

June 9, 2014

Elizabeth M. Murphy  
Secretary  
U.S. Securities Exchange Commission  
100 F Street, N.E.  
Washington, D.C. 20549-1090

**RE: Comments on File Number S7-12-10 (Investment Company Advertising: Target Date Retirement Fund Names and Marketing)**

Dear Ms. Murphy:

We would like to thank the U.S. Securities and Exchange Commission (“Commission”) for the opportunity to respond to the recent request for comments on the Commission’s Investor Advisory Committee recommendation that the Commission develop a glide path illustration for target date funds (“TDF(s)”) that is based on a standardized measure of fund risk as a replacement for, or supplement to, the asset allocation glide path (“Asset GP”) illustration.<sup>1</sup> TDFs are an important and growing part of the retail investing landscape and research suggests that TDFs provide investors with portfolios that may be better suited to their long-term investment needs than other products or other portfolios they might otherwise own.<sup>2</sup> The Asset GP is the current conceptual presentation of the balance between risk and return for a TDF based on the TDF’s investment allocation between equity and fixed income securities. While we agree that an Asset GP can be useful information, we maintain, consistent with our previous comments,<sup>3</sup> that it is insufficient to assist investors in understanding the full risk to their invested capital, can mislead investors with respect to the relative risks of TDFs, and can encourage gamesmanship in managing funds to make them look less risky than they actually are.

Below, we outline our views on (1) why the Asset GP provides insufficient and potentially misleading information for an investor to make an informed decision about investing in a TDF; (2) the necessity to provide investors with a more adequate risk metric; (3) our suggestion as to one such measure, calculated loss potential (“LP”), as a better proxy for risk; and (4) our recommendation for calculating LP.

**I. The Asset GP Provides Insufficient Information to Investors About Risk to Invested Capital**

The current prevailing risk disclosure for TDFs, the Asset GP, attempts to illustrate the perceived risk level of TDFs based on a TDF’s relative portfolio allocation of equities to fixed income

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<sup>1</sup> See Investment Company Advertising: Target Date Retirement Fund Names and Marketing, 79 Fed. Reg. 19564 (Apr. 9, 2014).

<sup>2</sup> *Financial Engines & Aon Hewitt Find 401(k) Participants Who Use Professional Help Are Better Off Than Those Who Do Not*, Financial Engines (May 13, 2014), at <http://ir.financialengines.com/phoenix.zhtml?c=233599&p=irol-newsArticle&ID=1930183&highlight>.

<sup>3</sup> See FOLIO*fn* Investments, Inc. Comments on File Number S7-12-10 (Investment Company Advertising: Target Date Retirement Fund Names and Marketing), dated May 21, 2012, at <http://www.sec.gov/comments/s7-12-10/s71210.shtml> (“Folio May 2012 Letter”).

securities over the course of an investor’s “income life cycle” – years of employment through retirement. As noted in the Folio May 2012 Letter,<sup>4</sup> a TDF’s allocation of equities to fixed income securities in its portfolio is a poor indicator of risk to invested capital.

Simply put, two different hypothetical TDF portfolios with the same percentage allocation to equities and fixed income can have substantially different risk levels based on the type of equity or fixed income securities held in the portfolio. As an example, Portfolio 2 in Figure 1, has investments in emerging market and small cap equity and corporate and high-yield bonds and has a greater degree of potential capital loss in bad market conditions, even though both portfolios are allocated 50% to equity securities and 50% to fixed income securities.

**Figure 1 – Portfolio Allocation (50% Equity, 50% Fixed Income)**

|                      | Fund / Asset Class                 | Portfolio 1 | Portfolio 2 |
|----------------------|------------------------------------|-------------|-------------|
| Equities             | S&P500                             | 50%         | 30%         |
|                      | MSCI Emerging Market Equity        |             | 10%         |
|                      | Russell 2000 (Small Cap Equity)    |             | 10%         |
| Fixed Income (Bonds) | Aggregate Bond                     | 50%         | 30%         |
|                      | Corporate Bond                     |             | 10%         |
|                      | High-Yield Bond                    |             | 10%         |
|                      | Percentage in Equities             | 50%         | 50%         |
|                      | Percentage in Fixed Income (Bonds) | 50%         | 50%         |
|                      | Estimated 12-Month Loss Potential  | -14.6%      | -19.3%      |

We estimated LP (which is explained in greater detail in Section III and in footnote 14) for Portfolio 1 and Portfolio 2 over a 12-month period. Conceptually, small cap and emerging market stocks are riskier than large cap stocks, which increases the LP to Portfolio 2 in bad market conditions. Similarly, while the fixed income portion of Portfolio 1 is invested in an aggregate bond index, the fixed income portion of Portfolio 2 includes allocations to high-yield bonds and an investment-grade corporate bond index, as well as the aggregate bond index. The high-yield and investment-grade corporate bond indices are riskier than the aggregate bond index and, accordingly, increase the LP in bad market conditions.<sup>5</sup>

We estimate that Portfolio 1 can be expected to lose 14.6% of its value and that Portfolio 2 can be expected to lose as much as 19.3% of its value in a very bad year.<sup>6</sup> While these portfolios are

<sup>4</sup> See *id.*

<sup>5</sup> Including specific allocations to asset classes and sub-classes, such as emerging markets and small cap equities, can provide important diversification benefits and thereby increase portfolio return for a given level of risk. Of course, that does not mean that the more diversified portfolio (Portfolio 2) is less risky than the less diversified portfolio (Portfolio 1). A more intuitive example of this is a money market fund which is undiversified compared to a broadly diversified fund that includes many asset classes. The money market fund is inherently less risky. As with all other investment decisions, money managers and/or individual investors will continue to be charged with balancing relative risk with the potential for a higher return on investment. The optimal investment for an investor may not always be a TDF with the lowest risk potential, but the LP should be a factor available for consideration.

<sup>6</sup> The “very bad year” represents an estimated 1-in-100 probability on the basis of normally-distributed returns for the S&P500 and using the mean and standard deviation over the past fifteen years. Realistically, however, we expect

equal in their allocation of assets between equity and fixed income securities, Portfolio 2 is 32% more risky than Portfolio 1 or, in other words, the LP of Portfolio 2 is 32% greater than Portfolio 1.

The same behavior is evident with other asset allocation levels, such as for a 70% equity/30% fixed income portfolio. Portfolio 1 and Portfolio 2 in Figure 2 below have the same allocation of equities to fixed income securities (70% to equity, 30% to fixed income), but Portfolio 2 is 35% more risky than Portfolio 1 because it includes riskier equity and fixed income product types (*e.g.*, emerging market equity and high-yield bonds).

**Figure 2 - Portfolio Allocation (70% Equity, 30% Fixed Income)**

|                         | Fund / Asset Class                 | Portfolio 1 | Portfolio 2 |
|-------------------------|------------------------------------|-------------|-------------|
| Equities                | S&P500                             | 70%         | 30%         |
|                         | MSCI Emerging Market Equity        |             | 20%         |
|                         | Russell 2000 (Small Cap Equity)    |             | 20%         |
| Fixed Income<br>(Bonds) | Aggregate Bond                     | 30%         | 10%         |
|                         | Corporate Bond                     |             | 10%         |
|                         | High-Yield Bond                    |             | 10%         |
|                         | Percentage in Equities             | 70%         | 70%         |
|                         | Percentage in Fixed Income (Bonds) | 30%         | 30%         |
|                         | Estimated 12-Month Loss Potential  | -20.6%      | -27.9%      |

Notably, Portfolio 2 in Figure 1 and Portfolio 1 in Figure 2 have similar levels of LP, even though Portfolio 2 in Figure 1 has a lower percentage of its portfolio allocated to equity securities. Based only on the Asset GP, investors today likely would expect that Portfolio 2 in Figure 1 (a portfolio with 50% equity) would be less risky than Portfolio 1 in Figure 2 (a portfolio with 70% of its assets invested in equity). However, the difference in LP is only marginal. Our research suggests that, within the range of asset classes commonly used in TDFs, there could be as much as a 30% or higher difference in LP for funds with the same percentage of assets allocated to equities as compared to the risk that likely would be estimated based on the relevant Asset GPs alone.

Because portfolios with the same equity to fixed income allocations can have substantially different risk levels, there is the potential for the Asset GP to mislead investors as to the relative risk in one TDF series as compared to another. Using the example hypothetical portfolios in Figure 1 and Figure 2, along with additional portfolios created using the same process, Figure 3 below shows two hypothetical TDFs (Series 1 and Series 2), including their asset allocations and Asset GPs over time. Series 1 includes allocations to a S&P500 fund and an aggregate bond fund, with the equity allocation decreasing as the expected retirement date approaches. Series 2 includes allocations to the range of asset classes used for the Portfolio 2 examples in Figure 1 and Figure 2, and also has equity allocation decreasing as the expected retirement date approaches.

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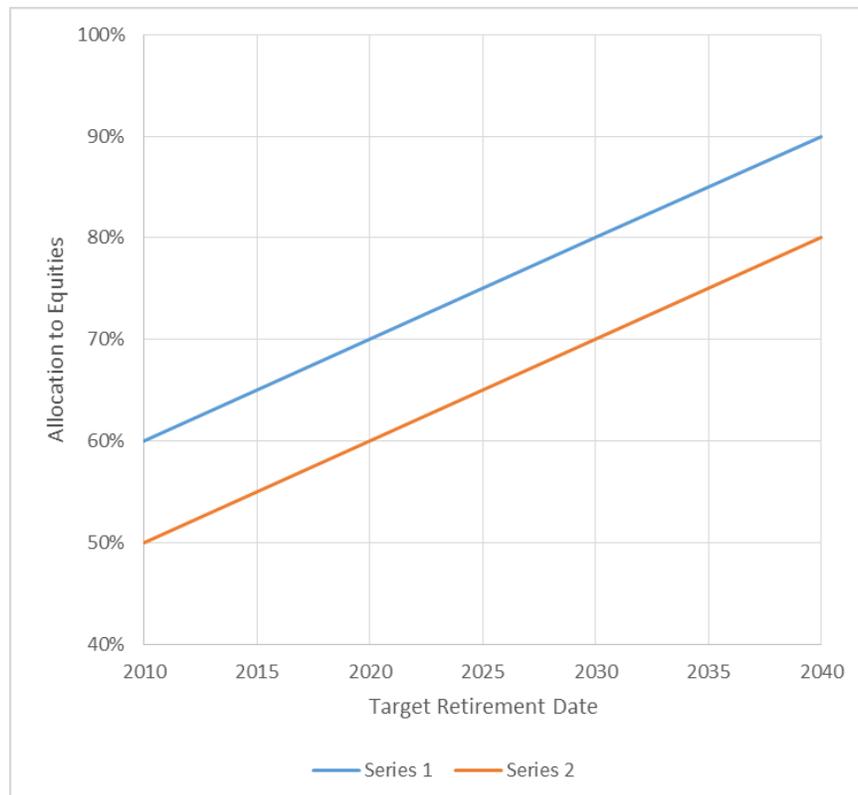
that the circumstances that currently have only a 1-in-100 probability with respect to S&P500 are likely to occur more frequently over time in the future. See, e.g., James Xiong, *Nailing Downside Risk*, Ibbotson Associates, 2010, at <https://corporate.morningstar.com/ib/documents/MethodologyDocuments/IBBAssociates/NailingDownsideRisk.pdf> ("Nailing Downside Risk").

**Figure 3 – Asset GPs for two hypothetical TDFs**

| Simulated Target Date Series 1 |                        |      |      |      |
|--------------------------------|------------------------|------|------|------|
| Fund / Asset Class             | Target Retirement Date |      |      |      |
|                                | 2010                   | 2020 | 2030 | 2040 |
| S&P500                         | 60%                    | 70%  | 80%  | 90%  |
| Aggregate Bond Index           | 40%                    | 30%  | 20%  | 10%  |
| Equity Allocation              | 60%                    | 70%  | 80%  | 90%  |
| 12-Month Loss Potential        | -18%                   | -21% | -24% | -27% |

| Simulated Target Date Series 2  |                        |      |      |      |
|---------------------------------|------------------------|------|------|------|
| Fund / Asset Class              | Target Retirement Date |      |      |      |
|                                 | 2010                   | 2020 | 2030 | 2040 |
| S&P500                          | 30%                    | 30%  | 30%  | 40%  |
| MSCI Emerging Market Equity     | 10%                    | 15%  | 20%  | 20%  |
| Russell 2000 (Small Cap Equity) | 10%                    | 15%  | 20%  | 20%  |
| Aggregate Bond                  | 30%                    | 15%  | 10%  | 7%   |
| Corporate Bond                  | 10%                    | 15%  | 10%  | 7%   |
| High-Yield Bond                 | 10%                    | 10%  | 10%  | 6%   |
| Equity Allocation               | 50%                    | 60%  | 70%  | 80%  |
| 12-Month Loss Potential         | -19%                   | -24% | -28% | -30% |



Using equity allocation as a proxy for risk, Series 1 appears riskier than Series 2 because Series 1 has a consistently higher allocation to equities at all target retirement dates. However, the LP consistently is higher for Series 2 than Series 1. Again, these examples further support the notion that relying solely on a portfolio’s percentage of assets allocated to equities as a proxy for risk can be misleading to investors in many instances.

## II. The Need To Provide A More Adequate Measure of Actual Risk of Capital Loss

The examples above demonstrate, very simply, why the Asset GP is insufficient as a measure of risk to an investor in a TDF and how counter-productive it can be. In fact, it may encourage fund managers to allocate greater percentages of assets to riskier classes of securities within each broad category of “equity” and “fixed income” securities. By doing so, one could expect that, over time and on average, a greater percentage of fund assets invested in riskier securities will yield higher returns and boost performance, without making the fund look any more risky from the Asset GP perspective. As shown with the data above, however, such a portfolio indeed would be riskier than a more conservatively managed fund.<sup>7</sup>

There, of course, are many risk metrics that could be used, but not all are easily understood or applied. Volatility, for example, is a very common risk metric used in finance<sup>8</sup> and is available from a number of sources.<sup>9</sup> It is significant to understanding risk, provided there is sufficient disclosure describing the metric and how it might be used. However, without a certain level of understanding in financial concepts, it is not the most intuitive measure. Nevertheless, whether it is volatility or LP, as we suggest below, we strongly urge the Commission to require a metric or a disclosure that actually focuses on risk and not a weak surrogate for it that can be misleading and gamed.

## III. Loss Potential As A Better Predictor of Risk To An Investor

We believe that a metric that provides an investor an indication of a “bad case scenario” over a 12-month period – the percentage by which the value of a TDF might be expected to fall in a bad year – is a simple and valuable data point in making an investment decision. This measure can be easily understood and investors can quickly compare investments to understand how they differ. It also is important to make it clear to investors that actual results could be better or worse than the calculated LP, but as a standardized measure, LP is useful for comparison purposes. If desired, this measure also could be provided along with the Asset GP.

In a survey of pension plan consultants, PIMCO determined that consultants’ beliefs about the maximum acceptable LP for 65-year-olds were much more conservative than the available TDFs for such investors.<sup>10</sup> The consultants believed that the maximum acceptable LP over a 12-month period for this age group was in the range of 0%-5%. PIMCO found, though, that the average 2010

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<sup>7</sup> Making the risk of higher equity allocations clearer could help investors to avoid simply chasing high performance. Seeing that a top-performing TDF has a higher equity allocation (without a risk measure) might simply suggest to investors that higher equity allocations are better. An investor seeing that such a fund may also have higher risk with a greater LP than other funds (hypothetically) would allow that investor to be better equipped to make a rational decision.

<sup>8</sup> See, e.g., RiskMetrics – Volatility, at <http://www.nasdaq.com/investing/risk/volatility.aspx>. Volatility is the standard deviation of return, and is typically provided in annualized form. For example, the trailing 3-year annualized volatility of hypothetical Portfolio 1, with 50% allocations to equity and fixed income in Figure 1, is 6.1% and for hypothetical Portfolio 2 is 8.0% based on publicly available market data for 3 years through March 2014. This means that the return on Portfolio 1 would typically fluctuate between plus and minus 6.1% of its average and that the return on Portfolio 2 would typically fluctuate between plus and minus 8% of its average over the course of a 12-month period.

<sup>9</sup> See, e.g., Morningstar Risk & Rating Statistics for the Vanguard 500 Index fund, at <http://performance.morningstar.com/fund/ratings-risk.action?t=VFINX&region=usa&culture=en-US>.

<sup>10</sup> Ying Gao and Stacy Schaus, *Loss Capacity Drives 401(k) Investment Default Evaluation*, PIMCO (Sep. 2012), at <http://www.pimco.com/EN/Insights/Pages/Loss-Capacity-Drives-401k-Investment-Default-Evaluation.aspx>.

fund (the fund best-suited to 65-year-olds at the time), had a LP of more than 17% over twelve months. Regardless of whether the consultants are being too conservative, these results force the question of whether individual investors have any idea how much they could realistically lose in a TDF. If pension consultants' expectations are so at odds with LP, it seems likely that individual investors would be surprised by the LP in TDFs. Supporting this concern, a survey submitted to the SEC<sup>11</sup> suggests massive misconceptions about how TDFs work, with only 36% of respondents understanding that TDFs don't provide guaranteed income in retirement.

LP can be charted in a manner consistent with the Asset GP, showing how LP changes as retirement approaches. The charts below in Figure 4 show an example of a LP glide path for two of the large TDF series (labeled as Fund Series 1 and Fund Series 2) and how LP decreases as investors approach retirement and beyond.

**Figure 4 - Presentation of LP Glide Paths**



Figure 4 shows results for 2010, 2020, 2030, and 2040 TDFs, but also can be formulated for five-year or other increments of expected retirement date. The 2010 fund (Target Retirement Date equal to 2010) has a less severe LP than that of the 2020 fund, etc. This approach to showing how risk level changes with expected retirement date provides important information to investors when comparing different funds. Specifically, Figure 4 shows that the LP for Fund Series 2 in 2030 *actually* is more similar to the LP for the Fund Series 1 fund in 2020 than the Fund Series 1 fund in 2030. Fund Series 2 is more conservative than Fund Series 1.

#### **IV. Calculating LP As A Standardized Risk Metric**

As noted above, there are different ways to estimate risk with respect to a portfolio, and firms quite likely will maintain proprietary models. However, Value-at-Risk ("VaR")<sup>12</sup> is a

<sup>11</sup> *Investor Testing of Target Data Retirement Fund (TDF) Comprehension and Communications*, Siegel & Gale LLC (Feb. 15, 2012), at <http://www.sec.gov/comments/s7-12-10/s71210-58.pdf>.

<sup>12</sup> Dennie Bams and Jacco L. Wielhouwer, *Empirical Issues in Value-at-Risk*, 31 ASTIN BULLETIN 2 (2001), pp. 299-315, available at <http://www.actuaries.org/LIBRARY/ASTIN/vol31no2/299.pdf>.

commonly used portfolio risk metric and, one way to standardize LP would be to derive the 12-month LP from a firm's VaR calculation. While there are many different VaR models, there are standards for reporting VaR.<sup>13</sup> In addition, there are a number of ways that experts could suggest a LP calculation be made, including for newly established funds and for funds with existing track records. We recognize that experts will have their favorites – we have ours.<sup>14</sup> However, we would support any that work reasonably well. The Commission should not let the observation that there are competing alternatives stand in the way of selecting at least one calculation.

To illustrate use of the LP metric using our formula, we examine how well LP would have worked as a predictor prior to 2008 for one of the largest TDF series. In Figure 5 below, we compare the projected 12-month LP calculated using data through the end of 2007 to the actual returns from the fund for 2008.

**Figure 5 – Illustration of LP Calculation**

| Target Date | Estimated 12-Month Loss Potential at end of 2007 | Actual 2008 Return |
|-------------|--|--------------------|
| 2010        | -21%   | -27%               |
| 2020        | -26%   | -33%               |
| 2030        | -30%   | -38%               |
| 2040        | -30%   | -39%               |

<sup>13</sup> James Ming Chen, *Measuring Market Risk Under the Basel Accords: VaR, Stressed VaR, and Expected Shortfall*, 8 AESTIMATIO 184 (2014), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2252463](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2252463).

<sup>14</sup> We have developed a measure of LP that can be calculated using inputs available from publicly available sources. Specifically, for estimating 12-month LP, we use:

$$12\text{-Month LP} = 2 * (3 \text{ Yr Volatility of Fund} * \text{Long-Term Volatility of S\&P500}) / (3 \text{ Yr Volatility of S\&P500})$$

With this formula, twice the expected volatility for a fund is viewed as a reasonable estimate of LP and that the expected volatility of a fund can be determined from its trailing volatility relative to the market, adjusted by whether the recent years have exhibited higher-than-normal or lower-than-normal volatility for the market as a whole.

For purposes of calculating LP in Figure 1 above, we used 15% as the long-term volatility for the S&P500.

Our LP calculation assumes that the trailing 3-year volatility of a portfolio relative to the market is a reasonable estimate of the future, and that the expected total volatility of the portfolio should be adjusted to reflect the long-term average volatility of the broader market. This measure is simply scaling the 3-year volatility of a fund to account for whether the 3-year period exhibited higher or lower volatility than average for risky assets. For example, at the end of 2007, the trailing volatility for the broader market was very low. Accordingly, the 12-month LP for TDFs would have been notably higher than would be expected based on the trailing 3-year volatility of the TDFs alone.

While a 3-year track record is preferred as providing stable risk estimates, while still evolving as the asset allocation changes through time, shorter track records can be used prior to the availability of the full three years. For new funds, a proxy risk estimation using core asset classes (as in Figure 1) could be used.

This approach makes an assumption that the expected LP is determined by volatility alone, whereas an alternative approach might choose a LP based on a combination of expected return and volatility. It is fairly common to discuss LP in terms of a number of standard deviations below expected return (see *Nailing Downside Risk*, *id.* at n.6). However, this type of approach assumes a standard for estimating expected returns for funds, which is not the case. For this reason, we used an estimate based only on volatility.

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As shown, the estimated 12-month LP would have provided a fairly good picture of the degree of losses that could reasonably have been expected in 2008. Further, as noted above, it is important to keep in mind that the estimated LP is not intended to be a measure of the worst-possible losses that a TDF might incur, but rather an *indication* of possible losses, which may actually be less or more, in a very bad year and investors should be made fully aware of the limits on its utility.<sup>15</sup> By this measure, however, we believe that the estimates here would have provided very useful information for investors selecting a TDF.

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Investors in TDFs need clear disclosures as to the amount of risk that they bear. While the Asset GP is useful in some circumstances, asset allocation alone is not sufficient as a measure of risk. Standard risk measures used in finance, such as volatility, are better. However, they may not be immediately comprehensible to individual investors and specifically the investors that TDFs are geared to. In the aftermath of 2008,<sup>16</sup> there was widespread concern that TDFs were considerably riskier than investors realized. Simple measures of LP, such as the one proposed here, could have helped considerably in matching investment choices to personal risk tolerances. For these reasons, we believe that disclosure of a standard measure of LP is necessary and in furtherance of investor education and protection. We have proposed one such measure and we would be happy to provide additional information on our work to study and address this important problem.

Sincerely,

Michael J. Hogan  
President & Chief Executive Officer

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<sup>15</sup> Of course, that disclosure should accompany any graphical or other representation of LP to investors.

<sup>16</sup> M.P. Dunleavy, *Some Target Date Funds Adjusting After Criticisms*, New York Times (Apr. 10, 2010), available at [http://www.nytimes.com/2010/04/11/business/mutfund/11target.html?\\_r=0](http://www.nytimes.com/2010/04/11/business/mutfund/11target.html?_r=0).