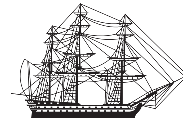

Total-return investing: An enduring solution for low yields

Vanguard research | November 2012

Executive summary. Many investors focus on the yield or income generated from their investments as the foundation for what they have available to spend. The higher the portfolio's yield, the more the investor can potentially spend. The challenge today, and going forward, is that yields for most investments are historically low, and both yields and returns for traditional income investments are forecasted to remain low for the next several years.[1] As a result, income-oriented investors have three broad choices: (1) spend less; (2) reallocate their portfolios to higher-yielding investments; or (3) spend from total returns instead of income alone. Given that spending less is generally not a desirable option for most investors, this paper focuses instead on the second and third options. We conclude that moving from an income or "yield" focus to a total-return approach may be the better solution.

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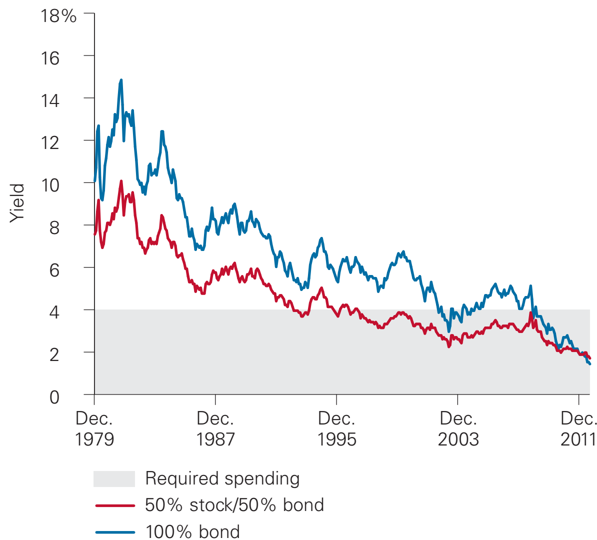
1 The Federal Reserve has indicated its willingness to keep interest rates near 0% until 2015 or beyond. See also Vanguard's discussion of forward bond returns (in Davis and Aliaga-Díaz, 2012).

Figure 1. Yields for many traditional portfolios have fallen below 4%

December 1, 1979–September 30, 2012



Note: Based on the dividend yield of the Standard & Poor's 500 Index and the yield-to-maturity of the Barclays U.S. Aggregate Bond Index.

Sources: Vanguard calculations, using data from Thomson Reuters Datastream and Barclays.

Over the last 30-plus years, investors could easily have become accustomed to spending from a portfolio's yield, while maintaining a conservative asset allocation. As shown in **Figure 1**, from December 1, 1979, through September 30, 2012, an investor with a 4%[2] portfolio spending target would have enjoyed a yield that met or exceeded 4% simply by allocating part of his or her portfolio to broadly diversified fixed income investments. In such an environment, investors (or their financial advisors) needed worry little about maintaining sufficient levels of income.

Not only could investors spend comfortably from the income on their portfolios, but in many cases, they had income left over to be reinvested, so they were still net accumulators. However, since the early 2000s, many balanced portfolios have consistently provided yields below 4%, and since 2010, even 100% bond portfolios have failed to meet that target.[3]

As a result of low current yields (and widely held expectations for their continuance—e.g., see Davis and Aliaga-Díaz, 2012), it appears that some investors are turning to other investments to potentially meet their need for income. For instance, **Figure 2** shows cumulative cash flows over the decade ended September 30, 2012, out of low-yielding money markets and into higher-yielding areas of the market in the form of traditional open-ended funds and exchange-traded funds (ETFs), including bond funds of all maturities, high-yield bond funds, equity-income funds, emerging market and world bond funds, and real estate (REITs).

Figure 2 also shows the percentage of assets at the start of each period that the cash flows represent. For example, the three-year cash flows for emerging market bonds indicate that in the last three years, investors have purchased $55 billion of emerging market bond funds and ETFs. Comparing that figure to the ten-year amount reveals that for the full ten years, $62 billion has been allocated to emerging market bond funds and ETFs. This means that investors have only really become interested in the last three years, since $55 billion of the $62 billion has occurred since September 30, 2009. In addition, we see that the $55 billion represents an increase of 356% in emerging market bond fund and ETF assets.

2 A 4% initial spending target is a reasonable starting point for investors with a broadly diversified portfolio (see Bruno, Jaconetti, and Zilbering, 2012).

3 Unless otherwise noted, when we refer to "bonds," we are referring to broadly diversified portfolios of investment-grade bonds of intermediate-term duration.

Figure 2. Cash flows have favored higher-yielding areas of the markets

As of September 30, 2012

Category (excluding funds of funds)	Open-end and exchange-traded funds' cumulative cash flows (in $billions) and cash-flow percentage of base AUM							
	1-year		3-year		5-year		10-year	
Intermediate-term bond	$126.1	(14%)	$252.2	(37%)	$374.3	(80%)	$526.4	(227%)
High-yield bond	52.1	(27%)	74.4	(51%)	95.4	(79%)	97.3	(158%)
Short-term bond	30.2	(14%)	106.8	(83%)	147.3	(183%)	158.7	(287%)
Equity income (dividend)	25.4	(14%)	54.5	(40%)	53.1	(28%)	79.9	(107%)
Emerging markets bond	22.9	(47%)	54.7	(356%)	55.9	(409%)	62.0	(2175%)
Multisector bond	15.8	(13%)	29.3	(32%)	42.6	(56%)	78.3	(330%)
Long-term bond	13.6	(31%)	19.5	(61%)	33.4	(238%)	36.6	(426%)
Inflation-protected bond	12.1	(10%)	35.2	(43%)	69.6	(164%)	95.2	(868%)
Real estate	11.5	(18%)	20.5	(49%)	26.8	(46%)	41.8	(329%)
Money market	–66.9	(–3%)	–845.5	(–26%)	–402.3	(–21%)	–432.9	(–26%)

Notes: Data cover periods from October 1, 2002, through September 30, 2012. AUM = assets under management.

Source: Morningstar, Inc.

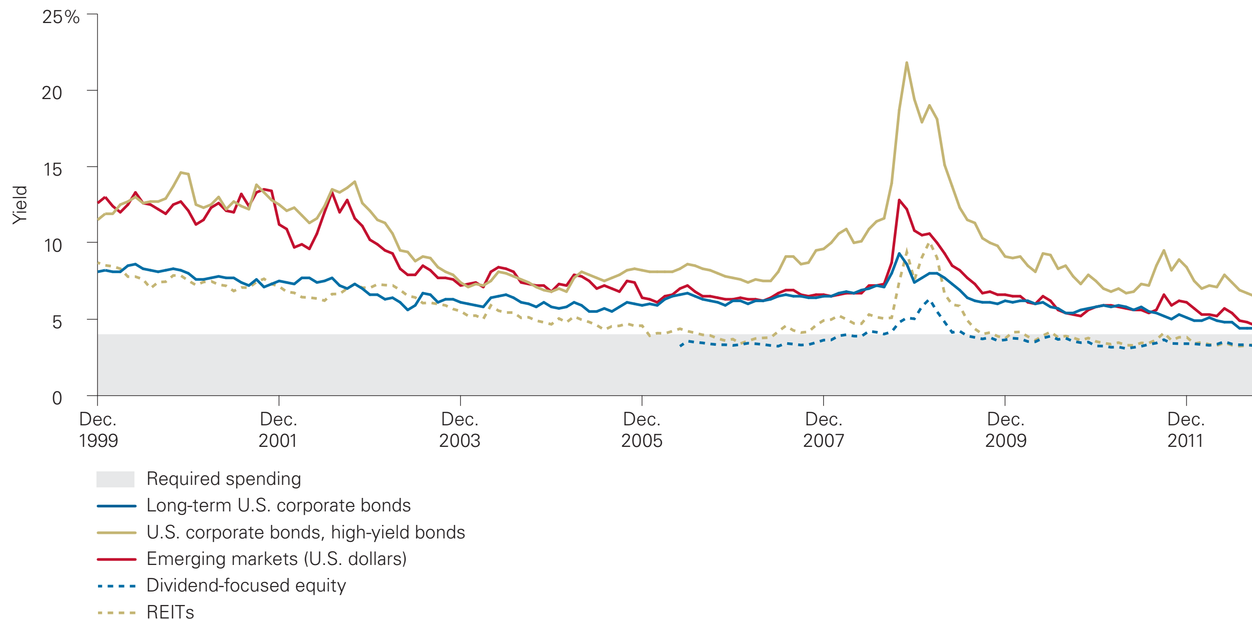
Notes about risk and performance data: All investments, including a portfolio's current and future holdings, are subject to risk, including the possible loss of the money you invest. Past performance is no guarantee of future returns. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index. There may be other material differences between products that must be considered prior to investing. Diversification does not ensure a profit or protect against a loss in a declining market. There is no guarantee that any particular asset allocation or mix of funds will meet your investment objectives or provide you with a given level of income.

Be aware that fluctuations in the financial markets and other factors may cause declines in the value of your account. Investments in stocks or bonds issued by non-U.S. companies are subject to risks including country/regional risk, which is the chance that political upheaval, financial troubles, or natural disasters will adversely affect the value of securities issued by companies in foreign countries or regions; and currency risk, which is the chance that the value of a foreign investment, measured in U.S. dollars, will decrease because of unfavorable changes in currency exchange rates. Bond funds are subject to the risk that an issuer will fail to make payments on time, and that bond prices will decline because of rising interest rates or negative perceptions of an issuer's ability to make payments.

High-yield bonds generally have medium- and lower-range credit-quality ratings and are therefore subject to a higher level of credit risk than bonds with higher credit-quality ratings. While U.S. Treasury or government-agency securities provide substantial protection against credit risk, they do not protect investors against price changes due to changing interest rates.

Funds that concentrate on a relatively narrow market sector face the risk of higher share-price volatility. Stocks of companies based in emerging markets are subject to national and regional political and economic risks and to the risk of currency fluctuations. These risks are especially high in emerging markets. Prices of mid- and small-cap stocks often fluctuate more than those of large-company stocks.

Figure 3. Yields for riskier market segments have been attractive: December 1, 1999–September 30, 2012



Sources: Authors' calculations, using data from Thomson Reuters Datastream and Barclays.

Although we can't confirm that the same investors who are leaving money markets are in fact moving into these other areas, the general trend is strong enough to permit us to assume that investors are moving up the risk spectrum. Figure 3 shows that high-yield bonds, emerging market bonds, and long-term corporate bonds continue to offer yields above 4%. Although yields of dividend stocks and REITs are (as of September 30, 2012) lower than 4%, they both offer higher yields than either broad-market equities or fixed income (including investment-grade corporate bonds). We do not believe that the positive cash flows for these areas of the market are a coincidence.

Risks of chasing yield

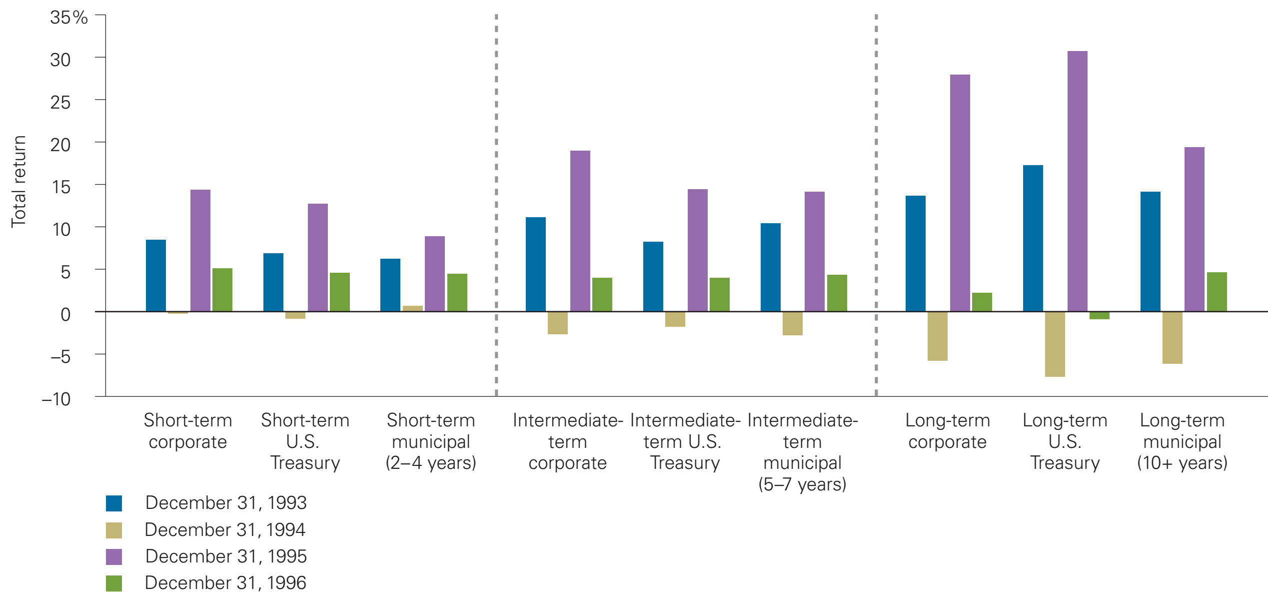
Although investors can use various ways to try to increase the income return or yield of their portfolios, this paper focuses on three current trends in investor cash flows:

- Extending the duration of the bond portfolio.
- Increasing the credit risk of the bond portfolio.
- Increasing exposure to dividend-paying equities.

Extending the bond portfolio's duration

The first move investors often make when they seek to increase their portfolio's yield is to raise the allocation to bonds of longer-maturity/duration.

Figure 4. Extending duration can introduce significant volatility: Selected bonds, 1993–1996



Note: The 1993–1996 period was selected because it illustrates the impact of an unanticipated increase in interest rates.

Source: Vanguard, using data from Barclays.

For example, although money markets have yielded between 0% and 0.2% for the three years ended September 30, 2012, the Barclays U.S. 1–5 Year Government/Credit Bond Index yielded 0.62% (duration of 2.7 years), the Barclays U.S. Intermediate Government/Credit Bond Index yielded 1.04% (duration, 3.9 years), and the Barclays U.S. Long Government/Credit Bond Index yielded 3.61% (duration, 14.8 years). It's thus easy to see why investors may try to increase their yields by 60 to 300 basis points (bps).[4]

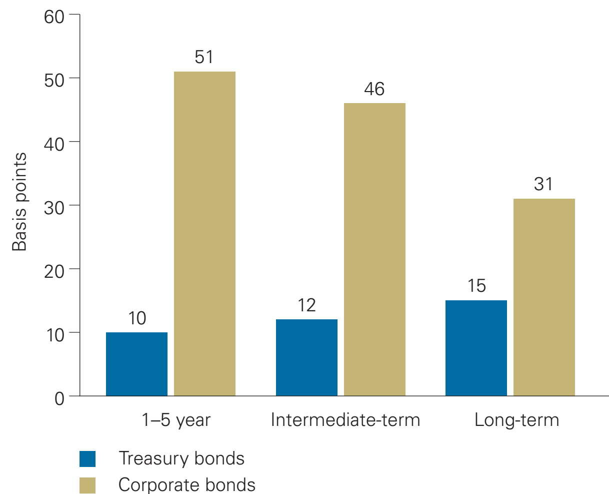
Nevertheless, investors need to be aware of two "risk relationships" when considering extending duration. The first is the relationship between duration and interest rates. **Figure 4**, for example, illustrates the impact on total returns of increased durations in the early to mid-1990s. Notably, in 1994 the Federal Reserve surprised the bond markets with an unanticipated increase in interest rates. Long-term bonds lost an average of 6.5% in 1994. Because duration reflects a bond's sensitivity to interest rate changes, the longer the duration, the greater the loss in prices when interest rates rise (as well as the subsequent price gain when interest rates fall).

4 One basis point = 1/100 of 1 percent.

Today the risks of duration-extension strategies are magnified, representing the second risk relationship that investors need to be aware of—that between yields and interest rates, and specifically the fact that current yields are so low that they provide little cushion for rising interest rates.[5] Investors face a prospect of very low yields combined with a duration that is not significantly different from history. This means that the current yield may not offset even a marginal decline in prices due to rising interest rates. For example, since 1995, the duration of the Barclays U.S. Intermediate Treasury Bond Index has oscillated between 3 and 4 years. Only the Barclays U.S. Long-Term Treasury Bond Index has seen its average duration change since that time, increasing to more than 16 years as of September 30, 2012, from an average of 11 years as recently as December 2007. The implication is that only a marginal increase in interest rates would lead to return parity between shorter-duration and longer-duration Treasuries. This is demonstrated in **Figure 5**, which details the basis point increase in yields (as of September 30, 2012) that would give Treasury bills the same total return as investors in longer-duration Treasuries (for comparison, corresponding values are also shown for corporate bonds). Yield increases greater than the amounts shown in the figure would mean that investors would be better off remaining in money markets today. Investors for whom principal security is important may not find duration extension a solution, even given the opportunity cost of accepting minimal yields in cash securities.

Figure 5. Current yields provide little cushion for rising rates

Increase in yield to make total return equivalent to T-bill



Note: Chart shows the basis point increase in yields that would be required to give investors in Treasury bills the same total return as investors in longer-duration Treasuries (or corporate bonds). Data as of September 30, 2012.

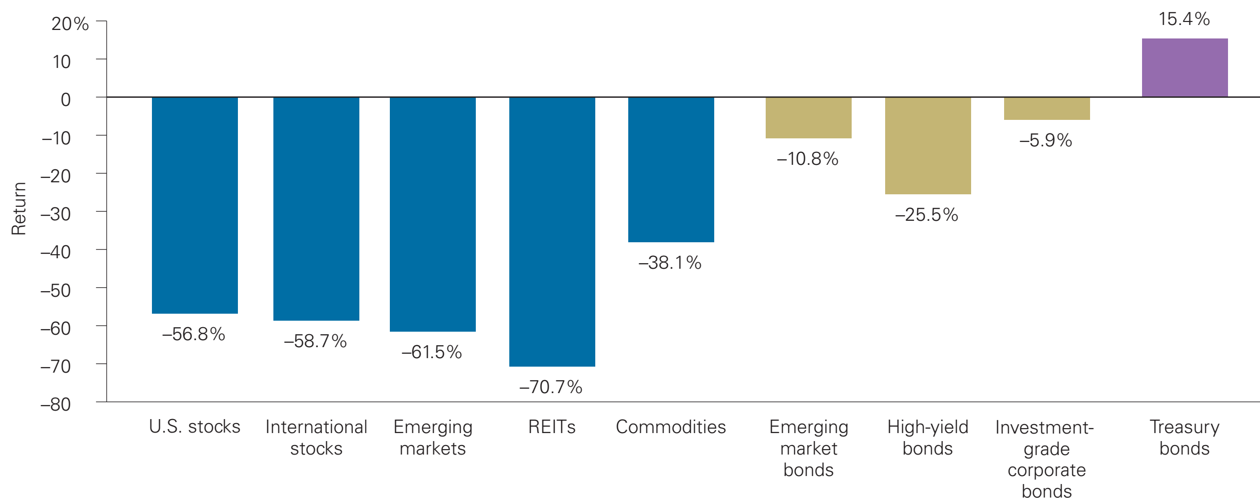
Sources: Vanguard, using data from Barclays.

Increasing the bond portfolio's credit risk

Perhaps as a result of negative press surrounding the perceived risks of U.S. Treasury bonds and other government securities in the current environment, many investors are also turning to higher-yielding bonds that are exposed to marginal or even significant credit risk. These include longer-duration investment-grade corporate bonds, high-yield (i.e., junk) corporate bonds, and emerging market bonds.

5 For certain clients, such as those in defined benefit pension plans that engage in asset liability matching, extending duration is likely to be more beneficial as part of their long-term strategy.

Figure 6. Cumulative performance of selected market segments: October 9, 2007–March 9, 2009



Notes: Returns for U.S. stocks, international and emerging market stocks, and REITs represent price returns; returns for commodities and bonds represent total returns. U.S. stocks are represented by the MSCI US Broad Market Index; international stocks, the MSCI World Index ex US; emerging market stocks, the MSCI Emerging Markets Index; REITs, the FTSE NAREIT US Real Estate Index; commodities, the Dow Jones-UBS Commodity Index; emerging market bonds, the JPMorgan Emerging Markets Bond Index; high-yield bonds, the Barclays U.S. Corporate High-Yield Bond Index; investment-grade corporate bonds, the Barclays U.S. Corporate Bond Index; and Treasury bonds, the Barclays U.S. Treasury Bond Index.

Sources: Vanguard and Thomson Reuters Datastream.

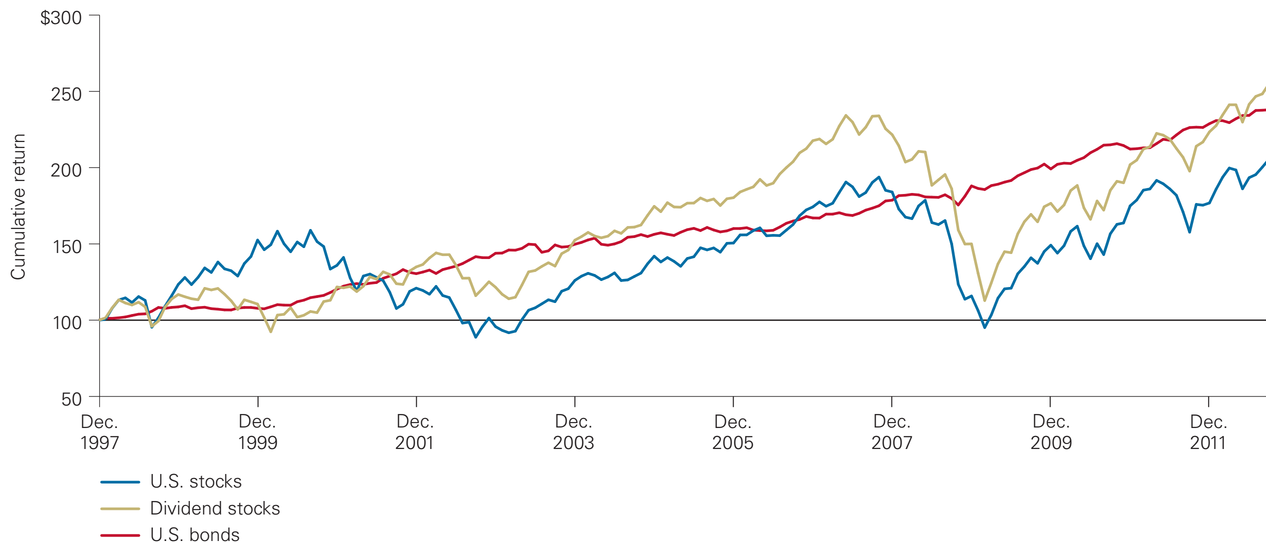
The risk is that credit risk tends to be correlated with equity risk, as was demonstrated during the global financial crisis (see **Figure 6**). This risk tends to be increased when investors move into riskier bonds at the expense of Treasury bonds, a proven diversifier during periods in which diversification is needed most.[6]

Further, investors should consider all potential consequences of reaching for extra yield. For example, our research has shown that replacing existing fixed income holdings with high-yield bonds has historically increased the volatility of a balanced portfolio by an average of 78 basis points annually. This is owing to the fact that high-yield bonds are both more highly correlated with the equity markets and more volatile than investment-grade bonds.[7] Investors who employ one of these strategies are sacrificing diversification benefits in hopes of receiving higher current income from their portfolio.

6 For more on the role of Treasury bonds during market environments characterized by a flight to quality, see Philips, Walker, and Kinniry (2012).

7 Note that REITs, commodities, and hedge funds are also more highly correlated with the equity markets than investment-grade bonds.

Figure 7. Dividend-paying stocks are not bonds: December 1997–September 30, 2012



12/31/1997–9/30/2012	Standard deviation	Correlation with stocks	Correlation with bonds
U.S. stocks	17%	1.0	–0.1
Dividend stocks	15%	0.8	0.0
U.S. bonds	4%	–0.1	1.0

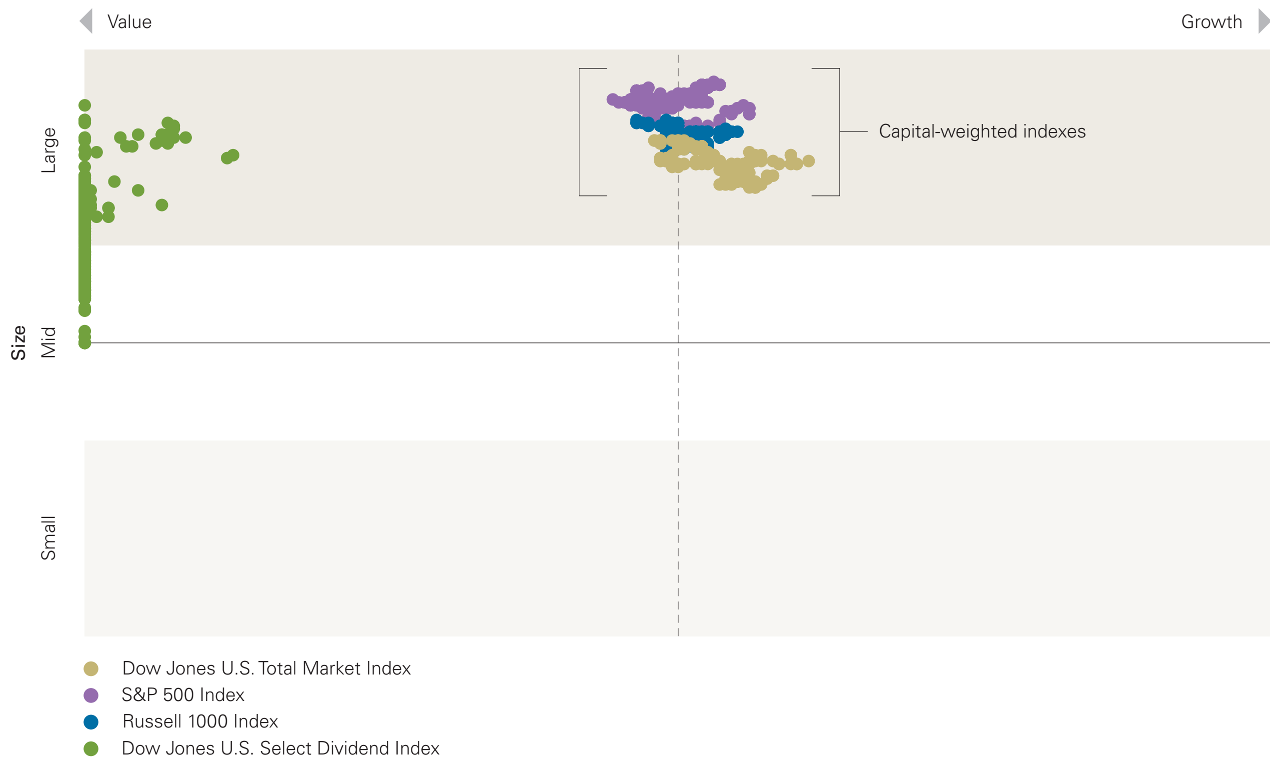
Notes: U.S. stocks are represented by the Dow Jones Wilshire 5000 Index through April 2005 and the MSCI US Broad Market Index thereafter; dividend stocks are represented by the S&P 500 Dividend Aristocrats Index through December 2003 and the FTSE Dividend Yield Index thereafter; U.S. bonds are represented by the Barclays U.S. Aggregate Bond Index.

Sources: Vanguard, with data from Thomson Reuters Datastream and Barclays.

Increasing the exposure to dividend-paying equities

Two general approaches are often advocated for using equities to help meet income.The first approach would have investors shift some or all of their fixed income allocation into higher-yielding dividend-paying stocks. Our concern with this approach is simply that stocks are *not* bonds. As articulated by Davis (2011), dividend-paying stocks are still stocks, and at the end of the day will perform like stocks—that is, they carry the risks of high volatility and the potential for significant loss. For example, **Figure 7** shows the cumulative performance for dividend-paying stocks versus that of broadly diversified fixed income. Clearly, for an investor who views fixed income as not just providing yield but also diversification, dividend-paying stocks fall well short.

Figure 8. Dividend strategies tend to be value-centric

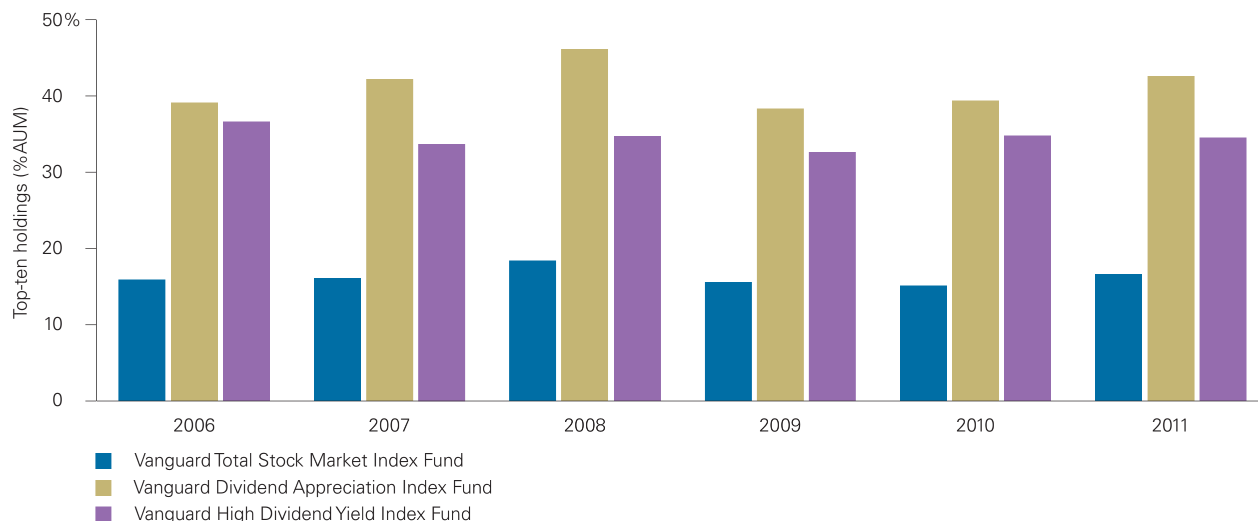


Notes: This style analysis displays the benchmark weights that result from a 36-month rolling tracking error minimization for each index across the set of six Russell size and style indexes (the results are not materially affected by the choice of index provider). Analysis covers the period 1992–2011.

Sources: Vanguard, based on return data from Thomson Reuters Datastream.

A second approach investors may take is to shift *out of broad-market equity* and into dividend- or income-focused equity. However, investors who move out of broad equity funds to focus on more dividend-centric portfolios may be inadvertently changing the risk profile of their portfolio as well. This is demonstrated in **Figure 8**, which provides a returns-based style analysis of the Dow Jones U.S. Select Dividend Index versus three traditional indexes widely used by investors to represent their broad equity exposure. The result of the style analysis is that the dividend-focused index displayed a persistent and significant bias toward value stocks.

Figure 9. Percentage of assets under management concentrated in top-ten holdings of three dividend-paying Vanguard funds



Notes: This illustration does not represent the holdings of any particular portfolio. AUM = assets under management.

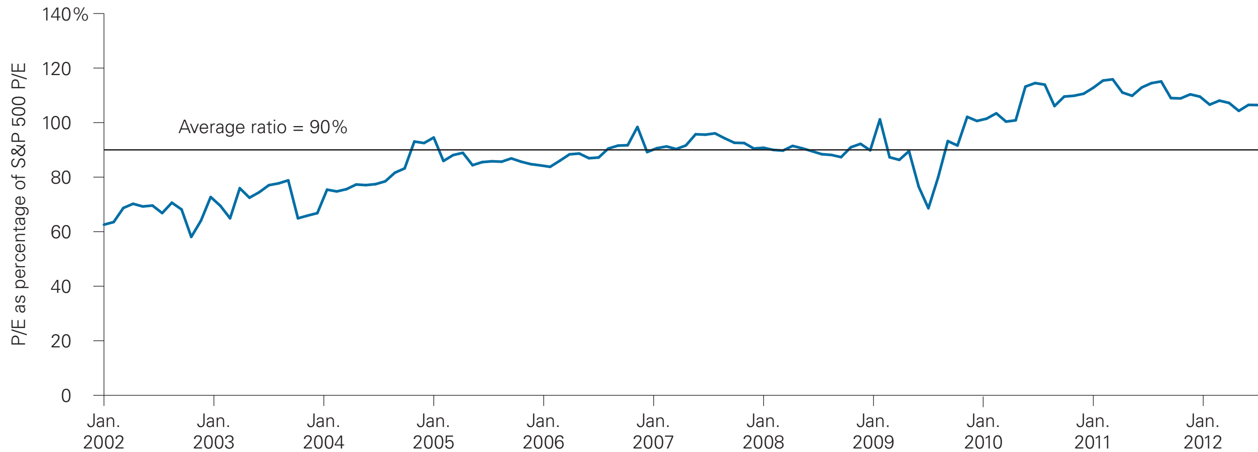
Source: Vanguard.

Although "value stocks" are generally considered to be a less risky subset of the broader equity market,[8] the risks to such a strategy can actually be substantial. First, portfolios focused on dividend-paying stocks tend to be concentrated in certain individual stocks and sectors. **Figure 9**, for example, indicates the percentage of assets under management that were concentrated in the top-ten holdings in a portfolio of three dividend-paying Vanguard funds for the years 2006–2011. The more broadly diversified Vanguard Total Stock Market Index Fund has a much lower percentage of assets under management in its top-ten holdings than does the dividend-centric Vanguard Dividend Appreciation Index Fund or Vanguard High Dividend Yield Index Fund. Also, the dividend-focused portfolios tend to systematically underweight technology and financial stocks and overweight consumer staples.

8 "Less risky" should not be taken to mean "better." Going forward, value stocks should have a risk-adjusted return similar to that of the broad equity market, unless there are risks that are not recognized in traditional volatility metrics.

Figure 10. Dividend payers today are at elevated valuations relative to their historical values and Standard & Poor's 500 Index

January 1, 2002 –September 30, 2012



Notes: Relative price/earnings (P/E) is calculated by dividing the P/E of the highest-yielding S&P 500 Index stocks (top quintile) by the overall P/E of the S&P 500. Securities in each quintile are equal-weighted.

Sources: Vanguard and FactSet.

Finally, it's important to note that the significant focus on dividend stocks since 2002 has driven relative valuations (based on price/earnings) well above their average for the decade ended September 30, 2012 (see **Figure 10**). All else equal, investors should be cautious about reaching for yield among dividend-paying stocks today (see also the box on page 12, "The value of dividends?").

Figure 11. Dividends alone do not reflect wealth creation

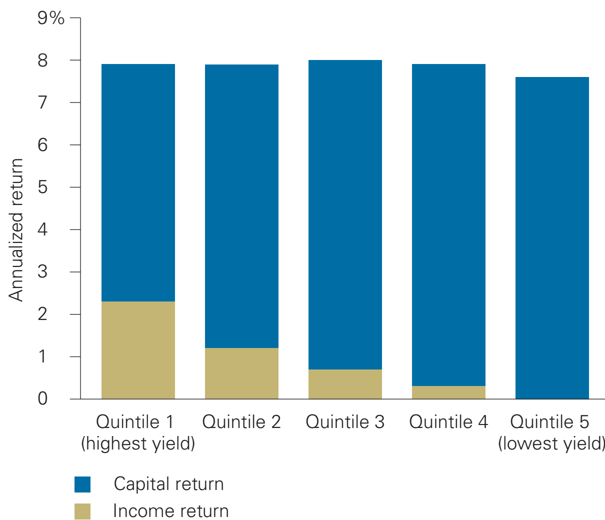
20 years ended December 31, 2011

a. A stock pays a dividend

Initial wealth	Final wealth	
$100	$5	Dividend
	95	Ex-dividend price
$100	$100	

b. A bond pays coupon interest

Initial wealth	Final wealth	
$100	$3	Coupon
	100	Principal
$100	$103	



Notes: Figure 11a shows return associated with income and capital for five buckets of funds ranging from those with the highest average yield to those with the lowest average yield for the 20 years ended December 31, 2011. Regardless of the average yield, the average returns for the 20 years were virtually identical. Chart is based on average yields and returns for general equity funds for the 20 years.

Sources: Vanguard and Morningstar, Inc.

The value of dividends?

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 positive net present value, it should do so, putting the cash to work to increase shareholder value. Otherwise, it might be in the company's best interest to buy back some of its stock, thereby increasing the value of the remaining shares. Although federal tax law has temporarily equalized the tax rates on dividend payouts and capital gains, this factor has not changed the capital-budgeting decision process.

From a technical aspect, value is not created by a stock's dividend payout (see **Figure 11**). This is because the stock's price falls by the amount of the payout on the ex-dividend date, so the shareholder does not gain or lose any value—except that now, if the stock is held in a taxable account, the shareholder owes taxes on the dividend. If an investor is looking for a cash payment from a stock investment in a taxable account, generally speaking it is more advantageous to sell some of the holding than to be paid a one-time dividend.

Because of the ex-dividend mechanism, the total returns are not positively or negatively affected by the actual payout. This is demonstrated in Figure 11, which shows the return associated with income and capital for five buckets of funds ranging from those with the highest average yield to those with the lowest average yield. Regardless of the average yield, the average returns for the 20 years ended December 31, 2011, were virtually identical.

Figure 12. Impacts on portfolio of income-only strategies: A summary

Income-only strategy	Impact on portfolio (compared with a capital-weighted portfolio at the sub-asset class level)
1. Overweighting longer-term bonds (extend duration).	Increases portfolio's exposure to changes in interest rates.
2. Overweighting high-yield bonds and/or underweighting Treasury bonds.	Increases portfolio's credit risk and raises portfolio's overall volatility.
3. Shifting the equity sub-asset allocation by overweighting value and dividend-centric equity.	Decreases diversification of equity portfolio by overweighting certain sectors.
4. Shifting a portion of the bond allocation to dividend-centric equity.	Increases portfolio's overall volatility and risk of loss.

Source: Vanguard.

To summarize this paper's discussion so far, **Figure 12** briefly outlines the impact on the portfolio of using each of the *income-only* strategies.

If not yield, then what? The total-return approach to investing

Given that each of the *income-only* strategies mentioned here could be damaging to a portfolio's overall health, Vanguard recommends a different approach, known as a *total-return approach*. This approach looks at both components of total return: income return plus capital return.

Keep in mind that the income-only and total-return approaches are identical to a point—that is, under each method, investors spend the income or yield generated by their portfolio. It is only when investors need additional monies from their portfolio that the investor often faces a decision and the approaches diverge. The spending gap can be filled either by overweighting income-producing assets or by spending from the other piece of the total return, namely, capital appreciation.

By focusing on the entire return earned by the portfolio—rather than its individual components—a total-return approach provides several advantages compared with an income-only method. Namely, the total-return approach:

- Maintains a portfolio's diversification (risk exposure);
- Allows the portfolio to be more tax-efficient;
- Increases the portfolio's longevity.

Maintains portfolio diversification (risk exposure)

Diversification can be a powerful strategy for managing the risk of return volatility, allowing investors to establish portfolios with risk profiles that are consistent with their goals and preferences. Although every portfolio is subject to market risk, idiosyncratic risks are largely avoidable. Investors can potentially diversify away firm-, sector-, and style-specific risks by investing in funds that seek to track broad-market indexes.

Allows portfolio to be more tax-efficient

Minimizing investment costs is critical to long-term investing success. Contrary to the typical economic relationship between price and value, higher costs do not lead to higher returns. Every dollar paid for management fees, trading commissions, or taxes is a dollar less of potential return. Research has repeatedly shown a powerful relationship between low costs and long-term performance (e.g., Wallick et al., 2011). However, unlike market returns and the other elements that determine performance, costs are predictable and controllable.

Of all the costs incurred when investing, taxes are one of the most significant. Taxes are incurred when an investor either sells shares that have appreciated in value (capital gains tax) or when an investor earns interest, dividends, or capital gains distributions on assets held in taxable accounts (taxes are not currently due on assets held in tax-advantaged accounts for these items).

Therefore, when constructing a portfolio, it is important to consider not only which assets to purchase but also where, or in which type of account (taxable or tax-advantaged) to purchase them; this is known as the portfolio's asset location (see the accompanying box, "Withdrawal order: Tax-wise strategies"). When the portfolio's goal is to maximize after-tax returns, there is a strong preference to hold tax-efficient investments (such as broad-market equity index funds/ETFs) in taxable accounts and to hold tax-inefficient investments (such as active equity or taxable bonds) in tax-advantaged accounts. *For total-return investors, asset location is driven by tax-efficiency, not by accessing income.*

Conversely, for investors following the income-only approach, asset location is driven by accessing the income at the expense of tax-efficiency. These investors are more likely to purchase taxable bond funds and/or income-oriented stock funds in taxable accounts so that they can gain access to the income (yield) from these investments. As a result, for assets held in taxable accounts, the investor will be subject to:

1. Paying his or her federal marginal income tax rate—as high as 35%—on taxable bond income; alternatively, the investor could purchase municipal bonds, in which case he or she would forgo the taxable–municipal spread.
2. Paying a 15% long-term capital gains tax rate on long-term capital gains/distributions and the investor's marginal income tax rate on short-term gains (to the extent the investor uses actively managed equity funds, capital gains distributions are more likely).
3. Paying a 15% rate on qualified dividend income (QDI) from equities (note that the 15% QDI rate could expire at the end of 2012, in which case the investor will pay his or her federal marginal income tax rate).

By contrast, by following a total-return approach, an investor can potentially purchase tax-efficient equity funds/ETFs in the investor's taxable accounts. Although these investors will still be subject to points 2 and 3 above, the amount of income or capital gains distributions will likely be significantly lower than that resulting from an income-only approach.

Increases portfolio's longevity

A direct result of minimizing the impact of taxes, as well as other costs incurred by the portfolio, is an increase in the length of time that the portfolio is able to meet an investor's spending needs. Put another way, minimizing taxes results in keeping more of the returns earned, which increases the longevity of the portfolio.

Conclusion

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. This focus may be encouraging investors to consider strategies such as extending the duration of their bond portfolios, tilting their bond holdings toward high-yield bonds, or shifting their equity holdings toward higher-dividend-paying stocks. Investors may adopt one or more of these strategies in the belief that they will be rewarded with a more certain return and, therefore, less risk. What these investors may fail to realize is that moving away from a broadly diversified portfolio and concentrating on certain sectors can potentially result in a less diversified portfolio, increased risk, decreased tax-efficiency (for taxable investors), and/or an increased chance of falling short of long-term financial goals. On the other hand, as discussed in this paper, a total-return approach potentially offers a number of portfolio benefits, including maintaining diversification, enhancing the portfolio's tax-efficiency, and increasing the portfolio's longevity.

Withdrawal order: Tax-wise strategies

Investors should consider depleting their taxable assets before spending from their tax-deferred accounts because of the fact that switching the order would accelerate the payment of income taxes. These taxes will likely be higher than taxes paid on withdrawals from taxable accounts, for two reasons. First, the investor will pay ordinary income taxes on the entire withdrawal (assuming the contributions were made with pre-tax dollars), rather than just paying capital gains taxes on the capital appreciation. Second, ordinary income tax rates are currently higher than the respective capital gains tax rates, so the investor would have to pay a higher tax rate on a larger withdrawal amount if he or she were to spend from the tax-deferred accounts first. Over time, the acceleration of income taxes and the resulting loss of tax-deferred growth can negatively affect the portfolio, resulting in lower terminal wealth values and lower success rates.

On the other hand, investors should consider spending from taxable accounts before tax-free accounts to maximize the long-term growth of the investor's overall portfolio. Reducing the amount of assets with tax-free growth potential can result in lower final wealth values and reduced investment success rates.

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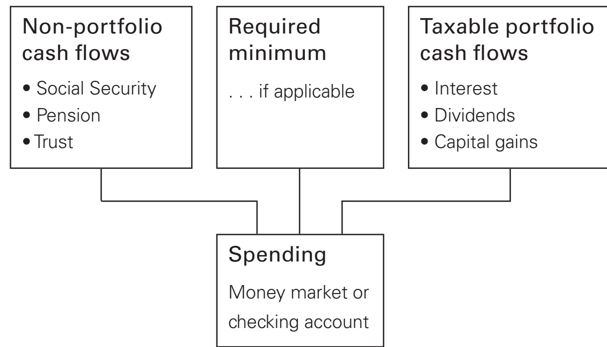
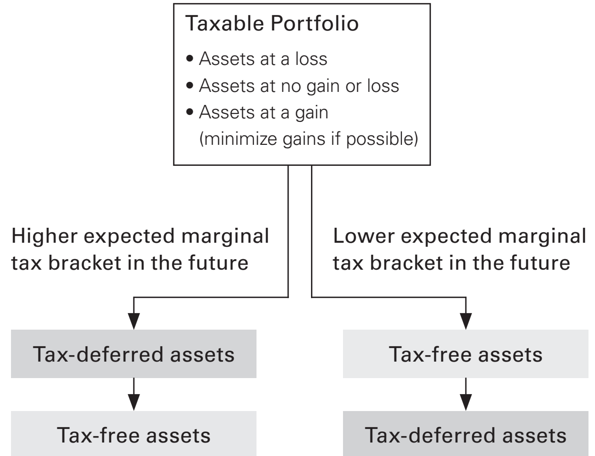
Appendix. Mechanics of implementing a total-return approach to spending

The following schematic shows how to implement a total-return approach to spending. Vanguard research holds that most investors should spend from their holdings in the following order: required minimum distributions (RMDs), if applicable; taxable assets; and, then tax-advantaged assets. This order is designed to allow the investor to obtain the desired spending amount while maximizing the long-term growth of the portfolio.[9]



Then, replenish spending account by selling assets in the following order:



Certainly, an investor's specific financial plan may warrant a different spending order, but this framework can serve as a prudent guideline for most investors.[10]

9 See Jaconetti and Bruno (2008).

10 See Jaconetti and Bruno (2008), for more information and exceptions to the general guidelines.

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