: THE TERM SPREAD REMAINS ELEVATED

YTM of long-term bonds minus YTM of short-term bonds



Source: Federal Reserve, Standard & Poor's, J.P. Morgan Asset Management. For illustrative purposes only. Data are as of 8/31/2014.

Of course, it is likely that the Federal Reserve's easy monetary policy has distorted many market measures, including these two factors—the question is by how much. At first glance, the Fed may be contributing to a higher term spread by depressing interest rates. This could also elevate dividend yields by incentivizing corporations to return cash to shareholders. However, closer examination suggests a more ambiguous effect. While short rates are directly affected by Fed policy, recent actions have also depressed long rates, thus moderating the term spread. Additionally, the more attractive dividend levels are, the more downward pressure there would be on dividend yields from heightened investor demand.

It is also important to understand that these factors provide guideposts and not turn-by-turn directions. The true future return over the full period and in any given year will no doubt differ from this expectation since there are countless other factors that could affect stock performance. What these two factors do tell us is that financial measures of sentiment are not at extremes, and thus stocks should still play a significant role in the average investor's portfolio.

EXHIBIT 6: SURVEYS OF SENTIMENT SHOW THAT THIS BULL MARKET IS NOT DRIVEN BY OVERCONFIDENCE IN THE ECONOMY OR MARKET

	University of Michigan Consumer Sentiment			Conference Board Consumer Confidence			AAII Investor Sentiment Survey		
	Index	% Difference from prior peak	Standard Deviations from prior peak	Index	% Difference from prior peak	Standard Deviations from prior peak	Bullish Index	Difference from prior peak	Standard Deviations from prior peak
Current	85			92			39%		
Tech Bubble Peak	112	-24%	2.2	145	-36%	1.9	60%	-21%	2.6
Housing Bubble Peak	97	-13%	1.0	112	-18%	0.7	45%	-6%	0.7

Source: Thomson Reuters/University of Michigan, Conference Board, American Association of Individual Investors, J.P. Morgan Asset Management. For illustrative purposes only. Data are as of 9/15/2014.

Direct measures of sentiment

A recent Wall Street Journal/NBC News poll found that 49% of Americans still believe the U.S. economy is in recession, even though we are now in the sixth year of the recovery.[5] As discussed earlier, financial measures of sentiment do not appear to be overextended, reflecting skepticism among investors. The irrational exuberance that typically signals asset bubbles and market peaks is also nowhere to be found in the survey data. In this section, we examine three of the most commonly cited sentiment surveys relative to their prior market peaks.

First, the University of Michigan Consumer Sentiment Index, at a level of 84.6 in September, is currently within 1% of its peak during this recovery. However, as shown in Exhibit 6, the index is still 24% below its prior peak level of 112 during the tech bubble, representing a 2.2 standard deviation difference, and is 13% below its peak of 96.9 in 2007 before the financial crisis, a 1.0 standard deviation difference.

This survey captures consumers' moods based on their financial situations and feelings about both near- and longer-term prospects for the economy. The improvement in the overall index has been driven largely by near-term sentiment on the economy, which has improved significantly since 2010, rising from 81.1 to 98.5. In contrast, long-term sentiment has been flat over this period. Clearly, consumers do believe the economy and their financial situations have improved, but are skeptical of the sustainability of this economic expansion.

Second, the Conference Board Consumer Confidence Index also is well below its prior peak. Current levels of the index reflect the positive employment situation and hit an expansion high of 92.4 in August. However, the index is still nearly 20% below the 2007 high of 112, and nearly 40% below the euphoric highs of 145 during the tech bubble.

Third, the American Association of Individual Investors (AAII) measures individual investors' sentiments toward the stock market. Individuals are polled weekly and the percentages of respondents who are bullish, bearish and neutral on the stock market based on a six-month investment horizon are reported.[6] The prevailing market sentiment over the last year has been predominantly neutral. Bullishness returned recently, but many investors appear to be waiting for clarity before acting.

Across these three surveys of sentiment, consumers and investors do appear to feel better about the economy and market. However, there is skepticism about the future, reflected in sentiment measures that are still well below their prior cycle highs. To the extent that euphoria often indicates a market peak, these measures do not suggest we are there just yet.

Our own worst enemies

If investing when others are skeptical has historically been a successful strategy, why don't more investors do so? This is an area where behavioral finance offers some clues. Specifically, individual investors often face behavioral biases that stand in the way of optimal investment decision making. Overcoming these biases is possible but requires guidance and discipline.[7]

Taking advantage of the findings discussed earlier requires investing when the economy and market seem to be at their worst, and rebalancing when conditions appear to be the best. This is counterintuitive for many investors, who tend to wait for confirming evidence before acting. This is related to herd behavior, the tendency to follow the crowd with portfolio decisions. Investing when others are skeptical is emotionally difficult but, as we've shown, tends to be when rewards are the greatest.

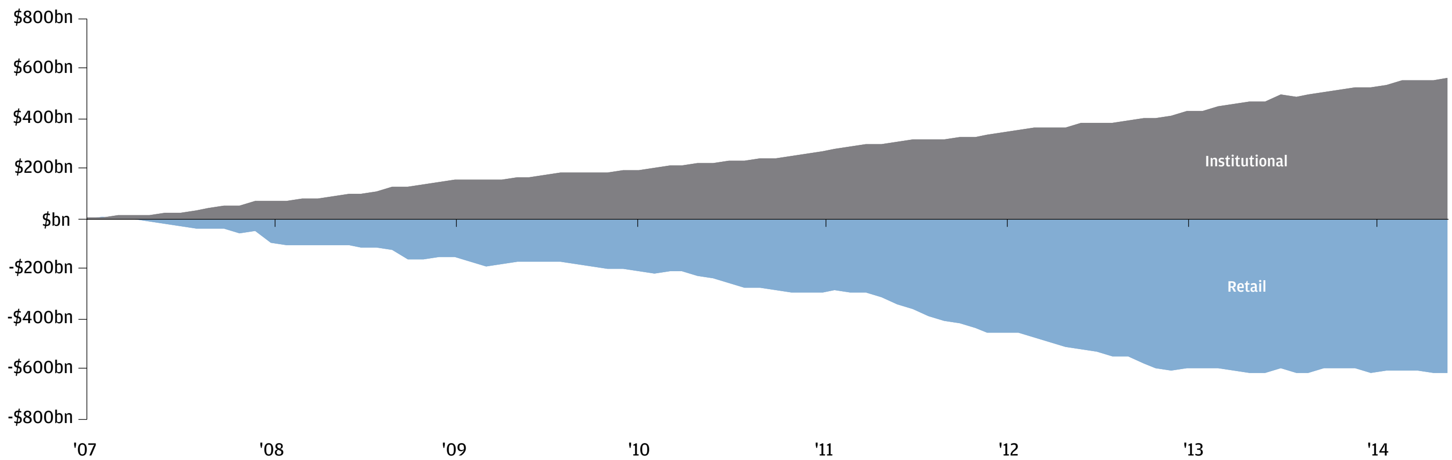
[5]Patrick O'Connor, "Poll Finds Widespread Economic Anxiety," The Wall Street Journal, August 5, 2014. Available at: http://online.wsj.com/articles/wsj-nbc-poll-finds-widespread-economic-anxiety-1407277801.

[6]Due to significant volatility in the survey results, we use a two-month moving average in our analysis.

[7]For more, see our earlier paper titled "Best Behavior: Applying Behavioral Finance to Today's Markets" released on February 27, 2014.

EXHIBIT 7: RETAIL FLOWS TO U.S. EQUITIES SINCE THE FINANCIAL CRISIS REFLECT BEHAVIORAL BIASES

Cumulative U.S. equity mutual fund and ETF flows since 2007



Source: ICI, J.P. Morgan Asset Management. For illustrative purposes only. Data are as of 8/31/2014.

However, at this point in the cycle, the market has improved dramatically, even if sentiment levels are still moderate. Why are investors still skeptical? The availability heuristic and loss aversion both offer hints.

The availability heuristic suggests that investors make decisions based on easily recallable events and vivid memories. For many, avoiding a situation reminiscent to the 2008 financial crisis is still top of mind. This is made worse by loss aversion, which argues that losses feel worse than gains feel good. In other words, despite potential positive returns, even a small possibility of a loss may prevent skittish investors from achieving their proper equity allocations.

The availability heuristic and loss aversion are reflected in retail investor mutual fund flows, shown in Exhibit 7. Whereas institutional investors typically follow policy targets that naturally enforce discipline, many retail investors have allowed their emotions to dictate their allocations, resulting in reduced U.S. equity investments even though the asset class has outperformed. Those investors who are able to overcome these behavioral biases to achieve their proper equity allocations will be poised to take advantage of potential long-run stock returns.

There is no assurance that **behavioral finance strategies** will protect against the loss of capital.

INVESTMENT IMPLICATIONS

The irrational exuberance that typically signals a market peak is still not present in the data. Financial measures of sentiment, like the market dividend yield and the term spread, still suggest that long-run expected returns are attractive. Direct measures of sentiment, including the University of Michigan Consumer Sentiment Index, the Conference Board Consumer Confidence Index, and the AAII Investor Sentiment Index, are well below their historical peaks. As a result, investors should strive to overcome the behavioral biases of herd behavior, the availability heuristic, and loss aversion that prevent many from achieving a proper portfolio allocation to equities. Those who do so successfully should be better positioned to take advantage of long-run expected stock returns.

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