

Redefining Defined Contribution Plans To Enhance Retirement Security

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Introduction

While almost all investors were affected by the market collapse last year, Baby Boomers approaching or in their first years of retirement were among the most seriously impacted.

Near retirees, especially those without access to other sources of retirement income such as a defined benefit (DB) plan, now find themselves having to delay retirement. Retirees relying heavily on income from defined contribution (DC) plan assets that have been sharply reduced are looking at ways to reduce their living expenses.

Legislators, plan sponsors, and plan participants are questioning the long-term viability of the DC system, and whether DC plans are equipped to serve as the primary retirement savings vehicles for most Americans. These doubts are natural in light of the losses sustained; total assets in DC plans declined by over \$1 trillion during 2008.¹

Although the market collapse has increased the urgency of efforts to reform DC plans, it is important to note that the shortcomings of these plans existed long before the current financial crisis, and will persist after an eventual market recovery. Most participants are not saving enough, retirement income is not protected from adverse market conditions, and participants can exhaust their assets during retirement. Moreover, too many people cannot participate in DC plans because nearly half of all private sector employers, particularly those with 100 employees or fewer, did not offer a DC plan as recently as 2006.²

Key shortcomings of today's DC plans that redefined plans must address:

- Participants are not saving enough.
- Retirement income is not protected from adverse markets.
- Participants can exhaust their assets during retirement.
- Too many individuals still do not participate in a DC plan.

However, these drawbacks do not mean that DC plans cannot help Americans achieve a secure retirement. Many Americans have embraced DC plans and are using these plans as their primary retirement savings vehicle. The importance of DC plans will only grow as more private-sector employers shift their focus from DB to DC plans, and as the federal government's ability to support Americans' retirements becomes more constrained by fiscal realities. What is imperative is to redefine DC plans to address their current limitations by incorporating three elements into DC plans:

1. Built-in risk protection to protect participants' future retirement income against adverse markets in the years just before retirement, and to ensure that participants cannot exhaust their source of retirement income during retirement.
2. Autopilot retirement planning that provides participants with an automated and pre-defined path from their first day of employment through their retirement that maximizes their chances of enjoying a secure retirement.
3. Streamlined plan operations that automate and reduce the cost of plan administration, making DC plans more affordable for small firms.

This paper describes how and why DC plans became so important in ensuring retirement security, reviews the benefits that today's DC plans offer, proposes specific enhancements to DC plans, and discusses the benefits of such enhancements.

¹ Investment Company Institute, "2009 Investment Company Fact Book," page 91.

² U.S. Bureau of Labor Statistics, "Access, Participation, and Take-up Rates in Defined Contribution Retirement Plans among Workers in Private Industry, 2006," December 27, 2006.



DC Plans Are Increasingly Important in Ensuring Retirement Security

The growth of DC plans accelerated with the introduction of 401(k) plans in the early 1980s. Participants in these plans can decide how much to contribute, select investment options, access their assets before retirement by paying taxes and penalties, and withdraw their assets during retirement as they choose.

In contrast, before the widespread acceptance of DC plans, employers that provided retirement benefits tended to sponsor DB plans in which the employer invested the assets on the behalf of participants, and provided funds at the time of retirement, usually in the form of a guaranteed paycheck for life.

DC plans were initially envisioned as an additional “leg” to supplement the primary sources of retirement security for most Americans: Social Security and Medicare benefits provided by the government, and DB plans and healthcare benefits provided by employers. Before 1980, an estimated 54%³ of private sector employees had access to a DB plan, and more than 80% of medium and large employers offered some form of retiree health insurance.⁴ Today, only 22% of private employees have access to a DB plan,⁵ and only 13% of private-sector firms offer retiree healthcare benefits.⁶

DC savings are an especially critical source of retirement income because only 51% of workers have any personal savings outside their retirement savings.⁷ As a result, many retirees will need to rely heavily on DC assets to supplement their Social Security benefits, which only replace about 40% of the average retiree’s pre-retirement income.⁸ In addition, Medicare covers little more than half of the cost of healthcare services for Medicare beneficiaries.⁹ The fiscal challenges faced by the federal government make it highly unlikely that government will be able to increase benefits in the future.

Over the years, legislators have sought to increase participation in DC plans. The passage of the Pension Protection Act (PPA) in 2006 enabled plan sponsors to automatically enroll participants, to automatically increase participant contributions over time, and to default participants’ contributions into sponsor-chosen investment vehicles.

³ Estimated based on Employee Benefit Research Institute data.

⁴ Mulvey, Janemarie, and Nyce, Steven, “Strategies to Retain Older Workers,” Pension Research Council Working Paper, 2004, page 10.

⁵ U.S. Bureau of Labor Statistics, “Defined Contribution Plans More Common than Defined Benefit Plans,” Program Perspectives, Issue 3, March 2009, page 3.

⁶ Employee Benefit Research Institute, “Health Insurance: Trends in Availability and Cost,” Fast Facts, January 2008.

⁷ Employee Benefit Research Institute, “The 2008 Retirement Confidence Survey,” April 2008, page 12.

⁸ Social Security Administration, “The Future of Social Security,” 2008, page 7.

⁹ Fronstin, Paul, et al., Employee Benefit Research Institute, “Savings Needed to Fund Health Insurance and Health Care Expenses in Retirement: Findings from a Simulation Model,” Issue Brief 317, May 2008, page 4.

The Plan Sponsor Has a Critical Role to Play in Any Efforts to Redefine DC plans

Although individuals are the ones relying more than ever on DC plans to secure their retirements, it is plan sponsors who will ultimately have to lead any efforts to strengthen these plans. Government can introduce new regulations for DC plans, but it is sponsors who have to redesign their plans to take advantage of new regulations, such as the safe harbors provided by the PPA to automatically enroll employees in DC plans.

Sponsors are increasingly aware that managing DC plans effectively poses a growing challenge to their organizations. In a recent survey of finance executives, 63% said that they were more concerned than they were a year ago about employees who may be financially unable to retire due to the recent performance of DC plans, and therefore may reluctantly stay in a position that they would prefer to retire from. In addition, 59% of the surveyed executives said they are also more concerned about the fiduciary risks associated with their DC plans.¹⁰

These issues demonstrate that it is important to strengthen DC plans not just to provide retirement security for participants, but also to help sponsors manage and protect their organizations. However, sponsors are increasingly limited in their ability to allocate additional resources to strengthen DC plans while other benefit programs, such as health insurance or defined benefit plans, consume significant resources and management attention.

Any attempt to strengthen DC plans must take the needs of the sponsor into account. Redefining DC plans offers an opportunity to create a true win-win for the sponsor and the participant because redefined plans provide tangible benefits to the plan sponsor as well. Redefined DC plans build in risk protection that helps mitigate fiduciary risks during future market downturns. Expanding the role of autopilot retirement planning through redefined DC plans reduces the amount of resources that sponsors must invest in encouraging appropriate participant behavior. Finally, redefining DC plans by streamlining plan operations lowers costs and administrative overhead for the sponsor.

¹⁰ CFO Research Services/Prudential, "Managing Retirement Benefits Amid Capital Market Disruption," August 2009, pages 6-7.



DC Plans Provide a Strong Foundation for a Better Retirement System

With so many questions and concerns about the sharp decrease in assets in DC plans in 2008, it is easy to forget that DC plans have been playing an increasingly important role in retirement planning. Even in their current state, DC plans offer a robust foundation on which to build a better retirement system.

Large Existing Base

More than 700,000 employers¹¹ in the private sector offer their employees access to a DC plan, and, as of 2006, more than three quarters (79%) of their employees participated;¹² access to DC plans is more prevalent across larger companies with more than a 100 employees. The PPA is driving employee participation in DC plans higher by providing safe harbors for employers who automatically enroll their employees in DC plans. High levels of adoption suggest that a large number of employers are already familiar with DC plans and could quickly and cost-effectively implement potential enhancements, and that a large number of employees are comfortable with the plans and are likely to welcome improvements.

Institutional Oversight

DC plans provide participants with two important and unique safeguards compared to retirement savings vehicles available to individuals, such as Individual Retirement Accounts (IRAs). First, DC plans are designed and managed by institutions. As institutional buyers, employers have access to investment professionals that serve institutional investors, the resources to carefully choose investment options, and the ability to negotiate fees that individuals would not be able to negotiate on their own. Second, DC plans are overseen by fiduciaries that have an obligation to place the participants' interests first in making any decisions about the plan.

Worksite Delivery

Employees benefit in many ways from having DC plans delivered on-the-job. The worksite provides an opportunity to educate employees about retirement planning at key junctures in their lives, such as at the beginning or end of an individual's career. Moreover, the delivery of retirement

benefits through the worksite mirrors the successful delivery of other benefits such as disability insurance. More than 50 million workers are currently covered by disability insurance provided at the workplace, while only three million individuals have disability insurance through personal policies.¹³ This demonstrates the power of the workplace in driving the adoption of critical financial solutions that many individuals may neglect to adopt on their own.

Finally, delivering DC plans via the worksite helps employers attract and retain employees. A recent survey of graduating college seniors across the country asked what employee benefits they considered most important in choosing a job; 401(k) plans ranked third, ahead of life insurance, pension plans, and bonuses and commissions.¹⁴

Beginnings of an Autopilot Approach to Retirement Planning

The PPA enables sponsors to automatically enroll participants in a DC plan, routinely increase their contributions over time, and default participants into certain investment vehicles, such as target-date funds or managed accounts. Autopilot features have already been adopted by some plan sponsors, and this provides a key building block for sponsors to implement DC plans that place participants on a path towards a more secure retirement by making many, if not all, retirement planning decisions on behalf of the participant. Simultaneously, automating so much of the process reduces costs and simplifies decision-making for the employer.

Source of Funding for Medical and Other Needs

DC plans provide retirees with a source of assets that they can tap if needed to fund medical or other expenses during retirement. This distinguishes DC plans from other sources of retirement security, such as Social Security or DB plans, that provide retirees with a "retirement paycheck," but not immediate access to a pool of assets to pay for unexpected expenses. In particular, many retirees will face significant medical expenses because of the rapidly growing cost of healthcare and the significant out-of-pocket payments potentially required to supplement Medicare coverage.

¹¹ Includes 403(b) plans; excludes 457 plans. Estimates from Cerulli Associates, "Cerulli Quantitative Update: Retirement Markets 2008," pages 35, 204.

¹² U.S. Bureau of Labor Statistics, "Access, Participation, and Take-up Rates in Defined Contribution Retirement Plans among Workers in Private Industry, 2006," December 27, 2006.

¹³ "Most Disability Insurance Claimants Are Satisfied With Their Policies," AHIP Coverage, America's Health Insurance Plans, July-August 2008.

¹⁴ "2008 National Association of Colleges and Employers Graduating Student Survey," NACE Journal, May 2008.

There is an Opportunity to Redefine DC Plans to Strengthen Retirement Security

Although DC plans have accomplished a great deal in a relatively short time, there are still a number of issues that need to be addressed:

- Participants are not saving enough. In 2007, the average 401(k) account balance was approximately \$65,000, and the median account balance was approximately \$19,000.¹⁵ Average account balances for older participants are higher, but still not sufficient to generate significant retirement income.
- Retirement income is not protected from poor market conditions, as demonstrated by the recent market downturn. Market declines reduce the amount of retirement income a retiree can draw from their assets. Near-retirees are also vulnerable, as significant asset losses right before retirement impacts an individual's future retirement income.
- Participants can outlive their retirement assets. Increased longevity means participants must "over-save" to ensure that their assets will last for an uncertain and potentially decades-long time horizon. A healthy 65-year-old retiree can expect to live, on average, another 19 years. Many, of course, will live longer.¹⁶
- Too many people still do not participate in an employer sponsored retirement plan, since nearly half of all private sector employers, particularly smaller firms with less than 100 employees, do not offer a plan.¹⁷ In 2006, 46% of private sector workers did not have access to a DC plan.

Redefined DC plans address these concerns by enhancing traditional DC plans with several essential elements. These include built-in risk protection to protect near-retirees and retirees from market and longevity risks, autopilot retirement planning to guide participants from the first day of their career through retirement, and streamlined

plan operations to reduce plan costs, support portability between DC plans, and facilitate the adoption of DC plans by employers.

Built-in Risk Protection

The events of the last year have clearly demonstrated the risks that participants in today's DC plans face. The first major risk is the possibility of losing a significant portion of one's retirement assets right before retirement. In 2008, individuals invested in target-date funds designed for those retiring as soon as 2010 lost as much as 41% of their assets.¹⁸ While the recent market downturn is severe, it is not unprecedented. There have been multiple periods over the last 80 years when a typical target date fund allocation of 60% stocks and 40% bonds¹⁹ declined over a five-year period—a period of time which represents the final stage of an individual's investing horizon before retirement. In fact, since 1928, there was an 8% chance that this situation would occur.²⁰

Individuals also face the risk of simply outliving their assets during retirement. For example, there is a 58% chance that one member of a married couple, both healthy at age 65, will live to age 90, and a 30% chance that one will live to age 95.²¹ Today's DC participants must accumulate sufficient assets, and then draw down these assets prudently to fund a retirement that could span decades.

¹⁵ Employee Benefit Research Institute, "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2007," December 2008, pages 1, 12.

¹⁶ Center for Disease Control and Prevention, "National Vital Statistics Reports," Vol. 56, No. 10, Table 7, April 28, 2008.

¹⁷ U.S. Bureau of Labor Statistics, "Access, Participation, and Take-up Rates in Defined Contribution Retirement Plans among Workers in Private Industry, 2006," December 27, 2006.

¹⁸ Ibbotson Associates, "Ibbotson Target Maturity Report: Fourth Quarter 2008," 2009, page 5.

¹⁹ The typical glide path is the average of glide paths of AllianceBernstein, Fidelity, Vanguard, and T. Rowe Price in 2007 as created by Ernst & Young for "Retirement Income: The Value of Guarantees," Prudential, 2008.

²⁰ Prudential calculations.

²¹ Annuity 2000 Basic Mortality Table, The Society of Actuaries.



DB plans do protect participants against market risk and longevity risk. Similarly, DC plans should provide participants with two specific types of protection:

- Market downside protection that protects future retirement income from market declines. This type of protection is offered by new solutions which enable a participant to lock-in a future guaranteed level of annual retirement income based on the market value of their retirement assets several years before retirement.
- Longevity protection that ensures a participant will have access to a steady stream of income during retirement, no matter how long the participant lives or how the markets perform. Longevity protection prevents an individual from having to “over-save” for retirement because of the uncertainty of how long he or she will live in retirement. This protection is available from new solutions, such as income guarantees, as well as traditional products, such as immediate income annuities.

Sponsors want to protect participants from market risk and longevity risk, but want to do so in a way that does not transfer these risks to them. As a result, redefined DC plans should transfer these risks from participants to a third party, such as a financial services firm, and not to the DC plan sponsor.

Autopilot Retirement Planning

Saving adequately for retirement, investing appropriately, and systematically drawing down retirement savings to fund a possibly decades long retirement are difficult challenges for even the most financially savvy individual. A mounting body of evidence indicates that most individuals lack the time and knowledge to make decisions about their retirement savings and investments.

The academic community has documented a low level of financial literacy in the U.S, with the majority of the population unfamiliar with financial concepts such as the

compounding of interest and the effects of inflation. A recent survey showed that only 44% of workers have tried to calculate how much money they need to save for a comfortable retirement.²² Retirement planning is a strong predictor of retirement wealth, and the lack of planning can be traced back to the lack of financial literacy.²³

The PPA recognized this issue and took an important step towards autopilot DC plans by enabling sponsors to automatically enroll participants, automatically escalate their contributions over time, and default participants into certain investment vehicles. There is already compelling evidence that the autopilot approach is effective because participants are willing to follow a defined path if it is easy and “done for them.”

For example, DC plans that have adopted auto-enrollment have been able to raise participation of new hires from an average of 78% to 90%.²⁴ Moreover, 67% of new hires in automatic enrollment plans allocate their entire contribution to the default investment, versus 21% of new hires who are not in automatic enrollment plans.²⁵ Seven in 10 older workers wish, in hindsight, that their plans had offered features such as automatic enrollment, automatic contribution acceleration, automatic age and risk-based investment rebalancing, and guaranteed lifetime income upon retirement.²⁶

Redefined DC plans extend autopilot features into an individual’s retirement years by automatically enrolling participants in protection features, such as products that generate a guaranteed stream of income from an individual’s DC assets during retirement.

While sponsors may have taken pride in the past in the flexibility and breadth of choice offered to participants in their DC plans, future DC plans are likely to be judged instead on the basis of how well they place participants on a pre-defined and optimal path towards retirement security.

²² Employee Benefit Research Institute, “The 2009 Retirement Confidence Survey,” April 2009.

²³ Lusardi, Annamaria, and Mitchell, Olivia, “Financial Literacy, Retirement Planning and Retirement Wellbeing: Lessons and Research Gaps,” March 2009.

²⁴ Hewitt Associates, “Trends & Experience in 401(k) Plans,” 2007, and “Automatic Enrollment Boosts Participation and Retirement Savings,” 2007.

²⁵ Vanguard Center for Retirement Research, “Measuring the Effectiveness of Automatic Enrollment,” December 2007, page 7.

²⁶ Prudential Retirement, “Fifth Annual Workplace Report on Retirement Planning,” 2006.

Streamlined Plan Operations

Plan processes must be streamlined and automated as much as possible to reduce costs and administrative overhead. Fortunately, autopilot plans make this possible by reducing the need for highly customized offerings for each participant. Web technologies and the adoption of safe harbor plan policies also facilitate the migration to a highly automated plan.

Research has shown that plan sponsors value automation. Cost savings and greater efficiency are the most important reasons, followed by improved quality of information and error reduction. Today, almost 70% of plan sponsors say that reducing benefit costs is an important or very important objective, up from 63% in 2006.²⁷

Redefined DC plans streamline plan administration:

- Participants can be automatically enrolled in plans.
- Participants can view account balances and conduct transactions online.
- Advice and education can be delivered online.

- Seamless portability of accounts between plans is facilitated.
- Policies for loans and withdrawals leverage existing safe harbor guidelines to enable sponsors to electronically process loan applications.

These improvements will bring DC plans closer to being truly paperless, and increase the adoption of DC plans by employers that are concerned about the cost or complexity associated with DC plans.

Redefined DC plans mitigate the shortcomings of today's DC plans in multiple ways as shown in [Exhibit 1](#) below.

Exhibit 1: Benefits of Redefined DC Plans			
Shortcomings of Traditional DC Plans	Benefits of Redefined DC Plans		
	Built-in risk protection	Autopilot retirement planning	Streamlined plan operations
Insufficient savings	Longevity protection maximizes a given level of savings	Automatically sets participants on a path with sufficient contributions	Lowers plan costs to potentially increase assets in the long run
Lack of protection from adverse markets	Market downside protection protects future retirement income from adverse markets	Automatically defaults participants into risk protection features	
Risk of outliving assets	Longevity protection ensures participant cannot outlive assets	Automatically defaults participants into risk protection features	
Low participation	Market downside protection encourages savings	Automatically enrolls participants	Encourages adoption of plans by employers concerned about cost and complexity

²⁷ Prudential Group Insurance, "Study of Employee Benefits: 2008 & Beyond," page 48.



A Case Study: Redefined DC Plans Can Help Participants

The most important test of any improvements to DC plans is whether the enhancements will lead to measurably better outcomes for participants. Will participants have a better chance of retiring with sufficient retirement assets? Will they have a greater level of assurance that their retirement assets will provide income throughout their retirement?

To determine the answers, Ernst & Young used their proprietary Retirement Analytics™ model to analyze and compare the retirement outcomes in a traditional DC plan to those of a redefined DC plan.

Implementing a Redefined DC Plan

Redefined plans build in risk protection. For the purposes of this analysis, the redefined plan is assumed to incorporate an income guarantee to protect against market and longevity risks. An income guarantee is integrated with the existing investments in a DC plan, such as a target-date fund, and is usually activated five to 10 years before retirement. Income guarantees provide three key benefits:

- The income guarantee locks in a level of retirement income for the participant based on the level of assets that the participant has accumulated at the time the guarantee is activated. The guaranteed level of annual income is based on a certain percentage, such as 5%, of the retirement assets the participant has accumulated at the time the guarantee is activated. Once locked in, the guaranteed level of retirement income cannot decline, regardless of market conditions. The guaranteed level of retirement income can only decline if the participant withdraws assets from his/her DC account prior to retirement or withdrawals exceed the guaranteed amount of annual income after retirement.
- The guaranteed level of income can increase before retirement if the participant's retirement assets appreciate and/or if the participant makes further contributions to the DC plan.
- Upon retirement, the income guarantee provides the participant with a guaranteed level of income each year, regardless of how the markets perform or how long the participant lives.

Traditional annuities are also an option for providing built-in risk protection within DC plans. An immediate annuity, bought at the time a participant retires, would provide the participant with a guaranteed stream of retirement income for as long as the participant lives. However, for the purposes of this analysis, an income guarantee was analyzed because it provides two unique benefits.

First, an income guarantee leaves control of the assets with the participant at all times—traditional annuities require an individual to cede their assets to an insurer in return for a stream of guaranteed income. Retaining control of one's assets is especially beneficial for retirees who need to access their retirement assets during times of medical or other emergencies. Taking withdrawals that exceed the guaranteed level of annual income will generally reduce the future level of guaranteed income; however, an income guarantee enables participants to determine if this trade-off is appropriate for them. Second, an income guarantee enables the participant to continue to remain invested in the equity markets and benefit from any market appreciation.

The tradeoff against these two benefits is that traditional annuities may provide a higher initial level of retirement income, depending in part on interest rates and the annuity buyer's age at the time the annuity is purchased.

In addition to including an income guarantee, it was assumed that the redefined plan has an automatic initial contribution rate of 4% and that the contribution rate would automatically increase by one percentage point each year up to 10%. There are several reasons for this default strategy:

- The initial contribution rate was set at a slightly higher level than the most common default contribution across plan sponsors today, which is 3%.²⁸ It was set slightly higher because many participants, especially older ones, need to save more, particularly to rebuild retirement savings after the recent market downturn.
- The initial contribution rate was not set higher than 4% because doing so increases the risk that some participants may opt-out completely.

²⁸ Fidelity Investments, "Fidelity's 401(k) Data Show Auto Enrollment Has Biggest Impact on Younger, Lower-Paid Workers," July 14, 2009.

- The default contribution rate increases each year to gradually increase participants' contributions to a high enough level to help generate sufficient retirement savings. Gradually increasing the contribution rate reduces the likelihood that a participant will opt-out, because the higher contributions can often be funded entirely out of annual salary increases. Therefore, each year, participants' "take-home" paychecks, after removing taxes and retirement contributions, will generally not decrease even though the contribution rate is increasing.

The redefined plan also assumes that plan sponsors advise participants to make an additional \$5,000 catch-up contribution each year after age 50, and that the participants do, in fact, make this contribution. The goal of this policy is to encourage older participants to review their financial position as they near retirement, and to begin making higher contributions if they have

not saved sufficiently within their DC plan or outside the plan. The catch-up contributions provide a valuable mechanism for older participants to accelerate their retirement savings based on their financial situation.

Meet Sarah Smith

The hypothetical participant for the comparison is Sarah Smith. Sarah is single and began participating in her company's DC plan when she was 25. She is planning to work until age 65, when she will retire. Sarah's starting salary is \$30,000 and grows at the rate of inflation plus one percent annually. Sarah's employer matches 50% of her contributions to the DC plan each year up to a maximum of 6% of her salary. Sarah's income at retirement, including Social Security benefits, is set at a level to replace 63% of her pre-retirement income.²⁹

Exhibit 2: Comparison of Traditional and Redefined DC Plans

	Plan Characteristic	Traditional DC Plan	Redefined DC Plan
Built-in risk protection	<ul style="list-style-type: none"> • Protection against: <ul style="list-style-type: none"> – Adverse market conditions immediately before retirement – Outliving assets during retirement 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Income guarantee that provides: <ul style="list-style-type: none"> – Market risk protection after being activated – Longevity risk protection after retirement
Autopilot retirement planning	<ul style="list-style-type: none"> • Automatic enrollment • Contribution rate • Contribution escalation • Catch-up contributions • Asset allocation • Risk protection 	<ul style="list-style-type: none"> • None • Participant chosen—3% average • None • None • Participant chosen—typically 70% equities, 30% fixed income/cash. Rebalanced at ages 35, 45, 55, and 65. • None 	<ul style="list-style-type: none"> • Yes • 4% initially • 1% increase per year up to 10% • Participant elects to contribute \$5,000 a year after age 50 • Target-date fund that gradually shifts towards fixed income to reach a 60% equities and 40% fixed income/cash allocation 10 years before the target date and thereafter • Automatic activation of income guarantee at age 55
Streamlined plan design (examples)	<ul style="list-style-type: none"> • Enrollment • Statements • Transactions • Participant education 	<ul style="list-style-type: none"> • On-site and phone • Paper • Phone • On-site and phone 	<ul style="list-style-type: none"> • Automatic • Electronic • Web • Web

²⁹ Based on estimates of required level of income replacement as calculated from "Retirement Vulnerability of New Retirees: The Likelihood of Outliving Their Financial Assets," Ernst & Young for Americans for Secure Retirement, July 2008.



A Monte Carlo simulation was run to compare the retirement outcomes for Sarah in both the traditional DC and redefined DC plans using market performance and longevity as variables.³⁰ A total of 2,000 scenarios were generated, and the results are presented in real, or today's, dollars. The middle 1,600 scenarios in terms of outcomes are averaged and called the "average markets" results; the bottom 200 scenarios are averaged and called the "poor markets" results.

Account Value Projections

Exhibit 3 projects Sarah's account balance starting at age 25. The redefined DC plan outperforms the traditional DC plan at all points in time and in all market conditions. This is driven by the higher initial contribution rate and subsequent contribution escalations that are facilitated by the autopilot features in the redefined DC plan. At age 65, Sarah's account balance in the redefined DC plan under average market conditions is approximately \$470,000 in real dollars, more than three times higher than in the traditional DC plan. Under poor market

conditions, Sarah's account balance in the redefined DC plan is approximately \$265,000 in real dollars, which is also more than three times higher than in the traditional DC plan.

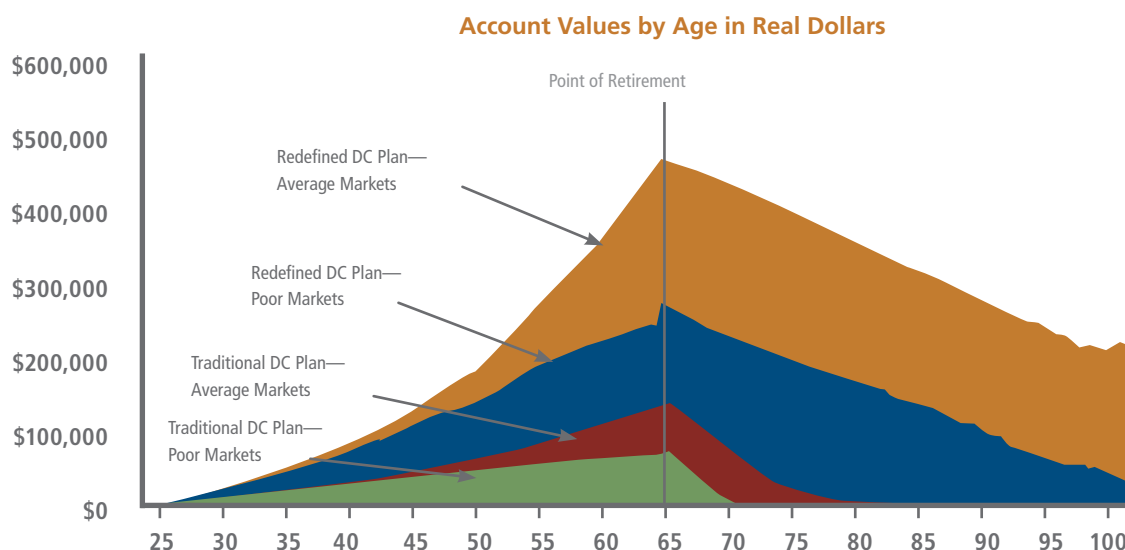
Retirement Income Projections

The benefit of the income guarantee in the retirement phase is illustrated in Exhibit 4, which contains a projection of Sarah's retirement income in real dollars for both plans under average and poor market conditions. These projections assume that at retirement, Sarah begins to withdraw income from her DC assets and receives Social Security benefits to achieve her target income replacement rate of 63%.

The income is generated in different ways from each plan:

- In the traditional plan, Sarah simply withdraws a sufficient amount of her DC assets each year after retirement to achieve her income replacement target. However, after Sarah depletes her assets, she can no longer draw an income from her DC account.

Exhibit 3: Account Values by Plan Type



Source: Ernst & Young analysis

³⁰ The analysis assumed fees of 74 basis points for the traditional DC plan, and 174 basis points for the redefined DC plan, which includes the cost of the income guarantee. The fee for the income guarantee is only charged after the guarantee is activated at age 55. This analysis does not assume any reduction in operational costs or fees in a redefined DC plan.

- In the redefined plan, the income guarantee enables Sarah to withdraw a certain percentage, such as 5%, of the value of her DC assets at the time she activated the income guarantee and any additional DC contributions made after the activation of the guarantee. Sarah's retirement income may be higher than this value if her assets appreciated after the activation of the guarantee. Sarah is able to withdraw this level of income at the time of retirement and every year thereafter, no matter how long she lives or how the markets perform.

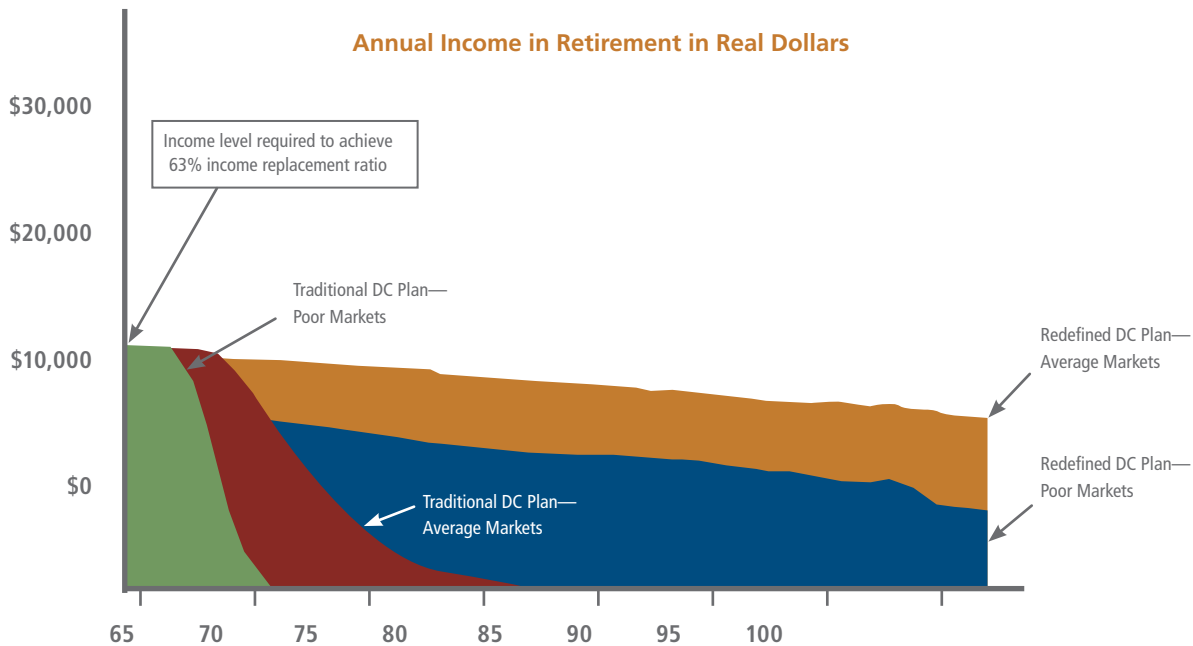
Exhibit 4 demonstrates that the two plan types have a dramatic impact on retirement income:

- In the traditional DC plan, Sarah rapidly depletes her account because low contributions during the working years resulted in a low account balance at the time of retirement. Eventually, even during average market conditions, Sarah completely runs out of money and can no longer withdraw any income from her DC account.

During poor market conditions, Sarah runs out of money in her early 70's—just a few years after retiring.

- In the redefined DC plan, Sarah has the same or higher level of retirement income in average market conditions than the traditional DC plan because Sarah retired with a higher account balance at retirement and the income guarantee provides Sarah with a guaranteed stream of income no matter how long she lives or how the markets perform. During average markets, the redefined DC plan provides Sarah with sufficient guaranteed retirement income to achieve her 63% target income replacement ratio.
- During poor market conditions, Sarah's guaranteed level of retirement income is insufficient to achieve the 63% income replacement ratio. However, this lower level of guaranteed income is significantly higher than the income Sarah can expect in her later years in retirement from a traditional plan under average or poor market conditions.

Exhibit 4: Retirement Income by Plan Type



Source: Ernst & Young analysis

Note: Income declines gradually for the Traditional DC plan because the exhibit shows the average across all scenarios, and in some scenarios, market appreciation enables Sarah to draw on her assets for a longer period of time than other scenarios.



Sarah's guaranteed retirement income declines over time in average and poor market conditions in real dollars due to the long-term impact of inflation.

The redefined DC plan provides Sarah with a stream of guaranteed retirement income while preserving the flexibility for Sarah to access all of her retirement assets at any time. This flexibility is particularly important if Sarah faces major medical expenses that require significant out-of-pocket payments. However, in any year, if Sarah withdraws a level of assets greater than her guaranteed level of annual income, her future level of guaranteed income will be reduced proportionally.

Ernst and Young also analyzed the scenario in which Sarah chooses not to make catch-up contributions in a redefined DC plan. Without catch-up contributions, Sarah's account balance in a redefined DC plan reaches \$375,000 by age 65 under average market conditions, \$95,000 less than if she had made catch-up contributions. However, even this lower level of savings is sufficient for Sarah to generate nearly enough guaranteed income to achieve her 63% income replacement target.

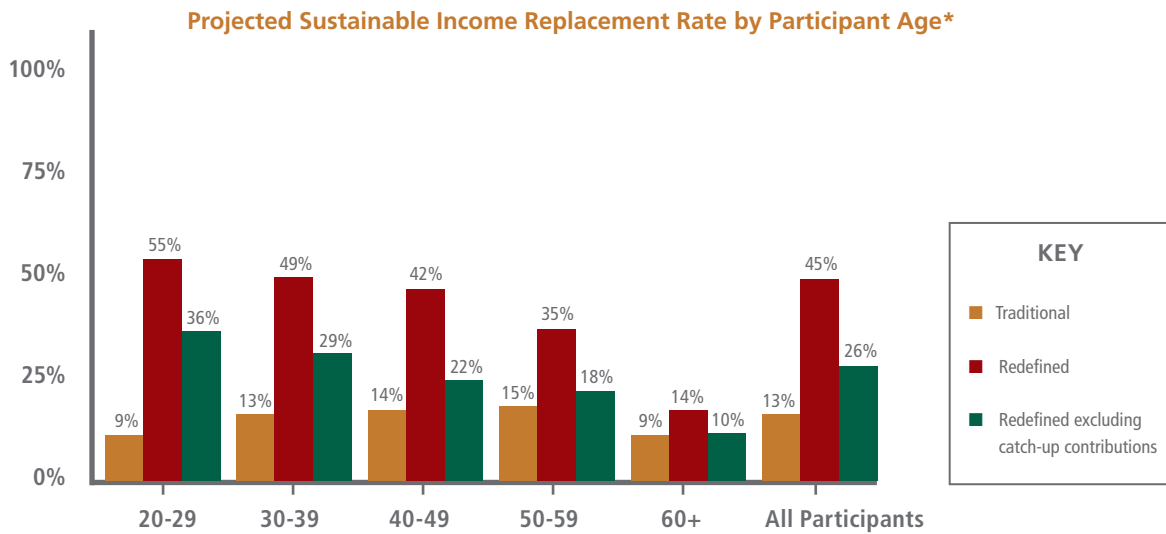
However, under poor market conditions, Sarah only accumulates \$194,000 by age 65 in a redefined DC plan without catch-up contributions. The guaranteed level of income that Sarah could draw from this level of savings is well below the amount required to achieve her income replacement target. This demonstrates the importance of encouraging participants to make catch-up contributions when participants are old enough to do so. If Sarah had benefited from good market conditions in the years before turning 50, Sarah can make the decision to not make catch-up contributions. However, if markets had performed poorly, Sarah can decide to make catch-up contributions to maximize the possibility that she can achieve her income replacement target.

Redefined DC Plans Help Sponsors Improve Retirement Outcomes

Redefined DC plans help plan sponsors offer more effective DC plans. One way to measure this is to project the sustainable income replacement ratio that a DC plan will be able to achieve for all the participants in a plan. Ernst & Young measured the sustainable income replacement ratio achieved across a participant population of varying ages, using the same assumptions as outlined in the previous case study. The analysis was conducted for a

traditional DC plan, a redefined DC plan, and a redefined DC plan without catch-up contributions. Exhibit 5 presents the results of this analysis. The sustainable income replacement ratio achieved for all participants ranges from 13% for a traditional DC plan to 45% for a redefined DC plan that includes catch-up contributions.

Exhibit 5: Impact of Redefined Plan



* Sustainable income defined as the income level that lasts through retirement in 95% of the average market scenarios; Income projections do not include Social Security benefits.

Source: Ernst & Young analysis.

Exhibit 5 demonstrates that redefined DC plans dramatically improve participant outcomes, particularly for younger participants who have a longer period of time to benefit from the improvements in such plans. This analysis also demonstrates the importance of catch-up contributions as the sustainable income replacement ratio achieved is

highest for redefined plans that include catch-up contributions. Sponsors can quickly strengthen their existing DC plans by implementing programs to educate older participants about the benefits of catch-up contributions.



Sponsors and plan fiduciaries can realize a number of other benefits by implementing redefined DC plans:

- **Mitigation of fiduciary risk:** Plan fiduciaries are obligated to make many plan decisions based on the best interests of the participants. Implementing redefined DC plans mitigates fiduciary risk by offering participants a pre-defined path with appropriate risk protection measures that is designed to maximize retirement outcomes. This provides valuable protection for fiduciaries by demonstrating the intent and care that was taken to design an optimal plan.
- **Cost reduction and scale efficiencies:** A streamlined plan that places participant decisions on autopilot minimizes both direct recordkeeping costs and administrative overhead. It also reduces the amount of time that a sponsor needs to periodically redesign the plan and educate participants. In addition, scale efficiencies occur as asset balances accumulate more rapidly and drive down the average cost per dollar of assets.
- **Enabling the transition from DB to DC:** Many DB plan sponsors have terminated or are planning to terminate their DB plan due to under-funding and other challenges.³¹ Implementing redefined DC plans provides sponsors with a low risk way to offer employees some of the important benefits of a DB plan, such as built-in market risk and longevity risk protection.
- **Effective workforce management:** Implementing a DC plan that improves participant outcomes means that more employees will be able to retire when they would like to. This helps avoid the situation in which some employees may reluctantly stay in their current job because they cannot afford to retire, thereby limiting advancement opportunities for other employees.

Legislators are evaluating how to encourage DC plan adoption across small employers. A redefined DC plan could serve as a blueprint for a “model” plan to be made available to small employers. Redefined DC plans address some of the concerns that smaller employers have about cost, complexity, administrative overhead, and fiduciary liability, thereby increasing the likelihood that small employers will adopt DC plans.

³¹ Towers Perrin, “Benefits in Crisis—Weathering Economic Climate Change,” April 2009, page 3.

Redefined DC Plans are the Solution to a Secure Retirement

The current economic environment has caused participants, plan sponsors, and legislators to question whether DC plans can provide the retirement security Americans seek. However, DC plans already provide many necessary elements of a robust solution, including widespread adoption, fiduciary oversight, and the beginnings of an autopilot approach. DC plans can be enhanced by

protecting participants from adverse market conditions and longevity risk, providing autopilot retirement planning, and further streamlining plan operations. These redefined DC plans will improve participant outcomes and better meet plan sponsors' objectives. Most importantly, such plans will bring the promise of a secure retirement closer for all Americans.

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