Putting a value on your value: Quantifying Vanguard Adviser's Alpha in the UK

Vanguard Research

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Francis M. Kinniry Jr., CFA, Colleen M. Jaconetti, CPA, CFP®, Michael A. DiJoseph, CFA, Yan Zilbering, Donald G. Bennyhoff, CFA and Georgina Yarwood

- The value proposition of advice is changing. The nature of what investors expect from advisers is changing. And, fortunately, the tools available to advisers are evolving as well.
- In creating the Vanguard Adviser's Alpha™ concept in 2001, we outlined how advisers could add value, or alpha, through relationship-oriented services such as providing cogent wealth management via financial planning, discipline and guidance, rather than by trying to outperform the market.
- Since then, our work in support of the concept has continued. This paper takes the Adviser's Alpha framework further by attempting to quantify the benefits that advisers can add relative to others who are not using such strategies. Each of these can be used individually or in combination, depending on the strategy.
- We believe implementing the Vanguard Adviser's Alpha framework can add about 3% in net returns for your clients and also allow you to differentiate your skills and practice. Like any approximation, the actual amount of value added may vary significantly, depending on clients' circumstances.

Acknowledgments: This paper is the most recent update of Vanguard research first published in 2014 under the same title. For additional information on the Vanguard Advisor's Alpha framework, see The Evolution of Vanguard Advisor's Alpha®. From Portfolios to People (2018) by Donald G. Bennyhoff, Francis M. Kinniry Jr., and Michael DiJoseph. The authors thank Christopher Celusniak for his contributions to the latest version.

The value proposition for advisers has always been easier to describe than to define. In a sense, that is how it should be, as value is a subjective assessment and necessarily varies from individual to individual. However, some aspects of investment advice lend themselves to an objective quantification of their potential added value, albeit with a meaningful degree of conditionality. At best, we can only estimate the 'value-add' of each tool, because each is affected by the unique client and market environments to which it is applied.

As the industry continues to gravitate toward fee-based advice, there is a great temptation to define an adviser's value-add as an annualised number. In this way, fees deducted annually for the advisory relationship could be justified by the 'annual value-add.'

However, although some of the strategies we describe here could be expected to yield an annual benefit – such as reducing expected investment costs or taxes – the most significant opportunities to add value do not present themselves consistently, but intermittently, and often during periods of either market duress or euphoria. These opportunities can pique an investor's fear or greed, tempting him or her to abandon a well-thought-out investment plan. In such circumstances, the adviser may have the opportunity to add tens of percentage points of value-add, rather than mere basis points[1], and may more than offset years of advisory fees.

However, the difference in your clients' performance if they stay invested according to your plan, as opposed to abandoning it, does not show up on any client statement. An infinite number of alternative histories might have happened had we made different decisions; yet, we only measure and/or monitor the implemented decision and outcome, even though the other histories were real alternatives.

For instance, most client statements don't keep track of the benefits of talking your clients into 'staying the course' in the midst of a bear market or convincing them to rebalance when it doesn't 'feel' like the right thing to do at the time. But their value and impact on clients' wealth creation is very real.

The quantifications in this paper compare the projected results of a portfolio that is managed using well-known and accepted best practices for wealth management with those that are not. Obviously, results will vary significantly.

Believing *is* seeing

What makes one car with four doors and wheels worth £300,000 and another £30,000? The answer differs from person to person. Vanguard Adviser's Alpha is similarly difficult to define consistently. For some investors without the time, willingness or ability to handle their financial matters, working with an adviser may bring peace of mind. They may simply prefer to spend their time doing something – anything – else. Maybe they feel overwhelmed by product proliferation in the fund industry.

The value of an adviser in this context is virtually impossible to quantify. Nonetheless, the overwhelming majority of mutual fund assets are advised, indicating that investors strongly value professional investment advice.

Investors who prepare their own tax returns have probably wondered whether a tax expert might do a better job. Might a tax expert save you from paying more tax than necessary? If you believe an expert can add value, you see value, even if the value can't easily be quantified in advance.

The same reasoning applies to other household services that we pay for – such as painting, house cleaning or landscaping. These can be considered "negative carry" services, in that we expect to recoup the fees we pay largely through emotional, rather than financial, means. You may well be able to wield a paint brush, but you might want to spend your limited free time doing something else. Or maybe, like many of us, you suspect that a professional painter will do a better job. Value is in the eye of the beholder.

It is understandable that advisers would want a less abstract or less subjective basis for their value proposition. Investment performance thus seems the obvious, quantifiable value-add. For advisers who promise better returns, the question is: Better than what? Those of a benchmark or 'the market'? Not likely, as evidenced by the historical track record of active fund managers who have regularly failed to consistently outperform benchmarks in pursuit of excess returns (Rowley et al., 2018). Better returns than those provided by an adviser or investor who doesn't use the value-added practices described here? Probably, as we discuss in the following sections.

1 One basis point equals 1/100 of a percentage point.

Indeed, investors have already hinted at their thoughts on the value of market-beating returns: Over the fifteen years ended 2018, cash flows into mutual funds in the US heavily favoured broad-based index funds and ETFs, rather than higher-cost actively managed funds (Bennyhoff and Walker 2016)[2]. In essence, investors have chosen investments that are generally structured to match their benchmark's return, less management fees. They seem to feel there is great value in investing in funds whose expected returns trail, rather than beat, their benchmarks' returns.

Why would they do this? Ironically, their approach is sensible, even if 'better performance' is the overall goal. Over the long term, index funds can be expected to better the return of the average mutual fund investor in their benchmark category, because of their lower average cost (Rowley et al., 2018).

A similar logic can be applied to the value of advice: Paying a fee for advice and guidance to a professional who uses the tools and tactics described here can add meaningful value compared with the average investor experience, currently advised or not. We are in no way suggesting that every adviser – charging any fee – can add value, but merely that advisers can add value if they understand how they can best help investors.

Similarly, we cannot hope to define here every avenue for adding value. For example, charitable-giving strategies, key-person insurance or business-continuity planning can all add tremendous value given the right circumstances, but they do not accurately reflect the 'typical' investor experience. The framework for advice that we describe in this paper can serve as the foundation upon which to construct an Adviser's Alpha.

2 Based on calculations from the Vanguard Adviser's Alpha research team using data from Morningstar.

Figure 1 is a high-level summary (organised into seven modules as detailed in the 'Vanguard Adviser's Alpha Quantification Modules' section, beginning on page 8) of the value we believe advisers can add by incorporating wealth-management best practices.

Based on our analysis, advisers can potentially add around 3% in net returns by using the Vanguard Adviser's Alpha framework. Because clients only get to keep, spend or bequest net returns, the focus of wealth management should always be on maximising net returns. We do not believe this potential 3% improvement can be expected annually; rather, it is likely to be very irregular. Further, the extent of the value will vary based on each client's unique circumstances and the way the assets are actually managed.

Obviously, our suggested strategies are not universally applicable to every client circumstance. Our aim is to motivate advisers to adopt and embrace these best practices and to provide a reasonable framework for describing and differentiating their value proposition. This paper focuses on the most common tools for adding value, encompassing both investment-oriented and relationship-oriented strategies and services.

Vanguard Adviser's Alpha: Good for your clients and your practice

For many clients, entrusting their future to an adviser is both a financial and an emotional commitment. Similar to finding a new doctor or other professional service provider, they typically enter the relationship based on a referral or other due diligence. They put their trust in someone and assume they will keep their best interests in mind.

Yet trust can be fragile, especially when the relationship is new. Once the relationship has been established, and the investment policy has been implemented, we believe the key to asset retention is keeping that trust.

First and foremost, clients want to be treated as people, not portfolios. This is why beginning the client relationship with a financial plan is so essential. Not only does it promote more complete disclosure about investments, but more importantly, it provides a perfect way for clients to share with the adviser what is of most concern to them: their goals, feelings about risk, their family and charitable interests. All of these topics are emotionally based, and a client's willingness to share this information is crucial in building trust.

Another important aspect of trust is delivering on your promises, which begs another question: how much control do you actually have over the services promised? At the start of the client relationship, expectations are set regarding the services, strategies and performance that the client should anticipate from you. Some aspects, such as client contact and meetings, are entirely within your control. Recent surveys suggest that clients want more contact and responsiveness from their advisers (Bennyhoff, Kinniry and DiJoseph, 2018).

The research cited not being proactive in contacting clients and not returning phone calls or emails in a timely fashion as among the top reasons investors changed financial advisers. In a fee-based practice, an adviser is paid the same whether he or she makes a point of calling clients just to ask how they're doing or calls only when suggesting a change in their portfolio. A client's perceived value-add from the 'Hey, how are you doing?' call is likely to be far greater.

Figure 1: Vanguard quantifies the value-add of best practices in wealth management

Vanguard's Adviser's Alpha strategy modules	Module number	Value-add relative to 'average' client experience (in basis points of return)
Suitable asset allocation using broadly diversified funds/ETFs	I	> 0* bps
Cost-effective implementation (expense ratios)	II	29 - 44 bps
Rebalancing	III	0 - 48 bps
Behavioural coaching	IV	150 bps
Tax allowances and asset location	V	0 - 32 bps
Withdrawal order for client spending	VI	0 - 153 bps
Total-return versus income investing	VII	> 0* bps
Potential value added		About 3%

Notes: *Return value-add for Modules I and VII was significant but too variable by individual investor to quantify. See page 8 onwards for detailed descriptions of each module. Also for 'Potential value added', we did not sum the values because there can be interactions between the strategies. Bps = basis points.

Source: Vanguard.

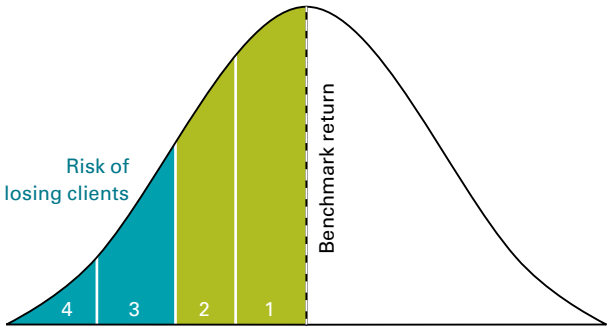
This is not to say that performance is unimportant. Although advisers cannot control performance, they can choose the strategies upon which to build their practice. For example, advisers decide how strategic or tactical they want to be with their investments, or how far they are willing to deviate from the broad-market portfolio.

As part of this decision process, it's important to consider how committed you are to a strategy, why someone else may be willing to commit to the other side of the strategy, which party has more knowledge or information and the holding period necessary to see the strategy through. For example, opting for an investment process that deviates significantly from the broad market may work extremely well when you are 'right', but could be disastrous if your clients lack the patience to stick with it during difficult times.

Most people do not like change. They tend to have an affinity for inertia and, in the absence of a compelling reason not to, are inclined to stick with the status quo. What would it take for a long standing client to leave your practice? The return distribution in **Figure 2** illustrates where, in our opinion, the risk of losing clients increases. Although outperformance of the market is possible, history suggests that underperformance is more probable.

Significantly tilting your clients' portfolios away from a market-capitalisation-weighted portfolio or engaging in large tactical moves can result in meaningful deviations from the market benchmark return. As shown in **Figure 2**, the farther a portfolio return moves to the left — that is, the amount by which the return underperforms the benchmark return — the greater the likelihood that a client will remove assets from the advisory relationship.

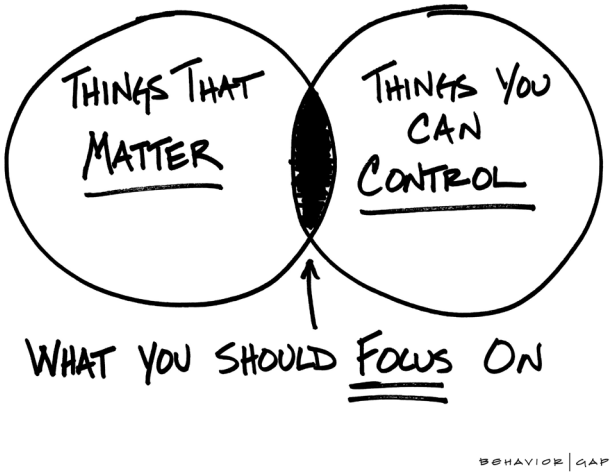
Figure 2: Hypothetical return distribution for portfolios that significantly deviate from a market-cap weighted portfolio



1. Client asks questions
2. Client pulls some assets
3. Client pulls most assets
4. Client pulls all assets

Source: Vanguard.

Carl Richards, CFP®, a popular author and media figure in investor education, is known for creating illustrations that bring immediate clarity to complex financial issues. The sketch shown at right encapsulates not only the basic framework of Vanguard Adviser's Alpha but the essence of how we believe investors and advisors should view the entire investing process. Understand what's important, understand what you can control, and focus your time and resources accordingly.



Note: Reproduced by permission of Carl Richards.

The markets are uncertain and cyclical – but your practice doesn't have to be. To take one example, an adviser may believe that a portfolio tilted toward mid-cap value oriented equities will outperform over the long run. However, they will need to keep clients invested over the long run for this belief to have the possibility of paying off. Historically, there have been periods – sometimes protracted – in which mid-value has trailed the broad market (see **Figure 3**).

It's reasonable to expect this type of cyclicality. But remember, that your clients' trust is fragile. Even if you have a deep client relationship with well-established trust, periods of significant underperformance – such as the 12- and 60-month return differentials shown in **Figure 3** – can undermine this trust. (**Appendix 1** highlights performance differentials for some of these other market areas).

We are not suggesting that market deviations are unacceptable, but rather that you should carefully consider the size of those deviations, given markets' cyclicality and investor behaviour. As **Figure 3** shows, there is a significant performance differential between allocating 50% of a global equity portfolio to mid-value versus allocating 10% of it to mid-value. As expected, the smaller the deviation from the broad market, the tighter the tracking error and performance differential. With this in mind, consider allocating a significant portion of your clients' portfolios to the 'core', which we define as broadly diversified, low-cost, market-cap-weighted investments (see **Figure 4**) – limiting the deviations to a level that aligns with average investor behaviour and your comfort as an advisory practice.

For advisers in a fee-based practice, substantial deviations from a core approach to portfolio construction can have major implications and result in an asymmetric payoff. Because investors commonly hold the majority of their investable assets with a primary adviser, the adviser has less to gain than lose if the portfolio underperforms instead. Although the adviser might gain a little more in assets from success, they might lose some or even all of the client's assets in the event of a failure. So, when considering deviations from the market, make sure your clients and your practice are prepared for all the possible implications.

'Annuitising' your practice to 'infinity and beyond'

In a world of fee-based advice, assets reign. Why? Acquiring clients is expensive, requiring significant investment of your time, energy and money. Developing a financial plan can take many hours and require multiple meetings. **Figure 5** demonstrates that these client costs tend to be concentrated at the beginning of the relationship, if not actually before (in terms of adviser's overhead and preparation), and that they subsequently moderate significantly over time. In a transaction-fee world, this is where most client-relationship revenues occur, more or less as a 'lump sum.' However, in a fee-based practice, the same assets would need to remain with an adviser for several years to generate the same revenue. Hence, assets – and asset retention – are paramount.

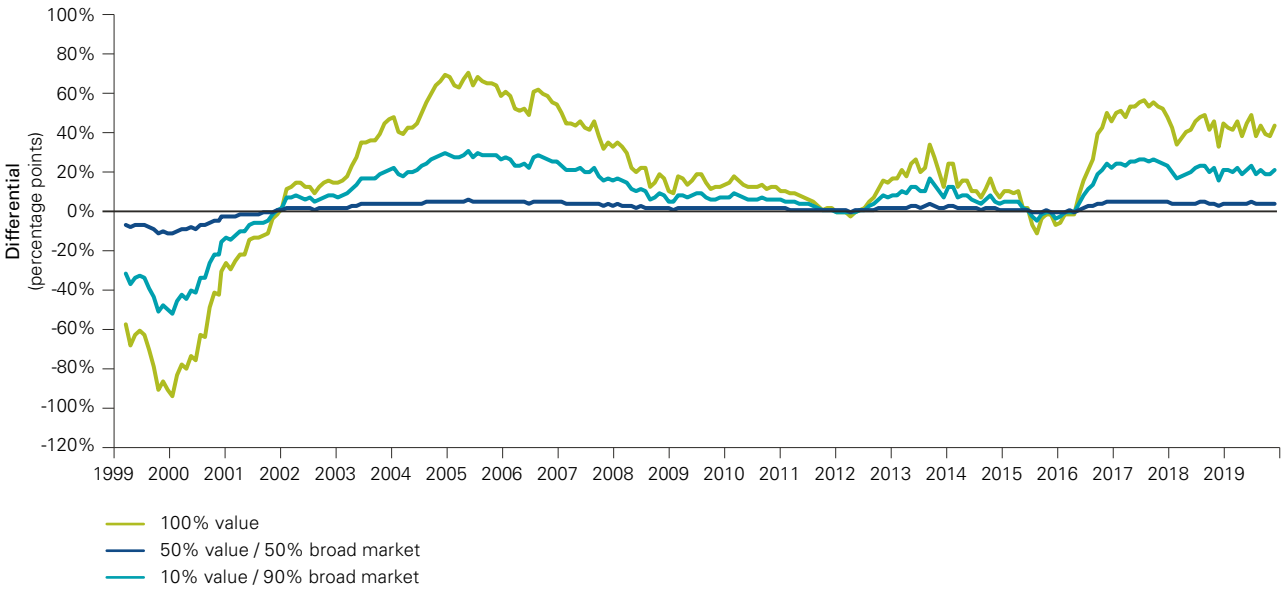
Conclusion

'Putting a value on your value' is as subjective and unique as each individual investor. For some, the value of working with an adviser is peace of mind. For others, we found that working with an adviser can add around 3% in net returns when following the Vanguard Adviser's Alpha framework for wealth management. This increase should not be viewed as an annual value-add, but is likely to be intermittent. Some of the best opportunities to add value occur during periods of market stress or euphoria when clients are tempted to abandon their well-thought-out investment plans.

Although the strategies discussed in this paper are available to every adviser, the applicability – and resulting value added – will vary by client circumstance (time horizon, risk tolerance, financial goals, portfolio composition and tax bracket, to name a few) and adviser implementation. Our analysis and conclusions are meant to motivate you to adopt and embrace these best practices as a framework for describing and differentiating your value proposition.

The Vanguard Adviser's Alpha framework is not only good for your clients but also good for your practice. With the compensation structure for advisers evolving from a commission- and transaction-based system to a fee-based asset management framework, assets – and asset retention – are paramount. Following this framework can provide you with additional time to spend communicating with your clients and can increase client retention by avoiding significant deviations from the broad-market performance – thus taking your practice to 'infinity and beyond'.

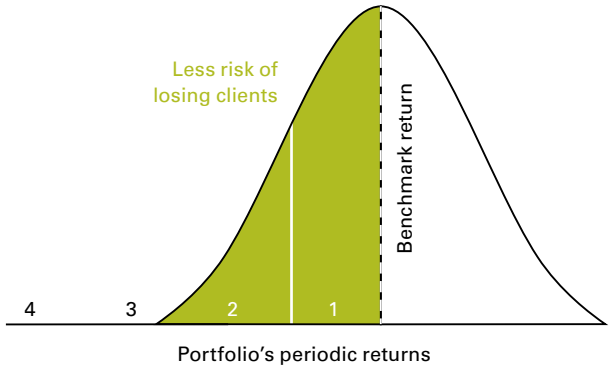
Figure 3: Relative performance of mid-value versus the broad market



	12-months		60-months	
Largest performance differentials	Outperform	Underperform	Outperform	Underperform
100% mid-value	38.7%	-21.5%	71.8%	-95.5%
50% mid-value / 50% broad market	18.0%	-11.2%	30.8%	-53.3%
10% mid-value / 90% broad market	3.4%	-2.3%	5.5%	-11.7%

Notes: Broad global equity is represented by the MSCI All Country World Index; Global mid-value equity is represented by the MSCI All Country World Mid-Value Index. Data are in sterling to 31 December 2019.
Sources: Vanguard calculations, based on data from Thomson Reuters Datastream and Factset.
Past performance is not a reliable indicator of future results.

Figure 4: Hypothetical return distribution for portfolios that closely resemble a market-cap weighted portfolio



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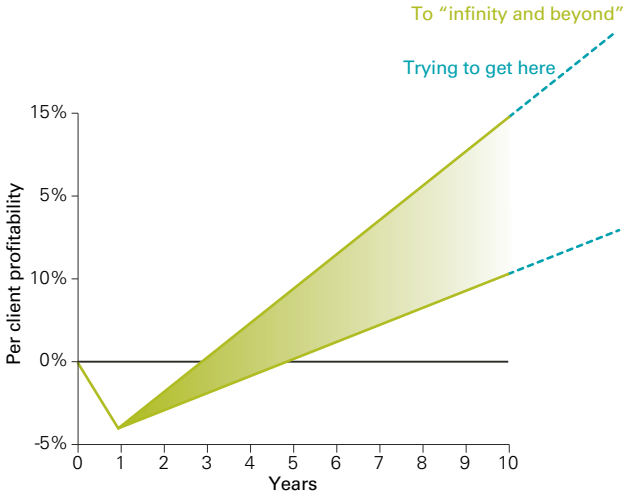
Source: Vanguard.

Figure 5: Adviser's Alpha 'J' curve



Source: Vanguard.

Vanguard Advisor's Alpha Quantification Modules

For accessibility, our supporting analysis is included here as a separate section. Also for easy reference, we have reproduced below our chart providing a high-level summary of wealth-management best-practice tools and their corresponding modules, together with the range of potential value we believe can be added by following these practices.

Figure 1: Vanguard quantifies the value-add of best practices in wealth management

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Suitable asset allocation using broadly diversified funds/ETFs	I	> 0* bps
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Potential value added		About 3%

Notes: *Return value-add for Modules I and VII was significant but too variable by individual investor to quantify. See page 8 onwards for detailed descriptions of each module. Also for 'Potential value added', we did not sum the values because there can be interactions between the strategies. Bps = basis points.

Source: Vanguard.

Module I. Asset allocation

Potential value-add: Value is deemed significant but impossible to quantify as it is unique to each investor's varying time horizon, risk tolerance, and financial goals.

Asset allocation refers to the percentage of a portfolio invested in various asset classes such as stocks, bonds and cash investments, according to the investor's financial situation, risk tolerance and time horizon. It is the most important determinant of the return variability and long-term performance of a broadly diversified portfolio that engages in limited market-timing (Davis et al., 2007).

We believe a sound investment plan begins with an individual's investment policy statement, which outlines the financial objectives for the portfolio as well as any other pertinent information such as the investor's asset allocation, annual contributions to the portfolio, planned expenditures and time horizon. Unfortunately, many ignore this critical effort, in part because it can be very time-consuming, detail-oriented and tedious. But, the financial plan is integral to success; it's the blueprint for a client's entire financial house and, done well, provides a firm foundation on which all else rests.

Starting with a well-thought-out plan can not only ensure that clients will be in the best position possible to meet their long-term financial goals, but can also form the basis for future behavioural coaching. Whether the markets have been performing well or poorly, you can help your clients cut through the noise they hear suggesting that if they're not making changes in their investments, they're doing something wrong. Almost none of what investors are hearing pertains to their specific objectives. Market performance and headlines change far more often. Thus, not reacting to the ever-present noise and sticking to the established plan can add tremendous value. The process sounds simple but has proven to be very difficult for investors and advisers alike.

Asset allocation and diversification are two of the most powerful tools advisers can use to help their clients achieve their financial goals and manage investment risk. Since the bear market in the early 2000s, many investors have embraced more complicated portfolios, with more asset and sub-asset classes, than in the past. This is often attributed to equities having two significant bear markets and a 'lost decade,' as well as very low yields on traditional high-grade bonds. What is often missed is that forward-return expectations should be proportional to forward-risk expectations. It is rare to expect higher returns without a commensurate increase in risk.

One way to demonstrate that a traditional long-only, highly liquid, investable portfolio can be competitive is to compare a portfolio of 60% equities/40% bonds to the endowments studied by NACUBO-Commonfund (2020), as shown in **Figure I-1**. The endowment institutions studied have incredibly talented professional staff as well as unique access, so replicating or even coming closer to their performance would be a tough task. And yet, a portfolio constructed using traditional asset classes – domestic and non-domestic equities and bonds – held up quite well, outperforming the vast majority (90%) of these endowment portfolios.

Although the traditional 60% equity/40% bond portfolio may not hold as many asset classes as the endowments, it should not be viewed as unsophisticated. These asset classes and the investable index funds and ETFs that track them are perfectly suitable. For example, a diversified portfolio using broad-market index funds gives an investor exposure to more than 9,000 individual equities and 12,000 individual bonds – representing the majority of market-cap coverage for equities and bonds, respectively. Better yet, the tools for implementation, such as mutual funds and ETFs, can be very efficient – that is, broadly diversified, low-cost, tax-efficient and readily available.

Taking advantage of these strengths, assets can be allocated using only a small number of funds. Too simple to charge a fee for, some advisers say, but simple isn't simplistic. A portfolio that provides broad asset-class diversification, low-costs and return transparency can enable most investors to adopt the investment strategy with confidence and better endure the inevitable ups and downs in the markets. Complexity is not necessarily sophisticated, it's just complex.

Simple is a strength, not a weakness, and can be used to promote better client understanding of asset allocation and of how returns are derived. When incorporating index funds or ETFs as the portfolio's core, simplicity and transparency are enhanced, as the risk of portfolio tilts (a source of substantial return uncertainty) is minimised. These features can be used to anchor expectations and help keep clients invested when headlines and emotions tempt them to abandon the investment plan.

Figure I-1. Performance comparison of endowments and a traditional 60% stock/40% bond portfolio

	Small endowments (39% of endowments)	Medium endowments (47% of endowments)	Large endowments (14% of endowments)	60% stock / 40% bond portfolio
1 year	5.3%	5.1%	5.9%	6.8%
3 years	8.2%	8.6%	9.5%	8.6%
5 years	4.9%	5.0%	6.1%	6.0%
10 years	8.0%	8.2%	9.0%	9.1%
15 years	5.8%	6.4%	7.6%	7.0%
30 years	7.3%	8.2%	9.8%	8.0%

Notes: Data are as of June 30 for each year. Data through 30 June, 2019. 60% stock/40% bond portfolio: Domestic equity (42%) is Dow Jones Wilshire 5000 Index through 22 April, 2005, and MSCI US Broad Market Index thereafter. Non-US equity (18%) is MSCI All Country World Index ex USA. Bonds (40%) are Barclays U.S. Aggregate Bond Index.

Source: Vanguard and 2019 NACUBO-Commonfund Study of Endowments (2020).

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.

Module II. Cost-effective implementation

Potential value-add: 44 bps annually, by moving to low-cost funds. This 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 of these funds. This value could be larger if compared with higher-cost funds.

Cost-effective implementation is a critical component of every adviser's tool kit and is based on simple arithmetic: gross return minus costs (expense ratios, trading or frictional costs and taxes) equals net return. Every pound paid for management fees, trading costs and taxes is a pound less of potential return for clients. And, for fee-based advisers, this equates to lower growth for their assets under management, the base from which their fee revenues are calculated. As a result, cost-effective implementation is a 'win-win' for clients and advisers alike.

If low costs are associated with better investment performance (and research has repeatedly shown this to be true), then costs should play a role in an adviser's investment selection process. With the recent expansion of the ETF marketplace, advisers now have many more investments to choose from – and ETF costs tend to be among the lowest in the fund industry.

Expanding on Vanguard's previous research[3], which examines the link between net expense ratios and net cash inflows over the past decade through 2017 in the US, we found that a UK investor could save from 29 bps to 44 bps annually by moving to low-cost funds, as shown in **Figure II-1**.

By measuring the asset-weighted expense ratio of the entire mutual fund and ETF industry across various investment categories, we found that, depending on asset allocation, the average investor pays between 46 bps annually for an all-bond portfolio and 66 bps annually for an all-equity portfolio, while the average investor in the lowest quartile of funds can expect annually to pay between 17 bps (all-bond portfolio) and 22 bps (all-equity portfolio). This includes only the total expense ratio or ongoing charges figure (TER or OCF) and, by some measures, is conservative when taking into account total investment costs.

This value-add has nothing to do with market performance. When you pay less, you keep more, regardless of whether the markets are up or down. In fact, in a low-return environment, costs are even more important because the lower the returns, the higher the proportion that is assumed by fund expenses. In comparison to higher-cost funds than the asset-weighted average shown in **Figure II-1** (29 bps to 44 bps), the increase in value could be even higher than stated here.

Figure II-1. Asset-weighted expense ratios versus 'low-cost' investing

Equity/bond mix (%)	100/0	80/20	60/40	50/50	40/60	20/80	0/100
Asset-weighted expense ratio (AWER)	0.66	0.62	0.58	0.56	0.54	0.50	0.46
Lowest Quartile AWER (Q1)	0.22	0.21	0.20	0.19	0.19	0.18	0.17
Cost-effective implementation (AWER vs. Q1)	0.44	0.41	0.38	0.36	0.35	0.32	0.29

Notes: Fund universe includes funds available for sale in the UK from the following Morningstar categories: UK equity – flex cap, large-cap blend, large-cap growth, large-cap value, mid-cap, small-cap; Europe equity – Europe OE: flex-cap, large-cap blend, large-cap growth, large-cap value, mid-cap, small-cap; euro zone equity – flex-cap, large-cap, mid-cap, small-cap; global– flex-cap, large-cap blend, large-cap growth, large-cap value, small-cap; US equity – flex-cap, large-cap blend, large-cap growth, large-cap value, mid-cap, small-cap; emerging markets equity – global emerging markets, BRIC, EMEA, emerging Europe, global emerging markets small/mid-cap, global frontier markets; Europe bond – EUR diversified; US bond – USD diversified; global bond – global un-hedged bond; UK bonds – UK diversified, UK government. Calculations based on annual report expense ratios, where unavailable semi-annual report expense ratios are used instead.

Source: Vanguard calculations, based on data from Morningstar as of 31 December 2019.

3 See the Vanguard research paper *Investors Are 'Voting With Their Feet'* on Costs (Bennyhoff and Walker, 2016).

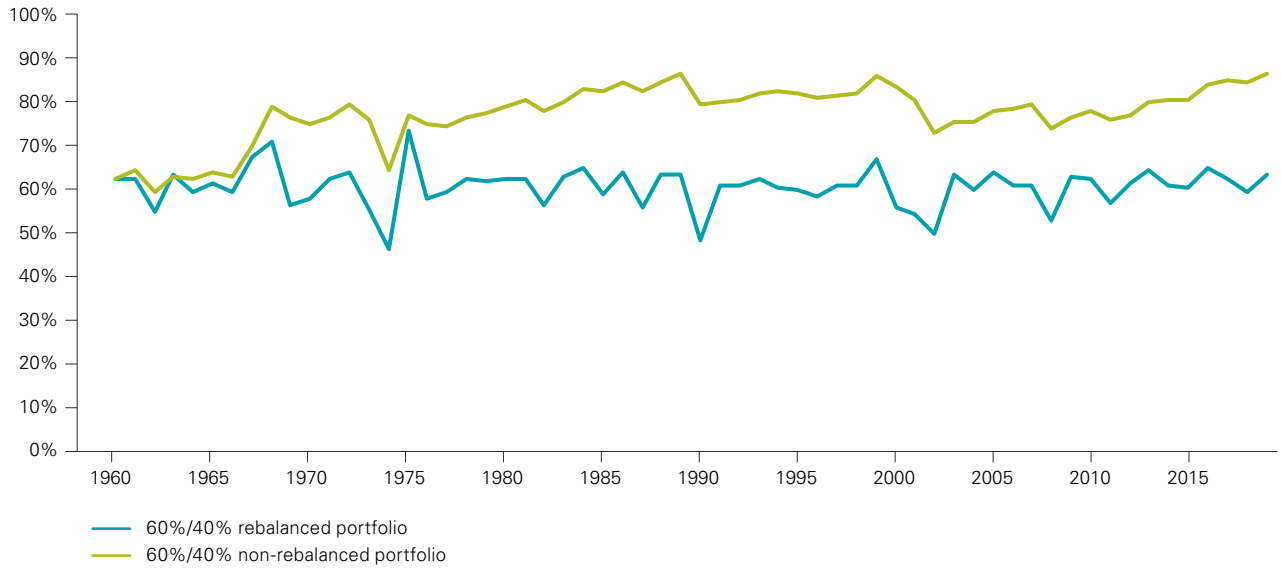
Module III. Rebalancing

Potential value-add: Up to 48bps when risk-adjusting a 60% stock/40% bond portfolio that is rebalanced annually versus the same portfolio that is not rebalanced (and thus drifts).

Given the importance of selecting an asset allocation, it's also vital to maintain that allocation. As investments produce different returns over time, the portfolio is likely to drift from its original target allocation, acquiring new risk-and-return characteristics that may be inconsistent with your client's original preferences. ***Note that the goal of a rebalancing strategy is to minimise risk, rather than maximise return.*** An investor wishing to maximise returns, with no concern for the inherent risks, should allocate his or her portfolio 100% to equities to capitalise on the equity risk premium. Investments that are not rebalanced, but drift with the markets, have experienced higher volatility.

In a balanced portfolio this equity risk premium tends to result in equities becoming over-weighted relative to a lower risk–return asset class such as bonds. Although failing to rebalance may help the long-term returns of portfolios as the weight of equities rises, the true benefit of rebalancing is in controlling risk. A portfolio overweighted to equities is more vulnerable to equity-market corrections, putting it at risk of larger losses compared with the 60% equity/40% bond target portfolio, as shown in **Figure III-1**.

Figure III-1. Equity allocation of 60% equity/40% bond portfolio: Rebalanced annually and non-rebalanced, 1960-2019



Notes: Equities are represented by the Barclays Equity Gilt Study from 1960 to 1964, the Thomson Reuters Datastream UK Market Index from January 1965 – December 1969; the MSCI UK from January 1970 – December 1985; thereafter, equities are represented by the MSCI All Country World Index. Bonds are represented by the Barclays Equity Gilt Study from 1960 – 1976; the FTSE UK Government Index from January 1977 – December 1984, the Citigroup World Global Bond Index from 1985 to 1989, the Barclays Global Aggregate Index thereafter. Returns are in sterling, with income reinvested, to 31 December 2019.

Source: Vanguard calculations based on data from Thomson Reuters Datastream and FactSet.

During this period (1960–2019), a 60% equity/40% bond portfolio that was rebalanced annually provided a marginally higher return (10.02% versus 9.89%) with significantly lower risk (18.86% versus 21.05%) than a 60% equity/40% bond portfolio that was not rebalanced, as shown in **Figure III-2**.

Vanguard believes that the goal of rebalancing is to minimise risk, not maximise return. However, to assign a return value for this quantification exercise, we searched over the same time period for a rebalanced portfolio that exhibited similar risk to that of the non-rebalanced portfolio. We found that an 80% equity/20% bond portfolio provided similar risk as measured by standard deviation (22.71% versus 21.05%), with a higher average annualised return (10.38% versus 9.89%) as shown in **Figures III-2** and **III-3**.

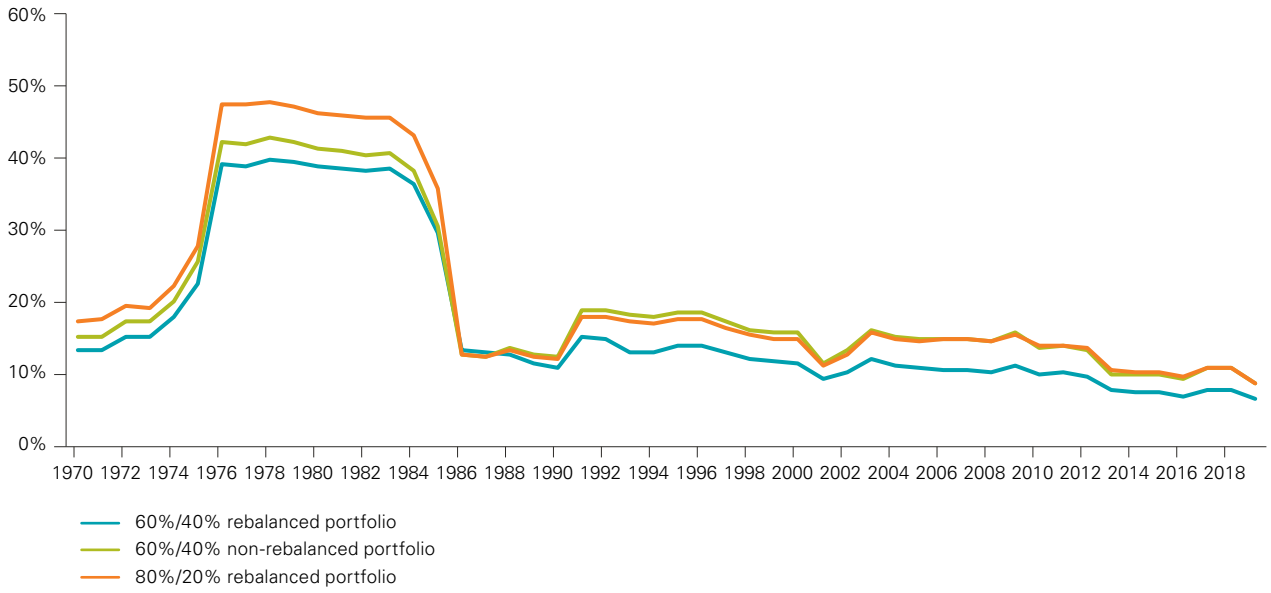
Figure III-2. Portfolio returns and risk: Rebalanced and non-rebalanced, 1960-2019

	60%/40% rebalanced portfolio	60%/40% non-rebalanced portfolio	80%/20% rebalanced portfolio
Average annual return	10.02%	9.89%	10.38%
Average annual standard deviation	18.86%	21.05%	22.71%
Sharpe ratio	0.19	0.17	0.18

Notes: Equities are represented by the Barclays Equity Gilt Study from 1960 – 1964, the Thomson Reuters Datastream UK Market Index from January 1965 – December 1969; the MSCI UK from January 1970 – December 1985; thereafter, equities are represented by the MSCI All Country World Index. Bonds are represented by the Barclays Equity Gilt Study from 1960 – 1976; the FTSE UK Government Index from January 1977 – December 1984, the Citigroup World Global Bond Index from 1985 – 1989, the Barclays Global Aggregate Index thereafter. Returns are in sterling, with income reinvested, to 31 December 2019.

Source: Vanguard calculations based on data from Thomson Reuters Datastream and FactSet.

Figure III-3. Looking backwards, the non-rebalanced portfolio exhibited risk similar to that of a rebalanced 80% equity/20% bond portfolio



Notes: Equities are represented by the Barclays Equity Gilt Study from 1960 – 1964, the Thomson Reuters Datastream UK Market Index from January 1965 – December 1969; the MSCI UK from January 1970 – December 1985; thereafter, equities are represented by the MSCI All Country World Index. Bonds are represented by the Barclays Equity Gilt Study from 1960 – 1976; the FTSE UK Government Index from January 1977 – December 1984, the Citigroup World Global Bond Index from 1985 – 1989, the Barclays Global Aggregate Index thereafter. Returns are in sterling, with income reinvested, to 31 December 2019.

Source: Vanguard calculations based on data from Thomson Reuters Datastream and FactSet.

Looking forward, we would not necessarily expect the risk of a 60% equity/40% bond portfolio that drifts to match the risk of an 80% equity/20% bond portfolio. However, we believe the equity risk premium will persist and that investments that are not rebalanced over long time periods will have higher returns and higher risk than the target portfolio. An investor comfortable with higher risk should simply select the higher equity allocation from inception and rebalance to that allocation through time.

Helping investors to stay committed to their asset allocation strategy and remain invested in the markets increases the probability of meeting their goals. But the task of rebalancing is often an emotional challenge. Historically, rebalancing opportunities have occurred when there has been a wide dispersion between the returns of different asset classes (such as equities and bonds). Whether in bull or bear markets, reallocating assets from the better-performing asset classes to the worse-performing ones feels counterintuitive. An adviser can provide the discipline to rebalance when it is needed most, which is often when it involves a very uncomfortable leap of faith.

Keep in mind, too, that rebalancing is not necessarily free. Associated costs can include taxes and transaction costs, as well as time and labour on the part of advisers. These could all potentially reduce a client's return. An adviser can add value for clients by balancing these trade-offs, thus potentially minimising costs. For example, a portfolio can be rebalanced with cash flows by directing dividends, interest payments, realised capital gains and/or new contributions to the most underweighted asset class. This can keep the client's asset allocation closer to its target and also trim costs.

An adviser can furthermore determine whether to rebalance to the target asset allocation or to an intermediate allocation, based on the type of rebalancing costs. When trading costs are mainly fixed and independent of the size of the trade – the cost of time, for example – rebalancing to the target allocation is optimal because it reduces the need for further transactions. When trading costs are mainly proportional to the size of the trade – as with commissions or taxes – rebalancing to the closest boundary is optimal, minimising the size of the transaction[4].

Advisers who can systematically direct investor cash flows into the most underweighted asset class and/or rebalance to the most appropriate boundary are likely to reduce their clients' rebalancing costs and thereby increase the returns their clients keep.

4 See the Vanguard research paper *Best Practices for Portfolio Rebalancing* (Jaconetti et al., 2010).

Module IV. Behavioural coaching

Potential value-add: Vanguard research and other academic studies have concluded that behavioural coaching may add 1 to 2% in annualised net return over a long-term investment horizon. Providing discipline and guidance could be the largest potential value-add of the tools available to advisers.

Because investing evokes emotion, advisers need to help their clients maintain a long-term perspective and a disciplined approach. **This can add a large amount of potential value.** Most investors are aware of these time-tested principles, but the hard part of investing is sticking to them in the best and worst of times. Having emotions isn't a 'rational or irrational investor' Issue: it's a human issue. It's normal to be swayed by the opinions voiced by those considered experts – the talking heads or news headlines that often recommend change. Abandoning a well-planned investment strategy can be costly, and research has shown that some of the most significant challenges are behavioural.

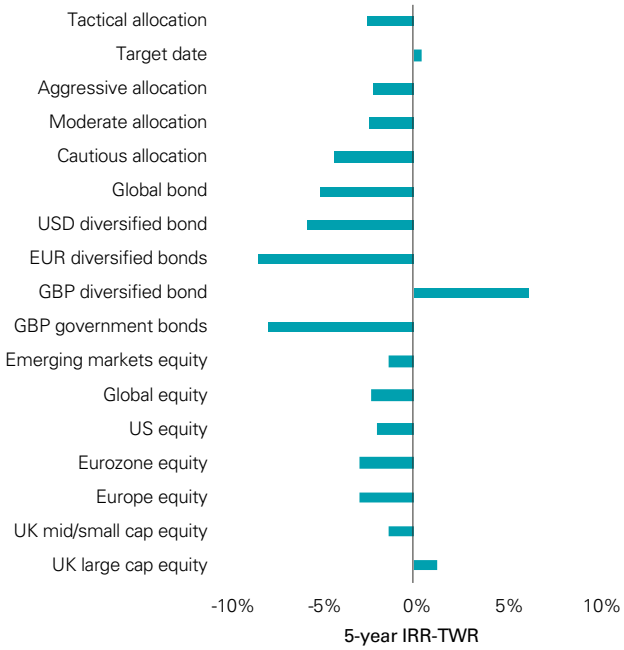
That is where you, as a behavioural coach to your clients, can earn your fees and then some. Recognising that, to some clients, factors that affect their wealth are almost as serious as those affecting their health is one of the most overlooked benefits you can provide.

When clients are tempted to abandon markets because performance has been poor or to chase the next 'hot' investment, you need to remind them of the plan you created before emotions were involved. This is where the trust they have in you is key: strong relationships need to be established before the bull- and bear-market periods that challenge their confidence[5]. Advisers can act as emotional circuit breakers by circumventing clients' tendencies to chase returns or run for cover in emotionally charged markets. In the process, they may prevent significant wealth destruction and also add percentage points – rather than basis points – of value. A single such intervention could more than offset years of advisory fees.

Studies have concluded that behavioural coaching can add up to an average of approximately 200 basis points per year. For example, we investigated how individual investors exchanging money between funds or into other funds affected their average returns. By comparing 58,168 self-directed investor's personal returns for the five years ended 2012 versus hypothetical results using two Vanguard created 'personal rate of return benchmarks' based on single fund alternatives, we found that the average fund investor who made at least one change to their portfolio sacrificed 104 to 150 bps due to poor portfolio adjustments (Weber, 2013).

A common method of analysing mutual fund investor behaviour is to compare investor returns (internal rates of return, IRRs) with the fund's reported total returns (time-weighted returns, TWRs) over time. Fund TWRs represent the performance of a mutual fund's assets under management for a defined period of time and are generally the industry standard for reporting returns. IRRs approximate the returns earned by the average pound invested in the fund over the same period, rather than the result of any specific investor. The two tend to differ to various degrees and in various directions. The IRR differs from the TWR due to cash flows in and out of the fund; absent any cash flows, the TWR and IRR should be the same. All managed funds should expect a return drag versus their benchmark over longer periods as money continually enters a rising market. However, larger differences can be a sign of performance-chasing (Kinniry and Zilbering, 2012).

Figure IV-1. Investor returns versus fund returns in the UK: five-years ending 31 December 2017



Notes: The time-weighted returns (TWRs) in this figure represent the average fund return in each category. Investor returns assume that the growth of a fund's total net assets for a given period is driven by market returns and investor cash flow. An internal rate-of-return (IRR) function is used which calculates the constant growth rate that links the beginning total net assets and periodic cash flows to the ending total net assets. Discrepancies in the return 'difference' are due to rounding.

Sources: Vanguard calculations, based on data from Morningstar, Inc.

5 For more information, please see the Vanguard research papers *The Vanguard Adviser's Alpha Guide to Proactive Behavioural Coaching* (Bennyhoff, 2018) and *Reframing Investor Choices: Right Mindset, Wrong Market* (Kinniry et al., 2016).

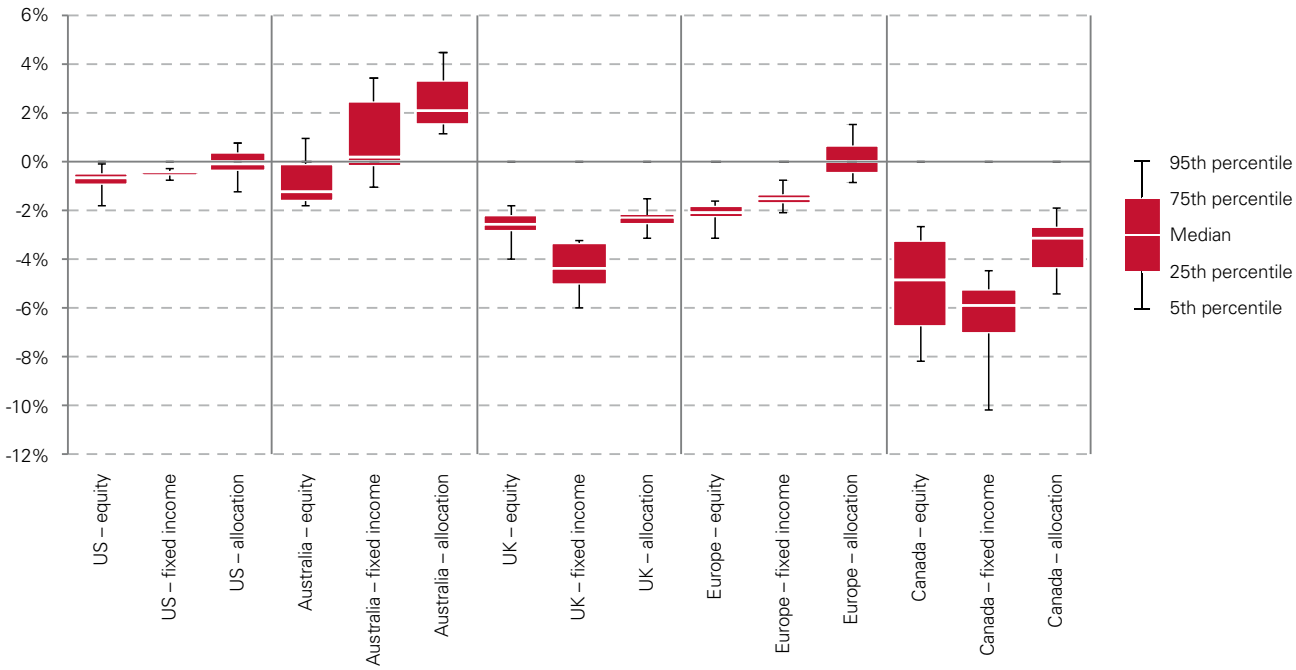
Investors and the funds they invest in commonly receive very different returns (see **Figure IV-1**). Demonstrating that these funds' cash flows tend to be attracted by, rather than precede, higher returns[6]. History suggests that, on average, this negative gap between IRR-TWR is most evident in fund categories that are more concentrated, narrow, or different from the overall market. It is less negative in the more broadly diversified categories, which typically include a varying mix of equity and fixed income. The Vanguard Adviser's Alpha framework was constructed with a firm awareness of these behavioural tendencies. Its foundation is built upon having a significant allocation to a core portfolio that is broadly diversified, low-cost and market-cap-weighted, with satellite allocations limited to levels appropriate for each investor and practice.

It is important to point out that such an evaluation is time-period dependent; results can look different from one year to the next. The analysis is also limited by its reliance on the availability of industry assets under management and cash flow data. This data availability is more limited in markets outside the US and the analysis covers a shorter window of time, which can result in more volatile figures (both positive and negative).

The lower number of funds, smaller base of assets and fewer observations make it difficult to draw conclusive inferences. However, over time as the analysis period is extended and the data sample becomes more robust, we would expect these figures to gradually look more similar to the US market, although the comparison may not always yield a negative result (**Figure IV-2**).

Observing IRR-TWR gaps for more fund types, markets and rolling time frames offers a more consistent perspective. When we examine the categories excluding Australia, the median IRR-TWR difference can range from -0.68% to -4.91% (for US and Canadian equities, respectively) and -0.47% to -5.93% (for US and Canadian fixed income, respectively). In addition, when we look at the distribution of the investor gaps through time, we see that there are times when the investor returns are greater than their fund total returns. We believe these outcomes are better explained by quirks in the market's data-set rather than by investors' superior skillset. Nonetheless, most of the observations, as well as the median, tend to be negative. This suggests a great opportunity for advisers to help their clients and add value by helping them to close the gap.

Figure IV-2. Global distribution of investor returns versus fund returns: rolling returns for various regions



Notes: The time-weighted returns (TWRs) in this figure represent the average fund return for each category. Investor returns assume that the growth of a fund's total net assets for a given period is driven by market returns and investor cash flow. An internal rate-of-return (IRR) function is used, which calculates the constant growth rate that links the beginning total net assets and periodic cash flows to the ending total net assets. Discrepancies in the return 'difference' are due to rounding. Not every fund or ETF is included for each category given limitations in available data. Data represents quarterly observations of rolling 10-year IRR-TWR differentials for funds and ETFs available for sale in the US, Australia, and Canada, and 5-year rolling observations for UK and Europe, due to data limitations for those regions. Data availability starts in 1993 for US, 2003 for Australia, 2008 for UK and Europe, and 2002 for Canada.

Source: Vanguard calculations, based on data from Morningstar, Inc.

6 To be clear, many investors rely on the help of an intermediary, such as a financial adviser, so it is unclear whether the IRR-TWR return gap is due to investors' decision-making.

Module V. Asset location

Potential value-add: 0-32 bps depending on the investor's asset allocation, tax-band and the breakdown of assets between taxable and tax-advantaged accounts. If an investor has all of his or her assets in one account type (that is, all taxable or all tax-advantaged), the value of the asset location is 0 bps.

Asset location, the allocation of assets between taxable and tax-advantaged accounts, can add value each year that can compound through time[7]. While previous Vanguard research on asset location has focused on US investors (Jaconetti 2007), asset location strategy can also add significant value to UK investors.

From a tax perspective, optimal portfolio construction minimises the impact of taxes by holding tax-efficient broad-market equity investments in taxable accounts and by holding broad-market bonds within tax-advantaged accounts (such as Individual Savings Accounts (ISAs) and pensions). All assets held in a tax-deferred account are taxed as income when withdrawn, less the 25% tax-free portion. However, assets held in a taxable account are taxed differently depending on the type of return generated. While interest income is taxed as regular income, dividends are taxed at preferential rates, and capital gains at even lower rates than dividends[8].

Thus, the effective tax rate on equities can be lowered by holding them in a taxable account where they receive preferential tax treatment. The effective tax rate on bonds can be lowered by holding them in tax-deferred accounts where they effectively receive a 25% tax discount due to the tax-free portion. This arrangement takes maximum advantage of the different tax treatment between the two asset classes. And those incremental differences have a powerful compounding effect over the long run.

Our research has shown that constructing the portfolio in this manner can add up to 32bps of return in the first year, without increasing risk (see **Figure V-1**).

We tested several scenarios based on varying assumptions and looked at the difference in pre- and post-tax returns between following the recommended asset location strategy and the reverse of holding assets in the 'wrong' accounts. The maximum benefit is derived for an additional rate taxpayer with a 50% stock/50% bond portfolio. The maximum benefit was found for the case of an additional rate tax payer with a 50% stock/50% bond portfolio split across 50% taxable/50% tax-advantaged accounts.

Figure V-1. Asset location can add up to 32 basis points of value annually to a portfolio

	Taxable accounts	Tax-deferred accounts	Pre-tax return	After-tax return	Relative to optimal (Row A)
A	Equity (50%)	Bonds (50%)	6.60%	5.65%	N.A.
B	Bonds (50%)	Equity (50%)	6.60%	5.33%	-0.32%

Notes: Pre-tax and after-tax returns are based on the following assumptions: Bond return 3.00%; index equity 9.00% (of which 2.25% is for dividends). This analysis is based on the taxes paid by an additional rate tax payer (40% for income tax, 38.1% for dividends and 20% for capital gains). These values do not assume liquidation.

Source: Vanguard.

7 Absent liquidity constraints, wealth-management best practices would dictate maximising tax-advantaged savings opportunities.

8 See Appendix 2 for current UK tax rates.

Module VI. Withdrawal order for client spending from portfolios

Potential value-add: 0bps – 153bps, depending on the investor's income tax bracket. If an investor has all of his or her assets in one account type, or an investor is not currently spending from the portfolio, the value of the withdrawal order is 0 bps.

With the retiree population on the rise, an increasing number of clients are facing important decisions about how to spend from their portfolios. Complicating matters is the fact that many clients hold multiple account types, including taxed, tax-deferred and tax-free accounts. In addition to this, the shift from defined benefit to defined contribution pension plans, greater pension freedoms and other factors have increased the complexity UK investors face when it comes to planning for retirement. Advisers who implement informed withdrawal-order strategies can minimise the total taxes paid over the course of their clients' retirement, thereby increasing their clients' wealth and the longevity of their portfolios. This process alone could represent the entire advice value proposition.

Many investors will retire with multiple account types, but we focus here on the three most common for UK investors: Defined Contribution Pensions (DCP), Individual Savings Accounts (ISA), and General Investment Accounts (GIA). The primary determinant of whether one should spend from taxable assets or tax-advantaged assets is taxes. Absent taxes, the order of which account to draw from would yield identical results (assuming accounts earned the same rates of return).

Vanguard research (for a more detailed discussion of the results see Harbron et al., 2019) suggests advisers can minimise the impact of taxes on their clients' portfolios by, as a general rule, following three best practices:

- Spend from taxable accounts first;
- When drawing from pensions, crystallise only the amount needed each year;
- Non-retirement goals should dictate the subsequent withdrawal order.

While withdrawal order is an important planning consideration, it is only part of the story. While an investor must decide which assets to sell when withdrawing from an ISA or a GIA, the withdrawal decision itself is fairly binary – the investor withdraws or not. However, for a DCP, UK investors have another opportunity to increase after-tax returns by selecting the appropriate method by which an investor 'crystallises' capital. The choice of crystallisation method can be every bit as important to the investor's outcome as the withdrawal order itself.

There are essentially three options when choosing a crystallisation method for a DCP:

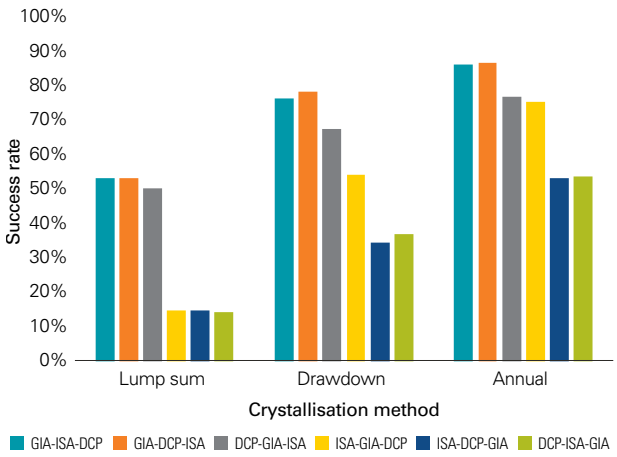
1. **Lump sum**
   The investor withdraws the full balance of their DCP as one lump sum. 25% of the account balance will normally be free from tax, and the remainder is taxed as income.

2. **Drawdown**
   The entire balance is crystallised, but only the 25% tax-free portion is withdrawn from the DCP.

3. **Annual**
   A series of partial lump sums are taken each year in order to meet spending needs. 25% of each year's withdrawal is tax-free and the remainder is taxed as income.

In our research, each withdrawal order and crystallisation combination was run against three base cases, chosen to test whether the investor's tax band (basic, higher or additional) affects withdrawal order. The annual crystallisation strategy was found to produce the best results across all withdrawal orders, as shown in **Figure VI.1** for the case of a higher-rate tax payer. This is because, in most cases, it results in less tax drag and/or less taxes paid.

Figure VI.1 Success rates of different crystallisation methods for a higher rate tax payer



Notes: Calculations based on funds of £1,200,000 (£400,000 in each account) and £58,000 after-tax spending with State Pension included. Assumes interest income tax of 40% and dividend income tax of 32.5%. These hypothetical data do not represent the returns on any particular investment. Each internal rate of return (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.
Source: Vanguard.

When it comes to withdrawal order, drawing from the GIA first was shown generally to deliver the best result for most investors across a number of success metrics. Little difference was found, in terms of meeting retirement spending goals, in the order of drawing from the remaining wrappers once the GIA is depleted.

We focus here on one success metric, the internal rate of return (IRR). The IRRs of six different withdrawal orders were compared across the three most common account types (DCP, GIA and ISA). The highest IRRs were found when the GIA is drawn down first, with little difference whether the DCP or ISA is drawn next. Lowest IRRs were found when drawing on the GIA last. This is illustrated with the example of a higher rate tax payer[9] in **Figure VI.2**.

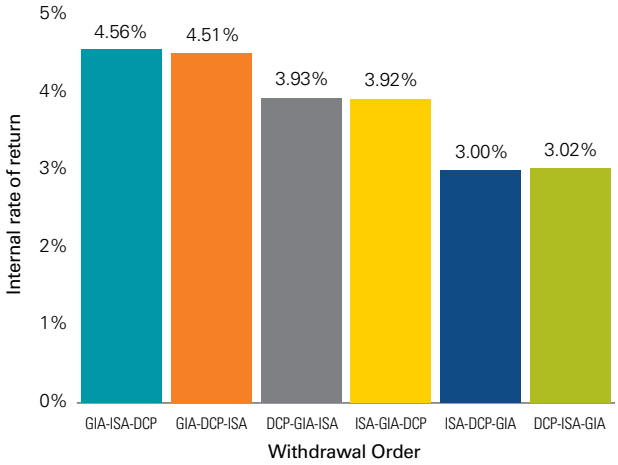
Spending from the portfolio in this manner, with annual crystallisation, can add up to 132 - 153 bps of average annualised value, without any additional risk. These results are consistent across the three base cases examined, although the magnitude of the 'value-add' varies depending on the investor's income tax bracket.

Drawing down on the GIA first will often be the most tax-efficient strategy. As returns on the GIA are taxable, current taxes paid reduce potential returns when compounded over years. By depleting this account sooner rather than later, an investor is able to eliminate the tax drag from the portfolio, increasing its average net return. At the same time, selling down the GIA reduces taxable capital gains over time as the account becomes smaller, further reducing the tax drag on the portfolio.

As **Figure VI.2** shows, there little difference as to whether the ISA or DCP is drawn down next. While an investor will likely owe more in taxes upon withdrawing money from their DCP as compared to an ISA or even a GIA, if their tax bracket remains constant, the proportion of the DCP they receive after tax should also remain constant. Although money withdrawn from a DCP will generate higher tax liabilities than money withdrawn from an ISA, there is no tax drag in the sense of a difference in net returns that compounds over time. Since the 'net' portion of the DCP is essentially tax free, it makes little difference whether the ISA or DCP is drawn next.

That said, DCPs carry a number of advantages which can argue for spending from the DCP last. Most DCPs are not part of the investor's estate for inheritance tax purposes, they also have protection from creditors that ISAs do not.

Figure VI.1 Success rates of different crystallisation methods for a higher rate tax payer



Notes: Calculations based on funds of £1,200,000 (£400,000 in each account) and £58,000 after-tax spending with State Pension included. For our analysis, we assume the modelled portfolios hold a 50% stock/50% bond allocation in each of the tax wrappers, rebalanced annually and with an overweight of approximately 15% to domestic holdings. Example shown is for a higher rate taxpayer with interest income tax of 40%, dividend income tax of 32.5% and capital gains tax up to 20%. Annual crystallisation method assumed. These hypothetical data do not represent the returns on any particular investment. Each internal rate of return (IRR) is calculated by running the same 10,000 VCMM path simulations for equity and fixed income instruments across 30 years. Illustration only.

Source: Vanguard.

Finally, flexibly accessing a DCP triggers the Money Purchase Annual Allowance, potentially reducing the investor's ability to contribute to the DCP in the future. These factors will likely mean most investors are better off drawing down their ISAs first, suggesting a withdrawal order of GIA-ISA-DCP.

As with any general rule, there are exceptions and other factors that may indicate the investor is better off deviating from the general rule. Examples include 'topping up' or changing tax bands, whether investors have spouses or civil partners and the likelihood of breaching the Lifetime Allowance. There are also capital gains tax considerations. Investors with large unrealised gains in their GIA may better use their capital gains tax allowances by drawing down on their GIA more slowly and supplementing early-year GIA withdrawals with withdrawals from the ISA or DCP. Many of the considerations and exceptions mentioned above require sophisticated cash flow analysis to take full advantage of the planning opportunities, providing yet another opportunity for financial advisers to add value.

9 See Appendix 2 for UK tax assumptions.

Module VII. Total-return versus income investing

Potential value-add: Value is deemed significant but impossible to quantify as it is unique to each investor based on each investor's desired level of spending and the composition of his or her current portfolio.

With yields at historically low levels and expected to remain low relative to past standards, the value of advice has never been more critical for investors requiring income. Historically, a diversified portfolio of equity and fixed income investments could be expected to generate a reasonable level of natural income. This is no longer the case. Investors who wish to spend only the income generated by their portfolio, referred to here as the 'income-only' approach, have three choices if their current cash flows fall short. They can spend less, they can reallocate to higher-yielding investments, or they can spend from the total return on their portfolio, which includes not only the income or yield but also the capital appreciation.

As your clients' adviser, you can help them make the right choice for their situation. Be aware that, for many investors, moving away from a broadly diversified portfolio could actually put their portfolio's principal value at higher risk than spending from it. **Figure VII-1** outlines several common techniques for increasing a portfolios yield, along with their impacts.

1. **Overweighting longer-term bonds (extending the duration)**
   Extending the duration of the bond portfolio will likely increase the current yield but will also increase sensitivity to changes in interest rates. Generally speaking, the longer the bond portfolio's duration, the greater the decline in prices when interest rates rise (and the greater the price gain when rates fall).

2. **Overweighting high-yield bonds**
   Another strategy to increase yield is to increase the allocation to higher-yielding bonds exposed to marginal or even significant credit risk. However, credit risk tends to be correlated with equity risk, which tends to be magnified when investors move into riskier bonds at the expense of government bonds. Government bonds are a proven diversifier during periods of equity-market stress, when diversification is needed the most.

   Vanguard research has shown that replacing existing fixed income holdings with high-yield bonds has historically increased the volatility of a balanced portfolio by an average of 78 basis points annually.[11] This is because high-yield bonds are more highly correlated with the equity markets and are more volatile than investment-grade bonds. Investors who employ such a strategy are sacrificing diversification benefits in hopes of receiving higher current income.

Figure VII-1. Income-only strategies and potential portfolio impact

Strategy	Impact on a portfolio
1. Overweighting of longer-term bonds (extending the duration)	Increases exposure to changes in interest rates
2. Overweighting of high-yield bonds and/or underweighting of government bonds	Increases credit risk and raises overall volatility
3. Increasing exposure to high dividend equity	Decreases diversification of equity portfolio by overweighting certain sectors and/or increases overall volatility and risk of loss if it reduces the bond portfolio

Note: Compared with a market-cap-weighted portfolio at the sub-asset-class level.
Source: Vanguard.

10 The term *high-yield bonds* refers to fixed income securities rated as below investment grade by the primary ratings agencies (Ba1 or lower by Moody's Investor Service; BB+ or lower by Standard & Poor's).

11 See the Vanguard research paper *Worth the Risk? The Appeal and Challenge of High-Yield Bonds* (Philips, 2012).

3. **Increasing exposure to high dividend equity**
   An often-advocated approach to increase income is to shift some or all of a fixed income allocation into higher-yielding dividend-paying equities. But equities are not bonds. At the end of the day, they will perform like equities – they have higher volatility and the potential for greater losses. Moreover, higher dividend equities are correlated with equities in general, whereas bonds show little to no correlation with either of these. If you view fixed income as providing not just yield but also diversification, dividend-paying shares fall well short as a substitute.

   A second approach is to shift from broad-market equity to dividend- or income-focused equity. However, this is likely to change the portfolio's risk profile because dividend-focused equities tend to display a bias toward value stocks. Although value stocks are generally considered to be a less risky subset of the broader equity market, the risks nevertheless can be substantial, owing to the fact that portfolios focused on dividend-paying shares tend to be overly concentrated in certain individual sectors and companies.

   In addition, when employing an income-only approach, investors need to ensure that they don't forsake tax-efficiency. Investors/advisers might purchase bond funds and/or income-oriented equity funds in taxable accounts to gain access to the income (yield) from these investments. Following this approach will most likely increase taxes on the portfolio, resulting in a direct reduction in spending power.

Benefits of a total-return approach to investing

Some may feel that the income strategies described above will reward them with a more certain return and therefore less risk. But in reality income-biased approaches are more likely to increase the portfolio's risk. It will become too concentrated in certain sectors, with less tax-efficiency and a higher chance of failing to provide for long-term financial goals.

Vanguard believes in a total-return approach, which considers both income and capital appreciation. It has the following potential advantages over an income-only method:

- **Less risk.** It allows better diversification, instead of concentrating on certain securities, market segments, or industry sectors to increase yield.
- **Better tax-efficiency.** It offers more tax-efficient asset locations (for clients who have both taxable and tax-advantaged accounts). An income approach focuses on access to income, resulting in the need to keep tax-inefficient assets in taxable accounts.
- **A potentially longer lifespan for the portfolio.**

Designing a tax-efficient, total-return strategy when an investor requires specific cash flows to meet his or her spending needs involves substantial analysis and experience. To do this well is not easy and could well represent the entire value proposition of an advisory relationship.

Modules conclusion

Where should you begin? We believe you should focus on those areas in which you have control, at least to some extent, such as:

- Helping your clients select the asset allocation that is most appropriate to meeting their goals and objectives, given their time horizon and risk tolerance.
- Implementing the asset allocation using low-cost investments and, to the extent possible, using asset-location guidelines.
- Limiting the deviations from the market portfolio, which will benefit your clients and your practice.
- Concentrating on behavioral coaching and spending time communicating with your clients.

12 See the Vanguard research paper *Total-Return Investing: An Enduring Solution for Low Yields* (Schlanger et al., 2016).

13 'Less risky' should not be taken to mean 'better.' Value stocks should have a risk-adjusted return similar to that of the broad equity market, unless there are risks that are not recognised in traditional volatility metrics.

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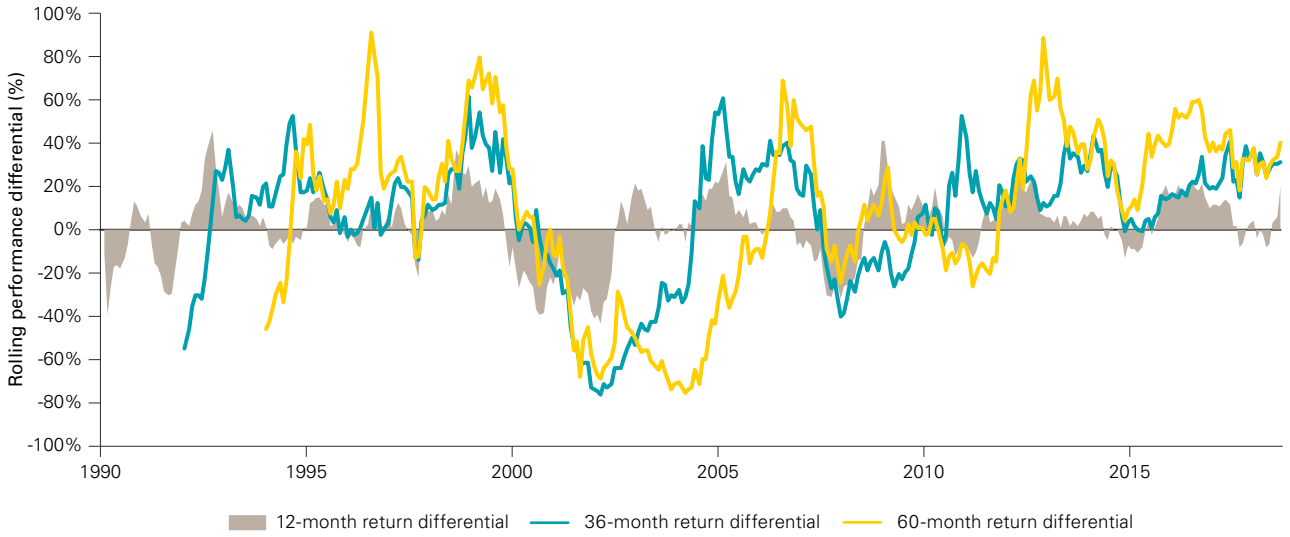
Appendix 1. Relative performance charts

Figure A-1. Performance of global equities relative to global bonds

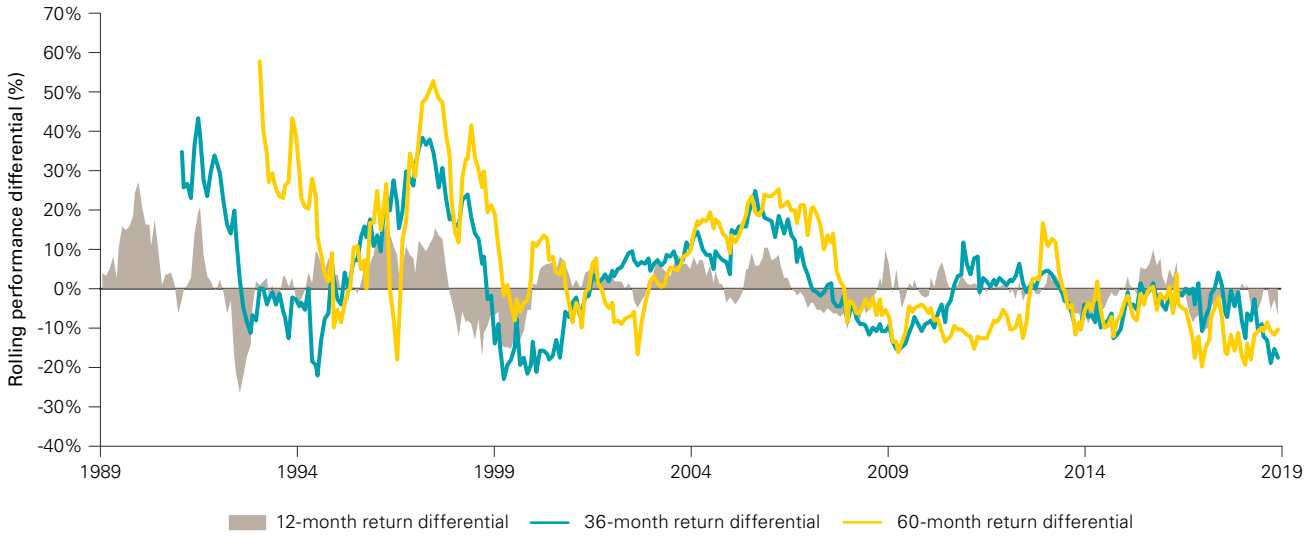


Largest performance differential	12-month	36-month	60-month
Global equities outperfom	45.99%	61.65%	91.17%
Global equities underperform	-43.69%	-76.17%	-75.58%

Notes: Global equity is represented by MSCI AC World Index and global bonds are represented by the Barclays Global Aggregate Index, hedged back to sterling. Data are in sterling to 31 December 2019.

Source: Vanguard calculations based on data from Thomson Reuters Datastream and Factset.

Figure A-2. Performance of UK equities relative to global equities

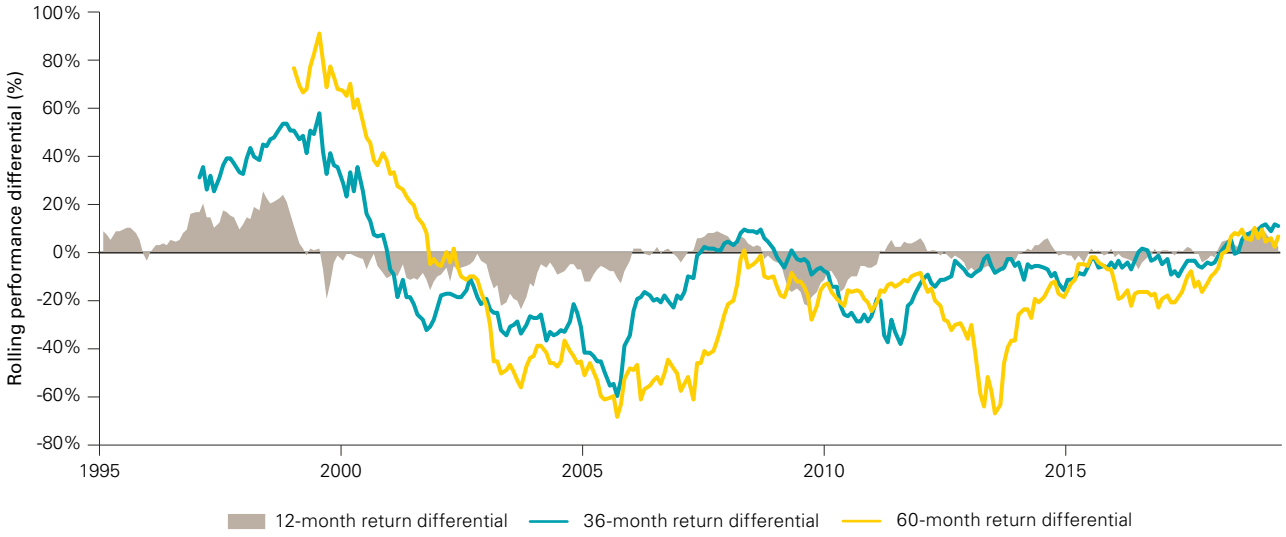


Largest performance differential	12-month	36-month	60-month
UK outperforms	27.04%	42.95%	57.30%
UK underperforms	-26.84%	-23.23%	-19.89%

Notes: UK equity is represented by FTSE All Share Index and global equity is represented by MSCI AC World Index. Data are in sterling to 31 December 2019.

Source: Vanguard calculations based on data from Thomson Reuters Datastream and Factset.

Figure A-3. Performance of global large-cap equities relative to global small-cap equities

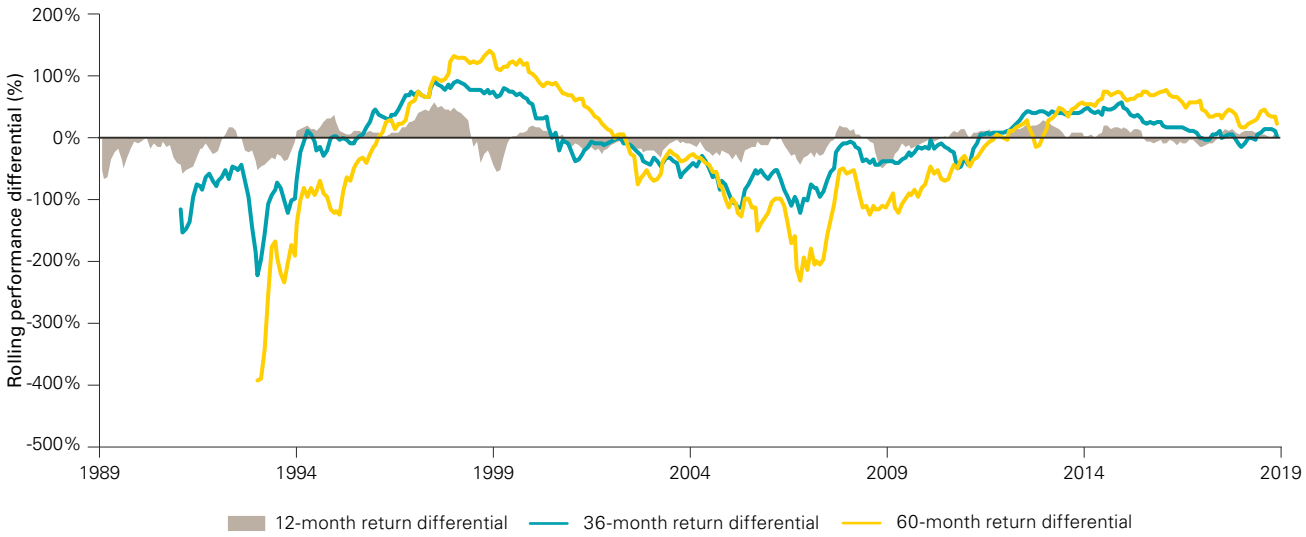


Largest performance differential	12-month	36-month	60-month
Global large outperforms	25.29%	57.22%	90.77%
Global large underperforms	-23.77%	-60.49%	-69.00%

Notes: Global large-cap equity is represented by MSCI AC World Large Index and global small-cap equity is represented by MSCI AC World Small Index. Data are in sterling to 31 December 2019.

Source: Vanguard calculations based on data from Thomson Reuters Datastream and Factset.

Figure A-4. Performance of developed equities relative to emerging market equities

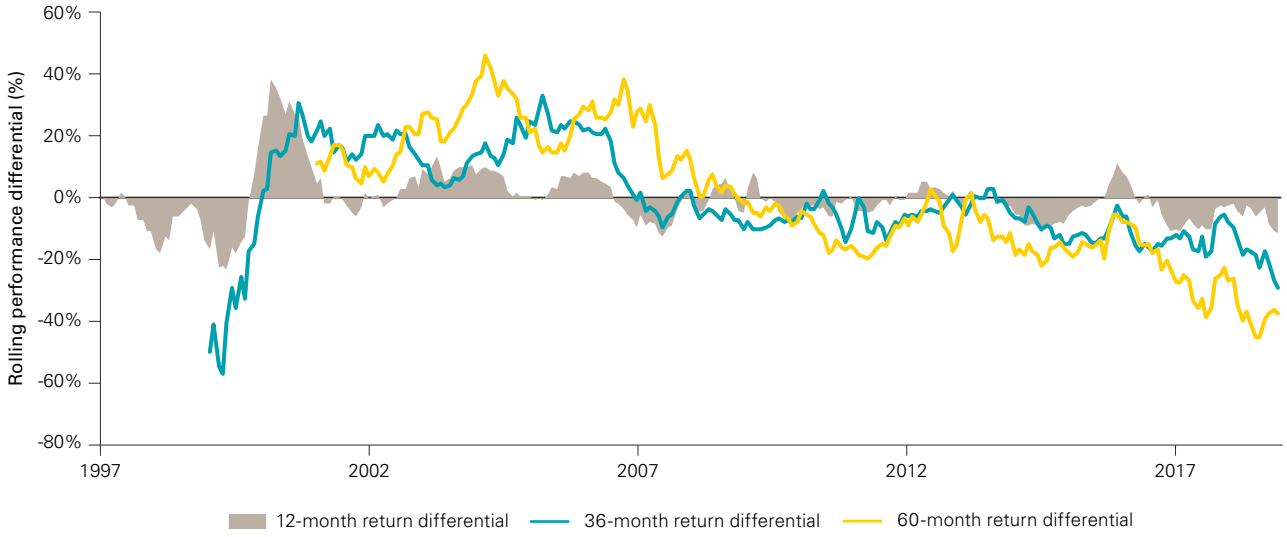


Largest performance differential	12-month	36-month	60-month
Developed outperforms	56.40%	93.51%	142.28%
Developed underperforms	-67.46%	-224.12%	-394.88%

Notes: Developed equity is represented by MSCI World Index and emerging market equity is represented by MSCI Emerging Markets Index. Data are in sterling to 31 December 2019.

Source: Vanguard calculations based on data from Thomson Reuters Datastream and Factset.

Figure A-5. Performance of global value equities relative to global growth equities



Largest performance differential	12-month	36-month	60-month
Value outperforms	38.34%	32.96%	46.00%
Value underperforms	-23.51%	-57.16%	-45.27%

Notes: Global value equity is represented by MSCI AC World Value Index and global growth equity is represented by MSCI AC World Growth Index. Data are in sterling to 31 December 2019.

Source: Vanguard calculations based on data from Thomson Reuters Datastream and Factset.

Appendix 2. UK tax rates and allowances for 2020-2021

Taxpayer status	Taxable income	Income/interest	Dividends	Capital gains
Allowance	£12,500	£12,500*	£2,000	£12,000
Basic rate	£12,501 to £50,000	20%	7.5%	10%
Higher rate	£50,001 to £150,000	40%	32.5%	20%
Additional rate	Over £150,000	45%	38.1%	20%

* Personal allowance decreases by £1 for every £2 earned above £100,000, and is £0 over £125,000.

Source: HMRC. Data as at 31 December 2019.

Notes

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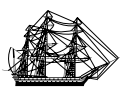

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