FACTORS IN FOCUS

February 2018

Never Let a Correction Go To Waste

by Eric D. Nelson, CFA

From their highs in mid-January through early February, stocks experienced a -10% "correction," the first in more than two years. Declines of this size are common; since 1980 the average intra-year loss on stocks was -14% but with a wide spread ranging from -3% (2017) to -48% (2008). I mentioned that we could see a market decline just last month in January's *Factors In Focus*, and November's edition was dedicated to bear markets.

The events of early this year aren't especially noteworthy or relevant to your long-term plan; however they attract significant scrutiny from the financial media and probably cause you to pay closer attention to your investment portfolio. So I thought this would be a good time to revisit some of our core investment principles through the lens of recent events.

Trust Markets

When prices bounce around wildly, there is a tendency for investors to question the sanity of the stock market. The financial media is all too happy to stoke the flames of "rigged markets" and blame big institutional players who are supposedly manipulating prices. In the past, high-frequency traders were at fault; this month we've been told that institutional investors liquidating highly leveraged positions in short volatility futures contracts have pushed market prices way beyond levels supported by fundamentals.

What should we make of market volatility and manic price movements? Are stock prices fair? Can they be trusted? These are common questions in challenging times. When you are counting on the stock market to provide you with sufficient long-term returns to achieve your lifetime financial goals, these concerns can be unsettling. Thankfully, it's easy to dismiss the worries.

There are legions of professional investors—mutual fund managers—who spend their entire careers researching stock (and bond) prices. They attempt to buy undervalued companies while avoiding overvalued ones or try to invest in stocks when they are priced attractively while shunning them in troubling times. If prices were consistently wrong, if it were possible to determine when fundamental values and current prices became disconnected, we would see professional investors exploiting this phenomenon and generating returns higher than the general stock market. After all, these are highly educated professionals with CFAs and MBAs. But education and effort do not equate to selection and timing success.

Chart 1: % of Active Managers Outperforming the Index

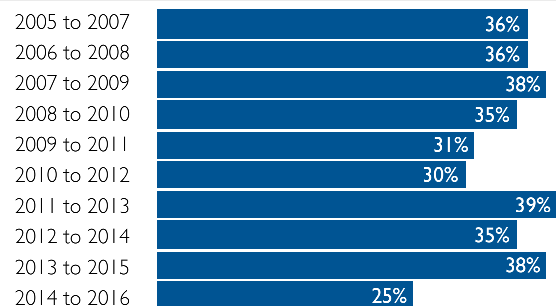

Chart 1 reports the percentage of actively managed US stock mutual funds that have outperformed the stock market over all three-year periods in the last decade. We never see a majority of the pros beating the market, even over short periods of time. If anything, their results seem to be getting worse as only 25% have managed to outperform the market over the last three years through 2016. We don't see the pros doing better in bear markets —2007 to 2009—nor do we see them winning in bull markets (any other period).

Continued…

Dramatic market moves don't mean that stock prices are irrational. It means there is a lot of new information that will impact future corporate profitability and economic fortunes and prices change rapidly in response. Price changes, even significant ones, are healthy even though we don't always fully understand them. Instead of trying to capitalize on market volatility or react in a way that you will benefit from, it makes more sense to study and understand stock price and asset class patterns and use the conclusions to design a portfolio that will achieve your long-term goals.

Revisiting Risk and Return

Volatility and stock declines don't reliably offer opportunities to exploit the market for outsized returns. Historical price movements do provide us with a helpful estimate of how much short-term risk we have to assume to achieve a given result. This is an essential component of the investment planning process. If you are caught off guard by a temporary decline that is larger than you expected, you might be tempted to bail on your portfolio. During extended bull markets a "Fear Of Missing Out" (FOMO) mindset sometimes replaces the quest for a healthy balance of risk and long-term return.

Table 1: Growth of $1 (1973 to 2017)

	Stock and Bond Index Mixes				
Bear Markets	**100/0**	**85/15**	**75/25**	**65/35**	**50/50**
Jan 1973 to Sept 1974	$0.64	$0.70	$0.73	$0.77	$0.83
Sept 1987 to Nov 1987	$0.76	$0.79	$0.81	$0.83	$0.87
Jan 1990 to Sept 1990	$0.79	$0.83	$0.85	$0.88	$0.92
May 1998 to Sept 1998	$0.81	$0.84	$0.87	$0.89	$0.92
May 2002 to Sept 2002	$0.77	$0.82	$0.85	$0.88	$0.93
Nov 2007 to Feb 2009	$0.42	$0.51	$0.57	$0.64	$0.74
May 2011 to Sept 2011	$0.78	$0.82	$0.84	$0.87	$0.91
Average of All Periods	$0.71	$0.76	$0.79	$0.82	$0.87

Table 1 lists the seven bear markets since 1973, and the impact they had on various stock/bond index mixes. The average decline in the all-stock asset class mix ("100/0") during these seven periods was -29%, as $1 declined to an average of $0.71. The average decline moderated as bonds were introduced: -24% for 85/15, -21% for 75/25, -18% for 65/35 and -13% on the 50/50 allocation.

But these are just averages. In the extreme bear markets of 1973-1974 and 2008, we find that the all-stock allocation declined -36% ($1 dropped to $0.64) and -58% ($1 fell to $0.42), respectively. Even the 65/35 allocation saw losses of -23% and -36%.

Looking only at periodic losses, typically "risk-averse" investors are inclined to choose the portfolio with the smallest short-term losses. But there is a downside to limiting downside. Table 2 lists the annualized returns of each stock/bond mix and long-term growth of $1.

Table 2: Asset Class Index Returns (1973 to 2017)

	Stock and Bond Index Mixes				
	100/0	**85/15**	**75/25**	**65/35**	**50/50**
Annualized Return	+13.5%	+12.8%	+12.2%	+11.7%	+10.7%
Growth of $1	$297	$224	$180	$142	$97

Smaller portfolio losses meant lower long-term returns. The all-stock index gained +13.5% annually; the 50/50 allocation returned just +10.7%. The "Growth of $1" figures are where the return differences manifest. Over an investment lifetime, adding only 15% in bonds to an all-stock index reduced ending wealth by 32%. Opting for 35% in bonds over 15% in bonds resulted in 58% less wealth. You sacrifice significant expected gains to guard against temporary short-term losses.

Trust The Plan

A review of history reminds us that market "corrections" are common. A decline of -20% or more happens at least twice a decade. During these periods revisiting the fundamental relationship between risk and return helps to reaffirm that you have the appropriate allocation for your long-term needs. We can always make adjustments but adding more bonds and the corresponding lower returns might mean that you will sacrifice some of your future goals for greater short-term peace of mind. The decision should not be taken lightly. Usually, your first instinct (and allocation) was the right one.

<u>Source of data</u>: DFA Returns Web, Dimensional Fund Advisors

100/0 Index = 21% S&P 500, 21% DFA US Large Value Index, 28% DFA US Small Value Index, 18% MSCI EAFE Value Index (MSCI EAFE Index prior to 1975), 12% DFA Int'l Small Cap Index. *Rebalanced annually.*

85/15, 75/25, 65/35, 50/50 = combinations of 100/0 Index & 5-YR T-Notes

Past performance is not a guarantee of future results. Diversification does not eliminate the risk of loss. Index and fund returns include the reinvestment of dividends but not expenses or additional advisory fees. This article is for informational purposes, and it is not to be construed as an offer, solicitation, recommendation, or endorsement of any particular security, product, or service. Servo is a Registered Investment Advisor (RIA) with clients nationwide. Unauthorized copying, reproducing, duplicating, or transmitting of this material is prohibited. For past *Factors In Focus* newsletters, please visit Servo's website at servowealth.com. **Edited by Kathy Walker.**

Contact Eric Nelson, CFA at eric@servowealth.com with any questions, comments, thoughts, or to discuss your personal financial situation.