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U.S. Department of Labor
200 Constitution Avenue, NW
Washington, DC 20210

Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

Subject: File No. 4-582, Target Date Fund Joint Hearing

Dear sir or madam:

Attached is a revision of our original submission for the hearing that accompanied our testimony. Please use this updated version as a statement of our views.

If you have any questions feel free to contact us at 617-482-1433. Thank you again for the opportunity to comment on these important matters.

Sincerely,

Richard O. Michaud
President and CIO, New Frontier Advisors

The Myth of Age-Based Risk

by

Richard O. Michaud and Robert O. Michaud

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Abstract

The Department of Labor (DOL) should disallow fiduciary relief for Target date funds (TDFs) as qualified default investment alternatives (QDIAs) for individual account plan investments. TDFs are artifacts of a well intentioned but ineffective and often counter-productive consequence of DOL regulatory fiduciary relief for QDIA investing. Age is no more than a commonly accepted and dangerous myth for properly assessing long-term investment risk. Additionally, TDF structure encourages inappropriate risk management for meeting retirement objectives. Properly defined, Target Risk Funds (TRFs) provide far more effective QDIA alternatives.

Introduction

The Department of Labor (DOL) grants fiduciary relief for funds defined as qualified default investment alternatives (QDIAs) for individual account plans such as 401(k)s. QDIAs absolve employers and advisors from the fiduciary responsibility of "know thy client." Fiduciary relief is a well intentioned proposal to provide safe funds for investors who do not want to choose a fund for investment or feel they do not have the expertise to properly do so.

Life-cycle or targeted-retirement-date funds (TDFs) are diversified asset allocation portfolios that use an age-based glide path to decrease risk as the target date approaches. DOL regulations provide fiduciary relief for TDF investments in individual account plans.

TDF Risk

TDFs define risk in terms of percent of equities or the stock/bond ratio of the asset allocation.[1] The stock/bond ratio is widely acknowledged as the single most important asset allocation decision for long-term investing.[2] A glide path defines the value of the declining stock/bond ratio at each age prior to target date.

Risk Assessment

Proper risk assessment is a highly complex multidimensional and situational consideration for individuals and institutions. Standard theoretical approaches include classical utility theory and psychological multidimensional scaling theory. Many financial economists devote much of their careers to the study of appropriately defining investment risk.[3]

In practice some financial institutions use questionnaires for individual risk assessment with dubious validity and reliability. Sophisticated advisors include factors such as wealth level, investments, income sources, risk-aversion, health, marital status, long-term objectives and legacies for risk assessment.[4] In depth risk level analyses typically include Monte Carlo simulation and are often costly and resource intensive.[5]

Risk Based on Age

No credible formal basis in financial theory exists or can exist that rationalizes a glide path definition of risk for long-term target date investing. In addition, empirical evidence is

[1] This definition of risk may have limitations if alternative assets such as hedge funds, private equity, or commodities are included in the asset allocation.
[2] Brinson et al (1986, 1991)
[3] A classic theoretical study of the choice of risk for investment is given in Rubinstein (1973).
[4] See Michaud (2003) for a review.
[5] Michaud (1976) provides an example of such a study.

inconsistent with simple age-based glide path risk.[6] A common TDF critique is that no specific age-based lifetime rule can be appropriate for all, most, or even many. However, the far more important issue is that glide paths are perversely related to properly defining investor target date risk for many investors. As a simple example of perversity, TDFs often encourage recklessness for the young and excessive conservativeness for the elderly. An unemployed 25 year old may be rightfully far more conservative than a wealthy octogenarian.

Age-based risk is no more than a commonly accepted but dangerous investment myth. The notion comes from the simple rule of thumb that investors may want to reduce equity exposure near retirement. Whatever validity such a rule enjoys, it does not imply that glide path risk is appropriate over an entire investor's lifetime. Investors who are concerned about life-style risk may want a substantive equity exposure near and beyond retirement date. In addition, glide path risk investing in retirement is inappropriate for many investors who rely on their investments as a major portion of their income in retirement.

TDF Fund Management Limitations

The lack of a valid framework for defining age-related risk rationalizes the empirical fact that TDFs often have widely differing definitions of the glide path stock/bond ratio, and investment performance, for similar target dates. Widely varying definitions of glide path risk are a strong indication that many TDFs are unlikely to fulfill their promise of appropriate long-term retirement investments.

DOL regulations are silent on TDF risk control management. In practice, competitive pressures often motivate TDF managers to engage in short-term market timing by varying the stock/bond ratio of the fund. Market timing with the stock/bond ratio reduces the reliability of meeting long-term objectives. In addition, many academic empirical studies have shown that market timing is rarely successful long-term.

TDF Popularity

DOL regulatory fiduciary relief of TDFs is very popular among fund managers. This is because it greatly facilitates the sales of investment funds. DOL sponsorship encourages a false sense of security and relevance for individual account plan investing. Fund sales are greatly facilitated since a broker or advisor only needs to know a client's age in order to recommend a TDF.

[6] Smetters (2009) finds empirically that the age to stock/bond ratio has an inverted "U" shape that diminishes as educational level increases.

TDF Investment Limitations

Age-based rules encourage TDF client lock-in investing by promoting the notion that the same fund is an appropriate investment until target date. While client lock-in is a major sales facilitation benefit for TDF fund families, it is also sometimes claimed as a benefit to investors. This is because investors are encouraged to believe that they can stay in the same diversified fund until target date. However, client lock-in ignores the problem of lifestyle and financial status changes to individuals over time. As individuals age many factors that affect an appropriate investment risk level change including marital status, income level, investments, and health. TDF lock-in can be a very high price to pay for inappropriate risk management over an individual's investing cycle.

TDFs are often accused of double-dipping. This is because TDFs charge management fees for allocating assets to the institution's funds that also charge management fees. In particular, TDFs that invest in actively managed funds may incur substantial management fees. Nondisclosure of management fees seems inconsistent with the DOL mandate of providing appropriate long-term investments to unsophisticated investors. Few investors do not understand a concept of management fees whatever their level of financial sophistication.

A frequent proposal to limit double-dipping and excessive fees is to require that QDIAs invest only in low cost index funds or index fund Exchange Traded Funds (ETFs). Such a proposal has the added benefit of reducing overall long-term investing risk.

The Target-Risk Fund (TRF) Alternative

A target risk fund (TRFs) is a diversified asset allocation indexed by the stock/bond ratio. The DOL currently grants fiduciary relief relative to a diversified 60/40 or balanced TRF. A balanced TRF is roughly "market neutral" and a suitable default investment for many long-term investors.[7] In aggregate, investors hold claims to the economic productivity of the economy. Mathematically, the average portfolio is roughly equal to a 60/40 risk-target portfolio of capitalization weighted index funds.[8] Deviating from this portfolio represents under-weighting of one segment of the economy and over-weighting of another.

DOL QDIA objectives seem more consistent with TRF investments. Sophisticated investment managers typically offer a family of TRFs such as 20%, 40%, 60%, 75%, 90% and 100% equity exposures. Unlike TDFs, TRFs have the important property of risk transparency. A TRF framework does not encourage lock-in investing or reckless investments for the young and overly conservative investments for the elderly. TRFs can be mandated to have fixed stock/bond ratios to avoid active market timing and invest in low cost index funds or ETFs to reduce management fees and long-term investing risk. Investors can be easily educated to the notion of more or less long-term "capital market"

[7] The Swedish Social Security System found that roughly 70% of participants preferred a default risk investment option.
[8] The concept of the market portfolio is central in modern finance (Sharpe 1964, Lintner 1965).

risk relative to a balanced TRF portfolio. TRF frameworks properly encourage investors to consider the benefits of accessing investment advice in particular circumstances.

QDIA Management Limitations

Many QDIAs are optimized asset allocations that use fifty-year-old procedures with provable performance limitations.[9] Alternatively, QDIA asset allocations are often based on ad hoc techniques that ignore principles of modern risk management. New technology is available that is consistent with modern risk management while overcoming limitations of current technology for enhancing retirement investing.[10]

Our Recommendations:

- Disallow TDFs as QDIAs
- Allow a limited risk spectrum of TRFs as default QDIAs
- Encourage index fund and index fund ETFs for QDIA investment
- Encourage fixed risk QDIAs
- Encourage modern more effective risk management technology.

Summary

TDFs are artifacts of a well intentioned but ineffective consequence of DOL regulatory fiduciary relief for QDIA targeted-retirement-date investing such as 401(k)s. No credible financial theory or empirical data exists that rationalizes age-based glide path risk for effective retirement investing. TDFs are often costly and exhibit risk management practices inconsistent with reliable long-term investing. A family of TRFs, suitably risk controlled and managed provides more transparent and effective instruments that are more likely to effectively meet DOL retirement objectives.

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[9] Markowitz (1959), Jobson and Korkie (1981), Michaud (1989).
[10] Chernoff (2003), Michaud and Michaud (2008a, 2008b).

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Dr. Richard O. Michaud is President and CIO, New Frontier Advisors. He has a Ph.D. in Mathematics from Boston University and taught investment management at Columbia. He is co-holder (with Robert Michaud) of three U.S. patents in portfolio optimization and management. He has authored numerous refereed academic and professional

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