

Comments on the Risk Characteristics of Target-Date Funds

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For a Joint Hearing of the Department of Labor and the Securities and Exchange Commission in Washington, D.C., June 18, 2009

I appreciate the opportunity to offer some comments on the risk characteristics of target-date funds, both when used as an accumulation vehicle in retirement accounts and when used for retirement distributions. I base these comments on a comprehensive analysis we have conducted recently in the Research and Innovation Center at Watson Wyatt Worldwide, a global human capital consulting firm. I am attaching, for the record, a copy of our working paper containing the analysis. We would be glad to answer any questions the Department or Commission might have on the data, assumptions, methodologies and results in our paper.

It is difficult to know for any individual what is the optimal asset allocation in his or her retirement account. Individual workers have different extents of pension and Social Security and insurance coverage, career and employer risks, income levels, liquidity needs, tax situations, and personal characteristics such as health, marital status and family responsibilities. Nonetheless, our empirical evidence suggests that asset allocations by workers in their retirement accounts seem to be less than optimal, with many, regardless of age, investing entirely in equities or entirely in fixed-income instruments. Indeed, one fifth of workers approaching retirement in 2007 had their entire balances invested in equities. Against this background, target-date funds offer a better and easier approach to retirement investing for many individuals, because the asset mix shifts away automatically from equities toward fixed-income instruments as the worker ages.

Our empirical evidence also shows that there is a wide range of initial allocations, glide paths and exit positions among target-date funds of varying maturities and the respective fund families' income distribution funds. This range presents us with the need for deeper consideration and analysis. Because target-date funds are so new, an evaluation of their design can be gained through stochastic simulations. The stochastic model we have created is quite comprehensive in considering fund expense charges, mortality, annuity pricing, and cross-correlations, both short- and long-run, of returns among three asset classes (equities, bonds and cash), bond yields and inflation.

For typical workers of various ages contributing consistently to a 401(k) plan, we first evaluate target-date funds in terms of the amount of 'terminal' wealth accrued upon retirement and the attendant levels of risk. For younger workers, two findings are of note. (1) The differentials in final balances among the five target-date funds ranked from highest to lowest initial equity allocations are relatively small across stochastic outcomes. This is mainly because of multiple cross-overs of allocations in the life cycle in the fund families; for example, they may start out higher and end with lower equity allocations. (2) Investment risk remains substantial regardless of which target-date fund family is used – poor investment outcomes will be disappointing to all 401(k) participants using any of these families, compared to, say, a lifelong participant in a defined benefit plan.

For mid-career workers who start their target-date fund investing at age 50, we begin to see more consistent differentiation in outcomes among fund families. Those investing in funds with high equity allocations can see significantly larger balances if equity markets perform well, whereas those investing in funds with higher bond and cash allocations are better protected on the downside. Note, however, again that the initial

allocations do not indicate the whole picture because even at later ages some funds' allocations cross-over.

For workers approaching retirement, that is, first investing their considerable balances at age 60, the return differences among funds within the observed wide range of equity allocations are quite large. A high-equity fund may outperform a low-equity fund by about 27 percent in good times, but may under-perform the latter by 16 percent in a down market. The Sharpe ratios, that is, the risk-adjusted returns are higher for the low-equity funds, indicating some superiority there.

For some participants, plan sponsors, and policymakers, the analysis ends here and it might be thought that the need for regulation begins, to limit equity allocations in shorter horizon target-date funds. But that would leave out a significant additional aspect of the problem – what is the best asset allocation and withdrawal strategy to cover comfortably a long retirement? When that aspect is considered, playing it safe, i.e. lower equity share, may not always be the best answer. When a plan participant or IRA holder pursues a fixed percentage or fixed dollar withdrawal strategy in retirement, our simulations find that the fund families with the highest allocations to equities at and during retirement perform the best and represent the lower risk alternatives against the chance of falling below certain minimum income amounts, in inflation-adjusted terms, or of outliving one's retirement plan resources. Only if complete annuitization is chosen do the lower equity allocations before and at retirement represent lower risk. Note also that a higher bond rather than cash allocation before and at retirement makes more sense in this latter strategy because the bond holdings in the funds represent better hedges than cash against the interest-rate-induced volatility in annuity prices. And the annuitization

strategy, on average, produces a higher income stream, at the cost, however, of loss of liquidity and bequest potential.

This concludes my summary of our research results. Probably the best outcome to plan sponsors and participants from the attention to this issue would be better disclosure and understanding of investment and withdrawal strategies and a highlighting of the risks involved. I am glad to answer your questions.