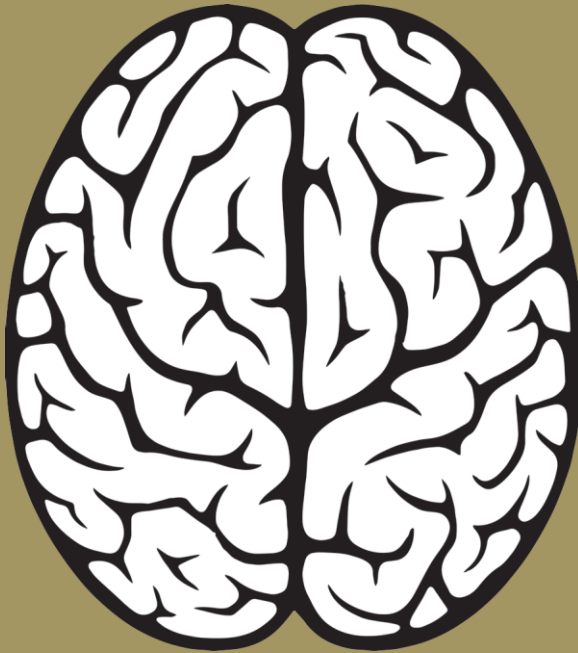
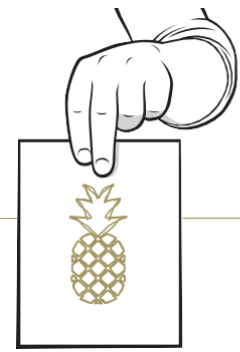


Investment Philosophy & Process



THANKS®
WEALTH PLANNING

Contents



| | | | |
|--|-----------|--|-----------|
| Executive Summary | 03 | ESG Considerations | 33 |
| The Service | 04 | Increased Interest | 33 |
| Investment Philosophy Statement | 05 | Performance | 34 |
| The Capital Markets Work | 05 | Our Approach | 35 |
| Asset Allocation & Portfolio Structure Drive Return | 06 | Excluded Asset Classes | 37 |
| Risk & Return Are Related | 07 | Commodities | 37 |
| Consistent Outperformance Is Rare | 07 | Cryptocurrencies | 37 |
| Diversification Is Essential | 09 | Futures | 37 |
| Costs Matter | 13 | Hedge Funds & Private Equity | 37 |
| Investors' Behaviour Is a Key Determinant of Their Long-Term Outcome | 15 | Fund Selection & On-Going Screening | 38 |
| Asset Allocation Guidelines | 17 | Investor Protection | 38 |
| Fixed Income | 18 | Index-Replication Method | 38 |
| Capital Preservation | 18 | Base Currency | 38 |
| Income | 18 | Fund Track Record | 38 |
| Inflation Protection | 18 | Fund Expense | 38 |
| Diversification Of the Bond Allocation | 18 | Transparency | 38 |
| Credit Ratings | 18 | Fund Size | 39 |
| Corporate Bonds | 19 | Launch Date | 39 |
| Government Bonds | 19 | Platform Availability | 39 |
| UK Inflation-Linked Bonds | 19 | Rebalancing | 40 |
| Maturity & Interest Rate Risk | 19 | Managing Costs Effectively | 42 |
| Global Exposure | 20 | Costs Come In All Shapes and Sizes | 42 |
| Currency Hedging | 21 | Fees | 42 |
| Equities | 22 | Emotional Costs and Opportunity Loss | 42 |
| A Diversified Starting Point | 22 | Summary | 43 |
| Global Market Capitalisation | 23 | Centralised Retirement Proposition | 44 |
| Reduces Total Portfolio Volatility | 23 | Centralised Investment Proposition Structure | 44 |
| Removes Home Bias | 23 | Centralised Retirement Proposition Structure | 45 |
| Reduces Idiosyncratic Risks | 25 | Decumulation Strategy | 46 |
| Factor Investing | 26 | Investment Options & Solutions | 47 |
| Equities: Small & Value Premium | 27 | Annuity | 48 |
| Momentum & Volatility Factors | 29 | Secured/Guaranteed Income | 48 |
| Emerging Market Equities | 31 | Appendix | 51 |
| The Rationale For Emerging Market Equities | 31 | Client Communication & Education | 51 |
| Evidence For An Emerging Markets Premium? | 31 | Clients' Responsibilities | 51 |
| Risk Management | 32 | Fiduciary Duty | 51 |
| Benchmark Selection | 32 | Platforms & Product Wrapper | 52 |
| Mapping Our Portfolios Against the Retail Price Index | 32 | Portfolio Design & Testing | 52 |
| | | References | 53 |

Executive Summary

The most important thing about a Centralised Investment Process (CIP) is that you have one and stick with it.

The purpose of this document is to provide a comprehensive overview of our investment philosophy, strategy, process, and reasoning and will be referred to when any questions around investments arise. Our aim is to help you make smart investment decisions and, ultimately, to enjoy the peace of mind that a successful investing experience brings.

The benefits of creating an Investment Policy Statement are:

- You understand our investment philosophies, strategies, and processes.
- You have a clear understanding of your attitude to investment risk.
- Your performance objectives and expectations are clarified.
- Misunderstandings are less likely.

We believe our independent status provides us with the best possible framework for the service that we offer. The information contained within this investment policy statement is based on a comprehensive and fair analysis of the relevant market; is unbiased; and unrestricted.

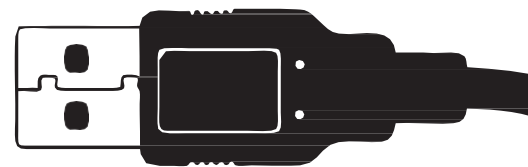
Our vision is to capture global stockmarket returns over the long term with a buy-and-hold strategy via index tracker and evidence-based funds, whilst eliminating unnecessary costs, inefficiencies, and anxiety for our clients. Our robust and disciplined investment philosophy is the engine driving our clients' financial goals. We ensure that our clients' investment strategy is well-aligned to their needs so that it delivers the returns for them to be financially prosperous and live a fulfilling life.

This document sets out our philosophy and reasoning behind how we invest and manage clients' capital on their behalf. This document is not a substitute for personal, independent financial advice and should not be relied upon solely as a means of making an investment decision.



Most investors, both institutional and individual, will find that the best way to own common stocks is through an index fund that charges minimal fees.

- Warren E. Buffet, Chairman's Letter, Berkshire Hathaway Corp.
1996 Annual Report, February 28, 1997.



The Service

As independent wealth planners we are responsible for conducting an in-depth assessment of each client's needs, objectives, and circumstances to identify the most suitable solution for them. Our investment philosophy is suited to advised clients with the following profile:

- Net worth of between £200k and above.
- Portfolios of between £50k and above.
- Seeking income or capital growth or a combination of the two.
- Long term investor prepared to invest for longer than 5 years.
- Pre-retired, at retirement and retired.
- Value and prepared to pay for on-going advice.
- Delegator but engaged with our financial planning and investment process.

We also identify circumstances where our portfolios may not be suitable for some clients, specifically the following:

- Clients that require active fund management that attempts to predict market trends or anomalies or tactically try to overweight or underweight assets based on subjective research.
- Clients who require or want full self-investment functionality.
- Clients that require esoteric investments or strategies.
- Clients with less than £100,000 in investable assets under advice and require ongoing advice. This is because the ongoing cost hurdle may be too high.
- Where a client does not want on-going financial advice and on-going reviews of their portfolio.
- Where clients' risk profile, objectives or preference suggests they want any form of capital guarantees or protection on their investments.
- Where the cost or tax barriers from switching assets into the portfolios are too high or penal.

Investment Philosophy Statement

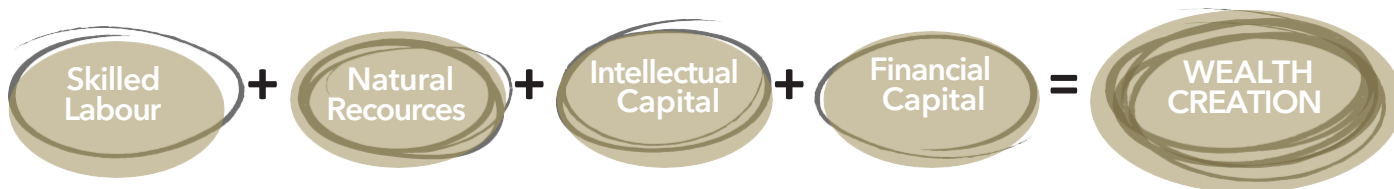
Our philosophy is based upon several key beliefs about financial markets. These beliefs lead us to construct carefully structured investment portfolios that are designed to meet the investment needs of our clients. Our beliefs are that:

The Capital Markets Work

The capital markets are far from perfect, but they do a good job of fairly pricing all publicly available information about securities.

Capital markets could be viewed as the vasculature of the global economy, in the sense that they facilitate the movement of capital (the lifeblood) to the places with the greatest affinity for it. Capital tends to flow smoothly through the system, however, as is the case with biological systems, capital markets tend to malfunction from time to time.

Market participants rely on these structures to function properly and are thus taking a risk with their capital when allowing it to enter these channels. It is paramount that investors are aware of the risks they are taking when participating in the markets, just as one would be when bartering in a street market. Whether it be a dusty corner of a market in a third-world country or the floor of a stock exchange, every financial dealing is embedded with its own particular set of risks. And although laws and regulations may protect participants from certain dangers when dealing on regulated exchanges, certain risks will still exist across all investment vehicles and investors must be aware of this.



We believe that the prices of securities reflect the expectation of all market participants (Fama 1970). While stocks may be sometimes mispriced, it is near impossible for anyone to recognise this and systematically profit from these inefficiencies on a consistent basis over the longer term. It is not impossible to beat the market, but it's very difficult to do so consistently over a long time period. This is primarily because when mispricing occurs, market participants will buy or sell, moving the price back to its natural level. Thus, beating the market often just means being quicker than everyone else. Over any period, some investors will beat the market, but the number of investors who do so will be part of a very small minority.

There is however an emerging body of behavioural finance research which suggests that markets may not in fact be that rational. The reality is that market participants tend to make decisions based upon the fact that certain market events' bear resemblance to those that have happened in the past. Academics such as Shiller (2003) argue that the presence of an asset price bubbles is an indication that markets may not be entirely efficient. However, he admitted:

"In judging the impact of behavioural finance to date, it is important to apply the right standards.

Of course, we do not expect such research to provide a method to make a lot of money off of financial market inefficiency very fast and reliably. We should not expect market efficiency to be so egregiously wrong that immediate profits should be continually available. But market efficiency can be egregiously wrong in other senses. For example, efficient markets theory may lead to drastically incorrect interpretations of events such as major stock market bubbles" (Shiller, 2003, p. 20).

Moreover, Burton (2010) similarly concluded that while asset-price bubbles do in fact exist and are an inevitable occurrence within capitalist systems, they are virtually impossible to identify and thus exploit ex-ante.

We take the view that while there are inefficiencies in the markets from time to time, empirical evidence suggests that the idea that these inefficiencies can be systematically exploited to deliver superior returns to clients just isn't plausible. Independent research by SPIVA backs up our argument






<https://www.spglobal.com/spdji/en/research-insights/spiva/>

Investment Philosophy Statement

Asset Allocation & Portfolio Structure Drive Return

We believe the most important factor determining the level of risk and variability of return in a portfolio is asset allocation. In their seminal study, Brinson, Hood and Beebower (1986) demonstrated that 93.6% of the average return variation in US pension plan portfolios from 1974 to 1983 could be explained by asset allocation. Later research by Kaplan and Ibbotson (2000) found that asset allocation explained approximately 90% of the variability of US mutual fund returns over time.

The contribution of asset allocation to overall portfolio return is not only a US phenomenon. Blake, Lehmann and Timmermann (1999) examined the asset allocations of a sample of 364 UK pension funds that retained the same fund manager over the period 1986-1994. They found that the total return is predominately driven by asset allocation. The average return from stock selection is negative, and average return to market timing very negative. More recent research by Scott, Balsamo, et al. (2017) showed that asset allocation was responsible for the majority of portfolio returns across five developed markets: Australia, Canada, Japan, UK, and USA.

| |  USA |  Canada |  UK |  Australia |  Japan | Brinson et al. (1986) |
|--|---|--|---|---|---|-----------------------|
| Number of balanced funds in each market sample | 709 | 303 | 743 | 580 | 406 | 91 (pension funds) |
| Median percentage of actual-return variation explained by asset allocation. | 91.10% | 86% | 80.50% | 89.10% | 87.90% | 93.60% |

Source: Scott, Balsamo, et al. (2017)

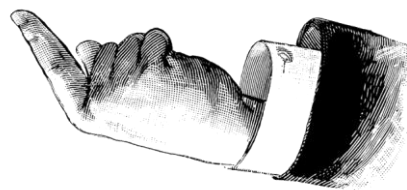
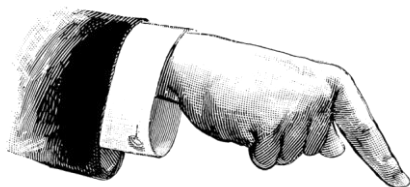
Therefore, we believe that asset allocation and portfolio structure are the key drivers of returns, value added from stock picking and market timing is questionable and tends to be negative.

Investment Philosophy Statement

Risk & Return Are Related

It is a fundamental law within finance that to achieve a certain level of return, you have to accept a certain level of risk. In other words, the potential financial loss you expose yourself to in investing and taking a risk, is also the reason you earn a return. However, risk is not uniform. Risk comes in forms that offer reward for volatility (good risk) and in forms that fail to do so (bad risk).

The reward that one can theoretically receive for taking on risk however does not come free of charge and so risk can also be perceived as a premium. Our role is first to identify which risks offer consistently higher expected returns, and those which do not, and then provide exposure to the good risks in a structured, disciplined, and cost-effective way.



Consistent Outperformance Is Rare

It's an extremely hard task for an active manager to consistently beat the market and it's even harder to predict which manager will manage to do so. Economic uncertainties, random market movements, and the rise and fall of individual companies are all part of financial markets' natural activity and predicting when and to what extent those things will happen is a fool's errand.

As is the case with virtually every game of chance, past events just aren't a good predictor of what will happen in the future. The same is true for fund manager performance. Not only is manager outperformance inconsistent, but research has also shown manager outperformance to have been driven by luck, rather than merit. Studies carried out by Barras, Scaillet and Wermers (2010) show that only 0.6% of US funds delivered positive alpha through skill, as opposed to luck alone, over a 32 year period. Other recent US and UK studies find that at most around 5% of funds have "truly" positive net return alphas (Kosowski, et al. 2005; Cuthbertson, Nitzsche and O'Sullivan 2005).

In evidence to the Treasury Committee in May 2006, Mr Clive Briault, Managing Director, Retail Markets, at the FCA was questioned regarding the merits of actively managed funds and their associated costs.

He was asked:

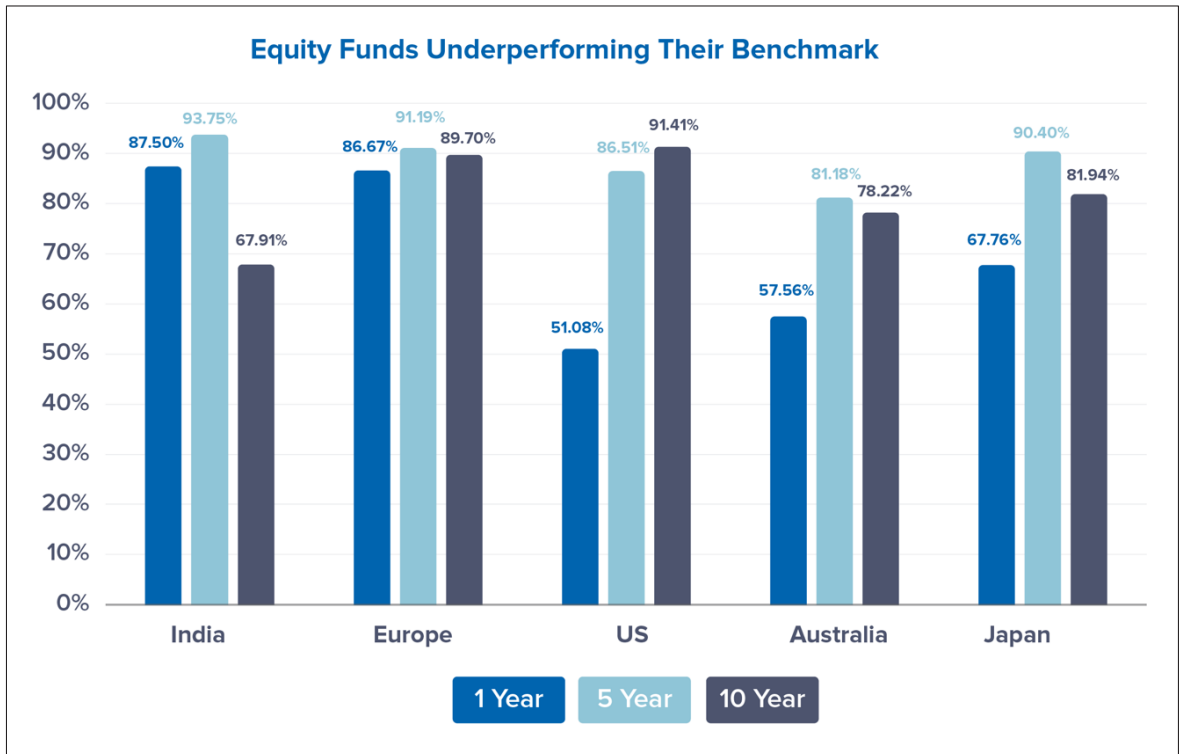
"Is there an assumption that actively managed funds actually make better returns for those investors which outweigh the costs of having more actively managed funds?"

He replied:

"Well, the research which we have undertaken shows there is no evidence that, on average and over time, actively managed funds out-perform tracker funds, taking account of the differential in charges across the two" (Briault, 2006).

Contemporary research conducted by S&P Indices Versus Active (SPIVA) continues to support the claim that active managers fail to consistently outperform their respective benchmarks in both developed and developing markets (S&P 2023).

Investment Philosophy Statement



Source: S&P (2023)

Considering the overwhelming body of evidence, we believe that the most sensible approach for the vast majority of retail clients is to focus on the most efficient and cost-effective way to capture returns from mainstream asset classes over the longer term and through the means of our well-designed portfolios, clients are equipped to do this.

We believe:

- The average active investor will do worse than the market because they are paying the highest fees.
- The average index investor will perform slightly better than that because their fees are lower than the active investor.
- That our investment approach is likely to outperform both due to reasonable fees, exposure to dimensions of higher expected return, and intelligent portfolio implementation. This cannot be guaranteed.

We believe that:

- here is the potential to outperform the global stockmarket by using factor-based investing to tilt a portfolio towards factors with empirical evidence to suggest that they can outperform the general market. These factors include size, value and profitability of stocks and tilting a portfolio towards these could generate a higher premium of investment return.

Investment Philosophy Statement

Diversification Is Essential

Akin to the familiar saying “don’t put all your eggs in one basket”, diversification, in its broadest sense, consists of allocating wealth across several assets.

The concept is not new, examples of the merits of diversification can be found as far back as the fourth century. The Rabi Isaac, in the Babylonian Talmud: Tractate Bab Mezi’a suggested:

“One should always divide his wealth into three parts: [investing] a third in land, a third in merchandise, and [keeping] a third ready to hand”
(Troberg, 2015).

Shakespeare also appeared to understand the importance of diversification. In his play, *The Merchant of Venice*, the character Antonio, after being asked whether his apparent sadness was due to worry, regarding his ships currently at sea, explains:

“ I thank my fortune for it, my ventures
in one bottom trusted, nor to place one

(Shakespeare, 2006, p. 9):
are not
nor is

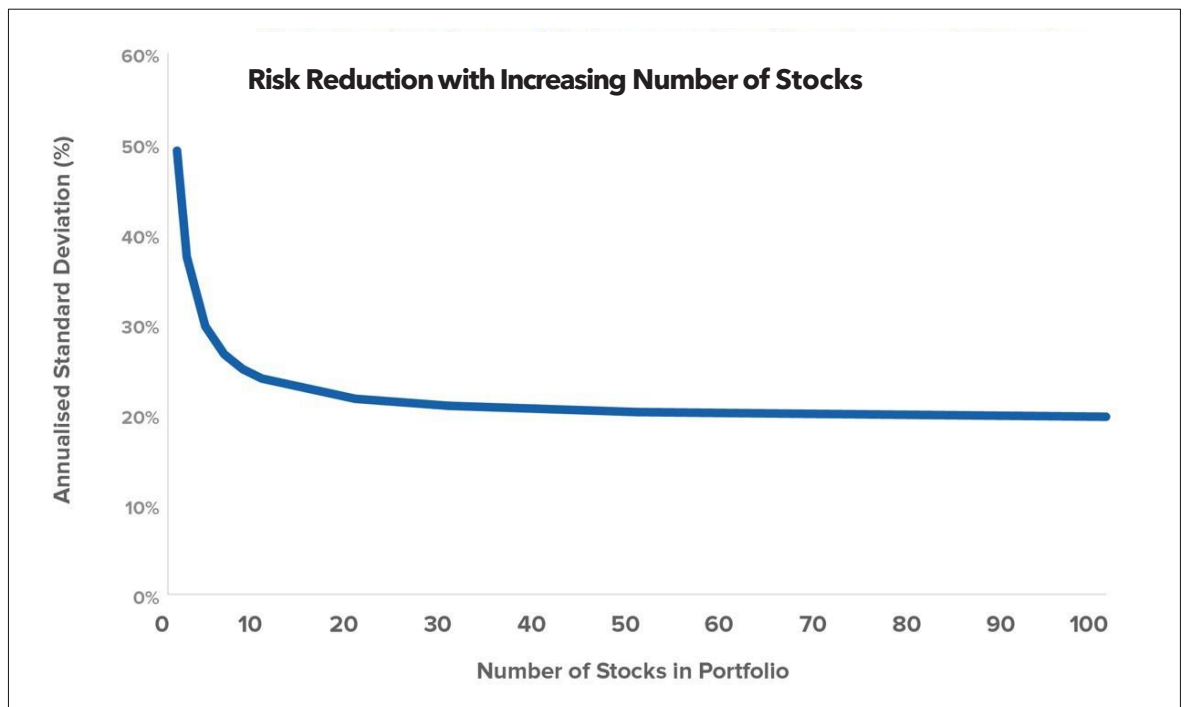
“

By owning multiple vessels, his estate upon the fortune of this present year it was possible one ship could be lost but the risk of losing all his ships was unlikely.

However, it was not until the 1950s that academics attempted to quantify diversification. In their seminal work, Markowitz (1952) and Roy (1952) demonstrated in mathematical terms how investment diversification works. This work resulted in Modern Portfolio Theory, whereby portfolios are constructed in a manner to minimize risk and maximize expected return. This theory postulates that a combination of two individually risky assets, can be combined to produce a portfolio with less overall risk, without reducing the expected returns, if the two individual assets are not perfectly correlated.

Investment Philosophy Statement

One of the most famous illustrations of the positive benefits of diversification was a study by Elton and Gruber (1977), which investigated how varying the size of a portfolio impacted an investor's risk exposure. The research found that while a single share had a standard deviation of annual returns of 49.2%, the addition of an extra share to the portfolio reduced this to 37.4%, a reduction in risk of 24%.



Source: Elton & Gruber (1977)

Sankaran, Krishnamurti and Patil (1999) also demonstrated how increasing the number of securities within a portfolio resulted in higher Sharpe ratios (risk adjusted returns), although the marginal benefit of diversification decreases as the number of securities increases.

Further to this research, Adamiec and Cernauskas (2019) concluded that market risk can indeed be reduced through diversification due to the covariance of the assets. However, increasing holdings can introduce factors such as trading costs whilst not providing any further diversification benefits. Much like Elton and Gruber's (1977) research, it was concluded that the optimum portfolio in fact had 25 stock positions in comparison to larger portfolios (e.g. 50 & 100).

Not only does diversification in terms of the stock help mitigate systemic risk, it has been shown that the diversification of geographic regions can also look to stabilise portfolios. The following tables show equity market returns over the last 20 years for various developed and emerging markets, ranked in descending order. The lack of consistency in stock market performance by geography shows the general lack of predictability in markets and should be a lesson to investors who believe that they can predict which pattern of colours will appear in the column corresponding to next year.

Investment Philosophy Statement

Equity Returns of Developed Markets (%)

| | | Developed Markets Annual Returns (%) | | | | | | | | | | | | | | | | | | | |
|----------------------------------|-------------|--------------------------------------|------|------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|
| | | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
| ↑ HIGH RETURNS ↓ LOW | Sweden | 48.0 | 59.9 | 43.5 | 31.0 | 46.2 | -2.0 | 66.6 | 38.0 | 14.6 | 33.4 | 43.3 | 19.7 | 30.6 | 48.6 | 44.6 | 2.6 | 32.9 | 39.3 | 42.8 | 12.8 |
| | Germany | 47.3 | 42.9 | 40.4 | 29.3 | 38.8 | -3.8 | 57.1 | 34.8 | 6.3 | 25.5 | 38.5 | 14.0 | 23.2 | 41.2 | 24.4 | 2.0 | 32.2 | 20.3 | 28.8 | 7.3 |
| | Spain | 42.5 | 33.8 | 39.4 | 28.8 | 32.9 | -13.6 | 54.9 | 27.1 | 2.1 | 25.2 | 29.3 | 12.8 | 18.6 | 35.2 | 23.8 | 0.9 | 27.2 | 20.0 | 27.6 | 7.2 |
| | Austria | 41.2 | 33.4 | 39.2 | 28.7 | 29.2 | -17.8 | 46.2 | 26.0 | -1.8 | 25.2 | 28.9 | 11.6 | 15.9 | 32.9 | 23.0 | -2.1 | 27.0 | 17.0 | 27.1 | 7.1 |
| | New Zealand | 39.8 | 27.1 | 39.0 | 27.3 | 27.4 | -21.5 | 42.6 | 24.2 | -6.1 | 23.6 | 28.9 | 10.6 | 9.5 | 32.7 | 20.8 | -3.0 | 25.8 | 16.7 | 23.1 | 6.7 |
| | Canada | 39.0 | 26.0 | 30.5 | 25.8 | 26.2 | -24.6 | 40.2 | 19.1 | -9.3 | 22.6 | 28.9 | 9.4 | 8.2 | 32.3 | 17.6 | -3.4 | 23.3 | 16.2 | 23.0 | 4.7 |
| | Australia | 34.4 | 23.5 | 30.1 | 21.7 | 26.2 | -25.1 | 39.1 | 18.4 | -10.0 | 20.4 | 25.2 | 8.7 | 7.9 | 25.1 | 17.3 | -3.8 | 22.6 | 11.5 | 20.6 | 4.4 |
| | Denmark | 34.2 | 22.0 | 29.7 | 19.9 | 23.5 | -27.1 | 33.9 | 18.1 | -10.3 | 16.7 | 24.8 | 7.8 | 7.2 | 25.0 | 17.2 | -5.6 | 22.4 | 10.9 | 20.4 | 0.2 |
| | Norway | 33.2 | 21.5 | 27.9 | 19.8 | 21.9 | -27.4 | 27.7 | 15.3 | -11.5 | 16.6 | 24.3 | 6.1 | 6.7 | 23.6 | 16.6 | -6.5 | 20.9 | 10.9 | 20.1 | -1.5 |
| | Ireland | 29.4 | 20.2 | 27.3 | 19.3 | 21.9 | -28.3 | 27.6 | 14.4 | -11.6 | 16.0 | 24.0 | 5.5 | 6.5 | 22.6 | 16.0 | -7.3 | 18.9 | 8.2 | 19.6 | -1.9 |
| | Portugal | 28.6 | 16.5 | 23.4 | 18.0 | 18.6 | -28.5 | 27.5 | 13.8 | -12.1 | 15.3 | 22.9 | 2.6 | 6.3 | 22.1 | 13.3 | -7.5 | 18.2 | 8.1 | 16.1 | -2.4 |
| | France | 26.1 | 16.3 | 22.9 | 16.2 | 11.3 | -30.6 | 26.7 | 13.3 | -13.7 | 15.1 | 22.2 | 2.5 | 5.7 | 22.0 | 13.1 | -7.7 | 16.5 | 5.4 | 10.4 | -2.7 |
| | Hong Kong | 24.2 | 14.0 | 22.9 | 15.2 | 7.1 | -30.7 | 25.0 | 12.2 | -15.4 | 13.4 | 18.4 | 1.9 | 5.2 | 21.0 | 11.9 | -8.3 | 16.4 | 2.6 | 10.0 | -3.6 |
| | Italy | 24.0 | 13.9 | 22.0 | 14.8 | 6.5 | -31.7 | 21.6 | 11.8 | -15.4 | 10.3 | 18.2 | 1.3 | 3.8 | 20.0 | 11.9 | -8.8 | 16.1 | 2.1 | 9.5 | -4.6 |
| | Singapore | 23.7 | 11.5 | 21.2 | 14.6 | 4.3 | -32.4 | 17.4 | 11.7 | -15.4 | 10.2 | 11.3 | 0.5 | 0.5 | 19.2 | 11.7 | -10.2 | 15.7 | 0.9 | 6.6 | -6.1 |
| | Japan | 22.2 | 10.5 | 20.1 | 14.3 | 3.7 | -33.8 | 12.7 | 4.9 | -16.3 | 9.5 | 9.2 | -1.8 | -0.8 | 18.1 | 10.7 | -11.0 | 15.0 | -1.3 | 6.3 | -8.0 |
| | Belgium | 21.7 | 8.3 | 17.6 | 14.0 | 3.5 | -36.0 | 12.4 | 2.7 | -17.3 | 7.5 | 9.0 | -3.9 | -2.2 | 13.7 | 10.1 | -12.1 | 10.6 | -4.8 | 3.1 | -9.7 |
| | Switzerland | 20.6 | 8.0 | 16.8 | 11.8 | 0.5 | -37.9 | 11.6 | -1.1 | -17.5 | 4.3 | 8.9 | -4.3 | -4.7 | 13.5 | 9.6 | -12.6 | 10.0 | -6.3 | 2.6 | -12.6 |
| | UK | 18.8 | 7.2 | 14.0 | 3.3 | -1.1 | -50.5 | 11.4 | -8.5 | -22.5 | 3.4 | 7.4 | -4.8 | -10.1 | 10.8 | 8.3 | 7.7 | 7.7 | -7.7 | 2.3 | 16.9 |
| | USA | 15.5 | 4.7 | 13.8 | 2.2 | -4.4 | -53.6 | 0.0 | -12.3 | -22.6 | 1.1 | 3.7 | -17.2 | -10.8 | 10.3 | 7.9 | -20.7 | 6.1 | -10.3 | 1.1 | -17.1 |
| Netherlands | 15.2 | 2.7 | 9.7 | 0.6 | -5.8 | -56.3 | -1.0 | -15.5 | -31.4 | -1.0 | 2.2 | -25.4 | -12.9 | 6.8 | 6.0 | -22.4 | 6.1 | -10.9 | -3.0 | -18.6 | |
| Finland | 7.4 | -1.0 | 9.3 | -6.8 | -21.4 | -61.1 | -5.4 | -19.5 | -36.0 | -1.5 | -0.2 | -34.4 | -19.8 | 0.5 | 2.0 | -22.9 | 5.3 | -13.2 | -16.3 | -19.4 | |

Source: Dimensional Fund Managers (2023)

Investment Philosophy Statement

Equity Returns of Emerging Markets (%)

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|------|----------------------|----------------------|----------------------|---------------------|----------------------|-----------------------|----------------------|----------------------|-----------------------|----------------------|----------------------|----------------------|-----------------------|----------------------|----------------------|-----------------------|---------------------|----------------------|---------------------|---------------------|
| HIGH | Thailand 119.0 | Colombia 116.7 | Egypt 192.5 | China 60.4 | Peru 91.1 | Colombia 3.7 | Brazil 103.1 | Thailand 60.6 | Indonesia 6.8 | Turkey 57.0 | Taiwan 7.0 | Egypt 37.4 | Hungary 44.2 | Brazil 98.3 | Poland 41.3 | Peru 7.9 | Egypt 36.3 | Korea 40.2 | Czech Rep. 56.5 | Turkey 114.4 |
| | Turkey 102.6 | Egypt 110.9 | Colombia 131.7 | Indonesia 52.4 | Brazil 76.5 | Chile -11.1 | Indonesia 101.4 | Peru 58.1 | Malaysia 0.9 | Egypt 40.6 | Egypt 6.2 | Indonesia 34.5 | India -0.7 | Peru 85.6 | China 40.7 | Brazil 5.7 | Taiwan 31.1 | Taiwan 36.6 | India 27.4 | Chile 34.4 |
| | Brazil 92.8 | Hungary 78.5 | Korea 75.5 | Peru 42.2 | Turkey 71.2 | South Africa -14.0 | India 80.6 | Chile 48.7 | Philippines -0.2 | Philippines 40.0 | Malaysia 5.7 | Philippines 33.4 | Korea -1.3 | Hungary 61.5 | Korea 34.5 | Czech Rep. 1.5 | Colombia 25.8 | China 25.5 | Taiwan 27.3 | Brazil 28.5 |
| | Peru 74.5 | Czech Rep. 73.1 | Brazil 75.0 | Philippines 38.7 | India 70.2 | Peru -17.2 | Turkey 75.8 | Colombia 47.9 | Thailand -2.0 | Poland 33.1 | Korea 2.0 | India 31.6 | Philippines -1.4 | Thailand 51.0 | Chile 29.9 | Thailand 0.3 | Brazil 21.4 | India 12.0 | Mexico 23.7 | Peru 23.2 |
| | Egypt 72.5 | Poland 50.2 | Turkey 74.5 | India 32.5 | China 63.4 | Malaysia -18.6 | Chile 65.2 | Malaysia 41.3 | Colombia -4.3 | Colombia 29.9 | China 1.7 | Turkey 26.1 | China -2.5 | Colombia 50.9 | Hungary 27.8 | Malaysia -0.2 | China 18.7 | Malaysia 0.5 | Hungary 13.1 | Thailand 18.2 |
| | China 68.7 | Indonesia 40.5 | Mexico 66.8 | Brazil 27.4 | Egypt 55.8 | Mexico -21.0 | Colombia 64.1 | South Africa 38.4 | Czech Rep. -5.3 | Thailand 28.6 | Poland 0.7 | Thailand 23.7 | Taiwan -6.6 | Taiwan 41.4 | India 26.7 | Hungary -0.3 | Hungary 14.8 | Mexico -4.9 | Poland 9.5 | Indonesia 16.6 |
| | Chile 64.8 | Mexico 38.3 | Czech Rep. 63.0 | Mexico 24.1 | Czech Rep. 52.7 | Czech Rep. -21.2 | Taiwan 59.6 | Indonesia 38.1 | Korea -11.3 | Mexico 23.4 | Mexico -1.6 | Peru 17.4 | Mexico -9.5 | South Africa 40.6 | Peru 26.4 | India -1.5 | Korea 8.2 | Philippines -6.4 | Egypt 8.5 | Mexico 10.3 |
| | India 60.4 | South Africa 35.1 | India 53.9 | Poland 23.4 | Indonesia 51.6 | Taiwan -25.9 | Hungary 58.1 | Philippines 38.1 | Mexico -11.5 | India 20.4 | Philippines -4.5 | Taiwan 16.2 | Chile -12.9 | Indonesia 39.5 | Turkey 26.4 | Taiwan -3.3 | Mexico 7.1 | South Africa -6.9 | South Africa 4.5 | South Africa 8.2 |
| | Indonesia 58.8 | Turkey 31.9 | Peru 50.7 | Malaysia 20.3 | Malaysia 43.6 | Thailand -28.7 | Thailand 57.2 | Mexico 31.6 | South Africa -13.7 | Hungary 17.4 | India -5.6 | China 14.7 | Czech Rep. -13.7 | Chile 37.8 | South Africa 24.3 | Indonesia -3.6 | Turkey 6.8 | Czech Rep. -6.9 | Indonesia 3.1 | Malaysia 6.1 |
| | Colombia 49.6 | Brazil 26.7 | South Africa 43.5 | Czech Rep. 17.5 | Thailand 43.6 | China -31.9 | Peru 53.1 | Korea 30.7 | China -17.8 | China 17.4 | Hungary -7.6 | South Africa 11.8 | Indonesia -14.8 | Korea 29.7 | Czech Rep. 23.7 | Colombia -6.0 | Philippines 6.2 | Peru -7.7 | Thailand -0.5 | Colombia 5.9 |
| | Czech Rep. 47.8 | Chile 19.4 | Poland 38.9 | Hungary 17.3 | Philippines 38.0 | Egypt -34.0 | Korea 52.6 | Taiwan 25.7 | Chile -19.8 | Korea 15.9 | South Africa -8.0 | Czech Rep. 1.6 | Malaysia -15.4 | China 20.4 | Thailand 22.9 | Poland -7.5 | South Africa 5.8 | Chile -8.5 | Philippines -3.0 | India 3.6 |
| | South Africa 31.2 | Philippines 17.3 | Philippines 37.1 | Chile 12.9 | Korea 29.6 | Philippines -34.3 | Philippines 47.5 | India 24.8 | Taiwan -20.3 | Peru 14.9 | Czech Rep. -12.2 | Mexico -3.7 | Thailand -19.1 | Poland 19.4 | Taiwan 16.5 | Egypt -8.7 | Thailand 5.3 | Indonesia -10.9 | Malaysia -5.4 | Philippines -3.1 |
| | Taiwan 27.6 | Korea 13.8 | Chile 35.2 | South Africa 5.7 | Poland 23.1 | Poland -37.5 | China 44.5 | Turkey 24.6 | Peru -20.8 | South Africa 13.5 | Thailand -16.2 | Malaysia -5.1 | Egypt -19.2 | India 17.6 | Malaysia 14.2 | Mexico -10.3 | Indonesia 4.9 | Turkey -11.6 | Korea -7.5 | Czech Rep. -3.7 |
| | Philippines 27.3 | India 11.1 | China 33.9 | Taiwan 5.2 | Chile 21.0 | Korea -38.1 | South Africa 40.5 | Poland 18.9 | Brazil -21.3 | Taiwan 11.6 | Brazil -17.6 | Korea -5.6 | Poland -21.0 | Malaysia 14.6 | Philippines 13.8 | Philippines -11.3 | India 3.4 | Poland -14.1 | Colombia -13.0 | China -12.1 |
| | Poland 21.5 | Malaysia 7.4 | Hungary 31.9 | Egypt 2.7 | South Africa 16.2 | Brazil -39.4 | Mexico 39.5 | Egypt 16.0 | Poland -29.6 | Malaysia 9.2 | Colombia -22.6 | Chile -7.6 | South Africa -21.1 | Czech Rep. 13.3 | Indonesia 13.5 | China -13.8 | Peru 0.7 | Hungary -14.4 | Chile -16.5 | Egypt -12.9 |
| | Korea 21.4 | Taiwan 1.6 | Indonesia 28.7 | Colombia -0.4 | Hungary 14.8 | Indonesia -39.7 | Malaysia 35.4 | Brazil 9.9 | Hungary -33.2 | Chile 3.0 | Chile -23.4 | Brazil -8.7 | Peru -27.7 | Philippines 11.4 | Brazil 13.4 | Chile -14.7 | Czech Rep. 0.2 | Thailand -14.4 | Brazil -16.6 | Poland -18.1 |
| | Mexico 19.4 | Peru -3.9 | Thailand 21.6 | Korea -1.2 | Colombia 13.1 | Hungary -46.7 | Poland 26.0 | China 7.9 | Turkey -34.9 | Indonesia 0.1 | Indonesia -24.9 | Poland -8.9 | Turkey -27.9 | Turkey 9.2 | Colombia 6.2 | Korea -16.0 | Malaysia -5.8 | Colombia -21.5 | Peru -19.1 | Korea -20.5 |
| | Hungary 18.7 | China -5.0 | Taiwan 19.0 | Thailand -2.5 | Mexico 10.3 | Turkey -47.8 | Egypt 24.4 | Czech Rep. 0.5 | India -36.7 | Czech Rep. -2.0 | Turkey -28.1 | Colombia -14.8 | Brazil -38.0 | Mexico 8.4 | Mexico 5.9 | South Africa -20.1 | Poland -9.5 | Brazil -21.5 | China -21.0 | Taiwan -20.9 |
| LOW | Malaysia 13.9 | Thailand -7.9 | Malaysia 14.4 | Turkey -18.6 | Taiwan 6.6 | India -51.0 | Czech Rep. 12.6 | Hungary -6.7 | Egypt -46.5 | Brazil -4.3 | Peru -31.2 | Hungary -22.9 | Colombia -38.4 | Egypt 5.5 | Egypt -4.0 | Turkey -37.8 | Chile -20.1 | Egypt -24.9 | Turkey -27.7 | Hungary -22.4 |

Source: Dimensional Fund Managers (2023)

Investment Philosophy Statement

Costs Matter

If competition drives prices to fair value, one might wonder why underperformance is so common. A major factor are mutual fund costs. Costs reduce an investor's net return, often to the extent that the additional services associated with the fees do not compensate for the loss in return.

All mutual funds incur costs. Some costs, such as expense ratios, are easily observed, while others are more difficult to measure. The question is not whether investors must bear some costs, but whether the costs are reasonable, and indicative of the value added by a fund manager's decisions.

The data shows that many mutual funds are expensive to own and do not offer higher value for the higher costs incurred. Let's consider how one type of explicit cost, expense ratios, can impact fund performance.

In the next charts, US equity funds in existence at the beginning of ten, fifteen and twenty-year periods are ranked into quartiles based on their average expense ratio. Fund expense ratios range broadly. For the ten-year period, the median expense ratio averaged 1.1% for equities. In 2021, funds in the lowest quartile cost equity investors an average of 0.8%, compared to the most expensive quartile which had an average cost of 1.4%.

Are investors receiving a better experience from higher-cost funds? The data suggests otherwise.

Especially over longer horizons, the cost hurdle becomes too high for most funds to overcome.

Over the ten-year period, 38% of the low-cost equity funds outperformed, compared to 18% of the high-cost funds. For fifteen years, 35% of the low-cost funds outperformed, against 10% of the high-cost funds. And finally, over twenty years, 31% of low-cost funds outperformed, in contrast to the 6% of high-cost equity mutual funds.

Investment Philosophy Statement



Source: Dimensional Fund Managers (2023)

Investment Philosophy Statement

Morningstar research into fund expenses and star ratings, as predictors of future fund performance, shows that fund expense ratio is a far more reliable predictor of future performance. The author of the report concluded that:



If there's anything in the whole world of mutual funds that you can take to the bank, it's that expense ratios help you make a better decision. In every single time period and data point tested, low-cost funds beat high-cost funds. Expense ratios are strong predictors of performance. In every asset class over every time period, the cheapest quintile produced higher total returns than the most expensive quintile. Investors should make expense ratios a primary test in fund selection. They are still the most dependable predictor of performance. Start by focusing on funds in the cheapest or two cheapest quintiles, and you'll be on the path to success.

(Kinnel, 2010).



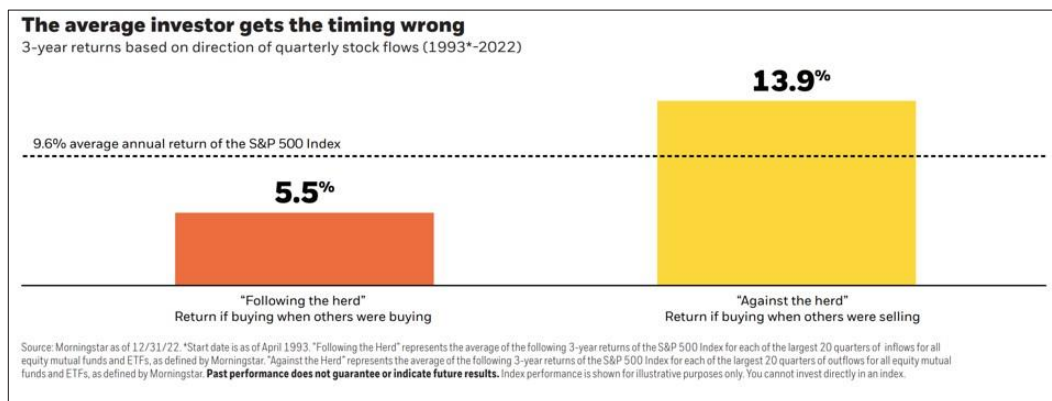
Accordingly, our approach is to select low-cost funds for our portfolios, and to only select higher cost funds where we can demonstrate that additional value is being added. Charges taken by the fund manager can substantially impact fund returns, especially in flatter markets. Costs, like interest, have a compounding effect over time.

Our portfolios typically have a total ongoing cost of between 0.08% and 0.23% per annum. This is inclusive of fund charges but does not include platform costs, discretionary fund manager or adviser fees.

Investors' Behaviour Is a Key Determinant of Their Long-Term Outcome

We believe that the longer you stay invested, the greater the probability that your investment will generate a positive return. Once an investment strategy has been agreed with clients, it is important to stick to it. As the saying goes, 'it is time in the market, not timing the market.'

Recent data by Blackrock (2023), demonstrated the significant difference for the average return of an investor who 'follows the herd' (selling when others are selling) vs goes 'against the herd' (buying when others are selling). Those who followed the heard returned 5.5% over 3-years vs 13.9% for those who went against the herd. This difference in returns helps illustrate the 'performance gap' between what investors actually return vs what the market does. It helps highlight the natural biases in human behaviour, and how fallible we can be when it comes to investing.



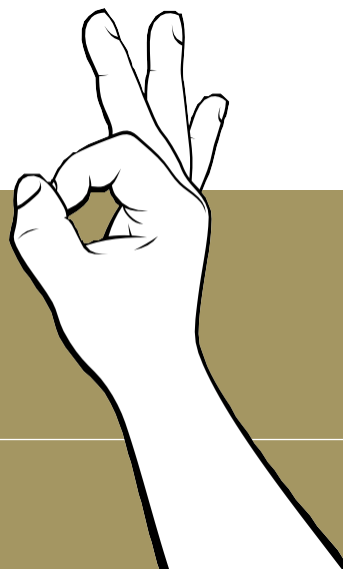
Investment Philosophy Statement

Data by Morningstar effectively demonstrates this concept in its research on the “performance gap”, which is the difference between the return of an average mutual fund and the return the average investor in that fund experiences. In their research, they found that fund investors earned 7.7% “investor return” over the 10 years to the end of 2020, while their “fund holdings” generated a 9.4% annual total return over the same period. The 1.7% difference was due to mistimed purchases and sales (Morningstar, 2021).

Clare and Motson (2010) lend further credence to the importance of adopting a long-term perspective, finding that poor timing decisions by UK retail investors cost them, on average 1.2% per annum over an eighteen-year period. Furthermore, Schneider (2007) showed that the performance gap was as much as 2.4% per annum for UK smaller company funds and 2.1% per annum for growth funds over an 11-year period between 1992 and 2003. The plausible explanation is that investors are chasing past winners and therefore end up buying high and selling low.

When looking to optimise returns, it is extremely difficult to predict the best time to enter or exit the market. With the increasing globalisation of news and events, the speed at which markets react to events means stock prices almost immediately absorb the impact of new developments. When markets turn, they turn quickly; investors looking to time their entry and exit may be impacted more negatively than those who chose to remain invested throughout.

Therefore, we maintain a disciplined approach and stays the course even during extreme market conditions. All too often, investors let their emotions get the better of them with dire consequences for investment returns. We are expected to work with our clients to maintain a disciplined approach, especially in extreme market conditions, both up and down.

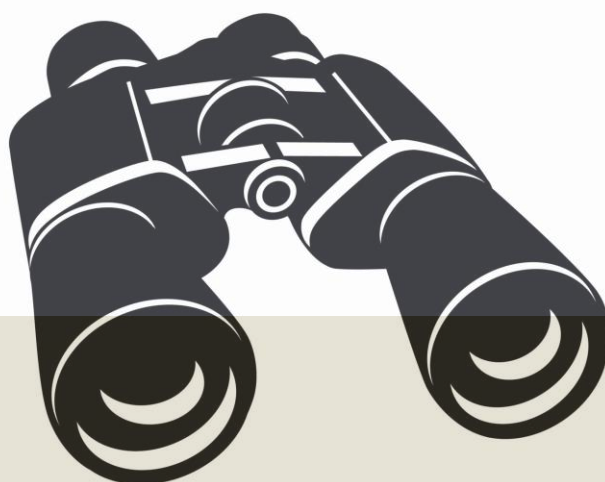


Asset Allocation Guidelines

We take a long-term strategic approach to asset allocation and do not engage in tactical asset allocation strategies. Each investment portfolio range rises in equity allocation by 10% increments, from 0% to 100%. This enables us to match a portfolio with our client's needs whilst also considering their tolerance for investment risk.

Our asset allocation within equities is linked to developed world and emerging stockmarkets weightings, with factor tilts and/or Ethical, Social & Governance tilts as required or expressly requested by our client. Our fixed income asset allocation is broad, driven by diversification and provides defensive qualities to offset the more volatile characteristics of equities.

The first step in constructing a portfolio for a particular risk profile is assessing the split between fixed income and equity.



Fixed Income

Since Tobin's Separation Theorem (Tobin, 1958) for which he was awarded the Nobel Prize for Economics in 1981, financial actors' perspective on investment portfolios have changed. It is now common knowledge that each investment must be considered within the context of the entire portfolio, which is why fixed income assets are used to mitigate portfolio risk stemming from equities.

The key role of fixed income in our portfolios is to provide diversification benefits against equities. We fully expect growth assets, namely equities, to experience negative price movements through the investment cycle. The purpose of fixed income is to provide a "defence" or a "cushion", limiting the loss in value of the total portfolio when equities are falling.

We primarily use bonds in a client's portfolio to reduce volatility. Three key features of fixed income that contribute to its diversification benefits include:

Capital Preservation

High-quality fixed income securities provide a solid foundation to a portfolio. Although losses can occur over the short term, these assets should offer stability over time.

Income

Although equities may provide an income stream from dividends to enhance investment returns, these payments are mostly paid at the company's discretion and tend to be minimal in the growth phase of the business cycle. Equities are also subordinate to the bondholders of the same company, which prioritise fixed income payments over dividends in times of distress.

Inflation Protection

The fear of inflation is a reality for most investors. Several asset classes can provide indirect protection against inflation, but inflation-linked bonds offer a more explicit hedge against inflation, protecting your investments' purchasing value.

Diversification Of the Bond Allocation

No one sub-asset class of fixed income consistently outperforms another in times of market stress. It is for this reason that we maintain a diversified bond allocation, to offer the greatest protection during times of market downturns. In addition, to provide protection from adverse currency movements and maintain relevance to the UK interest rate environment, all three ranges maintain a tilt to UK bonds. Portfolios hold both global government and corporate bonds.

Credit Ratings

Corporate and Government bonds are assigned ratings, to give investors an indication of the credit worthiness of a particular bond issue. If an investor buys a particular bond, they want to know if the issuer is able to pay the agreed interest on the loan in a timely manner and return the full amount when the bond expires.

Credit ratings are split into two broad categories: investment grade and speculative grade. Investment grade bonds are less risky. For this reason, we only invest in funds that hold investment grade bonds.

Fixed Income

Corporate Bonds

Investing in corporate bonds provides an alternative, and less risky approach to gaining exposure to public companies than shares. Whereas dividend payments and capital growth via an equity investment are not guaranteed, high quality corporate bonds are more likely to meet scheduled interest payments and return the original loan amount on bond expiration.

Government Bonds

Issued by governments to fund government spending. Government debt is generally seen as one of the safest forms of bond investing, as interest payments and principal are guaranteed by governments. However, as with companies, some governments are less risky than others. Because of this, like corporate bonds, we only invest in highly rated government bonds.

UK Inflation-Linked Bonds

We use UK inflation linked bonds to a greater or lesser extent. UK inflation linked bonds are one of the safest assets for UK investors. Being invested in UK government bonds means that investors' money is exposed to little credit risk and currency risk. Moreover, returns are linked to inflation, protecting investors' real wealth.

Maturity & Interest Rate Risk

One of the biggest factors that impacts the value of bonds is interest rates. There is an inverse relationship between interest rates and bond prices. When interest rates fall, bond prices rise. Why is this?

Essentially, bonds pay a fixed rate of interest. If interest rates fall, a bond paying a higher rate of interest becomes more attractive, demand increases, and whenever there is greater demand for any product or service, this results in higher prices. If interest rates increase, the fixed rate being paid by the bond becomes less attractive, when something is not in demand, its price drops.

Because the number of outstanding interest payments on a short-term bond are fewer than those on a long-term bond, changes in interest rates have less of an impact on the value of short-term bonds.

Our fixed income philosophy is to remain neutral on duration. We believe that you get the best stabilising benefits from a diversified exposure laddered across the whole yield curve.

Research concludes that there had been no consistent pattern; in some instances, short duration will outperform the longer end of the curve during equity downturns. However, in others the longer duration bonds would outperform. Further to this, we also concluded that in some cases it is simply a very particular part of the curve that outperforms, for example, the 5-7-year portion. Based on these varied results, we therefore believe that you need to be exposed to the whole yield curve in order to provide the true stabilising effects of diversification.

Based on this research, our house view is that it is not the stable nature of short-dated bonds that provides the primary protection to investors, but rather the low correlation fixed income offers relative to equities.

Fixed Income

Global Exposure

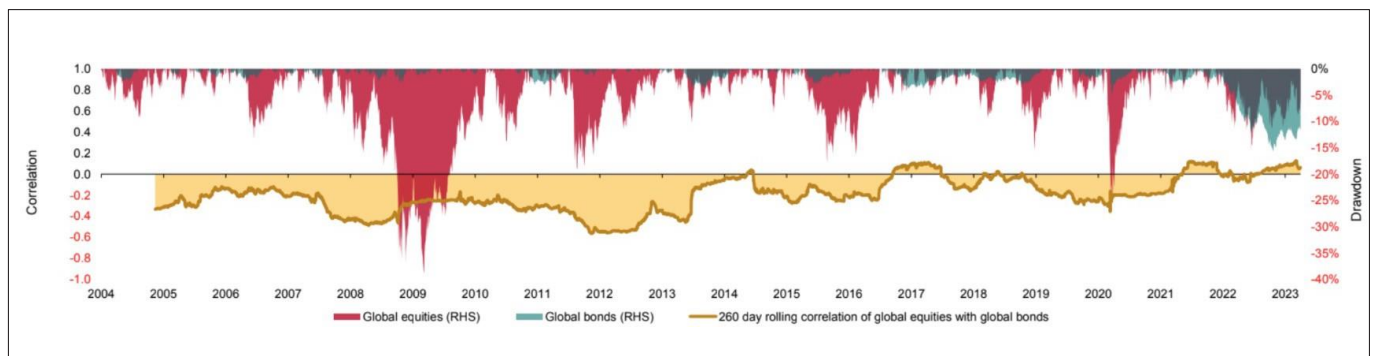
Investing in global bonds allows investors to gain exposure to a greater number of fixed income securities, and associated risk factors. Akin to equity investing, by taking a global perspective with regards to fixed income, events affecting bonds in other markets will be different to events affecting bonds in their own local market.

Therefore, a global allocation to bonds has the potential to reduce an investor's risk without necessarily reducing expected return (Phillips & Thomas, 2013).

In research by Vanguard (2023) it was found that global bonds proved to be amongst the best risk dampeners across the various asset class categories with comparatively low volatility and drawdowns in all-weather periods. The graph below demonstrates the various periods of economic volatility and the correlation between bonds and global equities.

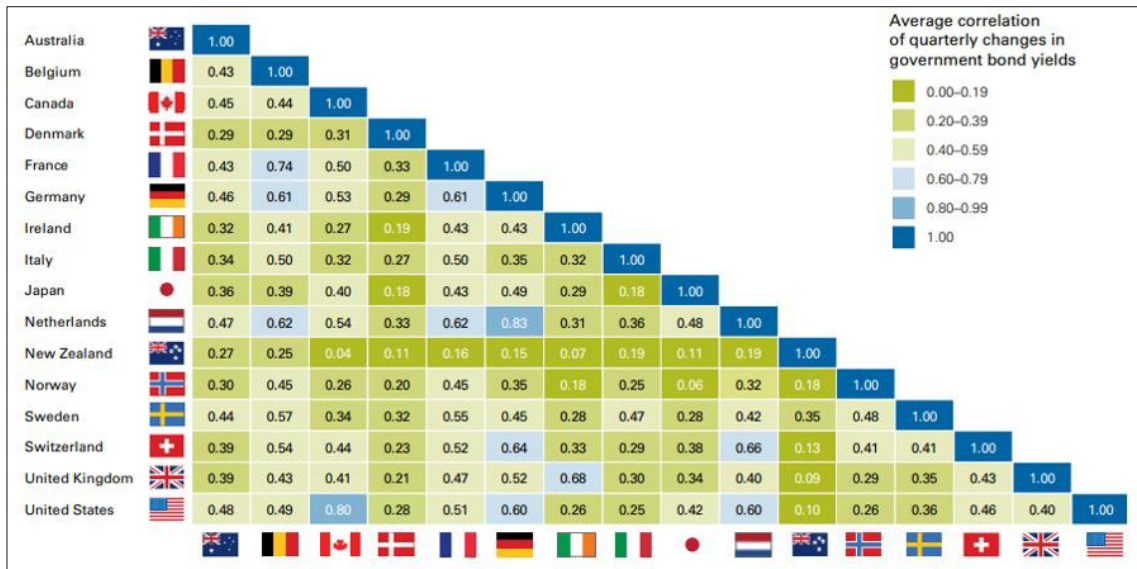
Source: Vanguard (2023)

Correlation and drawdown



Fixed Income

Further to this, Schlanger et al. found relatively low correlations of government bond yields across markets for the last 50 years suggests that local risk factors such as inflation, interest rates and yield curves tend to cancel each other out. The next diagram illustrates the benefits of holding a globally diversified bond allocation:



Source: Schlanger, Walker and Roberts (2018)

They also serve over the long-term to protect against inflation, although longer term fixed-income securities do have a potential to deviate more in value. Some evidence shows that securities with longer maturities do not deliver adequate returns considering the increase in risk (Berndsen 2003; Schröder and Sørensen 2010). However, clients with lower risk portfolios (and hence equity allocation) may want to hedge against inflation with long-term fixed income assets.

Currency Hedging

Our portfolios are designed to withstand some amount of foreign currency risk and where relevant we use hedged bond funds. Bonds are held in the portfolios for their defensive qualities, so we use hedged fixed income funds, to mitigate potential increased volatility associated with different currencies whilst also gaining exposure to the diversification benefits of foreign yield curves. Given the modest returns of fixed income securities, they are more susceptible to fluctuations in exchange rates, whereas with equities we take the view that the emphasis should be on delivering growth of a greater amplitude that far outweighs any potential foreign exchange risks.

In research, Vanguard (2023) concluded that currency hedging strengthened global bonds' all weather shock absorbing properties. This was demonstrated by a significantly lower volatility profile compared to unhedged global bonds. Whereas the currency profile of global equities does not increase the overall volatility of the asset class, and currency fluctuations have been shown to have net zero impact over the long term.

Equities

We believe that markets are mostly efficient and that asset prices are fair, which results in capital migrating to destinations that offer the most attractive risk-adjusted expected returns.

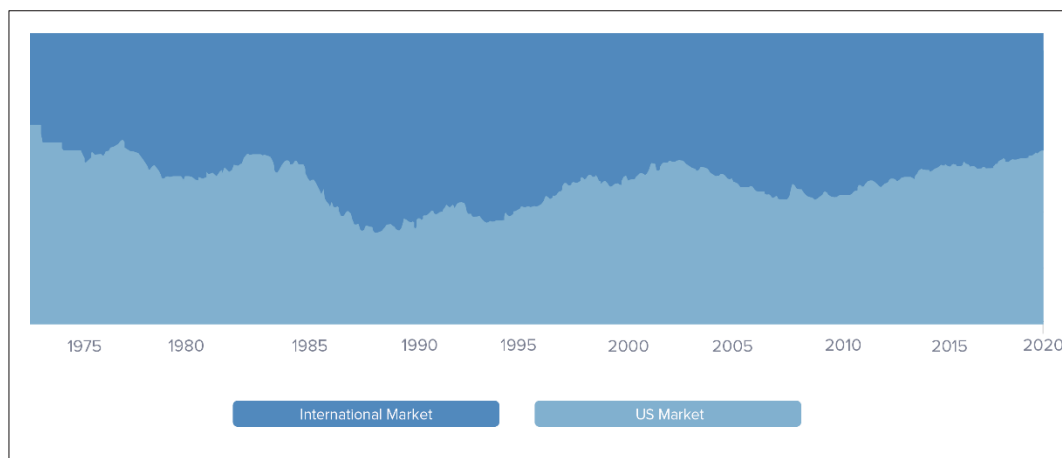
We, therefore, see no rationale for maintaining a home bias in our portfolio ranges and take a global investment perspective, holding securities in each market in line with their proportion of their total market capitalisation.

Our core philosophy is to use the vast quantity of theoretical and empirical research combined with our in-house analysis to make objective and informed investment decisions. As mentioned above, our asset allocation within equities is linked to developed world and emerging market weightings, with a small-cap, value, profitability factor tilt and/or ESG tilt if required or requested.

A Diversified Starting Point

We take a long-term, globally diversified approach to asset allocation. They allocate our equity exposure proportionally across regions according to each region's share of global market capitalisation. This approach ensures a diversified base to gain exposure to various economic market forces.

We believe that markets are mostly efficient and that asset prices are fair, resulting in capital migrating to destinations that offer the most attractive risk-adjusted expected returns. Therefore, a global market capitalisation approach can be seen as a dynamic investment approach that allows investors to share in the global equity markets as capital markets change over time. For example, the US equity market currently accounts for approximately 62% of the global equity market. In the late 1980s, the US equity market made up only 29% of the global equity market. These dynamic weights can be seen in the figure below:



Source: Vanguard (2022)

Equities

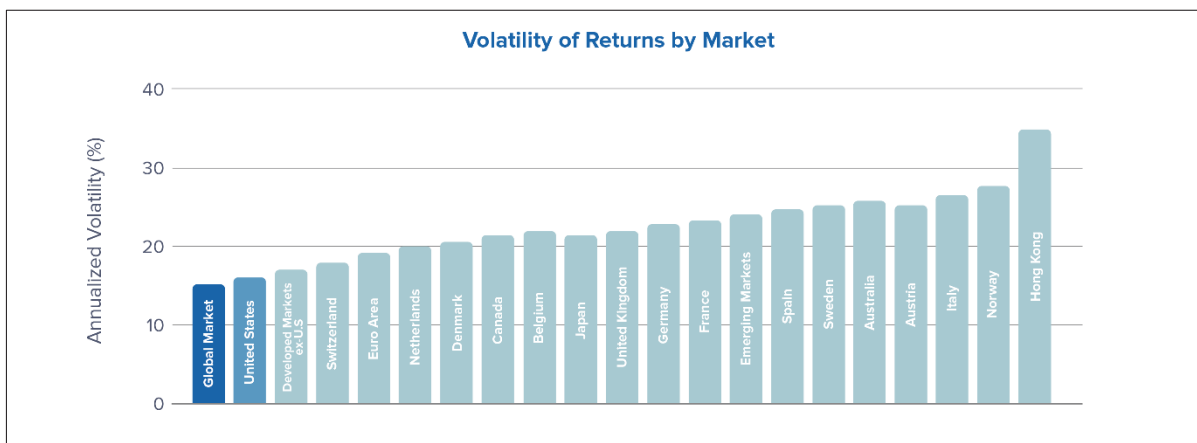
Global Market Capitalisation

There are four main reasons for using a global market capitalisation approach in our portfolio construction process. A global market capitalisation approach:

- Reduces total portfolio volatility.
- Reduces idiosyncratic risks.
- Removes a home bias.
- Serves as a diversified starting point.

Reduce Total Portfolio Volatility

The benefits of global diversification stretch further than just a diversified starting point. Equity markets across the globe have less than perfect correlations with each other. These imperfect correlations provide further diversification benefits by causing an offset of volatility when analysing the global equity market in aggregate. Research by Vanguard (2021) found that the United States' equity market has been the least volatile market of all the countries examined between January 1970 and September 2020. However, the volatility of the US market was still slightly higher than the combined global market. The rest of the countries examined had shown volatility levels up to 100% greater than the global market index as can be seen below.



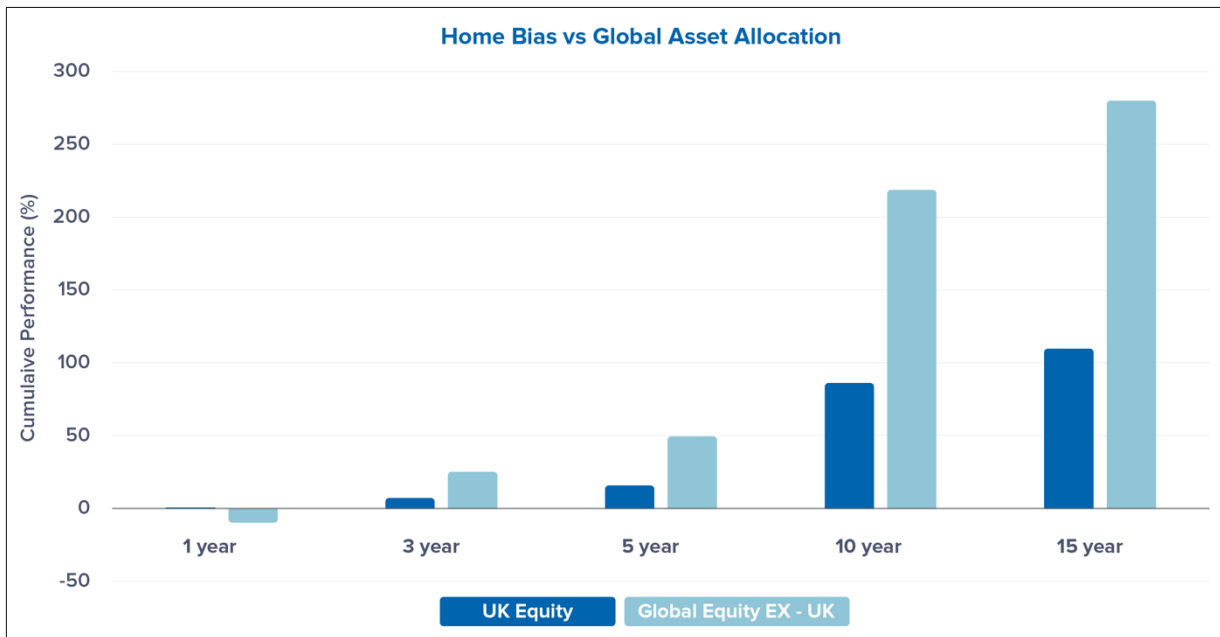
Source: Vanguard (2022)

Remove Home Bias

Home bias refers to the tendency for investors to cluster their holdings in domestic markets. Some investors maintain strong preferences towards what they know and understand. This has been well documented in the literature and although not fully understood, the reasons for this behaviour are believed to be explained through a combination of rational and behavioural factors (Ardalan, 2019).

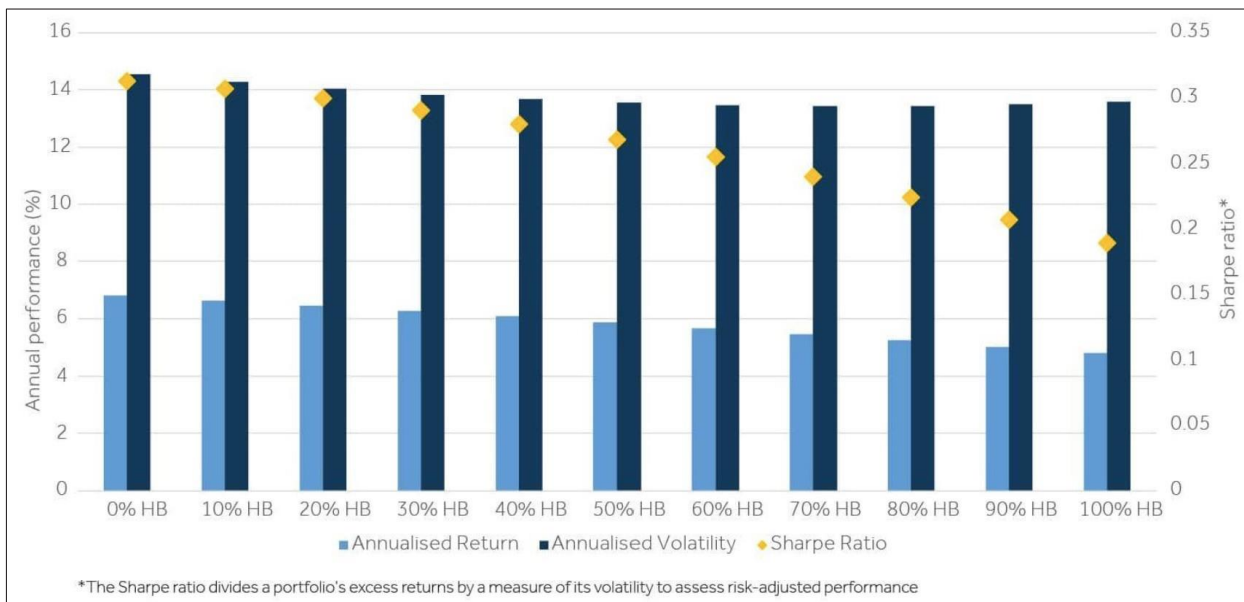
UK home bias has been estimated to be approximately 25% of an allocation, despite UK forming just 4% of the global index (Vanguard 2021). By concentrating their investments in one country, investors not only miss out on the opportunity to invest in faster-growing economies, but they are also more vulnerable to volatility in that market. The implications of investing heavily in the UK can be seen in the next chart.

Equities



Source: Timeline Portfolios (2023)

Barclays (2023) further noted the disadvantage to performance for investors who bias towards the UK in their portfolios by looking at the Sharpe ratio of both a UK portfolio and a global equity portfolio. As you can see below, having a purely UK portfolio significantly reduces your risk adjusted return in comparison to a global portfolio:



Source: Barclays Private Bank, Bloomberg (2023)

Equities

We further believe that in many ways “country” split is no longer a useful way to look at equity markets, and country classifications for the most part do not truly reflect the investment’s profile or likely behaviour. In many cases, there is limited information in the classification applied by data providers, that is driven by country of listing or incorporation.

With the level of transparency over company activities, we trust that global market players have allocated capital to the areas of opportunity that offer the best risk return profile. Country allocations should not have a bearing on how we construct our portfolios, and we use market capitalisation weightings to guide strategy, as they incorporate the aggregate forward-looking expectations of all market participants and provide a continuously updated, instantaneous snapshot of global diversification.

Reduce Idiosyncratic Risks

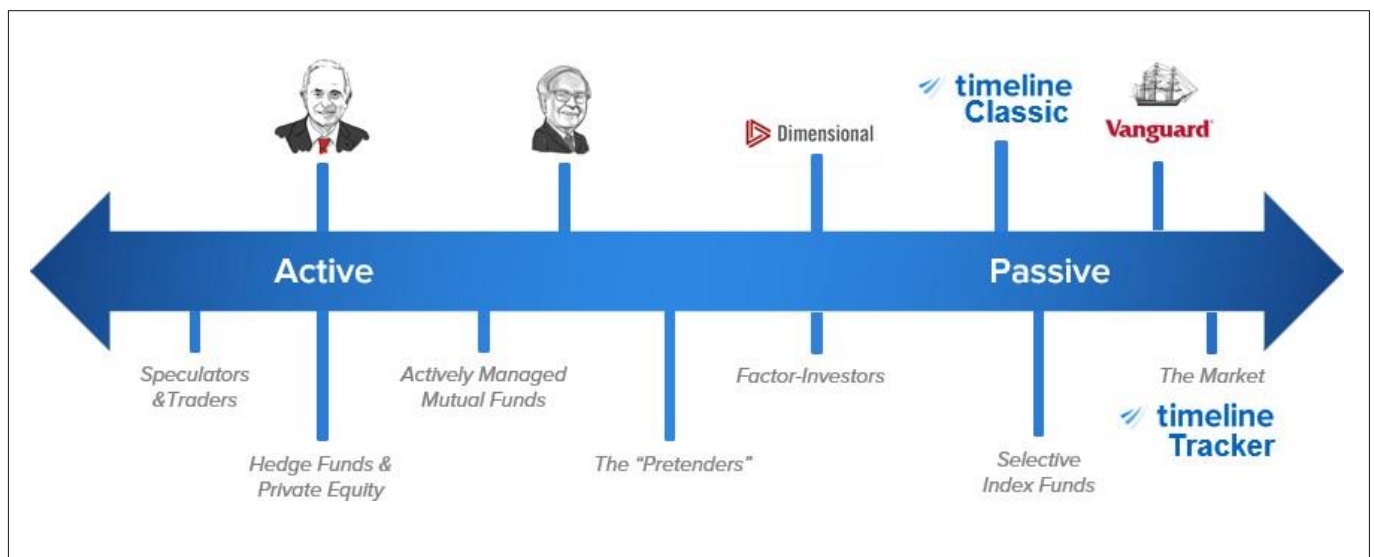
Idiosyncratic, geopolitical, economic, and financial risks are always present in global investing, our investment philosophy is to take a long-term view, rather than focus on short term risks. A global market capitalisation approach serves to reduce exposure to these risks. This was evident in February 2022 when Russia invaded Ukraine. In the first month of the invasion, the MOEX Russian equity index declined by a third, while a global market-cap index like the MSCI All Country World Index, declined by approximately 1%.

Therefore, in line with our views on the importance of international diversification and supported by the findings of Driessen and Laeven (2007) and Scott, Balsamo, et al. (2017), we take a global approach to asset allocation.

Factor Investing

Traditionally it was widely accepted that a stock's expected return is determined by its systematic risk compared to the overall market, more famously known as a stock's "beta".

Factor investing can be defined as an investment approach that involves targeting mutually exclusive drivers of risk and return in an investment portfolio. Factor investing sits somewhere between both the active and passive space as it aims to outperform the markets utilising evidence-based investment. The most succinct way to view factor investing is perhaps as a spectrum between the active and passive extremes:



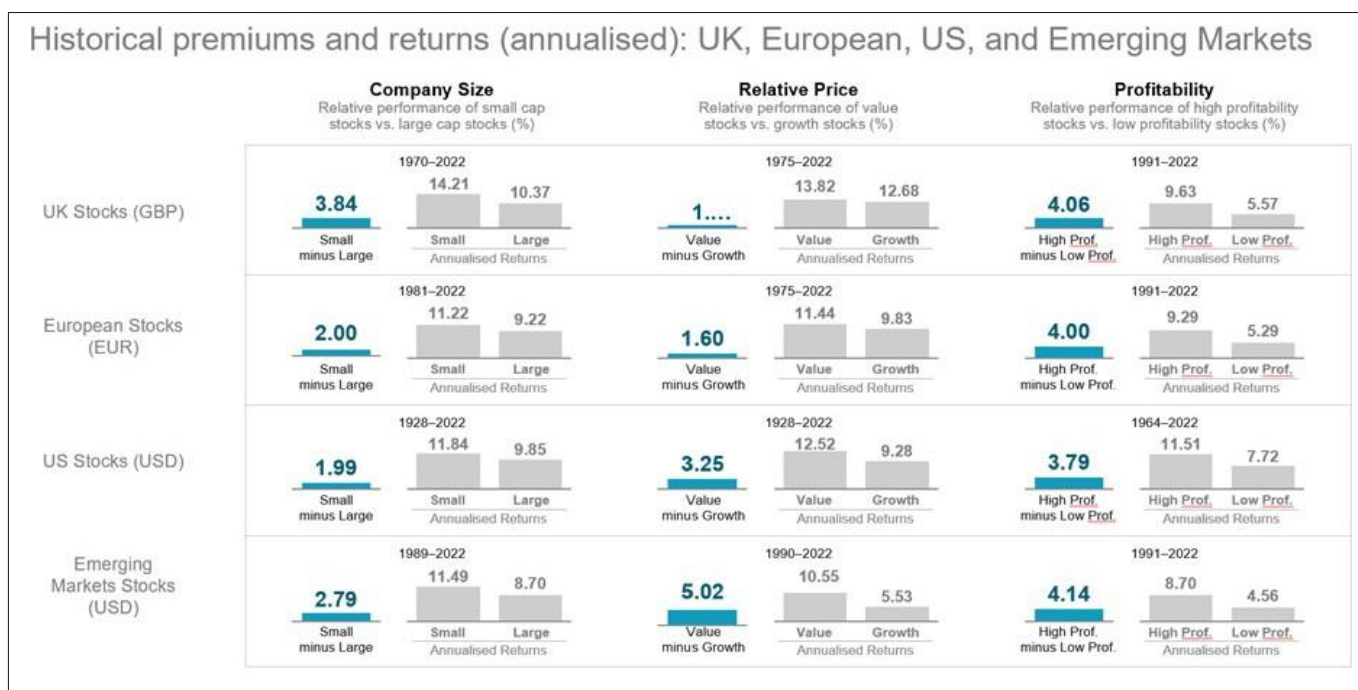
Before we seek out any premiums from factor investing, we first have to acknowledge that risk and return are related. Whilst evidence suggests that certain factors outperform the market over the longer term, seeking 'enhanced beta' can come at the risk of periods where these factors do not outperform the markets. It is important to choose these factors carefully in order to not take on unnecessary risk for minimal returns. We will discuss a variety of options with our clients to determine a suitable investment strategy based on specific needs and circumstances.

Factor Investing

Equities: Small & Value Premium

In 1992 the traditional view of 'beta' was challenged by what is today known as the three factor Fama-French Model (FFM) model. The FFM designed by Nobel Laureate Eugene Fama (University of Chicago) and Professor Kenneth French (Tuck School of Business, Dartmouth College) hypothesised that two other factors contribute meaningfully to a stock's expected return. These two factors are a stock's size (small or large-cap) and its book-to-price ratio (value or growth).

Dimensions of Expected Returns

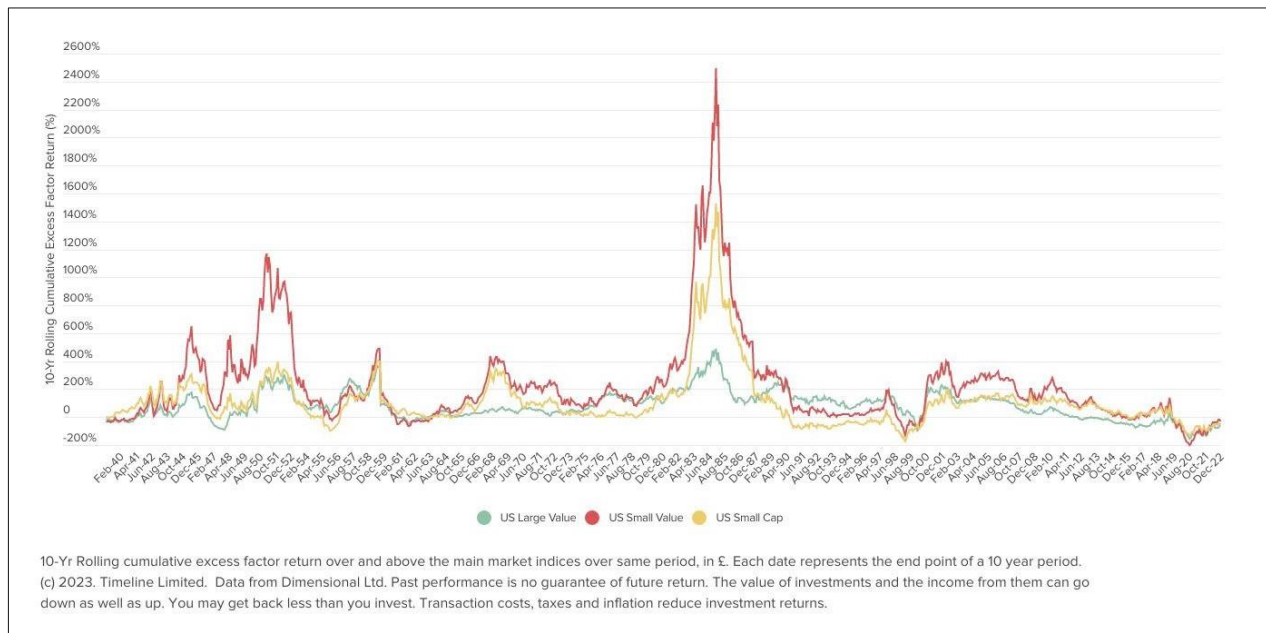


Source: Dimensional Fund Advisors (2022)

As you can see from the previous chart, value stocks deliver greater returns than their growth counterparts, because the prices of value stocks (as the name would suggest) don't reflect the strength of their fundamentals, but instead present good value, which tends to lead to better returns. Growth stocks, although designed to appreciate, do worse on average, given the fact that they tend to already be relatively expensive, with little room left to rise. The latter is also the reason for the outperformance of small cap stocks, given that they have more room to rise and demonstrate increased volatility, for which investors are rewarded.

The pattern of performance remains the same if we extend the time period to look at data beginning in 1939. Again, there appears to have been substantial outperformance of small-cap and value stocks, compared to large-cap and growth stocks in the US equity market.

Factor Investing



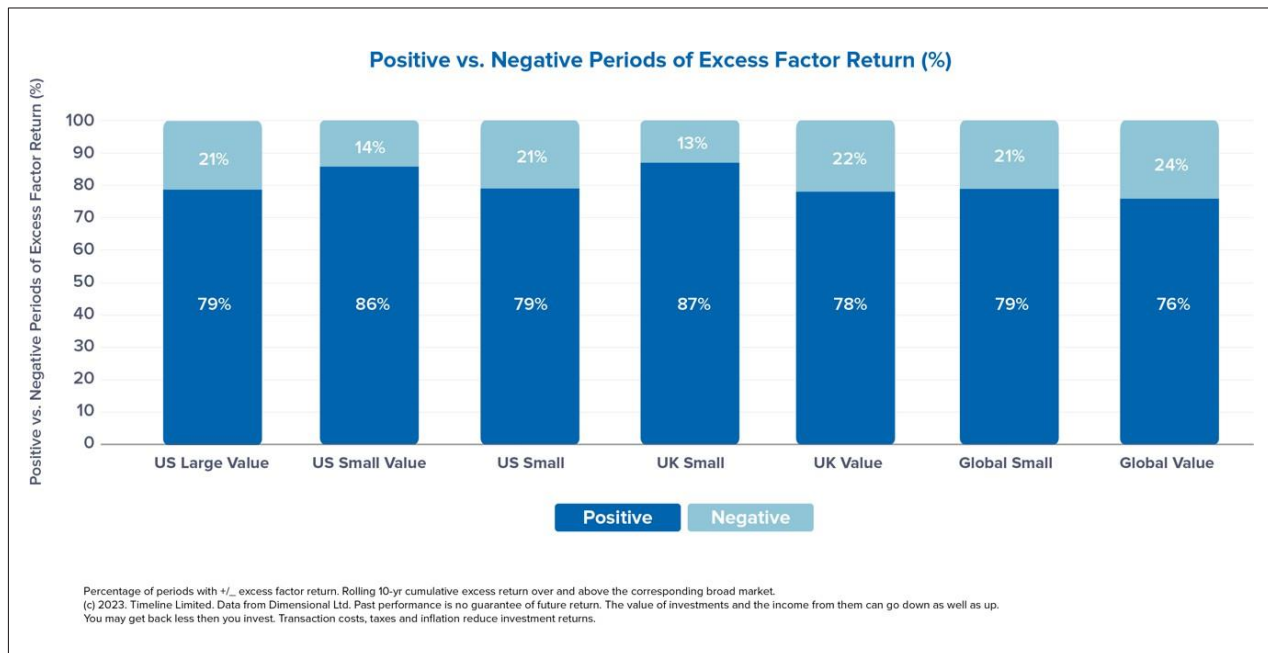
Source: Timeline Portfolios (2023)

We are often faced with the argument that these small-cap and value premiums result from market inefficiencies. However, if that was the case, then one should expect the market to exploit these inefficiencies as they become known, and the premium should disappear.

Yet, given the nearly 100 years of past data, we see that these premiums are much rather a result of investors' risk preferences. These risk premiums indicate that investors prefer to hold large-cap stocks over small-cap stocks, and growth stocks over value stocks. Therefore, the small-cap, value tilt in our investment philosophy is rooted in our belief that the small-cap value premium will persist into the future.

An important point that is often forgotten about factor investing is that it usually undergoes a very prolonged period of underperformance. Therefore, they are called "risk factors". If you just earned additional returns for factor exposures, it would be called a "free lunch". The next chart shows that around 20% of 10-year periods end up with a negative excess return for most factors.

Factor Investing



Source: Timeline Portfolios (2023)

The most prominent observation from the previous charts is the cyclical and lumpy nature of factor returns. The excess returns associated with value and size factors come at a price, that protracted periods of under-performance, relative to the overall market.

Momentum & Volatility Factors

Further to the small and value premiums outlined above, both momentum and volatility have also been noted as factors. Whilst there is rationale to support both when it comes to investment, after consideration we have chosen to not actively target these factors within our portfolios.

Factor Investing

Momentum

The momentum factor has without a doubt a significant contribution in explaining returns. However, it is a high turnover strategy that is more appealing on paper and for those who specialise in high frequency trading like hedge fund managers.

The high turnover basically means two things:



Momentum increases portfolio turnover and costs, with most studies confirming that the size of the premium does not outweigh the higher costs.



The momentum premium is also inconsistent over time and has a rapid decay when out of favour. This rapid decay in the premium implies high turnover to capture it. There is a saying in the market: "Momentum is your friend, until the bend in the end", which in practice means that the drawdown, once momentum ends, is significant.

That said, we do not completely ignore momentum in our portfolios. We capture momentum in two ways:



Through our Dimensional fund holdings within the Classic portfolio ranges. Dimensional's investment philosophy is to focus primarily on small, value and profitability. However, they do capture the momentum premium passively by having a flexible trading strategy, where they can delay a buy or sell transaction in order to capture momentum without increasing portfolio turnover.



Our rebalancing methodology is also ideally suited for capturing some of the momentum premium in the market. This strategy allows us to leverage market momentum within a 10% range, essentially resulting in a sell-high-buy-low strategy.

Volatility

Some managers also seek to target low volatility stocks and securities within their portfolios. One should also be very careful when introducing a low-volatility strategy in a portfolio for the following reasons:



1.

Low volatility stocks have a great overlap with value stocks, meaning that your diversification benefits might not add any additional value.



2.

Low volatility, in general, has a lower beta exposure to the market, which means that it is possible to reduce portfolio volatility, but usually at the expense of higher returns.

There is also a liquidity premium, term premium, credit premium etc. As you combine more and more premiums to your strategy, you are overfitting your model that explains the return profile of your portfolio. This can ultimately lead you to nothing more than a market portfolio at an elevated cost. The momentum and value premium are a typical example of two premiums that work against each other, rather than in tandem.

Emerging Market Equities

When considering global capital markets from an investment perspective, it's second nature to divide the world into "developed" versus "emerging". Index providers allocate countries to either classification depending on their stage of economic development and its sustainability. The two characteristics considered are "investability" such as size and liquidity, and then "accessibility", which considers factors such as foreign ownership limits, ease of capital flows and operational stability. Emerging economies are often associated with increased risk of inflation, geopolitical uncertainty, and foreign exchange fluctuations. The overall systemic, or "market" risk, is elevated, resulting in a bumpier investment ride.

The Rationale for Emerging Market Equities

Beta-convergence. This macroeconomic growth theory predicts that emerging economies will grow faster than their developed counterparts, until they reach the same level of economic development. Economic growth within a country is important to investors as over the long term, this is the main driver of a country's equity market value. If Beta-convergence holds, by investing in countries with faster growing economies, investors should receive a greater return. The evidence suggests that emerging markets may converge (IMF, 2011) and thus experience higher rates of economic growth, subject to the adoption of appropriate economic, legal, and political reforms.

Is there evidence For an Emerging Markets Premium?

When considering risk adjusted rates of returns, our research found that there is not an observable emerging market premium due to the higher volatility of returns observed in those markets. In short, emerging markets provide potential for superior returns, but at the cost of higher volatility. Our factor tilt portfolios overweight emerging markets relative to their market capitalisation to offer clients access to these higher returns, within the volatility parameters that their risk profiles can withstand.

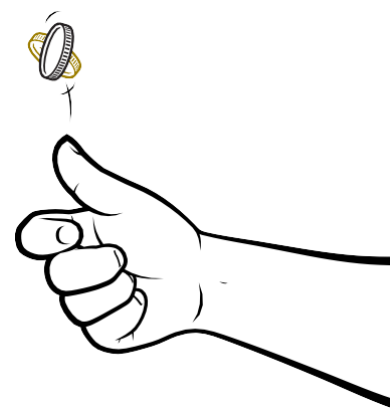
Risk Management

Our models are built across a range of equity increments that satisfy clients' risk profiles and are risk-rated after the construction process. Our portfolio construction process does not manage a portfolio to maintain a specific level of risk (volatility). However, we construct our portfolios to take on more risk to deliver a higher level of risk-adjusted return as the equity exposure increases from 0% to 100%.

Benchmark Selection

An investment benchmark can be defined as a standard against which a portfolio's performance can be measured. According to CFA Institute (2020), a good investment benchmark will exhibit the following key characteristics: it should be unambiguous, investable, measurable, appropriate, reflective of current investment opinions, and specified in advance.

Inflation is "enemy number one" for every investor, and we can use it as a structured benchmark to make sure that clients' growth is on track to attain their goals. If investment have not outpaced inflation, regardless of absolute return, the portfolio has lost "real value". We provide Retail Price Index (RPI) targeted benchmarks to allow us to track a client's progress toward their long-term financial goals. We can also report market returns via Morningstar Indices and peer group performance, via the multi-asset fund universe to facilitate full performance evaluation and due diligence.



Mapping Our Portfolios Against the Retail Price Index

Consumer Price Index (CPI) and the Retail Price Index (RPI) are closely aligned, with both measuring the cost of a basket of goods and services. CPI measures five broad components: food, beverages, and tobacco; fuel and light; housing; clothing and bedding, and miscellaneous footwear. RPI also includes housing components, e.g., council tax and mortgage interest payments, when considering inflation. Historically, both measures of inflation tend to run in tandem with each other with RPI running at approximately 1% above CPI. We appreciate that RPI is an older measure and tends to be higher than the CPI, however, we are comfortable that a more pessimistic benchmark will be in the client's favour when managing investment goals.

ESG Considerations

While Milton Friedman (1970) argued that the one responsibility of business was “to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game”, proponents of Environmental, Social and Governance (ESG) investing argue businesses have responsibilities and obligations not only to shareholders but to a wide variety of internal and external stakeholders. Moreover, failure to consider these stakeholders can have a negative impact on long-term profitability. Therefore, firms which are environmentally responsible, socially aware, and well governed should deliver superior risk adjusted returns. In essence, ESG investments seek positive returns while also considering the long-term impact business practices have on the environment and society.

Increased Interest

Interest in these strategies has increased significantly in recent years. According to the US SIF Foundation (2022), of the \$66.6 trillion of total assets under professional management in the United States in 2022, \$8.4 trillion was invested in ESG portfolios.

However, the concept of “responsible” investments is not new and stretches back at least to the 18th century, when the Quakers prohibited any investments relating to the slave trade and Methodists were asked to avoid investments in any trade that could be harmful to life and health (Renneboog et al., 2008).

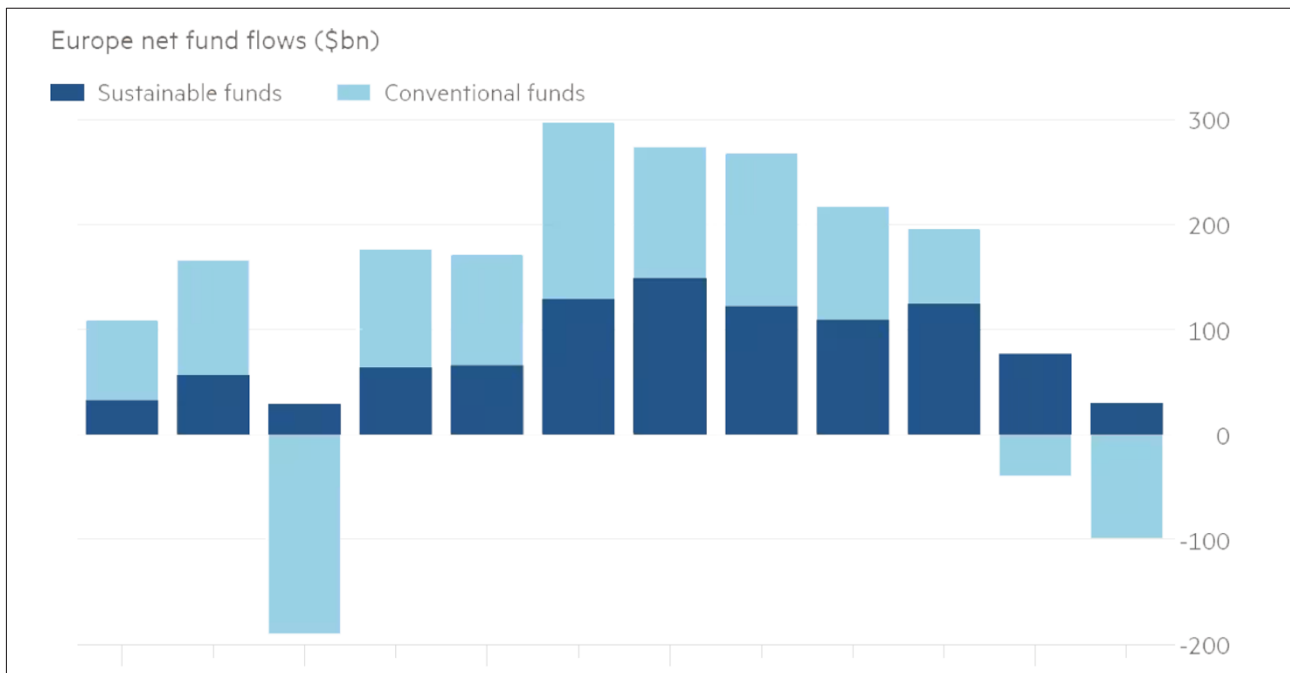
The demand for ESG over the past 4 years has maintained its momentum and continues to be a driver in consumer investment. In its report, PwC claimed that ESG-orientated assets under management are expected to grow much faster than the asset and wealth management market as a whole. Further to this, it predicted that passive approaches to ESG in funds would spearhead this growth.

Forecasts suggest that compound annual growth rate of assets under management held by ESG mutual funds between 2021 and 2026 will be 12.4 per cent.



ESG Considerations

The Sustained attraction of sustainable funds



Source: Financial Times (2023)

Performance

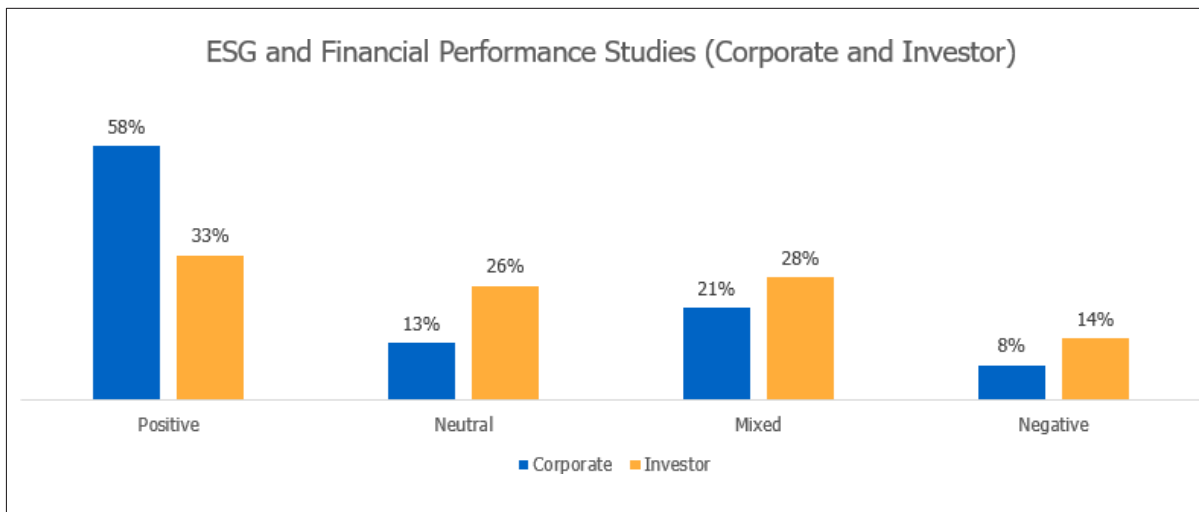
Concerns that investing responsibility could negatively impact returns is not supported by the academic research. Busch, Friede, and Bassen's (2015) meta analysis of over 2,200 empirical studies, examining the link between ESG and financial performance found that in approximately 90% of the studies, a relationship was present; the majority of these relationships were non-negative.

In addition, research by the Morgan Stanley Institute for Sustainable Investing (2019) found, after reviewing performance data from 2004 to 2018 of 10,723 exchange-traded and open-end mutual funds, that sustainable funds provided returns in line with comparable traditional funds while reducing downside risk; furthermore, there was evidence to suggest, sustainable funds were more stable during periods of extreme volatility. Moreover, the International Monetary Fund's (2019, p.87) own "analysis suggests that the performance of sustainable and conventional funds is comparable".

A more recent meta-analysis by Whelan et al. (2021) came to a similar conclusion. This study involved reviewing over 1000 research papers, divided into those that focussed on corporate financial performance (e.g., operating metrics such as return on equity or stock performance) and those focused on investment performance from the perspective on an investor (e.g., risk adjusted returns). In the corporate studies, a positive or neutral relationship between ESG and financial performance was found in 71% of studies. For studies that took the perspective of an investor, the figure was 59%.

ESG Considerations

ESG and Financial Performance Studies (Corporate and Investor)



Source: Whelan et al. (2021)

Our Approach

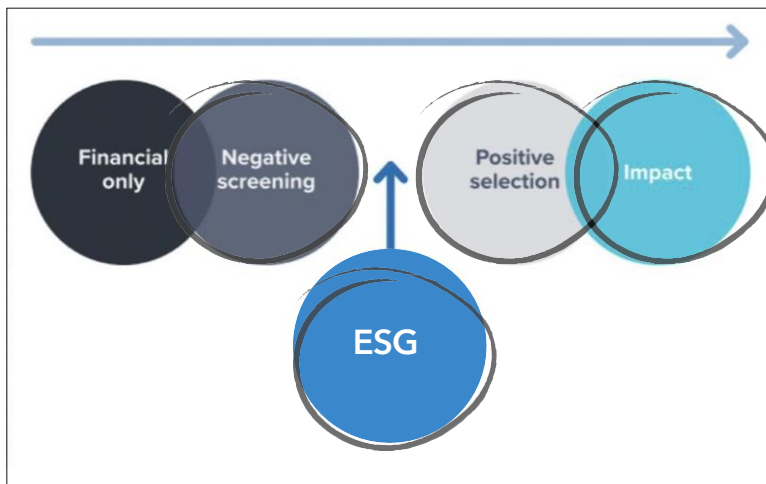
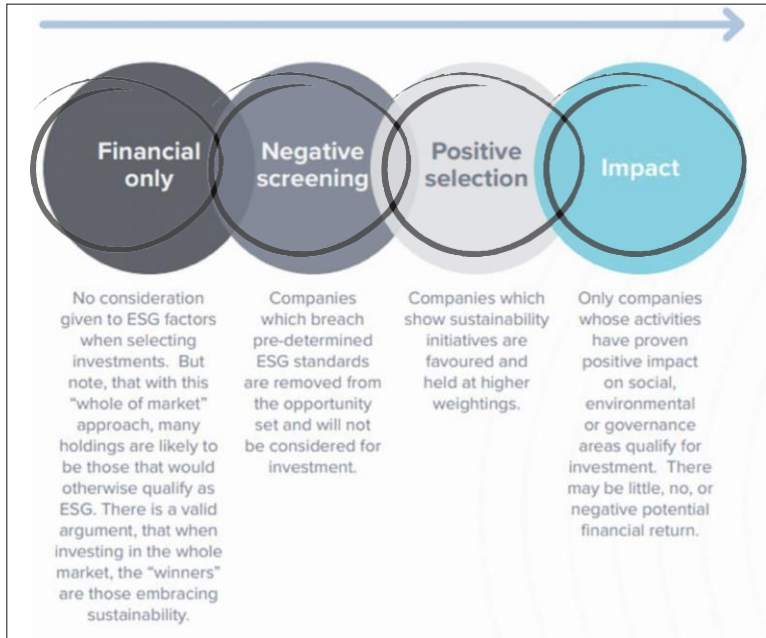
Traditional “Ethical” portfolios tend to exclude or include certain companies based on even the smallest infraction or exclude all companies within a particular industry because of the industry’s environmental record, irrespective of each company’s specific policies and practices. This binary and rigid approach can lead to a smaller investment universe, a diminished opportunity for diversification and generally results in higher costs.

By contrast, we aim to allocate more to companies that adhere to these principles and less to those that don’t. We therefore don’t necessarily exclude these companies completely. Often this is referred to as “light green” ESG investing. Since environmental business practices can vary considerably among companies, corporate governance and practices that advance sustainability are better characterised along a spectrum. We believe that an investment methodology that applies more robust sustainability scoring at company level, may better serve investors.

Our ESG portfolios would hold a number of ESG funds, included after a thorough analysis of the underlying fund construction process utilised to ensure their ESG credentials. In addition, all funds fit our core investment philosophy of being low-cost, passively managed and maintain a diversified market capital approach.

ESG Considerations

There are differing approaches to ESG that can be viewed as a continuum:



Excluded Asset Classes

Virtually all non-traditional asset classes and investment strategies, collectively known as “alternative investments” are omitted from our core portfolios.

Commodities

We consider investments in commodities such as gold, that do not have the capacity to deliver any kind of income (from which value is derived) to be speculative. Gold’s value, much like all commodities in their original form, is derived solely from finding a counterparty to a trade, so even if somebody owns all of the gold in the world, it’s worthless if they cannot find a buyer. There might be a place for speculation at the fringes of an investment portfolio, but we do not believe speculative instruments should play a major role in our core portfolios. We therefore concentrate on bonds and equities.

Although our portfolios do not hold commodities directly, exposure to commodities is gained indirectly by holding the stocks of commodity producing and mining companies within the funds used to construct the portfolios.

Cryptocurrencies

We do not include cryptocurrencies. There is no reliable way to determine value. Whereas traditional assets, such as equity and fixed income are valued by examining expected cashflows, and then discounting these back to the present day, the value of cryptocurrencies is driven by behavioural psychology and market sentiment. The behavioural aspect in driving cryptocurrency returns also means returns can be highly volatile.

Futures

Futures have demonstrated benefits of diversification historically, however, the discussion on the benefits of holding these securities over the long-term is still highly contested. As a result, we cannot advocate the usage of these instruments in our portfolios, considering the lack of compelling empirical evidence. It should be noted that some of the funds used in our portfolios may use futures for cash management and to gain exposure to equity.

Hedge Funds & Private Equity

Common alternative investment strategies such as hedge funds and private equity do offer certain advantages. This stems from their low correlation with traditional market forces and thus with commonly held instruments like equities and fixed income. Another proposed benefit of these strategies is that they deliver exposure to talent. Given the discretionary-based salary of professionals within private equity and hedge funds, this exclusive sector of finance attracts extremely qualified professionals, and so naturally an investor would want their money in the hands of these people.

However, when investing based on this premise, an investor opens themselves up to risk, based both on selection of manager and the selected manager’s consistency of results, which as we discussed in previous sections, is not the most reliable strategy to pursue. The exclusive, private nature of these entities also brings lack of information disclosure and thus relatively opaque structures, resulting in difficulties conducting any significant amount of due diligence on the investment vehicles they produce. Complex investment products which drive high costs and the lack of liquidity also contribute to a level of risk for the investor that we believe isn’t palatable and so we justifiably omit these vehicles from our portfolios.

Fund Selection & On-Going Screening

Our screening of funds starts with the entire market of relevant retail investment products, which includes OEICs/Unit trusts (onshore & offshore) and Investment Trusts. Using FE Analytics, we apply a set of well-defined criteria to identify the most appropriate funds. These criteria include:

Investor Protection

We screen the funds for compliance with the fourth (IV) and fifth (V) editions of the European Union's Undertakings for Collective Investment in Transferable Securities Directive (UCITS). The most recent versions of the directive centre around depositaries, more notably the safeguarding of clients' assets, establishing liability for mishandling and disclosure of remuneration policies to ensure alignment of the custodian's incentives with those of the clients. Additionally, we screen funds for compliance with UK UCITS, a framework introduced by the Financial Conduct Authority in response to the United Kingdom leaving the European Union. This framework retains the UCITS rulebook for UK domiciled funds.

Index-Replication Method

As a rule, we invest in funds that physically replicate the index being tracked, i.e., the fund is invested in the underlying securities, as opposed to replicating the performance with derivatives that pay the return of the index (referred to as synthetic). This avoids the added element of risk stemming from the financial security of the financial institution (counterparty) that enters into the derivative contract with the fund house and ensures returns are provided regardless of the financial failure of one organisation.

Base Currency

We screen out funds that are traded in foreign currencies as we do not want to introduce currency risk at this level of the investment strategy. Underlying fund holdings are exposed to non-sterling currencies.

Fund Track Record

We examine the track record of the fund, with respect to tracking error and performance.

Fund Expense

Given the importance of cost as a predictor of performance, we set an expense ratio cap of 0.50% for our asset-class-tracking funds within the portfolios, with the exception of Ethical, Small Cap and Value funds (0.75%), where increased costs are justified by the more complex investment management process.

Transparency

Our approach is to select funds with transparent charging structures and exclude funds with opaque structures from our selection process.

Fund Selection & On-Going Screening

Fund Size

With greater assets under management comes an increase in economies of scale, efficiencies, and greater liquidity even in the event of a sell-off. Thus, we require funds with a fund size of greater than £100m. We make an exception for screens employing an Environmental, Social and Governance filter, given the infancy of that sector.

Launch Date

We screen for funds that have a longer tenure than 5 years, this enables us to avoid newly launched funds that have not yet gained traction and may not offer longevity of investment portfolio to clients. We make an exception for screens employing an Environmental, Social and Governance filter, given the infancy of that sector.

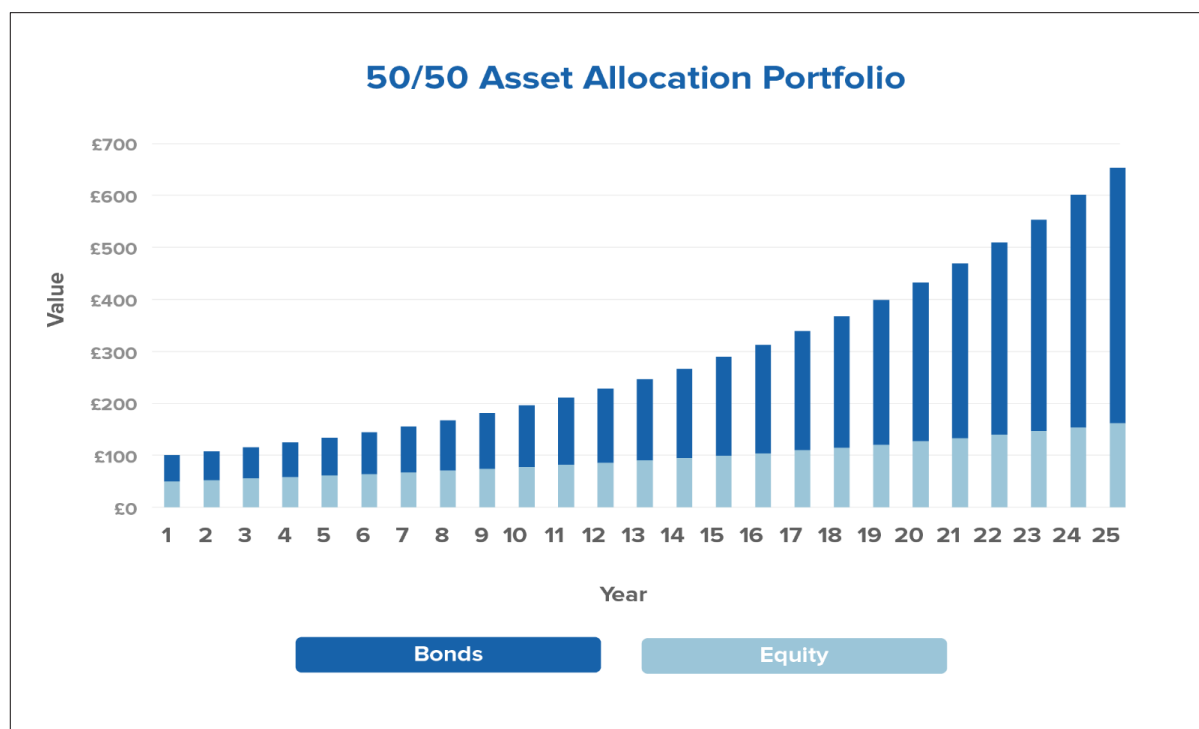
Platform Availability

It's important that we are able to trade the fund in a cost effective and efficient way and therefore we ensure that the fund is widely available on main adviser platforms. We look at whether the fund is available on largest platforms in the market, as an indication of widespread availability. If a fund we are interested in is not available on those platforms, we investigate further.

Fund Selection & On-Going Screening

Rebalancing

Rebalancing is designed to realign the investments held within a portfolio to their original target allocations. The necessity to rebalance is a consequence of long-term varying levels of performance between asset classes. For example, assuming over the long-term equity was to grow by 10% per annum while bonds grew by 5% per annum, a portfolio consisting of an initial allocation of 50/50 to bonds and equity, would drift to an allocation of 25/75 over a 25-year period.



Source: Kitces (2015)

As the previous illustration shows, if left unchecked a portfolio's composition may no longer meet the client's risk profile as higher performing and more risky assets such as equity become an ever-increasing proportion of the portfolio. To mitigate this problem, we monitor and when necessary, rebalance portfolios. Rebalancing involves selling higher performing assets and replacing them with lower performing assets. This may seem counterintuitive, and one could rationally argue, from a purely performance based perspective that a portfolio should never be rebalanced as to do so reduces long term return. However, with investments, risk and return are never considered in isolation.

The optimal rebalancing approach is to capture a proportion of the performance of the outperforming assets, while at the same time mitigating the increased risk of moving too far from the portfolio's target asset allocation.

Fund Selection & On-Going Screening

There are a number of approaches to rebalancing (Daryanani, 2008). Arguably, the most common and simplest approach is “calendar rebalancing”, whereby portfolios are rebalanced at fixed points throughout the year regardless of actual movements in asset prices. This is a sub-optimal approach to re-balancing and serves not only to reduce the ability for investors to capture upside performance but also increases trading costs for the investor which further decrease returns over the long term.

After a review of the literature together with our own in-house analysis, our portfolios will be rebalanced using a “tolerance-based” approach. This involves monitoring the drift of each portfolio on a daily basis. Our tolerance level is 10%. This means that once an asset class, equity, or fixed income as a whole, increase or decreases by more than 10%, the portfolio will be re-balanced with all funds reset back to their initial target allocation. Compared to other tolerance levels, such as 15% and 20%, whereby overall return would be higher, we believe that such drifts expose investors to excessive risk.

During periods of volatile markets, discretion will be used as to the frequency of rebalancing to reduce unnecessary trading and associated costs. In addition to this, we consistently review clients’ risk preferences to determine whether any changes should be made.

| Rebalancing Rule | Annual Return | Min Return | Max Return | Cumulative Return | Volatility | Drawdown | Nominal End Balance |
|------------------|---------------|------------|------------|-------------------|------------|----------|---------------------|
| 5% Band | 9.9% | -4.0% | 49.2% | 2218.3% | 10.9% | -15.4% | £23,182,478 |
| 10% Band | 10.0% | -5.0% | 40.9% | 2344.0% | 10.0% | -14.5% | £24,440,006 |
| 15% Band | 10.2% | -12.2% | 40.5% | 2313.1% | 12.3% | -18.9% | £24,131,346 |
| 20% Band | 10.4% | -21.5% | 39.6% | 2379.8% | 13.6% | -23.4% | £24,798,125 |
| None | 11.2% | -17.0% | 53.6% | 2948.5% | 15.1% | -32.1% | £30,485,407 |

Source: Timeline Portfolios (2023)

Managing Costs Effectively

Clients should avoid getting carried away by the excitement of chasing the next best manager and hot tips, but instead ensure that their costs are minimised. Small differences in returns, due to costs, compound into large differences over extended periods of time, which can materially affect future lifestyle choices.

Costs Come in All Shapes and Sizes

Fees

Given the body of research dedicated to the relationship between high costs and poor returns, we seek to minimise the costs associated with our core portfolios. To achieve this, we use high quality, low cost, passive funds that simply capture the performance of the market.



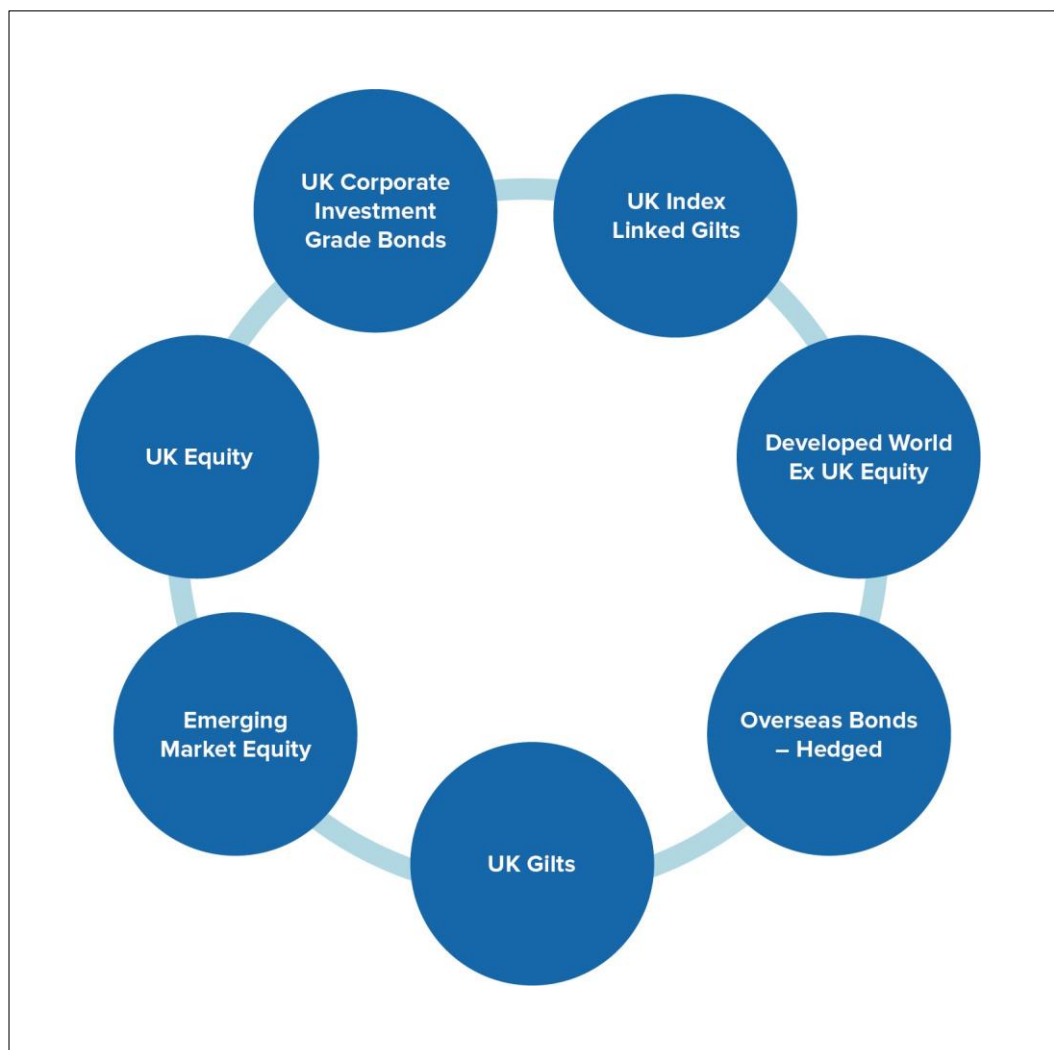
Emotional Costs and Opportunity Loss

Keeping a level head when markets become turbulent is a tough task. When the financial implications are large, it's easy to become engulfed in the financial press' coverage of securities of interest, which can lead to over-emotional decision making and selling assets at inopportune times. Not only does this result in increased transactional costs, but also the abandonment of future capital gains can irk even the most seasoned of investors, resulting in more irrational decisions made down the line.

Summary

The model portfolios will be invested in equities for growth and fixed income, for defensive qualities. Asset allocation strategies will be set according to client risk and return profiles. Equity market cap weights will be used as a starting point.

The model portfolios will invest in some or all the following sub-classes of asset:



Source: Timeline Planning (2024)

Centralised Retirement Proposition

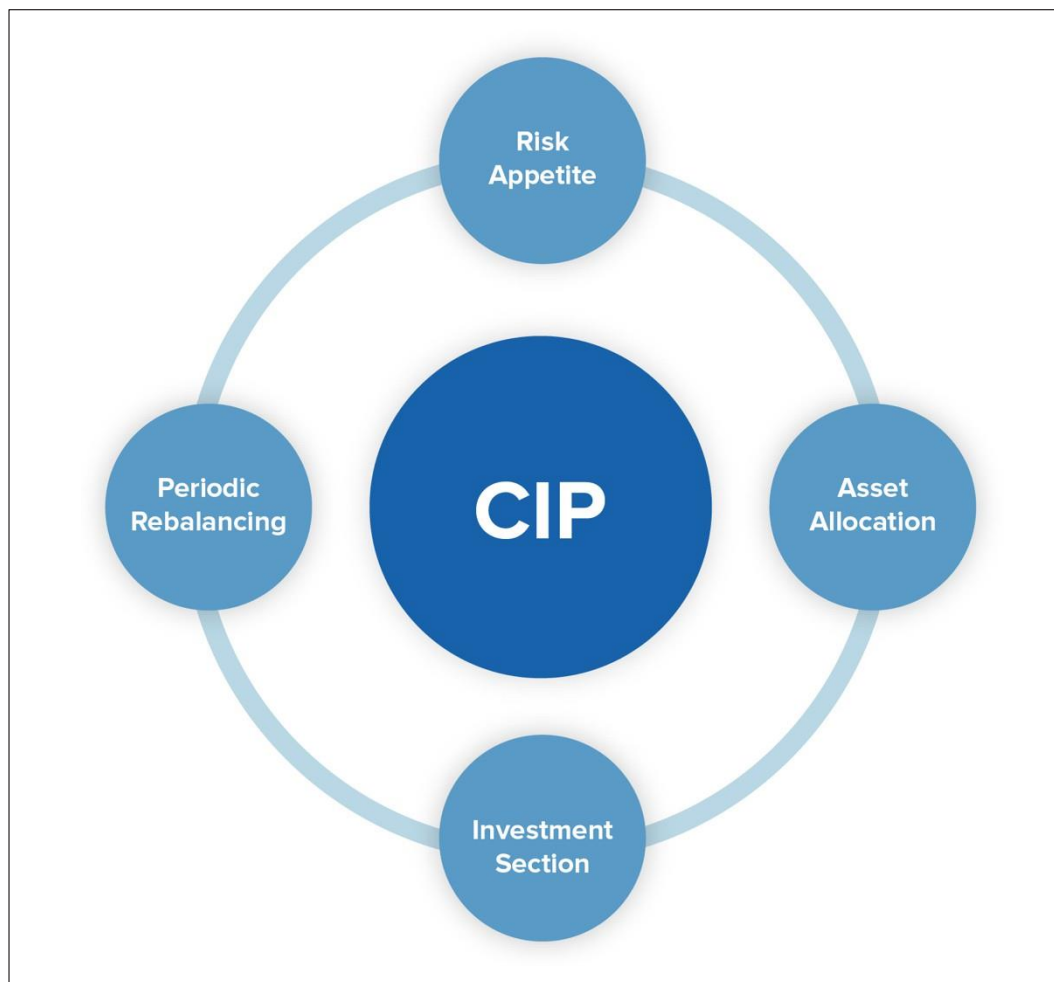
Supplementary to our Centralised Investment Proposition (CIP) provided by the model portfolios is our Centralised Retirement Proposition (CRP).

The term initially introduced by asset managers to market decumulation fund solutions has come to encapsulate a far more holistic way of viewing risk when a client retires, and a portfolio enters decumulation.

Our view of decumulation is that the most important issue is sequence risk. Now, while attempts have been made to mitigate this through focusing on client portfolio volatility or by holding cash buffers or separate accounts, the only way of truly mitigating the issue is through a centralised retirement proposition.

The structure of a CRP is built around the CIP described above, which we have conceptualised diagrammatically as follows:

Centralised Investment Proposition Structure

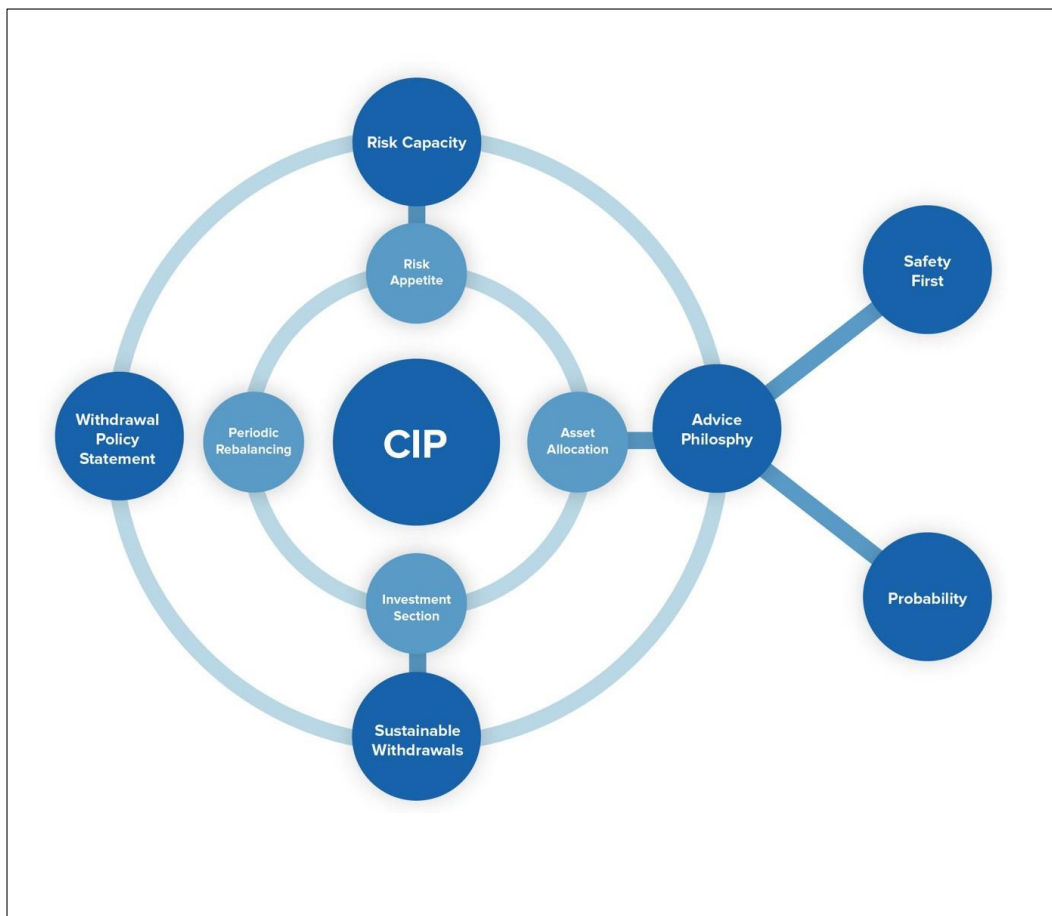


Centralised Retirement Proposition

We see the main four considerations in designing an investment proposition as: determining risk appetite, determining the appropriate asset allocation, selecting the optimal investments and periodic rebalancing to keep in line with a client's risk preferences.

Now, where the CRP differs from this, is inherently linked to the client's newly gained dependence on the capital markets, mediated by their investment portfolio. As such, we will see how the CRP addresses these issues conceptually.

Centralised Retirement Proposition Structure



The diagram above, represents wider factors and processes that link into the core CIP.

Centralised Retirement Proposition

Given the importance of decumulation clients' portfolios to their lifestyle, a CRP involves reevaluating a client's risk appetite, timeframes, longevity, and needs. The threat of sequence risk also must be accounted for through establishing sustainable withdrawal strategies, which need to be documented accurately. Finally, the overall philosophy of the process must be evaluated considering capital market returns, whilst ensuring no excessive risk is assumed.

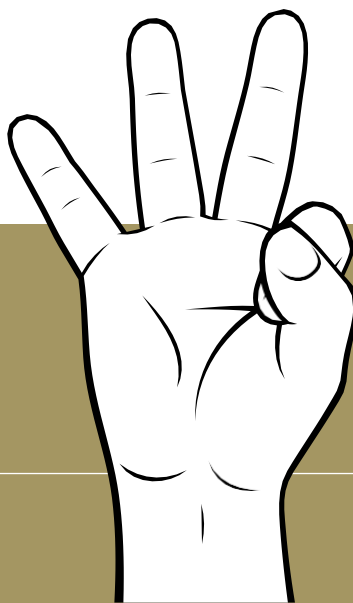
This is an issue that requires deep understanding of clients' personal situations, but one that we enhance by using long-term historical market returns data and a probabilistic approach to determining withdrawal sustainability.

This is achieved through the usage of the wealth planning tools, which take market returns over the course of the last 100+ years and enables us to gauge the sustainability of future withdrawals and their sequence risk, based on a multitude of different scenarios including, but not limited to, investment strategies, emergency fund categorisation, spending patterns, risk tolerance, guaranteed income, client knowledge, understanding and optimism regarding future returns.

Decumulation Strategy

Decumulation strategy is built on three key elements:

- 1.** Our understanding of our client, their needs and considering the level of guaranteed income they have available to them in relation to their spending needs and risk tolerance. This includes defined benefit pensions, state pensions, any other income deemed to be secure or our clients evidencing long term historical income from the owned asset.
- 2.** Calculating a sustainable withdrawal based on the client's needs and asset allocation. This means the level of withdrawal would be sustainable even in the event of poor sequence of return i.e., the historical worst-case scenario.
- 3.** Having a dynamic withdrawal approach that reduces withdrawal to protect the client's interests in a worse than worst case scenario.



Centralised Retirement Proposition

There are different approaches to asset allocation and drawdown in the retirement phase. Using a cash buffer is popular as it reduces the need to raise income when prices have fallen. However, evidence shows remaining “fully invested” and withdrawing to meet income needs provides the best outcome.

Abraham Okusanya (2017) built upon the earlier research by Bengen (1997) to understand the impact of different cash buffer strategies in a fully invested scenario. Starting with a 50% global equity and 50% global fixed income, multiple iterations were carried out substituting cash for equity and substituting cash for global fixed income. Of the two scenarios, the iterations which substituted cash for equity had a negative impact on longevity or success rate of the portfolio, while substituting global fixed income for cash had comparatively little impact on the longevity of the portfolio.

Another popular decumulation strategy is “bucketing”. Bucketing involves holding several “buckets” of investments. In one bucket the investor holds several years of cash, while the others hold investments in capital markets. The cash bucket is replenished by selling from the capital market buckets. For a retiree, following a bucketing approach is attractive, there is no need to worry that assets will be sold to fund withdrawal needs when prices have dropped substantially. However, research by Estrada (2018), using a sample of 21 countries over a 115-year period suggests that retirees would be better off following static strategies as opposed to bucketing.

To sum up, our modelling and research has found that holding no cash buffer and rebalancing using a tolerance-based approach provides superior outcomes. However, we will adjust our advice to clients based on their unique needs and situation.

Investment Options & Solutions

The starting point for our clients moving from accumulating wealth to decumulating is that our investment philosophy is suitable, for all the reasons outlined in this guide. This assumes we have been advising clients on an ongoing basis in the lead up to their retirement and have adjusted their investment strategy accordingly.

Retirement planning is typically more complicated than pre-retirement wealth planning especially if there is 10 years or more before retirement. This is not only because earnings typically cease but also because retirement income needs often need to be counterbalanced with leaving legacy assets to beneficiaries. We therefore need to consider additional options for our clients to marry their immediate spending needs, whilst they are healthy and have the inclination to enjoy retirement, with long term financial sustainability. This can be true if later life care is also a major consideration.

Based on the changing nature of the marketplace, we segment clients in the years before retirement so that we can consider additional options. The factors we include are anyone over 55 years of age, ill health, risk tolerance, employment status, dependency status, those transitioning into retirement or semi-retirement, spending needs in the early (55-75), mid (75-85) and later retirement years (85+). These spending needs include whether they need to flex first, fix later, secure income now and have flexibility or need guaranteed requirements.

Our overriding consideration for our clients is to construct decumulation strategies that avoid foreseeable harm.

Here are some of the additional options, which are not limited to, we will consider. It is possible that these options replace or supplement an invested strategy and will depend on several variables and factors.

Centralised Retirement Proposition

Annuity

An annuity provides a guaranteed income stream for life or a set period of time, offering a reliable solution for managing retirement funds. When a client purchases an annuity, they make a lump sum payment to an insurance company, which in return commits to paying a fixed or variable income starting immediately or at a future date. This can significantly reduce the anxiety of outliving one's savings, ensuring financial stability throughout retirement.

Annuities can be particularly beneficial for clients seeking predictability and security in their retirement income. They serve as a complement to other retirement strategies, such as flexi-access drawdown, where clients can draw variable amounts from their pension pot. While flexi-access drawdown provides flexibility and potential for growth, it also carries market risk and the possibility of depleting funds prematurely. Annuities provide a safeguard against this risk, delivering a steady income regardless of market fluctuations.

There are several annuities' options that will consider such as:

- **Lifetime Annuities:** Offering a guaranteed income for the rest of your life, regardless of how long you live.
- **Fixed-Term Annuities:** Providing income for a predetermined period, with some flexibility in how the funds are received at the end of the term.
- **Enhanced Annuities:** Available to those with certain health conditions, offering a higher income based on reduced life expectancy.

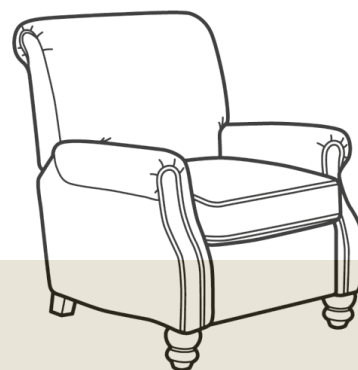
Incorporating annuities into a retirement strategy allows clients to balance flexibility and security. By using an annuity to cover essential expenses, and a flexi-access drawdown plan for discretionary spending, clients can efficiently manage their retirement funds, adapting to their changing financial needs while ensuring they never run out of income. This dual approach empowers clients to enjoy their retirement with confidence, backed by a well-structured financial safety net.

We will analyse a suitable solution for our clients, depending on several factors which we stress test and discuss with them.

Secured/Guaranteed Income

This solution aims to deliver a guaranteed income producing asset which could optimise drawdown portfolio outcomes when included within a pension. We will look to utilise a guaranteed income producing asset to manage key risks in retirement alongside investing in the right amount of growth assets to match your needed level of risk.

The guaranteed income delivered is free from sequence risk and is uncorrelated to other assets in a drawdown portfolio. This solution is built upon the long established and proven concept of pooling longevity risk with other retirees. This means it could generate higher income than conventional bonds, as the income assumes bond-like returns plus mortality credits. As a result, the withdrawal rate on the rest of the drawdown portfolio could be lower.



Centralised Retirement Proposition

This enables the portfolio to produce:

- **Higher long-term values, to increase legacy provision; and/or**
- **More sustainable or higher income.**

The benefits of incorporating this solution into portfolios for our clients are:

- **Flexibility and efficiency - the monthly payments can be used immediately to support our client's lifestyle or retained within their drawdown arrangement and reinvested.**
- **Simplicity - It sits within our client's pension alongside their other retirement savings and investments, so everything is under one roof.**
- **Personalised guaranteed income for life - It takes account of our client's individual health and lifestyle to provide a personalised guaranteed income.**
- **Legacy provision - It potentially enhances the overall legacy provision and provides protection against early death by offering an automatic lump sum death benefit for a set period.**
- **A cash in option - Should circumstances change significantly during the set cash-in value period.**

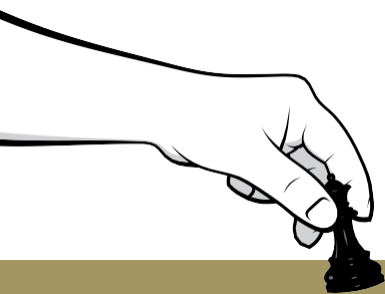
By including a percentage of guaranteed income within the drawdown pension it offers the opportunity to increase the level of equity content in the portfolio to potentially generate higher expected returns. This increases the risk budget, but in fact keep the equity exposure the same in the overall SIPP portfolio.

Our investment philosophy primarily use bonds in a client's portfolio to lower volatility, provide capital preservation, a steady income stream and liquidity. They may not offer the highest returns, but they do provide a conservative balance that can suit many investors, particularly those with a lower risk tolerance or those needing a more stable investment during volatile periods. Generally, the consensus is that for the extra risk, equities should outperform fixed income over the long term. Fixed income in a portfolio should effectively allow the equity component the time and space to grow long term wealth.

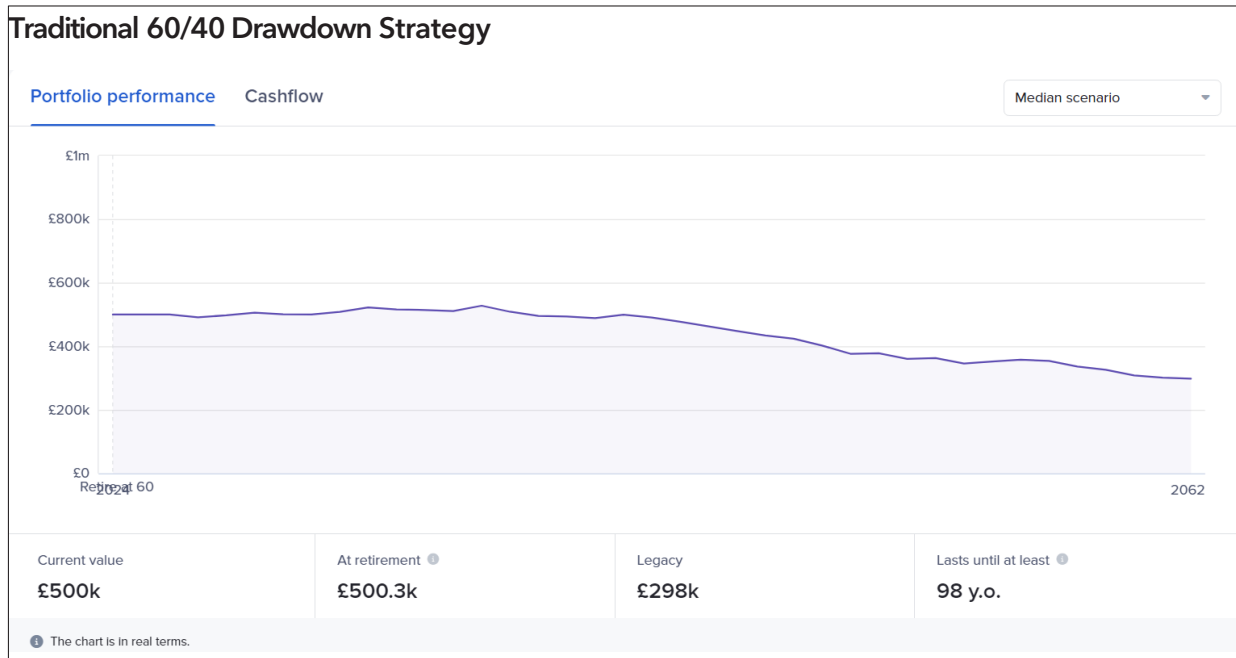
So, why would we replace the fixed income portion in the portfolio?

Guaranteed Income offers potentially higher levels of income for life, and long-term legacy benefits, by removing reinvestment risk, credit risk, shortfall risk and by managing sequential and longevity risk. As part of a blended portfolio it does expose clients to short term mortality risk.

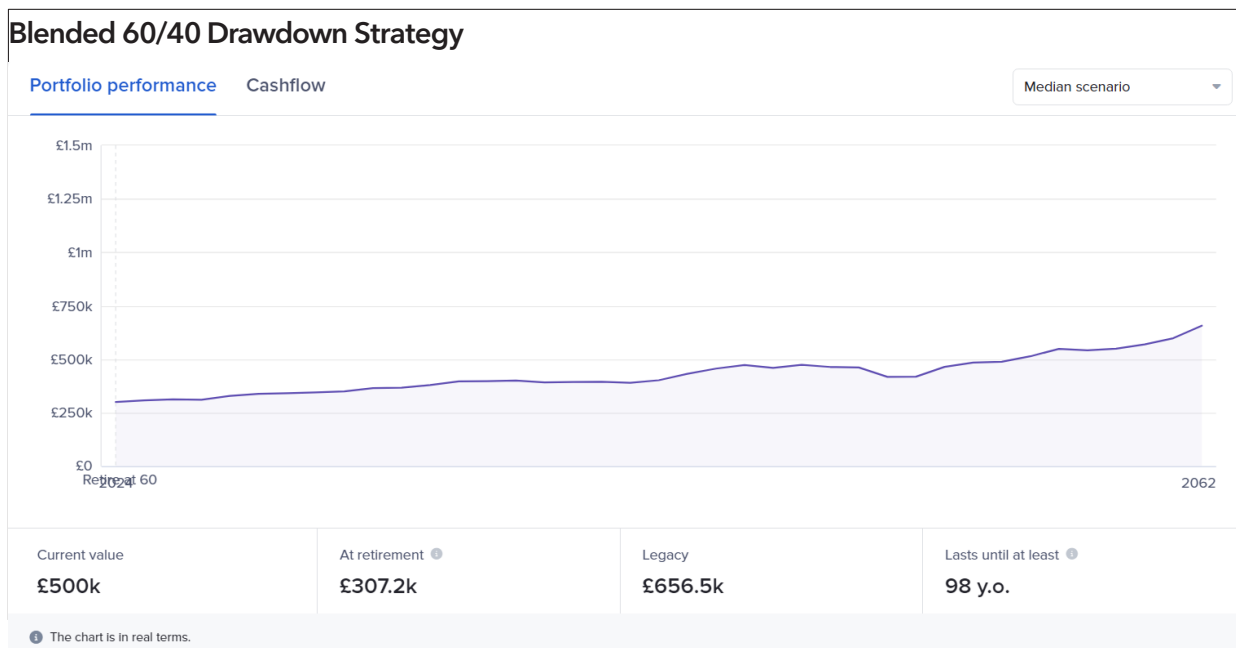
This is evidenced in the graphs below, which assumes a 60-year-old, healthy male pension policyholder, draws £25,000 pa increasing by inflation ever year, from their £500,000 pension value, invested in a 60/40 global index tracker portfolio, until mortality at age 98. No account has been made for charges. You will notice that after age 81 the long-term effects of the guaranteed income take effect to potentially provide a higher legacy.



Centralised Retirement Proposition



Source: Timeline Planning (2024)



Source: Timeline Planning (2024)

We will analyse a suitable solution for our clients, depending on several factors which we stress test and discuss with them.

Appendix

Client Communication & Education

It's important that our clients understand how their funds are invested. We communicate our investment approach to clients and keep them informed about our investment process in the following ways:

- Client meetings
- Client reports (including recommendations and reasoning)
- Regular updates and market commentary

Clients' Responsibilities

A relationship based on mutual trust and responsibility is key to a successful investment experience. Accordingly, it is expected that clients familiarise themselves with and understand the conditions of the relationship. Clients are expected to:

- Familiarise themselves with the investment literature to a level of understanding that is sufficient to make investment decisions upon.
- Have read and understood the Investment Policy Statement.
- Inform us in writing if any divesture from equity-linked investments is expected within the following 5 year period, to facilitate the continuation of our holistic approach to portfolio management.
- Inform us in writing of any absolute ethical restrictions regarding investment in certain industries.
- Maintain proper correspondence to ensure the timeliness of investment related actions.

Fiduciary Duty

In addition to any legal responsibilities, we believe our duties to the client include the following:

- Providing perspective, facilitating the type of sound, responsible investment decisions that somebody working with a financial adviser expects and deserves to experience. We believe in "structure, process and discipline", and while that might not sound like the most exciting or colourful motto, it has yielded success for likeminded planners and advisers, which the empirical evidence supports.
- We feel it is our responsibility to construct clients' portfolio in a responsible, calm, and efficient manner. By focusing on things that can be controlled, rather than unpredictable market fluctuations, we promote and enable the client to follow this thought process and avoid making irrational decisions.
- With this perspective on markets and investing, the future looks bright. With methodologically crafted portfolios, founded on fair, objective research, clients can focus on building legacy and wealth, rather than becoming preoccupied by market activity.

Appendix

Platforms & Product Wrapper

Platforms offer a range of tools which enable us to manage client transactions and custodial matters more effectively. However, we recognise platforms may not be suitable for all clients, so we will also consider off-platform solutions, where appropriate.

Our platform selection documents detail our platform-selection process, which we review annually as part of our due diligence process.

Portfolio Design & Testing

A client's tolerance for risk, and analysis of their life and finances, are fundamental to our portfolio-construction process.

From our experience, while many of the psychometric risk-profiling questionnaires successfully gauge clients' perceptions about risk, often there can be a disconnect between how clients feel they will respond in the future and how they actually respond to the prospect of part of their life's savings evaporating into thin air. Clients do also tend to equate their feelings on financial risk to their ability to stomach risk when engaging in other pursuits (sports etc.). This too creates disparities between the results and reality as people tend to view the financial stability of their family when it's at the beck and call of an unpredictable financial market as somewhat more important, than, let's say the structural integrity of a leg when mountain biking.

Thus, while we strive to provide clients with the most suitable solution, the ultimate determining factor will be how the client responds to risk in real-life and what their needs are.

References

- (Barclays), A. J. (2023, April 03). *Overcoming home bias when investing*. Retrieved from Barclays Private Bank: <https://privatebank.barclays.com/insights/2023/april/market-perspectives-april-2023/overcoming-home-bias-when-investing/>
- Ardalan, K. (2019). *Equity Home Bias in International Finance: A Place-Attachment Perspective*. London: Routledge; 1 edition.
- Barras, L., Scaillet, O., & Wermers, R. (2010). False Discoveries in Mutual Fund Performance: Measuring Luck in Estimated Alphas. *The Journal of Finance*, 179-216.
- Bengen, W. P. (1997). Conserving Client Portfolios During Retirement, Part III. *Journal of Financial Planning*, 84-97.
- Berndsen, J. (2003). Does Duration Extension Enhance Excess Returns? *Denmarks Nationalbank Working Papers*, No. 10. Retrieved from http://www.nationalbanken.dk/en/publications/Documents/2003/04/WP_10_2003.pdf
- BlackRock. (2023). *Investing with Emotions can be Costly*. BlackRock.
- Blake, D., Lehmann, B., & Timmermann, A. (1999). Asset Allocation Dynamics and Pension Fund Performance. *The Journal of Business*, 429-461.
- Boyde, E. (2022, October 11). *Demand for ESG investments outstrips supply, PwC finds*. Retrieved from Financial Times: <https://www.ft.com/content/5763c866-3437-4b66-8467-09486454a162>
- Briault, C. (2006, May 18). *Treasury Select Committee*. (D. Waters, Interviewer)
- Brinson, G., Hood, R., & Beebower, G. (1986). Determinants of Portfolio Performance. *Financial Analysts Journal*, 39-44.
- Burton, M. (2010, January). *Bubbles in Asset Prices*. Retrieved from Princeton University: <https://www.princeton.edu/ceps/workingpapers/200malkiel.pdf>
- Busch, T., Friede, G., & Bassen, A. (2015). ESG and Financial Performance: Aggregated Evidence from More than 2000 Empirical Studies. *Journal of Sustainable Finance & Investment*, 5(4), 25. Retrieved from https://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID2699610_code2486463.pdf?abstractid=2699610&mirid=1&type=2
- CFA Institute. (2020). *Benchmarking Investments and Managers*. Retrieved from CFA Study Guide: <https://cfastudyguide.com/benchmarking-investments-and-managers/>
- Clare, A., & Motson, N. (2010). *Do UK Retail Investors Buy at the Top and Sell*. Cass Business School. London: City University. Retrieved from <https://openaccess.city.ac.uk/id/eprint/16846/>
- Crotty, A. D. (2018). Passive versus Active Fund Performance: Do Index Funds Have Skill? *Journal of Financial and Quantitative Analysis*, 53 (1), 33-64.

References

- Cuthbertson, K., Nitzsche, D., & O'Sullivan, N. (2005). Mutual Fund Performance: Skill or Luck? *Journal of Empirical Finance*, 613-634.
- Daryanani, G. (2008). Opportunistic Rebalancing: A New Paradigm for Wealth Managers. *Journal of Financial Planning*.
- Dimensional Fund Advisors. (2022). Matrix Book, Historical Returns Data - British Pounds.
- Dimensional Fund Advisors. (2022). *Mutual Fund Landscape*. Retrieved from <https://www.ifa.com/pdfs/the-fund-landscape-dfa.pdf>
- Driessen, J., & Laeven, L. (2007). International Portfolio Diversification Benefits: Cross-Country Evidence from a Local Perspective. *Journal of Banking & Finance*, 1693-1712.
- Elton, E., & Gruber, M. (1977). Risk Reduction and Portfolio Size: An Analytical Solution. *The Journal of Business*, 415-37.
- Estrada, J. (2018). *The Bucket Approach for Retirement: A Suboptimal Behavioral Trick?* IESE Business School.
- Fama, E. (1970). Efficient Capital Markets: A Review of the Theory and Empirical Work. *Journal of Finance*, 383-417.
- Fama, E., & French, K. (1992). The Cross-Section of Expected Stock Returns. *The Journal of Finance*.
- Foundation, U. S. (2022). *2022 Report on US Sustainable Investing Trends*. SIF Foundation.
- Friedman, M. (1970, September 13). The Social Responsibility of Business is to Increase its Profits. *The New York Times*. Retrieved from <https://www.nytimes.com/1970/09/13/archives/a-friedman-doctrine-the-social-responsibility-of-business-is-to.html>
- International Monetary Fund. (2011). *World Economic Outlook, Slowing Growth, Rising Risks*. Retrieved from https://www.imf.org/~media/Websites/IMF/imported-flagship-issues/external/pubs/ft/weo/2011/02/pdf_textpdf.ashx
- International Monetary Fund. (2014). *Statistical Appendix*. Retrieved from <https://www.imf.org/external/pubs/ft/weo/2014/01/pdf/statapp.pdf>
- International Monetary Fund. (2019). *Global Financial Stability Report: Lower for Longer*. International Monetary Fund. Retrieved from <https://www.imf.org/~media/Files/Publications/GFSR/2019/October/English/text.ashx?la=en>
- Kaplan, P., & Ibbotson, R. (2000). Does Asset Allocation Policy Explain 40, 90, 100 Percent of Performance? *Financial Analysts Journal*, 56(3):16-19.
- Kinnel, R. (2010, August 9). *How Expense Ratios and Star Ratings Predict Success*. Retrieved from Morningstar: <https://www.morningstar.com/articles/347327/how-expense-ratios-and-star-ratings-predict-success>

References

- Kitces, M. (2015). *How Portfolio Rebalancing Usually Reduces Long-Term Returns (But Is Good Risk Management Anyway)*. Retrieved from Kitces: <https://www.kitces.com/blog/how-rebalancing-usually-reduces-long-term-returns-but-is-good-risk-management-anyway/>
- Kosowski, R., Timmermann, A., Hal, W., & Wermers, R. (2005). Can Mutual Fund "Stars" Really Pick Stocks? New Evidence from Bootstrap Analysis. *Journal of Finance*.
- Larissa Adamiec, D. C. (2019). OPTIMAL NUMBER OF ASSETS FOR REDUCTION OF MARKET RISK. *International Journal of Economics, Business and Management Research* (Vol. 3, No. 03), 45-54.
- Markowitz, H. (1952). Portfolio Selection. *The Journal of Finance*, 77-91.
- Morgan Stanley. (2019). *Sustainable Reality, Analysing Risk and Returns of Sustainable Funds*. Retrieved from https://www.morganstanley.com/pub/content/dam/msdotcom/ideas/sustainable-investing-offers-financial-performance-lowered-risk/Sustainable_Reality_Analyzing_Risk_and_Returns_of_Sustainable_Funds.pdf
- Morningstar. (2021, August 30). Mind the Gap 2021 - A report on investor returns in the United States. Retrieved from Morningstar: <https://www.morningstar.com/articles/942396/mind-the-gap-2019>
- Morningstar. (2021, April). *Which Countries Lead on ESG*. Retrieved from Morningstar: <https://www.morningstar.co.uk/uk/news/211424/which-countries-lead-on-esg.aspx>
- Office for National Statistics. (2022). Retrieved from <https://www.ons.gov.uk/economy/inflationandpriceindices>
- Okusanya, A. (2017, December 14). *Cash reserve buffers, withdrawal rates and old wives' fables for retirement portfolios*. Retrieved from FianlytiQ: <https://fianlytiq.co.uk/cash-reserve-buffers-withdrawal-rates-old-wives-fables-retirement-portfolio/>
- Phillips, C., & Thomas, C. (2013). Fearful of rising interest rates? *Consider a more global bond portfolio*. Retrieved from Vanguard Group: <https://www.vanguardcanada.ca/documents/fearful-rising-interest-rates-tlr.pdf>
- Renneboog, L., Horst, J. T., & Zhang, C. (2008, September). Socially responsible investments: Institutional aspects, performance, and investor behaviour. *Journal of Banking & Finance*, 32(9), 1723-1742.
- Roy, A. (1952). Safety First and the Holding of Assets. *Econometrica*, 431-449.
- S&P. (2023). SPIVA: *Statistics and Reports*. Retrieved from S&P Dow Jones Indices: <https://us.spindices.com/spiva/#/reports>
- Sankaran, J., Krishnamurti, C., & Patil, A. (1999). On the Optimal Selection of Portfolios Under Limited Diversification. *Journal of Banking & Finance*, 1655-1666.
- Schlanger, T., Walker, D. J., & Roberts, D. R. (2018, April). *Going global with bonds: The Benefits of a more global fixed income allocation*. Retrieved from Vanguard Group: <https://personal.vanguard.com/pdf/ISGGLBD.pdf>

References

- Schneider, L. (2007, July). Are UK Fund Investors Achieving Fund Rates of Return? An examination of the differences between UK fund returns and UK Investors' returns. *Thesis*.
- Schrøder, S., & Sørensen, C. (2010). *Do Long-Term Bonds Offer a Higher Return?* Denmark Nationalbank. Retrieved from https://www.nationalbanken.dk/en/publications/Documents/2010/07/mon_2qtr_2010_web.pdf
- Scott, B. J., Balsamo, J., McShane, K. N., & Tasopoulos, C. (2017, January). *The Global Case for Strategic Asset Allocation and an Examination on Home Bias*. Retrieved from Vanguard Group: <https://www.vanguard.co.uk/documents/adv/literature/strategic-asset-allocation.pdf>
- Shakespeare, W. (2006). *The Merchant of Venice*. (B. Raffel, Ed.) London: Yale University Press.
- Share of professional investors increasing their environmental, social, and governance (ESG) investments worldwide in 2023*. (2023). Retrieved from Statista: <https://www.statista.com/statistics/1191755/esg-etf-increased-investment-next-year-worldwide/>
- Shiller, R. (2003). From Efficient Markets Theory to Behavioural Finance. *Journal of Economic Perspectives*, 83-104.
- Tobin, J. (1958). Liquidity Preference as Behavior Towards Risk. *The Review of Economic Studies*, 65-86.
- Troberg, R. (2015). *Smart Beta: Alternative Concepts in Passive Portfolio Management*. Hamburg: Anchor Academic Publishing.
- US SIF Foundation. (2018). *Report on US Sustainable, Responsible and Impact Investing Trends*. US SIF Foundation. Retrieved from <https://www.ussif.org/files/Trends/Trends%202018%20executive%20summary%20FINAL.pdf>
- Vanguard. (2021, April). *Global equity investing: The benefits of diversification and sizing your allocation*. Retrieved from Vanguard Group: <https://www.vanguard.com/pdf/ISGGEB.pdf>
- Vanguard. (2023). *Global Bonds Paper*. Vanguard.
- Wei Dai, P. (2015, December 03). *Empirical Evidence in the Fixed Income Markets*. Retrieved from Dimensional Fund Advisers: <https://my.dimensionalfund.com/empirical-evidence-in-the-fixed-income-markets>
- Whelan, T., Atz, U., Van Holt, T., & Clark, C. (2021). *ESG and Financial Performance: Uncovering the Relationship by Aggregating Evidence from 1,000 Plus Studies Published between 2015 – 2020*. NYU Stern Center for Sustainable Business. Retrieved from https://www.stern.nyu.edu/sites/default/files/assets/documents/NYU-RAM_ESG-Paper_2021.pdf
- Yeoh, M. G. (2021, May). *World Economic Forum - investing-to-curb-climate-change-rising-what-you-need-to-know*. Retrieved from weforum.org: <https://www.weforum.org/agenda/2021/05/investing-to-curb-climate-change-rising-what-you-need-to-know/>



So, why the pineapple you may ask.

The pineapple has always been associated with wealth, prestige and luxury due to its exotic appearance. It first appeared in Britain in 1668, gaining notoriety when Charles II used it as part of a public relations opportunity. Pineapples have become known as a symbol for warm welcomes, celebration, and hospitality.

Perfect on a pizza too.

Thanks for asking.

The details

THANKS[®]

WEALTH PLANNING

T: +44 (0)203 828 7107 Thanks Wealth Planning
M: +44 (0)756 352 9918 3rd Floor
E: sam@thankswp.com 86-90 Paul Street
W: thankswp.com London
EC2A 4NE

Thanks Wealth Planning Ltd is registered in England and Wales. Company number: 10616529.
Registered office: W8a Knoll Business Centre, 325-327 Old Shoreham Road, Hove, England, BN3 7GS.
Authorised and regulated by the Financial Conduct Authority. Reference: 840337