DIVIDENDS—A NEW PERSPECTIVE

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OVERVIEW

During the last bull market, investors focused their attention on rapidly growing businesses and paid little consideration to the dividends companies paid. In fact, higher dividends were seen as a weakness for potential corporate growth. The adage: "a company only pays dividends if it cannot grow," came to be accepted as fact. Of course, total return includes income in addition to price appreciation. Income, truth be told, is a very important part of a stocks total return. According to a study done by Morgan Stanley, since 1930 dividends have accounted for 41.8% of the total return of the S&P 500.

In The Future for Investors, Wharton's Jeremy Siegel analyzed the returns of the original S&P 500 companies since the formation of the index in 1957. To the surprise of many investors he found that the best performing stock over this period was Phillip Morris, now known as Altria Group (MO). Phillip Morris actually returned an astonishing 19.75% per year. MO is certainly not in a growth industry—during the entire period the industry lost customers—yet it outperformed every technology, retail, and pharmaceutical stock. The reason: high dividends and profitable growth.

The chart on the next page shows how investors would have benefited by investing in high dividend paying stocks. Professor Siegel broke down the performance of the S&P 500 into quintiles, illustrating that focusing on only those stocks that provided the highest level of dividends had a dramatic impact on performance—and risk.

As you can see, an investor who put $1,000 in a portfolio of the 100 highest-yielding stocks on January 1, 1957, by December 31, 2012, would have accumulated $677,799 (assuming all dividends were reinvested). On the other hand, investing in the lowest-yielding 100 stocks would have grown to only $102,650.

The highest quintile outperformed the broad S&P 500 Index by nearly 2.50% per year—which turned into more than 300% outperformance over time. Futhermore, it did this with a lower beta. Even the second quintile outperformed the S&P 500 by more than 2% per year for a total of more than 275% outperformance over time, with less risk.
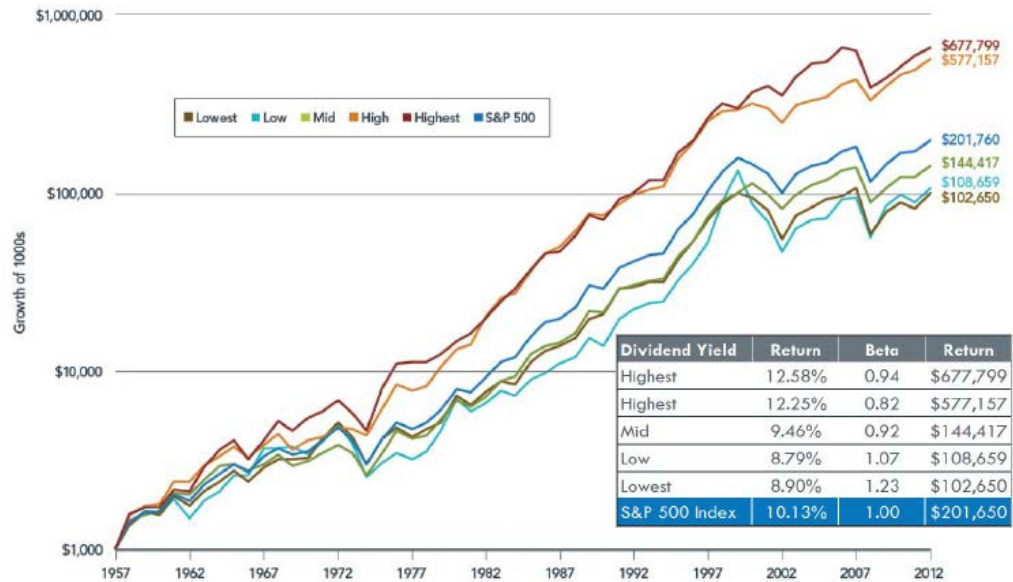
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Figure 1

[Quintile Charts from Jeremy Siegel's Research, period 12/31/1957-12/31/2012]

Dividend Yield	Return	Beta	Return
Highest	12.58%	0.94	$677,799
Highest	12.25%	0.82	$577,157
Mid	9.46%	0.92	$144,417
Low	8.79%	1.07	$108,659
Lowest	8.90%	1.23	$102,650
S&P 500 Index	10.13%	1.00	$201,650

Source: Siegel, Future for Investors. 2005, with updates to 2012.

Because of their importance to total return and overall performance, we decided to see if we could add value to client portfolios by creating a strategy which focused on dividend income. Given today's low yield environment, finding a strategy that provides long-term returns equivalent to the S&P 500 while producing higher income seems essential.

However, as a consequence of this focus on income, we would expect returns to differ from the S&P 500. As a result, this strategy would not be appropriate for investors looking to benchmark their performance against the S&P 500.

STUDY

To create this dividend income strategy we sought to exploit three long-term market anomalies:

1) Low beta stocks outperform high beta stocks;

2) Equally weighting stocks in a portfolio instead of market capitalization weighting, generally outperforms;

3) Rebalancing a portfolio outperforms a portfolio whose positions are allowed to drift.

The evidence of low beta, or low risk stocks outperforming high beta, or high risk stocks is pervasive and supported by four decades of research including: Black, Jensen and Scholes (1972), Gibbons (1982), Kandel (1984), Shanken (1985), Fama and French (1992), and Ang, Hodrick, Xing, and Zhang (2006) and others.

While the research documenting the outperformance due to equally weighting positions and rebalancing does not extend forty years, it is equally compelling and includes: Stein, Bouchey, Atwill, Nemtchinov, (2011), Plyakha, Uppal, Vilkov, (2012), and Willenbrock, (2011); as well as Washington Trust Bank's internal research, Nesbitt, (2005) and Cozzetto, (2010).

In essence, our goal is to combine years of research on different anomalies and expand on that research to develop a useful investment strategy.

To ensure diversity, we need to invest broadly, across all sectors; therefore, we broke down the stocks of S&P 500 into the ten economic sectors: Basic Materials, Consumer Durables, Consumer Staples, Energy, Finance, Health, Industrials, Technology, Telecommunications, and Utilities.

For each sector, we ranked the stocks by beta. From this list, to account for the first anomaly (low beta stocks outperform high beta stocks) we eliminated all stocks with a beta above the market's beta of 1. To produce high income, we then invested in the three highest yielding stocks that remained in each sector.

To exploit our second anomaly (equal weighting outperforms market cap weighting), we weighted each stock equally. The end result is a portfolio of 30 securities with equivalent dollar values. Finally, to benefit from the third anomaly (rebalancing outperforms drift) we rebalanced the portfolio annually—actually, just over the twelve month period to avoid the higher taxes from a short-term capital gain. Total transaction costs must be considered.

To take into account good and bad years for stocks, we tested our strategy back to the beginning of 2003.

RESULTS

Exhibit 1 provides annual returns and dividend yields for the dividend income strategy we developed and the S&P 500 for the last ten years. During this time period, the dividend income strategy had a significantly better annualized return while providing a much better dividend yield. See below. Quite frankly, the annualized outperformance was better than that achieved by the highest yielding quintile in the Siegel study.

Exhibit 1

Return	Annualized	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
Dividend Income	12.2%	24.5%	11.3%	9.5%	18.2%	23.8%	-34.8%	2.4%	28.3%	14.0%	24.3%
S&P 500	9.2%	32.6%	16.0%	2.1%	15.1%	26.5%	-37.0%	5.5%	15.8%	4.9%	10.9%
Yield	*Average*										
Dividend Income	5.3%	5.5%	5.0%	5.0%	7.5%	7.1%	8.0%	3.3%	4.2%	3.3%	3.8%
S&P 500	2.0%	2.0%	2.1%	2.1%	1.8%	2.0%	3.1%	1.9%	1.8%	1.8%	1.6%

To illustrate the point (see Figure 2), an investor who put $1,000 in this dividend income strategy ten years ago would have accumulated $2,702.65 (assuming all dividends were reinvested), while investing in the S&P 500 Index would have grown to only $2,042.45.

Figure 2
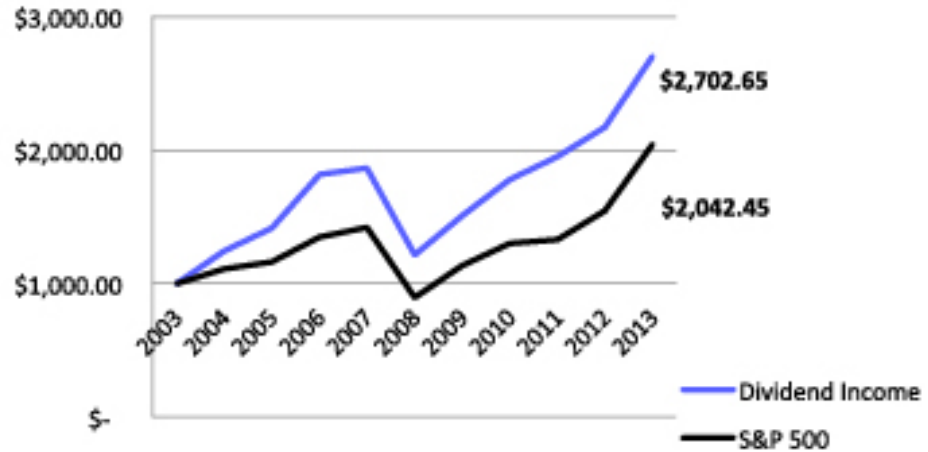
However, as we have said numerous times, returns are only part of performance; risk has to be considered as well. To assess risk we looked at standard deviation and beta. To assess risk adjusted returns we looked at the Sharpe ratio. Each of these statistics is defined below:

Standard deviation: a statistic used to measure the dispersion of a set of data from its mean (in this case mean return). As the difference from the mean becomes greater, the standard deviation increases, indicating greater volatility.

Beta: a measure of the volatility of a portfolio in comparison to the market (in this case the S&P 500). A beta of 1 indicates similar volatility. A beta below 1 is less volatile than the market, and above 1 more volatile.

Sharpe ratio: a ratio to measure risk-adjusted performance, calculated by subtracting the risk-free rate from the rate of return for a portfolio, then dividing the result by the standard deviation of the portfolio returns.

Exhibit 2

	Std Dev 3 Yr	Std Dev 5 Yr	Std Dev 10 Yr	Beta 3 Yr	Beta 5 Yr	Beta 10 Yr	Sharpe Ratio 3 Yr	Sharpe Ratio 5 Yr	Sharpe Ratio 10 Yr
Dividend Income	10.19	14.29	14.35	0.74	0.84	0.91	1.42	1.19	0.66
S&P 500	12.11	15.81	14.62	1.00	1.00	1.00	1.30	1.12	0.45

Exhibit 2 clearly shows the volatility of the portfolio is lower than that of the S&P 500 Index in all time periods analyzed, whether measuring total volatility through the standard deviation or relative volatility through beta. Once you combine Exhibit 1 and Exhibit 2, a higher risk adjusted return is to be expected and is in fact achieved, as shown above in the Sharpe ratio.

While not a risk statistic per se, we also looked at annualized returns over different time periods to see if the performance was consistent. And as shown in Exhibit 3, it was.

Exhibit 3

	Total Return Annualizd 3 Yr	Total Return Annualizd 5 Yr	Total Return Annualizd 10 Yr
Dividend Income	**14.94**	**17.31**	**10.45**
S&P 500	16.18	17.94	7.41

Finally, one of the fears we had was how increases in interest rates would affect returns. In general, when interest rates are increasing, income investments become relatively less attractive and tend to lose value. We have been in a secular decline in interest rates since the 1980s, which could have benefited this strategy; however that trend has most likely come to an end. We want to make sure the strategy works when interest rates rise as well. As mentioned, interest rates have been in a long-term decline since the 1980s, but in 2013 interest rates mostly rose. In Exhibit 4 below, we look at the quarterly performance of the portfolio in 2013.

Exhibit 4

	2013-Q1	2013-Q2	2013-Q3	2013-Q4	Total Return
Dividend Income	9.58	1.75	3.73	7.67	18.86
S&P 500	10.61	2.91	5.24	10.51	24.42

While not keeping pace with a market that was wildly bullish, returns were far from negative and very respectable.

CONCLUSION

By developing a strategy combining three well-known anomalies, we were able to "build a better mouse-trap." But, before creating this strategy, we developed a few rules that we thought were essential if this model were to be replicated:

1. The process had to be transparent (clearly defined);

2. The portfolio would have to be well diversified;

3. There would have to be a clear economic rationale supporting the data;

4. There would have to be long-term evidence of positive returns under different market environments.

While adhering to these rules, we generated fascinating results. As the research proves, when analyzing stocks, dividend income cannot be ignored. While dividends are only part of total return, they are an important part. A high dividend/low beta portfolio can provide better long-term returns than the S&P 500 with lower risk and significantly higher income.

Although these anomalies have persisted for some time, they could be reduced or eliminated in the future. We are aware of this potential, but know that we are better off benefitting from these anomalies while they last than by sitting on the sidelines and watching them disappear.

It should be noted that this strategy made no attempt to track the performance of the S&P 500 or any other equity benchmark, which means large tracking errors relative to commonly used equity benchmarks are probable. For investors concerned with returns that differ from these standard benchmarks, this strategy is not appropriate. However, for investors seeking income, looking to achieve superior risk adjusted returns, this dividend income strategy may be a good alternative to the S&P 500.

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