

When funding a long-term payment stream, the real growth of equities generally provides both a lower payout rate and higher long-term accumulation of capital than either bonds or hedge funds.

Investment committees are still dealing with fallout from the global financial crisis. The experience has left decision makers and fiduciaries extremely averse to volatility, causing many to launch headlong into portfolio de-risking using fixed income securities and low volatility hedge fund strategies. Yet this backward-looking risk avoidance has created a new headache: the combination of low returns implicit in a de-risked portfolio, coupled with low discount rates on liabilities, has resulted in a real risk of not being able to fund liabilities in the future.

So in wrestling with asset allocation decisions, it is important to assess the impact that volatility has on the timing of cash flows for spending. Is the answer to this challenging question simply to choose low volatility combined with stable returns or is the answer to select an option that produces the best long-term real growth of principal? To address this issue we have attempted to model three different time periods over the last 22 years to compare the results of a 100% allocation to value equities (cheapest quintile price to book value excluding the most volatile stocks), 100% to bonds (10 year U.S. Treasury Bonds) or 100% to hedge fund of funds (HFRI Fund of Funds Composite Index).

In our analysis we made the following assumptions about our spending rate:

1. Initial spending rate is 4% of the beginning principal.
2. Real spending growth of 2% per year (in excess of inflation).
3. Funds are needed equally over the course of a year.

The three scenarios we considered were:

1. Starting at the beginning of 1990 and capturing a full cycle of equity returns.
2. Buying at the absolute top of the internet bubble (3/1/2000).
3. Buying just prior to the financial meltdown (11/1/2007).

In each case, we attempted to see how low the balance in the funds fell or alternatively to see how high the required spending rate as a percentage of the fund balance rose.

The results:

If we started in 1990, as shown directly below, the value equity strategy required our 4% initial spending rate to go as high as 6.4%

as the portfolio fluctuated but the spending marched upward. But the ending balance far exceeded the other strategies. Additionally it is worth noting that the superior return of equities was achieved concurrent with their having the highest monthly volatility.

Bonds on the other hand were unable to keep up with real spending growth and by the end of the 22 year period; we would be spending 8.5% of the fund balance. It is also worth noting that during this period bonds produced annualized returns of 7%, as the yield on 10 year Treasury Bonds fell from around 8.5% to the current 1.6%.

January 1990-September 2012

	Jan. 1990 Value	Spend Rate*		September 2012 Value	Monthly Volatility ¹
		Max	End		
Value Equities	100	6.40%	1.30%	923	17.60%
Bonds	100	9.00%	8.50%	130	7.30%
Hedge Funds	100	5.00%	5.00%	229	5.80%

*annualized monthly spending rate as percentage of beginning month values

¹annualized monthly volatility

With yields today of well less than 2% this history of returns is unlikely to repeat itself; instead quite the opposite is more probable and the fund will shortly be exhausted. Hedge funds did a good job of matching the returns with the spending requirement and the spending rate never got much higher than the initial spending rate.

What if we started at the peak of the internet bubble in March, 2000? If our equity strategy included a valuation component to it, it would have made little difference:

March 2000-September 2012

	Mar. 2000 Value	Spend Rate*		September 2012 Value	Monthly Volatility ¹
		Max	End		
Value Equities	100	6.40%	2.30%	309	20.00%
Bonds	100	5.60%	5.10%	130	7.90%
Hedge Funds	100	10.50%	10.50%	66	5.30%

*annualized monthly spending rate as percentage of beginning month values

¹annualized monthly volatility

From the peak of the internet bubble, a value equity strategy would have grown faster than the real spending rate and would never have had a period where spending was of concern. Bonds continue to be troublesome since the returns are not high

enough to justify the real spending growth plan. But here, hedge funds fell short and would likely not be able to produce the returns necessary to keep up with a 10.5% spending rate.

Lastly, starting at the absolute worst time in the last century for an equity strategy – the market’s 2007 peak, we would certainly have had a scare as spending requirements in March 2009 consumed 10.2% of that month’s beginning balance which at that point had fallen by 55% from its November 2007 beginning balance.

November 2007-September 2012

	Nov. 2007 Value	Spend Rate*		September 2012 Value	Monthly Volatility ¹
		Max	End		
Value Equities	100	10.20%	5.70%	87	26.00%
Bonds	100	7.40%	3.90%	123	9.00%
Hedge Funds	100	7.20%	7.20%	67	6.40%

*annualized monthly spending rate as percentage of beginning month values

¹annualized monthly volatility

While a logical argument could have been made that the expected return on equities at the time far exceeded 10.2%, it would have been a difficult argument to make to an emotional investment committee. Nevertheless, nearly five years later, a sizeable portion of the principal balance would have been recovered and it would still be possible to make the case that the expected return on equities well exceeded the 5.7% ending spend rate. Once again, hedge funds appear to be in the most precarious position, as our Fund’s investors would need to believe that their returns will exceed their 7.2% spending rate or risk the depletion of their entire principal. Even bonds, which have done the best overall in this most recent period, should make investors nervous going forward as they will need to achieve returns of over 3.9% to maintain both spending requirements and their principal cushion. With the current yield to maturity for 10 year Treasury Bonds at approximately 1.6%, this would be no small feat.

Conclusion

The ability to support a vibrant spending stream over long periods of time benefits most from the highest levels of real growth in asset values, as shown in our analysis of the 22 years covering the period from 1990 through the middle of 2012. The value equities portfolio significantly outperformed the alternatives of bonds or hedge funds as it supplied the necessary real growth in spending while also out-growing the asset levels provided by its competitors. Even significantly shortening the time period to the

past 12 years starting in early 2000 still shows the power of value equities to provide real growth in spending while also steadily lowering the annual spending burden relative to the fund’s asset base. Even in this briefer time period neither bonds nor hedge funds approach the levels of performance achieved by a portfolio comprised of value equities. In the most recent five year period, since the equity market’s peak in 2007, the picture looks different as value equities have struggled, therefore, bonds look to be the asset class of choice. However, given where bonds are today, yielding about 1.6%, and recognizing where they have come since November 2007 when they were yielding about 4%, it’s difficult to believe they can meet the long-term real spending challenge. Only equities, with real underlying earnings growth, can be expected to supply the power needed longer term to fund the type of model program outlined in our study which is reflective of the demands of long-lived capital pools. ■

DISCLOSURES

Past performance is no guarantee of future results. The historical returns of the specific portfolio securities mentioned in this commentary are not necessarily indicative of their future performance or the performance of any of our current or future investment strategies. The investment return and principal value of an investment will fluctuate over time.

The specific portfolio securities discussed in this commentary were selected for inclusion based on their ability to help you understand our investment process. They do not represent all of the securities purchased, sold or recommended for our client accounts during any particular period, and it should not be assumed that investments in such securities were, or will be, profitable.