

ASSET CLASS

An update of performance, trends, research & topics for long-term investors

Asset Class Returns

June 30, 2013

	YTD 2013	Past 10 yrs.*	2012	2011	2010
Bonds (%)					
One-Year	0.2	2.3	0.9	0.6	1.2
Five-Year	-1.2	4.0	4.8	4.5	5.3
Intermediate	-3.3	5.3	3.7	9.4	6.9
Long-Term	-7.7	7.4	3.5	29.3	8.9
U.S. stocks (%	b)				
Large Market	13.8	7.0	15.8	2.1	14.9
Large Value	18.0	8.4	22.1	-3.1	20.2
Small Market	17.2	10.9	18.4	-3.2	30.7
Small Micro	17.5	10.4	18.2	-3.3	31.3
Small Value	17.7	11.3	21.7	-7.6	30.9
Real Estate	6.0	11.4	17.5	9.0	28.7
International s	tocks (%)			
Large Market	2.6	8.4	17.8	-12.3	9.3
Large Value	1.8	10.2	16.6	-16.9	10.6
Small Market	3.8	12.8	18.9	-15.4	23.9
Small Value	5.5	13.5	22.3	-17.5	18.1
Emerg. Mkts.	-10.3	17.4	19.2	-17.4	21.8

All returns except "YTD" (Year to Date) are annualized.

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Descriptions of Indexes

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	One-Year bonds	DFA One-Year Fixed Income fur
	Five-Year bonds	DFA Five-Year Global Fixed
	Intermediate bonds	DFA Intermed. Gov't Bond fund
	Long-Term bonds	Vanguard Long-term U.S.Treas.
	U.S. Large Market	DFA U.S. Large Co. fund
	U.S. Large Value	DFA Large Cap Value fund
	U.S. Small Market	DFA U.S. Small Cap fund
	U.S. Small Micro	DFA U.S. Micro Cap fund
	U.S. Small Value	DFA U.S. Small Value fund
	Real Estate	DFA Real Estate Securities fund
	Int'l Large Market	DFA Large Cap Int'l fund
	Int'l Large Value	DFA Int'l Value fund
	Int'l Small Market	DFA Int'l Small Company fund
	Int'l Small Value	DFA Int'l Small Cap Value fund
	Emerging Markets	DFA Emerging Markets fund

"Past 10 yrs." returns are ended 12/31/12.

Equius Partners is an investment advisor registered with the Securities and Exchange Commission. Consider the investment objectives, risks, and charges and expenses of any mutual fund and read the prospectus carefully before investing. Indexes are not available for direct investment; therefore, their performance does not reflect the expenses associated with the management of an actual portfolio. **Past performance is not a guarantee of future results.**

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Volatility, Withdrawals, and Balance

July 2013

Jeff Troutner, Equius Partners

One of the greatest concerns of our many clients who are near or in retirement is whether their balanced portfolios can survive regular annual withdrawals during volatile financial markets. Whether the last thirteen years of historically volatile markets represent a "new normal" is debatable, but one thing's for sure: they offer a powerful real-world scenario to stress-test how such a portfolio might have performed during extreme market swings.

Severe market declines and low annualized returns for an extended period of time generally concern *all* investors. Younger investors, if they are adding to their portfolios, can weather these market storms and actually prosper by buying at low prices. Investors living off their portfolios typically consume withdrawals and seldom make additional contributions. It's important for these investors to pay even greater attention to portfolio balance and diversification while also maintaining a rebalancing discipline that is at times very uncomfortable and seemingly counterintuitive.

To illustrate this, let's compare how two \$500,000 balanced indexed portfolios would likely have performed over the last thirteen years. Here are the general parameters we'll use:

- Time period is 2000-2012.
- Start value is \$500,000: 65% stocks, 35% bonds.
- 4% withdrawal on year-end value, adjusted yearly for 3% inflation. Withdrawal taken from winning asset class each year.
- Rebalance at year-end if bonds rise to 42% or fall to 28% of the total portfolio value (+ or -20% of target allocation).

The Asset Class Balanced Portfolio

Stock Allocation (% of 65%)

- 21% DFA US Large Company fund (S&P 500)
- 21% DFA US Large Cap Value fund
- 28% DFA US Small Cap Value fund
- 18% DFA International Value fund
- 12% DFA International Small Value fund

Bond Allocation (% of 35%)

• 100% DFA Five-Year Global Fixed Income fund

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The John Bogle/Vanguard Indexed Portfolio

Stock Allocation (% of 65%)

- 70% Vanguard Total Stock Market fund
- 30% Vanguard Total Int'l Stock Market fund

Bond Allocation (% of 35%)

I 00% Vanguard Short-Term Bond Index fund

The Asset Class Balanced Portfolio represents the core portfolio allocation we use at Equius in our initial discussions with new clients. Allocations are then adjusted to meet each client's unique risk and return objectives. The John Bogle/Vanguard Indexed Portfolio is intended to represent the kind of portfolio John Bogle, the former chairman of The Vanguard Group, would recommend to the average do-it-yourself investor.

In my analysis, I deduct a 1% annual advisory fee from the Asset Class Balanced Portfolio and the weighted average expense ratio of the DFA funds is 0.35%. No advisory fee is deducted from the John Bogle/Vanguard Indexed Portfolio, and using Vanguard's cheapest institutional-class funds results in a weighted average expense ratio of 0.07%. So there's a clear annual cost advantage favoring the Vanguard portfolio. Here are the summary results (all values are year-end):

Table 1: Summary Results 2000-2012			
Metric	Asset Class Balanced Portfolio	John Bogle/Vanguard Indexed Portfolio	
Starting Value	\$500,000	\$500,000	
Ending Value	\$604,659	\$393,076	
Total Withdrawals	\$312,354	\$312,354	
Lowest Value	\$435,393	\$344,211	
Highest Value	\$698,542	\$499,346	
#Years Below Initial Value	4	13	
Longest #Years Below Initial Value	3	13	
# of Rebalances	4	I	
Ending \$ Advantage	\$211,583	—	

Small Cap, Value, and Disciplined Rebalancing

Over time it is reasonable to expect the higher risk of small cap and value stocks to produce higher returns than that of large and growth stocks. Therefore, we should expect a more diversified and balanced global portfolio that tilts toward small cap and value stocks to perform better over periods such as the last thirteen years. But the *structure* and *management* of the small cap and value funds also make a difference. For example, including the Vanguard U.S. large and small value funds in the second portfolio raised the ending value to \$536,956—still significantly lower than the asset class portfolio using Dimensional funds.

I should also note, because it's a significant challenge for do-it-yourself investors, failing to rebalance the Vanguard portfolio at the end of 2002 (the only rebalance necessary for the full thirteen years, and following yearly declines of 12.0%, 13.6%, and 19.2% for the Vanguard portfolio!) would have produced an even lower ending value, at \$367,948.

In contrast, the Asset Class Balanced Portfolio needed to be rebalanced *four times* over the period (one critical rebalance included the *purchase* of stocks at the end of 2008, after they fell 37% for the year) and failing to rebalance would have dropped the ending value to \$582,012. Including Vanguard U.S. small cap and value funds in the Vanguard simulation would have resulted in three rebalancing events. Failing to rebalance in that portfolio would have reduced the ending value by \$30,000.

The extreme volatility of the 2000-2012 period argues strongly for an experienced and disciplined advisor to help clients develop better portfolios, to keep them fully invested, and to rebalance opportunistically at times when other investors (and advisors) are losing their nerve and ignoring their long-term objectives.

Market Timing Is Not an Option

As we can see in Table 2 on the next page, fiveyear Treasury bonds outperformed the U.S. stock market by a wide margin over the last thirteen years. But how many investors (or "experts," for that matter) bet correctly on that outcome in advance, particularly given the historically strong stock returns from 1995 to 1999?

It's more likely that the majority of investors took a lot of the 2000-2002 hit on their growth stockheavy portfolios and enjoyed little, if any, of the higher returns on bonds (fund cash flow numbers indicate that investors in general moved heavily into stocks and out of bonds prior to 2000). Look at the contrast in total return for stocks and bonds for those three years (-37.6% vs. +36.9%, respectively).

The same behavior played out prior to, during, and after the severe stock market decline that started in late 2007 and ended in early 2009. Looking at consecutive calendar-year periods, these thirteen years saw stocks fall by almost 37.6%, then rise by 82.9%, fall by 37.0%, and rise again by 72.4%! Market timing is the biggest fool's game around, especially during markets as volatile as we have seen over the last thirteen years. Market timing is simply not a rational consideration for serious investors with long-term time horizons or those who must rely on their portfolios for future income. A far wiser choice is a healthy balance between a more diversified stock portfolio (not just a large growth stock-heavy total market or S&P 500 index fund!) and high-quality, short-term bonds.

Table 2: Stock and Bond Returns (%)				
Year	S&P 500 Index	Five-Year U.S. Treasury Index		
2000	-9.1	12.6		
2001	-11.9	7.6		
2002	-22.1	13.0		
2003	28.7	2.4		
2004	10.9	2.3		
2005	4.9	1.4		
2006	15.8	3.2		
2007	5.5	10.1		
2008	-37.0	13.1		
2009	26.5	-2.4		
2010	15.1	7.1		
2011	2.1	9.5		
2012	16.0	0.6		
Annualized	1.7	6.1		
2000-2002	-37.6	36.9		
2003-2007	82.9	20.4		
2008	-37.0	13.1		
2009-2012	72.4	15.2		

Withdrawal Rates

According to the literature, a widely accepted "safe withdrawal rate" for the average investor in retirement is 4%. We use 4% as a routine *starting point* when we counsel clients at Equius Partners. Depending on the client's age, we will recommend either raising or lowering the percentage. But in all cases it must be set based on the client's unique circumstances, it must be managed properly, and it should be adjusted when appropriate.

One example of managing the withdrawal rate properly is a common sense-based (rather than emotion-based) decision to take withdrawals from the "winning" asset class rather than the "losing" asset class every year. In the Vanguard example, imagine how difficult it would have been for investors to take withdrawals in 2000, 2001, 2002, and 2008 from their bond allocations at a time when most other investors were significantly reducing, or even eliminating, their stock allocations. In our simulation, increasing the withdrawal rate to 5% dropped the ending value for the Asset Class Balanced Portfolio to \$499,052 (from \$604,659) and the John Bogle/Vanguard Indexed Portfolio to \$286,833 (from \$393,076). Decreasing the withdrawal rate to 3% would have resulted in increases in ending value for the Asset Class Balanced Portfolio to \$675,101 and for the John Bogle/Vanguard Indexed Portfolio to \$536,704.

Conclusion

During one of the most volatile periods in stock market history, which included two periods when stocks fell by 37% or more, a balanced, wellstructured asset class portfolio was able to sustain a 4% withdrawal rate while maintaining (and actually growing) its original principal. As our simulation demonstrates, the source of withdrawals and disciplined rebalancing were important factors in the portfolio's success. Also, note that this result was achieved without exposing the strategy to the very high risks and costs of market timing.

Another important takeaway, given the recent decline in bond prices (due to a rise in interest rates), is that short-term, high-quality bonds are more than sufficient as a risk buffer and income source during volatile stock market cycles. At Equius, we prefer to manage our risk on the stock side by increasing our exposure to small cap and value stocks—risks supported by a huge body of research and twenty years of actual experience—in a highly diversified and low-cost way.

Research and experience reveal repeatedly that trying to eke out a few extra percentage points of return on the bond side introduces extra risk that is not very likely to pay off over time, particularly for investors making regular withdrawals from their portfolios.

Even though this is a simulation using real funds and actual returns over a historically volatile period, real-life outcomes would have varied based on the frequency of withdrawals (monthly instead of annually, for example), an investor's actual asset allocation, the timing and structure of rebalancing, and so on. It's also unlikely that history will repeat itself in exactly the same way in the future. For example, even though value stocks outperformed growth stocks in the first few years of this period and they underperformed during the 2007-2008 period, that won't always be the case. The information provided is for educational purposes only. Consider the investment objectives, risks, and charges and expenses of all mutual funds carefully before investing. Past performance is no guarantee of future success. Worksheet details supporting the numbers in Table 1 can be found at http://www.equiuspartners.com/blog/2013/07/volatility-wit hdrawals-and-balance/.



The Art of Letting Go

Jim Parker, Dimensional Fund Advisors

In many areas of life, intense activity and constant monitoring of results represent the path to success. In investment, that approach gets turned on its head. The Chinese philosophy of Taoism has a word for it: "wuwei." It literally means "non-doing." In other words, the busier we are with our long-term investments and the more we tinker, the less likely we are to get good results.

That doesn't mean, by the way, that we should do nothing whatsoever. But it does mean that the culture of "busyness" and chasing returns promoted by much of the financial services industry and media can work against our interests.

Investment is one area where constant activity and a sense of control are not well correlated. Look at the person who is forever monitoring his portfolio, who fitfully watches business TV, or who sits up at night looking for stock tips on social media.

In Taoism, by contrast, the student is taught to let go of factors over which he has no control and instead go with the flow. When you plant a tree, you choose a sunny spot with good soil and water. Apart from regular pruning, you leave the tree to grow.

But it's not just Chinese philosophy that cautions us against busyness. Financial science and experience show that our investment efforts are best directed toward areas where we can make a difference and away from things we can't control.

So we can't control movements in the market. We can't control news. We have no say over the headlines that threaten to distract us. But each of us can control how much risk we take. We can diversify those risks across different assets, companies, sectors, and countries. We do have a say in the fees we pay. We can influence transaction costs. And we can exercise discipline when our emotional impulses threaten to blow us off-course.

These principles are so hard for people to absorb because the perception of investment promoted through financial media is geared around the short-term, the recent past, the ephemeral, the narrowly focused and the quick fix. We are told that if we put in more effort on the external factors, that if we pay closer attention to the day-to-day noise, we will get better results.

What's more, we are programmed to focus on idiosyncratic risks—like glamor stocks—instead of systematic risks, such as the degree to which our portfolios are tilted toward the broad dimensions of risk and return. Ultimately, we are pushed toward fads that the financial marketing industry decides are sellable, which require us to constantly tinker with our portfolios. You see, much of the media and financial services industry wants us to be busy about the wrong things. The emphasis is often on the excitement induced by constant activity and chasing past returns, rather than on the desired end result.

The consequence of all this busyness, lack of diversification, poor timing decisions, and narrow focus is that most individual investors earn poor long-term returns. In fact, they tend to not even earn the returns available to them from a simple index.

This is borne out each year in the analysis of investor behavior by research group Dalbar. In 20 years, up to 2012, for instance, Dalbar found the average US mutual fund investor underperformed the S&P 500 by nearly 4 percentage points a year.¹

This documented difference between simple index returns and what investors receive is often due to individual behavior—in being insufficiently diversified, in chasing returns, in making bad timing decisions, and in trying to "beat" the market.

Recently, one of Australia's most frequently quoted brokers broke ranks from the industry and gave the game away on this "busy" investing. In his final note to clients before retiring to consultancy work, Morgan Stanley strategist Gerard Minack said he had found over the years that investors were often their worst enemies.²

"The biggest problem appears to be that—despite all the disclaimers—retail flows assume that past performance is a good guide to future outcomes," Minack said.

"Consequently, money tends to flow to investments that have done well, rather than investments that will do well. The net result is that the actual returns to investors fall well short not just of benchmark returns, but the returns generated by professional investors. And that keeps people like me employed."

It's a frank admission and one that reinforces the ancient Chinese wisdom: "By letting it go, it all gets done. The world is won by those who let it go. But when you try and try, the world is beyond the winning."

1. "Quantitative Analysis of Investor Behavior," Dalbar, 2013.

^{2.} Gerard Minack, "Downunder Daily," Morgan Stanley, May 16, 2013.