Putting a value on your value:

Quantifying Vanguard Advisor's Alpha™

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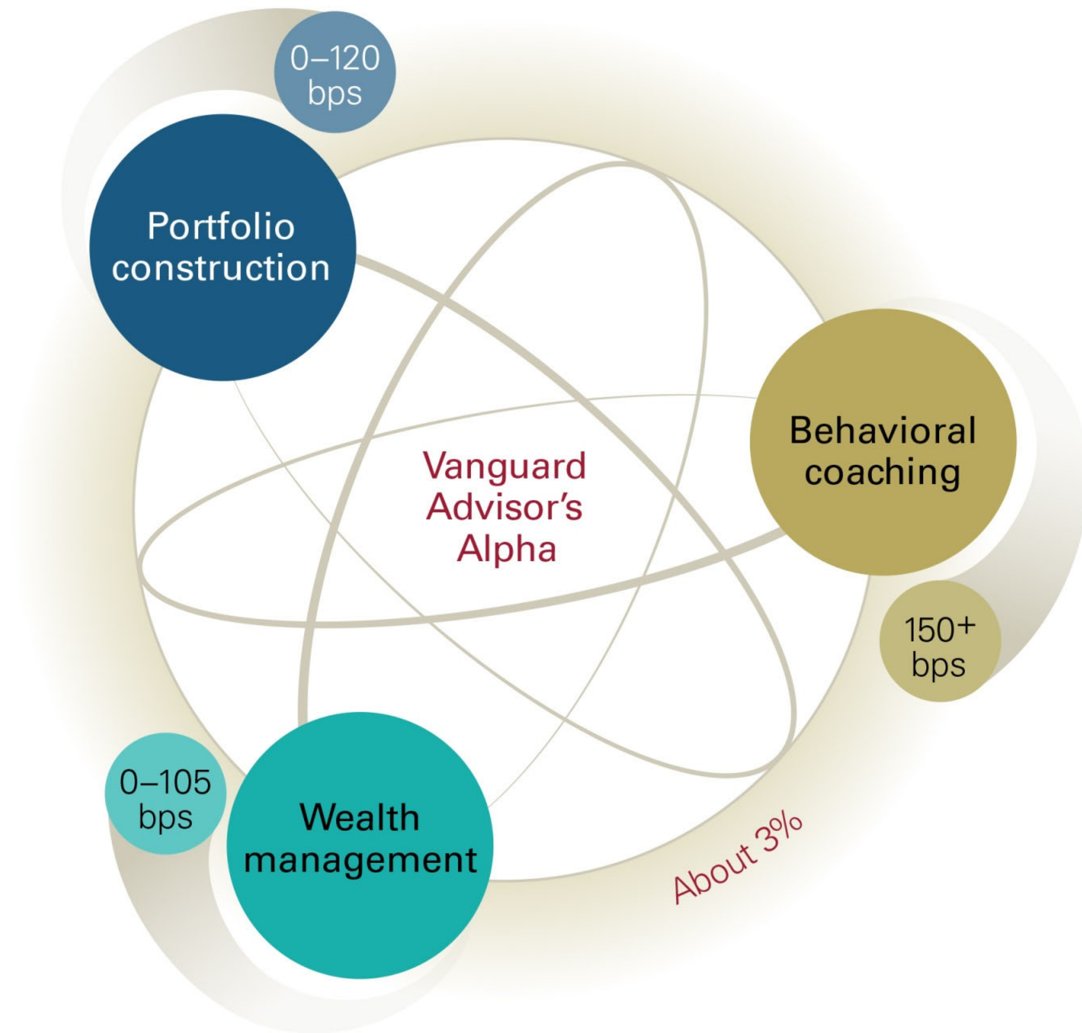
Vanguard®

What is your value to clients?



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“About 3%” defined

- Net potential returns over time (not a specific time frame)
- Return value does not show up on a quarterly statement—but it is very real!
- Increase the amount of return that clients keep

Framework	Clients’ gross earnings	Fees/taxes	Net returns
Without advisor’s alpha	8%	4%	4%
With advisor’s alpha	8	1	7

Added value an advisor provides by helping clients keep more

Note: Hypothetical example of annualized returns over an unspecified period of time.

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The added value of an advisor is about 3%

Vanguard Advisor's Alpha strategy	Value-add relative to "average" client experience (in basis points of return)
Portfolio construction	
Suitable asset allocation using broadly diversified funds/ETFs	>0*
Cost-effective implementation (expense ratios)	45
Asset location	0–75
Total-return versus income investing	>0*
Wealth management	
Rebalancing	35
Spending strategy (withdrawal order)	0–70
Behavioral coaching	
Advisor guidance	150
Potential value added (bps)	**"About 3%"**

Source: *Putting a value on your value: Quantifying Vanguard Advisor's Alpha* (Kinniry, Jaconetti, DiJoseph, and Zilbering, 2014).

* Return value-add was deemed significant but too unique for each investor to quantify. Also, for "Potential value added," we did not sum the values because there can be interactions between the strategies. Bps = basis points.

Note: "About 3%" means 3 percentage points of additional net return over an unspecified period of time.

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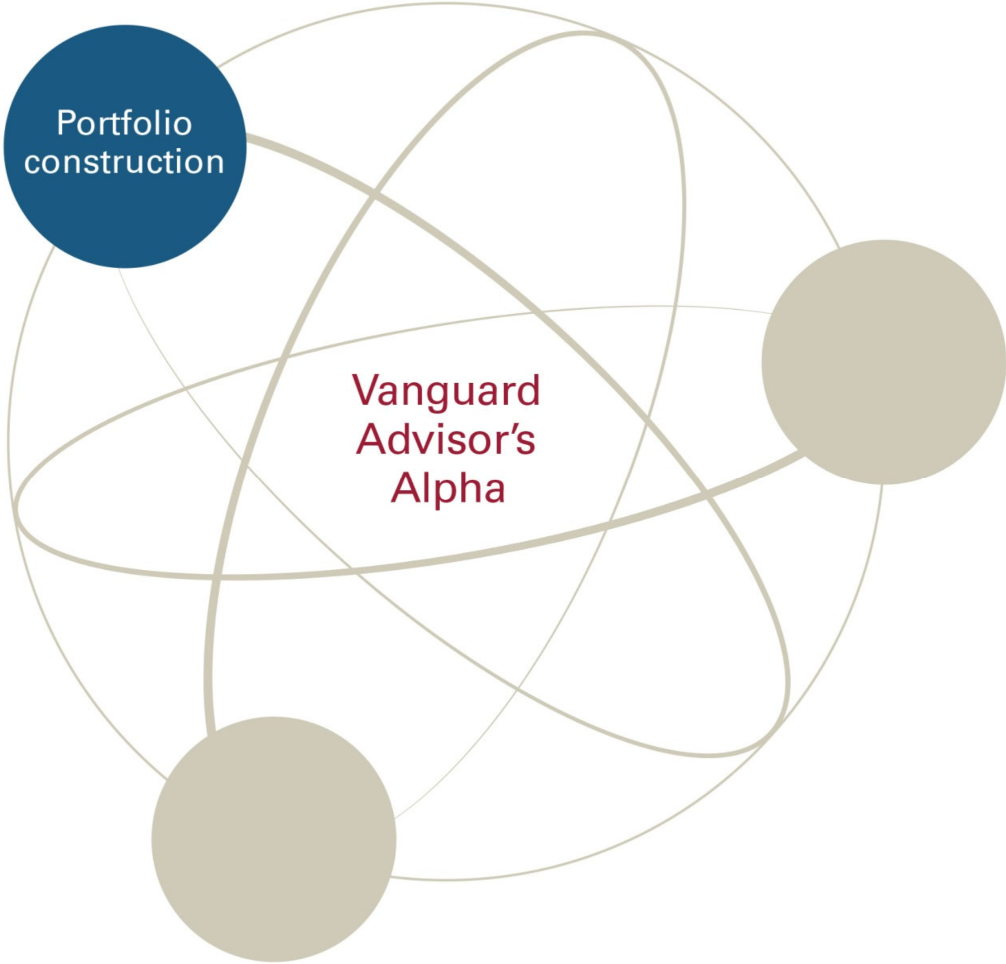
Portfolio construction

>0*	Asset allocation
~35–46 bps annually	Cost-effective implementation (expense ratios)
0–75 bps	Asset location
>0*	Total-return versus income investing



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Asset allocation

>0

Potential value added:

This value is deemed significant, but too unique to each investor to quantify, based on each investor's varying time horizon, risk tolerance, and financial goals

- Asset allocation and diversification are two powerful risk management tools
- One of the first things you do with clients is ascertain their risk tolerance, time horizon, and goals
- The initial plan assists with future behavioral coaching—sticking to the plan can add value

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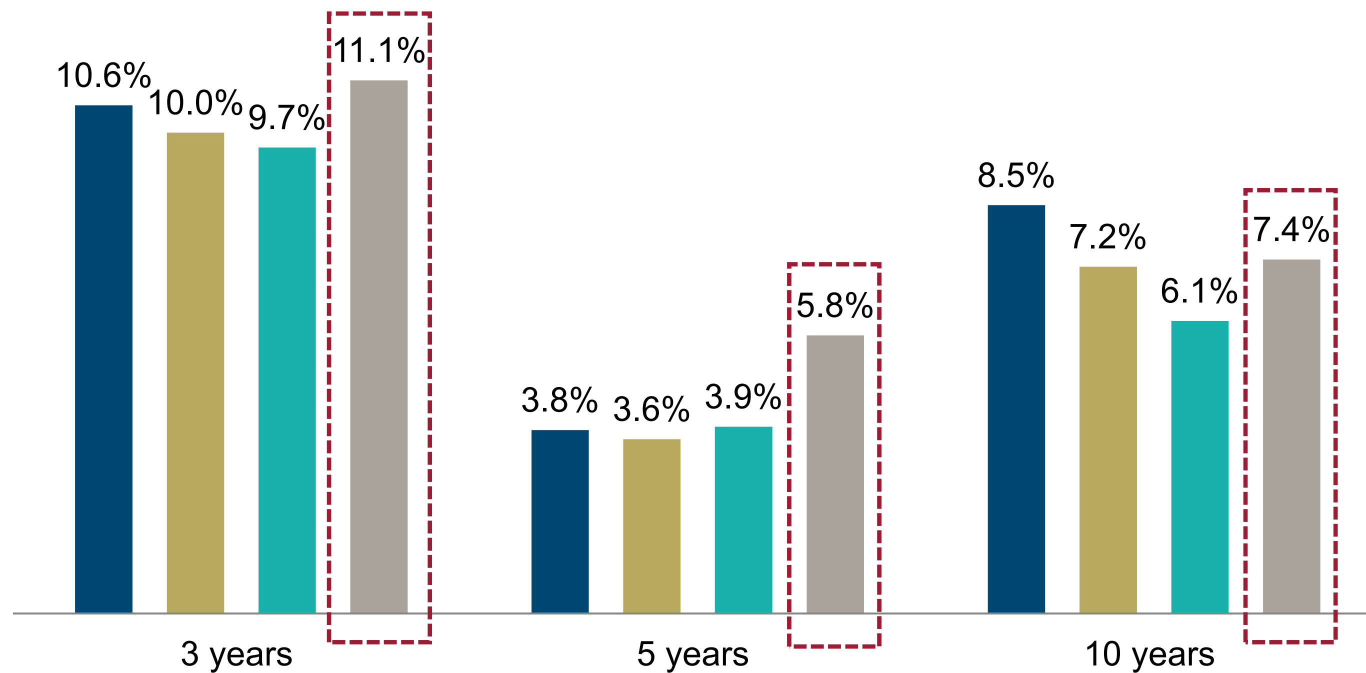
Asset allocation: Simplicity has been very competitive

NACUBO-Commonfund Study: 60% stock/40% bond portfolio has performed well against professionally managed endowments



Large endowments (10% of endowments) Medium endowments (39% of endowments)
Small endowments (51% of endowments) 60% stock/40% bond portfolio

Sources: Vanguard and NACUBO-Commonfund Study of Endowments, 2014.
Note: Data are as of June 30 for each year. Data through June 30, 2013. 60% stock/40% bond portfolio: Domestic equity (42%) is Dow Jones Wilshire 5000 Index through April 22, 2005, and the MSCI US Broad Market Index thereafter. Non-U.S. equity (18%) is MSCI All Country World Index ex USA. Bonds (40%) are Barclays U.S. Aggregate Bond Index. **Past performance is no guarantee of future returns. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.**

Cost-effective implementation

~35–46 bps annually

Potential value added:

This value-add is the difference between the average investor experience, measured by the asset-weighted expense ratio of the entire mutual fund and ETF industry, and the lowest-cost funds within the universe*

- Simple math: Gross returns – Costs (expense ratio, trading, taxes) = Net returns
- Lower costs are associated with better performance**, so consider costs during investment selection
- In a low-return environment, costs have a greater impact

Source: Vanguard calculations based on data from Morningstar, Inc., as of December 30, 2013.

* This value could be larger if using higher-cost funds than the asset-weighted averages.

** *The case for index-fund investing* (Philips, Kinniry, Schlanger, and Hirt, 2014).

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Cost-effective implementation (expense ratios)

Stocks/bonds	100%/0%	60%/40%	0%/100%
Asset-weighted expense ratio	0.61%	0.55%	0.47%
“Lowest of the low”	0.15	0.14	0.12
Cost-effective implementation (expense ratio bps)	**0.46**	**0.42**	**0.35**

Source: Vanguard calculations based on data from Morningstar, Inc., as of December 30, 2013.
Note: “Lowest of the low” category is the funds whose expense ratios ranked in approximately the lowest 7% of funds in our universe by fund count.

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Asset location

0–75
bps

Potential value added:

This value depends on the investor's asset allocation and "bucket" size (the breakdown of assets between taxable and tax-advantaged accounts)

- What is asset location? Allocation of assets between taxable and tax-advantaged accounts to maximize after-tax return
- May offer additional return in first year without additional risk
- Adds value each year—benefits compound over time

Asset location

Hypothetical 60% stock and 40% bond portfolio split evenly between taxable and tax-advantaged accounts

Taxable accounts	Tax-deferred accounts	Pre-tax return	After-tax return	Relative to optimal (Index equity)
Index equity (50%)	Taxable bonds (40%) and equity (10%)	6.60%	6.38%	—
Taxable bonds (40%) and index equity (10%)	Equity (50%)	6.60	6.08	–0.30%
Municipal bonds (40%) and index equity (10%)	Equity (50%)	6.24	6.19	–0.19
Active equity (50%)	Taxable bonds (40%) and equity (10%)	6.60	5.61	–0.77

Source: Vanguard.
Past performance is no guarantee of future results.
Note: Pre-tax and after-tax returns are based on the following assumptions: Taxable bond return, 3.00%; municipal bond return, 2.40%; index equity, 9.00% (1.80% for dividends, 0.45% for long-term capital gains, and 6.75% for unrealized gains); active equity, 9.00% (1.80% for dividends, 1.80% for short-term capital gains, 4.50% for long-term capital gains, and 0.90% for unrealized gains). This analysis uses a marginal U.S. income tax rate of 39.6% for income and short-term capital gains and 20% for long-term capital gains. These values do not assume liquidation. See *Asset Location for Taxable Investors* (Jaconetti, 2007) for details.

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Total-return versus income investing

>0

Potential value added:

This value is deemed significant, but too unique to each investor to quantify, based on each investor's varying time horizon, risk tolerance, and financial goals

- Better diversification, and less risk
- Potentially better tax efficiency
- Potentially longer preservation of retirement portfolio

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The advantages of a total-return approach

Total-return approach

Pros:

- Maintains asset allocation
- Provides broader diversification
- No factor, duration, or credit overweights
- Potentially increases tax efficiency
- Potentially increases the longevity of the portfolio
- Lowers rebalancing events

Con:

- More complicated to implement

Income-only approach

Pro:

- May be less complicated to implement

Cons:

- May shift asset allocation and sub-asset allocation
- Increases factor, duration, and credit risks
- Increases concentration risks
- Potentially reduces tax efficiency
- Potentially reduces longevity and future income generation
- Higher rebalancing events

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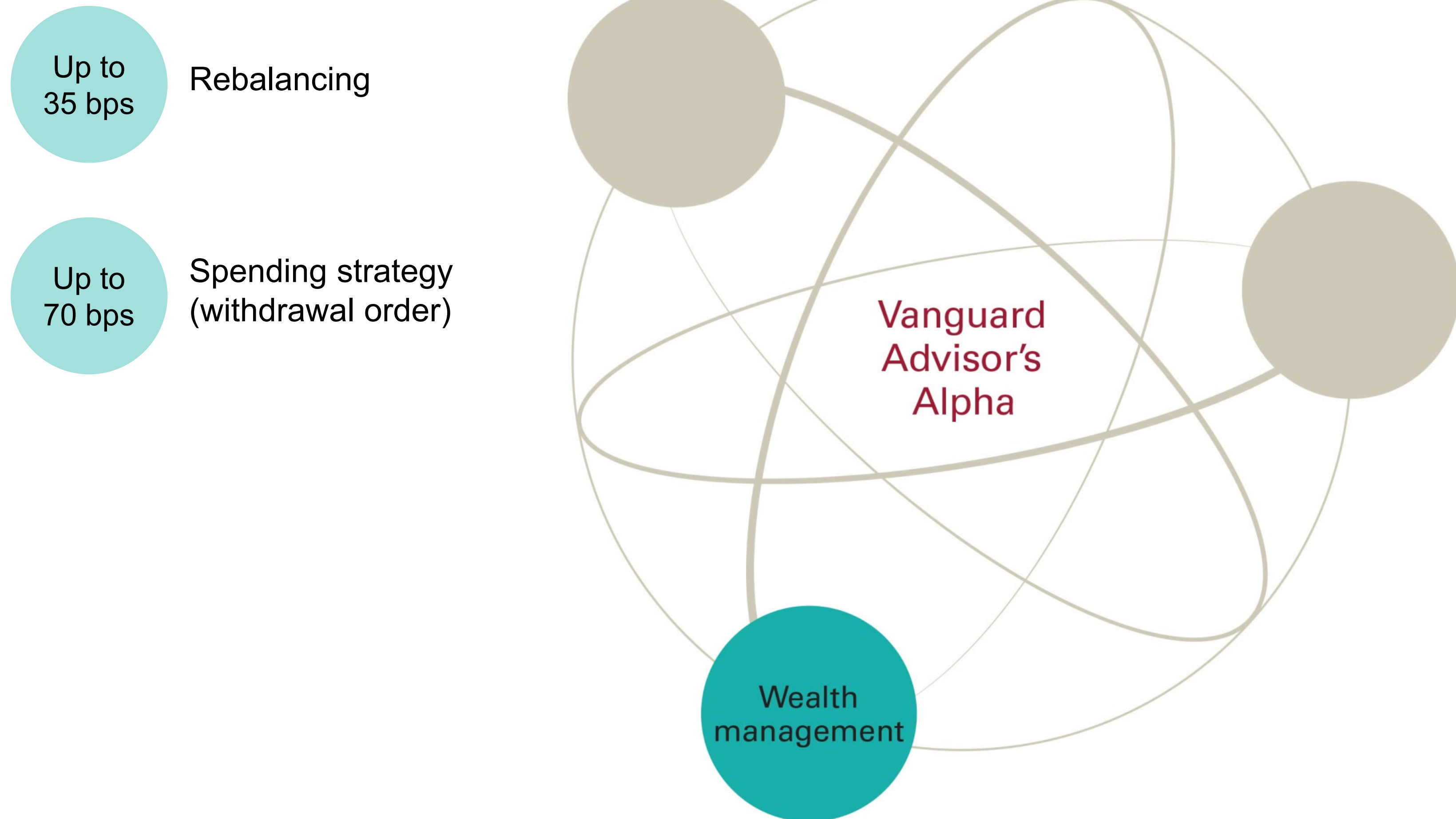
Wealth management



Source: *Putting a value on your value: Quantifying Vanguard Advisor's Alpha* (Kinniry, Jaconetti, DiJoseph, and Zilbering, 2014).

Rebalancing

Up to
35 bps

Potential value added:

The value is based on the annual rebalancing of a 60% stock/40% bond portfolio versus the same portfolio that is not rebalanced (and thus drifts, taking on more risk)

- Maintaining asset allocation over time is critical
- Goal of rebalancing: maintain risk of the portfolio, rather than maximize return
- Client commitment to allocation strategy increases the probability of achieving long-term goals

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Rebalancing

1960–2013	60% stocks/ 40% bonds	60% stocks/ 40% bonds (drift)	80% stocks/ 20% bonds
Average annualized return	9.1%	9.4%	9.7%
Average standard deviation	11.4	14.2	14.2

Source: Vanguard calculations using data from Thomson Reuters Datastream.

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Spending strategy: Withdrawal order

Up to
70 bps

Potential value added:

Depends on the "bucket" size (breakdown of assets between taxable and tax-advantaged accounts) and marginal tax bracket

- Wealth management is critical during the drawdown phase
- Spending strategies can:
  - Potentially minimize total taxes paid
  - Potentially increase clients' wealth and portfolio longevity

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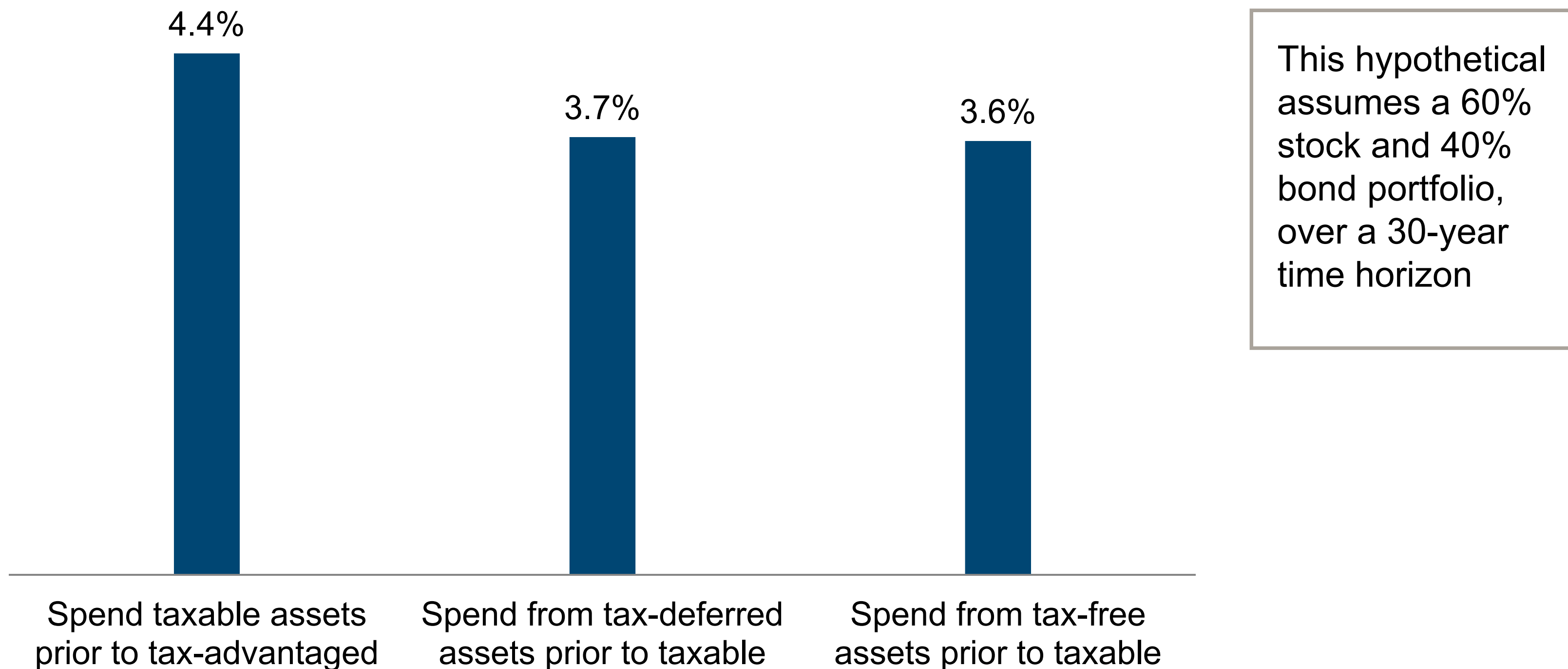
Spending strategy: Withdrawal order

Average internal rate of return (IRR) of different withdrawal-order strategies



This hypothetical assumes a 60% stock and 40% bond portfolio, over a 30-year time horizon

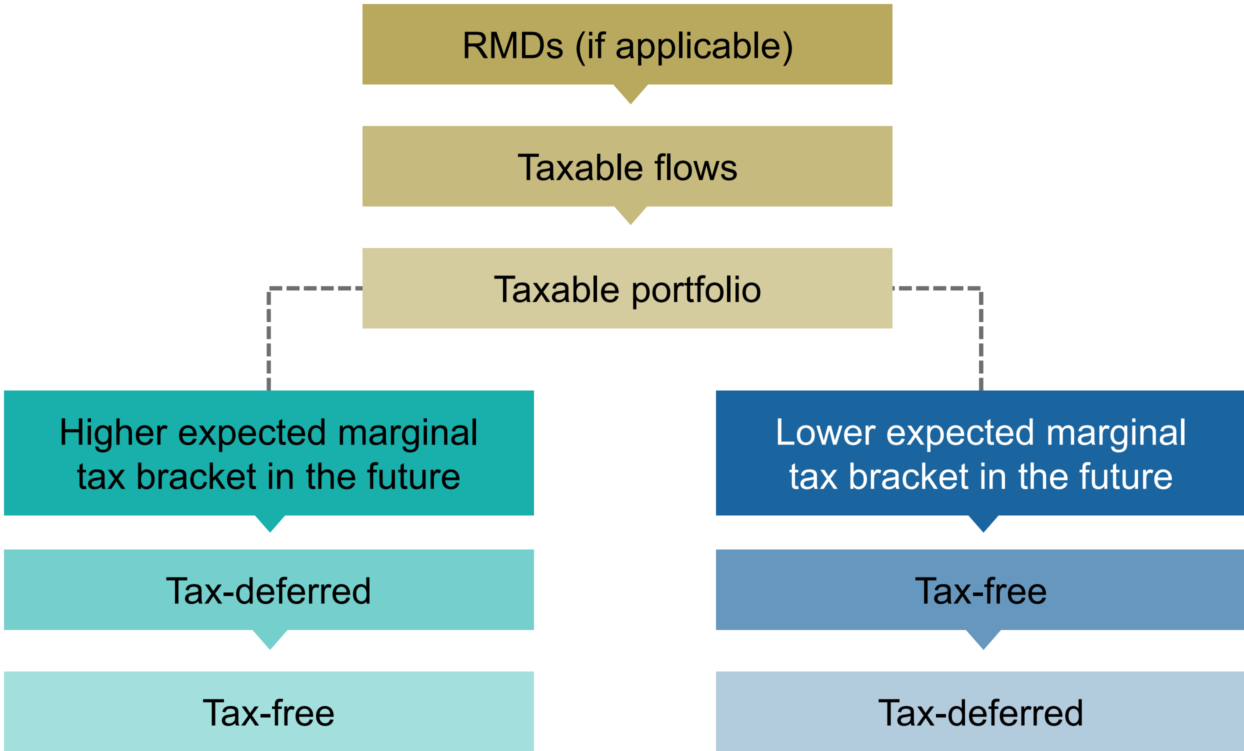
Source: Vanguard.

Note: **These hypothetical data do not represent the returns on any particular investment.** Each IRR is calculated by running the same 10,000 VCMM simulations through three separate models, each designed to replicate the stated withdrawal order strategy listed. Assumes 60% stock and 40% bond portfolio, 30-year time horizon, 39.6% marginal tax bracket, 20% long-term capital gains rate, 4% initial withdrawal rate.

IMPORTANT: The projections or other information generated by the VCMM regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. Distribution of return outcomes from VCMM, derived from 10,000 simulations for U.S. equity returns and fixed income returns. Simulations as of June 30, 2013. Results from the model may vary with each use and over time. For more information, please see the important information slide.

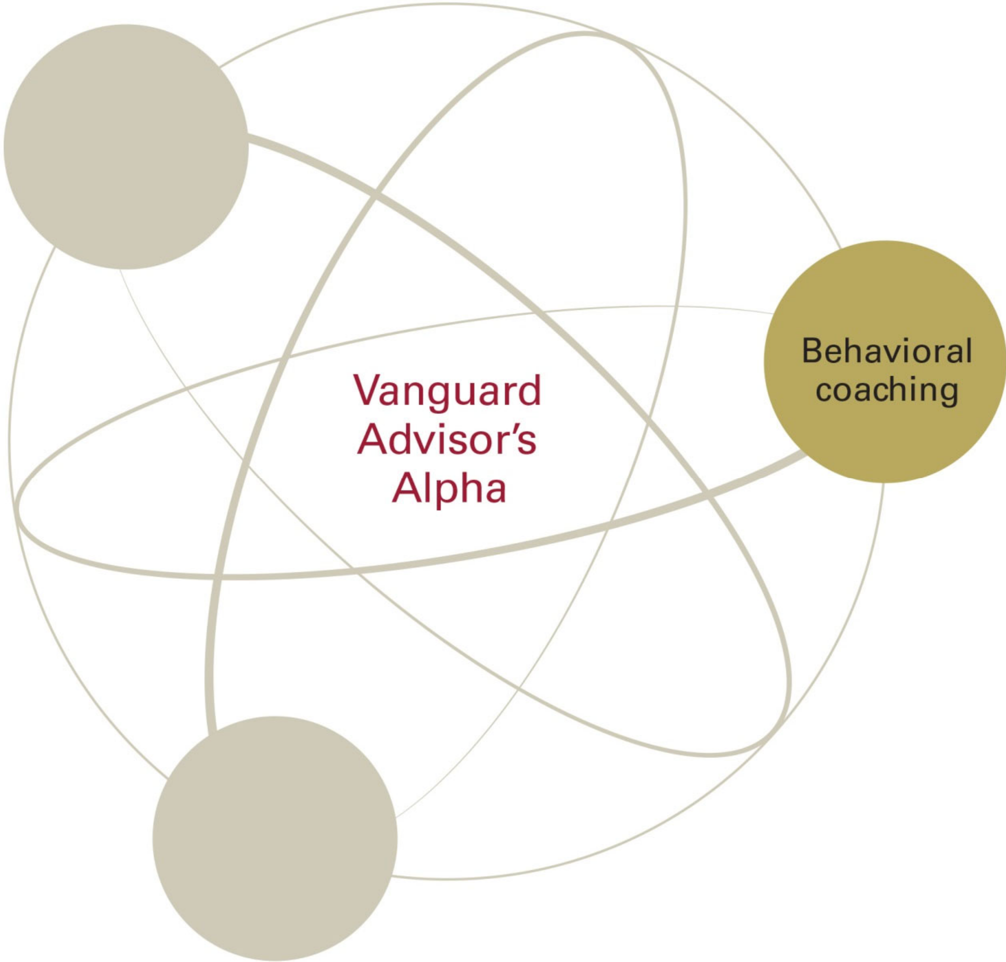
Spending strategy: Withdrawal order

Taxes can be minimized by following this recommended spending order



Behavioral coaching

150 bps or more — Behavioral coaching



Source: *Putting a value on your value: Quantifying Vanguard Advisor's Alpha* (Kinniry, Jaconetti, DiJoseph, and Zilbering, 2014).

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Behavioral coaching

150
bps or
more

Potential value added:

Vanguard research and other academic studies have concluded that behavioral coaching can add 1% to 2% in net return

- Help your clients maintain a long-term perspective and disciplined approach
- Market-timing and chasing performance or "hot investments" can be costly
- Add value by acting as the "emotional circuit breaker" in a bull or bear market

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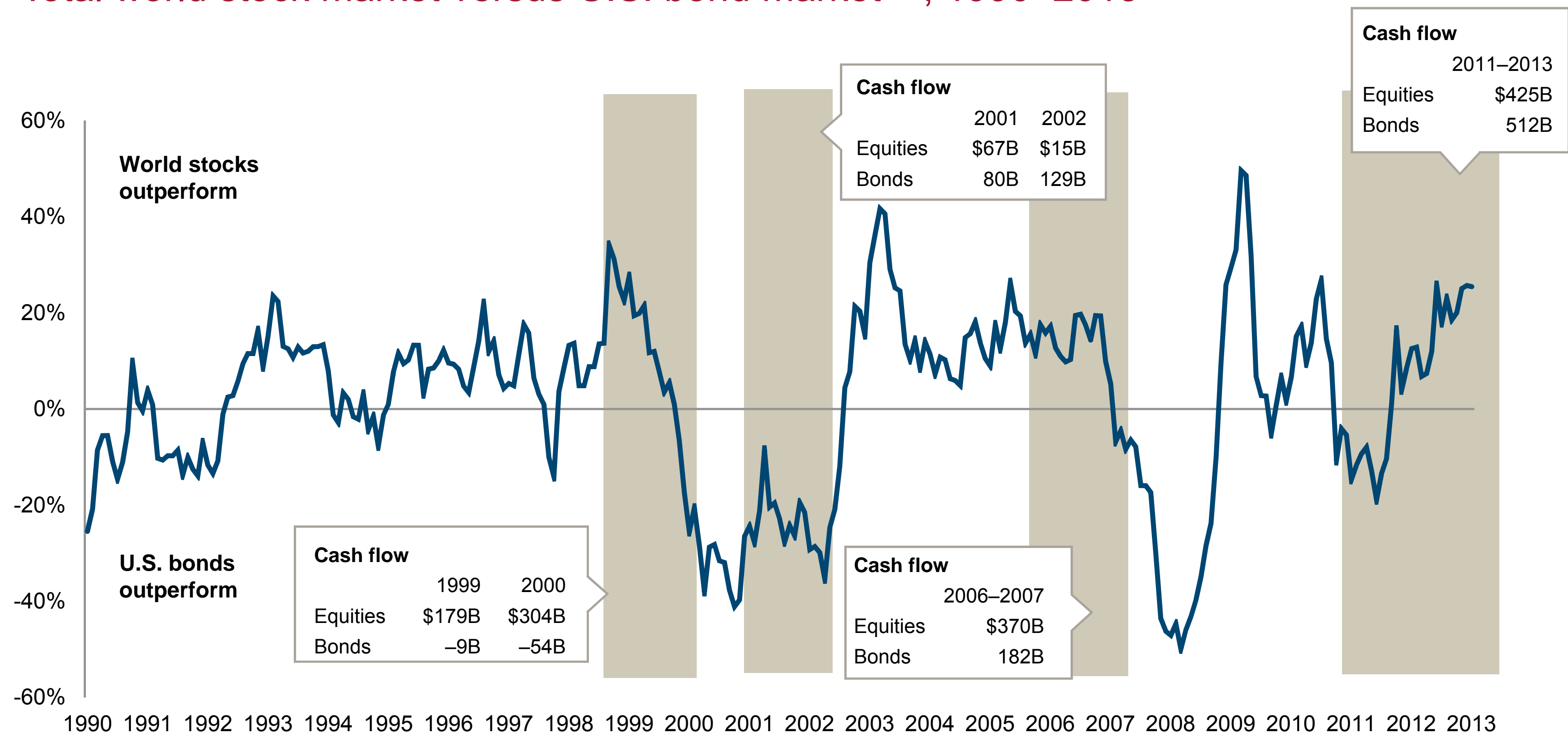
Behavioral coaching: Rebalancing, a proven strategy during market declines

A balanced, diversified investor has fared relatively well

Sources: Barclays, and Thomson Reuters Datastream, as of December 31, 2013.
Note: Stocks represented by Standard & Poor's 500 index. Bonds represented by Barclays U.S. Aggregate Bond Index. Each rebalanced monthly. Date label as of December 31 for each year. **Past performance is no guarantee of future results.** *The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.*

Behavioral coaching: Helping clients follow their best interests

Rolling 12-month excess returns*
Total world stock market versus U.S. bond market **, 1990–2013



Sources: Vanguard Investment Strategy Group, MSCI, and Barclays.
Note: Date label as of December 31 for each year.
Past performance is no guarantee of future results. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.
* Excess return is the difference between the return of broadly diversified world stocks and U.S. bonds.
** World stocks consist of the MSCI All Country World Index and U.S. bonds consist of the Barclays U.S. Aggregate Bond Index.

DALBAR's 20th Annual Quantitative Analysis of Investor Behavior (2014)

Best practices to avoid money-losing behavior:

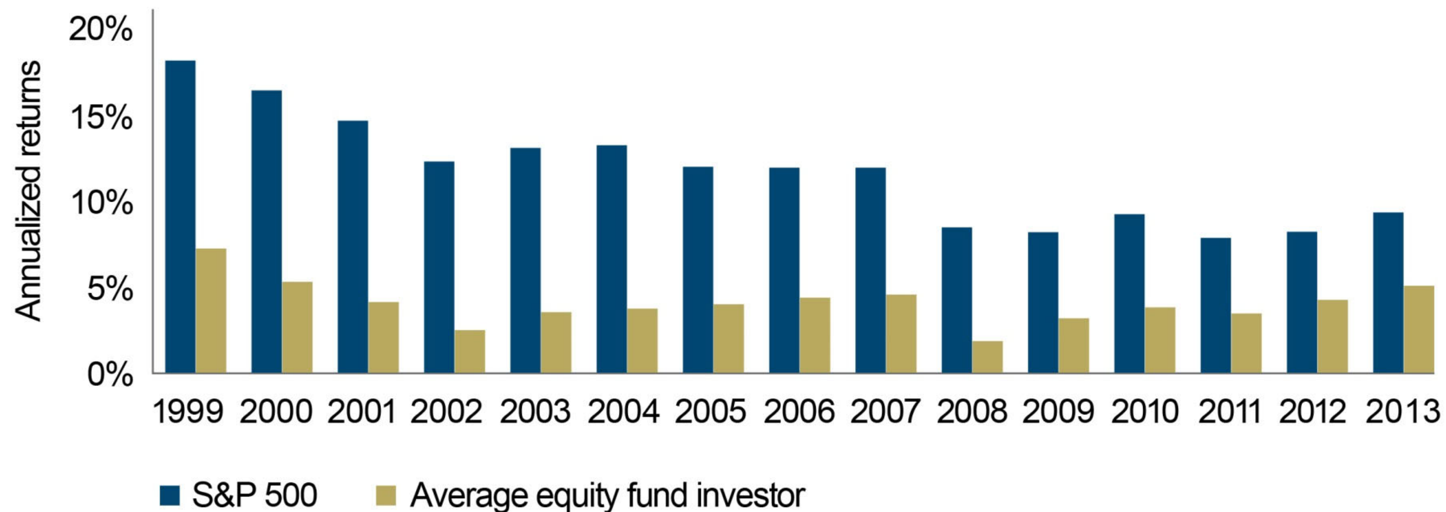
- Set expectations below market indexes
- Control exposure to risk
- Monitor risk tolerance
- Present forecast in terms of probabilities

"The future success in investment business will belong to those who manage prudently and relieve investors of the burden of learning the business themselves."

DALBAR's research and recommendations mirror Vanguard Advisor's Alpha

“The average investor cannot be above average”

S&P 500 versus average equity fund investor (20-year annualized returns*)



Successful practice is to explicitly set reasonable expectations, and not infer from historical records, market indexes, investors’ own experience, or media coverage

Source: DALBAR’s 20th Annual Quantitative Analysis of Investor Behavior (2014).
Past performance does not guarantee future results.
* The original analysis began in 1984. Between 1998 and 2002, the periods covered were less than 20 years. Since 2003, however, the long-term analyses have covered 20-year time frames.

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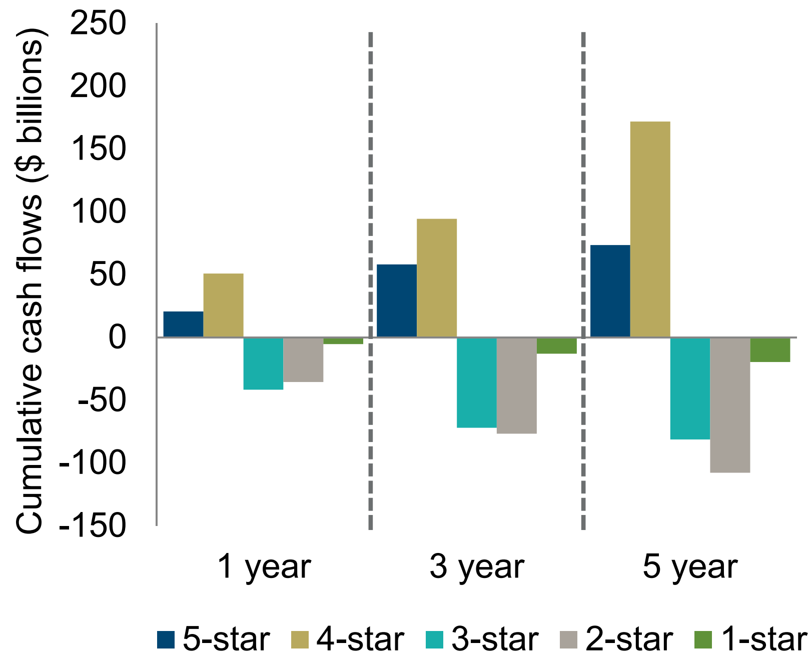
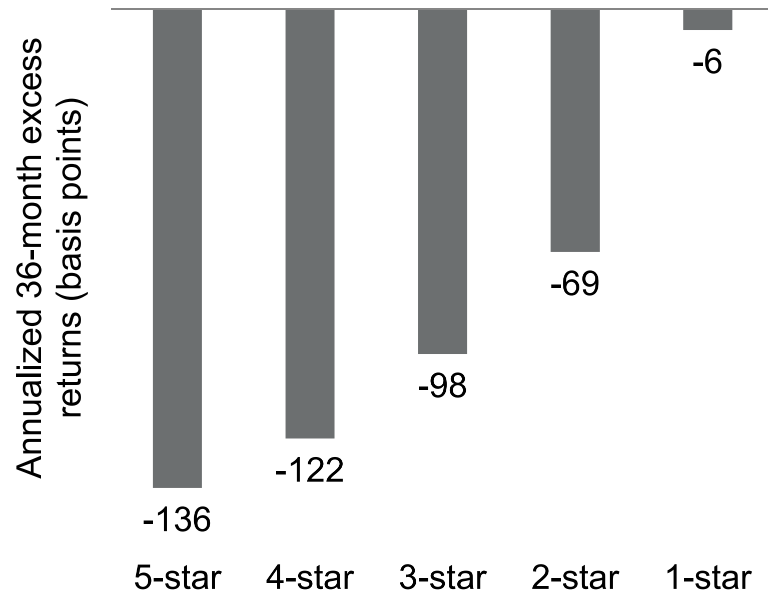
Behavioral coaching: Market-timing and performance chasing can reduce investor returns

Cash flows are associated with performance ratings



High ratings have not led to future outperformance



Source: Vanguard calculations using data provided by Morningstar, Inc., as of December 31, 2013.
Past performance does not guarantee future results.

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Quantification of Vanguard Advisor's Alpha

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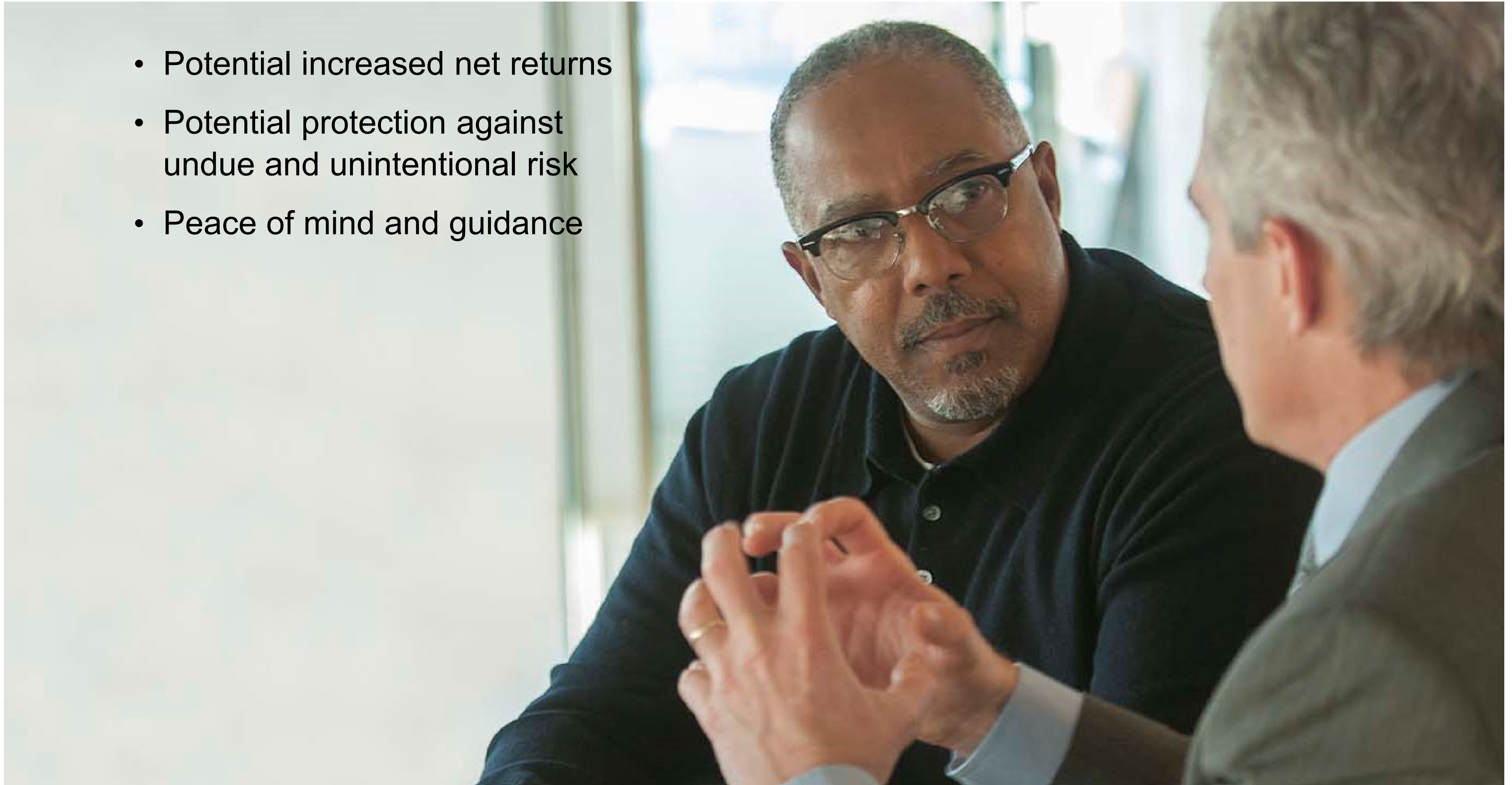
Advisor’s alpha win-win

Advisor’s alpha: A win for your clients



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Advisor's alpha: A win for your business

Time management

- Less time spent trying to outsmart the market
- More time spent with your clients and prospects

Client retention

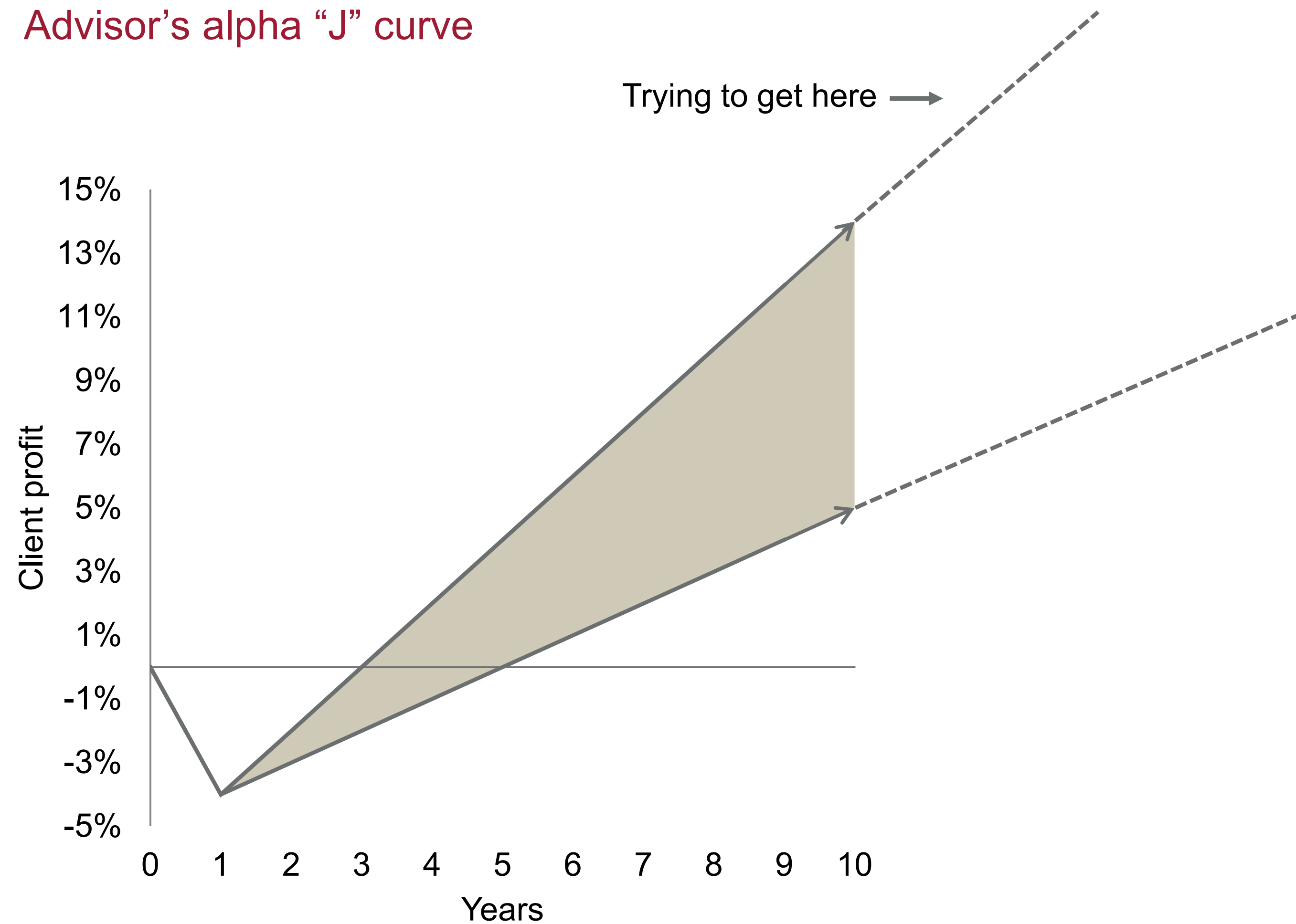
- You define your value proposition to your clients
- Keep clients by earning their trust
- "Best practices" to build your business

Practice growth

- Higher client balances
- Increased revenue
- Greater profitability
- More client referrals

Annuitizing your practice

Advisor's alpha "J" curve



Source: Vanguard.

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Action plan

Control what you can control:

- Have you reviewed your current practice?
- What aspects of the advisor's alpha framework can you implement in order to add more value?
- What pieces of this research might you incorporate to help tell your value proposition story?

Consult with your Vanguard sales executive to discuss tactical solutions to implement this framework

Important information

IMPORTANT: The projections or other information generated by the Vanguard Capital Markets Model™ regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. VCMM results will vary with each use and over time.

The VCMM projections are based on a statistical analysis of historical data. Future returns may behave differently from the historical patterns captured in the VCMM. More important, the VCMM may be underestimating extreme negative scenarios unobserved in the historical period on which the model estimation is based.

The Vanguard Capital Markets Model is a proprietary financial simulation tool developed and maintained by Vanguard's primary investment research and advice teams. The model forecasts distributions of future returns for a wide array of broad asset classes. Those asset classes include U.S. and international equity markets, several maturities of the U.S. Treasury and corporate fixed income markets, international fixed income markets, U.S. money markets, commodities, and certain alternative investment strategies. The theoretical and empirical foundation for the Vanguard Capital Markets Model is that the returns of various asset classes reflect the compensation investors require for bearing different types of systematic risk (beta). At the core of the model are estimates of the dynamic statistical relationship between risk factors and asset returns, obtained from statistical analysis based on available monthly financial and economic data from as early as 1960. Using a system of estimated equations, the model then applies a Monte Carlo simulation method to project the estimated interrelationships among risk factors and asset classes as well as uncertainty and randomness over time. The model generates a large set of simulated outcomes for each asset class over several time horizons. Forecasts are obtained by computing measures of central tendency in these simulations. Results produced by the tool will vary with each use and over time.

There is no guarantee that any particular asset allocation or mix of funds will meet your investment objectives or provide you with a given level of income.

The information contained herein does not constitute tax advice, and cannot be used by any person to avoid tax penalties that may be imposed under the Internal Revenue Code. Each person should consult an independent tax advisor about his/her individual situation.

All investing is subject to risk, including possible loss of principal. Diversification does not ensure a profit or protect against a loss.

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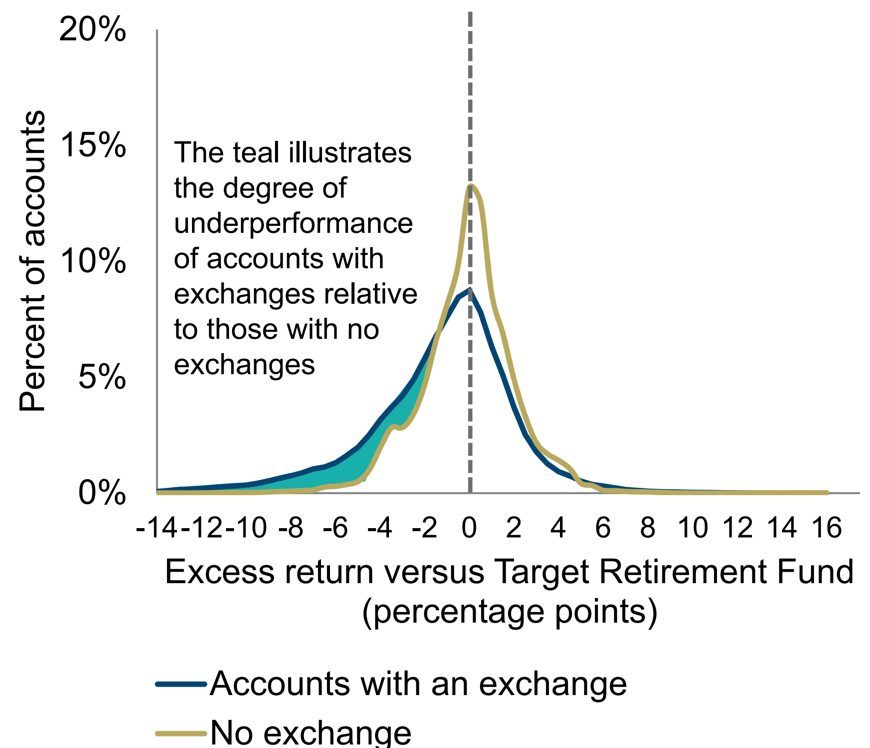
PID507359_DOLU05/28/2017(CE)_ML (DOLU05/06/2016)

Appendix

Behavioral coaching: Market-timing and performance chasing can reduce investor returns

- A recent Vanguard study analyzed the personal performance of more than 58,000 portfolios over five years ended December 31, 2012 (a tumultuous period in the market)
- The majority of investor returns trailed the target-date benchmark slightly
- Investors who made exchanges themselves fared considerably worse

Investors who made investment changes did not perform as well as those who did not



Past performance does not guarantee future results.
Notes: Average value with exchange, -1.50; average value without exchange, 0.19.

Source: Vanguard.

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