CAIA Viewpoint

An Alternative Retirement

Excerpted from the Alternative Investment Analyst Review, Volume 7, Issue 4

The Alternative Investment Analyst Review is the official publication of the CAIA Association. Access to the most current issue is an exclusive benefit of CAIA Membership while archived issues are available to the public in the Perspectives section at CAIA.org.

The full article may be accessed here.

Introduction

The increasing trend of companies offering defined contribution plans rather than defined benefit plans with investment into alternatives has highlighted a very serious question: can something created as a retirement income supplement hold its own as a primary retirement plan? In their paper, "The Evolution of Target Date Funds: Using Alternatives to Improve Retirement Plan Outcomes," Angela M. Antonelli, David O'Meara and Jason Shapiro discuss how a type of defined contribution fund (a TDF) can best incorporate alternative investments into their portfolios for higher returns and less risk.

Central Issue of the Paper

Can alternative investments improve target date funds (TDFs) and provide a better retirement? Target date funds are a type of defined contribution (DC) plan that automatically shifts allocation from risky assets to safer assets as the employee nears retirement. For many employees this automated asset allocation management increases expected annual income at retirement. Yet defined contribution plans were originally designed to only supplement retirement income and these DC plans, including target date funds, provide a risk-return profile that is usually inferior to that of defined benefit plans with allocations to alternative investments. More and more employees are increasingly reliant on the relatively inferior performance results of DC plans for most of their income retirement. How much can an allocation to alternatives increase expected annual retirement income? What are the obstacles preventing defined contribution plans from including alternative investments as defined benefit plans usually do?

Approach Employed by Paper

Before examining obstacles and solutions to including alternatives in a TDF, the authors first investigate the magnitude of the benefits from doing so.

A baseline glide path without alternatives is first established. It consists of an initial allocation of 91% of total assets categorized as risk-seeking (mostly public equities) with the allocation to the same risky assets dropping gradually over time to 45% at retirement. A hypothetical baseline

career begins at age 25 with an initial income of $51,000 growing at inflation plus 2% until mid-career when only a cost of living adjustment is made. Additional assumptions are made regarding savings rates, employer contributions and a retirement age of 65.

Allowing key variables such as salary growth, inflation and market returns to vary, 5000 simulated paths for the retirement plan's value at age 65 are generated. For each path the ending value is converted into an annuity. With this approach a distribution of annual inflation adjusted retirement incomes provide a baseline range and expected value.

The results of this defined contribution plan simulation contrast greatly with a defined benefit plan where there is no distribution or dispersion in participants' expected annual income at retirement due to market fluctuations. One important way to improve the outcomes of a TDF is to reduce the uncertainty. Due to their low correlation with traditional assets, adding alternative investments is one approach to lowering the risk inherit in a TDF without dragging performance with greater allocations to bonds and cash.

The simulations are repeated in four scenarios: 1) adding private equity and reducing the allocation to public equity, 2) adding core real estate and reducing both risk-enhancing and risk-reducing assets, 3) adding hedge funds in a manner like core real estate, and 4) adding a diversified allocation consisting of private equity, core real estate and hedge funds. In each of the four scenarios, both a conservative allocation (5%) and a moderate allocation (10%) were made to alternatives resulting in a total of eight additional sets of simulations.

Findings of the Paper

As one might expect, adding alternative investments to a target date fund reduces the risk and increases the return. The benefits are greatest when using a diversified allocation including private equity, core real estate and hedge funds. Relative to the benefits provided by any single alternative investment, the added benefits of a diversified alternative allocation are derived from the low correlation among the three alternative investments. Specifically, a baseline inflation adjusted expected annual income of $53,000 increases to $62,000 when a diversified portfolio of alternatives is included. All other metrics improved as well, increasing or decreasing in an optimal direction: the "bad scenario" annual income, the probability of positive assets after 30 years of spending at both 4% and 5% (adjusted for inflation), the ages 65 and 75 expected returns, the age 65 and age 75 "bad scenario" single-year return, the probability of a one-year inflation adjusted return being under 5% or under 10%, as well as the probability of a three-year inflation adjusted return being under 5% or under 10%.

Obstacles to including alternatives in TDFs are likely derived from their historic, but now virtually obsolete purpose as a supplementary (rather than primary) retirement income whereby allocation decisions were made solely by the plan participants. Due to fiduciary rules and possibly a lack of knowledge about the alternative investments, DC plan sponsors may be reluctant to include illiquid, high fee assets often with opaque pricing. Increased governance is likely necessary because of the complexity of the alternative investments: both operational and investment due diligence are important aspects of investing in alternatives. Many of these issues are valid concerns. For example, the benefits noted above rely on the assumption of an ability to actively choose top managers within the alternative asset classes to earn a premium from the spread between top performers and median performers.

The authors emphasize that overcoming obstacles to investing in alternatives are well worth it and demonstrated amply by the TDF simulations. DC sponsors without the expertise or resources necessary to benefit from diversification into alternatives can use an outsourcing model to

effectively manage the challenges involved. Policy guidance may also be necessary to provide many DC plans with a level of comfort needed to innovate into alternatives.

.....