BETTER PARTICIPANT OUTCOMES
through in-plan guaranteed retirement income

Christine C. Marcks
President
Prudential Retirement

John J. Kalamarides
Senior Vice President
Full Service Solutions
Prudential Retirement
TABLE OF CONTENTS

Introduction .................................................................................................................. 3

Americans’ View on Retirement Readiness and Guaranteed Lifetime Income ........................................... 4

Main Risks to a Successful Retirement ........................................................................... 6

In-Plan Guaranteed Retirement Income Produces Better Outcomes .................................................. 7

Awareness Changes Perception about Guaranteed Income ..................................................... 10

Target-Date Funds Alone Are Not a Complete Solution ....................................................... 11

Summary and Conclusion .................................................................................................... 12
INTRODUCTION

Over the past 30 years, the move to Defined Contribution (DC) plans has served to reduce many of the costs and fiduciary risks that employers have faced with Defined Benefit (DB) plans. However, this shift has posed serious problems for many employees: principally the loss of a reliable source of lifetime retirement income. It also places the control—and burden—of managing retirement accounts in the hands of employees.

One way financial services companies have addressed the challenges faced by employees is to offer in-plan guaranteed retirement income options. These can be added to a traditional retirement plan to help provide employees with a source of guaranteed lifetime income.

With more than 7,000 plans now offering Prudential’s in-plan guaranteed retirement income option, we conducted two research studies in late 2011 to determine how in-plan guaranteed retirement income options have impacted participant behavior:

- Preparedness for retirement
- Improved retirement outcomes

This paper details the findings.

Research-Based Learnings

This paper references two proprietary research studies:

- Prudential Retirement Plan Participant Survey: As a product manufacturer, we wanted to understand how participants view in-plan guaranteed retirement income options. In December 2011, Prudential Retirement surveyed participants in Prudential Retirement plans with an in-plan guaranteed retirement income option. The 42-question survey was distributed to all participants in the plan, regardless of age. The more than 2,300 responses represented both participants who did, and did not, invest in a Prudential in-plan guaranteed retirement income option.

- Book of Business Analysis: Conducted in mid-2011, this study examined participant outcomes based on their investment in an in-plan guaranteed retirement income option. This study examined more than 20,000 full-service defined contribution participants, age 50 and older, who were in a plan administered by Prudential Retirement. The study centered on how market volatility affected the behavior of both those who invested in a Prudential Retirement in-plan guaranteed retirement income option, and those who did not.

2 Ibid.
AMERICANS’ VIEW ON RETIREMENT READINESS AND GUARANTEED LIFETIME INCOME

Plan participants are less prepared and more anxious about their ability to retire than ever before. As illustrated in Exhibit I:

- Three out of five participants say they’re behind schedule or don’t know where they are in relation to their retirement goal\(^4\)
- Only one in five participants is “extremely or very” confident that their money will last through retirement\(^5\)

This is also a concern for employers. More than 80% doubt that once their employees retire, they will be able to manage their incomes.\(^6\)

---

Exhibit I:

Retirement Confidence and Preparedness of Participants

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>63%</td>
<td>3 out of 5: Claim to be behind schedule or don’t know where they are with respect to their retirement savings</td>
</tr>
<tr>
<td>21%</td>
<td>Only 1 in 5: Are confident in their ability to endure market volatility and retire as planned</td>
</tr>
<tr>
<td>19%</td>
<td>Only 1 in 5: Are confident that they will have enough retirement income to last a lifetime</td>
</tr>
<tr>
<td>71%</td>
<td>Nearly 3 out of 4: Are concerned about retirement income</td>
</tr>
</tbody>
</table>

\(^5\) Ibid

In response to these challenges, many pre-retirees expect to work longer to make up for their retirement savings shortfalls. Nearly three out of four middle-class plan participants between 25 and 69 years old expect to have to work through their retirement years.  

Unfortunately, this expectation could leave many Americans with a false sense of security about their retirement prospects. A recent study by the Employee Benefit Research Institute (EBRI) found that one out of every two retirees left the workforce earlier than planned. Poor health or disability, changes at their company (such as downsizing or closure), or having to care for a spouse or other family member were primary reasons why individuals left the workforce early, as shown in Exhibit II. Only 8% of retirees said they retired early because they thought they could afford it.  

In another recent EBRI study, it was found that nearly 15% of those older than 85 were in poverty, as defined by U.S. Census poverty thresholds, compared with approximately 10.5% of those older than 65.9. Statistics further show that more than one in five (20.9%) single women above age 65 lives in poverty.  

A guaranteed income feature in a DC plan, referred to in this paper as an “in-plan guaranteed retirement income option,” is one potential solution that can help participants address their retirement readiness and confidence challenges, as well as assist them in managing an earlier-than-expected retirement.  

Participants tend to agree. Our research found that three out of four participants felt it was important that their workplace retirement plan include a guaranteed income feature.  

---

* 2012 Retirement Confidence Survey, Employee Benefit Research Institute.  
MAIN RISKS TO A SUCCESSFUL RETIREMENT

Retirement security risks that worry plan participants most include:¹¹

- Market volatility may jeopardize their ability to retire as planned.
- Their current retirement investments won’t provide the growth potential they need.
- Increased longevity means increased costs.
- A protracted illness or disability could deplete their retirement account.
- Social Security benefits will be reduced or even discontinued.
- Even mild inflation will erode a retirement account’s buying power.

In looking further, age was not a factor. Those under 55 years of age listed the same concerns, with the same priority, as all the participants who responded to the survey.¹² And, whether or not a participant was close to retiring, market volatility stood out as the greatest concern.

Those participants invested in an in-plan guaranteed retirement income option reported that they were extremely satisfied, citing such features as upside market potential, retirement income protection during down markets, flexibility, and providing lifetime guaranteed income, as shown in Exhibit III.¹³ One observation that can be made is that investor confidence rises, as three out of five of those surveyed said they were more confident. Furthermore, two out of three plan participants investing in an in-plan guaranteed income option said they would recommend it to a friend.¹⁴

Other research suggests participants place a high value on adding an income guarantee to their retirement strategy. Specifically, 85% of investors aged 55-70 said they value guaranteed monthly income over pursuing above-average market returns.¹⁵

Participants are willing to pay more to receive the benefits of an in-plan guaranteed retirement income option. A 2011 industry study found that more than half of plan participants surveyed said they were willing to pay extra for a guaranteed retirement income stream.¹⁶

Exhibit III:
Participant Satisfaction

Percentage of participants invested in in-plan guaranteed retirement income options who rated these features “excellent” or “very good”


---

¹² Ibid.
¹³ Ibid.
¹⁴ Ibid.
IN-PLAN GUARANTEED RETIREMENT INCOME PRODUCES BETTER OUTCOMES

From 1991 to 2011, the S&P 500 Index has averaged 9.14%. In contrast, the average investor in equity mutual funds earned 3.83%, and the average investor in asset allocation mutual funds earned 2.56%. The same is true for bond investors. During the same period, the Barclays Capital U.S. Aggregate Bond Index returned an average 6.89% per year, while the average investor in fixed-income mutual funds only realized 1.01%.\(^{18}\)

According to DALBAR, the Boston-based research group that has analyzed investor behavior for more than two decades, this is largely because average investors tend to sell securities after a market decline, and then wait until the market recovers before reinvesting. By trying to time the market, investors, in effect, sell low and buy high.

“The psychological factors of behavioral finance help explain why investors often make buy and sell decisions that contradict the best investment practice,” DALBAR asserts. “In order to correct the behaviors, advisors and others need to apply antidotes to the factors that drive the poor choices investors make.”\(^{19}\)

\[2 \text{ OUT OF 3}\]

67%

Said investing in an in-plan guaranteed retirement income option made them more confident in general about their retirement security.

DRIVING BETTER BEHAVIORS

Over the many years that DALBAR has analyzed investor behavior “...at no point in time have average investors remained invested long enough to derive the benefits of a long-term investment strategy.”\(^{20}\)

However, Prudential’s research showed that participants were more likely to “stay the course” when in-plan guaranteed retirement income options were introduced.

---

\(^{18}\) Quantitative Analysis of Investor Behavior, DALBAR, Inc., 2011. Past performance does not guarantee future results. Barclays Capital U.S. Aggregate Bond Index: This index covers the U.S. investment grade fixed rate bond market (measuring bonds with maturities of at least one year), with index components for government and corporate securities, mortgage pass-through securities, and asset backed securities. These major sectors are subdivided into more specific indices that are calculated and reported on a regular basis.


\(^{20}\) Ibid.
Staying the Course

More than half of those polled said investing in an in-plan guaranteed retirement income option made them more prone to weather market volatility, and two out of three said investing in an in-plan guaranteed retirement income option made them more confident in general about their retirement security.21

In examining our book of business, we found that during the down market from 1Q/08–2Q/09, plan participants invested in in-plan guaranteed retirement income were 2.5 times more likely to stay invested in equities than participants without an in-plan guaranteed retirement income option.22 One reason may be because guaranteed income would not decline with market volatility.

This was underscored when, from July 31 to August 8, 2011, the S&P 500 Index lost more than 13%.23 following the downgrade of U.S. debt, yet not one participant invested in in-plan guaranteed retirement income experienced a loss in their Income Base. (The Income Base is a value that is only used to determine a participant’s guaranteed annual lifetime income. It is not an amount that can be withdrawn. Market Value, meanwhile, is similar to an account balance. It fluctuates daily due to market performance, contributions and transfers, and therefore is not guaranteed.)

Diversification

It is generally agreed that a comprehensive diversification strategy can help manage risk. But participants often struggle with how to build such a portfolio tailored to their specific goals. A study by The Wharton School concurred, finding that, “Retirement wealth over a 35-year work life might be reduced by as much as one-fifth due to participant diversification errors.”24

We found similar results within our own book of business:

- Nearly 40% of Prudential Retirement defined contribution plan participants age 50 and older not enrolled in an in-plan guaranteed retirement income option were invested entirely in either equity or fixed-income funds.25

Deferral Rates

Our book of business also showed, as illustrated in Exhibit IV, that providing an in-plan guaranteed retirement income option results in participants contributing more—38% more—than average 401(k) plan participants contribute.26

In addition to the presence of an in-plan guaranteed retirement income option, we found that providing information about retirement income has influenced participant behavior and outcomes. This cause-and-effect relationship is also borne out by Prudential’s Retirement Income Calculator (RIC).

The Retirement Income Calculator is an interactive, online planning tool that helps participants estimate whether they can reach their retirement income goal based on their specific time horizon, rate of deferral and tolerance for risk. Often, participants discover that they have an income shortfall. When a shortfall is projected, the RIC also identifies actions to help close the gap.

Our research found that when there was a shortfall, nearly one in five participants increased their savings rate, by an average of almost 5.0 percentage points.27

During the down market from 1Q/08–2Q/09, plan participants invested in in-plan guaranteed retirement income were 2.5 times more likely to stay invested in equities than participants without an in-plan guaranteed retirement income option.

22 Study of nearly 20,000 Prudential Retirement full-service Defined Contribution participants, age 50 and older, researched during the period of Q1/2008 through Q2/2009, Prudential Retirement. Statistic refers to IncomeFlex Select due to the start date of the research. IncomeFlex Select is no longer available for new clients.
23 Bloomberg Finance Report, 10/11/2011. Statistic is inclusive of IncomeFlex Target and Select. IncomeFlex Select is no longer available to new clients. The S&P 500® is a registered trademark of The McGraw-Hill Companies, Inc. and is an unmanaged index of 500 common stocks primarily traded on the New York Stock Exchange, weighted by market capitalization. Index performance includes the reinvestment of dividends and capital gains.
26 Industry average contribution rate 7.30% versus 10.13% for Prudential IncomeFlex participants, Aon Hewitt, 2010, Prudential Retirement, 2011. Study of nearly 20,000 Prudential Retirement full-service Defined Contribution participants, age 50 and older, researched during the period December 2007 through April 2011. Statistic is inclusive of IncomeFlex Select due to the start date of the research. IncomeFlex Select is no longer available for new clients.
Exhibit IV:
Providing an in-plan guaranteed retirement income option correlates with participants contributing more—38% more—than average 401(k) plan participants contribute.

![Average contribution to an in-plan guaranteed income option.](10.1%)

![Average contribution to a defined contribution plan.](7.3%)

Exhibit V:
Even with a “safe withdrawal rate” of 4%, nearly half of participants will either run out of money or need to reduce their spending in retirement.
Source: Prudential Retirement, 2010. Monte Carlo simulation of 2,000 market return scenarios.

SECURING LIFETIME INCOME

To determine the effect that having a guarantee can have on a participant’s retirement strategy, we ran 2,000 market return scenarios using a hypothetical 55-year-old investor with $100,000 in a retirement account. We assumed annual contributions of $7,200 until retiring at age 65, followed by a 30-year retirement.

Based on what many in the financial services industry consider to be a “safe withdrawal rate” of 4%, our analysis, illustrated in Exhibit V, found that 17% will run out of money by age 95, and another 29% will need to scale back their spending to avoid running out. In other words, nearly half of the hypothetical scenarios will either run out of money in retirement, or need to scale back their retirement lifestyle by spending less.28

When the time comes to retire, we found that those not invested in an in-plan guaranteed retirement income option actually withdraw an average of 7% to 15% of their market value from their Prudential Retirement plan each year.29 This willingness to exceed what many consider a “safe rate” increases a participant’s chances for negative outcomes.

However, in-plan guaranteed retirement income options eliminate the need to wrestle with how much to withdraw. Even if their balances fell to zero, participants would not need to worry about outliving, or reducing, their annual income.30

28 Prudential Retirement, 2010. Monte Carlo simulation of 2,000 market return scenarios.
30 Note: Excess Prudential IncomeFlex® withdrawals during a withdrawal period would permanently reduce the Lifetime Annual Withdrawal Amount available for subsequent withdrawal periods. If excess withdrawals reduce the Income Base to zero, Prudential would no longer be obligated to make these withdrawals available.
AWARENESS CHANGES PERCEPTION ABOUT GUARANTEED INCOME

Of course, for a plan participant to invest in an in-plan guaranteed income product, a plan participant must be aware that one is available. Our research found that even when guaranteed income products were available, awareness was low.

Nearly half (46%) of eligible plan participants who had not invested in an in-plan guaranteed retirement income option said they simply didn’t know one was available.31 Once informed (through this research survey), perceptions changed significantly.32

- Nearly half said they were likely to consider enrolling within the next year.
- Nearly three out of four said guaranteed lifetime retirement income would make them more confident about staying invested in stocks and bonds during market volatility.
- More than nine out of ten said guaranteed lifetime income would be a valuable addition to their plan.

This suggests that although interest in guaranteed income is keen, acceptance may be tempered by a lack of awareness or simple inertia among participants.

32 Ibid.

Nearly half of eligible plan participants who had not invested in an in-plan guaranteed retirement income option said they simply didn’t know one was available.
TARGET-DATE FUNDS ALONE ARE NOT A COMPLETE SOLUTION

Following passage of The Pension Protection Act of 2006, target-date funds have become a popular investment option, with nearly 40% of defined contribution assets and the majority of flows projected to be captured by 2015. However, target-date funds alone are not a complete solution for those seeking guaranteed lifetime income in retirement.

A recent study demonstrated that many investors in target-date funds do not understand their investment. When investors were asked whether they thought their target-date fund provided guaranteed income, 51% said “yes,” while another 19% were “not sure,” suggesting a mismatch between product features and participant expectations, as shown in Exhibit VI.

In addition, target-date funds can lose value. For example, during the 2008 financial crisis, target-date funds designed for individuals retiring in 2010 lost an average of 23% of their value. As recently as 2011, eight of the nine target-date fund categories tracked by Morningstar lost money in the year, from -0.2% for funds with a target-date year of 2020, to -4.1% for funds with a target-date year of 2050.

Valuable as they may be, target-date funds alone do not completely address retirement investors’ main concerns: securing guaranteed retirement income and protecting that income from market volatility.

This presents a potential opportunity to combine the diversification features of target-date funds or other asset allocation vehicles with the stability of in-plan guaranteed retirement income options.

Exhibit VI:
Do target-date funds provide guaranteed retirement income?

Source: “What Workers Get—And Don’t Get—About Target-Date Funds,” AllianceBernstein, 2011.

Only 30% know that target-date funds do not provide guaranteed income

51% Yes
19% Not Sure
30% No

One opportunity to consider is to combine one of the most compelling advantages of target-date funds—simplified, age-based asset allocation—with the benefits of in-plan guaranteed retirement income options—the security of lifetime retirement income that is unaffected by market volatility.

33 “Winning in the Defined Contribution Market of 2015,” McKinsey & Company, 2010. The target date of the fund typically corresponds with the approximate date the investor expects to retire or begins withdrawals. Target-date funds become more conservative as the target date approaches by lessening equity exposure and increasing exposure to fixed income type investments. Principal value is never guaranteed, including at the target date.
34 “What Workers Get—And Don’t Get—About Target-Date Funds,” AllianceBernstein, 2011.
36 That compares to the Standard & Poor’s 500 index, which produced a total return of 2.1%, and bonds, which returned 7.8%. Source: “Target Date Funds Stick Investors with Losses in a Year When Stocks Held Steady, Bonds Rise,” Daily Reporter, January 19, 2012 (“Bonds” are represented by the Barclays Capital U.S. Aggregate Bond index, 2011.)
With the decline of DB plans, many Americans lost a critical component to a successful retirement: guaranteed lifetime income. Through our research, we wanted to determine whether the introduction of in-plan guaranteed retirement income options:

- Made participants feel more prepared for retirement
- Produced better retirement outcomes

**OUR RESEARCH SUGGESTS “YES” TO BOTH. IN ADDITION, WE FOUND:**

**Americans Lack Confidence in Their Retirement Readiness**
Participants are neither confident about nor adequately prepared for retirement. They are particularly concerned about running out of money, and protecting the money they do have from future market volatility.

**Americans Are Concerned About a Variety of Retirement Risks**
Chief among their concerns are the risks associated with market volatility, followed by investment performance, longevity risk, healthcare costs, inflation and the challenges facing Social Security.

**Guarantees Produce Better Outcomes**
When in-plan guaranteed retirement income options are added to defined contribution plans:

- Participant satisfaction increases
- Participant confidence increases
- Participant outcomes improve due to better long-term investing behaviors

Our research found that plan participants with in-plan guaranteed retirement income options were more inclined to stay invested during market turmoil, were better diversified and contributed more than participants without guaranteed retirement income.

**Awareness Increases Interest in In-Plan Guaranteed Retirement Income Options**
Nearly half of those who had not invested in an in-plan guaranteed retirement income option said it was simply because they were unaware one was available. Once informed, perceptions about and interest in guaranteed retirement income was high.

**Target-Date Funds Alone Are Not a Complete Retirement Income Solution**
When introduced in the 1990s, target-date funds were an important step in bringing diversification to Americans investing for retirement. However, target-date funds alone do not provide a complete retirement income solution, despite participant perceptions. Account values can decline due to market volatility.

---

SEEKING A BETTER RETIREMENT OUTCOME

One opportunity to consider is to combine one of the most compelling advantages of target-date funds—simplified, age-based asset allocation—with the benefits of in-plan guaranteed retirement income options—the security of lifetime retirement income that is unaffected by market volatility.

Additionally, this combination of a target-date investment with a guaranteed retirement income feature could be considered a qualified default investment alternative (QDIA), subject to a participant “opt-out” election.

Participants we surveyed who already invest in an in-plan guaranteed retirement income option believe this is a good option for their colleagues. More than three out of five supported “…a guaranteed retirement income option as part of the default investment for employees who are automatically enrolled in their workplace retirement plans,” provided they can opt-out if they change their minds.  

When DB plans were the primary retirement income source, they provided certainty. Employees who qualified could count on a guaranteed income for life. Providing an in-plan guaranteed retirement income option as a plan’s QDIA could help re-introduce an element of certainty and restore a sense of confidence in retirement plan strategies.

It could also provide defined contribution plans with one of the most coveted features of defined benefit plans: income that is guaranteed to last a lifetime, no matter how long that lifetime lasts.

---

Christine C. Marcks  
President  
Prudential Retirement

John J. Kalamarides  
Senior Vice President  
Full Service Solutions  
Prudential Retirement

---

In providing this information Prudential Retirement is not undertaking to provide impartial investment advice, or to give advice in a fiduciary capacity. Prudential Retirement may benefit from advisory and other fees paid to it or its affiliates for managing, selling, or settling of the Prudential mutual funds and other investment products or securities offered by Prudential Retirement or its affiliates. Investment vehicles sponsored or managed by a Prudential Retirement affiliate generate more revenue for the Prudential enterprise than non-proprietary investment vehicles. Prudential Retirement’s sales personnel generally receive greater compensation if plan assets are invested in proprietary investment vehicles. Prudential Retirement may benefit directly from the difference between investment earnings of Prudential Retirement’s stable value funds and the amount credited to deposits in those funds. Prudential Retirement may also benefit from broker-dealer or other entities’ co-sponsorship of Prudential conferences.

This information should not be considered an offer or solicitation of securities or insurance products or services. No offer is intended nor should this material be construed as an offer of any product.

Guarantees are based on the claims-paying ability of the insurance company and are subject to certain limitations, terms and conditions.

Prudential IncomeFlex Target Funds are separate accounts under group variable annuity contracts issued by Prudential Retirement Insurance and Annuity Company (PRIAC), Hartford, CT. PRIAC is a Prudential Financial company.

© 2017 Prudential Financial, Inc. and its related entities. Prudential, the Prudential logo, the Rock symbol and Bring Your Challenges are service marks of Prudential Financial, Inc. and its related entities, registered in many jurisdictions worldwide.

0227397-00005-00

To speak with a retirement plan specialist about in-plan guaranteed lifetime income solutions, please call (800) 353-2847 or visit incomechallenges.com.