The global case for strategic asset allocation

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This paper summarises recent Vanguard research into the impact of strategic asset allocation on portfolio risk and returns.

The asset allocation debate continues

It's been 25 years since Brinson, Hood and Beebower (BHB) released their groundbreaking research paper, 'Determinants of Portfolio Performance', confirming that asset allocation was the primary driver of returns in a diversified portfolio.

BHB's analysis found that more than 90% of a portfolio's return variability over time could be explained by its asset allocation policy. Return variability measures the divergence between actual and asset allocation policy returns.

BHB's research has been widely debated by the portfolio management community. More recent research conducted by Vanguard confirms that BHB's findings are still as relevant today as they were when first published in 1986.

Vanguard's latest research updates previous analysis from 2007. It covers four key markets: United States, Canada, United Kingdom and Australia; from January 1962 to December 2011.

The research confirms that, on average, most of a portfolio's return variability over time is due to the ups and downs of its static asset allocation. Active investment decisions, such as market-timing and security selection, had relatively little impact on return variability over time.

Analytical framework

Like BHB, Vanguard's research compares what a portfolio could have earned using its policy asset allocation and passively managed index funds with the return it actually earned over the period.

In his 1997 research, Jahnke[1] claimed that the results at the end of an investment time horizon depended on the active funds that were selected. He argued that BHB's research didn't take into account the actual returns earned across different active balanced funds with a set time horizon. So, it failed to demonstrate that two funds with the same asset allocation could have very different total returns

Vanguard's analysis takes BHB's and Jahnke's research one-step further by using a much greater number and variety of balanced mutual funds over various time periods.

1 The Asset Allocation Hoax, William W. Jahnke, 1997.

Figure 1. Role of asset allocation policy in return variation of balanced funds

Selected periods, January 1962 through December 2011

	United States	Canada	U.K.	Australia	Brinson et al. (1986)
Number of balanced funds in each market sample	518	245	294	336	91 U.S. pension funds
Median percentage of actual-return variation explained by policy return	91.4%	88.3%	80.0%	89.9%	93.6%

BHB's results were slightly higher than Vanguard's as their universe was confined to pension funds, which are typically more exposed to systematic market risk. Vanguard's universe included total-return funds, income funds, asset allocation funds and traditional balanced funds.

Like BHB, Vanguard's research confirmed that asset allocation accounted for the majority of variation in returns in a balanced portfolio - around 90% for US, Canada and Australia and 80% in the UK.

What matters most to investors: Return and risk

BHB's research attributed portfolio return variability to indexed static asset allocation policy, security selection, and market-timing components. Their research showed that the active managers they analysed had been unable to add value above their static indexed policy returns, through either market-timing or security selection. This is consistent with the observation that indexing outperforms a significant portfolio of active portfolios in equity and bond markets.

Jahnke believed that investors cared more about actual returns and the range of possible investment outcomes at the end of their time horizons, rather than the return variability, or the volatility experienced over time. Vanguard's research tests both BHB's and Jahnke's methodologies to address the question: Can active management increase a portfolio's returns without increasing the volatility experienced?

Active management produced significant performance dispersion in the four markets examined. Our analysis supported that of Jahnke, which confirmed that some actively managed funds can outperform their policy portfolios on an individual basis. At the same time, our research supported BHB's finding that 'broadly diversified' balanced-fund returns move in tandem with broad markets over time.

Overall, our research found that active funds added to volatility levels and underperformed their own stated benchmarks. While some active funds did outperform, on average, active management risk was not compensated unless manager skill could overcome hurdles such as the higher costs and turnover of active management.

Characteristics of funds with positive and negative alpha

Vanguard's research shows that the average actively managed fund reduced returns and increased return variability compared with funds that mirrored the policy benchmark. The analysis also highlighted some actively managed balanced funds that have significantly outperformed their policy benchmarks over time.

What are the general characteristics of these "winning" funds and how do they compare with the broader universe of active balanced funds?

Figure 2. Fund characteristics for Australian balanced funds

Australian balanced funds	All Australian balanced funds	Funds with statistically significant positive alpha	Funds with statistically significant negative alpha	Funds with zero alpha
Risk and return (average across funds)				
Average annualized alpha	–0.81%	1.34%	–1.83%	–0.51%
Policy return as percentage of actual return	105.9%	91.9%	113.9%	103.5%
Policy volatility as percentage of actual volatility	92.9%	99.0%	94.7%	92.1%
Return variability explained by policy variability	86.2%	94.6%	89.1%	84.8%
Average fund characteristics				
Expense ratio	N.A.	N.A.	N.A.	N.A.
Net assets (millions)	A$59.2	A$196.3	A$16.0	A$70.3
Turnover	N.A.	N.A.	N.A.	N.A.
Number of funds	336	8	87	241

This table shows the results for Vanguard's study of Australian balanced funds. On average, the funds surveyed underperformed their policy benchmark returns by 0.81%. Of the 336 funds studied only eight delivered a 'statistically significant positive excess return' while 87 delivered a 'statistically significant negative excess return' and 241 funds delivered zero alpha. On average, the winning funds outperformed their benchmark portfolios by 1.34% per year while the losing funds, underperformed their benchmark portfolios by 1.83% per year.

While manager skill plays a role in generating positive-alpha there are other important differences that distinguish the winners from the losers. Vanguard's research found that the winning active funds also had lower expenses, lower portfolio turnover and more assets under management than the consistently underperforming funds.

Implications for advisers

Asset allocation is the key to managing the range, or variability (experienced volatility), of a portfolio's returns over time. The portfolio construction process should begin with setting the asset allocation policy. An investor can then select the funds to implement the strategy based on the investor's risk-and-return expectations.

In summary

- Asset allocation explains the majority of a portfolio's return variability.
- Asset allocation is the primary driver of return variability for investors who hold broadly diversified portfolios.
- Indexed policy portfolios provided on average, higher returns and lower volatility than actively managed funds.
- Outperformance is possible for investors who have the ability to select a 'winning' actively managed fund. ■

References

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