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Managing the low-yield environment: stay the course with a total-return investing approach

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- Historically low bond yields have left many retirement investors looking to supplement their income with high-yielding assets.
- Income-oriented investors who are prompted to tilt their portfolios towards higher-yield assets may ultimately alter the original risk profile of the portfolio.
- We recommend a total-return approach to investing, which can help to minimise portfolio risks and increase portfolio longevity, while allowing an investor to meet spending goals with a combination of portfolio income and capital.

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Introduction

In March 2020, when global stock markets tumbled, the already-low yields on fixed income investments fell lower as investors sought shelter in government bonds and other safe havens. Subsequent waves of Covid-19 cases and additional lockdowns have done little to lift yields since. At the end of July 2021, 10-year gilts[1] yielded 0.5%. High-quality corporate bonds yielded 2.0%. (Since 1990, 10-year gilts have yielded, on average, 4.6%.)

The low-yield environment poses a challenge to income-focused investors who hope to use portfolio income to support retirement spending. As illustrated in Figure 1, in the 1990s, a broadly diversified portfolio of equity and fixed income could generate a "natural yield"[2] greater than 4% or 5% of the portfolio's value, consistent with conventional guidelines for retirement spending from a portfolio. Today, that is no longer the case.

Figure 1 Yields on traditional investments

Source: Vanguard calculations[3] using data from Macrobond and Bloomberg

Unless income-seeking investors are willing or able to make radical cuts to their spending, they have two broad options to address the shortcomings of portfolio yield in meeting spending goals. They either alter the portfolio asset allocation in search of higher yielding and potentially riskier assets or they spend from the capital returns in addition to the portfolio yield.

In this paper, we look at the pitfalls of the first option – shifting the portfolio's asset allocation towards higher-yielding assets, which can lead to unintended changes in the portfolio's risk profile and diversification. The alternative is a total-return strategy, that is positioned to support retirement spending through both portfolio yield and capital appreciation. This strategy severs the link between portfolio income and the level of spending, allowing investors to take back control of their spending plans. Combined with prudent withdrawal strategies[4], this approach allows an investor to meet annual spending needs without relying entirely on portfolio yield.

Constructing a portfolio based on a total-return strategy also creates an asset allocation that is driven by the retiree's risk-return profile through diversified domestic and global equity and fixed income.

1 Based on Barclays UK 10-year Gilts Index.

2 "Natural yield" is the return of the portfolio in the form of dividends and interest.

3 Yields for global equities and global bonds from 1 January 1990 to 30 April 2020. Global equities are defined as the MSCI ACWI Index USD, and global bonds are represented by the Bloomberg Barclays Global Aggregate Index Unhedged USD.

4 See Sustainable spending rates in turbulent markets, Vanguard research note, March 2021.

The appeal and challenges of income-focused investing

Traditionally, an income-focused approach to investing has been in vogue with retirement investors. Some of this has to do with the portfolio imposing discipline on withdrawals and the administrative convenience. Since the income-focused investor is only using the portfolio's natural yield, the portfolio determines both the amount and timing of withdrawals. Thus, there is no need to develop a spending strategy. The preference for an income-focused approach is also rooted in a belief that by spending only the portfolio's natural yield, investors will preserve capital and stand a smaller chance of running out of money in retirement.

While this approach has been effective historically, it is unlikely to be successful in the current low-yield environment. To achieve the targeted income, the investor is required to adjust the portfolio allocation each year with changing market circumstances. This may lead to an inappropriate risk exposure, raising the odds that the portfolio might be depleted earlier than would otherwise be the case.

In this paper we focus on three segments of the market with attractive yields in today's environment:

- Non-traditional bonds, such as high-yield and emerging market bonds, and strategic bond funds.
- UK commercial property investments
- High-dividend equity strategies

We then explain how a total-return approach can mitigate the risks associated with these portfolio tilts.

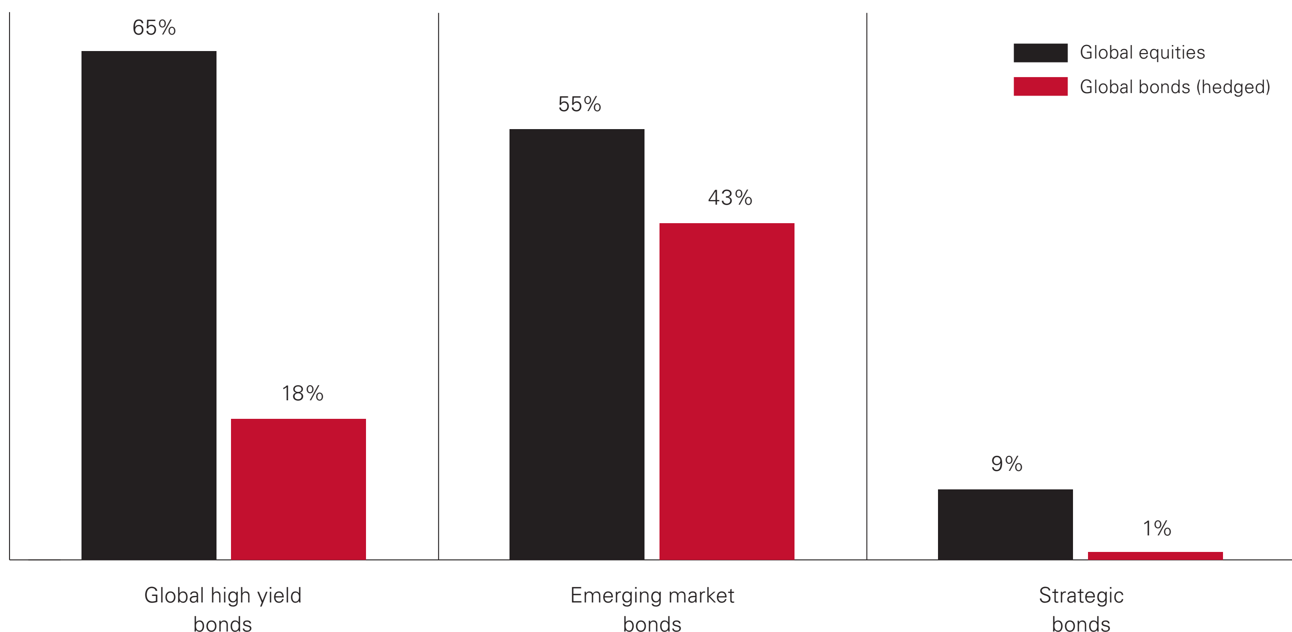
Allocating to non-traditional bonds

High-yield bonds, emerging market bonds and strategic bond funds can offer attractive yields when compared to more traditional investment-grade bonds. These yields offer potential compensation for the additional risks involved.

In the case of high-yield bonds, their sub-investment grade ratings indicate a higher probability of default. For bonds issued by emerging market governments and corporations, investors face other non-traditional forms of risk, such as those stemming from less-developed political systems and fluctuations in emerging market currencies. Note also that these bonds don't provide the same diversification benefit that developed-market government bond and investment-grade corporate bonds provide.

Strategic bond funds are run by active managers who have a flexible mandate to offer an attractive yield and to time interest rates through duration strategies (buying bonds or other debt according to their sensitivity to interest rates). As Figure 2 suggests, an allocation to these investments can be more correlated with the equities than with the bond market.

Figure 2 Correlation of non-traditional bonds



Source: Vanguard calculations[5], using data from Macrobond, Bloomberg and Morningstar, Inc.

5 Based on data from 1 January 1995 to 30 December 2019 for the global high yield and emerging market bonds, global equities, and global bonds (hedged). Strategic bonds covers 1 January 2004 to 30 July 2018. Global high yield is defined as the Bloomberg Barclays Global High Yield Index GBP and emerging market bonds is defined as the Bloomberg Barclays EM Aggregate Index GBP. Global equities are defined as the MSCI ACWI IMI Index GBP, and Global bonds (hedged) are represented by the Bloomberg Barclays Global Aggregate Index Hedged GBP. Strategic bonds are defined as the fund representing the median 15-year return from the Morningstar Database.

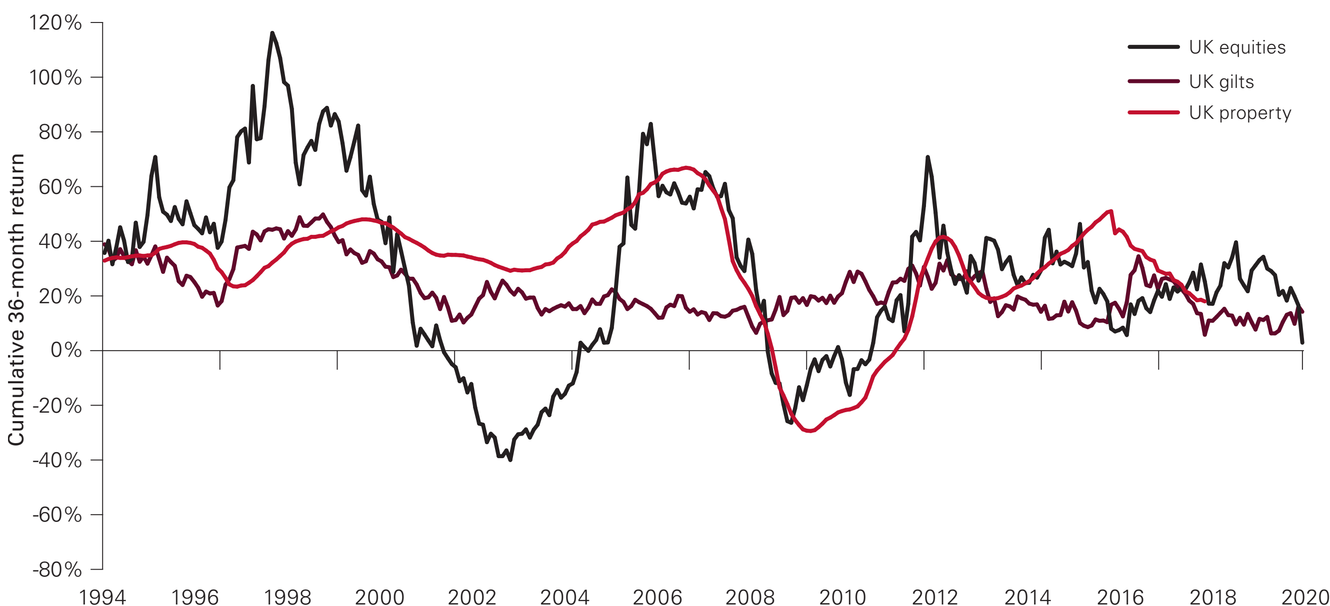
Exposure to commercial property

A common way to invest in the property market in the UK is through direct property funds that manage physical commercial properties. While the yields on these portfolios can be attractive and reported correlations with traditional asset classes are low (suggesting a diversification benefit), there are several other considerations and unconventional risks to consider. Unlike traditional investments (such as equities and bonds) that have publicly available indices that investors can track, no practical method of commercial property ownership offers pure systematic exposure to the entire asset class. As a result, willing investors must employ an active manager to select a sample of properties to hold. Some managers produce better-than-average returns. Some don't. And identifying those who will perform best in the future has proven difficult.

In the period covered by Figure 3, the average monthly volatility of the Commercial Property Index is 3.7%, much lower than the 6.0% of UK gilts, and markedly lower than the 15.1% of UK equities[6]. But the lower volatility of the property index is something of an illusion due to the industry's accounting conventions. Commercial properties are subject to appraisal-based valuation, meaning their values are not known in real time. Common practice is to appraise the properties on an annual basis, leading to risk metrics (volatility and correlation) that can be distorted relative to traditional asset classes such as equities and gilts that are valued just about every trading day. When we use annual volatility to compare commercial property with UK gilts and UK equities, property looks riskier. The annual volatility of the Commercial Property Index, even with its appraisal-based limitations, is 10.1%, much higher than the 7.3% of UK gilts but below the 15.6% of UK equities.

The smoothing effect of appraisal-based valuation can be seen in Figure 3 relative to both equities and bonds, which are valued more frequently. You can also see how the drawdown and subsequent recovery during the global financial crisis lagged the public equity markets by around one year, and commercial property eventually fell further. Therefore, the 33% drawdown figure for UK property in the global financial crisis[7], would likely have been higher had the properties been valued in real time. This leads us to conclusion that drawdown risk may be a more accurate gauge of commercial property risk than volatility.

Figure 3 Cyclicality of UK commercial property



Source: Vanguard calculations[6], using data from Macrobond, Bloomberg, and Morningstar, Inc.

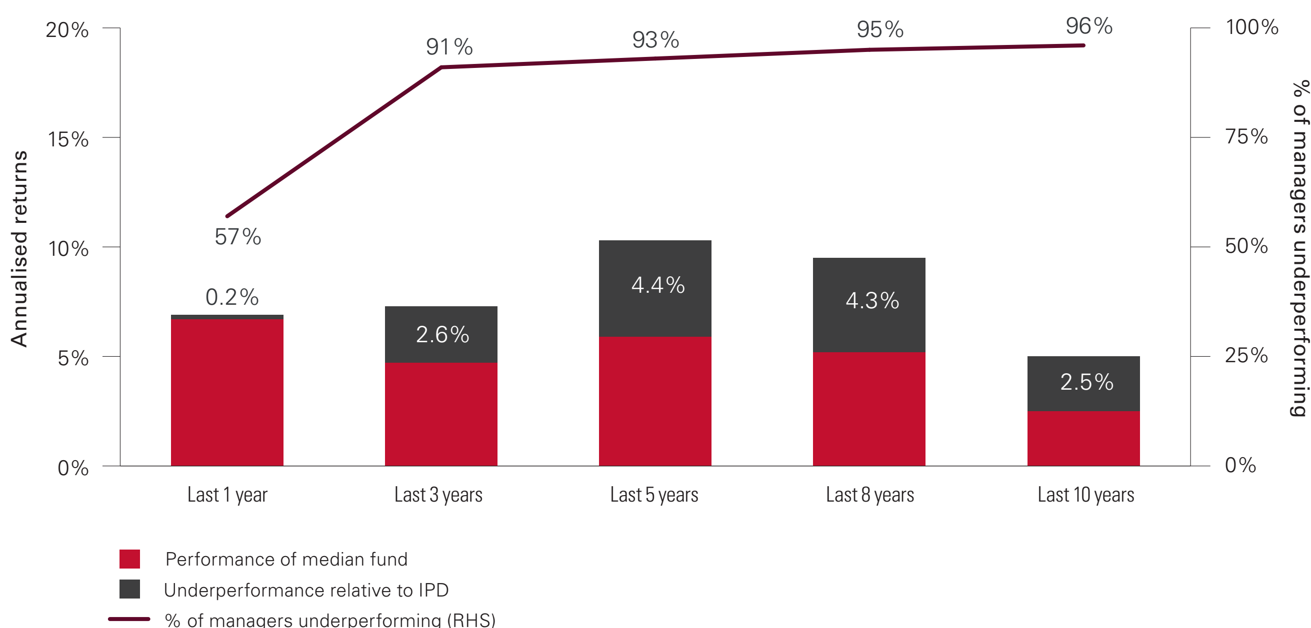
6 UK property defined as Investment Property Databank (IPD) Index from 31 December 1986 to 31 December 2015 and then FTSE UK All Property Index from 1 January 2016 to 31 December 2017 (index discontinued), UK equity defined as the FTSE All-Share Index and UK gilts defined as the Bloomberg Barclays UK Aggregate Index. All returns are in sterling terms with income reinvested. Equity and bond data runs from 31 December 1986 to 28 February 2020.

7 12 October 2007 to 9 March 2009.

For investors who are comfortable embracing this cyclicality, a final consideration is the implementation hurdle. In Figure 4 we report the underperformance of property funds when compared against the UK Investment Property Databank (IPD) index. While the IPD index is not investible, it is the most commonly used benchmark for UK commercial property and is often used to make a case for the asset class in a diversified portfolio. It's worth noting that more than 90% of fund managers underperform the IPD index over any meaningful holding period.

Investors need to contend with the high costs associated with managing these pools – not just in terms of the transaction costs needed to buy and sell properties and ongoing charges such as expense ratios, which average 130 basis points[8], but also the high bid-ask spreads applied by some funds. It is also common for these funds to hold a significant cash position as a liquidity buffer, which can lead to a return drag. Investors may, in addition, need to accept front- and back-end loads (or entry and exit fees).

Figure 4 Underperformance of UK commercial property funds



Source: Vanguard calculations[9], using data from Bloomberg and Morningstar, Inc.

8 Based on the Morningstar data for EAA OE Property - Direct UK. This is comparable to the fees charged by active equity funds and much higher than passive equity funds (around 25 bps).

9 Property is defined as the IPD Index from 31 December 2007 to 31 December 2015 and then FTSE UK All Property Index from 1 January 2016 to 31 December 2017. We consider all UK property funds (both onshore and offshore) available in Morningstar as at 31 December 2017. Median UK property fund excess return is relative to the IPD Index. Historic performance data runs to the period ending 31 December 2017.

Swapping local equities for high-dividend equities

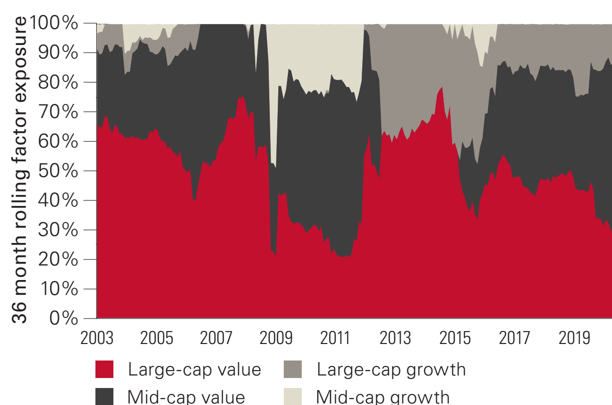
It is widely perceived that higher dividend-paying equities can outperform other equities. But there is no good reason why a firm that is paying higher dividends should generate greater overall returns. This is because, at a fundamental level, the decision to pay or not to pay a dividend is a capital budgeting decision. If a company believes it can reinvest its cash in projects with a positive net present value, it should put the cash to work in this way to increase shareholder value. Otherwise, it might be in the company's best interest to buy back some of its shares, thereby increasing the value of the remaining shares, or to distribute the excess cash as a dividend. In general, the total returns should not be positively or negatively affected by the actual payout.

Returns-based factor analysis (as shown in Figure 5 and 6) indicates that a high dividend equity benchmark such as the MSCI UK High Dividend Yield Index represents a significant overweight, or bet, on mid-cap value stocks, as compared with the broad market. Consequently, investors are taking a concentrated bet. This bet can potentially pay off but is time-period dependent. Since 2000, for example, it has paid off as value stocks have outperformed growth stocks, but following the 2008-2009 financial crisis, the same bet cost investors dearly as value underperformed growth stocks by a significant margin.

Corporate vs. government bonds

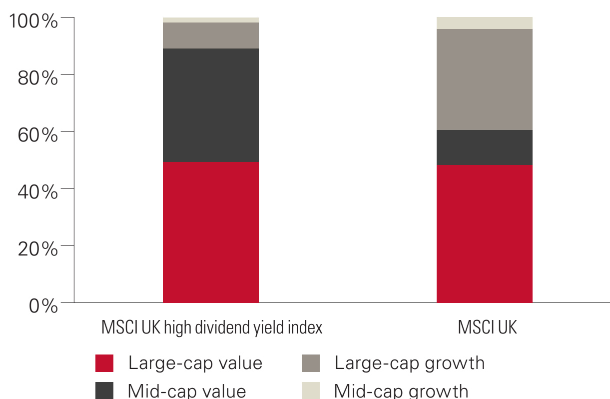
A balanced portfolio with exposure to fixed income would usually be invested in an "aggregate" bond fund comprised of a mix of corporate, government, government-related and securitised bonds. Investors seeking to increase portfolio yield may increase exposure to corporate bonds in place of government bonds due to the yield premium they offer. This yield premium comes at a cost – the extra credit risk, or risk of default, associated with corporate bonds relative to "risk-free" government-issued securities in developed markets. Although both investment-grade corporate bonds and government bonds act as diversifiers to a portfolio, an asset shift to just corporate bonds can bring additional risk to a portfolio in market downturns. The consequence of additional credit risk can be seen in asset class returns during early 2020, as shown in Figure 7.

Figure 5 Factor analysis of UK high dividend equities



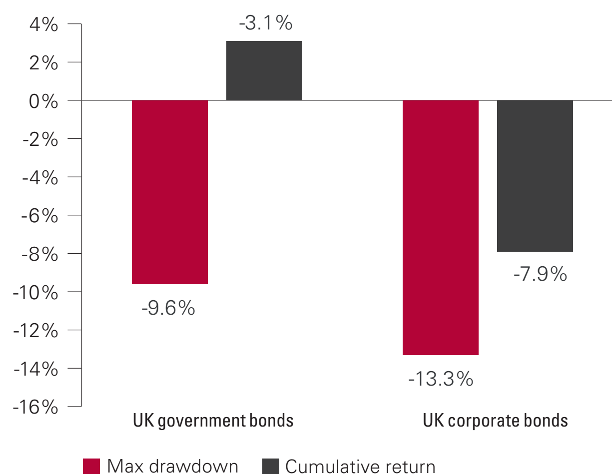
Source: Vanguard calculations[10]. Period covered is 31 January 2003 to 30 June 2020.

Figure 6 UK high-dividend exposure compared with broader UK market



Source: Vanguard calculations. Period covered is 31 January 2003 to 30 June 2020.

Figure 7 Performance of corporate vs. government bonds during downturn period



Source: Vanguard calculations[11], using data from Bloomberg. Period covered is 3 February 2020 to 31 March 2020.

10 Factor analysis displays the benchmark weights that result from a tracking error minimisation for each index across the set of four MSCI size and factor indices (the results are not materially affected by the choice of index provider).

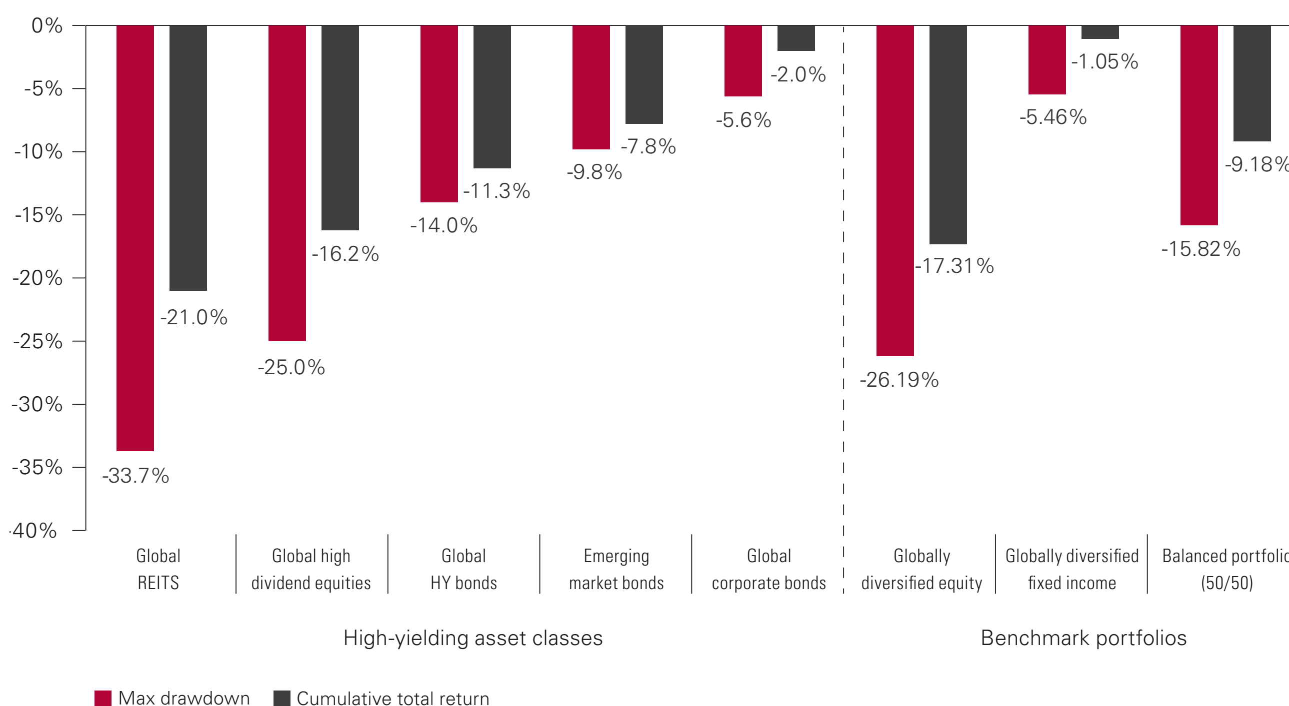
11 UK government bonds are represented by Bloomberg Barclays Sterling Bond Gilts All Maturities TR and UK corporate bonds by Bloomberg Barclays Sterling Corporate TR Value.

Downside risk in market shocks

Having a diversified investment portfolio can offer some downside protection during market shocks. Tilting a portfolio toward higher-yielding assets and away from traditional asset classes often magnifies losses during times of market stress. Figure 8 below displays the maximum drawdown and cumulative total return of various asset classes during the market downturn caused by the onset of the Covid-19 pandemic.

The figure shows the negative effects that a tilt towards higher-yielding assets can have on portfolio returns during market stress. Emerging market and high-yield bonds experienced a lower cumulative return and higher maximum drawdown than a globally diversified fixed income portfolio, more closely resembling the returns of equities. Global REITs had an even larger drawdown and lower cumulative return than a globally diversified equity portfolio. High-dividend equity, by contrast, performed similarly to the broad equity market during this period.

Figure 8 High yield assets provide addional downside risk – February 2020 to March 2020



Source: Vanguard calculations[12] using data from Bloomberg.

12 Global REITs are represented by MSCI ACWI Diversified REIT Index, emerging market bonds – Bloomberg Barclays EM Aggregate Index, global HD equities – MSCI World High DY Index, global high-yield bonds – Bloomberg Barclays Global High Yield Corporate Index, Global corporate bonds – Bloomberg Barclays Global Aggregate Corporate Index, globally diversified equity – MSCI World Price Index, globally diversified fixed income – Bloomberg Barclays Global Aggregate Index Hedged, balanced portfolio – 50/50 equity/bond allocation from MSCI World Price Index and Bloomberg Barclays Global Aggregate Index Hedged. All indices in GBP.

Yield chasing: a portfolio perspective

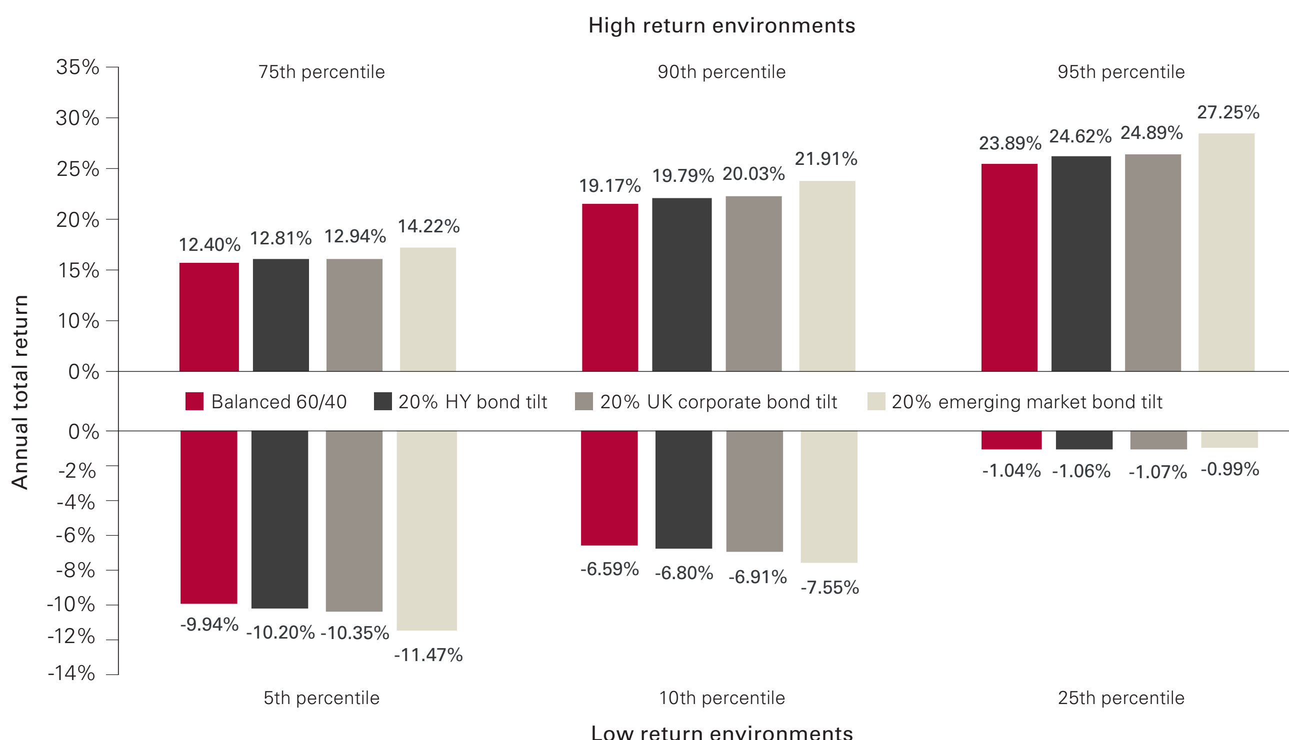
Considering the current low-yield environment, we project that the outlook for yields on traditional assets will remain below historical highs well into the future. Due to the continued forecast of low yields, investors seeking to maintain an income strategy may be tempted to tilt their portfolio towards some of the higher-yielding assets that were mentioned earlier in the paper. These higher yielding assets do not come without additional risks, and in the simulations below, we analyse the following portfolios with a modest 20% allocation towards high-yield assets:

- Portfolio 1: Broadly diversified balanced 60/40
- Portfolio 2: 20% high yield bond tilt
- Portfolio 3: 20% UK corporate bond tilt
- Portfolio 4: 20% emerging market bond tilt[13]

In this simulation, we use a March 2021 Vanguard Capital Markets Model[14] forecast to project portfolio returns across a variety of percentiles using a 30-year time horizon. We use 10,000 market scenarios to assess the total return potential of the portfolios in high- and low-return environments.(See appendix for more details).

In the figure below, we look at three market scenarios when the portfolio does well; the 75th, 90th and 95th percentile total return, as well as the scenarios when the portfolio does poorly; the 5th, 10th and 25th percentiles. For the three lower-return scenarios, the broadly diversified balanced portfolio offers more downside protection than the portfolios tilted towards higher yielding assets. However, the portfolios tilted towards high-yielding assets generally performed better in the higher-return environment. It is not surprising that portfolios with higher allocations to riskier assets can be expected to earn, on average, higher returns. The relationship between risk and return is fundamental to finance. But the risks are clear: less downside protection and more portfolio volatility. In low-return market environments similar to that of early 2020, a balanced portfolio continues to deliver the diversification needed to withstand large drawdowns.

Figure 9 Downside risks in bottom percentile environments



13 Portfolio asset allocations for the four portfolio tilts are as follows: 1) Base portfolio – 15% domestic equity, 45% international equity, 14% domestic bonds and 26% international bonds. 2) High-yield tilt 20% – 15% domestic equity, 45% international equity, 14% domestic bonds, 6% international bonds and 20% high-yield bonds. 3) UK corporate bond tilt 20% – 15% domestic equity, 45% international equity, 20% international bonds and 20% UK corporate bonds. 4) Emerging market bond tilt 20% – 15% domestic equity, 45% international equity, 14% domestic bonds, 6% international bonds, 20% emerging market government bonds.

14 VCMM is a proprietary forecasting tool that provides investors with a range of possible future expected returns for a wide range of asset classes. For more information about the VCMM please see: Davis, Aliaga-Diaz, Ahluwalia, Polanco, Tasopoulos, 2014. Vanguard Global Capital Markets Model.

Tax considerations

Every pound paid for management fees, trading commissions or taxes is a pound less of potential return or spending. Minimising investment costs is critical to long-term investing success because, contrary to the typical economic relationship between price and value, higher costs do not lead to higher returns. For investors with taxable assets, one of the most significant costs when investing can be taxes incurred when an investor earns interest, dividends or capital gains.

When it comes to an income-focused approach, taxes can be an important consideration, particularly for a high-net-worth investor. Under current tax law for a higher-rate taxpayer, for example, any dividends and interest earned above an annual allowance are taxed at 32.5% and 40%, respectively, relative to capital gains at 20%[15]. Also, the annual tax-free capital-gains allowance is £12,300, compared with £2,000 for dividends. All else being equal, the more punitive tax treatment of dividends and interest, when compared with capital gains, means an income-focused investor would face a higher tax liability and, hence, a lower after-tax return on their portfolio, which would reduce the spending the portfolio can support over the years[16].

A different approach

A broadly diversified total-return approach addresses many of the risks and pitfalls of an income-focused strategy, especially in a low-yield landscape. The total-return approach combines the investor's goals and risk tolerance, developing an appropriate asset allocation tailored to the specific investor.

The total-return strategy provides additional value to investors with increased spending flexibility stemming from two sources: capital gains and income. The total-return approach when combined with a prudent spending rule[17] provides value compared with the income approach by:

- Maintaining portfolio diversification
- Creating more tax efficiency
- And allowing more control over the size and timing of withdrawals (spending from capital gains and yield)

Conclusion

This paper explains the pitfalls of an income-focused approach for any investor wishing to meet their spending objectives over time and then proposes a total-return strategy as an alternative approach.

The current low-yield environment is leading many investors to focus on only one piece of their portfolio's total return – namely, the income return or natural yield. This focus may be encouraging investors to consider strategies such as reallocating to non-traditional bonds, property investments and equity income strategies. Investors may adopt one or more of these strategies in the belief that they will be rewarded with a more certain level of income or less risk. Unfortunately, there may be several unintended consequences when moving away from a broadly diversified portfolio.

Concentrating on higher-yielding sectors results in a less diversified portfolio, increasing the level of overall risk, and increasing the chance of falling short of long-term financial goals. On the other hand, a total-return approach potentially offers several portfolio benefits, including the ability to maintain diversification, potentially enhance a portfolio's tax-efficiency whilst allowing more focus on the size of portfolio withdrawals.

In these challenging times, with low yields and uncertain future returns, investors need to take back control of their portfolios. A total-return approach severs the link between portfolio yield and spending, allowing the investor to rely on portfolio withdrawal strategies that may be better suited to their needs.

15 Capital gains tax on property is 28%. As at 2021-22 tax year.

16 Any tax reliefs referred to in this document are those available under current legislation, which may change, and their availability and value will depend on your individual circumstances. If you have questions relating to your specific tax situation, please contact your tax adviser.

17 See Sustainable spending rates in turbulent markets, Vanguard research note, March 2021.

Appendix – VCMM

Vanguard's forward looking expectation for key asset classes as at March 2021. The March 2021 forecast is used to project future asset returns. Vanguard's VCMM forecast is presented as a distributional framework. For more information about Vanguard's forecast, please see the Vanguard Economic and Market Outlook[18]. There are two types of forecasts used, a geometric forecast and year by year forecast. The year by year forecast is used to display the annual downside risks that high yielding assets present in terms of total return.

Figure A-1 VCMM forecast – March 2021 – Total return in any given year over 30 year horizon

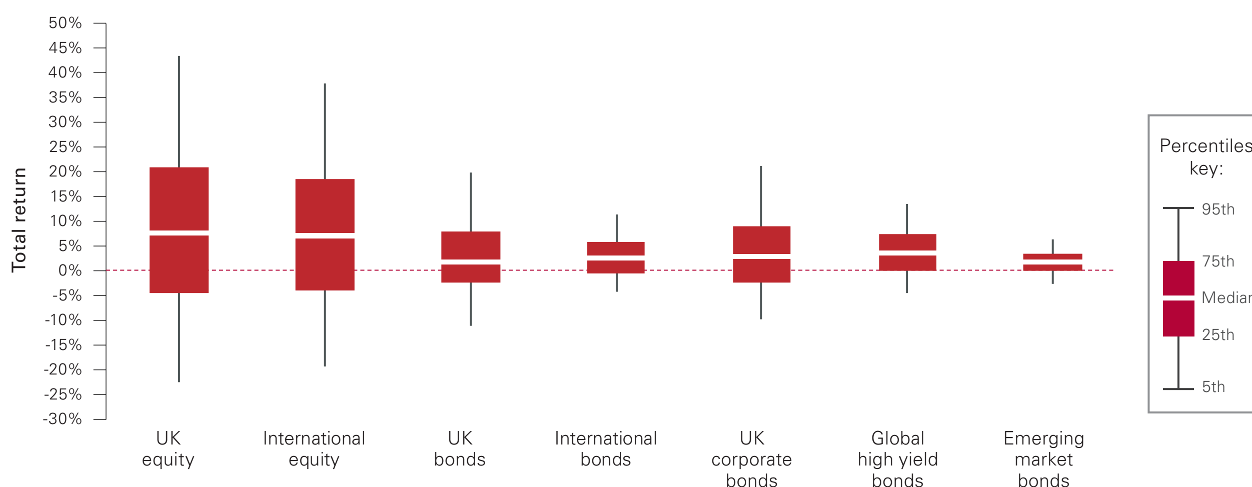
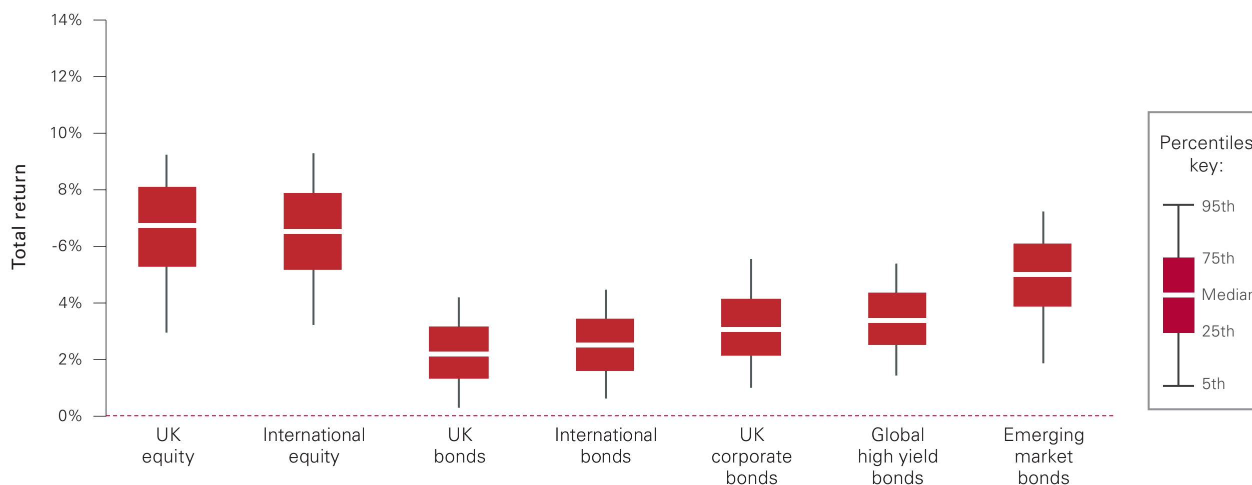


Figure A-2 VCMM forecast – March 2021 – Geometric total return over 30 year horizon



18 Latest Vanguard economic and market outlook: https://www.vanguard.co.uk/professional/vanguard-economic-and-market-outlook

References

Davis, Joseph, Roger A. Aliaga-Díaz, Peter Westaway, Qian Wang, Andrew J. Patterson, Kevin DiCurcio, Alexis Gray, and Jonathan Lemco, 2019. *Vanguard Economic and Market Outlook for 2020: The New Age of Uncertainty.* Valley Forge, Pa.: The Vanguard Group.

Davis, Joseph H., Roger Aliaga-Díaz, Harshdeep Ahluwalia, Frank Polanco, and Christos Tasopoulos, 2014. *Vanguard Global Capital Markets Model. Valley Forge*, Pa.: The Vanguard Group.

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