GUINNESS ATKINSON™ FUNDS

INVESTING IN HUMAN PROGRESS

Guide to Dividend Investing

Think Income as Your Outcome

INVESTMENT RESEARCH SERIES

The Guide to Dividend Investing: *Think Income as Your Outcome*

I N T R O D U C T I O N

Investors seeking current income or seeking to accumulate capital to realize an income stream later might well be frustrated by the low interest rate environment. This era of low yields not only reduces current income from yield oriented investments but comes with the threat that rates may rise which may put pressure on income oriented investments. What's an investor to do?

In this report we discuss the characteristics and benefits of dividend investing and offer our views on the effects of higher interest rates and, perhaps more importantly, discuss why dividend investing can work even in declining markets.

We also discuss the key difference between fixed income investing and dividend investing.

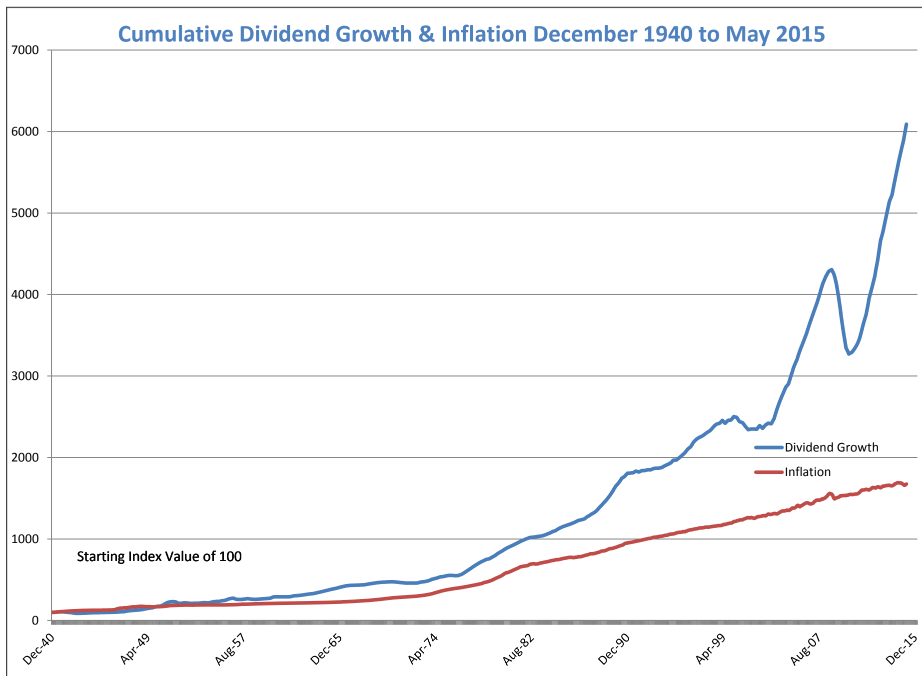
Background

Historically, both stock and bond investing was much more focused on generating income. In fact, income generation was for most investors the key point of investing for much of the last century. It wasn't until the bull market euphoria of the 1980's and 1990's that income investing lost credibility as investors and companies alike took to the notion that growth was superior to income and who better to deliver that growth than management.

Income investing has regained some of its mojo this decade, for good reason. Over the long term, dividends have been the main contributor to total returns for equity investments. Since 1940 the return for the S&P 500 has been driven almost exclusively by dividends with dividends providing over 90% of the total return for the index over that time. If at the end of 1940 you had invested $100 into the S&P 500 your investment would have grown to approximately $174,000 at the end of 2011, provided you reinvested your dividends along the way. Had you not reinvested, your $100 would only be worth $12,000.[1]

Dividends and Inflation

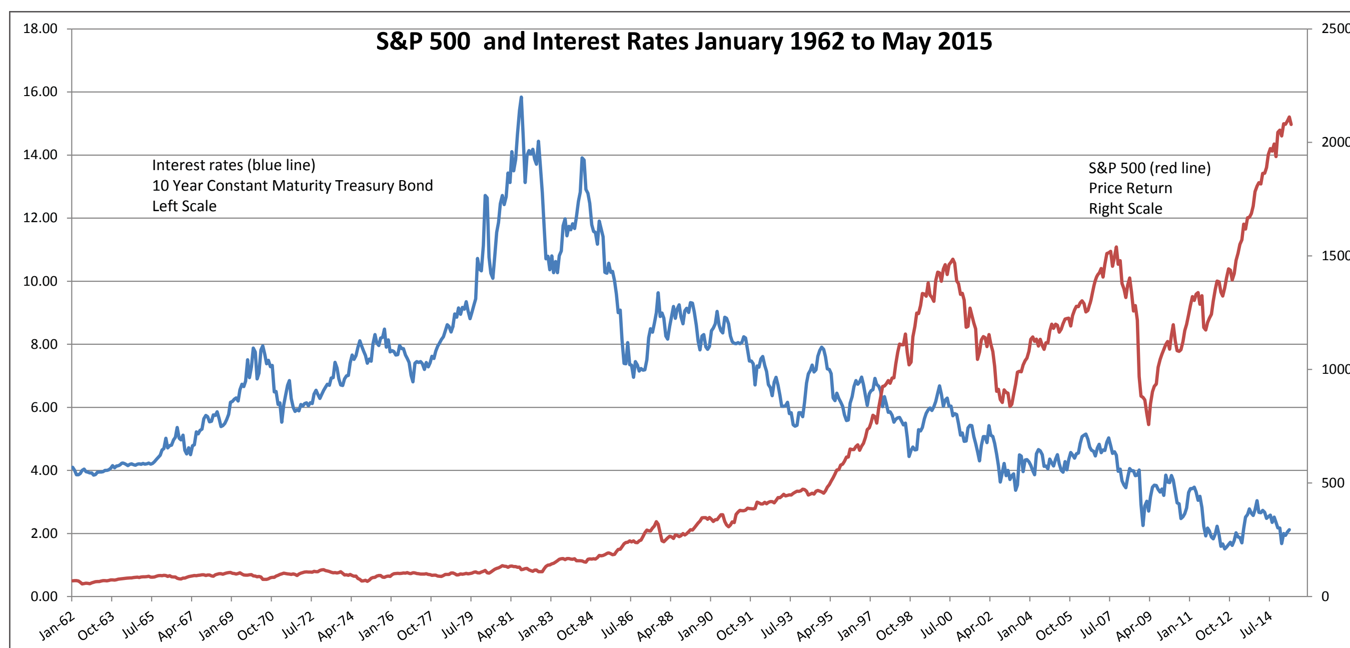
Conservative income investors are generally faced with a choice between bonds and dividend paying stocks. Bonds, often referred to as fixed income instruments, have the benefit of paying a fixed rate of interest. While many believe this fixed rate of interest is an advantage, we believe that this fixed rate of interest is the fatal flaw of bond investing. To be sure, there is no requirement that a company pay dividends and companies may reduce or eliminate their dividend payments in tough times. But they can and do raise their dividends as earnings grow. And as we shall see, dividend paying companies as a group have an impressive and consistent track record of dividend growth.



Cumulative Dividend Growth & Inflation *Dividend growth isn't always positive, but over time it far outpaces the rate of inflation. This is of critical importance to dividend investors as it suggests that over time their income can grow in real terms. Source: Robert Shiller Online Data.*

The ability of dividends to grow provides the ability to offset--and indeed outpace--the financial damage caused by inflation. Historically dividends have grown at a significantly faster rate than the rate of inflation. From the end of 1940 through April of 2015 the S&P 500 dividend growth has outpaced the rate

of inflation by more than three and one-half times,[2] meaning that after inflation $100 dollars in dividends paid in 1940 would have grown to more than $350 after inflation. To be clear, there will be years when inflation outpaces dividend growth. Over the long run the rate of inflation is no match for the historic rate of dividend growth which is sufficiently greater than the historic rate of inflation that over the long run it can be fairly said to obliterate inflation.



Interest Rates and the S&P 500 *Interest rates moved up sharpely in the late 1970's into the early 1980's. Despite this the market showed positive returns over this period, albeit barely. The market benefited from declining rates in the 1980's, 1990's and into the new century. But note the periods of declining markets despite the declining rates in the 2000's.*

Risk of Rising Rates

Rising interest rate environments are generally not favorable to income oriented investments. This is certainly true for most bonds[3] whose prices are strongly negatively correlated with changes in interest rates. But is it true for dividend paying stocks?

The accompanying graph shows the Ten Year Constant Maturity Treasury Yield from January of 1962[4] through May of 2015 and the price value of the S&P 500 over that same period. Most notable on the graph is the extreme spike in interest rates from the mid-1970's to the early 1980's. From the end of 1976 to September 1981 the yield on the 10-year Treasury bond rose from 6.81% to 15.84%. What did the S&P 500 do over that same period? It rose; not by a lot, but it did rise from a value of 104.70 to 118.30 over that time period.[5]

But this is just one period on the graph, albeit an extreme example. What might be of greater interest is to understand the relationship between equities and interest rates in specific years. From 1962 through 2014 there are 53 calendar years. During these 53 years the S&P 500 index advanced 38 times and de-

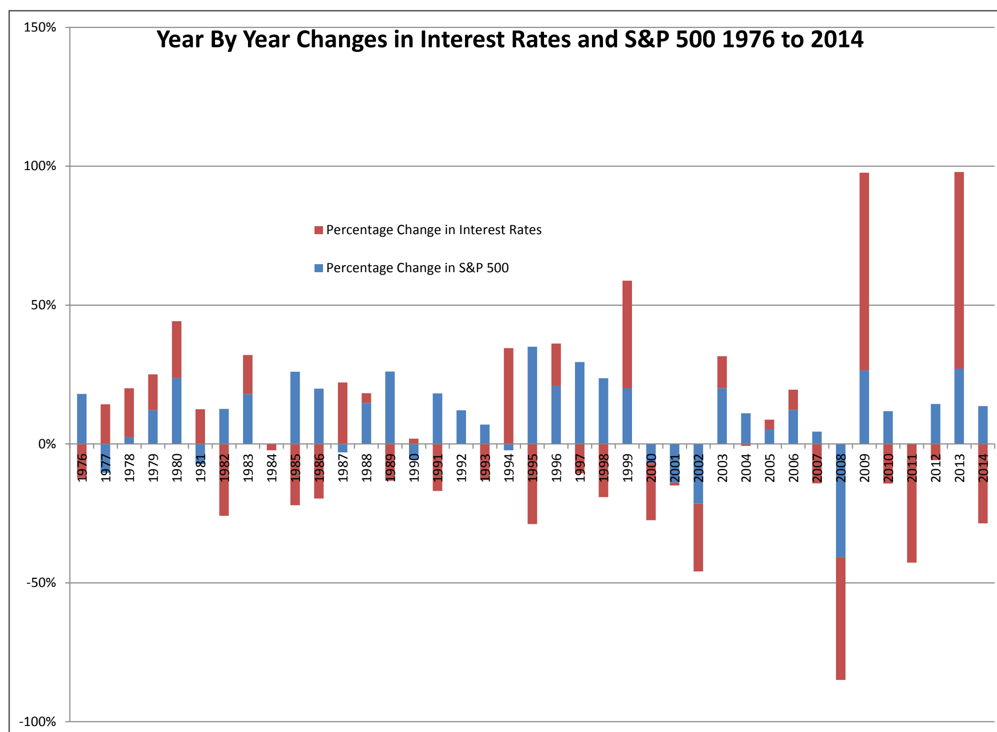
clined 15 times. Interest rates (again using the 10 year constant maturity treasury yield as our proxy) rose 27 times and declined 26 times.[6] During the 27 years of rate increases the market declined only eight times. It was up the other 19 years which experienced interest rate increases. The story is almost exactly the same for declining rate environments with the market up during 19 of the years of rate declines and down during seven years of rate declines.[6]

Calendar Year Movements 1962 to 2014	S&P 500 Up	S&P500 Down
Interest Rates Up	19 times	8 times
Interest Rates Down	19 times	7 times

Interest Rates and Stock Market Returns *This grid illustrates the four possible outomes of two variables: interest rates up or down and market up or down over the 53 calendar years from 1962 through 2014. Interest rates were up one-half of the time and down one-half of the time. But the stock market didn't seem to care, rising 19 times in rising rate years and 19 times in declining rate years. Equally the market didn't care on the downside either, falling 8 times in rising rate years and declining 7 times in declining rate years. Source: Federal Reserve Bank of St. Louis and Shiller.*

But wait; we've used the S&P 500 index value and not total return of the index for these results. If we had included the dividend payments for each year the number of negative years declines from 15 to 11.

What conclusions might we draw from this data? First, over the period studied, the data show that the market is more likely to rise than fall during rising rate environments and that it is more likely to rise than fall during declining rate environments. Further, interest rates are just as likely to be



Interest Rates and Equity Returns *Changes in interest rates and the S&P 500 by calender year 1976 to 2014. When both bars are above the zero line then both the market and interest rates were up compared to the previous year. When one is above and the other below then interest rates and equities moved in opposite directions. The graph is measuring the percentage change from the previous year. For clarification, in 2009 interest rates increased from 2.25% to 3.85%, an increase of 71%. The interest rate data is for the ten year constant maturity treasury bond. Source: Federal Reserve Bank of St. Louis.*

up as down during years the stock market declines.

This shouldn't be too surprising. Rising rates may mean the economy is strong and that may be good for corporate profits which is usually good for the stock market. Further, a declining interest rate environment might be the result of economic weakness which may be bad for corporate profits and equities.

	Scenario 1 (annual decline of 5%)	Scenario 2 (zero appreciation)	Scenario 3 (annual appreciation of 5%)
Principal Value at End of Year 20	$13,204	$12,833	$21,735
Annual Income in Year 21	$2,046	$1,048	$645

Dividend Investing in a Bear Market

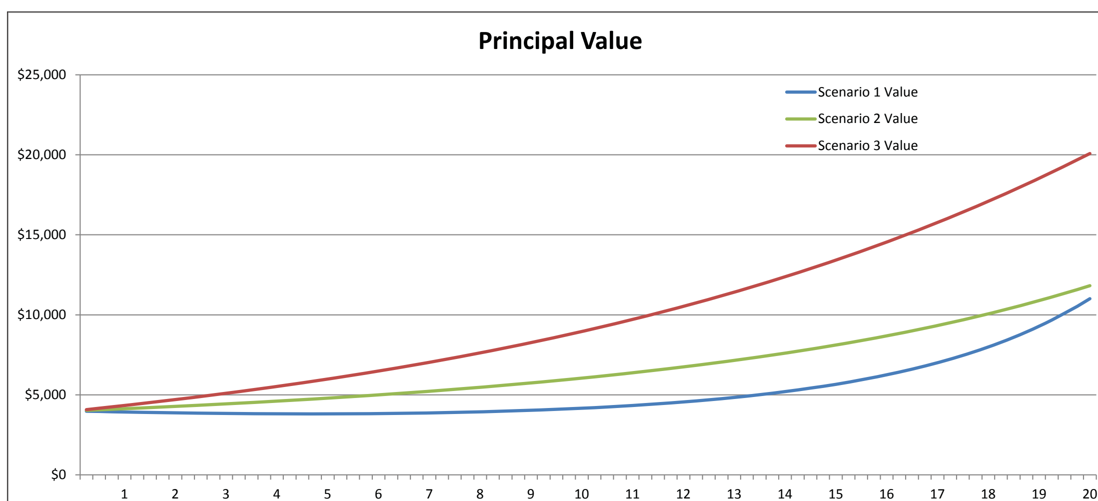
Just because rising rates may not cause a decline in dividend paying stocks doesn't mean we shouldn't worry about market declines or, even worse, a bear market. Equity markets do go up and down and foresighted investors need to consider the effect of a declining equity market on their investment strategy.

We'll start with our conclusion, which is counter intuitive: Declining markets can be highly favorable for dividend investors. Not surprisingly there are some caveats to this statement which we will get to in a moment.

Investors reinvesting their dividends can benefit greatly from flat (good) or declining (better) markets. This is because the reinvested dividends accumulate more shares at lower prices. The key is understanding that downward price movements can actually be hugely beneficial for building a future income stream.

For illustrative purposes we'll use The Coca-Cola Company as an example and present three hypothetical scenarios which will demonstrate the benefit a declining market can have on a dividend strategy. As of June 30, 2015 the Coca-Cola Company pays a quarterly dividend of $0.33 per share which annualizes to a current yield of approximately 3.30%, assuming a price of $40 per share. Above we show three basic scenarios. In the first scenario we assume, that the price of the company declines by 5% per year for 20 years. In the second scenario we assume the price remains flat for 20 years while in the final scenario we assume the price appreciates by 5% per year for 20 years. In all scenarios we assume the dividend grows at a constant rate of 5% per annum. Note that this dividend growth rate is well below the last 10 year growth rate for The Coca-Cola Company's dividend of 9%.[8] For all of the scenarios we assume a 100 share, $4,000, initial investment. At the end of the 20 years the value of our initial investment and the year 21 dividend stream can be seen for each scenario in the above table.

Note that the disaster scenario of a 5% annual decline for 20 years actually produces a decent return on the original investment, which has grown from $4,000 to $13,204 but that the income in year 21 is substantially above the zero



Principal Value of Three Scenarios *All three scenarios assume dividends reinvested and a dividend growth rate of 5% per annum. Scenario one is the 5% per annum decline in Coca-Cola Company; Scenario two is zero price appreciation and Scenario three is 5% per annum appreciation.*

growth and the 5% annual appreciation scenarios. The important point is that downward price movements can be hugely beneficial for investors that are seeking to build a future income stream. Counter-intuitively, the decline in principal may seem to be a negative, but it is actually a meaningful benefit for income investors reinvesting their dividends. This explains our sub title, "Think Income as Your Outcome."

While these scenarios are illustrative, Scenario 1 is, as we mentioned, highly unlikely, in that it is unreasonable to expect the dividend to grow at a rate of 5% per year while the principal declines at the rate of 5% per year. We would expect that over time the correlation between the stock price and the change in the dividend would be high. If Scenario 1 were to play out as we've modeled the dividend yield at the end of year 20 would be over 24%. Over short periods of time the dividend can grow while the stock declines or fails to appreciate. However, over the long-term such a pattern is unlikely to be sustained.

Of course, we don't actually know what The Coca-Cola Company's stock—or the stock market as a whole—will do over the next 20 years. If all goes well, The Coca-Cola Company will experience continued dividend growth and the stock will fluctuate, sometimes meaningfully. However, we think that over the long run, the stock price is likely to generally move in line with the growth rate of the dividend.

What about those caveats we mentioned? First, we've assumed that the 5% annual decline and even the zero appreciation assumptions occur while the company continues to thrive and in fact increases its dividend by 5% per annum. As we've mentioned, it is very unlikely that the dividend would increase with such consistency while the price of the stock fell or even failed to appreciate.

Second, this analysis collapses if the dividend is cut or discontinued. This is why it is critical to invest in quality companies; companies that have a high likelihood of not just maintaining but ideally in-

creasing their dividend payment over time. The ability of a company to pay, and indeed grow, its dividend is entirely a function of the business prospects of the company.

Third, for investors that are not in the accumulation phase, meaning they are not adding to their capital base and are not reinvesting their dividends then clearly scenario three is the optimal of the three presented here. But note that as long as the dividend growth rate is sufficient, long term investors needn't be overly concerned by market declines.

The Dividend Isn't Just About The Dividend

Many dividend investment strategies look at the dividend payment as the key element in the determination of investability. These strategies often look at the amount of the dividend, *e.g.*, a high dividend strategy. Others look at the history of dividend increases. This last strategy, often referred to as the dividend aristocrats strategy isn't altogether bad but it does have what we consider a serious flaw. One of the attributes of dividend aristocrats (generally considered to be companies that have increased their dividend for a minimum of 25 consecutive years) is that once a company has achieved aristocrat status management will seek to continue to increase the dividend each year to maintain that status. That is completely understandable; once a company falls off the list it will take at least 25 years to return. But, what if the company is no longer producing the required returns to pay an increasing dividend?

By focusing on the dividend as the key attribute investors may be missing the more important attribute, which is the ability to consistently generate the required earnings in the first place.

Dividend Builder Fund

The Guinness Atkinson Dividend Builder Fund uses a strict earnings consistency based methodology to select what we believe are high quality dividend paying companies.

To be considered for the Dividend Builder Fund companies must have achieved a 10% or greater cash flow return on investment (CFROI) for *each* of the previous 10 years. In any given year about 20% or more of companies are able to achieve a CFROI of 10%. But, to do so over 10 consecutive years is so difficult only about one-half of one percent of companies are able to meet this requirement.

After we screen for CFROI consistency we eliminate from consideration any company that doesn't pay a dividend and eliminate any with a debt to equity ratio of greater than one. After these screens our universe is down to a few hundred stocks. From here we apply our fundamental analysis to get down to our portfolio size of 35 stocks. We believe this rigorous process produces a portfolio of high quality companies, companies with the ability to consistently pay--and grow--their dividends. This explains the Dividend Builder Fund name.

Conclusions

Investors that hold a portfolio of high quality dividend paying stocks:

- Should expect to see their dividends grow over time at a rate that exceeds the rate of inflation;
- Should recognize that a declining stock market may be beneficial;
- Should not be fearful of a rise in interest rates

in part because the link between rising rates and declining equity values is tenuous and because market declines can work to the benefit of investors reinvesting their dividend;

- Of key importance to this dividend strategy is to invest in high quality dividend paying companies which have the ability to increase their dividends consistently over time.

Footnotes

1. Source: Robert Shiller Online Data. www.econ.yale./edu/~shiller/data.htm.
2. Source: Robert Shiller Online Data.
3. Low credit quality, or junk bonds, may experience price movements in the same direction as interest rates.
4. This time period is chosen as it is the start of the data. Source: Federal Reserve Bank of St. Louis.
5. We've used the S&P 500 index value (not total return) as our proxy for the return of stocks year by year. Some readers may wonder if that is a fair comparison given that we're really arguing in favor of dividend paying stocks and not stocks in general and that dividend paying stocks may be more interest sensitive than non-dividend paying stocks. Fair question. Easy answer: Over the time period studied the top 100 dividend paying stocks in the S&P 500 produced a negative total return 11 times versus the S&P as a whole 12 times. Source: Greenrock Research.
6. Source: Federal Reserve Bank of St. Louis.
7. Source: Robert Shiller Online Data and Federal Reserve Bank of St. Louis.
8. Source: GuruFocus

Mutual fund investing involves risk and loss of principal is possible. Investments in foreign securities involve greater volatility, political, economic and currency risks and differences in accounting methods. These risks are greater for emerging markets countries. The Fund also invests in smaller companies, which will involve additional risks such as limited liquidity and greater volatility.

The Fund's investment objectives, risks, charges and expenses must be considered carefully before investing. The statutory and summary prospectus contains this and other important information about the investment company, and it may be obtained by calling 800-915-6566 or visiting gafunds.com. Read it carefully before investing.

Opinions expressed are those of Guinness Atkinson Funds, are subject to change, are not guaranteed and should not be considered investment advice.

Past performance is no guarantee of future results.

The S&P 500 is a market capitalization weighted index based on the 500 largest publicly traded American companies as determined by Standard & Poor's. You cannot invest directly in an index.

Cash Flow Return on Investment (CFROI*) is a valuation model that assumes the stock market sets prices on cash flow, not on corporate earnings. It is determined by dividing a company's gross cash flow by its gross investment.

Fund holdings and/or sector allocations are subject to change at any time and are not recommendations to buy or sell any security.

As of 9/30/2015, Guinness Atkinson Dividend Builder Fund had 2.92% of its total assets in The Coca-Cola Company.

*CFROI is a proprietary metric prepared by HOLT, a division of Credit Suisse. CFROI is a registered trademark of Credit Suisse AG or its affiliates in the United States and other countries. For more information on HOLT, a corporate performance and valuation advisory service of Credit Suisse, please visit their website at https://www.credit-suisse.com/investment_banking/holt/en/index.jsp

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