

Retirement Income Security: Hybrid Pension Plans Merit Further Attention

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Foreword

This report was done at the request of the Chicago field office of the U.S. Government Accountability Office (GAO). The purpose was to investigate whether the topic of hybrid pensions might be worthy of further investigation by GAO. The availability, adequacy, and financial security of employer-provided pension plans is a growing federal concern as personal savings rates decline, workers' job mobility increases, many large traditional defined benefit plans appear underfunded, and the baby boom generation approaches retirement. This study reviews the characteristics of traditional defined benefit and defined contribution plans, describes how so-called "hybrid plans" combine key features of both plan types, and assesses what we know both about possible types of hybrid plans and about their potential advantages and disadvantages for employers and employees. The report reveals how few data are available on hybrid plans, even as they grow in number and variety, concluding with a call for further study of this issue by GAO.

The La Follette School of Public Affairs offers a two-year graduate program leading to a master's degree in public affairs. Students study policy analysis and public management and pursue a concentration in a public policy area of their choice. They spend the first year and a half taking courses that provide them with the tools they need to analyze public policies.

Although acquiring a set of policy analysis skills is important, there is no substitute for doing policy analysis as a means of learning policy analysis. Public Affairs 869, required in the program's final semester, provides graduate students that opportunity. The authors were all enrolled in Public Affairs 869, Workshop in Public Affairs, Domestic Issues (Section 2). They collaborated to improve their policy analysis skills while contributing to the capacity of public agencies to analyze and develop policies on issues of concern to residents of the United States.

The students in this workshop were assigned to one of five teams. One group worked on this report, while the others collaborated with the Wisconsin Joint Legislative Council, the Wisconsin Department of Natural Resources, and the Wisconsin Department of Health and Family Services' Office of Policy Initiatives and Budget, and its Bureau of Environmental and Occupational Health in the Division of Public Health.

Michael Hartnett, Senior Evaluator at GAO's Chicago field office first suggested the topic of this report. He and Sharon Hermes, Senior Analyst in the same office, generously gave their time, first to me in the development of potential topics and in the selection of this one, and then to the authors, who talked with them regularly throughout the semester. This report would not have been possible without their assistance. I am also grateful for the willingness of Patrick DiBattista, Assistant Director in GAO's office of Education, Workforce and Income Security

(EWIS) in Washington, D.C., to commit his time and that of staff in the EWIS Chicago office to this project. The acknowledgments thank other individuals who supported the students as they pursued data and policy insights. I add my gratitude to the appreciation expressed there.

The conclusions herein are those of the authors alone. The topic they address is large and complex, and this report cannot provide the final word on the issues addressed by the authors, who are graduate students constrained by the semester time frame. Nevertheless, much has been accomplished, and I trust that GAO and other readers of this report will gain valuable insight into the pension issues that have arisen in a rapidly changing employment and financial environment and the advantages (and cautions) of fashioning new types of pension plans that combine features of the traditional defined contribution and defined benefit plans.

The report also benefited greatly from the support of faculty and the staff of the La Follette School of Public Affairs, especially that of Publications Director Karen FASTER, who edited and managed production of the report.

I am very grateful to Wilbur R. Voigt whose generous gift to the La Follette School supports the public affairs workshop projects. With his contribution, we can finance the production of the final reports, plus other expenses associated with the projects.

I hope that through this involvement in the tough issues our workers, employers, and public policymakers face, our students have learned a great deal about doing policy analysis. I hope that this report will contribute to the work of GAO and to the ongoing public and policy discussions about how to enable a more secure retirement for U.S. workers and their families.

Karen Holden
May 2008

Acknowledgments

This report would not have been possible without the support and guidance of numerous people. The authors would first like to thank the U.S. Government Accountability Office; in particular, Michael Hartnett and Sharon Hermes were instrumental to the success of the report through their direction and feedback. The authors would also like to thank Sharon A. Burns and Patricia Krajnak of the International Foundation of Employee Benefit Plans for lending their expertise and for pointing us toward resources. Finally, we offer sincere gratitude to Karen Holden and Karen FASTER at the Robert M. La Follette School of Public Affairs for their ongoing support and guidance with content and with the editing process.

Results in Brief

This report provides a description and brief history of retirement pensions, with a specific focus on employer-sponsored hybrid pensions in the United States. As a direct result of this research, we recommend that the U.S. Government Accountability Office (GAO) perform further research to identify the impacts of hybrid pensions on specific employees and employers. The number of employers shifting to hybrid pension plans, variations in types of hybrid plans, and the scarcity of data on who offers and is covered by these plans makes a comprehensive look at the issues raised by hybrid plans worthwhile and in line with GAO policy interests.

We begin by defining the major distinctions and usual differences between traditional defined benefit pension plans and defined contribution pension plans. Namely, we focus on how defined benefit pensions are a formulaic benefit provided by the employer, who bears all funding and investment risk. In contrast, defined contribution pensions serve as an investment tool for employees, with pension benefits determined by individual account fund accumulation and with the employee bearing all the investment risk. We describe major problems associated with each plan type. For defined benefit, this includes the potential for insufficient funding. Another problem is that high job mobility limits workers' pension benefit amounts.

We describe the issues that have emerged for defined contribution plans. Because these plans promise no given benefit amounts, they are not insured by the Pension Benefit Guaranty Corporation, which does cover defined benefit plans. In addition, because defined contribution participation and related contribution amounts are generally optional, covered workers may underfund their defined contribution plans through their own lower contributions or inattention to investment options. The outcome of this underfunding is that the employees may have lower than expected benefits upon retirement. This may be particularly true for low-income workers. Hybrid pension plans, including the cash balance plan and the target benefit plan, have emerged as alternate pension options, and we describe these two types of plans. Hybrid plans attempt to combine the more advantageous provisions of defined contribution and defined benefit plans.

Section 1 describes hybrid plan types in the United States and abroad. Pension equity, floor-offset, and age-weighted profit sharing are all examples of distinct hybrid pension plan designs. Hybrid-type pension plans in other countries, including the United Kingdom, Canada, Japan, and the Netherlands are described for the insights they provide into possible plan designs in the United States.

In Section 2, we outline major hybrid pension trends. Since 2003, cash balance plans have grown significantly, while target benefit plans have declined. Additionally, we examine the contributions per participant for both hybrid plans and

traditional pension plans over time and conclude that contributions to hybrid plans are now comparable with those of traditional pension plans.

In Section 3 we assess the impacts on employees and employers of a cash balance plan and a target benefit plan, the two most prevalent hybrid pension plans. Both types allow workers more plan portability than do defined benefit pensions, but they also place greater market risk on employees. The target benefit is technically a defined contribution plan and is not insured by the Pension Benefit Guaranty Corporation, while the cash balance is considered a defined benefit plan and is insured. Typically, the employer contributes in the case of either hybrid plan type, while the employee contributions are usually required only in target benefit plans.

We conclude that hybrid pension plans merit further attention from the GAO. Hybrid pensions have increased in number and are a viable option for aligning the goals of employees and employers in certain situations. However, given the existing research, firm conclusions are difficult to draw about the impacts on all types of employees and employers covered by these plans relative to traditional plans. Further research is needed to understand the circumstances under which a particular hybrid plan benefits employees and employers.

Introduction: Concerns about Retirement Security

Over the past forty years, employer-sponsored pension plans have become one of the three major “legs” of the “stool” of post-retirement income security.¹ Pensions, Social Security, and personal savings and assets combine, ideally, to create retirement security. The weight with which retirees may rely on each of the legs continues to evolve. As average retirement age has declined, dependence at older ages on Social Security as well as on pensions has steadily increased.² Experts suggest that workers should attempt to have at least 65 percent of their normal income after retirement.³ With lower rates of economic growth and U.S. personal savings rates at an all-time low, workers may increasingly rely on pensions as a means of support after they withdraw from work.

At a time when people may become more dependent on pensions for retirement security, the pension landscape is becoming increasingly complex. The U.S. Government Accountability Office (GAO) asked us to prepare a report on the changing pension environment with a focus on hybrid pensions. This report describes the environment surrounding U.S. employer-sponsored pensions and the most prevalent U.S. and international hybrid plans. It illustrates trends in pension participation, and it evaluates the cash balance and target benefit pension plans from employee and employer perspectives. Finally, based on this information, the report recommends research on employer-sponsored hybrid pensions. Appendix A contains a list and definitions of key terms that are used in this report.

¹ Employee Benefit Research Institute, 2007.

² Employee Benefit Research Institute, 2007.

³ Gonyea, 2007.

Background

Traditional employer-sponsored pensions in the United States can be identified as one of two major types: defined benefit plans and defined contribution plans.⁴ Developed in the 1980s, hybrid pension plans combine features of defined benefit and defined contribution plans.

Defined Benefit: Formula-Based Pensions

Defined benefit (DB) pensions are employer-provided retirement plans that pay a pre-stated benefit upon retirement. All DB pensions calculate benefits formulaically.⁵ Typically, the plan bases the benefit “formula” on “an employee’s final average pay or career average pay in combination with the participant’s years of service and a multiplier, or percentage factor, that is part of the formula.”⁶ Payments from DB pensions usually are in the form of an annuity, but if the total payout is less than \$5,000, the employer is not required to provide an annuity.⁷ The employer contributes to and manages, through plan trustees, investment of these plans on behalf of all employees. Each employee automatically enrolls in the pension as long as he or she has met minimum participation requirements with the employer.⁸

Defined Contribution: Account-Based Pensions

Defined contribution (DC) plans are account-based plans that, unlike DB plans’ formula benefits, pay a benefit based on the balance of the account upon retirement. DC benefits are offered most often as a lump-sum payment upon termination, although other options are possible, such as installments and annuities.⁹ Employees typically contribute to an individual investment account. If the employer contributes, the amount may depend, often through a matching formula, on the amount that the employee contributes.¹⁰ A DC plan, such as a 401(k), gives portability to an employee who frequently switches jobs: the account may be rolled over from the original to another DC plan, including an individual retirement account, where it may gain value after termination of employment with the DC-providing organization. As a qualified retirement plan, DC plan contributions by employees are tax deferred.¹¹ While all qualified plans are required to provide annual reports to active participants, the reporting of current account values by DC plans are often thought to be more informative than is the reporting of future benefits by DB accounts.¹²

⁴ Employee Benefit Research Institute, 2005.

⁵ Employee Benefit Research Institute, 2005.

⁶ U.S. General Accounting Office, 2002. p. 8.

⁷ Green, 2003.

⁸ Sostek, 2004.

⁹ Blostin, 2003.

¹⁰ Purcell, 2004.

¹¹ Employee Benefit Research Institute, 2005.

¹² Employee Benefit Research Institute, 1990.

Hybrid Pensions: Account-Based Defined Benefit Plans

Hybrid pension plans are pension plans that are not solely a traditional DB or a DC plan; they combine essential features of DB and DC plans into new pension plans. For example, hybrid pensions may resemble DB plans in that benefits are defined in some way and thus the federal Pension Benefit Guaranty Corporation (PBGC) insures them. But the hybrid models DC plans' account-based format and generally duplicates their portability because, upon termination of employment, the employee can roll over money into another employer plan.¹³

Cash balance plans are the most prevalent and well-known form of hybrid pension plans. These plans articulate retirement benefits through a hypothetical bank account; they add a certain percentage of the participant's salary each year as a credit and match with an interest rate.¹⁴ The benefit paid is based on this hypothetical account, which is not actually separately identified or managed for or by the individual. These plans enroll participants automatically, and although they give employees an annuity option, most participants receive benefits in a lump-sum.¹⁵

Another example of a hybrid pension plan is a target benefit plan. Here, the employee determines a desired benefit at retirement, then the employee and employer set contribution levels and make investments to an individually identified account to achieve that desired benefit. The benefit paid is based on accumulated contributions and earnings on investments of the individual account. The PBGC does not guarantee the plan because the target benefit plan is technically a DC plan.¹⁶ However, the target benefit plan is also considered a hybrid because employees are automatically enrolled and because it uses a formula to calculate appropriate contributions. Many other types of hybrids exist in the United States and abroad, and some examples are described in greater detail in Section 1 of this report.

Historical Development of Pensions in the United States

Pension plans originated as a form of deferred compensation for employees during World War II, when, under price controls, employers were allowed to provide salary-based pensions. DB plans grew in popularity in the years after World War II. Many employers believed providing DB plans was essential for them to remain competitive in attracting and retaining employees during this period of rapid economic growth.¹⁷ DB plans in the United States began to face criticism in the late 1960s when several large plans failed. In response to these concerns, Congress enacted the 1974 Employee Retirement Income Security Act (ERISA).¹⁸

¹³ Employment Policy Foundation, 2005.

¹⁴ U.S. Government Accountability Office, 2005a.

¹⁵ Cahill & Soto, 2003.

¹⁶ Purcell, 2004.

¹⁷ Ezra, 2007.

¹⁸ Congressional Budget Office, 2005.

ERISA set minimum standards for who can participate, how long the vesting period is, and plan funding procedures.¹⁹ These provisions required company-sponsored retirement plans to provide information to participants and the federal government regarding major plan features. ERISA also required the employer to pay the benefit if a retirement plan was a DB-style plan and hence set funding requirements to assure plan solvency.

Attempting to prevent further retirement plan failures, ERISA established rules for plan fiduciaries who make the investment decisions for company-sponsored DB plans. In addition, ERISA created the PBGC,²⁰ a federal corporation that insures private, employer-provided, tax-qualified defined DB pensions. In the event that employers needed to freeze or terminate DB pensions, PBGC would pay the benefits to vested participants. PBGC operations guarantee that a DB plan participant receives a benefit up to \$51,750 annually if her or his plan was terminated in 2008. PBGC funds the insured benefits through DB-covered employee premiums that employers pay, assets from terminated pension plans, and investment income.²¹

ERISA amended the Internal Revenue Code as did the Revenue Act of 1978 that created 401(k) plans.²² Through ERISA, Congress validated the non-taxable portion of income that employees set aside as deferred compensation in retirement. The Revenue Act of 1978 also sanctioned the use of salary reductions as a source of retirement plan contributions.²³

Despite legislative efforts to regulate DB pension plans, they continued to face considerable challenges. A significant issue that DB plans have encountered since the 1980s is underfunding and the potential that PBGC will be fiscally unable to cover promised benefits of ailing DB plans.

The origin of problems for DB plans is a complex set of funding choices, economic conditions, public regulation, and assignment of risk. However, most experts point to historical practices that contributed to this concern about underfunding. Some analysts identify poor actuarial accounting practices, especially methods used in the 1980s, as the primary origin of current funding concerns. Strong economic projections and decreasing inflation in the 1980s encouraged actuaries for DB plans to adopt assumptions, particularly about fund earnings, that led to lower estimated contributions for companies to fund DB plans while keeping the assumed benefit high. As the economy worsened, companies continued to fund DB plans at the lower levels, assuming they would be able to meet their benefit obligations. In addition, legislation allowed DB plans with identified

¹⁹ U.S. General Accounting Office, 2002.

²⁰ U.S. Government Accountability Office, 2005b.

²¹ Pension Benefit Guaranty Corporation, 2003.

²² Employee Benefit Research Institute, 2005.

²³ Employee Benefit Research Institute, 2005.

underfunded liabilities to be corrected over an extended period of time. Companies likely used this flexibility and delayed critical assessment of their DB plans' funding status and the necessary steps to ensure solvency.²⁴ The Congressional Budget Office (CBO) estimated in 2005 that, across all insured DB plans, total underfunding approached \$600 billion. The CBO estimated that with the 2005 premium rates for insured company plans and projected levels of benefit assistance, PBGC would exhaust its on-budget fund by 2013.²⁵

In addition to underfunding, DB plans were, and continue to be, scrutinized for their lack of portability. Although DB plans are favorable for older workers who do not switch jobs often, younger and more mobile workers are at a disadvantage with DB plans because plan benefits freeze at their lower salary levels and service credits when participants switch jobs.²⁶

These changes reduced the competitiveness of employers offering DB instead of DC plans. Combined with the drift away from "paternalistic" employers,²⁷ these changes explain why DC plans became a more attractive option to employers beginning in the 1990s. DC plans shift the market risk and obligation to ensure retirement security away from employers onto employees. DC plans also emerged as a lower cost option for many employers because DC plans limited the amount of financial obligation and risk an employer bore and required no PBGC premium payments. In contrast to DB plans, DC plans permitted employees to easily determine the actual balances of their retirement contributions and monitor the growth or loss of value of those contributions through a hypothetical or actual account balance.

DC plans face challenges that prevent them from being optimal plans for many employers and employees. Employees who work for companies with DC plans may not be fully aware of available retirement plan options offered, as DC plans do not typically automatically enroll employees. Furthermore, many low-income individuals may feel they cannot afford to contribute, and many do not make regular contributions to the plan even when offered an employer match.²⁸ DC plans may incorporate early retirement penalties through contribution schedules tied to service and percentage of salary.²⁹ Because the participants contribute to individual accounts, they are typically given control over the investments made to fund the pension. In turn, participants bear the risk if those investments turn out poorly, as the PBGC does not insure DC plans, which means no benefit is guaranteed. This is a concern, as many may be uncomfortable or unable to make

²⁴ Ezra, 2007, pg. 26-27.

²⁵ Congressional Budget Office, 2005.

²⁶ Purcell, 2004.

²⁷ Gonyea, 2007.

²⁸ U.S. Government Accountability Office, 2007.

²⁹ Schieber, 2003.

their own investment decisions.³⁰ Another feature of the DC plan is that employees typically choose lump-sum distributions upon retirement, although they may annuitize that distribution by purchasing this service from an insurance company.³¹ Lump-sum distributions are often attractive to employees who switch jobs frequently. Low-income workers also might be more likely to take lump-sum distributions rather than shifting the money into other tax-deferred accounts that would produce income, which could harm their retirement security.³²

Companies introduced hybrid pension plans in the 1980s as alternatives to a traditional DB or DC plan. The most common type is the cash balance hybrid design.³³ In general, hybrid pension plans offer a mix of features from DB and DC plans. Employers explored hybrid pension plans because they incorporate within a single plan the best aspects of DB and DC plans.³⁴ The decision by the U.S. District Court for the Southern District of Illinois in *Cooper v. IBM* found that the conversion from DB to cash balance plans discriminated on the basis of age, appearing to jeopardize the future of cash balance plans.³⁵ However, in 2006, the U.S. Court of Appeals overruled that decision, finding that cash balance plans did not violate ERISA's age discrimination rules.³⁶

In the same year, prompted by the poor health of PBGC, Congress passed the Pension Protection Act of 2006. The act is the most comprehensive pension reform since ERISA. The act affects DB, DC, and hybrid plans with new funding requirements for each. For DB pensions, the Pension Protection Act tightened the funding rules for employers. Previously, employers could extend their liabilities into the future and were only required to maintain 90 percent funding of future plan liabilities. Once the law fully phases in, employers will have to maintain funds equal to 100 percent of pension plan liabilities.³⁷

The Pension Protection Act affected DC plans in two major ways. The legislation renews the Economic Growth and Tax Reconciliation Act of 2001 until 2010. It also set a maximum average contribution for highly compensated employees that prevents DC plans from discriminating in benefit design in their favor.³⁸

For cash balance plans, the Pension Protection Act reinforced the U.S. Court of Appeals decision that the plans do not discriminate against employees on the basis of age as long as the plan vests the worker within three years and meets the age

³⁰ Sostek, 2004.

³¹ Employee Benefit Research Institute, 1997.

³² Gonyea, 2007.

³³ Green, 2003.

³⁴ Clark, Haley, & Schieber, 2001.

³⁵ Davis & Harman LLP, 2006; and *Cooper v. IBM*, 2006.

³⁶ Congressional Research Service, 2006.

³⁷ Congressional Research Service, 2006.

³⁸ Congressional Research Service, 2006.

discrimination test.³⁹ The relevant age discrimination test compares workers on the basis of accrued benefits or accounts. If benefits are similar for a younger and an older worker, with all other identical characteristics (e.g., service, earnings), then the plan passes the age discrimination test.⁴⁰

The Pension Protection Act also eliminated the so-called whipsaw calculation and wear-away effects in hybrid plans. Pre-Pension Protection Act plans were required, when calculating the distribution to a terminating employee, first to use the plan's interest crediting rate to project the account balance to the normal retirement age and then to use the statutory discount rate to estimate the present value of the lump-sum distribution to the employee. When the interest crediting rate exceeded the statutory discount rate, the employer would pay a benefit greater than that which would be payable based on the employee's "hypothetical account" balance.⁴¹ The Pension Protection Act allows employers to pay benefits to terminating workers based on the current hypothetical account balance.

Wear-away refers to a DB to cash balance plan conversion phenomenon that occurs when employees may receive no additional pension accrual as their cash balance plans "catch up" to the DB benefit accrued. This could occur, for example, when an employer offers a benefit based on the higher of the DB formula or the hypothetical balance. This catch-up period is longer for older workers with longer years under the DB plan; the Pension Protection Act eliminates these time periods.⁴²

While the Pension Protection Act clarified pension rules, especially for hybrid plans and the conversion from DB plans, and added safeguards for participants in traditional DB and DC plans, concerns still exist about the long-term financial viability of employer-provided pensions. DB plans' placing of market and longevity risks on employers and continued underfunding remain serious concerns. The lack of portability of DB plans is also a growing disadvantage as job tenure diminishes and job mobility increases, especially for certain types of employees.

With the clarity of rules for cash balance plans provided by the Pension Protection Act and the potential for hybrid pension plans to combine desirable aspects of DC and DB plans, hybrids have become an alternative for employees and employers. The ongoing criticism of DB and DC plan features has generated considerable attention to hybrid pension plan designs as a potential answer to concerns about retirement income security.

³⁹ The three year requirement is only binding for plans/participant enrolling beginning in 2008.

⁴⁰ Congressional Research Service, 2006.

⁴¹ U.S. General Accounting Office, 2000.

⁴² U.S. General Accounting Office, 2000.

Section 1: Hybrid Pension Plans in the United States and Abroad

Many hybrid plans exist in the United States and in other countries. Each plan possesses characteristics worthy of examination. Two tables in Appendix B summarize hybrid plans from the United States and other countries.

Hybrid Examples from the United States

Explored later in this report, the cash balance plan and the target benefit plan are the most prevalent hybrid pension plans in the United States, which is also home to several other types of hybrid plans discussed below.

Pension Equity Plans

NJR Nabisco first introduced and popularized the pension equity plan in 1993.⁴³ It is similar to a cash balance plan, but it dictates benefits as a percentage of the final average salary, instead of a career average salary (see Section 3 for discussion of these rules in cash balance plans).⁴⁴ This end-of-service salary average not only protects against inflation,⁴⁵ it also recognizes fast-track employees.⁴⁶ The pension equity plan does not generate an actual or hypothetical account, but the individual accrues an amount based on a specific percentage for each year of employment. This ultimately is added together and the final total multiplied by the final average earnings upon termination.⁴⁷ Because there is no actual account accumulation, the expected benefit received is slightly less transparent than a cash balance plan, but it is easier to figure out than a traditional DB plan. The percentage accrued each year may depend on the age and/or the service of the individual, which means that the accrual rate can vary during a person's career.⁴⁸ Benefits are normally paid out in a lump sum, but employees must be offered the choice to switch the lump sum to an annuity under the plan or roll it into another account.⁴⁹

Floor-Offset Pension Plans

A floor-offset plan is unique in that it actually combines two separate plans: a DB plan, characterized as the "floor," and a DC plan, labeled the "base."⁵⁰ The DB plan determines a minimum benefit, but if the DC plan matches or pays more than the minimum DB benefit, the DC plan pays the benefits out to the employee rather than the DB plan. If the DC plan payout does not reach that minimum level, the floor-offset plan uses the DB plan to make up the difference between the DC

⁴³ Green, 2003.

⁴⁴ Schieber, 2003.

⁴⁵ Green, 2003.

⁴⁶ Employee Benefit Research Institute, 1997.

⁴⁷ Employee Benefit Research Institute, 1997.

⁴⁸ Green, 2003.

⁴⁹ Employee Benefit Research Institute, 1997.

⁵⁰ Employee Benefit Research Institute, 1997.

payout out and the minimum level.⁵¹ This means that the employer bears the investment risk since benefits are guaranteed to that minimum. Although a floor-offset plan can include any type of DB plan, a restriction on DC plans is allowed. The Tax Reform Act of 1986 does not allow 401(k) plans to be a part of the floor-offset plan, and, since 1987, employee stock ownership plans are also not allowed.⁵² Most floor-offset plans include profit-sharing as their DCs.⁵³

Age Weighted Profit Sharing

Age weighted profit sharing aims to provide the flexibility of DC pensions while skewing benefits in favor of older employees in the same way as service- and salary-based DB pensions.⁵⁴ This type of plan is more favorable toward small employers. Age weighted profit sharing follows the guidelines of traditional profit sharing, but it adds a weighted element for older employees; this may allow older employees with high job mobility to maximize earnings for retirement.⁵⁵ To prevent violating discrimination laws, age weighted profit sharing converts the larger benefits for older employees to “equivalent benefits.”⁵⁶ As in traditional profit sharing, only the employer contributes to the plan, early withdrawal penalties exist, there are contribution limits, and each individual has a separate account.⁵⁷

International Pension Plans

Retirement plans exist in many forms throughout the world. In general, the varied nature of pension plans among countries arises from “differences in legislation, tax, social security, and culture.”⁵⁸ In many of the countries discussed below, plans, including hybrid forms, may only be public, state-run pensions. However, while hybrid pension plans in other countries may operate under very different legal, political, and economic conditions than the United States, they offer perspectives on how to combine different pension plan characteristics. While these plans emerged to meet specific needs in their countries of origin, they have the potential to serve U.S. workers and employers. This section explores hybrid pension plans in the United Kingdom, Canada, Japan, and the Netherlands. Appendix C offers a portrayal of the featured international plans in a tabular format.

⁵¹ Employee Benefit Research Institute, 1997.

⁵² U.S. Bureau of Labor Statistics, 2002.

⁵³ Employee Benefit Research Institute, 1997.

⁵⁴ Employee Benefit Research Institute, 1997.

⁵⁵ Employee Benefit Research Institute, 1997.

⁵⁶ Employee Benefit Research Institute, 1997.

⁵⁷ U.S. Department of Treasury, 2008.

⁵⁸ Mercier, 2005.

Hybrid Examples from the United Kingdom

A **self-annuitizing plan** most closely resembles a DC plan with which an employee assumes investment risk. However, unlike a DC, the self-annuitizing plan automatically provides the recipient with an annuity. To accomplish this, an employer specifies rates of annuity conversion in the plan “rather than requiring the employee to purchase an annuity on the market” with the sum of funds available at retirement.⁵⁹

Underpin retirement plans in the United Kingdom closely resemble floor-offset plans in the United States. In the underpin plan, an employer calculates a retirement benefit for an employee based on the formula of a DB plan. This calculated benefit acts as the DC “underpin.” During the life of the plan, the employer and employee make contributions to a DC plan. At retirement, if the actual value of the DC plan exceeds the calculated DC benefit, the employee maintains the full benefit of the DC plan. If, however, the value of the DC plan is lower than the “underpin,” the employee receives the benefit identified in the DB calculation through employer additions to the value of the actual DC plan.

Some traditional DB plans have a “DC underpin” that an employee uses when retiring early. With these types of underpins, the value of the early retirement benefit will not be lower than the value of a hypothetical DC plan, depending on calculated member contributions and accumulated interest.⁶⁰

Hybrid Examples from Canada

The member-funded pension plan was introduced in Quebec in 1995. It resembles a traditional DB pension except for a few key distinctions. Member contributions, as opposed to employer contributions, fund it. This type of plan also exempts “the plan sponsor from having to cover any unfunded actuarial deficits.”⁶¹ As a result, if there were any plan underfunding upon the plan’s termination, employees would not receive the full amount of their pension payments. In the event of a funding surplus, the plan distributes additional assets, as a proportion of beneficiary entitlements, to members who retire during the surplus period. Essentially, investment risk fully shifts to the employee with the member-funded pension plan. To compensate, the member-funded pension plan uses a very low interest rate to set the plan’s value in order to minimize the risk of underfunding.⁶²

Combination or “stacked” plans in Canada typically involve adding a DC plan onto a “core” DB plan. Both the DB and DC aspects of the plan operate simultaneously for the duration of employment. The total benefit paid to the employee is the sum of the benefits from both parts of the combination plan.

⁵⁹ Wesbroom & Reay, 2005.

⁶⁰ Wesbroom & Reay, 2005.

⁶¹ Unknown author, 2005.

⁶² Unknown author, 2005.

The DB portion is fully funded by the employer and the DC aspect is funded through optional member contributions that may or may not receive an employer match.⁶³

Choice plans give employees the option to choose between a DB and a DC style pension plan. The employees choose the direction of their retirement plans depending on factors in their lives, including salary, age, and tolerance of risk. The decision may “be a one-time choice at enrollment, or the plan may allow one switch during the member’s career or unlimited switches at regular anniversary dates.”⁶⁴ Members receive the sum benefit accumulated from their choices during the life of the plan.

The lifecycle plan’s goal is to maximize the benefit value to employees at any age during their participation in the plan. Typically, a lifecycle plan provides an employee with a DC plan during the initial years of employment or until the employee reaches a certain age. This strategy allows for maximum accrual of benefit value during the early years of a lifecycle plan, assuming that market conditions create strong growth for plan assets. The strategy also enhances the potential value for an employee who leaves the employer after a few years. The DC aspect of the lifecycle plan creates a lower cost and more flexible option for employers with a combination of long and short-term staff.⁶⁵ At a specified age or after a specified number of years of service, a DB plan begins for the member and continues until retirement.⁶⁶

Cash Balance Hybrid Pension in Japan

There are several differences between the United States’ and Japan’s cash balance pension plans. U.S. plans tend to use short-term interest rates to determine investment, while in Japan the investment rate ties to a national bond average that fluctuates less. In Japan, an employee may choose an annuity, an annuity plus a lump sum, or a lump sum alone as a method of payout. Finally, unlike the United States, Japan has no PBGC to insure pension plans, thus the funding risks associated with the cash balance plans are the company’s responsibility. Cash balance plans accounted for approximately 40 percent of the new defined benefit plans in

⁶³ Gendron, 2006; Wesbroom & Reay, 2005. Note: Similar plans have also been developed in the United Kingdom, where combination hybrids typically come in two forms. One is similar to the Canadian combination plan. The other combination type involves an employer contributing to a DB plan for a capped, maximum level of earnings, then providing a defined contribution plan for earnings in excess of the cap. An employer match may or may not be made to the defined contribution portion of the plan (Wesbroom & Reay, 2005).

⁶⁴ Gendron, 2006.

⁶⁵ Wesbroom & Reay, 2005.

⁶⁶ Gendron, 2006. Note: A similar plan has been developed in the United Kingdom called a sequential hybrid or nursery schemes (Wesbroom & Reay, 2005).

September 2006.⁶⁷ Cash balance plans are the only form of hybrids in Japan; however, pension plans are starting to become more diverse.

Hybrid Plans in the Netherlands

One aspect of Dutch pension plans is that the law requires independent financial institutions to manage plans instead of employers. Through this regulation, the government intended to separate pension-funding decisions from employers whose choices might not be the best for the fund's solvency. Hybrid plans in the Netherlands exist as DB pension plans that allow flexibility in funding indexation rates and contribution rates. Typical DB plans are fully indexed for wage growth, and the contribution rate is adjusted "to absorb a funding surplus or shortfall."⁶⁸ Another type of pension plan, called a collective defined contribution plan, has fixed contribution rates with only the indexation rate being adjusted. With Dutch hybrid plans, fund managers can adjust the indexation rate and the contribution rate simultaneously to absorb a surplus or shortfall. These hybrid plans are not traditional DB plans because benefit levels are still uncertain and market rates during the life of the plan determine these levels. However, this type of plan management intends to minimize underfunding the pension, ensuring some minimal level of benefits. In this way, the Netherlands classifies many pension plans as hybrid plans.

⁶⁷ Endo, 2007.

⁶⁸ Ponds & Van Riel, 2007.

Section 2: Hybrid Pension Plan Trends

With the emergence of hybrid pension plans as a form of retirement security, employers face new choices of which pension plans to provide and challenges with the conversion from one type to another. This section presents trends in pension plans by examining the change in the number of plans, the number of participants in pension plans, and the contributions made to these plans.

Title I of ERISA requires firms to report to the U.S. Department of Labor which form of plan they provide. Since 1999, the Department of Labor has included in its reporting form an item for reporting of cash balance plans.⁶⁹ These data, along with target benefit plan data, provide insight into hybrid pension plan trends, although the Labor Department separately identifies only cash balance and target benefit plans.

Table 1 shows the number of pension plans and Figure 1 shows the percent change in number of plans from 1999-2005. While the traditional forms of pension plans (DB and DC) maintained a slight loss of zero to 5 percent in total plans annually over the six-year period, hybrid plan growth varied. The number of cash balance plans grew significantly, by as much as 30 percent in a single year. In comparison, target benefit plans decreased in number during the same time period by as much as 25 percent annually. While traditional pension plans have steadily declined in number, hybrid plans are more volatile and growth varies by plan type.

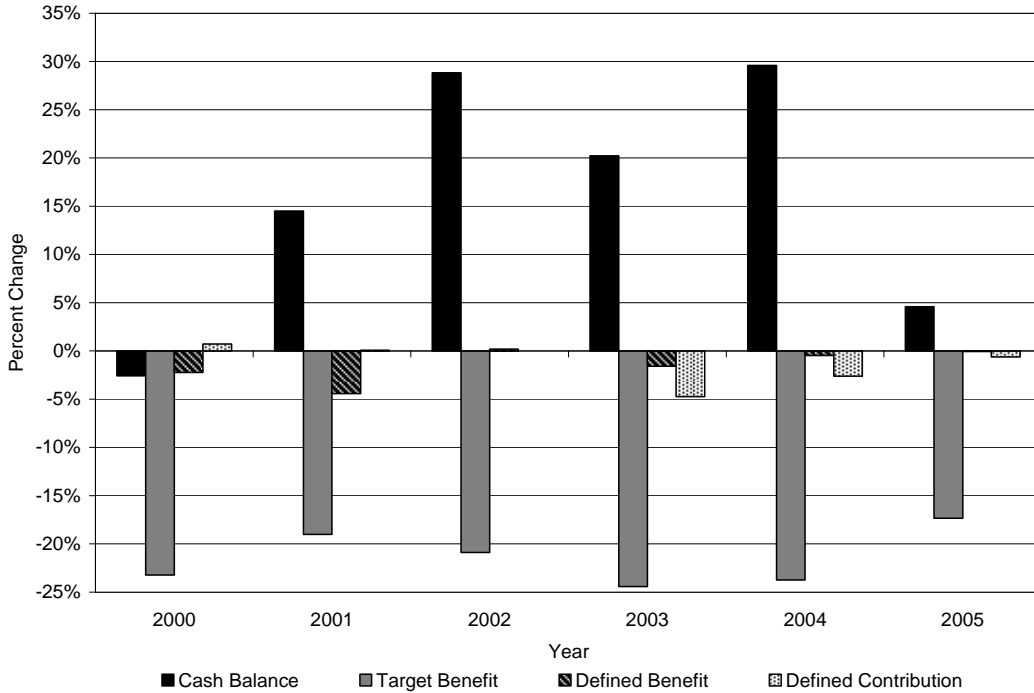
**Table 1: Number of Pension Plans
by Plan Type, 1999-2005**

Year	Type of Plan			
	Cash Balance	Target Benefit	Defined Benefit	Defined Contribution
1999	1,324	5,122	48,571	677,978
2000	1,290	3,932	47,483	682,946
2001	1,477	3,184	45,382	683,427
2002	1,903	2,519	45,466	683,424
2003	2,288	1,904	44,748	651,072
2004	2,965	1,452	44,537	634,115
2005	3,101	1,200	44,513	630,182

Source: Compiled from U.S. Department of Labor. Private Pension Plan Bulletin: Abstract of Form 5500 Annual Reports. 1999-2005.

⁶⁹ U.S. Department of Labor, 2004.

Figure 1: Percent Change in Number of Plans, 1999-2005



Source: Compiled from U.S. Department of Labor. Private Pension Plan Bulletin: Abstract of Form 5500 Annual Reports. 1999-2005.

The second trend, shown in Table 2, is the change in participants between the years 1999-2005. The trend shows that, like the number of plans, the number of participants in cash balance plans is increasing. Similarly, the number of participants in target benefit plans is decreasing. The number of DB plan participants decreases in the same time period. DC plan participation rises slightly from 1999-2001 and remains relatively stable from 2001-2005.

Table 2: Total Participants (in Thousands) by Plan Type, 1999-2005

Year	Type of Plan			
	Cash Balance	Target Benefit	Defined Benefit	Defined Contribution
1999	6,175	208	35,252	60,160
2000	7,016	99	34,597	61,617
2001	7,820	82	34,248	64,429
2002	8,244	79	33,834	65,196
2003	9,346	65	32,833	64,052
2004	9,808	67	31,900	64,560
2005	10,135	65	31,790	75,416

Source: Compiled from U.S. Department of Labor. Private Pension Plan Bulletin: Abstract of Form 5500 Annual Reports. 1999-2005.

A final pension plan trend captures the average contributions employers and employees make for every active participant. This trend is important because it provides insight into how closely contributions for hybrid pension plans parallel those for traditional pension plans. Table 3 illustrates the contributions per capita annually for the four types of pension plans. As this table shows, hybrid pension plans are indeed keeping pace with traditional pension plans in terms of contributions. In some years, the contributions per participant for hybrid pension plans exceed the contributions for traditional pension plans. The contributions are increasing over time for DB and cash balance plans; however, contributions per participant for DC and target benefit plans are growing at a similar rate as inflation.

Table 3: Contributions per Participant, 1999-2005 (2005 dollars)

Year	Type of Plan			
	Cash Balance	Target Benefit	Defined Benefit	Defined Contribution
1999	\$891	\$3,702	\$1,675	\$4,326
2000	\$1,015	\$3,556	\$1,850	\$4,427
2001	\$2,562	\$4,547	\$2,465	\$4,299
2002	\$5,710	\$3,724	\$4,166	\$4,306
2003	\$5,635	\$3,665	\$5,977	\$4,344
2004	\$4,550	\$3,561	\$4,804	\$4,532
2005	\$4,209	\$3,377	\$4,683	\$3,990

Source: Compiled from U.S. Department of Labor.
Private Pension Plan Bulletin: Abstract of Form 5500 Annual Reports. 1999-2005.

Overall, the trends indicate that hybrid pension plans vary more in annual growth compared to the steady decline of DB and DC pension plans; while hybrid pension plans are growing rapidly overall, traditional plans still dominate. Trends of plan participants show similar results. From 1999-2005, all plan types have become remarkably comparable in terms of contributions per employee, suggesting that the costs of funding benefits may not be greatly different even though hybrid plans are adopted in part because of alleged (or desired) plan cost savings.

Section 3: Impacts of Hybrid Plans on Employers and Employees

Each retirement plan has essential characteristics that define its nature, although the details may vary. Below, the report discusses the essential components of cash balance and target benefit plans and the important considerations associated with each characteristic. Depending on each characteristic of a retirement plan, the plan will affect employers and employees differently. Impacts may vary depending on the nuances of each retirement plan. We introduce this analysis as a systematic approach to illustrate the potential advantages and disadvantages to employers and employees for each plan. Appendix C displays a comparative summary of characteristics for traditional DB and DC, cash balance, and target benefit plans.

Analysis: Cash Balance

The most common hybrid, the cash balance plan, is technically a DB plan because it uses a formula to determine benefits based on contributions made to a hypothetical individual account. This account is for bookkeeping purposes only as the employer manages the plan's funds on behalf of all participants. Each year a percentage of the participant's salary, usually 4 to 6 percent,⁷⁰ is added to the hypothetical account and an interest rate is applied to estimate accruals. This rate is usually in line with the interest rate for U.S. Treasury bills or notes.⁷¹ The firm does not actually separately invest or distinguish the "accounts," but the firm does invest aggregated amounts to fund the benefits.⁷²

Participation

Participation in retirement plans may be automatic or optional, dependent in part on the nature of plan benefit accrual and contributions.⁷³ Some organizations automatically enroll employees in an employer-sponsored retirement plan upon hire. For other types of plans, participation is optional: to enroll, employees must go through a process to select how they participate.

Participation in cash balance plans, as is the case in most traditional DB plans, is automatic. This is beneficial to employers, as it reduces administrative costs and avoids adverse selection and age-discrimination issues that can arise with low participation.⁷⁴ Automatic enrollment in retirement plans ensures that workers have some minimum level of income upon retirement, but it forces employees into plans that may not be optimal.

⁷⁰ Purcell, 2004; Cahill & Soto, 2003.

⁷¹ Purcell, 2004.

⁷² Cahill & Soto, 2003.

⁷³ Cahill & Soto, 2003.

⁷⁴ U.S. Government Accountability Office, 2007.

Optional enrollment in plans gives the employees choice regarding their retirement savings. However, employees may not have sufficient information to make the best enrollment decisions, which often discourages participation. Furthermore, some participants may not feel they can afford contributing to plans, although some may underestimate the value of foregone employer contributions.⁷⁵ This may be especially true for low-income individuals.

Automatic enrollment in retirement plans increases aggregate funding obligations for employers if they are required to contribute to the retirement plan. It also shares risks across a larger group of employees not able to engage in adverse selection. Optional enrollment plans may decrease aggregate funding obligations, but it also makes funding estimates more difficult because of unpredictability in enrollment. Optional enrollment gains and losses only affect employers who are required to contribute to the retirement plan. Employers may have certain tax incentives for enrollment; however, employer contributions are tax-exempt to the employer and tax-deferred to employees.⁷⁶

Contributions and Financial Market Risk

Employer contributions, employee contributions, or a combination of the two fund retirement plans. Market risk for retirement accounts relates to the uncertain future value of funds invested by employers and employees. The value of funds available for retirement may be greater or less than expected depending on changes in financial markets and interest rates.⁷⁷ This investment risk depends on the contributor and the benefits promised, and thus can be borne by employers or employees.

Employers bear the financial market risk for cash balance plans, as they contribute to the investments and are in charge of them.⁷⁸ Additionally, PBGC guarantees benefits up to a point, should plans fail.⁷⁹ Market risk in cash balance plans is somewhat unique for employers. Because they are in charge of all of the investments, any return in excess of benefits paid is profit for the employers, although Congress has put limitations on the use of these excess returns.⁸⁰ As with DB plans, the risk employers face depends on the market. A typical employer will seek to receive the highest long-term return given the associated investment risks.⁸¹

⁷⁵ U.S. Government Accountability Office, 2007.

⁷⁶ U.S. General Accounting Office, 2002.

⁷⁷ Davidson, 2002.

⁷⁸ Cahill & Soto, 2003; Elliot & Moore, 2000.

⁷⁹ Cahill & Soto, 2003.

⁸⁰ Purcell, 2004.

⁸¹ Employee Benefit Research Institute, 1997.

Plan Transparency

Employees can make more informed retirement decisions when information on the status of the retirement plan and the probable income available at retirement is readily available and easy to understand. This reporting can act as a motivational factor for employees to increase contributions to other retirement savings if they feel that their current plans will provide insufficient retirement income. The account balance style of the cash balance plan reports available accumulations in contrast to only the benefit estimates in a DB plan.⁸² The account balance is straightforward to report, although employers must estimate “hypothetical accounts” and not monitor actual accounts for employees. The major cost to employers for plan transparency is the administrative costs for the formulaic hypothetical account. It may be more costly to administer than a traditional DB plan but likely less costly to administer than a traditional DC plan.⁸³

Portability

Portability allows an employee to change jobs without losing accruing value in their retirement benefits.⁸⁴ The cash balance plan has greater portability than does the DB plan, and this directly benefits employees who switch jobs more frequently. The cash balance plan uses crediting with interest each time the account accrues a percentage of earnings.⁸⁵ With three or more job changes, employees would obtain more benefits with a cash balance plan than they would with a traditional DB plan.⁸⁶

However, in some circumstances, traditional DB plans provide higher benefits to employees who stay with a single employer for many years when compared to highly portable plans. This has been one source of controversy when DB plans are converted into cash balance plans that are less favorable to long-term employees. Because traditional DB plans accumulate more near the end of a longer career, they may accumulate more for longer-term employees than would a plan which had level accumulations over time.⁸⁷

Pension Benefit Guaranty Corporation Insurance

The PBGC provides insurance for DB pension plans, including hybrid plans that have a benefit promise. If a retirement plan becomes financially insolvent in 2008, PBGC will pay employees, up to approximately \$51,750 annually, to cover the promised benefit level.⁸⁸ Because the cash balance plan is technically a DB plan, the PBGC insures employees' benefits.⁸⁹ PBGC insurance provides employees a

⁸² Purcell, 2004.

⁸³ Employee Benefit Research Institute, 1997.

⁸⁴ Purcell, 2004.

⁸⁵ Employee Benefit Research Institute, 1997.

⁸⁶ Cahill & Soto, 2003.

⁸⁷ Cahill & Soto, 2003.

⁸⁸ Pension Benefit Guaranty Corporation, 2003.

⁸⁹ Cahill & Soto, 2003.

level of retirement income security by guaranteeing some level of benefits if their retirement plans are unable to provide promised benefits. PBGC does not provide insurance for retirement plans, including a target benefit plan, that do not promise a DB, leaving employees enrolled in DC plans exposed to risk of plan insolvency.

Employers must pay a PBGC premium per covered participant. Congress sets the premium, which, coupled with PBGC fund earnings, is intended to cover expected liabilities. If the plan becomes underfunded, the employer has a period of time to once again fund it fully; otherwise, its tax-qualified status is in jeopardy.⁹⁰ Ultimately, however, PBGC insurance is beneficial to employees in that it prevents the loss of pension savings in cases such as the bankruptcy of Enron when employees saw pension accounts almost vanish.⁹¹

Accrual of Benefits

The benefits associated with retirement plans accrue at different rates over the lives covered by a plan. Some plans have benefits that accrue at a balanced and level rate during the life of the plan (level accrual). Such plans include DB plans that use a career average pay to determine the formula benefits. Other plans accrue benefits at a much faster rate in the final years of the plan (back-loaded). These include plans with a formula that uses final average pay to define benefits. Age and duration of employment are typically the two most important factors that are associated with accrual of benefits.

Unlike traditional DB pension plans that most often use final average pay, most cash balance pension plans accrue benefits through a career average formula. A career average plan, as opposed to a final average plan, benefits certain employees by providing a uniform accrual of benefits throughout the employee's life in the workforce.⁹² For employees who change jobs, this is ideal, as benefits will not decline between jobs as they do with final average plans. Without back-loading of benefits, employers with cash balance pension plans must contribute at a higher rate than in traditional DB plans during the early years of employees' tenure.⁹³ For employees, back-loaded plans offer a level of protection against inflation because their benefits are calculated based on an average of final years of service. Back-loaded plans also recognize fast-track employees who earn higher levels of income much more quickly during the course of employment. Conversely, they provide younger employees with slower benefit accumulation in early years.⁹⁴

⁹⁰ Purcell, 2004.

⁹¹ Gonyea, 2007.

⁹² Elliot & Moore, 2000.

⁹³ Elliot & Moore, 2000; Employee Benefit Research Institute, 1997.

⁹⁴ Employee Benefit Research Institute, 1997.

Early Retirement Incentives

Retirement plans may contain a provision that gives incentives for retiring early (early retirement subsidies) or discourages early retirement (early retirement penalties). Traditional DB plans provide early retirement subsidies that explicitly encourage early retirement.⁹⁵ These subsidies may supplement benefits until the worker is at an age eligible to receive Social Security. In DC and other plans with account balances that grow based on market rates, investment earnings on large lifetime accumulations may encourage delaying pension receipt. Disincentives for early retirement, or early retirement penalties, will naturally exist when accrual increases at the end of one's career and when annuity conversion of lump-sum amounts take full account of actuarial risks.⁹⁶

Unlike in traditional DB or DC pension plans, employees in cash balance plans are not penalized when selecting a retirement age. Because vested participants in cash balance plans may end employment and leave with their accrued benefit at any time, there is no actuarial penalty for employees leaving the workforce before retirement age.⁹⁷ An employee who transfers jobs or wishes to retire early gains and advantage from cash balance plan participation since he or she may withdraw or rollover the account balance.

Firms have traditionally used early retirement subsidies to encourage retirement by employees who may be less productive than newly hired younger employees. These may remain advantageous tactics in declining industries. However, in growing industries, and if a firm lacks the necessary pool of experienced workers to replace those who retire, plan-based early retirement incentives may have a negative effect on employers and employees. Retirement plans that have early departure penalties may be preferable in industries that wish to retain experienced workers.⁹⁸

Method of Payout and Longevity Risk

Retirement plans can pay employees' retirement benefits in a one-time lump-sum payment or through an annuity that usually pays a set monthly income for the remainder of the beneficiary's life and/or the life of the beneficiary's spouse.⁹⁹ An employee assumes the risk of living too long or outliving resources if he or she is enrolled in a plan that specifies a lump-sum payout.¹⁰⁰ At the same time, the recipient may not spend out of the lump sum at a rate that fully meets consumption needs. This longevity risk—not knowing how long resources must last—is borne by employees in DC plans and with lump-sum distributions.

⁹⁵ Johnson & Steuerle, 2003.

⁹⁶ Johnson & Steuerle, 2003.

⁹⁷ Elliot & Moore, 2000.

⁹⁸ Johnson & Steuerle, 2003.

⁹⁹ U.S. General Accounting Office, 2002.

¹⁰⁰ Cahill & Soto, 2003.

Annuity payments, paid monthly until death, achieve greater consumption stability, shifting the longevity risk onto employers.

As in DC pension plans, cash balance pension plans normally pay out benefits upon retirement or transfer of jobs in a lump sum, although ERISA requires the employer to offer an option to purchase an annuity conversion.¹⁰¹ Depending upon market factors at the time of retirement, such as interest rates and the consumer price index, employees may not be aware of the most advantageous payout option. Under future high interest rate assumptions, the lifetime benefit may be highest as an annuity. If a lower interest rate assumption is made in calculating the lump-sum benefit, the employee may be better off with a lump-sum payout. Ultimately, as the choice of pension payout relies upon the employee's knowledge of market forces at the time of retirement, the employee bears a higher share of market and longevity risk than does the employer.¹⁰²

Analysis: Target Benefit Plan

The target benefit plan, though technically a DC plan, also combines characteristics of DB and DC pensions. In this type of plan, employers and employees meet to determine a "target" amount of retirement income for each employee.¹⁰³ Both the employee and employer then contribute to the employee's account. As with a DC account, the employee is wholly responsible for the investment decisions and monitoring of the account balance. Unlike a cash balance plan, the account is real and not hypothetical. The target benefit account typically requires both employee and employer contributions.¹⁰⁴

Participation

Participation for employees in the target benefit plan is automatic and mandatory. All employees are required to make contributions to their account.¹⁰⁵ Since this essentially becomes a mandatory DC pension, participation rates should be higher, much like that for DB pensions. Mandatory enrollment ensures that all employees have some sort of retirement income available. The target benefit plan may encourage employees to think about other forms of retirement savings necessary to meet retirement income goals.

Contributions and Financial Market Risk

Both the employee and the employer make contributions to an account defined by the target benefit. Target benefit plans determine the level of contributions, set for both parties, based on the estimated regular contributions needed to meet the

¹⁰¹ Cahill & Soto, 2003.

¹⁰² Cahill & Soto, 2003.

¹⁰³ Employee Benefit Research Institute, 1997.

¹⁰⁴ Employee Benefit Research Institute, 1997.

¹⁰⁵ Employee Benefit Research Institute, 1997.

target benefit goal.¹⁰⁶ Employer contributions are tax deductible and employee contributions are tax deferred.¹⁰⁷

The employee bears the full financial market risk in a target benefit plan. Contributions by the employer and employee are placed in investment accounts the employee selects. At retirement, the actual balance of these funds may be lower or higher than the projected “target” set earlier. If the actual balance is lower than the target, the employer has no obligation to supplement the account balance to meet the account target.

Plan Transparency

Account balances are accessible and easy to understand for the employee. Because contributions are determined by targeted benefits the employer negotiated with employees, the employee may better understand the adequacy of the account balance for meeting targeted retirement income. This may encourage employees to seek additional sources of retirement income or better investment advice if their plan is underperforming. Target benefit plans create individual accounts that have limited administrative costs to the employer.

Portability

The target benefit pension is highly portable since it is a defined contribution plan.

Pension Benefit Guaranty Corporation Insurance

Because the target benefit pension is technically a DC pension, the PBGC offers no protection.¹⁰⁸ As a result, employers are not required to pay premiums to the PBGC.

Accrual of Benefits

Like DC and cash balance plans, benefits accrue at a level rate over the life of the plan. Market rates determine the actual growth. Level accrual is less advantageous for employees who expect to have much higher levels of income later in their careers with the same employer, as level accrual can result in fewer resources upon retirement relative to DB pensions. However, level accrual of benefits in the target benefit plan maximizes potential benefits for employees who do not expect to stay with the same organization for longer periods of time or anticipate switching jobs frequently throughout their careers. The level accrual of benefits does not affect employers in the target benefit plan because their contributions are not dependent on the actual account balance.¹⁰⁹

Early Retirement Incentives

There are no incentives for the employee to retire early, as all contributions aim to meet the retirement benefit goal. If an employee does not have sufficient

¹⁰⁶ Employee Benefit Research Institute, 1997.

¹⁰⁷ Conservative Financial Services Inc., 2008.

¹⁰⁸ Employee Benefit Research Institute, 1997.

¹⁰⁹ Employee Benefit Research Institute, 1997.

income set aside at retirement, he or she can continue to work and add to his or her target benefit plan account.

Method of Payout and Longevity Risk

Employees assume all the longevity risk in a target benefit plan.¹¹⁰ At retirement, an employee has an account balance that he or she can convert to an annuity or take as a lump-sum payment. If an employee chooses to purchase an annuity, the cost of the annuity depends upon the individual's expected life span and prevailing interest rates. If the account balance at retirement is lower than expected, the employee may not have enough money to purchase an annuity sufficient to fund consumption during her or his remaining lifetime.

¹¹⁰ Employee Benefit Research Institute, 1997.

Conclusion and Recommendation

DB and DC plans have made it possible for millions of Americans to retire with stable levels of retirement income. However, these two types of plans have encountered problems as labor markets have changed and retirement savings options have increased, bringing into question the plans' ability to provide retirement security.

Turbulent financial conditions have and will likely continue to make retirement account balances less stable. Hybrids offer an alternative to address these concerns and overcome some of the limitations found in DB and DC plans in that they can:

- *Increase portability of retirement benefits for mobile workers.*
Most hybrid pension plans are substantially more portable than DB plans but may not be as portable as DC plans.
- *Encourage greater levels of retirement savings for employees.*
Hybrid pensions are usually more transparent in terms of accruing account balances than are traditional DB plans. If employees are able to become better educated and understand their plans more with increased transparency, this may encourage savings as long as workers do not overestimate retirement income payable from seemingly substantial retirement accounts. DB-type hybrids that have provisions for automatic enrollment may achieve greater transparency without jeopardizing continued savings, providing at least some minimal level of income in retirement.

Hybrid pension plans merit further consideration and research. For many workers and employers, traditional DB and DC pension plans have been unable to address the changing labor and product market and provide benefits that meet the competitive hiring and personal retirement savings goals of employers and employees. Hybrid pension plans offer distinct new ways of combining desirable characteristics of traditional DB and DC plans for employers and employees to address potential goals for the pension system. They also remove some of the protections provided by traditional DB and DC plans for some workers.

While hybrid pensions may not be suitable for all types of employers and employees, hybrids are a distinct alternative to DB and DC plans. Designers of hybrid pension plans have the potential to arrange essential characteristics of traditional DB and DC pension plans in new ways to best align the goals of employers and employees. For all hybrid designs, further research is necessary to determine how these plans function in the short- and long-term compared to DB and DC plans. Research must continue to track existing hybrids and start collecting data on newer designs. Many new hybrid designs remain relatively

untested, but careful monitoring over time will reveal their relative advantages and disadvantages.

A brief examination of hybrid pension plans around the world demonstrates the complexity and creativity in other countries. These hybrid plans operate within the unique pension environment created by regulation, tradition, and values of those countries. International hybrid pensions provide the potential framework for pension schemes that may be successful in the United States. At the time of this study, no significant studies appear to examine the potential of international hybrid designs in the United States. Further research would help realize this potential.

Finally, with hybrid pension plans and the legislation governing them, employees and employers are able to consider a broader range of pension plan designs and benefits than previously realized with traditional DB and DC plans. However, hybrid plans may not be suitable or optimal for all types of employees and employers. Without the long-term study of hybrid pension plans for specific types of employers and employees, we are only able to speculate on the relative advantages and disadvantages of hybrid pension plans as compared to DB and DC plans. Employees, for example, may vary on the basis of age at the time of plan enrollment, expected service to an organization, willingness to assume risk, and financial goals at retirement. Employers vary in terms of the number of employees, employee turnover, expected retirement timing, prior obligations for pensions and other employee benefits, willingness to assume risk, and financial stability.

These multiple dimensions make recommending one “superior” type of pension plan for an organization and its employees complex. Further studies of hybrid pension plans must examine plan impacts by type of employers and employees in order to understand the advantages and disadvantages of hybrids, as compared to each other and to DB and DC plans. Certainly, the current array of hybrid pension plans may not represent the ultimate pension solution that would address the range of retirement income security issues, but we believe the flexibility allowed in creating these combination-type plans is an important step in achieving that goal.

Future Research

To have a greater understanding of hybrid pension plans, we suggest the following steps.

- *Determine number and type of hybrid pension plans that are in use.* Internal Revenue Service Form 5500 data only provide information for cash balance and target benefit hybrid types. To understand the complete picture of hybrid plans, this level of data must be collected for other types of hybrid designs. Hybrid pension plans come in many types of essential characteristic arrangements and thus go by many names other than

those found in Form 5500 data. Expanding the knowledge base of specific types of plans is necessary for future research and for movement away from the general discussion of hybrid pension plans toward specific analysis of unique hybrid designs.

- *Determine the types of employers and employees using hybrid pension plans.* Employers and employees across many “dimensions” can be described. Understanding and quantifying these dimensions would be necessary to conduct empirical analyses of hybrid pension plans’ impacts on employers and employees, and, ultimately, the relative advantages and disadvantages of hybrid plans for specific types of employers and employees. Further research is necessary to gather employer- and employee-level data for other types of hybrid designs.

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Appendix A: Key Terms and Definitions

This appendix contains a list of key terms and definitions used throughout the report.

Active participant: Pension plan participants employed under a plan and receiving a credited service. This does not include retired or separated plan participants.

Annuity payout: A method of benefit payout that provides the employee with a periodic disbursement of retirement benefits until a set date or death. Annuity payouts are often annually or monthly.

Career average pay: A formula design used in formula-based pension plans that calculate employee salaries from the average of their entire career.

Defined benefit (DB) pension plan: A formula-based pension plan generally based on the employee's salary and years of service. The Pension Benefit Guaranty Corporation insures this type of plan, and the plan usually expresses benefits in an annuity payout. Under a defined benefit plan, the employer pays the benefit.

Defined contribution (DC) pension plan: An employee account-based pension plan in which employees, employers, or both contribute. The Pension Benefit Guaranty Corporation does not insure this type of plan and the plan usually expresses benefits in a lump-sum payout.

ERISA: The federal Employee Retirement Income Security Act of 1974 (ERISA) sets forth provisions on pension plans, including who can participate, how long the vesting period is and plan funding. ERISA also created the Pension Benefit Guaranty Corporation.

Final average pay: A formula design used in formula-based pension plans that calculate employee salaries from the last few years of their career. Final average pay typically uses the last three to five years.

Hybrid pension plan: A form of pension plan that combines characteristics of both defined benefit pension plans and defined contribution pension plans.

Lump-sum payout: A method of benefit payout that provides the employee with a one-time disbursement of retirement benefits.

PBGC insurance: The Pension Benefit Guaranty Corporation (PBGC) insures private, tax-qualified defined benefit pension plans, and some hybrid pension plans, in the case of plan termination without sufficient assets for payout.

Portability: A characteristic of pension plans that indicates the ability to which an employee can transfer accrued benefits from one plan to another.

PPA: The Pension Protection Act of 2006 (PPA) reformed pension law under ERISA with new funding requirements for DB, DC, and hybrid pension plans.

Wear-away: Wear-away occurred in the conversion from a DB plan to a cash balance plan, when accrued benefits from the original DB plan surpassed those dictated by the new cash balance plan. This caused a stall in further accrual until cash balance formula accommodated it; the Pension Protection Act of 2006 eliminated wear-away.

Whipsaw: Whipsaw refers to the interpretation of tax code limiting interest rates that can be applied to cash balances; the Pension Protection Act of 2006 eliminated whipsaw.

Appendix B: Other U.S. and International Hybrids

Table 4 consists of summaries of the four other U.S. hybrid pensions alluded to in the report. They serve as examples of the many types of hybrids that exist in the United States today.

Table 4: Other U.S. Hybrid Examples Summary

Hybrid Plan Name	Brief Description
Pension equity	Similar to cash balance, but it protects against inflation and recognizes fast-track employees by using final average salary calculation. No account balance. ¹¹¹
Floor-offset	Employee is ensured minimum level of benefits. If minimum is not met by DC style plan, DB plan makes up difference. ¹¹²
Age-weighted profit sharing	Provides flexibility of DC style plan, but it skews benefits in favor of older employees. Follows typical profit-sharing plan guidelines. ¹¹³

Table 5 consists of summaries of pension environments, plans and description of the plans in four sample countries: the United Kingdom, Canada, Japan, and the Netherlands. Each country has its own hybrid plan setups. Examples of hybrid pension plans from outside the United States can provide insight when giving attention to domestic hybrids and the further development of new hybrids.

¹¹¹ Employee Benefit Research Institute, 1997; Green, 2003.

¹¹² Employee Benefit Research Institute, 1997.

¹¹³ Employee Benefit Research Institute, 1997; U.S. Department of Treasury, 2008.

Table 5: International Hybrid Comparison

Country of Origin	Pension Environment	Hybrid Plan Name	Brief Description
United Kingdom	Hybrid plans becoming more effective because of risk sharing features between employers and employees. ¹¹⁴ Falling stock returns and interest rates encouraging switch to DC and hybrid plans.	Self-annuitizing	DC plan equalizes risk by offering annuity conversion rate to the plan.
		Underpin	Greater risk sharing, guaranteed minimum benefit for employees. Employees receive best of a fictional DB plan or actual DC plan.
Canada	Challenges of aging population, financial volatility, and increased worker mobility. Growth of hybrids, but DB remains popular from strong union presence. ¹¹⁵	Member-funded pension plan	DB plan funded by employee contributions. Employee can benefit from funding surplus.
		Combination or "stacked"	Balanced risk sharing with simultaneous operation of DB and DC plan.
		Choice	Employee chooses a DB or DC plan based on optimal benefit for individual situation; may switch during employment tenure.
		Lifecycle	DC plan switches to DB plan during employment. Attempts to maximize benefit to employees.
Japan	Legislation in 2002 legalized employer ability to offer alternative forms of pensions. ¹¹⁶	Cash balance	Like U.S. cash balance, but investment rate tied to national bond. No insurance protection.
Netherlands	Independent financial institution, not employers, manages all pensions. Economic changes encouraged switch from DB final average to DB average-wage plans. ¹¹⁷	Hybrid DB	Pension fund managers modify indexation and contribution rate simultaneously to absorb surplus or shortfall.

¹¹⁴ Wilson & Lee, 2006.

¹¹⁵ Smolkin, 2006.

¹¹⁶ Feinberg, 2003.

¹¹⁷ Ponds & Van Riel, 2007.

Appendix C: Four Popular Pension Plans

Table 6 displays four popular pension plans. The two traditional plans are compared with two popular hybrid pensions by plan characteristics. While the traditional defined benefit and defined contribution are essentially opposite plans, the hybrid plans incorporate elements of both defined benefit and defined contributions, but in unique ways.

Table 6: Characteristics Comparisons for Four Popular Pension Plans

Plan Characteristics	Traditional Defined Benefit	Traditional Defined Contribution	Cash Balance	Target Benefit
Participation in Plan	Automatic	Optional	Automatic	Automatic
Origin of Contributions	Employer	Employee and employer	Employer	Employee and employer
Financial Market Risks	Employer bears	Employee bears	Employer bears	Employee bears
Plan Transparency	Not easily understood	Easy to understand "actual" current balance	Easy to understand "hypothetical" balance	Easy to understand "actual" current balance
Portability	Low portability	High portability	Portable	High portability
PBGC Insurance	Yes	No	Yes	No
Accrual of Benefits	Back-loaded	Level	Level	Level
Early Retirement Incentives	Incentive	No incentive	No incentive	No incentive
Normal Method of Payout	Annuity	Lump sum	Lump sum	Lump sum
Longevity Risk	Employer bears	Employee bears	Employee bears	Employee bears