

By Chris Goolgasian, CFA, CPA, CAIA
Institutional Portfolio Manager
Pyramis Global Advisors

SECOND QUARTER 2008

The 21st Century Participant: Investment Implications of the Pension Protection Act of 2006

Across the United States, Defined Contribution (DC) plan sponsors are embracing the opportunity provided by the Pension Protection Act of 2006 (PPA) to implement plan features such as automatic enrollment, Qualified Investment Default Alternatives (QDIA)—including lifecycle investing strategies—and automatic deferral increases, that are intended to simplify the concept of workplace retirement saving for millions of Americans. While we are responding to current product and service needs, Pyramis also is focusing on investment issues that may emerge due to the PPA's potential impacts. Specifically:

- Might asset allocation assumptions need to be realigned with potential impacts of the PPA?
- Will inflation be the next big investment worry for DC plan participants in the post-PPA era?

The Pension Protection Act of 2006: Changing the Game

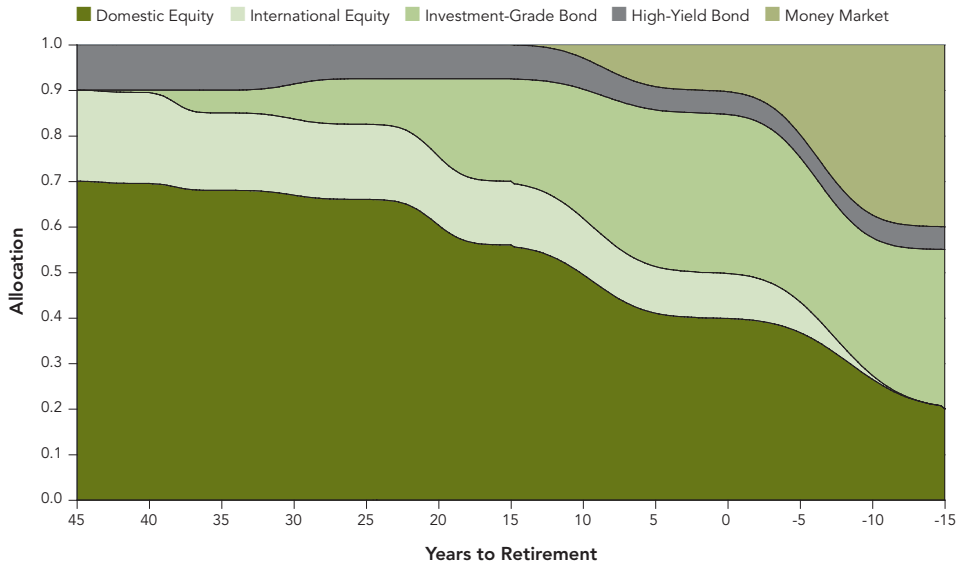
Before answering these questions, it's important to look at how we arrived at this point. We believe the PPA has changed the game for DC plan sponsors and participants. PPA enables plan sponsors to implement plan features that may help participants overcome the negative effects of retirement savings and investment "inertia" to reach their financial goals. As portfolio managers of asset allocation strategies including the Pyramis Lifecycle strategies, Pyramis Global Advisors is acutely aware of the funding status of the average DC participant. In fact, we monitor this funding status along with dozens of other factors like deferral rates, loan activity, wage growth, and withdrawal rate behavior by examining data available in the Fidelity Investments DC recordkeeping database. Fidelity is one of the largest DC recordkeepers in the United States, maintaining data on more than 10 million participants in 13,000 plans. This data is also reported annually in Fidelity Investments'

annual report *Building Futures VIII: How workplace savings are shaping the future of retirement*.¹

Access to data on more than 10 million DC plan participants for whom Fidelity provides recordkeeping services is a significant sample base to examine and helps us evaluate many aspects of our lifecycle investment strategies on an ongoing basis as we seek to assure that they best reflect the actual experience of today's typical 401(k) participant. Our monitoring of DC plan participant data from Fidelity and other sources reveals investment and behavioral issues that can have powerful negative consequences for an individual's retirement savings. For example, from an investment perspective, we know that the average participant invests in 3.8 investment options offered within a defined contribution plan, which may suggest inadequate diversification and, perhaps more significantly, 22% of participants are invested solely in equity investment options, while 13% have no equity exposure at all through their investments in their plans.¹

¹Source: *Building Futures VIII: How workplace savings are shaping the future of retirement*. Fidelity Investments, 2001.

Exhibit 1: The Typical Glide Path or Roll Down May Need Adjustments as the Post-PPA Era Advances



Source: Fidelity Investments.

Current typical glide path configurations may require adjustment in the future in light of changes in investor behaviors and account balances prompted by PPA investment and savings behaviors among DC plan participants

These investment and behavioral issues mean that some participants are significantly underfunded if their primary source of retirement income is DC plan withdrawals. In other words, they are not accumulating sufficient retirement savings to adequately fund their retirement income needs. According to *Building Futures VIII*, the average account balance among all DC plan participants is \$66,500. The average balance for 60- to 64-year-olds is \$117,000. Even when measured longitudinally—reflecting a savings track of 30 years or more in a single DC plan—account balances average \$181,000. Are these account balances—in the absence of any other savings—enough to support adequate income levels in a retirement?

A New Era May Emerge

The goal of the PPA was to put that all in the past. Let's assume that the PPA works as we all hope it will. The PPA can put inertia on the side of participants by automatically enrolling them, directing their investments to an age-appropriate lifecycle investing strategy, and

regularly increasing their deferral rates. As we move forward in this new PPA era, we will be analyzing data for what we term the “21st century participants”: those participants we hope will have benefited most significantly from the PPA.

As a result, plan sponsors should see higher participation rates, age-appropriate investment diversification across their participant bases, and increased savings deferral rates year over year. The payoff could be dramatically improved funding, assuming historical market returns.

These new-era patterns of workplace plan savings behaviors could have important implications from an investment perspective in a number of areas. We are examining potential implications for the typical lifecycle roll down or glide path. A glide path refers to the changing allocation among asset classes within a lifecycle strategy that occurs as the investor ages and approaches the retirement date.

Glide Path Design: Adapting to Changing Conditions

Currently, there are a range of assumptions in the lifecycle industry about the design of a strategy's glide path. These assumptions include the overall balance at retirement, withdrawal rates during retirement, mortality tables, and other savings or sources of income such as Social Security and defined benefit plan payments. The impact of these assumptions is especially evident when assessing equity weightings within the lifecycle strategy at key points in the roll down or glide path. At Pyramis, we refer to them as the 90/50/20 weights or, respectively, the weights during accumulation, retirement, and late phases of a participant's life.

While it's likely that today's young participants will be the first group most impacted by the PPA, it's also likely that given the slope of most glide paths, which is fairly flat initially, they could face the least amount of change to their allocation because most glide paths are aggressively weighted toward equity during the early years.

Because of the typical early aggressiveness in equity weightings, for those participants who are 22 years old today, theoretically, one could wait 10 years to judge the PPA's impact without prejudicing the outcome for this cohort significantly. But, as these participants mature and reach retirement age, we could see the need for more material changes. For example, if PPA “works” and participants are closer to fully funded, it may provide participants with true “optionality” for the first time. In these cases, optionality would mean that an investor could choose either an aggressive or conservative path, and still protect the fully funded status of their accounts. For example, a participant with a fully funded account could have the option to decide, “I've met my target, now I want to lock it in (the conservative route).” Or, the same participant could say, “I've met my target. I now have some room for error, so I'll try to invest for even greater wealth (the more aggressive route).” The latter objective could mean an increased allocation to equity within a lifecycle glide path as retirement approaches.

Ironically, under this scenario, lifecycle investment managers who have maintained aggressively high equity allocations all along—even before the PPA was passed—may have less remodeling to do once the long-term

results of the PPA are seen. However, those higher equity allocations represent inappropriate risks for a portfolio at that stage of the glide path in the near term before the potential benefits of the PPA may be realized.

Preparing for the Next Big Worry

Another issue we are currently analyzing is identifying the next big worry for post-PPA participants. In our view, it may be the damaging impact inflation can have on their growing retirement savings.

The ideal 21st century participant under the PPA is enrolled in the DC plan, investing with an age-appropriate asset allocation or in an age-appropriate lifecycle strategy, and regularly increasing deferrals as salary grows. Market returns are consistent with historical experience and the participant stays fully invested, avoiding the temptations of in-service loans, withdrawals, or contribution holidays. Everything is working beautifully and fully funded status at retirement age is a statistically likely outcome.

What now becomes their biggest worry? Probably protecting their purchasing power. Retirement savers who have accumulated a fully funded asset, might be most worried about maintaining it in real terms. Note: When you're balance is underfunded, the issue of protecting purchasing power is probably not at the top of the priority list, as concerns like working longer, cutting expenses, and longevity risk probably take precedence.

Historically, an answer to hedging inflation has been Treasury-Inflation Protected Securities (TIPS). However, with respect to lifecycle investing, we believe TIPS may be a classic example of “right church, wrong pew.” While TIPS may hedge increases in the Consumer Price Index (U-Urban consumer) perfectly, the CPI may not be the right inflation benchmark when a roll down or glide path is developed to accommodate the asset allocation requirements of disparate cohort age groups. We're not sure the effects of inflation are the same for a 45-year-old, 65-year-old, and 85-year-old.

To test our theories, over the next few months we are organizing a series of Inflation Assessment Roundtables. We will convene industry experts to help us understand and evaluate different inflation measures, how different inflation levels can impact different age cohorts, and potential vehicles that might better

Exhibit 2: Consumer Price Index—Relative Importance for Selected Expenditure Groups²

Expenditure Group*	Populations	
	Urban Consumers CPI-U	Elderly Consumers CPI-E
Food and Beverages	15%	13%
Housing	42%	48%
Apparel	4%	2%
Transportation	18%	14%
Medical Care	6%	11%
Recreation	6%	4%
Education/Communication	6%	3%
Other Goods and Services	4%	4%

*Percentages are rounded to the nearest full percent and, as a result, totals do not add to 100.

Assessing the changes in expenditures of age cohorts and anticipating the impact of inflation on those expenditures is part of anticipating the changing retirement savings needs of the 21st Century DC Plan Participant.

²Source: Consumer Price Index, U.S. Department of the Treasury, December 2005

hedge the various inflation impacts that the 21st century participant can be expected to face.

The PPA could be a major breakthrough for improving the retirement of the average participant by increasing and easing decision making around workplace retirement savings. We also think that, over the long term, the PPA could impact the investment decisions that prudent lifecycle strategy investment managers and plan sponsors should make. The key will be the possession, monitoring, and application of actual participant data into new iterations of asset allocation models and glide path designs for the 21st century participant.

Chris Goolgasian, CFA, CPA, CAIA, is Vice President, Institutional Portfolio Manager, at Pyramis Global Advisors. As of December 31, 2007, Pyramis managed more than \$2.7 billion in assets within Active Core and Index Lifecycle strategies for defined contribution plans at some of America's largest corporations.

About Pyramis Global Advisors

Pyramis Global Advisors, a Fidelity Investments company, is an investment management firm focused on serving corporate and public retirement funds, endowments, foundations, other institutions, and non-U.S. investors. Pyramis offers active and risk-controlled domestic equity, international equity, fixed income, real estate, and alternative disciplines.

For more information about Pyramis and the firm's lifecycle investment strategies as well as asset allocation investment solutions being developed for defined benefit plans, please contact Chris Goolgasian, vice president and institutional portfolio manager, Pyramis Global Advisors, at 401-292-7853.

Information presented herein is for discussion and illustrative purposes only and is not a recommendation or an offer or solicitation to buy or sell any securities. Past performance is no guarantee of future results.

Certain data and other information in this research paper were supplied by outside sources and are believed to be reliable as of the date presented. However, Pyramis has not and cannot verify the accuracy of such information. The information contained herein is subject to change without notice.

Pyramis does not provide legal or tax advice, and you are encouraged to consult your own lawyer, accountant, or other advisor before making any financial decision.

These materials contain statements that are "forward-looking statements," which are based upon certain assumptions of future events. Actual events are difficult to predict and may differ from those assumed. There can be no assurance that forward-looking statements will materialize or that actual returns or results will not be materially different than those presented.

© 2008 FMR LLC All rights reserved.

All trademarks or service marks presented herein belong to FMR LLC or an affiliate, except for third-party trademarks and service marks, which belong to their respective owners. The views expressed herein are those of the individual contributors and do not necessarily represent the views of Pyramis Global Advisors.