

## What's New At Empirical

- Our EWM Management Fee Report will be sent in a separate mailing before January 31st. If you need additional copies, please contact your advisor.
- To sign up for the Client View Portal or to receive **paperless** statements going forward, please email Simon Liu at [techsupport@empiricalfs.com](mailto:techsupport@empiricalfs.com). For a visual overview of the Client View Portal, please go to [client.empiricalfs.com](http://client.empiricalfs.com).
- Follow us on Twitter and Facebook for the latest news, developments and research.
- Tune into Empirical Investing Radio every Thursday at 2PM PST on the VoiceAmerica business channel: [business.voiceamerica.com](http://business.voiceamerica.com)

In this quarterly communication, we ring in the New Year by revisiting a topic that remained popular throughout 2011: increasing portfolio income. This letter discusses a research-based approach to income oriented investment strategies across both fixed income and equity asset classes. The approaches have been thoroughly researched by the Empirical Investment Committee and will be implemented starting January 2012. This letter provides a simple introduction to these strategies. The appendix summarizes many of the ways Empirical offers customization of an investment program to meet client-specific objectives.

### A Risk/Return Framework for Targeted Credit Bond Portfolios

There is no, “right” equity portfolio; instead, there are various ways to construct an equity portfolio in order to meet the specific needs and objectives of a particular investor. We believe the same is true for fixed income portfolios. Here, we briefly outline a few ways that we may modify a very conservative fixed income portfolio to change its risk and return characteristics. It is the job of your Empirical advisor to work directly with you in the context of your financial plan, to determine if any changes to your current strategy make sense. Please speak to us if you have any questions about your fixed income strategy.

Interest rates remain historically low<sup>1</sup>, as such, investors near or at retirement have good reason to think about how future bond returns will affect their ability to meet current and future return/income requirements. Recently, many of the safer bond asset classes we invest in (standard and inflation protected Treasuries) have done quite well in spite of low interest rates. The reason has to do with the continued decline in interest rates, the preference of investors to hold safe assets and for TIPS expectations for inflation in the future. Many investors mistakenly assume that the return of a bond strategy is simply the yield of the bond(s) at the time of purchase. The total return of a bond investment realized over a specific period of time comes from the combination of interest

***Yield To Maturity:*** The rate of return earned by an investor holding the bond to maturity, assuming any coupons are reinvested at the same rate of return

## this issue

Illustration of Targeted Credit Portfolios™ P.4

Global Income Stock Portfolios P.4

Appendix-Empirical Portfolio Strategies P.8

## looking ahead

Retirement Distribution Approach ♦

Roth Conversions & Asset Location During Retirement ♦

payments and price changes of the bond. In this letter, we reference the average yield to maturity (or YTM) for simplicity. However, in reality, when evaluating alternatives, we adjust the yield to maturity to estimate the expected return by considering losses due to default, fund expenses and bond call options.

For an investor looking to maximize future fixed income returns, they must face the reality that future bond price appreciation (as a result of declining interest rates) is very limited. There is little room for interest rates to fall from current levels. In order to increase the yield to maturity, and more importantly, the expected return on a bond strategy, there are two basic approaches:

1. You could extend the maturities of the bonds you hold, taking advantage of a positive sloping yield curve (longer term bonds pay a higher interest rate than shorter term bonds when the yield curve is positive - see market update for example). Given current interest rate levels, and the likelihood that we will see interest rates eventually begin trending up, this approach has not paid off in the past. However, if we are structuring an income strategy for a specific retirement income need over a specific period of time, maturity extension that matches bonds to income needs may present the best approach.
2. The other option is to increase your exposure to credit risk in the bond portfolio. This approach has paid off historically (if proper diversification is assumed), and

<sup>1</sup>“5-year Treasury auction draws record-low yield” Associated Press. 9/28/2011.

makes the most sense at times when there is sufficient and additional expected compensation between risk free bonds (Treasuries) and bonds exposed to credit risk (corporate bonds).

In past letters (Q2 2011, Q3 2009), we have discussed how over the long run, low interest rate periods will be offset by high interest rate periods. A solid retirement plan is built to endure low-yield bond environments just as it is built to endure declining stock markets. It is reasonable to examine the approach we are taking in the context of our time horizon and ability to bear specific risks before making changes that increase the expected return of a portfolio. In this situation, you should take a total portfolio view, and consider the way equities interact with fixed income. Further, it may be prudent to take the least amount of risk required (on a total portfolio risk basis) to achieve all of your least flexible goals (paying for necessities like food and other fixed expenses). Once these prioritized expenditures/objectives are secure, taking on greater risk is more appropriate with your flexible investment objectives (paying for extra vacations, or other superfluous expenses).

- Take on credit risk rather than interest rate risk. While longer term bonds have higher yields, they will also decline more if interest rates rise. With interest rates at record lows, a rising interest rate environment is a distinct risk investors should be prepared for.
- Diversify among as many bond issuers as possible.
- Include emerging markets bonds when there is adequate expected return.
- Utilize the most efficient, lowest cost approaches to diversification.
- For clients in the higher tax brackets, use tax-advantaged bonds in taxable accounts.

### Asset Classes

**Figure 1** shows a list of asset classes included in the Targeted Credit Portfolios™. The table organizes bond asset classes as follows:

- The least risky bond asset classes are ranked by risk (in light gray)
- Bond asset classes with moderate risk are ranked by risk (in medium gray)
- The riskiest bond asset classes are ranked by risk (in dark gray)

**Figure 1: List of Fixed Income Asset Classes (Taxable Bonds)**

Asset Class	Number of Holdings	Yield-to-Maturity	Duration (Interest Rate Risk)	Worst Drawdown	Data Available Since
Less Risky					
Short Term Treasury Bonds	27	0.25%	1.87	-1.50%	Oct-82
Intermediate Term Treasury Bonds	53	0.82%	4.53	-3.40%	Jan-99
Treasury Inflation Protected Securities (TIPS)	32	1.48%	8.19	-12.20%	Mar-97
Short Term Inv.* Grade Corporate Bonds	928	2.63%	2.80	-5.10%	Apr-97
Intermediate Term Inv.* Grade Corp.* Bonds	841	4.19%	6.20	-19.30%	Jan-73
Emerging Markets Bonds	87	5.42%	4.47	-21.50%	Jan-97
Short Term High Yield Corporate Bonds	151	7.42%	1.76	-24.90%	Dec-06
Intermediate Term High Yield Corp.* Bonds	221	7.98%	4.40	-37.10%	Jan-94
More Risky					

Data as of 1/4/2012. Sources: iShares, Pimco, Schwab, State Street Global Advisors, Vanguard and WisdomTree. See performance disclosure. \*Inv. short for Investment; Corp.\* short for Corporate.

To examine differing bond portfolio examples, we will start with a portfolio that has very little credit risk, and move toward greater amounts of credit exposure as a method of increasing the yield to maturity. We refer to credit exposed portfolios as Targeted Credit Portfolios™ (TCP), and refer to the most conservative model as the Credit Managed Portfolio™ (CMP). The more aggressive TCP models are denoted by a number ranking system. The higher the number, the higher the levels of credit risk. For example, the TCP1 is more aggressive than the CMP portfolio, but less aggressive than the TCP2 model.

Targeted Credit Portfolios™ are based on the following principals:

We ranked the risk of each asset class by considering the worst drawdown as well as the length of historical data available. “Drawdown” is the amount of decline in value experienced from the peak of the investment class to the bottom based on monthly data.

**Figure 2** lists the tax-free asset classes for taxable accounts of clients in upper tax brackets (generally 28% or higher). The tax-equivalent expected return adjusts the return for the fact that the bond income is tax-deductible.

Many of the asset classes in our Targeted Credit Portfolios™ are already in use in Empirical’s Credit Managed Portfolio™. Others, like intermediate investment grade bonds and high-

**Figure 2: List of Fixed Income Asset Classes (Tax-Free Bonds)**

Asset Class	Number of Holdings	Yield-to-Maturity	Tax-Equivalent Exp* Return (28% Tax Bracket)	Duration (Interest Rate Risk)	Worst Drawdown	Data Available Since
Less Risky						
↑ Short Term Inv.* Grade Municipal Bonds	1,595	1.13%	1.57%	2.40	-2.10%	Jan-90
Intermediate Term Inv.* Grade Muni Bonds	3,114	2.61%	3.63%	5.70	-5.20%	Jan-90
Variable Rate Demand Obligations (VRDOs)	47	0.67%	0.93%	0.02	-0.50%	Sep-09
↓ High Yield Municipal Bonds	55	6.74%	9.36%	10.03	-25.80%	Jan-05
More Risky						

Data as of 1/4/2012. Sources: PowerShares, State Street Global Advisors and Vanguard. See Performance Disclosure. \*Inv. short for Investment,

yield bonds, are not currently used (for specific reasons), though they are well known to most investors. Two bond investment classes, emerging markets debt and variable rate demand obligations (VRDOs), are less understood, and warrant a brief overview.

### Emerging Markets Debt

While the US government is paying negligible interest on its bonds, many emerging markets governments are paying significantly more. In fact, Brazilian debt is currently yielding 12.3% and South African government bonds are paying 8.3%<sup>2</sup>. Clearly, there are varying degrees of risk across the individual countries that make up the emerging markets. We would only recommend a diversified basket of emerging markets debt as a potential addition to a high-yield bond

portfolio. This asset class would only be appropriate for those with a tolerance for volatility within their fixed income portfolio. Typically, our advice is to concentrate risk within equity asset classes, rather than use high-volatility bond asset classes like high-yield bonds and emerging markets debt.

The TCPs include emerging markets debt that is issued in the local currency. Historically, local currency debt has had extremely low default rates. This is because it is easier for a government to pay back debt in its own currency rather than a foreign currency like the US dollar. While investors in local currency debt do not have to worry too much about defaults, they are still affected by currency movements. Currency movements can add significant volatility to an emerging market debt portfolio. Over long periods of time, the

**Figure 3: Targeted Credit Portfolios™ (Taxable Bonds)**

Asset Class	Credit Managed Portfolio™	TC1	TC2	TC3	TC4
Less Risky					
↑ Short Term Treasury Bonds	20%	20%			
Intermediate Term Treasury Bonds	15%				
Treasury Inflation Protected Securities (TIPS)	30%	15%	10%		
Short Term Inv.* Grade Corporate Bonds	35%	40%	35%	25%	10%
Intermediate Term Inv.* Grade Corporate Bonds		25%	25%	20%	20%
Emerging Markets Bonds			10%	20%	30%
Short Term High Yield Corporate Bonds			20%	20%	20%
↓ Intermediate Term High Yield Corporate Bonds				15%	20%
More Risky					
<b>Average Yield-to-Maturity</b>	<b>1.54%</b>	<b>2.37%</b>	<b>4.14%</b>	<b>5.26%</b>	<b>5.81%</b>
<b>Duration</b>	<b>4.49</b>	<b>4.27</b>	<b>4.15</b>	<b>3.85</b>	<b>4.09</b>
<b>Worst Drawdown (6/08 - 11/08)</b>	<b>-2.00%</b>	<b>-4.30%</b>	<b>-10.90%</b>	<b>-16.20%</b>	<b>-19.00%</b>

Data as of 1/4/2012. Sources: iShares, Pimco, Schwab, State Street Global Advisors, Vanguard and WisdomTree. See Performance Disclosure. \*Inv. Short for Investment.

<sup>2</sup>Source: WisdomTree. Bond yields as of 6/30/2011

**Figure 4: Targeted Credit Portfolios™ (Tax-Free Bonds)**

Asset Class	Credit Managed Portfolio™	TC1	TC2	TC3	TC4
Less Risky					
↑ Short Term Treasury Bonds	20%	10%			
Intermediate Term Treasury Bonds					
Treasury Inflation Protected Securities (TIPS)	30%	15%	10%		
Short Term Inv.* Grade Municipal Bonds	35%	45%	30%	20%	
Intermediate Term Inv.* Grade Muni.* Bonds	15%	30%	30%	30%	30%
Variable Rate Demand Obligations (VRDOs)			10%	20%	30%
Emerging Markets Debt			10%	10%	10%
↓ High Yield Municipal Bonds			10%	20%	30%
More Risky					
<b>Average Yield-to-Maturity</b>	<b>1.28%</b>	<b>1.54%</b>	<b>2.60%</b>	<b>3.12%</b>	<b>3.68%</b>
<b>Tax-Equivalent YTM (28% Tax Bracket)</b>	<b>1.59%</b>	<b>2.04%</b>	<b>3.34%</b>	<b>4.12%</b>	<b>4.90%</b>
<b>Duration</b>	<b>4.53</b>	<b>4.21</b>	<b>4.70</b>	<b>4.65</b>	<b>5.17</b>
<b>Worst Drawdown (6/08 – 11/08)</b>	<b>-1.40%</b>	<b>0.00%</b>	<b>-3.40%</b>	<b>-4.30%</b>	<b>-6.40%</b>

Data as of 1/4/2012. Sources: PowerShares, State Street Global Advisors and Vanguard. See Performance Disclosure. \*Inv. short for Investment; Int. short for Intermediate; Muni. short for Municipal.

additional yield premium is likely to compensate for any currency depreciation (this has been the case as shown in empirical data dating back to 1953<sup>3</sup>). In our models, we utilize a strategy that strives to reduce emerging markets credit risk by diversifying across 15 countries, and restricting overconcentration in any single country or region.

### VRDOs

VRDOs (Variable Rate Demand Obligations) are municipal securities with floating interest rates. Although VRDOs typically have maturities of 20-30 years, the interest rate resets every seven days. This means that investors will not be penalized if interest rates rise. These securities currently have higher yields than Treasuries, and because they are issued by municipalities, the income is federal tax-free (increasing its tax-equivalent yield). VRDOs have had very low volatility over their short history. This is due to the fact that investors can generally sell back their VRDOs to the dealer bank at par. In addition, the debt is backed by the issuing municipality and oftentimes, a monoline insurer. VRDOs make up about 15% of the municipal bond market. Historically, they have been purchased primarily by institutions, such as municipal money market funds. However, they are now available to individual investors through Exchange-Traded Funds.

### Portfolio Illustration

Figure 3 (on previous page) illustrates Targeted Credit Portfolios™ that utilize taxable bonds. The table is organized the same way Figure 1 is, with the bond asset classes in order by risk level. The Credit Managed Portfolio™ model has the lowest exposure to credit risk, consisting of the safest

fixed income asset classes. The table illustrates the construction of four additional Targeted Credit Portfolio™ models which shows the relationship between increasing risk and increasing yield to maturity. As discussed previously, the difference in actual expected return is smaller than the difference in yield to maturity because of the expectations that the greater the credit exposure, the greater the percentage of loss to defaults. Figure 4 (above) shows the same information for the tax-free bond portfolios.

### Conclusion

The purpose of presenting alternative bond models is to establish a prudent framework for viewing what is currently available in the fixed income markets. Investors sometimes make the mistake of chasing yields on individual bonds or narrow segments of the market outside of a diversified framework. These investors do not understand the risk they are taking with their bond strategy, and often overlook how the bond components fit in with their objectives and the other investments they hold. While there is no single, perfect bond portfolio for every investor, there are certain types of risks that every investor should avoid completely. The Empirical research team has the objective of providing advisors with a variety of well-researched tools in order to build customized solutions for you, as our client. We continue the discussion on income from equities in the next section of this letter.

### Global Income Stock Portfolios

Over the years, we have been asked our thoughts on investing in high dividend stock strategies. In the early 1990's, Michael B. O'Higgins (Author of *Beating The Dow* 1991) popularized

<sup>3</sup>Ilmanen, A. (2011). *Expected Returns*. John Wiley and Sons.

the idea of a concentrated portfolio of the highest paying dividend stocks from the Dow Jones index. This approach became known as the “Dogs of the Dow,” and focused on the ten highest dividend paying stocks from the Dow Jones Index. Mutual fund complexes and brokerage companies quickly capitalized on its popularity by creating products that tracked the ten stock portfolios. Interestingly, the strategy fell out of favor as it underperformed over the following decade, and research was published negating the merits of a concentrated portfolio of high dividend stocks.

Today, with historically low yields in fixed income, and seemingly above average volatility in global stock markets, we have seen a resurgence of interest in income-oriented equity investing. Recently, several new securities were launched enabling the creation of a globally diversified portfolio with an emphasis on dividend income. As a result, we have designed Targeted Premium Dividend™ (TPD) portfolios as a client investment option. The Empirical TPD strategies provide dividend seeking investors the ability to retain their level of global diversification and targeted premium<sup>4</sup>, while focusing on dividend paying equities. In this section, we introduce the concepts around these strategies, along with some potential drawbacks of dividend oriented investing. As always, please speak to your advisor to discuss the merits of incorporating these approaches into your investment plan. It is important to understand the expectations and implications of utilizing a dividend focused approach.

With one major hurdle (lack of diversified dividend income vehicles available) significantly lowered, what would hold an investor back from focusing on dividends, especially now, with bond yields so low? One reason to bypass a dividend focused strategy is that it excludes good companies that do not pay a dividend (for example, Apple Inc. is currently the second largest stock in the S&P 500 index and does not pay a dividend). Therefore, while the dividend strategy is diversified across the globe, it cannot hold as many stocks as a traditional portfolio. **Figure 5** shows the number of stocks

**Figure 5: Total Number of Holdings**

Asset Class	Targeted Premium Dividend™	Standard Equity Model
US Large	425	579
US Small	639	2,606
International Large	100	1,250
International Small	652	4,807
Emerging Large	279	1,738
Emerging Small	557	1,782
Real Estate	309	309
<b>Total Portfolio</b>	<b>2,961</b>	<b>13,070</b>

*Data as of 1/3/2012. Sources: Dimensional Fund Advisors, State Street Global Advisors, WisdomTree and Vanguard*

<sup>4</sup>Targeted Premium is the degree to which a portfolio overweights small, value and emerging markets stock. Historically these types of stocks have had higher returns than the stock market overall.

<sup>5</sup>Davis, James L. and Lee, Inmo. “Defining Value and Growth”. Dimensional Fund Advisors. August 2008.

**Figure 6: Asset Class Yields**

Asset Class	Targeted Premium Dividend™	Standard Equity Model
US Large	3.30%	2.01%
US Small	4.16%	0.98%
International Large	6.93%	3.79%
International Small	3.87%	3.03%
Emerging Large	7.89%	2.59%
Emerging Small	11.63%	2.79%
US Real Estate	2.61%	2.61%
Int'l.* Real Estate	5.75%	5.75%

*Data as of 1/4/2012. Sources: Dimensional Fund Advisors, State Street Global Advisors, WisdomTree, Schwab and Vanguard. Standard portfolio asset class yields are for the Targeted Premium 3 portfolio. \*Int'l. short for International.*

in our typical dividend neutral models relative to the number of stocks in the comparable Targeted Premium Dividend™.

Even though research shows that high dividend stocks have outperformed the general stock market indexes, an investor may still hesitate to implement the strategy. This is because dividends alone are not the only factor that explains increased return, and therefore may not be the best method to obtain them. A stock’s dividend yield is just one method of determining whether it is “cheap,” meaning that the market seems to put a lower price on its intrinsic value relative to other stocks. Other methods include using a stock’s P/E ratio or its accounting book value. Historically, sorting stocks by dividends does not increase returns as much as these other measures<sup>5</sup>.

**Figure 6** (above) compares the asset class yields of the dividend and standard Empirical models. **Figure 7** (below) compares the portfolio yields of the dividend and standard models for three separate Targeted Premiums™.

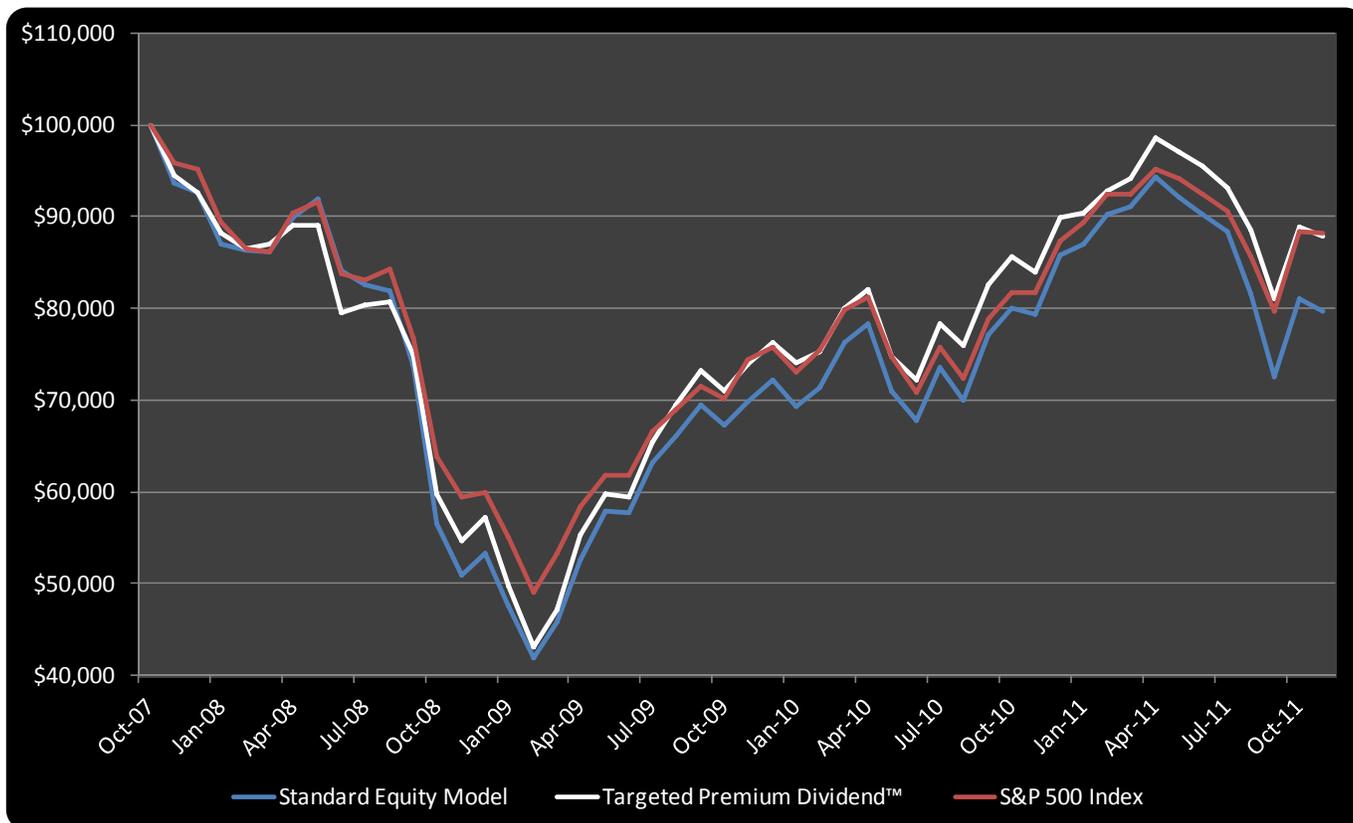
**Figure 7: Portfolio Yields of EWM Portfolios**

Asset Class	Targeted Premium Dividend™	Standard Equity Model
Targeted Premium™ 3	4.77%	2.32%
Targeted Premium™ 4	5.17%	2.19%
Targeted Premium™ 5	5.54%	2.05%

*Data as of 1/4/2012. Sources: Dimensional Fund Advisors, State Street Global Advisors, WisdomTree, Schwab and Vanguard.*

**Figure 8** (next page) shows how the Targeted Premium Dividend™ tracked the Standard Equity model over the last

**Figure 8: Tracking Error of Targeted Premium Dividend™ Portfolios**



Equity model performance is reduced by a 1% advisory fee. See Performance Disclosure

few years. You can see that while there is some variation between the portfolios, any outperformance of one strategy over another is expected to be random over the short term. This graph also illustrates the fact that owning high dividend stocks did not provide significant downside protection as global markets declined.

### Tax Considerations

Additionally, it is worth considering the treatment of dividends in a taxable account when comparing the after-tax returns of a dividend oriented approach and a dividend neutral approach. It may be advantageous to avoid larger dividend payments, if future tax rules continue to tax dividends as they are paid (in comparison to the deferral of capital gains taxes until non-dividend paying stocks are sold). This means that if we are going to employ a dividend focused approach to investing in equities, we may want to consider placing these strategies in tax-advantaged accounts.

### Conclusion

Over the long run, a preponderance of academic research demonstrates that corporate dividend policy alone is not the best method of enhancing future expected returns. We also demonstrated in our Q2 2011 letter, and in **Figure 8** above, that high dividend paying stocks can decline just as much as the general stock market. So, they should not be considered a less risky way to invest in equities. *Investors should employ a dividend strategy when they have a preference for receiving a larger portion of their equity returns as income payments and*

*not because they are looking for the best way to increase returns over that of the general stock market.* With this preference in mind, the goal when constructing Targeted Premium Dividend™ portfolios should be to retain as much of the diversification from standard targeted premium models as possible. This means we will continue to include exposure to broad investment assets classes like international stocks, small company stocks, REITs and emerging markets stocks. This framework creates the opportunity for a cash flow conscious investor to meet their objectives without foregoing many of the other important aspects of prudent portfolio management.

Sincerely,

Kenneth R. Smith, CFP®, MS  
Principal | Chief Executive Officer

Steven Guichard, CFA  
Portfolio Manager | Investment Analyst

Ethan Broga, CFP®, MS  
Principal

**Performance Disclosure**

The investment returns are hypothetical model returns, not actual returns, and should not be interpreted as an indication of such performance. The portfolios were designed well after the beginning date of the performance time period. The purpose is to estimate how Empirical's model portfolios would have performed historically based on the best available data. These portfolios were created with the benefit of hindsight, and do not take into account actual market conditions and available knowledge that would have impacted an investment advisor's decisions. There is no indication that the back-tested results could, or would have been achieved by Empirical had the program been activated during the years presented.

Past performance may not be indicative of future performance. (Calculating historical model returns is a method of estimating the risk of investing strategies. However, capital markets are constantly changing and poor performance in the past is not a worst case scenario.) The investment strategy that the back-tested results were based upon can be changed at any time in order to show better performance, was based on hindsight and can continue to be tested and adjusted until the desired results are achieved. Some of the funds in the Empirical model portfolios were not in existence 10 years ago. Prior to a fund's inception month, the performance of a similar fund or index adjusted by the fund's expense ratio is used. Similar funds were selected based on the historical return and risk characteristics. The estimated expense ratio is deducted monthly. Portfolios are assumed to be rebalanced annually. Model portfolios do not include an allocation to cash. All performance data includes dividends. The model performance can be adjusted to include Empirical's management fees. Client returns will be reduced by the advisory fees and other expenses it may incur in the management of its investment advisory account. A list of Empirical's fees is available on Empirical's form ADV Part II. Taxes and trading costs are not included. When index performance is used, estimated mutual fund expenses are deducted from index performance each month. The estimate used is the expense ratio of the current fund in the Empirical portfolio. Since indexes do not represent actual portfolios, they do not include several important costs, such as trading costs within funds, market impact costs, bid/ask spreads and other factors, which negatively impact performance.

There is always the risk that an investor may lose money. Even a long-term investment approach cannot guarantee a profit. Economic, political, and issuer-specific events will cause the value of securities, and the portfolios that own them, to rise or fall. Because the value of your investment in a portfolio will fluctuate, there is a risk that you will lose money. The information provided herein should not be construed as a recommendation to purchase or sell any particular security or an assurance that any particular security held in a portfolio will remain in the portfolio or that a previously held security will not be repurchased. It should not be assumed that any of the security transactions or holdings discussed herein have been or will prove to be profitable or that future investment decisions will be profitable or will equal or exceed the investment performance of the securities discussed.

The model performance is provided net of Empirical's highest management fee of 1%. For example, the following table compares an account with a 1.00% management fee and an account with no management fee, each with an initial investment of \$50,000, assuming an annual rate of return of 12% (for illustrative purposes only):

	<b>Starting Value</b>	<b>After 1 Year</b>	<b>After 3 Years</b>	<b>After 5 Years</b>
No Fee	\$50,000	\$56,000	\$70,246	\$88,117
1% Fee *	\$50,000	\$55,440	\$68,160	\$83,798

\*Annual management fee of 1.00% of assets

## Appendix: Empirical Portfolio Strategies

### Equity Portfolio Options

Targeted Premium™	Historically, small, value and emerging markets stocks have outperformed broad market indexes. Empirical offers 5 portfolios that attempt to capture the historical return premium of these asset classes, ranging from a slight overweight to a substantial overweight.
Socially Responsible and Environmentally Sustainable	Socially Responsible portfolios exclude sectors like tobacco, gambling and weapons manufacturing. Environmentally Sustainable portfolios overweight companies with practices promoting environmental sustainability.
Targeted Premium Dividend™	The Targeted Premium Dividend™ portfolio emphasizes companies that pay large dividends. It is designed to distribute more cash than our standard portfolio but have similar returns. Investors who are drawing income from their portfolio may prefer the Targeted Premium Dividend™ strategy because a larger portion of their return comes in the form of dividends rather than price appreciation.
Options Hedging	Options Hedging allows clients to purchase hedges that will help protect against dramatic declines in the market.

### Fixed Income Portfolio Options

Targeted Credit Portfolios™	5 levels of Targeted Credit portfolios take on additional credit risk to increase yield.
Municipal Bonds	Empirical recommends a diversified municipal bond portfolio for taxable accounts if investors are in a higher tax bracket.
Individual Bonds	Individual bonds allow investors to precisely time fixed income cash flows, but reduce portfolio liquidity.

### Other Portfolio Options

Tax-Loss Harvesting	Tax-Loss Harvesting involves selling a position that has declined and replacing it with a close substitute in order to realize tax losses.
Asset Placement	Asset Placement is consolidating in certain asset classes in certain account types to maximize tax efficiency. For example, fixed income is placed in a tax-deferred account because it distributes lots of taxable interest.
Rebalancing Method	Empirical offers 4 rebalancing methods that take different approaches to rebalancing in response to market movement.