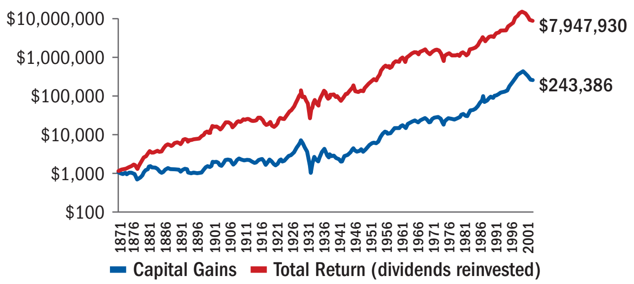
Using Dividend Growth Stocks to Pursue Financial Goals

Rajesh Kohli, CFA
Director, Senior Portfolio Manager

In today's low-growth, low-yield environment, investors face a challenge in their quest for returns to achieve their financial goals. Returns generated from cash sitting in the bank are close to zero and, in real terms, negative. Moreover, investments in fixed-income securities are fraught with the risk of capital loss amid the threat of rising interest rates. Without taking significant risks in this environment, investors face limited options. One such option worthy of consideration is dividend-paying stocks, especially those whose dividends exhibit strong potential growth characteristics. These investments offer income similar to that from fixed-income securities and the strong possibility of capital appreciation.

Exhibit 1: Capital gains & Total Return (with reinvested Dividends)



Source: *The Future for Investors* by Jeremy Siegel, 2005 & Cowles Foundation.
Past performance does not guarantee future results.

The emphasis on dividend-paying stocks may seem like a recent phenomenon, but the importance of dividends has not changed since the advent of modern investing in the late 19th century. In fact, a study comparing capital gains and total return found

KEY IMPLICATIONS

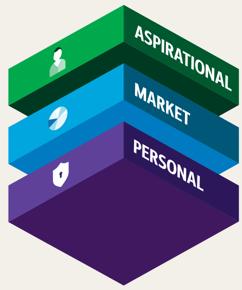
- The importance of considering dividend-paying stocks for a portfolio can be particularly acute for investors in or nearing retirement age. The Great Recession of 2007-2009 eroded the value of many investors' life savings, and many portfolios have yet to recover fully. Dividend growth stocks offer the possibility of higher returns than other equities, without an increase in risk.
- Some dividend stocks exhibit a history of steady growth in the payout amount of their dividends. Both the presence and the rate of growth in these stocks' dividends bear significant implications for the investor.
- One way for conservative investors to diversify in a risk-controlled manner is to focus on dividend growth strategies.
- Understanding how dividend growth stocks have fared historically under various market conditions can help in setting expectations for portfolios that allocate toward them.

The Wealth Allocation Framework

The Wealth Allocation Framework helps you put your goals and aspirations at the center of decisions about allocating your financial resources. **This paper focuses on strategies that may be appropriate for Personal and Market asset categories.**

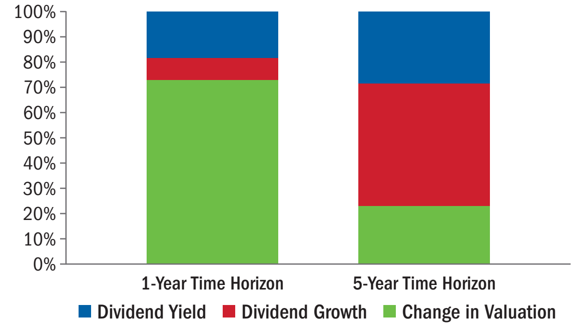
Personal: Individual investors have a desire for safety and personal financial obligations they want to meet regardless of market conditions. To safeguard essential goals, investors can hold lower-risk assets—but they have to accept lower returns in exchange.

Market: When we invest, we strive to capture market growth most efficiently. Today, access to a broadening array of asset classes and types makes diversifying beyond stocks and bonds easier than ever before.



To learn more, read the whitepaper, *Investing in a Transforming World: The Wealth Allocation Framework* that $1,000 invested in 1871 accumulated to $243,386 at the end of 2001 without reinvestment of dividends, while total return generated from the same investment with reinvested dividends accumulated to $7,947,930 (see Exhibit 1 on previous page). During the same time frame investors collected about $90,000 in dividends. If we simply add this amount to price appreciation, it would significantly fall short of what they would have received if they had reinvested dividends. Another study (see Exhibit 2) found that dividend yield and dividend growth together have accounted for 80% of aggregate return generated by the stock market over any 5-year period.

Exhibit 2: **Return generator by time horizon for every 1-year and 5-year period since 1871**



Source: GMO. Returns are through August 2010 and depict the S&P 500 Index. It is not possible to invest directly in an index.
Past performance does not guarantee future results.

As investors increase their portfolio allocation to dividend stocks, they should weigh several factors. Chief among them is that not all dividend stocks are the same! In addition, there are certain risks of which investors should be aware in their search for yield. It is important to differentiate between a high dividend yield stock and high dividend growth stock, because their main characteristics and risk profiles differ significantly.

This paper focuses on the following topics:

1. Importance of dividends
2. Reasons to consider dividend growth stocks
3. Identification of dividend growth stocks
4. Ways to avoid pitfalls when selecting dividend growth stocks
5. Reasons active management might be a preferred alternative in certain situations

What is a dividend?

A dividend is a payment made by a corporation to its shareholders out of free cash flows generated in the normal course of operations. In other words, dividends are distributed to the shareholders after taking into account all costs of running a business, including capital expenditures such as facility and equipment maintenance.

Dividends play a very important role in calculating the value of a company. Over the long run, return on an equity investment can be attributed to two sources: dividends and the price the market is willing to pay for a dividend stream.

When a company is formed it typically does not pay a dividend because, in its infancy, it often generates losses and burns through capital. But as its operations mature and profits accrue, the company is likely at some point to begin distributing dividends. Shareholders allow a company to reinvest in its operations as long as the potential returns generated by those investments exceed those that shareholders could generate elsewhere. But when shareholders can generate higher returns by investing on their own, they demand dividend payments. This generally happens as the company matures and its rate of revenue and earnings growth declines.

Importance of dividends in equity valuation

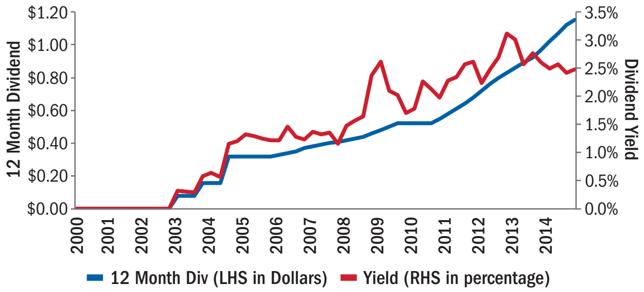
Investors purchase equities for various time horizons, typically either short- or long-term. An investor with a short time horizon seeks to sell the security at a higher price. His or her interest in receiving dividend payments is thus limited. This investor seeks to exploit a perceived market opportunity by buying a security at a price valued by the market which is below his or her estimated value of the company and then selling it at a higher one. This type of investor uses valuation metrics such as price-to-earnings (P/E) ratio, price-to-book value (P/B), enterprise value to earnings before interest, taxes and depreciation (EV/EBITDA), return on equity (ROE), etc. to compare the current valuation to its history.

By contrast, investors with a long time horizon are more interested in a stream of returns flowing from the company's operations. This investor approaches stock investment decisions akin to owning the business. Because his or her time horizon is long, this investor is less interested in the near-term volatility of the stock price. To assess the value of investment at the time of purchase, this investor must calculate the net present value of the stream of dividends plus the terminal value of the business.

Even in the case of a growth company that is expanding rapidly but has negative free cash flows (and thus cannot pay a dividend), the primary expectation of a long-term investor is that the company will generate dividends eventually.

Consider the example of technology companies that are still around from late 1990s. Back then, very few offered dividends. Now almost all do, as their business models have matured, generating positive free cash flows. Famously, Microsoft, which was founded in 1975 and went public eleven years later, did not start paying a dividend until 2003. Since then its dividend has steadily grown (see Exhibit 3).

Exhibit 3: Microsoft - Dividend History



Source: Bloomberg Finance L.P.

Past performance does not guarantee future results.

GORDON GROWTH FORMULA

The methodology commonly used to value stocks based on dividends is called the "Gordon Growth Formula," developed by the late economist Myron J. Gordon of the University of Toronto. Under this methodology the price of a stock is the expected value of next year's dividend, divided by the difference between its cost of equity and constant growth rate of dividends in perpetuity. It is also known as the Single-Stage Dividend Growth Formula.

$$P = \frac{D_1}{r-g}$$

P = current stock price

g = constant growth rate in perpetuity expected for the dividend

r = constant cost of equity for the firm

D_1 = value of next year's dividend

Let's take the example of two companies, A and B. Both are expected to pay a dividend of one dollar one year from today. Both have a cost of capital of 6%. Company A is expected to have a perpetual dividend growth rate of 4%, whereas Company B has a comparable growth rate of 2%. According to Gordon Growth Formula of valuation, the stock price that Company A

Exhibit 4: Using Gordon Growth Formula to calculate fair value of a stock

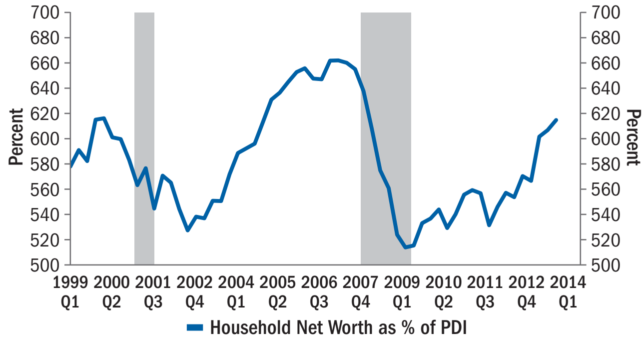
	Company A	Company B
Next year's dividend (D_1)	$1.00	$1.00
Cost of capital (r)	6%	6%
Growth rate (g)	4%	2%
Price	**$50.00**	**$25.00**

would command is $50 versus $25 for Company B. In other words, because the growth rate of Company A is twice that of Company B, its valuation follows suit (see Exhibit 4).

Need for yield

Today the importance of considering dividend stocks for a portfolio can be particularly acute for investors in or nearing retirement age. The Great Recession of 2007-2009 saw many investors fall behind in their retirement planning. But even though the stock market has rebounded from its 2009 lows, household net worth as a percentage of personal disposable income (PDI) remains below its 2007 peak (see Exhibit 5).

Exhibit 5: Household Net Worth (% of PDI), 1999-2014



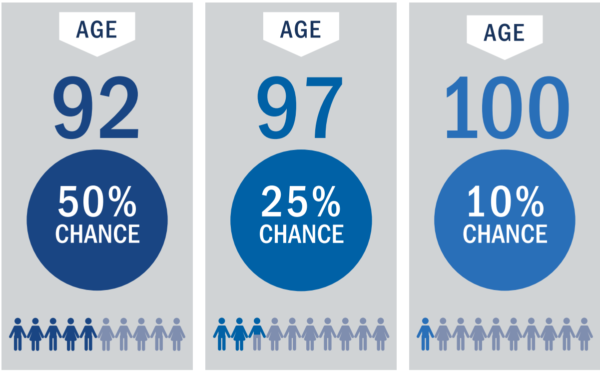
Source: Board of Governors of the Federal Reserve System (shading represents NBER recessions), BofA Merrill Lynch US Equity & US Quant trategy.

Complicating matters is the fact that Americans are living longer. A study conducted by the Society of Actuaries concludes that while the probability of a 65-year-old male living past 95 years is 14%, there is a 19% probability that a 65-year-old woman will live past 95 years. And for a 65-year old couple, there is a 50% probability that at least one spouse will live past 92 years (see Exhibit 6 on the next page). As Americans' life expectancy increases, investing for (and during) retirement promises to take on even greater importance. Longer life expectancy necessitates that Americans invest for a longer time horizon than before, which may make portfolio

Please refer to the last two pages of this document for additional important disclosure and risk information.

Exhibit 6: Probability of 65-Year-Olds Living to Various Ages

For a couple, both age 65, at least one spouse can expect to reach:

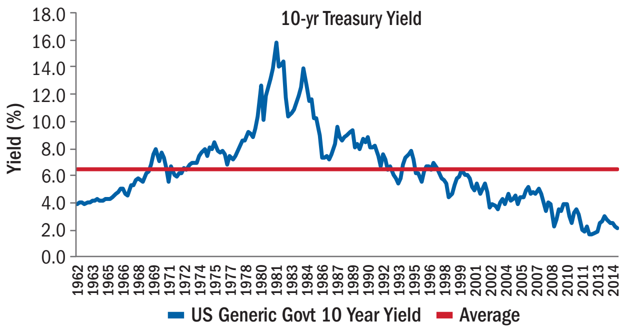


Source: Merrill Lynch Wealth Management calculations based on Society of Actuaries, 2012. Individual Annuity Mortality Tables, Basic.

growth a more pressing objective.

A third factor driving the need for yield is the current low level of interest rates. Over the past 20 years interest rates have declined gradually (see Exhibit 7). The corresponding decline in yield, however, has been offset by the strong performance of fixed-income markets. But with hardly any room for yields to decline further — and with rising expectations of an improving economy pushing real rates higher — the ability to generate positive returns from fixed-income securities is limited. These factors are likely to accelerate the phenomenon of the "Great Rotation," driving flows into equities from bonds, especially into dividend-paying stocks.

Exhibit 7: 10-yr Treasury Yield



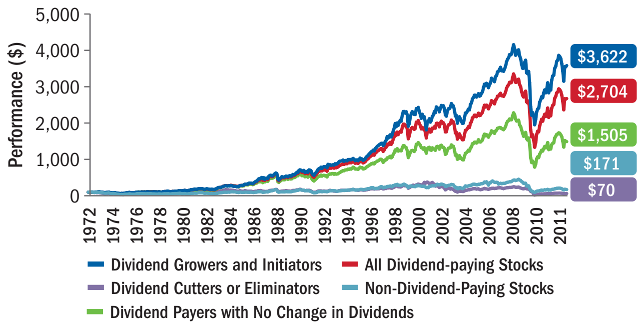
Source: BofA Merrill Lynch US Equity & Quant Strategy, Federal Reserve.
Past performance does not guarantee future results.

SOLUTION: DIVIDEND GROWTH STOCKS

Why focus on companies that pay and grow their dividends? Is there something inherent in dividend growth stocks that make them attractive relative to rest of the market?

A study conducted by Ned Davis Research, which categorized stocks in the S&P 500 based on their dividend policy, looked at the growth of $100 invested according to five different strategies from 1972 through 2011. It grouped stocks into the following categories: all dividend payers, non-dividend payers, dividend payers with no change in dividends, dividend payers that cut or eliminated dividends, and dividend payers that initiated and grew their dividends. Over the time frame, $100 invested in all dividend-paying stocks grew to $2,704, while same amount invested in non-dividend-paying stocks rose only to $171. Stocks that initiated and grew their dividends were the best performer, rising to $3,622, while dividend stocks with no changes rose to less than half that, at $1,505 (see Exhibit 8). Strikingly, $100 invested in companies that cut or eliminated dividends declined to $70 over the same period.

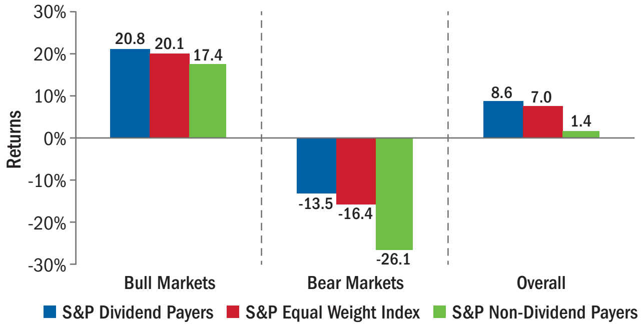
Exhibit 8: Growth of $100 for Five Strategies



Source of chart data: Ned Davis Research, 12/31/11. Based on equal-weighted geometric average of total return of dividend-paying and non-dividend-paying historical S&P 500 stocks, rebalanced annually. The chart uses indicated annual dividends to identify dividend-paying stocks and changes on a calendar-year basis. The performance shown is hypothetical investment of $100 in each of the five categories. The performance shown is for illustrative purposes only and does not predict or depict the performance of the strategy. The returns indicated above are not the strategy's returns. **Past performance does not guarantee future results.**

Now that we know dividend initiators and growers outperform the broader market over the long run, the question arises: How do these stocks perform in various market environments? Another study conducted by Ned Davis Research analyzed average return on stocks from 1972 through 2011, based on their dividend policy (see Exhibit 9 on the next page). It compared the performance of dividend payers and non-dividend payers with that of the S&P 500, in both bull and bear markets. Its conclusions were stark. From 1972 through

Exhibit 9: Dividend Payers Have Outperformed the S&P Equal Weight Index in All Markets – Average Returns (%), 1/31/72-12/31/11



Source: **Ned Davis Research.** Data as of 12/31/11. **Past performance does not guarantee future results.** A cyclical bull market requires a 30% rise in the Dow Jones Industrial Average (DJIA) after 50 calendar days or a 13% rise after 155 calendar days. A bear cyclical market requires a 30% drop in the DJIA after 50 calendar days or a 13% decline after 145 calendar days.

2011, the S&P 500 rose 7% on an annualized basis. During the same period, dividend payers grew 8.6% on an annualized basis — and non-dividend payers grew only 1.4% on an annualized basis.

In bear markets, dividend payers outperformed non-dividend payers. From 1972 through 2011, in a cyclical bear market (as defined by a 30% drop in the Dow Jones Industrial Average after 50 calendar days or a 13% decline after 145 days), dividend payers declined 13.5%, outperforming the S&P 500, which declined 16.4%. In the same environment, non-dividend payers declined a whopping 26.1%.

Notably, dividend payers outperformed both the broader market and non-dividend payers in bull markets too. From 1972 through 2011, in a cyclical bull market (as defined by a 30% increase in the Dow Jones Industrial Average after 50 calendar days or a 13% increase after 155 days), dividend payers rose 20.8%, outperforming the S&P 500, which rose 20.1%. In the same environment, non-dividend payers rose 17.4%.[1]

WHY DIVIDEND GROWTH STOCKS? YIELD, QUALITY AND GROWTH

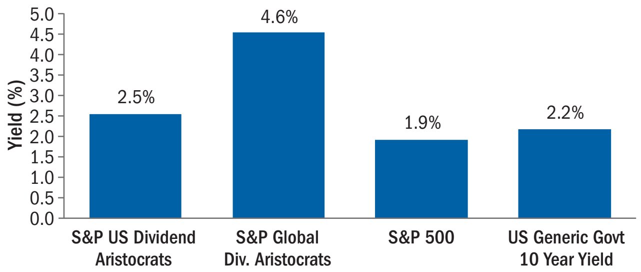
Fixed-income securities, a traditional source of income for investors, offer comparatively little income these days. Making matters worse is the possibility of a loss of capital from such securities, as interest rates rise from their historic lows. In this environment, equities appear to be a reasonable option. Equities generally have higher volatility and drawdown compared to bonds; however, not all stocks are the same.

If we can find stocks that have a dividend yield with lower volatility and higher quality than the broader market (S&P 500), as well as provide growth, then we might be able to satisfy the need for yield. Dividend growth stocks have these characteristics, making them even more attractive in the current market environment.

Yield

A key difference between bonds and dividend stocks is that the coupon on a bond remains constant throughout the life of the bond, whereas, in the case of a stock that pays a dividend, the rate of the dividend can grow. Currently, the 10-year U.S. Treasury yield is below its historical average of 6.2%. Meanwhile, equities in general and dividend growers in particular currently offer yields comparable to those of 10-year U.S. Treasuries (see Exhibit 10).

Exhibit 10: Yield



Source: Factset. Data as of Dec 31st, 2014.

Growth

Dividend growth stocks have a long history of outperformance versus the broader market, as highlighted in the chart earlier. This trend has held true over the past seven years, with the S&P 500 Dividend Aristocrats Index (a measure of stocks that have increased dividends every year for the past 25 years) outperforming the S&P 500.

An interesting feature of dividend stocks is that they outperform the broader markets in most economic environments. The only environment in which dividend stocks underperform is high growth. Dividend-paying stocks tend to outperform the broader equity markets significantly in a negative growth environment, such as from September 2007 to June 2009. This outperformance continues, though not to the same degree, in a low-growth environment. Current economic forecasts suggest we are likely to remain mired in low growth for the foreseeable future, implying that dividend stocks are likely to remain favorable.

[1] Ned Davis Research

Please refer to the last two pages of this document for additional important disclosure and risk information.

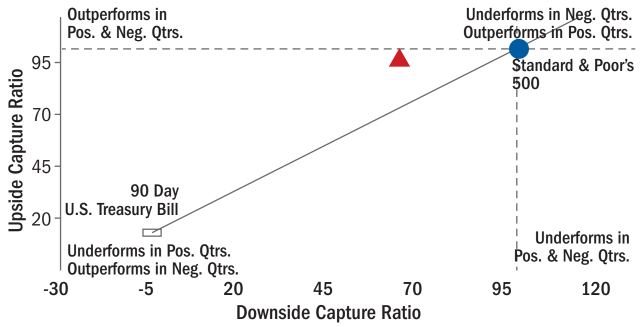
Quality

Dividend growth stocks tend to be of higher quality than those of the broader market. Lower volatility of free cash flows may also be a component of a predictable business model, resulting in lower volatility of earnings. Since they have positive free cash flows, they tend to have a better balance sheet with lower debt levels.

HISTORICALLY STRONG DOWN-MARKET PERFORMANCE

We have illustrated that dividend stocks outperform the broader market over time. But it may surprise some to learn that these stocks even provide superior performance when the market declines! As depicted in Exhibit 11, during the 10 years between 2004 and 2014, the S&P 500 Dividend Aristocrats Index performed extremely well during a declining market. Its down-market capture was 70.9%, meaning that if the markets were to decline 10%, based on past performance, this index would be expected to be down only 7%. At the same time, dividend-paying stocks generally have a tough time outperforming the market during strong rallies. Their up-capture ratio bears this out. Although these stocks generally don't keep up with the market, their performance tends to align closely with benchmark returns, capturing over 98.6% of them.

Exhibit 11: Market Capture – Dec. 31, 2004 to Dec. 31, 2014

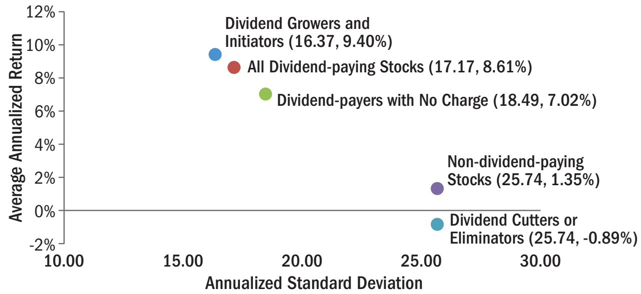


	Up Mkt Capt Return	Up Cap Ratio	Dnside Cap Return	Dnside Cap Ratio	R-Squared
▲ S&P 500 Div. Aristocrats	26.94	98.62	-19.27	70.92	0.83
● S&P 500	27.32	100.00	-27.17	100.00	1.00

Source: Informa

This characteristic, of strong performance in down markets, results in superior performance of dividend growth stocks, relative to the S&P 500, over the market cycle. Another aspect of this characteristic is that these stocks tend to exhibit less volatility than the broader market. An analysis of the performance of stocks in the S&P 500 during 1972-2011 demonstrates this (see Exhibit 12). In this analysis, the stocks comprising the S&P 500 were divided into four categories: dividend growers and initiators, dividend payers with no change, non-dividend paying stocks and dividend cutters or eliminators. During the 40-year time frame, the dividend growers and initiators outperformed all other categories. Importantly, they did so with lower volatility. This is counterintuitive to Modern Portfolio Theory, where riskier assets provide higher returns. The reasons for this performance owe to the unique characteristics of dividend growers and initiators, which are missing in stocks that don't pay dividends (or reduce them).

Exhibit 12: Risk and Return for Five Strategies



Source: Ned Davis Research. Data as of December 31, 2011. *See the appendix on page 9 for note detail.

Past performance is no guarantee of future results.

UNIQUE CHARACTERISTICS OF DIVIDEND GROWTH STOCKS

Now that we have demonstrated that dividend growth stocks historically outperform the broader market and do so with lower volatility, several key questions arise: How do we find these stocks? What are some of the characteristics of companies that pay and increase their dividend?

A company with a strong dividend profile tends to have the following characteristics:

1. Strong and sustainable business model.
2. Superior fundamentals, such as a strong balance sheet and consistent growth in revenue, earnings and cash flows.
3. These companies over the long run can provide superior return, not only on an absolute basis but also on a risk-adjusted one.

Please refer to the last two pages of this document for additional important disclosure and risk information.

4. These are generally higher quality companies that provide superior down-market performance with lower risk relative to broader market.
5. These companies can underperform in certain market environments briefly, but over the long run they have always exhibited superior performance.

AVOIDING PITFALLS

By offering superior growth potential and low risk, dividend growth stocks can be a useful tool to help clients reach financial goals. But in searching for such stocks to add to a portfolio, investors sometimes make certain common mistakes, affecting financial outcomes.

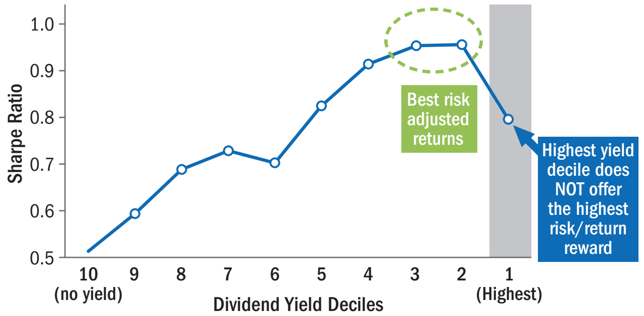
When is a dividend not a dividend?

In a sound investment, dividends should come from positive free cash flows generated by the company. However, in order to maintain their dividend history, companies sometimes make these payments in spite of deteriorating business fundamentals. Anytime a company with negative free cash flows distributes a dividend, it compromises the quality of its balance sheet. Such actions lead to a decline in company's future growth potential, resulting in lower valuation.

Avoid reaching for yield

The yield of a stock is calculated by dividing its dividend rate by the price of the stock. Two factors can cause a higher level of yield: an increase in dividend or a decline in stock price. An increase in the dividend rate is positive for the stock price, however, a decline in stock price can be a reflection of deteriorating fundamentals. In searching for dividend growers it is important to understand this dynamic and sift out stocks with high yield but weaker fundamentals. These stocks tend to have poor returns relative to the risk taken, as characterized by the Sharpe ratio. As Exhibit 13 shows, the second and third deciles offer the best risk-adjusted returns.

Exhibit 13: Russell 1000 - Risk/Return by Yield Decile - 1976 through 2012



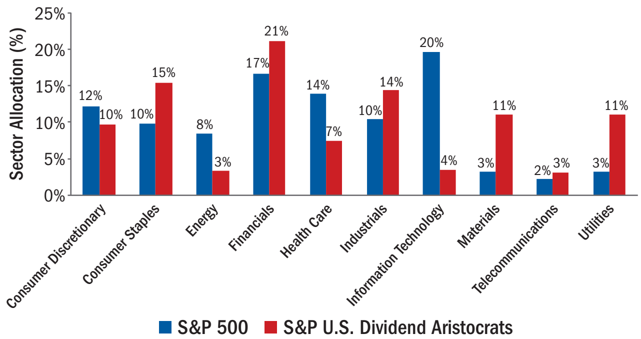
Source: BlackRock, data as of September 20, 2012. Russell 1000 was rebalanced monthly by yield decile. **Past performance does not guarantee future results.**

Stocks with a high dividend yield perform similarly to those with dividend growth in declining markets. However, because of their weaker growth profile, high dividend yield stocks underperform in rising markets, capturing just 91% of the upside, whereas dividend growth stocks outperform in both rising and declining markets.

Fundamental Exposure

There is a significant difference between a stock with high dividend yield and one with high dividend growth. Higher-yielding companies historically have had an inferior growth profile. They are similar to fixed-income investments. These securities appear in sectors like telecommunications, utilities and consumer staples. By contrast, companies with a superior growth profile and growing dividend streams appear in sectors such as consumer discretionary, health care and information technology (see Exhibit 14).

Exhibit 14: Sector Exposures



Source: FactSet

ACTIVE MANAGEMENT

Passive investing has some inherent risks. Passive benchmarks are backward-looking. In other words, they reward stocks that have performed well in the past, not necessarily the ones likely to perform well in future. Active management can alleviate this by assuming the challenging task of identifying dividend growers. It is easy to spot a company that has grown its dividend over the past 25 years. However, it is very difficult to identify companies that will grow their dividend for the next 25 years.

Levers of performance

In managing portfolios it is important to identify levers of performance in selecting active managers. These levers can be adjusted based on the investor's view of the markets. Levers are differentiated styles of investing designed to outperform the same benchmark. In other words, they categorize the universe of active managers based on certain characteristics that differentiate them from others. The levers can be categorized as follows:

High yield/stable growth: These managers tend to have a portfolio of higher dividend yield stocks with lower growth profile. These managers have a higher dividend payout ratio, lower beta, lower volatility and a lower rate of dividend growth. They also tend to have superior down-market performance compared to more dividend-growth-focused managers.

High dividend growth/lower yield: These managers tend to focus more on the growth rate of dividends and tend to focus less on dividend yield. It is possible for these managers to have stocks in the portfolio that don't currently pay a dividend but are likely to do so in future. Their portfolio has higher beta and volatility but a lower dividend payout ratio. These managers are likely to outperform in rising markets but could underperform in declining ones.

Core dividend growth: Core managers tend to fall between the high yield/stable growth managers and high growth/lower yield managers. Their beta likely approaches that of the benchmark, with balanced up- and down-market performance.

International dividend

Dividend investing is not as developed internationally as it is in the U.S. The variety and quantity of strategies available to invest in international dividend stocks is limited. As of November 2012, there were approximately $174 billion in U.S. dividend-focused assets versus only $13 billion in international ones. But this mix is changing. In the past 12 months, U.S. dividend-focused assets increased by roughly 15%, whereas their international counterparts did by nearly 70%. Moreover, while in the U.S. high dividend yield investing and high dividend growth investing are both well established, outside the U.S. dividend-yield-focused managers tend to outnumber dividend-growth-focused ones. This phenomenon is more pronounced in emerging markets, where most dividend investing is tied to yield rather than growth.

CONCLUSION

Investors today face a challenge in managing their portfolios amid high macro-economic uncertainty, low bond yields and anemic growth. This challenge is compounded by the fact that Americans are living longer, and many investors have fallen behind in their retirement planning following the Great Recession of 2007-2009. They are looking for alternatives that can generate income on a regular basis, offer capital appreciation in their portfolio and provide protection in down markets. Historically dividend growth stocks have all demonstrated these characteristics. Interestingly, they have had them since the beginning of modern investing, accounting for the majority of returns generated by the equity markets and outperforming the broader market, with lower volatility.

The reason such stocks are able to sustain these characteristics owes to solid business models and strong fundamentals. The challenge is in identifying these stocks and honing a disciplined investment approach. Opting for active management can help accomplish both these objectives.

Investing in stocks carries varying degrees of risk, including the possibility that the value of the stocks may fluctuate in response to events specific to the underlying companies or markets, as well as economic, political or social events in the U.S. or abroad. Investments in foreign securities involve special risks, including foreign currency risk and the possibility of substantial volatility due to adverse political, economic or other developments. These risks are magnified for investments made in emerging markets. Investments in a certain industry or sector may pose additional risk due to lack of diversification and sector concentration.

Please refer to the last two pages of this document for additional important disclosure and risk information.

INDEX DEFINITIONS

Indexes are unmanaged; and their returns do not include sales charges or fees, which would lower performance. It is not possible to invest directly in an index. They are included here for illustrative purposes. The indexes referred to herein do not reflect the performance of any account or fund managed by Merrill Lynch or its affiliates, or of any other specific fund or account, are unmanaged and do not reflect the deduction of any management or performance fees or expenses.

Citigroup 3-Month U.S. Treasury Bill Index: Tracks the performance of U.S. Treasury bills with a remaining maturity of three months.

Dow Jones U.S. Total Stock Market Index: The index measures all U.S. equity securities that have readily available prices.

S&P 500 Index: The S&P 500 Total Return Index is a market-weighted index that measures the total return, including price and dividends, of 500 top companies in leading industries of the U.S. economy. This index is often used as a reference for the performance of the U.S. equities market.

The **S&P 500 Dividend Aristocrats** index is designed to measure the performance of S&P 500 index constituents that have followed a policy of consistently increasing dividends every year for at least 25 consecutive years.

The **S&P Global Dividend Aristocrats** is designed to measure the performance of the highest dividend yielding companies within the S&P Global Broad Market Index (BMI) that have followed a policy of increasing or stable dividends for at least 10 consecutive years

Merrill Lynch assumes no responsibility for any of the foregoing performance information, which has been provided by the index sponsor. Neither Merrill Lynch nor the index sponsor can verify the validity or accuracy of the self-reported returns of the managers used to calculate the index returns. Merrill Lynch does not guarantee the accuracy of the index returns and does not recommend any investment or other decision based on the results presented.

TECHNICAL TERMS

Bear market: A condition marked by increased pessimism in the market as reflected in falling security prices. Many consider a 20% or more decline in prices in multiple broad-market indexes a bear market.

Bull market: A condition marked by increased confidence and optimism in the market as reflected in rising security prices. Many consider a 20% or more rise in prices in multiple broad-market indexes a bull market.

Correlation: Measures the extent of linear association of two variables. It quantifies the extent to which the fund and a comparative index move together.

Downside Market Capture Ratio: Measures the manager's performance in down markets relative to the performance of the market (index) itself. A down market is defined as any period (month or quarter) where the market's return is less than zero.

Rate of Return: Rate of Return is the percentage gained or lost over a stated amount of time. Time periods in excess of one year are annualized.

Sharpe Ratio: The Sharpe Ratio is a measure of risk-adjusted return. It divides excess return by risk. Excess return is defined as the annualized return of the manager minus the annualized return of the risk free rate. Risk is defined by standard deviation.

Standard deviation: A measure of the dispersion within a set of data from its mean. The more spread apart the data, the higher the deviation, and vice versa.

Stationary data: Time series whose statistical properties, such as mean and variance, are constant over time, i.e. without trend. Most forecasting methods rely on this assumption. Non-stationary series are considered random and hence unpredictable.

Upside Market Capture Ratio: The Up Market Capture Ratio measures the manager's performance in up markets relative to the performance of the market (index) itself. An up market is defined as any period (month or quarter) where the market's return is greater than or equal to zero.

APPENDIX

Page 6 (Exhibit 12): Based on equal-weighted geometric average of total return of dividend-paying and non-dividend paying historical S&P 500 stocks, rebalanced annually. Uses actual annual dividends to identify dividend-paying stocks and changes on a calendar-year basis. The performance shown represents the risk/return characteristics of each of the five categories with annualized standard deviation (measure of risk) measured on the x-axis and average annualized return measured on the y-axis. The performance shown is for illustrative purposes only and does not predict the performance of the strategy. The returns indicated above are not the strategy's returns.

OFFICE OF THE CIO

Ashvin B. Chhabra
Chief Investment Officer, Merrill Lynch Wealth Management
Head of Investment Management & Guidance

Mary Ann Bartels
CIO, Portfolio Solutions,
U.S. Wealth Management

Karin Kimbrough
Head of Macro
and Economic Policy

Christopher J. Wolfe
CIO, Portfolio Solutions,
PBIG & Institutional

This piece was prepared by the GWM Investment Management & Guidance ("IMG"). The views expressed are those of IMG. This is not a publication of BoA-Merrill Lynch Global Research. In addition, these views are subject to change. This material contains forward-looking statements about plans and expectations for the future. These statements may be identified by the use of words such as "may", "will", "expect", "anticipate", "estimate", "believe", and "continue". These statements are based on current plans and expectations. There is always the risk that actual events may differ materially from those anticipated and that the forward-looking views may not come to pass. This document is current as of the date noted, is solely for informational purposes and does not purport to address the financial objectives, situation or specific needs of any individual reader. Market information provided herein was generally prepared by sources unrelated to Merrill Lynch. Such information is believed to be reasonably accurate and current for the purposes of the illustrations provided but neither Merrill Lynch nor any of its affiliates has independently verified this information. Opinions and estimates expressed herein are as of the date of the report and are subject to change without notice. Neither the information nor any opinion expressed represents a solicitation for the purchase or sale of any security.

Any statements regarding market events, future events or other similar statements constitute only subjective views, are based upon expectations or beliefs, should not be relied on, are subject to change due to a variety of factors, including fluctuating market conditions, and involve inherent risks and uncertainties, both general and specific, many of which cannot be predicted or quantified and are beyond Merrill Lynch's control. Future evidence and actual results could differ materially from those set forth in, contemplated by, or underlying these statements. In light of these risks and uncertainties, there can be no assurance that these statements are not or will not prove to be accurate or complete in any way.

This document is provided for informational purposes only and does not constitute an offer to sell or a solicitation of an offer to buy any securities and any such offering will occur only upon receipt of and in accordance with the terms and conditions set forth in the offering documents. The document is not intended for distribution to, or use by, any person or entity in any jurisdiction or country where such distribution or use would be contrary to local law or regulation.

The information contained in this material does not constitute advice on the tax consequences of making any particular investment decision. This document does not take into account your particular investment objectives, financial situations or needs and is not intended as a recommendation, offer or solicitation for the purchase or sale of any security, financial instrument, or strategy. Before acting on any recommendation in this material, you should consider whether it is suitable for your particular circumstances and, if necessary, seek professional advice.

This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice.

Economic and market forecasts presented herein reflect our judgment as of the date of this document and are subject to change without notice. These forecasts do not take into account the specific investment objectives, restrictions, tax and financial situation or other needs of any specific client. Actual data will vary and may not be reflected here. These forecasts are subject to high levels of uncertainty that may affect actual performance. Accordingly, based on assumptions, and are subject to significant revision and may change materially as economic and marketing.

Merrill Lynch
Bank of America Corporation