

Vanguard[®]

INTRODUCING
**VANGUARD
LIFETARGET
MODEL PORTFOLIOS**

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1

TACKLING THE RETIREMENT CHALLENGE

The retirement landscape is constantly evolving, and the role of financial advice has never been more important. Our **LifeTarget Model Portfolios** are designed to help investors achieve their retirement goals, whilst allowing advisers to focus on the thing that matters most – building great relationships with clients.



The changing needs of retirement planning

Investors are facing a new retirement conundrum. They are enjoying a longer life, but are now increasingly bearing the burden of paying for it. To make matters worse, savings accounts pay very little, yields on equities and bonds are at historic lows, and the expectations for returns are lower than they have been in the recent past. All of this means that advisers have to plan smarter, and work harder to give their clients the retirement they desire.

The role of the adviser has never been more important in helping investors navigate their own personal retirement journey. Investors can have very different mindsets. Their investment goals vary widely, driven by their age, circumstances, affluence and risk appetite. Some are driven purely by spending needs, while others want to balance their need for income with plans for succession.

But common to most investors is the need for **peace of mind and a clear plan for meeting their retirement goals.**

Which to them means having confidence that they can achieve the return they need to fund the lifestyle they have worked so hard for.

Vanguard is committed to helping advisers deliver value throughout the retirement journey. That is why we have created Vanguard LifeTarget Model Portfolios. Designed with retirement in mind, they can help meet the needs of investors who are looking for the peace of mind that comes from having an investment solution that is positioned to meet their long-term requirements. This ultimately allows them to plan their retirement with more confidence.

2

INTRODUCING VANGUARD'S NEW LIFETARGET MODEL PORTFOLIOS

Traditional approaches to retirement investing may not always offer investors what they need to confidently plan ahead for the future. The need for income can lead investors towards higher-yielding assets, which can introduce greater risk into the portfolio, when what they really need is stability.



We believe that a more sustainable path through retirement is to adopt a total-return approach, where investors fund some or all of their spending from the return of their portfolio. This allows them to stay true to the key principles of investment success; to set clear goals, develop a suitable asset allocation using broadly diversified and low-cost funds, and to maintain a long-term perspective to guide their investments.

We don't believe investors should compromise on any of these principles to meet their retirement goals. But we do recognise that needs change as investors near or enter retirement, and that meeting these needs takes a different kind of investment solution. One designed to give investors more confidence around the likely outcome they can achieve over the long term.

That is why LifeTarget Model Portfolios are managed in a way that aims to maximise risk-adjusted returns whilst giving investors the best chance of achieving a specified **minimum** return target. This way investors know what their investment is working to achieve over the long term.

Three choices

Model portfolio name	Target Return	Target allocation ¹	All-in cost ²
VANGUARD LIFETARGET DEFENSIVE	2%	19% equity 79% bond 2% cash	0.33%
VANGUARD LIFETARGET CAUTIOUS	3%	44% equity 54% bond 2% cash	0.33%
VANGUARD LIFETARGET MODERATE	4%	62% equity 36% bond 2% cash	0.32%

Source: Vanguard.

¹Source: Vanguard. Data as at 31 January 2021.

²Source: Vanguard. Data as at 28 February 2021. All-in costs include the weighted Ongoing Charges Figures (OCF) and an annual portfolio management fee that covers the discretionary management of the managed portfolio service, ongoing oversight, and regular rebalancing of the portfolios. The portfolio management fee is exclusive of VAT and any adviser, platform, or dealing charges. The OCF covers the fund manager's costs of managing the underlying funds. It does not include dealing costs or additional costs such as audit fees. Minimum long-term return targets are not guaranteed and are subject to the performance of the bonds and equities in which the model portfolio invests.

Whilst market returns may fluctuate year on year, asset return predictability does improve over the longer term. There are three LifeTarget Model Portfolios to choose from, each managed and positioned to best meet a minimum long-term return target, over a five-year annualised rolling time horizon. These minimum return targets of 2%, 3% and 4% are based around the realistic long-term expectations for equity and bond returns in the future.

Importantly for investors, the LifeTarget Model Portfolios are designed to maximise an investor's risk-adjusted return while keeping the expected return above the minimum target, a key requirement of many retirement investors. What this means is that we do not cap returns at the target level, instead allowing investors to benefit when markets rally in any given year.

Adapting to changing conditions

It has long been established that the majority of investment success is driven not by tactical market-timing and securities selection, but through your long-term asset allocation choices – i.e. your mixture of bonds and equities, and how that breaks down across different regions and fixed income assets³.

However, we know that markets change, and if you are aiming for a minimum target return you need to be a little more flexible in your approach. That is why for LifeTarget Model Portfolios, we adapt their asset allocation each year, or after major market events in order to continue to give investors the best chance of maximising their risk-adjusted return, and achieving their minimum return target. We also rebalance our allocations each quarter to ensure that any drift in the portfolios is addressed back to the asset allocation defined for that year.

We call this approach 'time-varying asset allocation', and it simply means that as market conditions change, and with them, the long-term forecasts for bonds and equities, the portfolio allocation can be adjusted to take advantage of the new market conditions.

In addition, if inflation expectations change, and interest rates are significantly adjusted, Vanguard has the ability to adjust the minimum return targets of the LifeTarget Model Portfolios to reflect the new market conditions.

Key assumptions

1. The predictability of asset returns can improve with a longer-term horizon but the results are directional rather than short-term and precise.
2. Valuations are one of the biggest drivers of future equity and bond returns.
3. High-quality fixed income is often one of the best diversifiers against equity market downturns.

Source: Vanguard.

³Source: Vanguard calculations using data from Morningstar. A now-famous study by Brinson Hood and Beebower, published in 1986, looking at returns for 91 US pension funds from 1974 to 1983, found that roughly 80% of the variance of returns comes from strategic asset allocation. Since then a great many studies, looking at different periods and types of funds, have come to similar conclusions. For a study based on monthly returns for 743 UK balanced funds from January 1990 through September 2015, which reached a similar conclusion, see the Vanguard research paper *The global case for strategic asset allocation and an examination of home bias* (Scott et al., 2016).

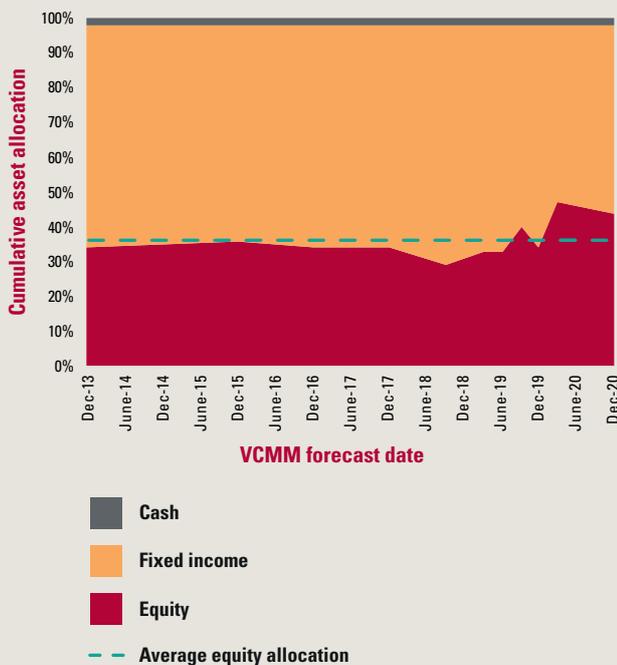
Time-varying portfolios

In order to keep track of the minimum return target, LifeTarget Model Portfolios are adjusted not just for the ratio of equities to bonds in the overall portfolio, but also the types of equities and bonds in the sub-asset allocation.

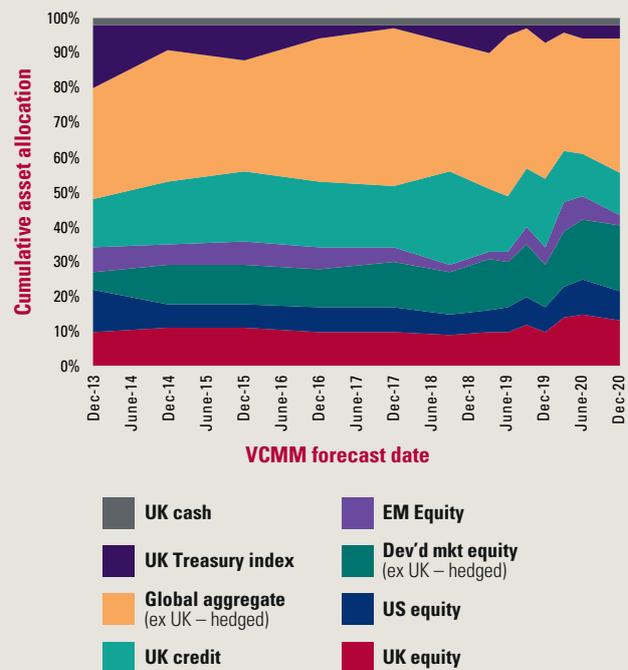
To demonstrate this we can take the example of the Vanguard LifeTarget Cautious Model Portfolio, which has a long-term minimum return target of 3% per year. Looking at how this model would have been allocated in the past,

we can see that the equity mix averaged around 36%. But at various points in time the equity content was adapted to market conditions. At its lowest it was 29% and at its highest 47%. In more extreme periods, where long-term valuations for equity and bonds change, such as after the Covid-19 market sell off, the portfolio can be adjusted in order to reflect the new market conditions.

Equity / bond mix over time⁴



Sub-asset allocation⁴



⁴Source: Vanguard, asset allocations are based on historical simulations of how the portfolios could have been allocated for the period from December 2013 to December 2020. Allocations are for illustrative purposes only and represent the sub-asset allocation output from the Vanguard Asset Allocation Model (VAAM). Note: The time-varying portfolio is constructed using VAAM by considering time-varying Vanguard Capital Markets Model (VCM) forecasts and holding the risk aversion constant. Asset allocations assume annual adjustments each year, except in the case of an extraordinary market event.

In order to achieve the desired equity and bond mix, LifeTarget Model Portfolios use a variety of low-cost index funds that provide broad exposure to sub-asset classes such as UK, European, global or emerging market equities and global and UK fixed income. Using our

proprietary investment engine, the resulting portfolio reflects the optimum mix of sub-asset classes that we believe will maximise the expected risk-adjusted return, while maintaining the asset allocation required to meet the minimum long-term return target.

3

TAKING A RESEARCH-DRIVEN APPROACH

LifeTarget Model Portfolios use Vanguard's own forecasting and modelling technology with the aim of giving investors the best chance of achieving their target returns.





The Vanguard Capital Markets Model

The first step to defining the right mix of assets in the portfolio is to look at the long-term return expectations for equities and bonds across the world. We do this using the Vanguard Capital Markets Model (VCMM), which is the key forecasting engine that underpins Vanguard's Economic and Market Outlooks and many of the portfolio solutions we build.

In order to generate the most accurate picture for how each asset class could perform in the future, VCMM runs 10,000 simulations over a number of different time horizons, and uses this to create a ten-year forecast for each asset class.

The Vanguard Asset Allocation Model

The second step is the Vanguard Asset Allocation Model (VAAM), which is another of Vanguard's proprietary models that uses the VCMM return projections to **determine the right mix of assets** that could achieve **the required minimum** return over the long-term.

More specifically, for each LifeTarget Model Portfolio ("Defensive", "Cautious" and "Moderate"), VAAM would optimise for the asset allocation that offers the highest expected risk-adjusted return subject to keeping the expected long-term portfolio return above the required minimum return.

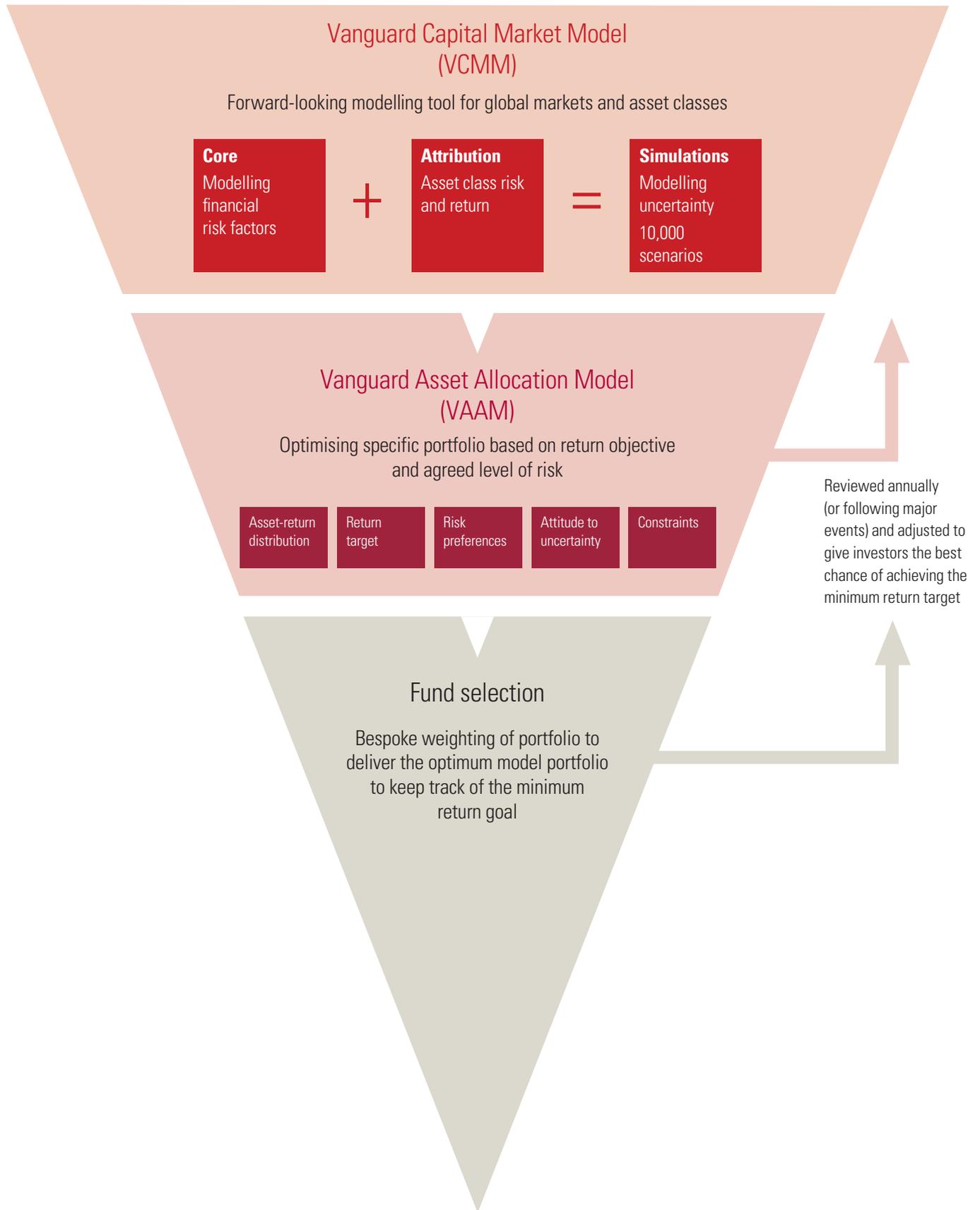
Low-cost index fund implementation

In order to implement the specific allocation derived from the VAAM model, LifeTarget Model Portfolios are built using low-cost Vanguard index funds.

Because VCMM forecasts are **dynamic** and dependent on market conditions, the most **effective balance of equities and bonds**, and the **individual exposures** needed to achieve the portfolio's target return, **will change too**. That is why we constantly monitor our Model Portfolios and will update annually, or after significant market events according to the latest forecasts from VCMM, and allocation from VAAM.

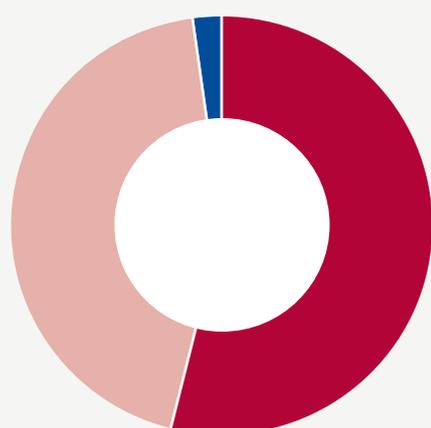
The technology behind our approach

Multiple layers drive the optimum client portfolio



⁵Source: Vanguard.

Example portfolio – LifeTarget Cautious Model Portfolio



■ Cash
■ Fixed income
■ Equity

Weighted ongoing charges figure ⁶	0.13%
Portfolio management fee ⁶	0.20%
Number of underlying holdings ⁷	20,427

Underlying funds	Weight (%) ⁸	Morningstar rating ⁹
Equity		
Vanguard FTSE U.K. All Share Index Unit Trust	13.1	Gold
Vanguard U.S. Equity Index Fund	8.7	Gold
Vanguard FTSE Developed Europe ex-U.K. Equity Index Fund	11.7	Silver
Vanguard Pacific ex-Japan Stock Index Fund	2.2	Bronze
Vanguard Japan Stock Index Fund	4.8	Silver
Vanguard Emerging Markets Stock Index Fund	3.1	Bronze
Fixed income		
Vanguard U.K. Government Bond Index Fund	2.8	Silver
Vanguard U.K. Investment Grade Bond Index Fund	11.5	Bronze
Vanguard Global Bond Index Fund	40.2	Bronze
Cash (GBP)	2.0	–

Sector breakdown – equities	(%) ⁸
Communication services	6.5
Consumer discretionary	12.2
Consumer staples	9.7
Energy	4.1
Financials	15.5
Health care	11.2
Industrials	12.8
Information technology	11.9
Materials	7.7
Real estate	3.0
Utilities	3.2
Other	2.4

Credit rating breakdown – bonds	(%) ⁸
AAA	33.5
AA	19.9
A	22.8
BBB	22.1
Less than BBB	0.0
NR	1.7

⁶ Source: Vanguard. Data as at 28 February 2021. All-in costs include the weighted Ongoing Charges Figures (OCF) and an annual portfolio management fee that covers the discretionary management of the managed portfolio service, ongoing oversight, and regular rebalancing of the portfolios. The portfolio management fee is exclusive of VAT and any advisor, platform, or dealing charges. The OCF covers the fund manager's costs of managing the underlying funds. It does not include dealing costs or additional costs such as audit fees.

⁷ Source: Vanguard. Data as at 31 January 2021.

⁸ Source: Vanguard. Data as at 28 February 2021. Numbers may not add up to 100 due to rounding.

⁹ Source: Morningstar Analyst Ratings. Data as at 31 January 2021.

General investor profile

When investing in a LifeTarget Model Portfolio an investor must be prepared to put their capital at risk. It is therefore important that an adviser considers each client's attitude to risk and capacity for loss before investing.

- The LifeTarget Cautious Model Portfolio aims to achieve at least its minimum target return over the long term by investing in a combination of equities, fixed income, and cash.

- In order to provide a cautious risk profile with some opportunity for growth, this model portfolio tends to hold less equities, and more fixed income.
- This model portfolio will maintain an equity position of between 25% and 50%.



4

DELIVERING VALUE FOR INVESTORS IN RETIREMENT

Benefit from Vanguard's expertise

Vanguard has been working with advisers for over 45 years. We have over £740bn¹⁰ invested across our multi-asset range globally, all supported by a team of experienced portfolio and investment specialists.



¹⁰Source: Vanguard. Data as at December 31, 2020.



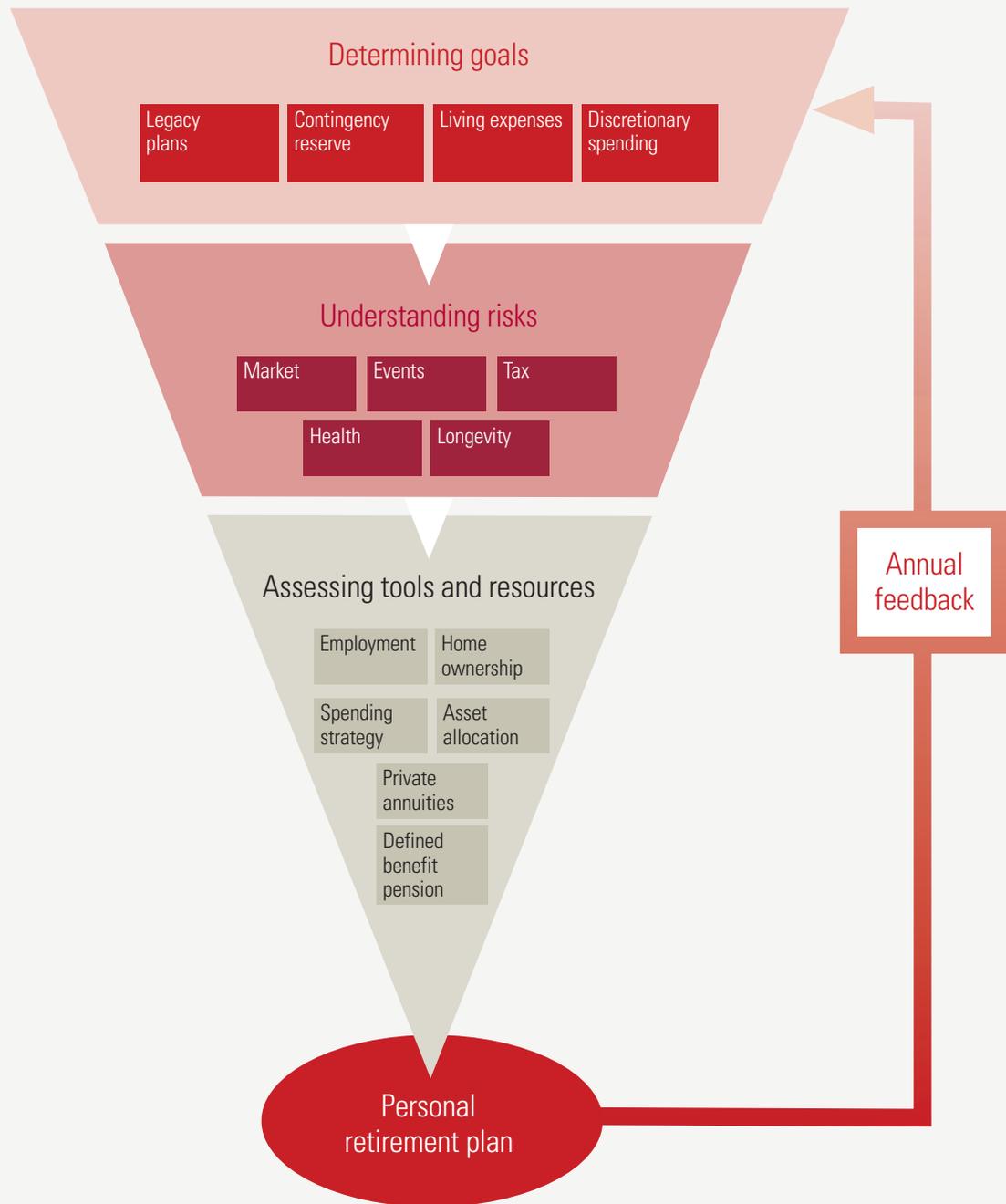
We are passionate about the role financial advisers play in helping investors navigate their financial future. Used as part of a clear retirement framework, LifeTarget Model Portfolios are designed to help advisers create personalised retirement plans based on the individual needs of each investor.

Our approach to retirement planning

Vanguard's retirement research provides individuals and their advisers with a framework for an outcome-orientated approach to retirement. We provide insights to support advisers in developing a personalised retirement roadmap with their clients, defining their goals, assessing their resources and determining which retirement solutions are right for them. Through this framework, we want to give investors the best chance of investment success.

Personalised retirement roadmap tool

Advisers can use this to create a uniquely personal retirement plan for individual clients.



¹Source: Vanguard.

Delivering the retirement plan – three examples

Once an adviser has drawn up a retirement plan for their client, the next step is to assess the underlying solutions that can deliver that plan. Vanguard's research and techniques can help with that process.

Here are three examples:

Generating growth

We advocate total-return investing, where investors are diversified across the equity and fixed-income markets, and income requirements are met through a combination of portfolio yield and capital. This can help protect a portfolio from unnecessary risk, and improve an investor's chance of achieving the retirement outcomes they are looking for.

Sustainable spending

To develop a sustainable spending strategy for retirement we advocate a **dynamic spending strategy**. It involves setting a **ceiling and a floor** on how much spending can rise or fall every year, reducing the risk of depleting capital but also limiting the big declines in spending that can result from withdrawing a fixed percentage each year.

And, because we aim to provide greater confidence around the potential return with the LifeTarget Model Portfolios, advisers can more precisely plan a dynamic spending strategy for their clients.

Withdrawal order

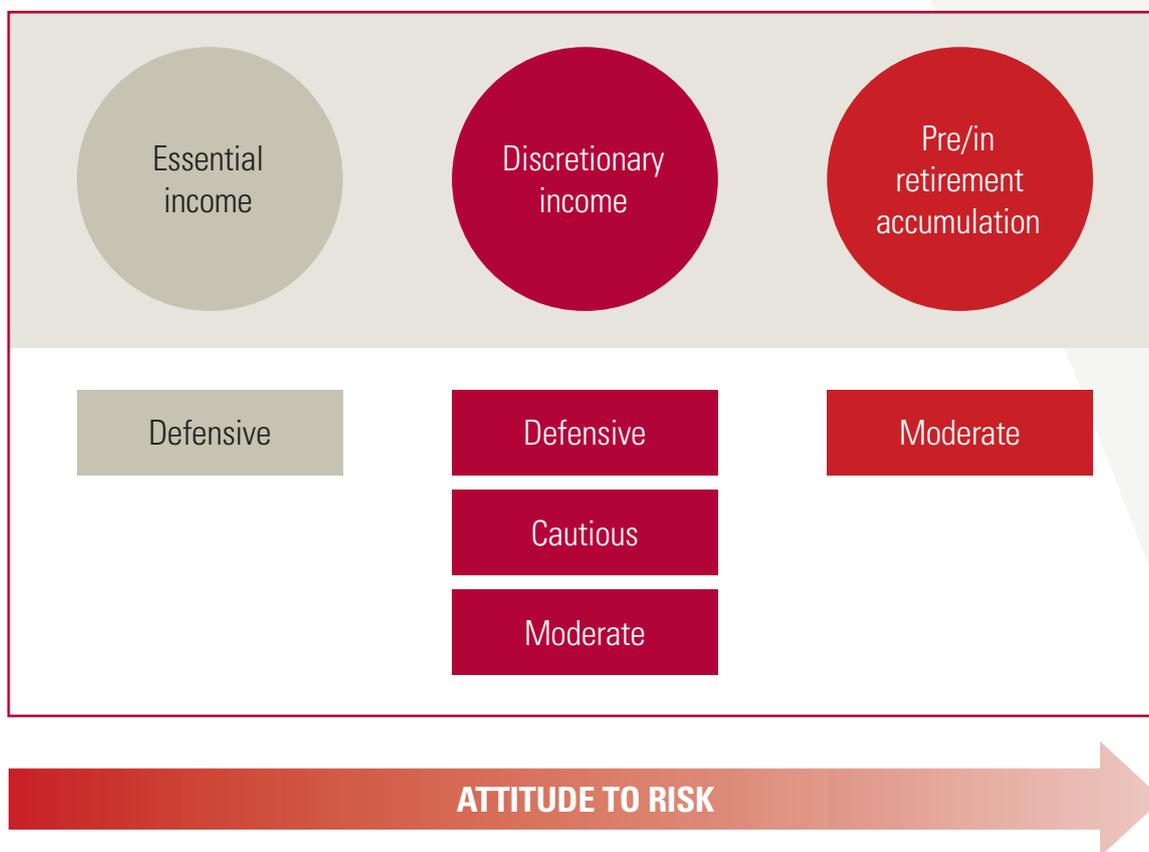
We advocate a focus on withdrawal order of retirement assets. The order in which accumulated retirement savings (whether general accounts, ISAs or pensions) are withdrawn can make a significant difference to the longevity of a retirement portfolio. Drawing from a general account first can improve the longevity of an investor's overall retirement assets.

You can read more about our approach to retirement on our website at vanguard.co.uk/professional.

Using LifeTarget Model Portfolios for retirement

Designed with flexibility in mind, Vanguard LifeTarget Model Portfolios are equally suitable for advisers looking to implement sustainable spending strategies for retired clients, or to support accumulation for those in retirement or preparing for retirement.

This is why we allow the adviser to maintain control of withdrawals and do not simply cap returns to the level of the long-term return target.





5

SUMMING UP THE KEY ADVANTAGES FOR CLIENTS AND ADVISERS

Reasons to choose Vanguard's LifeTarget Model Portfolios

Vanguard LifeTarget Model Portfolios are managed with the aim of giving investors the best chance of meeting or exceeding a minimum return target over the long term. These models are designed with retirement in mind and are built on decades of experience and the resources of one of the world's largest asset managers.



Model portfolios have the added advantage of freeing up an adviser's time from selecting individual funds, to spend on things that really matter, keeping clients on track to reach their goals through behavioural coaching and financial planning.

Flexible

Portfolios aim to generate sufficient long-term return to cover spending or growth requirements whilst maintaining portfolio balance over time.

Targeted

Designed to produce a minimum level of return of 2%, 3% or 4% over the longer term to support retirement objectives. Minimum long-term return targets are not guaranteed and are subject to the performance of the bonds and equities in which the model portfolio invests.

Intelligent

Allocations adapt each year or after major market events according to Vanguard's latest models.

Powered by VCMM and VAAM

Portfolios use two proprietary investment engines to inform and drive asset-allocation changes.

Adviser flexibility

Adviser controls actual drawdown of income to ensure control over income and capital needs.

Low cost

All-in costs of 0.32 – 0.33%¹² including management charge allow clients to keep more of the return.

Firm

Built on the investment and research expertise of one of the world's largest asset managers.

Our principles

Each model portfolio is built on the same four principles for investment success – goals, cost, balance, discipline.

With 45 years of experience since we were founded in 1975, Vanguard has consistently driven innovation in the investment market. We are one of the largest asset managers in the world with over £5 trillion in assets under management.¹³ We have been managing multi-asset funds since 1994 with £740bn¹³ in assets under management.

¹²Source: Vanguard. Data as at 28 February 2021. The weighted Ongoing Charges Figures (OCF) covers the fund manager's costs of managing the underlying funds. It does not include dealing costs or additional costs such as audit fees. The portfolio management fee is an annual fee that covers the discretionary management of the managed portfolio service, ongoing oversight, and regular rebalancing of the portfolios. The portfolio management fee is exclusive of VAT and any adviser, platform, or dealing charges.

¹³Source: Vanguard. Data as at December 31, 2020

Investment risk information

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

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

The value of investments, and the income from them, may fall or rise and investors may get back less than they invested.

Simulated past performance and past performance are not a reliable indicator of future results.

The model portfolios aim to achieve at least the minimum target return on an annualized basis over a rolling 5-year period. Achieving the minimum target return is not guaranteed and is subject to the performance of the underlying bonds and equities in which the model portfolios invest. In any given year the performance of the model portfolio may be higher, or lower than the minimum target return and an investor may not get back the full amount invested.

Some funds invest in emerging markets which can be more volatile than more established markets. As a result the value of your investment may rise or fall.

Investments in smaller companies may be more volatile than investments in well-established blue chip companies.

Funds investing in fixed interest securities carry the risk of default on repayment and erosion of the capital value of your investment and the level of income may fluctuate. Movements in interest rates are likely to affect the capital value of fixed interest securities. Corporate bonds may provide higher yields but as such may carry greater credit risk increasing the risk of default on repayment and erosion of the capital value of your investment. The level of income may fluctuate and movements in interest rates are likely to affect the capital value of bonds.

The funds may use derivatives in order to reduce risk or cost and/or generate extra income or growth. The use of derivatives could increase or reduce exposure to underlying assets and result in greater fluctuations of the fund's net asset value. A derivative is a financial contract whose value is based on the value of a financial asset (such as a share, bond, or currency) or a market index.

Some funds invest in securities which are denominated in different currencies. Movements in currency exchange rates can affect the return of investments.

For further information on risks of the underlying funds please see the "Risk Factors" section of the prospectus on our website at <https://global.vanguard.com>.

Important information

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This document is designed for use by, and is directed only at persons resident in the UK.

The information contained in this document is not to be regarded as an offer to buy or sell or the solicitation of any offer to buy or sell securities in any jurisdiction where such an offer or solicitation is against the law, or to anyone to whom it is unlawful to make such an offer or solicitation, or if the person making the offer or solicitation is not qualified to do so. The information in this document is general in nature and does not constitute legal, tax, or investment advice. Potential investors are urged to consult their professional advisers on the implications of making an investment in, holding or disposing of shares and /or units of, and the receipt of distribution from any investment.

Vanguard Investment Series plc has been authorised by the Central Bank of Ireland as a UCITS and has been registered for public distribution in certain EEA countries and the UK. Prospective investors are referred to the Funds' prospectus for further information. Prospective investors are also urged to consult their own professional advisers on the implications of making an investment in, and holding or disposing shares of the Funds and the receipt of distributions with respect to such shares under the law of the countries in which they are liable to taxation.

The Manager of Vanguard Investment Series plc is Vanguard Group (Ireland) Limited. Vanguard Asset Management, Limited is a distributor of Vanguard Investment Series plc.

The Authorised Corporate Director for Vanguard Investments Funds ICVC is Vanguard Investments UK, Limited. Vanguard Asset Management, Limited is a distributor of Vanguard Investments Funds ICVC.

The Manager of Vanguard FTSE U.K. All Share Index Unit Trust ('Trust') is Vanguard Investments UK, Limited. Vanguard Asset Management, Limited is a distributor of Vanguard FTSE U.K. All Share Index Unit Trust.

For further information on underlying funds' investment policy, please refer to the Key Investor Information Document ("KIID"). The KIID and the Prospectus for the fund(s) is available from Vanguard via our website <https://global.vanguard.com/>

The Key Investor Information Document ("KIID") and the Prospectus for Vanguard FTSE U.K. All Share Index Unit Trust is available, on request, via uk_client_services@vanguard.co.uk or telephone **0800 032 3731**.

The Central Bank of Ireland has granted authorisation for the Vanguard U.K. Government Bond Index Fund to invest up to 100% of net assets in different Transferable Securities and Money Market Instruments issued or guaranteed by any EU Member State, its local authorities, non-EU Member States or public international bodies of which one or more EU Member States are members. The Vanguard U.K. Government Bond Index Fund invests more than 35% of its scheme property in transferable securities and money market instruments issued or guaranteed by the UK.

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The Analyst Rating is Morningstar's forward-looking, analyst-driven ratings system that takes the form of Gold, Silver, Bronze, Neutral, and Negative. The Analyst Rating denotes an analyst's conviction in a fund's investment merits. Analysts typically re-evaluate Analyst Ratings on an annual basis.

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

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