United States Government Accountability Office

GAO

Report to the Chairman, Committee on Education and Labor, House of Representatives

July 2009

PRIVATE PENSIONS

Alternative Approaches Could Address Retirement Risks Faced by Workers but Pose Trade-offs

This report was revised on September 1, 2009, to correct table 12, row 1, column 4 – "The Baseline results, Household annuity equivalent (per year, 2008 dollars) for income quartile 2 should be $7,780."

GAO

Accountability * Integrity * Reliability

GAO-09-642

July 2009

PRIVATE PENSIONS

Alternative Approaches Could Address Retirement Risks Faced by Workers but Pose Trade-offs

GAO Accountability•Integrity•Reliability
Highlights

Highlights of GAO-09-642, a report to the Chairman, Committee on Education and Labor, House of Representatives

Why GAO Did This Study

Recent losses in the stock market and poor economic conditions underscore that many U.S. workers are at risk of not having an adequate income in retirement from pension plans. The dramatic decline in the stock market has diminished pension savings and reportedly led to low levels in older Americans' confidence in their ability to retire. Even before the current economic recession, research indicated that pension benefits are likely to be inadequate for many Americans.

This report addresses the following questions: (1) What are key risks faced by U.S. workers in accumulating and preserving pension benefits? (2) What approaches are used in other countries that could address these risks and what trade-offs do they present? (3) What approaches do key proposals for alternative plan designs in the U.S. suggest to mitigate risks faced by workers and what trade-offs do they entail?

To complete this work, we reviewed research on defined benefit and defined contribution plans, and interviewed pension consulting firms, industry experts, academics, and other relevant organizations in the U.S. and abroad. In addition, we used a microsimulation model to assess the impact of certain strategies to increase pension coverage on accumulated benefits.

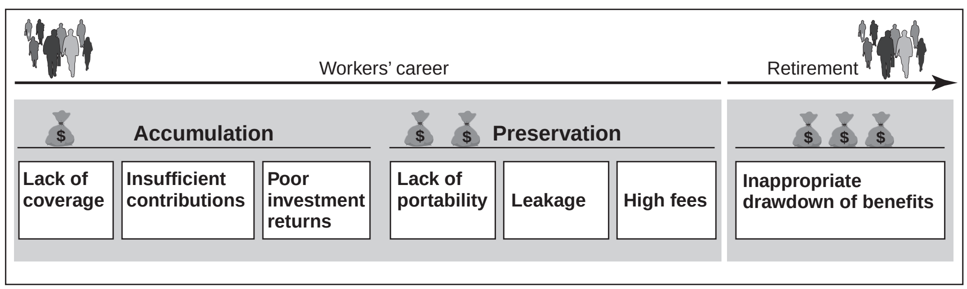
The Department of Labor and Department of Treasury provided technical comments on this report.

View GAO-09-642 or key components.
For more information, contact Barbara Bovbjerg at (202) 512-7215 or bovbjergb@gao.gov.

What GAO Found

U.S. workers face a number of risks in both accumulating and preserving pension benefits. Specifically, workers may not accumulate sufficient retirement income because they are not covered by a defined benefit (DB) or defined contribution (DC) pension plan. For example, according to national survey data, about half of the workforce was not covered by a pension plan in 2008. Furthermore, workers covered by DC plans, in particular, risk making inadequate contributions or earning poor investment returns, while workers with traditional DB plans risk future benefit losses due to a lack of portability if they change jobs. Preretirement benefit withdrawals (leakage), high fees, and the inappropriate drawdown of benefits in retirement also introduce risks related to preserving benefits, especially for workers with DC plans.

Key Risks in Accumulating and Preserving Pension Benefits



Sources: GAO analysis; images, Art Explosion.

The private pension systems of the Netherlands, Switzerland, and the United Kingdom represent alternative approaches to address these key risks, but they also pose trade-offs to consider in applying them in the U.S. We selected these countries from a larger group after an initial review indicated that their private pension systems addressed many of the risks that U.S. workers face and had the potential to yield useful lessons for the U.S. experience. Their systems offer ideas for mitigating risks in accumulating and preserving benefits, such as mandating coverage, sharing investment risk among workers and employers, restricting leakage, and using annuities to drawdown benefits. However, these approaches pose trade-offs. For example, in the Dutch and Swiss systems, sharing investment risk requires assets to be pooled and thus limits individual choice. Additionally, while annuitizing benefits at retirement can mitigate longevity risk, doing so also limits retirees' access to their assets.

Several proposals for alternative pension plan designs in the U.S. incorporate approaches to mitigate the risks faced by workers, such as incentives to increase voluntary coverage or mandating annuitization. However, these approaches also pose trade-offs and costs for workers and employers, and in some cases the federal government. In particular, important trade-offs arise with mandating coverage and contributions, guaranteeing investment returns, and annuitizing benefits. For example, mandatory approaches reduce risks but also raise concerns about the impact of higher benefit costs, particularly on small employers.

Contents

Figures

Abbreviations

DB	defined benefit
DC	defined contribution
ERISA	Employee Retirement Income Security Act
GDP	gross domestic product
GRA	guaranteed retirement account
IRA	Individual Retirement Account
OECD	Organisation for Economic Co-operation and Development
PENSIM	Policy Simulation Group Pension Simulator
PSG	Policy Simulation Group
U.K.	United Kingdom

United States Government Accountability Office
Washington, DC 20548

July 24, 2009

The Honorable George Miller
Chairman
Committee on Education and Labor
House of Representatives

Dear Mr. Chairman:

Recent losses in the stock market and poor economic conditions underscore that many U.S. workers are at risk of not having an adequate income in retirement. The dramatic decline in the stock market has diminished pension savings, a key component of retirement income, and has led to low levels in older Americans' confidence in their ability to retire. However, even before the current economic recession, research indicated that pension savings are likely to be inadequate for many Americans, particularly low-income workers. Over the last two decades, much of the risk and burden of financing retirement has shifted from employers to employees as pension coverage has moved away from traditional defined benefit (DB) plans, in which workers typically accrue benefits based on years of service and earnings, in favor of defined contribution (DC) plans, in which participants accumulate balances in self-directed individual accounts, such as 401(k)s. Yet despite the increase in the number of DC plans, a considerable number of workers still lack pension coverage through their employer. Even many workers who do have a pension may still fall short of sufficient pension benefits to maintain their standard of living in retirement due to a reliance on the financial health of the employer and other factors. This outcome has led some industry experts to conclude that the U.S. pension system is in need of new options to address the risks workers face in securing an adequate retirement income from pension plans.[1]

A number of other countries have made modifications to their private pension systems in an attempt to address risks faced by their workers. In addition, pension experts and organizations in the United States have developed proposals for alternative designs to address some of the risks

[1]The Joint Committee on Taxation reported that federal tax expenditures for pension plans are estimated to be $98 billion in 2009. Federal tax expenditures consist of forgone tax revenue from deferrals on employer and employee contributions and investment earnings in qualified pension plans net of taxes paid on pension distributions.

and limitations of employer-based DB and DC pension plans. In order to develop strategies to improve the retirement security of America's workers, you asked us for information about how alternative plan designs address the risks associated with accumulating and preserving pension benefits. Specifically, you asked us to answer the following questions:

1. What are key risks faced by U.S. workers in accumulating and preserving pension benefits?

2. What approaches are used in other countries that could address these risks and what trade-offs do they present?

3. What approaches do key proposals for alternative plan designs in the U.S. suggest to mitigate risks faced by workers and what trade-offs do they entail?

To identify key risks faced by workers from traditional DB and DC plans, we reviewed research and interviewed industry experts, pension consulting firms, academics, and other relevant organizations. The scope of this study is limited to risks faced by workers directly related to their pension benefits and does not focus on other significant but more indirect risks to retirement security, such as the loss of retiree health care coverage, rising Medicare premiums, or higher-than-expected health care costs in retirement. To identify approaches used in other countries that could address risks in the U.S. pension system, we examined the employer-sponsored pension systems of three countries: the Netherlands, Switzerland, and the United Kingdom (U.K.). We selected these countries after an initial review of employer-sponsored pension plans in countries that belong to the Organisation for Economic Co-operation and Development (OECD). In that review, we assessed each country's pension system based on the risks identified in the first objective and the potential for yielding useful lessons for the U.S. experience. For each of the three selected countries, we reviewed available documentation and research and analyzed the plan designs based on the risks workers face. We interviewed pension experts and government officials in each country, as well as academics and other experts based in the United States, about each plan's strengths, weaknesses, trade-offs, and lessons learned for the U.S. To identify the key proposals for alternative pension plan design in the United States, we reviewed available documentation and interviewed national retirement policy experts. We selected four proposals that incorporate strategies to address risks workers face, were developed in enough detail to allow us to fully analyze them, were not duplicative, and have been proposed or considered in the last 5 years. In addition, we assessed two other proposals that specifically focused on increasing the use of annuities in DC plans. We reviewed each proposal and interviewed their authors to evaluate the strengths, weaknesses, and trade-offs of each proposal, as well as the legal or institutional changes they would require. We also reviewed related research and interviewed pension experts about the approaches used in the proposals. In addition, we used a microsimulation model, PENSIM, to assess the impact of certain strategies, including requiring all employers that do not currently offer a pension plan to sponsor a DC plan with no employer contribution (i.e., universal access), on accumulated benefits.[2] These strategies are used in some of the proposals we reviewed, but do not represent any proposal in its entirety. PENSIM has been used by GAO, the Department of Labor, other government agencies, and private organizations to analyze lifetime coverage and adequacy issues related to employer-sponsored pensions in the United States[3] For additional information on the methodology used for this review, see appendix I.

We conducted this performance audit from August 2008 to July 2009 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Pension plans offered by private employers in the United States operate in a voluntary system with tax incentives for workers to participate in plans that employers offer. Employers may choose to offer different types of plans which fall into two broad categories: defined benefit (DB) and defined contribution (DC). A DB plan is generally financed by the employer and typically provides retirement benefits in the form of an annuity that provides a guaranteed monthly payment for life, the value of

[2]PENSIM is a pension policy simulation model that has been developed for the Department of Labor to analyze lifetime coverage and adequacy issues related to employer-sponsored pensions in the United States. See app. I for detailed information about the projections and input assumptions used to produce the results in this report.

[3]See, for example, GAO *Private Pensions: Low Defined Contribution Plan Savings May Pose Challenges to Retirement Security, Especially for Many Low-Income Workers*, GAO-08-8 (Washington, D.C.: Nov. 29, 2007) and *Private Pensions: Information on Cash Balance Pension Plans*, GAO-06-42 (Washington, D.C.: Nov. 3, 2005).

which is determined by a formula based on salary and years of service.[4] DB plans can include hybrid plans, such as cash balance plans.[5] In a DC plan workers and/or employers make contributions into individual accounts set up for each participant. Most DC plans allow participants to direct these contributions to mutual funds and other financial market investments to accumulate pension benefits, dependent on net investment returns, which will then be withdrawn during retirement. Over the last two decades, the number of DB plans has declined substantially while the number of DC plans has increased. In 2007, about half of private sector workers participated in employer-sponsored pension plans; 21 million had a DB plan and more than 40 million had a DC plan.

Research suggests that retirement income from pension plans is likely to be inadequate for many workers in the United States. In recent years, a considerable number of DB plans have been terminated or closed to new participants, which prevents workers from accruing further benefits in those plans in most cases. For those with DC plans, data gathered before the recent financial crisis indicate that many workers have low balances.[6] One study found that in 2007, median combined balances in 401(k) plans and Individual Retirement Accounts (IRA) were only $78,000 for individuals aged 55 to 64.[7] In the past year, poor investment returns have led to considerable losses in many workers' DC plans, leaving them at an even greater risk for having inadequate savings for retirement.

In addition to pension plans, retirees depend on other sources of income in retirement. Social Security benefits provide the largest source of retirement benefits for most households. In 2006, Social Security benefits

[4]DB plans offer benefits in the form of an annuity; however, a DB plan may also provide workers the option of receiving their benefits as a lump sum distribution.

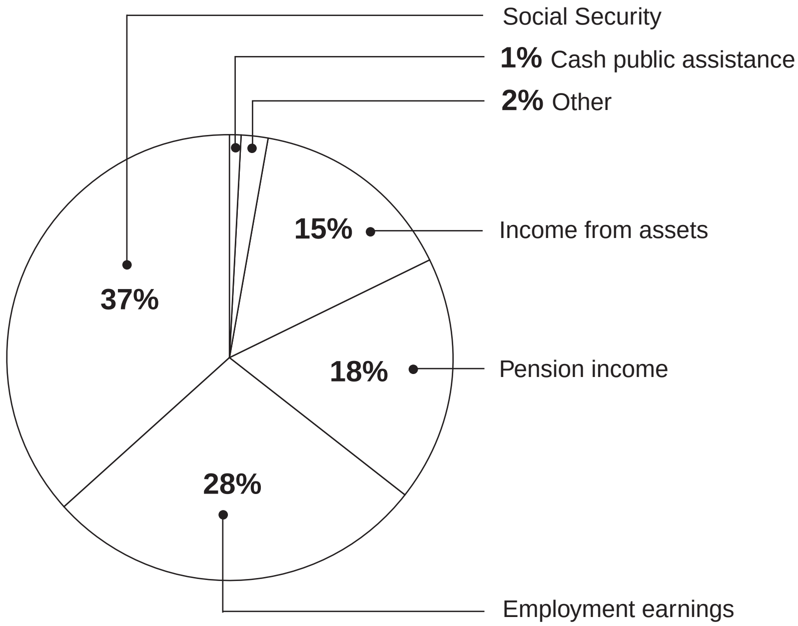
[5]Cash balance plans are referred to as hybrid plans because legally they are DB plans but contain certain features that resemble DC plans. As with traditional DB plans, employers that sponsor a cash balance plan make contributions to a pension trust fund that is invested on behalf of the employees in the plan. However, unlike traditional DB plans that express retirement benefits as an annuity amount calculated using years of service and earnings, cash balance plans express benefits as a hypothetical individual account balance that is based on pay credits (percentage of salary or compensation) and interest credits, rather than an annuity.

[6]GAO-08-8.

[7]Alicia Munnell, Francesca Golub-Sass, and Dan Muldoon, "An Update on 401(k) Plans: Insights from the 2007 SCF," Center for Retirement Research at Boston College, March 2009.

provided almost 37 percent of total income compared to 18 percent provided by pension income in households with someone aged 65 or older, excluding nonannuitized payments or lump-sum withdrawals.[8] As seen in figure 1, income from other sources, such as asset income (e.g., interest and dividends) and earnings from working during retirement, are also important for households aged 65 and older.[9]

Figure 1: Sources of Income for Households Aged 65 and Older, 2006



Source: U.S. Social Security Administration, Office of Retirement and Disability Policy Income of the Population 55 or Older, 2006.

Note: Data reported by the Social Security Administration for pension income includes regular payments from IRAs, Keogh, or 401(k) plans. Nonregular (nonannuitized or lump-sum) withdrawals from IRA, Keogh, and 401(k) plans are not included as income.

There is little consensus about how much constitutes “enough” savings for retirement. Retirement income adequacy may be defined relative to a standard of minimum needs, such as the poverty rate, or to the level of

[8]Data reported by the Social Security Administration for pension income includes regular payments from IRAs, Keogh, or 401(k) plans. Nonregular (nonannuitized or lump-sum) withdrawals from IRA, Keogh, and 401(k) plans are not included as income.

[9]Asset income includes income from interest, dividends (from stock holdings and mutual fund shares), rent, royalties, and estates and trusts. Sources of asset income may include IRAs and other savings. Capital gains from the sale of stock are not included as income.

spending households experienced during working years. Some economists and financial advisors consider retirement income adequate if the ratio of retirement income to preretirement income—called the replacement rate—is between 65 percent and 85 percent.[10] Retirees may not need to replace 100 percent of preretirement income to maintain living standards for several reasons. For example, retirees will no longer need to save for retirement and their payroll and income tax liability will likely fall. However, some researchers cite uncertainties about future health care costs and future Social Security benefit levels as reasons to suggest a higher replacement rate may be necessary.[11] Table 1 shows estimated replacement rates from Social Security benefits for low and high earners who retire in 2009 and 2055, as well as the remaining amount of preretirement income necessary to achieve a 75 percent replacement rate.[12]

Table 1: Estimated Social Security Replacement Rates for Workers Turning 65 in 2009 and in 2055, Percentage of Career-Average Earnings

	Year in which a 65-year-old retires			
	2009		2055	
Source of replacement rate income	Low earners' replacement rate	High earners' replacement rate	Low earners' replacement rate	High earners' replacement rate
Social Security	54.0	33.2	49.0	30.1
Replacement rate from other sources to achieve 75 percent replacement rate	21.0	41.8	26.0	44.9

Source: The 2009 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds. Table VI.F10.

[10]The replacement rate generally refers to the ratio of retirement income to preretirement income, but specific calculations of replacement rates can vary. For example, the measure of preretirement income could be based on final pay or a longer term average of pay.

[11]See, for example, Jonathan Skinner, "Are You Sure You're Saving Enough for Retirement," *Journal of Economic Perspectives*, vol. 21, no. 3, Summer 2007, 59-80; Congressional Budget Office, *Baby Boomers' Retirement Prospects: An Overview*, November 2003.

[12]Due to the long-term fiscal challenges facing Social Security, options for reform may result in lower benefits and reduced replacement rates from Social Security. As a result, reforms to the Social Security system may increase the need for retirement income from other sources such as private pensions. See GAO *Social Security Reform: Answers to Key Questions*, GAO-05-193SP (Washington, D.C.: May 2005.)

Note: Based on scheduled benefits under intermediate assumptions of Social Security projections. Replacement rates represent benefits as a percentage of career-average earnings for low and high earners. A "low earner" is someone whose career average earnings are about 45 percent of the national average wage index (AWI), while a "high earner" has career average earnings of about 160 percent of AWI. Estimated benefits based on intermediate Social Security Trust Fund assumptions. The AWI in 2009 is $42,041.84.

These figures give rough guidelines for how much income retirees may need from sources other than Social Security, such as employer-sponsored pensions and personal savings. In 2007, we reported that DC plans could, on average, replace about 22 percent of annualized career earnings at retirement, but these projected replacement rates vary widely across income groups with many low-income workers having little or no pension plan savings at retirement.[13] In an effort to increase personal savings for retirement, the President's 2010 budget includes a proposal targeted at workers who are not covered by an employer-sponsored pension plan.[14] Under this proposal, employers who sponsor a pension plan but exclude some portion of their employees from it would be required to automatically enroll the excluded workers into an IRA. However, the proposal does not mandate employer contributions.

Other countries share some of the same risks faced by their own workers in saving for retirement. The Netherlands, Switzerland, the United Kingdom, and the United States each have extensive private pension systems. However, in drawing comparisons between countries, it is important to recognize social and economic differences. As seen in table 2, compared to the United States, each of these countries has a smaller population with a higher share of individuals aged 65 and older. In addition, the size of each country's economy is smaller than that of the United States as measured by the per capita gross domestic product (GDP). While the economies of the Netherlands, Switzerland, and the United Kingdom can be characterized as market based, they generally include more extensive and generous social welfare provisions than that of the United States.

[13] GAO-08-8.

[14] Budget of the United States Government, Fiscal Year 2010, "A New Era of Responsibility: Renewing America's Promise" (Washington, D.C., Feb. 26, 2009).

Table 2: Demographic and Economic Data for the United States, Netherlands, Switzerland, and the United Kingdom

	Population	GDP per capita	Ratio of population aged 65 and older to total population	
	2007	2007	2007	2030
United States	301,621,000	$45,489	12.6	19.7
Netherlands	16,381,000	39,225	14.6	23.4
Switzerland	7,550,000	41,102	16.3	23.9
United Kingdom	60,975,000	35,669	16.0	21.9

Source: OECD Country Statistical Profile. Data extracted on May 11, 2009, from OECD Stat. http://stats.oecd.org/WBOS/Index.aspx?DataSetCode=CSP2009

Note: GDP per capita is based on purchasing power parity, which equalizes the purchasing power of different currencies in their home countries by taking into account the relative cost of living and the inflation rates of different countries, rather than just a nominal GDP comparison.

The private pension systems in the Netherlands, Switzerland, and the United Kingdom are designed to replace an adequate amount of income during retirement for the majority of the population. Key features of each country's system include the following:

- In the Netherlands, more than 90 percent of the workforce is covered by a private pension. Pension plans may be provided by individual employers or entire industries, either directly or though insurance providers. Most pension plans are DB plans, although since the early 2000s, almost all have changed from traditional final average pay DB plans to career average DB plans.[15] Private pensions are intended to supplement public pension benefits provided by the government, and together the goal of these two components is to replace 70 percent of preretirement earnings.

- In Switzerland, private pension plans cover over 90 percent of the workforce. Most pensions are DB plans, which use a cash balance formula. Plans can be offered by individual employers or a group of employers in an industry or locality, either directly or through an insurance provider. The public and private pension systems are integrated, and the overall goal of the two components is to replace 60 percent of preretirement earnings.

[15]Final pay DB plans calculate benefits using average earnings in the final years of employment, whereas career average DB plans calculate benefits on the average earnings in all years of employment.

- In the United Kingdom, the private pension system currently covers approximately 33 percent of the workforce. Similar to the United States, most plans in the United Kingdom are DC plans. The United Kingdom has enacted major public and private pension reforms in recent years that are intended to increase retirement saving among low- and middle-income workers. Reforms intended to expand the private pension system to ensure a minimum standard of living in retirement for most workers are scheduled go into effect in 2012. Although some of the details of the new system are currently under development, officials in the United Kingdom told us that the median earner's retirement income from the public and private pensions combined is expected to replace 45 percent of preretirement earnings.[16]

U.S. Workers Face a Number of Risks in Accumulating and Preserving Pension Benefits

Workers Face Risks Accumulating Pension Benefits Related to Coverage, Contributions, and Investment Returns

In securing an adequate income for retirement, workers face risks due to several factors that determine the amount of pension benefits accumulated. Workers may not accumulate sufficient benefits due to lack of pension coverage and inadequate contributions, as well as poor investment returns.

Coverage

Many workers face the risk of not accumulating sufficient retirement income from pension plans because they lack consistent coverage throughout their career. Everything else equal, fewer years of plan coverage reduce the amount of pension benefits accumulated for retirement. According to March 2008 data from the National Compensation Survey (NCS), 49 percent of the private sector workforce was not covered

[16] Retirement income replacement rates are not directly comparable across countries because differences in each country's social security, health care, welfare and tax systems influence the level of income security they provide.

by a pension plan.[17] Coverage rates tend to be lower for part-time and low-income workers and those employed at small firms. For example, NCS data indicate that 60 percent of full-time workers were covered by a plan compared to only 23 percent of part-time workers. Similarly, 76 percent of those who work for an employer with 500 workers or more were covered by a plan compared to 34 percent of those who work for an employer with less than 50 workers.

Whether or not a worker is covered by a pension plan depends on both access and participation. For workers to have access to a plan, their employer must sponsor a plan and workers must be eligible under the plan's rules.[18] Access to a plan is lower among part-time and low-income workers, and those who are employed at small firms. Participation features, though, vary for DB and DC plans (see table 3). While all eligible workers participate in a DB plan, workers may decide not to participate in DC plan. Thus, for workers who have access to a DC plan, coverage is also dependent on whether a worker participates. One study reports that 56 percent of private sector workers had access to a DC plan in 2006 but only about 40 percent participated.[19] Younger workers and low-income workers are less likely to choose to participate in a DC plan. Several experts we interviewed noted that automatic enrollment, which a growing number of DC plans have adopted, has been shown to increase participation because workers are required to opt out of, rather than opt into, their plan. Thus, if a worker fails to make an active decision about participating in the plan, under automatic enrollment he or she will participate by default. The long-term effect of automatic enrollment, however, has yet to be determined.[20]

[17]The NCS is an annual survey of establishments conducted by the U.S. Department of Labor's Bureau of Labor Statistics, which provides comprehensive data on the incidence and provision of selected employee benefit plans, such as pensions.

[18]DB and DC plans may exclude employees who do not work at least 1,000 hours in a year (i.e., never complete 1 year of service) but may not exclude part-time employees. Plans may also exclude hourly employees or certain salaried employees within a specific job classification. However, eligible employees must be allowed to participate in the plan as of age 21 and after completing 1 year of service, subject to certain exceptions.

[19]Patrick Purcell, "Retirement Plan Participation and Contributions: Trends from 1998 to 2006," Congressional Research Service, January 30, 2009, www.crs.gov.

[20]A forthcoming GAO report will provide recent evidence on the impact of automatic enrollment.

Table 3: Key Factors Affecting Accumulation of Benefits in Common DB and DC Plans

	DB plan—final average pay	DC plan—401(k)
Coverage	Voluntary for employers to sponsor a plan; all eligible workers generally participate in the plan	Voluntary for employers to sponsor a plan; voluntary for workers to participate
Contributions	Generally financed by the employer	Worker and/or employer may provide contributions
Investment	Assets are centrally managed; investment risk is borne by the employer; benefits are insured up to certain limits by the Pension Benefit Guaranty Corporation	Assets are generally self-directed by the worker (among options made available by the plan); investment risk is borne by the worker; benefits are not insured by the Pension Benefit Guaranty Corporation

Source: GAO analysis.

Contributions

Workers may also fail to accumulate sufficient pension benefits due to inadequate contributions. As a result of the transition to DC plans, workers increasingly bear the responsibility for making contributions to their plans. In a DB plan, contributions are generally financed exclusively by the employer and benefits are determined by a formula based on years of service and earnings. However, in a DC plan, contributions can be made by the worker, employer, or both, and the amount of the benefit depends on the amount of contributions made and net investment returns. Estimates vary for a target contribution rate to achieve adequate retirement income from a DC plan. Pension experts we interviewed cited target contribution rates of between 12 and 20 percent of pay. Research suggests that contributions to DC plans for many workers are less. For example, according to a study by an investment management firm which manages a large number of DC plans, the majority of contributions are made by workers, not employers, and the median worker contribution in 2007 was 6 percent among plans managed by this firm.[21] Employers can make either matching or nonmatching contributions to a DC plan.[22] The same study indicates that, among DC plans managed by this firm, most employers who sponsor DC plans provide matching contributions, with a

[21]See "How America Saves 2008: A Report on Vanguard 2007 Defined Contribution Plan Data," Vanguard Institutional Investor Group, 2008.

[22]Employer-matching contributions are made only if a worker makes contributions to the plan, while a nonmatching contribution is made regardless of the worker's contributions.

median employer match of 3 percent in 2007. Since 2007, under deteriorating economic conditions, many employers have suspended or reduced their contributions to DC plans. In a DB plan, on the other hand, the employer bears the responsibility of making contributions and may decide to terminate or freeze the plan to lessen the need to make future contributions, which also would reduce the amount of pension benefits a worker accumulates for retirement. Moreover, several experts we interviewed said that it is important to combine automatic enrollment in DC plans with automatic escalation of contributions. Without automatic escalation of contribution rates, automatic enrollment may lead to insufficient retirement income because employers may set a low default contribution rate for workers, such as 3 percent or less, and many workers who participate remain at the default level.

Investment

Workers face additional risks related to investment returns and asset allocation decisions in accumulating pension benefits. In a DC plan, the employer must provide participants with a range of investment options. Workers are responsible for allocating their funds among those options and individually bear the investment risks. If investments do not perform as well as expected, workers will have less money in their DC plans to provide income in retirement. In a DB plan, on the other hand, employers are responsible for making investment decisions and bear the investment risks. Several experts we interviewed said workers who participate in a DC plan may make poor investment decisions. For example, standard financial theory recommends that workers shift their investments from riskier assets, such as stocks, to more stable assets, such as bonds, as they near retirement. However, research shows that many older workers still have high stock allocations. For example, one study shows that nearly 1 in 4 individuals between the ages of 56 and 64 had more than 90 percent of their 401(k) account balance invested in stocks at the end of 2007.[23] A sharp drop in the stock market, such as the 37 percent fall in the S&P 500 in 2008, is of particular concern for older workers heavily invested in stocks because they may lack enough years before retirement to recoup their losses. Overall, from October 2007 to October 2008, the value of stocks held in 401(k)s and IRAs reportedly fell by about $2 trillion.[24] In

[23]Jack VanDerhei, "The Impact of the Recent Financial Crisis on 401(k) Account Balances," Employee Benefit Research Institute, *Issue Brief*, no. 326 (Washington, D.C., February 2009).

[24]Alicia Munnell, Francesca Golub-Sass, and Dan Muldoon, "An Update on 401(k) Plans: Insights from the 2007 SCF," Center for Retirement Research at Boston College (March 2009).

addition, several experts we interviewed noted that DC participants may also increase their exposure by investing in employer stock. Investing in employer stock poses additional risk because if the employer does not perform well, the value of the employer's stock may fall and layoffs ensue. Thus, workers may lose their jobs at the same time the value of their pension benefit declines. One study by an investment management firm, which manages a large number of DC plans, found that in 2006, 59 percent of DC participants were in plans that allow investment in employer stock.[25] Among these plans, 21 percent of participants' total assets were invested in employer stock. In addition, two experts we interviewed said that DB plans invest more successfully than some workers in DC plans because they are professionally managed. However, DB plans are not immune from declining investment returns. For example, declining investment returns can reduce a plan's funding level, requiring additional contributions from the employer. At the same time, poor economic conditions may make it financially difficult for the employer to make those contributions and could ultimately cause the employer to terminate or freeze their plan. In the event that an employer terminates a DB plan with insufficient assets to pay workers the pension benefit they are entitled to, a federal insurance program administered by the Pension Benefit Guaranty Corporation provides protection up to certain limits for qualified plans.[26] Nevertheless, in a DB plan, low investment returns do not directly lower a worker's benefits.

[25]See "Building Futures VIII: A Report on Corporate Defined Contribution Plans," Fidelity Investments, 2007.

[26]The pension benefit that the Pension Benefit Guaranty Corporation (PBGC) pays to a participant whose single-employer plan has been terminated depends on (1) plan provisions, (2) statutory limits on PBGC benefit payments, (3) the type of benefit the participant is entitled to receive, (4) the participant's age, and (5) amounts of assets that PBGC recovers from employers whose plans they have taken over.

Workers Face Risks Preserving Pension Benefits Related to Portability, Leakage, Fees, and the Drawdown of Benefits in Retirement

Workers also face risks in preserving their pension benefits for retirement. The amount of pension benefits may be reduced due to a lack of portability when workers change jobs, particularly in DB plans, and preretirement benefit withdrawals (i.e., leakage), particularly in DC plans.[27] In addition, workers with DC plans may have the value of their benefits eroded by high fees, which reduce net investment returns. Moreover, workers face several risks when drawing down their benefits during retirement, including whether their benefits last a lifetime, how well their investments perform, and how their savings weather inflation.

Portability

The pension benefits available for retirement may be lower for workers who change jobs if pension benefits are not fully portable. Specifically, risks arise in final pay DB plans because workers changing jobs may incur future lifetime benefit losses in that their benefits would be lower compared to the benefits they would have accrued by remaining with their current employer until retirement.[28] As the example in the box below illustrates, when a worker with a final pay DB plan changes jobs, she may lose credit for past service that will reduce the amount of her annual pension benefit in retirement.

[27]Preretirement benefit withdrawals include loans or hardship withdrawals. In addition, workers can decide to take an early distribution subject to taxes and a 10 percent penalty when changing employers.

[28]The term "portability" is also sometimes used to refer to the ability of plan participants to transfer accrued benefits from one plan to another, for example, in the case of DC plans and career average DB plans.

The Impact of Changing Jobs in a Final Average Pay DB Plan

In a DB plan with a formula based on final average pay, a worker who changes jobs and DB plans can accrue lower benefits compared to a worker who stays in the same plan. For example, a final average pay formula might determine monthly benefits payable at retirement on the basis of 1.25 percent multiplied by years of service completed multiplied by the worker's average salary over the last 5 years of service. Compared to a worker who stays in the same plan for a 25-year period, a worker who changes plans part-way through her 25-year career accrues a lower benefit.

Scenario 1: A worker is in the same DB plan for 25 years

1.25% x 25 years of service x $65,000 (average of employee's final 5 years' annual salaries) = $20,313

Annual benefit from DB plan = $20,313

Scenario 2: A worker is in two identical DB plans for 25 years, with a job change after 15 years

1.25% x 15 years of service x $35,000 (average of employee's final 5 years' annual salaries) = $6,563

1.25% x 10 years of service x $65,000 (average of employee's final five years' annual salaries) = $8,125

Annual benefit from both DB plans = $14,688

Note: In scenario two we assume that the worker is always covered by an identical plan that has the same features as the worker's current plan. The worker loses no benefits because she has met the plans' vesting requirements.

Table 4: Key Factors That Affect the Preservation of Benefits in Common DB and DC Plans

	DB plan—final average pay	DC plan—401(k)
Portability	Worker is entitled to vested benefits; the benefits and service credits generally are not transferable if the worker changes jobs and are not adjusted for inflation	Worker is entitled to vested benefits; the account balance may be transferred if the worker changes jobs
Leakage	Early access to benefits may be permitted in some cases	Plan may allow workers to take a loan or hardship withdrawal prior to retirement. In addition, workers may take an early distribution when separating from their employer and not roll it over into another plan or IRA. Early distributions that are not rolled over are generally subject to a 10 percent excise tax and regular income tax.

	DB plan—final average pay	DC plan—401(k)
Fees	Administrative and investment fees are paid by the employer	Investment fees are usually paid by workers; administrative fees are often paid by employers, but workers bear them in a growing number of plans
Drawdown	Workers who receive lump-sum distributions must decide how to withdraw their benefits[a]	Workers decide how to withdraw their lump-sum benefit[b]

Source: GAO analysis.

[a]In most traditional final average pay plans, benefits are typically distributed as annuities and are not adjusted for inflation.

[b]Most DC plans do not offer an annuity option.

Leakage

Several forms of preretirement benefit leakage can also reduce the income workers receive from pension benefits in retirement. For example, in a DC plan, workers may be able to access their account prior to retirement by taking a loan or hardship withdrawal, or requesting a lump-sum distribution when leaving a job (i.e., "cashout").[29] Over the long term, early withdrawals of retirement savings can adversely affect a worker's preparedness for retirement, especially when withdrawn funds are consumed and not replaced. Several experts we interviewed cited cashouts, in particular, as a significant form of leakage that can pose risks to workers' retirement security. Workers with a DC plan may cash out their account balances when separating from an employer by requesting a lump-sum payment of their total account balance, or some portion of it, rather than keeping their accumulated savings in the plan or rolling it into another DC plan or IRA.[30] If the worker chooses to receive their account

[29]Plans may permit participants to take a general purpose loan for up to 50 percent of their vested account balance, or $50,000, whichever is less, without those amounts being considered distributions from the plan. 26 U.S.C. § 72(p). Participants generally must repay loans with interest within 5 years unless the loan is used to purchase a primary home and the plan permits a longer repayment period. Plans may also allow participants to take hardship withdrawals in amounts not exceeding the participant's own 401(k) contributions upon demonstrating an immediate and heavy financial need, which the Internal Revenue Service has defined as including nonreimbursed medical expenses; costs relating to the purchase of a principal residence; postsecondary tuition and related educational fees and expenses; payments necessary to prevent eviction from, or foreclosure on, a principal residence; burial or funeral expenses; or expenses for the repair of damage to a principal residence. 26 C.F.R. § 1.401(k)-1(d)(3) (2008).

[30]Plans may also issue involuntary cashouts to separating workers whose account balances are worth no more than $5,000. If the plan issues a cashout and the account balance is worth more than $1,000 but less than $5,000, the distribution is automatically rolled over into an IRA unless the worker elects otherwise.

balance as a cashout, the distribution is generally subject to income taxes and a 10 percent excise tax.[31] According to a study by an investment management firm which manages a large number of DC plans, about 28 percent of workers leaving their employer in 2007 took their distribution as a cashout and another 2 percent split their distribution between saving and a cashout rather than preserving it for retirement.[32] Workers with a DB plan may in some cases be allowed to gain access to their benefits prior to retirement. For example, some DB plans may provide a lump-sum distribution when workers leave their jobs.[33] Similar to a DC plan, if this distribution is not rolled into a new employer's plan or IRA, the amount of benefits available for retirement may be reduced.[34]

Administrative and Investment Fees

In addition, the pension benefits available for retirement can be eroded by high administrative and investment fees. While fees are paid by the employer in a DB plan, workers often bear the cost in a DC plan.[35] Over the course of a worker's career, fees may significantly decrease retirement savings by lowering the net investment returns. For example, a 1 percentage point difference in fees can substantially reduce the amount of money saved for retirement (see fig. 2). Investment fees, which are charged by companies managing mutual funds and other investment products for services provided in operating the fund, comprise the majority of fees in 401(k) plans and are typically borne by workers. Administrative fees, which cover the cost of various administrative activities carried out to maintain participant accounts, generally account for the next largest portion of plan fees. Although employers often pay the administrative fees, workers bear them in a growing number of plans. Several experts we interviewed also said it is difficult for workers to understand the amount and impact of fees on their DC plans. As we reported in 2007, the fee information employers are required to disclose is

[31] 26 U.S.C. § 72(t).

[32] See "How America Saves 2008: A Report on Vanguard 2007 Defined Contribution Plan Data," Vanguard Institutional Investor Group, 2008.

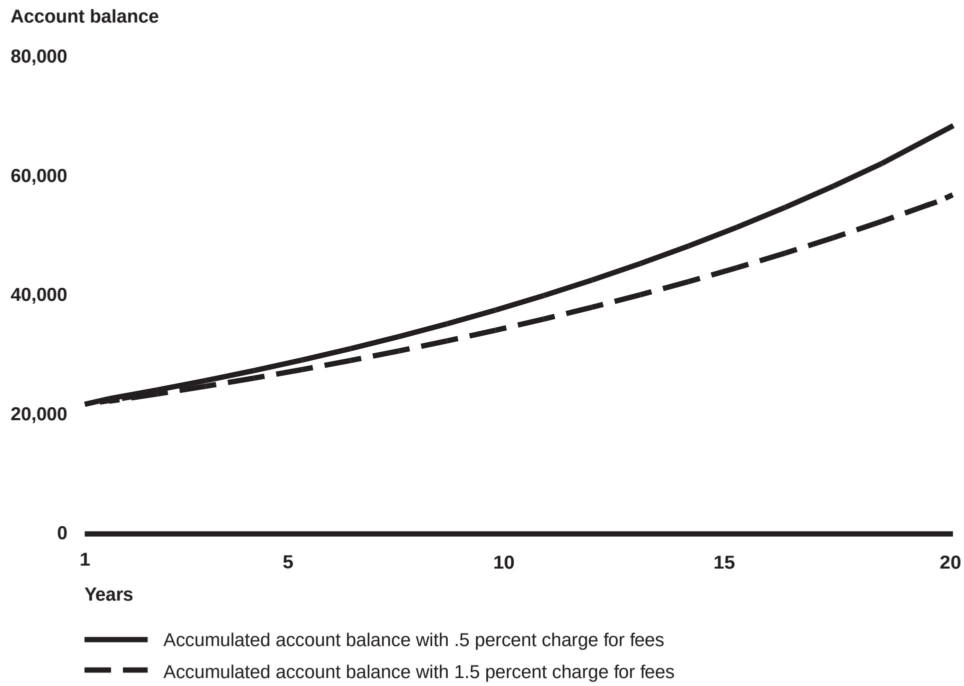
[33] Workers may also be able to take a lump-sum distribution in case of disability.

[34] A forthcoming GAO report will provide more information on the incidence of leakage.

[35] For more information on fees in 401(k) plans, see GAO, *Private Pensions: 401(k) Plan Participants and Sponsors Need Better Information on Fees*, GAO-08-95T (Washington, D.C.: Oct. 24, 2007) and *Private Pensions: Changes Needed to Provide 401(k) Plan Participants and the Department of Labor Better Information on Fees*, GAO-07-21 (Washington, D.C.: Nov.16, 2006). A forthcoming GAO report will examine fees in other DC plans, such as 403(b) plans and 457 plans.

limited and does not provide workers with easy comparisons between fees charged for different investment options.

Figure 2: Effect of a 1 Percentage Point Higher Annual Fee on a $20,000 401(k) Balance Invested over 20 years



Source: GAO analysis.

Drawdown of Benefits during Retirement

Once they retire, employers distribute retirement benefits to eligible participants according to the provisions of the plan. In DB plans, employers typically distribute benefits as an annuity, although lump-sum distributions may be allowed. In DC plans employers typically distribute benefits as a lump sum, and DC plans generally do not offer an annuity payout option. Workers that receive lump-sum distributions, in particular, face several risks related to how they withdraw, or “draw down” their benefits, including:

- Longevity risk—retirees may drawdown benefits too quickly and outlive their assets. Conversely, retirees may drawdown their benefits too slowly, unnecessarily reduce their consumption, and leave more wealth than intended when they die.

- Investment risk—assets in which pension savings are invested may decline in value.
- Inflation risk—inflation may diminish the purchasing power of a retiree's pension benefits.

As noted above, the extent to which retirees face these risks depends on how their benefits are distributed in retirement. For example, pension benefits may be distributed as a lump-sum and invested in assets that can be gradually drawn down over the course of retirement. In this case, retirees must decide how to invest their assets and face the risk that their investments will decline in value—investment risk—and thus not provide sufficient income. In addition, retirees may live longer than expected—longevity risk—and exhaust their account balances. If, instead, retirees die earlier than expected, they may leave much of their benefit unspent. Alternatively, benefits could be received in the form of an annuity—a series of monthly payments for the remainder of a retiree's life. An annuity mitigates the risk that retirees will outlive their assets. However, if the annuity is not adjusted for inflation, retirees still face the risk that purchasing power will be eroded if inflation rises—inflation risk.

In DC plans, the pension benefit is available as a lump-sum and retirees must decide how to draw down their account to finance retirement, for example through gradual withdrawals or by purchasing an annuity in which set payments are generally made for the rest of the retirees' lives. However, annuities are generally not offered as an option in DC plans. According to one study, estimates suggest that about one-fifth or less of DC plans offer an annuity option.[36] While retirees could purchase an annuity on the private market, several experts we interviewed indicated that one of the reasons this option is not widely used is that it is more expensive when purchased by individuals than by a group. DB plans, on the other hand, provide group access and are legally required to offer a benefit payout in the form of an annuity. However, most DB plans do not adjust benefit payments for inflation, so a retiree still faces the risk that their purchasing power will erode if inflation rises. While DB plans are required to offer benefits in the form of an annuity, many DB plans also offer workers the option of taking benefits as a lump-sum. One study

[36] John A. Ameriks et. al., "Immediate Income Annuities and Defined Contribution Plans," Vanguard Center for Retirement Research, vol. 32, May 2008.

found that when offered a lump-sum distribution the majority of DB participants chose this option over an annuity.[37]

Other Countries' Experiences Offer Alternative Approaches for Addressing Risks Faced by U.S. Workers but also Involve Trade-offs

The private pension systems in the Netherlands, Switzerland, and the United Kingdom provide alternative approaches to address the primary risks faced by U.S. workers, although there are important trade-offs to consider in applying these approaches in the United States.[38] These countries' systems offer ideas for mitigating risks in accumulating or preserving benefits, such as using mandates to increase coverage, facilitating portability, and the widespread use of annuities to drawdown benefits (see table 5). In addition, the Netherlands' and Switzerland's systems spread investment and longevity risks amongst workers and retirees as a group so that no single individual risks losing a significant portion of their benefits or outliving their resources. In taking steps to reduce risks for workers, however, these countries' private pension systems also pose trade-offs. For example, the United Kingdom's recent reform plan requiring employers to automatically enroll workers in and contribute to pension plans will increase costs for some employers and workers. Further information about each country's private pension system is provided in appendix II.

Table 5: Private Pension Systems in the Netherlands, Switzerland, and the United Kingdom

		Netherlands	Switzerland	United Kingdom
Predominant plan type		**DB (career average)**	**DB (cash balance)**	**DC (Personal Accounts)[c]**
Key features				
Accumulation	Coverage (% of workforce covered)	Mandatory for most employers and workers[a] >90%	Mandatory >90%	Mandatory access with automatic enrollment 75% (projected)[d]
	Contributions (% of a worker's total salary)	Employers – 7% - 19% Workers – 3% - 8%	Employers – 3.5% - 9% Workers – 3.5% - 9%	Employers – 3% Workers – 4% Government – 1%

[37]John A. Ameriks et. al., "Immediate Income Annuities and Defined Contribution Plans," Vanguard Center for Retirement Research, vol. 32, May 2008.

[38]In this section, we focus exclusively on employer-based private pension systems; however, all three countries also have a public pension system, similar to the U.S. Social Security system. In all three countries, private pension income is considered supplementary to public pension income.

		Netherlands	Switzerland	United Kingdom
Predominant plan type		**DB (career average)**	**DB (cash balance)**	**DC (Personal Accounts)[c]**
Key features				
	Investment	Assets pooled into pension funds managed by boards with employer and worker representation	Assets pooled into pension funds managed by boards with employer and worker representation	Individually managed by workers
		Workers' benefit accruals and retirees' benefits in payment indexed (adjusted in line with price/wage growth) conditional on fund's financial solvency	Guaranteed minimum 2% rate of return;[b] retirees' benefits in payment indexed (adjusted in line with price/wage growth) conditional on fund's financial solvency	Limited fund options, default investment allocation
Preservation	Portability	Full	Full	Full
	Leakage	Not allowed	Allowed for specific reasons	Not allowed
	Fees	No explicit limit; vary	No explicit limit; vary	Target of 0.5% of plan assets
	Drawdown of benefits	Mandatory annuitization except for small account balances	Most pension funds provide annuities	Mandatory annuitization except for small account balances
			Minimum 25% lump-sum option must be offered	Maximum 25% lump-sum allowed

Source: Discussions with officials in the Netherlands, Switzerland, and the United Kingdom, and examination of materials about employer-sponsored plans in those countries.

[a]Officials in the Netherlands told us there is no statutory obligation for employers to offer a pension plan but the government has mandated pension coverage in most industries at the request of employer and employee representatives.

[b]Officials in Switzerland told us this rate has decreased gradually over time from a high of 4 percent in 1998-2002 due to lower market investment returns.

[c]Officials in the United Kingdom are currently developing some of the details for the new Personal Accounts system, scheduled to go into effect in 2012.

[d]75 percent coverage rate represents the total percentage of private pension coverage, according to officials. Officials expect that Personal Accounts, once fully implemented, will cover about 30 percent to 40 percent of the workforce.

Some Level of Mandate Is Effective in Achieving Increased Rates of Coverage or Contributions

Private pension systems in the Netherlands, Switzerland, and the United Kingdom demonstrate that different types of mandatory approaches can be used to increase coverage or contributions.

Coverage

The Netherlands and Switzerland use different forms of a mandate that result in nearly universal coverage. In the Netherlands, officials told us that even though there is no statutory requirement for all employers to offer a pension plan, private pension coverage is mandatory for many employers and workers at the industry level. For participation in an industry-wide pension plan to be declared mandatory, employer and worker organizations, as social partners, must petition the government to extend a mandate.[39] As a result, employers and all eligible workers in most industries are required to participate in a pension plan. Over 90 percent of workers are covered and participate in a plan. Employers generally offer one of three types of plans: industry-wide plans, single company plans, and plans for specific professional groups, such as doctors; however, employers also can decide to sponsor a plan through an insurance company.

Switzerland has a mandatory private pension system that covers over 90 percent of eligible workers.[40] Officials told us that by law, Swiss employers are required to provide pension coverage for workers earning over a minimum threshold of income.[41] Workers may be covered in single company plans, multiemployer plans, or industry-wide pension plans, or employers can decide to sponsor a plan through an insurance company. A special default pension fund exists for employers who do not offer a specific pension plan.[42] Several officials we interviewed in Switzerland

[39]About 75 percent of industry-wide pension plans are mandatory and these industry plans cover about 67 percent of the workforce. The employer and worker groups making the request must represent at least 60 percent of the workers in that industry. A company offering a more generous plan can be exempt from joining the industry-wide plan.

[40]The Federal Law on Retirement, Survivors' and Disability Pension Plans was implemented in 1985 and specified a mandatory employer-based pension system. Officials said the majority of plans in Switzerland are hybrid plans. These hybrid plans are similar to cash balance plans, which in the United States are legally classified as DB plans because participants' benefits are determined by a benefit formula. However, a cash balance plan has certain features, such as hypothetical "individual accounts," that make it resemble a DC plan.

[41]Officials in Switzerland told us that participation in the private pension system is mandatory for workers age 25 and older earning above 20,520 Swiss Francs (about $19,000 as of June 2009). Workers earning below this level of income are covered by the public pension plan as are all Swiss workers.

[42]The default pension fund operates similarly to most company or industry pension funds as a foundation independent of employers and run on a nonprofit basis. This fund also covers employees working for several employers, the self-employed, citizens living abroad, and people no longer covered by the mandatory private pension system but wishing to keep their accounts.

said that mandatory coverage is a key strength of the Swiss private pension system. Before Switzerland implemented a mandatory private pension system in 1985, officials told us that only about 50 percent of workers were covered.

Private Pension Plan Governance

Laws in the Netherlands and Switzerland require private pension funds to be managed by independent entities with no legal or financial link to the sponsoring employers. This helps mitigate the risk that a pension fund will become insolvent if the employer goes bankrupt. Most pension funds in the Netherlands and Switzerland are non-profit entities with their own governing boards that have equal representation of employers and employees. Similarly, in the United Kingdom, the Personal Accounts plans will be administered on a nonprofit basis by a Trustee Corporation, with advisory panels comprised of employers and employees. In all three systems, this allows for shared input on key decisions, such as asset management in the Swiss and Dutch DB plans. In contrast, most private pension plans in the United States are not financially and legally independent from the sponsoring employer. In most DC plans, the sponsoring employer is responsible for administering the plan, including selecting and monitoring investment options offered to plan participants. In addition, most DB pension fund assets in the United States are financially linked to the sponsoring employer's company balance sheet as the pension funds are considered a part of the sponsoring employer's assets and liabilities.

The United Kingdom is in the process of introducing an auto-enrollment policy into its voluntary private pension system to increase pension coverage. According to officials in the U.K., the Pension Act of 2008 mandates U.K. employers to automatically enroll all eligible workers into a qualified employer-sponsored plan starting in 2012 or the new system of DC accounts called "Personal Accounts" that was established by statute and will be run by a nonprofit trustee corporation.[43] While some of the details of the Personal Accounts plan are still being developed, U.K. officials told us that employers sponsoring their own pension plans will be exempt from auto-enrolling employees into Personal Accounts provided they operate a plan of equal or better value.[44] Workers have the choice to opt out of the plan, thus their participation is voluntary. The United Kingdom's goal is to increase coverage, especially among low- and middle-income income workers. Officials said they expect about 70 percent to 90 percent of those automatically enrolled will not opt out which could increase the total private pension coverage from 33 percent to over 75 percent under this policy. Most officials and organizations we interviewed in the United Kingdom said that mandating auto-enrollment but allowing workers to opt out is a key feature that will increase coverage, and two officials said that requiring auto-enrollment is a constructive compromise because it directs individual inertia toward enrollment while preserving individual choice. Government officials said the previous reforms were largely unsuccessful at increasing total coverage because they provided access but relied on workers to actively enroll. The "Stakeholder Pensions" introduced in 2001 as a reform to the pension system were similar to the new Personal Accounts plans in that they were DC account-based plans; however, they did not significantly increase coverage because they required workers to make an active decision to participate in the

[43]Officials in the United Kingdom told us that eligible workers are those between the ages of 22 and the retirement age, currently 65, with earnings over the annual minimum pay threshold of £5,035 or about $8,000, as of June 2009.

[44]A qualified pension plan can be a DC or DB plan, or a combination of both. Qualified DC plans are those to which the employer contributes at the same level as required for Personal Accounts. Qualified DB plans are those that meet the current exemption requirements for the State Second Pension; overall, the DB plan must offer equivalent or better benefits.

plan, rather than use automatic enrollment. A limitation to auto-enrollment is that some workers may still choose to opt out and coverage may not increase as much as anticipated. To address this concern, employers will be required to automatically re-enroll workers every 3 years so that workers will be able to reconsider their decision periodically and will have to affirmatively decide to leave the plan.

Contributions

Each country's pension system requires contributions by both employers and workers to increase retirement savings (see table 6).

Table 6: Total and Distribution of Contributions to Private Pension Plans in the United Kingdom, the Netherlands, and Switzerland, 2009

	United Kingdom[a]	Netherlands	Switzerland
Employer	38% of contributions (3% of salary)	66% - 75% of contributions (7% - 19% of salary)	>50 % of contributions (3.5% - 9% of salary)
Worker	50% of contributions (4% of salary)	25%-33% of contributions (3% - 8% of salary)	<50 % of contributions (3.5% - 9% salary)
Government	13% of contributions (1% of salary)	None	None
Total percentage of salary	8% (minimum required by law)	10% - 25 % (negotiated between employers and unions)	7% - 18 %[b] (minimum required by law)
Total preretirement income replacement goal (public and private pension income combined)	45% (projected)	70%	60%

Source: Discussions with officials in the Netherlands, Switzerland, and the United Kingdom, and examination of materials about employer-sponsored plans in those countries.

[a]Figures for the United Kingdom are for the new Personal Accounts plans, which are currently under development and scheduled to go into effect in 2012.

[b]In Switzerland, the amount of the required contribution amounts increase with age.

Officials in Switzerland told us that Swiss federal law sets minimum contributions for employers and workers, requiring employers to pay at least half of the total of contributions. Mandatory minimum total contributions in Switzerland increase with age.[45] Officials in Switzerland also told us that many employers contribute more than the required

[45]Minimum total contributions change by age according to the following formula: 7 percent of qualified earnings from age 25 to 34; 10 percent from age 35 to 44; 15 percent from age 45 to 54; and 18 percent from age 55 to 65.

minimum.[46] Under recent reforms, the United Kingdom is also using a mandatory approach to minimum contributions. Officials in the United Kingdom told us that mandatory minimum contributions are required from employers and workers participating in an employer-sponsored or Personal Accounts plan. Officials also said they expect the minimum required employer contributions to be phased in gradually, starting at 1 percent of earnings in 2012, 2 percent of earnings in the second phase, and 3 percent of earnings upon final implementation.[47] Also, officials said that the contribution structure is based on the principle of sharing responsibility among all stakeholders, and that the government and employer contributions were designed to provide an incentive for workers to participate. Government officials in the United Kingdom said that mandating minimum employer and worker contributions in the recent reforms is particularly important for increasing total retirement savings. Officials said one of the reasons the previously introduced Stakeholder Pensions failed to increase retirement savings was because contributions were not mandated and many accounts had low balances. However, one insurance company official said that there is some concern among employers about mandating minimum contributions through automatic enrollment because it will likely increase the total costs of their pension plans as more workers participate and require employer contributions. Officials told us that they are considering ways to mitigate the impact of this mandate on the smallest employers.

Officials in the Netherlands told us while minimum contributions are not mandated in the Netherlands, labor contracts negotiated between employer and worker representatives specify required contribution levels for employers and workers in most companies or industries.[48] Officials also said that this process of negotiation is a key strength of the system because it leaves the decision making up to the directly affected parties. As a result, worker and employer contributions in the Netherlands vary across companies and industries. Pension fund boards can sometimes

[46]Officials in Switzerland said that earnings subject to mandatory contributions are those between 20,520 Swiss Francs and 82,080 Swiss Francs (about $19,000- $77,000 as of June 2009) with an offset or deduction tied to the public pension.

[47]U.K. officials said that earnings subject to contributions are those between £5,035 and £33,540 (about $8,000 to $54,000 as of June 2009).

[48]Officials in the Netherlands said that earnings subject to contributions in the Netherlands are gross earnings minus an offset or deduction tied to the flat public pension. The majority of private pension plans in the Netherlands are career-average DB plans, although participants also can make contributions.

request an increase in both worker and employer contributions to make up funding shortfalls in the pension plan. However, several officials said that in recent years, a few DB plans have been converted to collective DC (CDC) plans in which employers' contribution levels are fixed, even when there is a funding shortfall.[49] Officials said that while fixing employer contributions in CDC plans shifts some of the investment risk within pension funds to the workers, employers prefer this structure because their costs become more predictable.[50]

While mandating contributions can help workers accumulate sufficient pension benefits, it also can pose some challenges. For example, it could become the norm for workers and employers to make the minimum contributions and even encourage some that currently contribute to a pension plan at a higher rate to switch to lower contributions at the required minimum level, thus increasing the risk of inadequate retirement savings. U.K. officials said it will be a challenge to convey to the public that the employer and worker contribution rates that will be required in Personal Accounts are a minimum level of commitment rather than a target. Experts said that some employers currently offering pension plans in the United Kingdom may decrease their contributions to the minimum requirement, which is expected to be 3 percent of pay after they are fully phased in. Officials said that the government plans to address this problem by giving certain incentives to employers that have higher-than-minimum contribution rates, such as granting extensions on the deadline for automatically enrolling workers. In addition, GAO has previously found that lower-income workers face competing income demands for basic necessities, thus requiring mandatory minimum contributions could adversely affect lower-income workers who may find it difficult to contribute due to financial constraints. To address this concern, officials in the United Kingdom and Switzerland told us they have established

[49]A "collective defined contribution" plan in the Netherlands is not a DC plan as commonly understood in the U.S. context. Rather, it is similar to a career-average DB plan, except employer contributions are fixed for a set period of time, generally 5 years, while workers' contributions can be adjusted based on the solvency of the plan.

[50]Officials told us that recent changes in accounting standards provide an incentive for employers to offer a CDC plan. Because pension funds must use market values to calculate assets and liabilities, employers are becoming less willing to vary their contributions and prefer the fixed contribution schedule of CDC plans.

minimum earnings thresholds under which low-income workers are excluded from participating.[51]

Indexation of Benefits and Guaranteeing Returns Mitigate Investment Risk for Individual Workers

The pension systems in the Netherlands and Switzerland address investment risks faced by workers in various ways, such as pooling assets and guaranteeing rates of return. In the Netherlands and Switzerland, most private pension fund assets are pooled and managed by a pension fund board comprised of employer and worker representatives.[52] Officials from the Netherlands and Switzerland said that investment risk and management responsibility of pension funds were shared by the social partners—employers and workers. Officials from the Netherlands and Switzerland said that the social partnership between employers and workers was a key feature of their systems, and officials from the Netherlands said that there has been a slower shift from DB plans to self-directed DC plans than in other countries because of this partnership. Officials from Switzerland said that structuring assets collectively through a pension fund was more important in their system than maintaining individual control over assets, highlighting a key trade-off of investment features in private pension plans. In addition, officials told us that the governments in the Netherlands and Switzerland impose restrictions on pension fund boards' asset management in DB plans to protect workers against investment risks. For example, officials said that pension funds in Switzerland are limited to investing no more than 50 percent of total assets in equities, no more than 30 percent in foreign currencies, and no more than 5 percent in the sponsoring employer.

In the Netherlands, most DB pension plans share investment gains by periodically adjusting the value of workers' benefits, a process known as

[51]In the United Kingdom, officials said the minimum annual earnings threshold is £5,035 or about $8,000, as of June 2009. In Switzerland, officials said the private pension system is mandatory for workers earning above 20,520 Swiss Francs or about $19,000, as of June 2009.

[52]The majority of private pension plans in the Netherlands are career-average DB plans, although participants also make contributions, unlike in most U.S. DB plans. Officials said the majority of plans in Switzerland are hybrid plans. These hybrid plans are similar to cash balance plans, which in the United States are legally classified as DB plans because participants' benefits are determined by a benefit formula. However, a cash-balance plan has certain features, such as hypothetical "individual accounts," and contributions made by workers, that make it resemble a DC plan.

“indexation.”[53] According to officials, pension boards usually adjust workers’ and also retirees’ benefits conditional on the pension fund’s overall funding level.[54] According to officials, if the plan’s funding ratio is above the established benchmark, benefits are indexed to reflect the growth in wages or prices. However, if the plan’s funding ratio is below the established benchmark benefits may only be partially indexed or not indexed at all.[55] Labor contracts between employers and workers in the Netherlands specify exactly how indexation is to be determined. The process of indexation allows pension funds to spread investment gains or losses to all participants in the pension fund—active workers, those who have left the employer but keep their accrued benefits in the fund, as well as retirees—by either applying or not applying adjustments to accrued benefits and pensions. Officials in the Netherlands said that sharing investment risk by indexing accrued benefits conditional on the plan’s funding ratio helps protect workers from individually bearing investment risk. While this approach reduces individual investment risk, according to experts, the recent decline in investment returns caused by the financial crisis has prevented full indexation in many pension funds in the Netherlands and may lead to lower-than-expected benefits, especially for those close to retirement. Recent data from the Central Bank of the Netherlands shows that the average funding ratio of pension funds in the Netherlands at the end of 2008 was 95 percent, which is below the minimum level required for indexation. Thus, in the near term, pension benefits for many workers and retirees will not be adjusted to account for the growth in wages or inflation. However, if funding levels recover sufficiently, pension boards may decide to grant “catch-up” indexation to compensate for indexation not granted or partially granted in past years. Officials in the Netherlands said catch-up adjustments were applied by many pension funds after the financial crisis in the early 2000s; however it

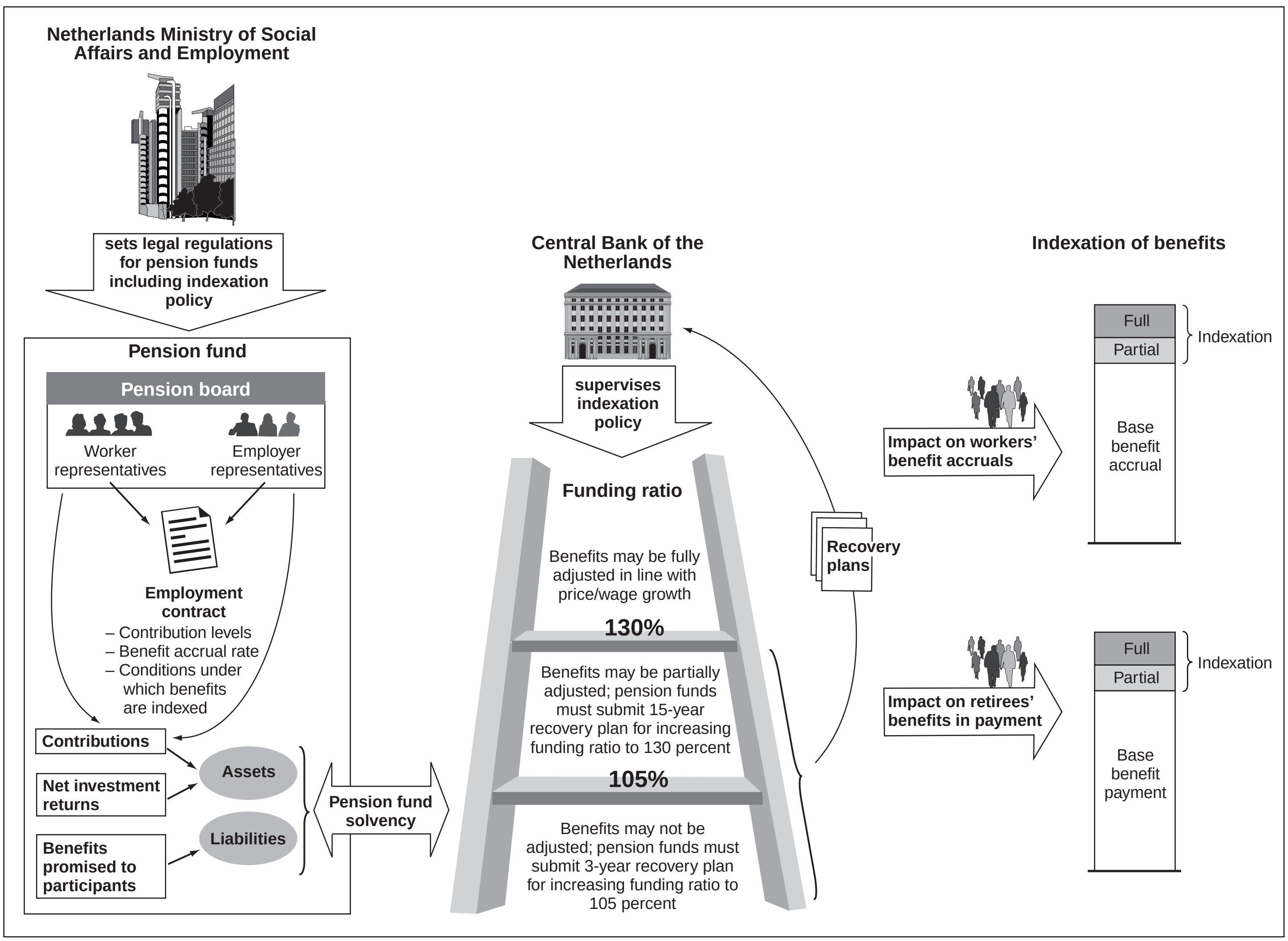
[53]In this context, to “index” benefits means to adjust benefits in line with price or wage growth. For example, if retirees’ benefits were never adjusted for price increases, the purchasing power of those benefits would be eroded.

[54]The funding level of a pension plan is largely determined by two factors—assets and liabilities. Investment returns impact assets and liabilities are affected by the interest rate used to compute them. According to officials, that interest rate is no longer fixed at 4 percent, but changes with market conditions. Officials said that every month, the Central Bank publishes the interest rate that pension funds must use to calculate their liabilities.

[55]Indexation policy is supervised by the Central Bank of the Netherlands. Specifically, if pension assets are above 130 percent of liabilities in a given year, accrued benefits are permitted to be fully indexed; if funding levels are between 130 percent and 105 percent, the pension fund may decide how to apply partial indexation; if the funding level is below 105 percent, indexation is prohibited.

is unclear when pension funds will have recovered sufficiently from the current economic downturn in order to make similar catch-up adjustments. Officials said that the Central Bank also requires that plans with a funding level below the minimum level required for indexation submit recovery plans detailing how they will restore funding levels, and currently government and pension funds are examining whether to extend the recovery period length in light of the recent turmoil in financial markets.

Figure 3: Risk-sharing through Conditional Indexation of DB Pension Benefits in the Netherlands



Sources: GAO analysis based on discussions with officials in the Netherlands; images, Art Explosion.

Alternatively, Switzerland mitigates investment risk faced by workers through a guaranteed minimum rate of return on accrued benefits. Officials told us that when the mandatory private pension system was implemented in 1985, the minimum rate of return was set at 4 percent.[56] However, in 2003, the government began adjusting the rate to more accurately reflect market rates of return and since then it has been reduced to 2 percent. Several officials we spoke to in Switzerland said that many Swiss pension funds usually provide investment returns higher than the minimum rate set by the government when funding levels of the pension fund allow. Although this guarantee provides workers some certainty regarding benefits, ensuring that benefits will increase by the specified amount can be challenging for the pension funds and insurance companies responsible for providing the guarantee. For example, in order to avoid having shortfalls, pension funds have an incentive to invest in lower-risk assets that tend to pay lower returns, which may restrain investment gains that would otherwise be earned. Furthermore, experts and officials in Switzerland said that setting the guaranteed minimum rate can be difficult because stakeholders have different interests. For example, workers generally favor higher guaranteed rates while insurance companies favor lower rates. Setting the rate requires law-makers to consider the trade-offs for all stakeholders. Usually, the minimum guaranteed interest rate is reviewed by the government every year and is adjusted every other year. In light of the financial crisis, the new rate may be reviewed as early as next year, ahead of the normal schedule.

Unlike the Netherlands and Switzerland, there has been a shift from DB to DC plans in the United Kingdom, thus more workers in the United Kingdom bear investment risk individually. U.K. officials are still discussing what types of investment options they will provide in the Personal Accounts plan. However, officials told us there will be a default investment option for workers that do not want to select their own investment allocations. Officials said the majority of workers enrolled into Personal Accounts plans are expected to remain with the default option and not actively choose how their particular assets are invested, so that the design of the default investment option will be an important part of the plan.

[56]This is a nominal rate of return, not an inflation-adjusted or “real” rate of return.

The Netherlands', Switzerland's, and the United Kingdom's Pension Systems Facilitate Benefit Portability in the Workforce and Limit Preretirement Benefit Leakage

The private pension systems in the Netherlands, Switzerland, and the United Kingdom facilitate portability in various ways, allowing workers to preserve benefits when they change jobs or leave the workforce. In the Netherlands and Switzerland, where the vast majority of workers have DB plans, officials told us that accrued benefits are portable because workers have the legal right to transfer them when they change jobs, even if they change industries or types of plans.[57] When a worker changes jobs in the Netherlands or Switzerland, the accrued benefits in the old plan are used to buy pension credits in the new plan. In the Netherlands, officials told us workers also can decide to leave their accrued benefits with the old pension fund; their benefits are then indexed in line with retiree benefits, conditional on the fund's solvency. In Switzerland, officials said that if a worker does not transfer benefits to a new employer or leaves the workforce, benefits are transferred to a "portability institution fund," an account provided by banks and life insurance companies, or a public default fund.[58] According to officials, benefits are "parked" in these institutions until being transferred to another pension fund, for example when a worker takes a new job, and generally earn a minimum interest rate, which is usually lower than the guaranteed interest rate set for other pension plans, but protects workers' benefits from being eroded by inflation. One trade-off to facilitating the portability of accrued DB benefits is that employers may lose a workforce management tool that allows them to regulate the size of their workforce in response to changing economic conditions.

In the United Kingdom, the Personal Accounts plan's centralized structure will enable workers to maintain a single account throughout their career that each employer can contribute to and keeps accrued benefits in one location. In addition, officials said that preretirement benefit leakage in the forms of loans and hardship withdrawals will be prohibited. Further, transfers between plans will not be allowed with Personal Accounts prior

[57] Officials told us that the right to transfer benefits is suspended in the Netherlands if one of the funds involved in the transfer (the giving or receiving fund) has a funding ratio under 100 percent. The Central Bank of the Netherlands, which regulates the overall recovery process for insolvent pension funds, re-establishes the right of portability once the funding status of the pension fund recovers. In Switzerland, officials told us that the law of vesting rights guarantees workers the right to pension benefits, even if assets on the pension fund's balance sheet do not cover the liabilities. The worker is entitled to the full accrued nominal retirement savings and can use it to buy into the new employer's plan.

[58] Officials in Switzerland told us if the worker does not designate a new employer's fund within a window of time, between 6 months and 9 years after leaving the employer, his accrued benefits are automatically transferred into the portability institution fund.

to drawing down benefits in retirement. As a result, workers will not be able to consolidate accounts until the age of 55 if they have a Personal Account and other employer accounts. Officials in the United Kingdom told us that the rule prohibiting transfers in and out of Personal Accounts was an important compromise for consensus building, particularly for the financial industry, as there was concern that workers may transfer funds out of existing plans into Personal Accounts plans. A trade-off to prohibiting transfers and consolidations, however, is that workers may have multiple accounts, which would be administratively more complex for both employers and workers to manage.

The Netherlands and the United Kingdom prohibit early withdrawals, such as loans or hardship withdrawals, from private pension plan savings as a way to limit the risk of leakage of a worker's retirement benefits, according to officials in those countries. A trade-off for restricting leakage is that it may deter workers from participating in a voluntary system or making contributions beyond the minimum requirements. For example, some workers may want the right of access to retirement funds in hardship situations. Unlike the Netherlands and the United Kingdom, officials told us workers in Switzerland are able to access their benefits prior to retirement in limited circumstances. For example, officials said that workers are able to cash out accrued benefits to purchase a home, start a business, or if they move outside the European Union. However, officials in Switzerland said that benefit leakage rarely occurs because the Swiss are particularly "conservative and cautious" when drawing from their pension fund assets.

Widespread Use of Lifetime Annuities and Limits on Lump-Sum Payments Reduce Risks in Drawing-down Benefits during Retirement

Pension plans in the Netherlands, Switzerland, and the United Kingdom commonly provide benefits in the form of annuities in retirement, limiting the risk that individuals may draw down their benefits too quickly and outlive their assets. In the Netherlands and Switzerland, pension funds typically provide the annuities directly, rather than facilitate purchases through insurance companies.[59] In the Netherlands, officials said that limited lump-sum payments are allowed only when accrued benefits amount to very small annuity payments.[60] In Switzerland, officials said that most people receive their pension benefits as a monthly annuity; however, pension funds must allow retirees to receive at least 25 percent of their accrued benefits as a lump-sum payment. Swiss pension funds can decide to allow retirees to take 100 percent of their accrued benefits as a lump-sum distribution, but officials told us this is usually only offered by small businesses or companies with very low or very high earners. In addition, officials told us Swiss law sets a mandatory minimum annuity conversion rate for pension benefits—the factor used to convert the accrued benefits into lifelong monthly payments.[61] Although a minimum conversion rate provides some form of guarantee on the amount retirees will receive in annuity payments, officials and experts in Switzerland told us that the current rate may be too high for pension funds and insurance companies to meet. For example, insurance companies may be strained to provide benefits using the minimum conversion rate if investment earnings are insufficient or longevity assumptions are too low. In recent years there has been debate in Switzerland about lowering the minimum annuity conversion rate due to lower investment returns and increases in life expectancy.[62] Another difficulty to setting a standard annuity conversion

[59]According to officials, pension funds can reinsure longevity risk by contracting with an insurance company and if pension funds are small enough, they must be reinsured.

[60]Officials told us lump-sum distributions are allowed in the Netherlands only if the annuity payment would be less than 400 euro (about $550, as of June 2009) per year. According to the OECD, the Netherlands has introduced a flexible system of purchasing annuities because of the recent turmoil in financial markets, allowing one-half of accumulated capital to be used to purchase an immediate 5-year annuity, deferring the rest of the purchase after this date.

[61]The annuity conversion rate, currently set at 7 percent, is multiplied by the account balance to determine the amount of the annual annuity income. For example, an accrued benefit of 100,000 Swiss Francs (about $90,000 as of June 2009) would provide an annual annuity of 7,000 Swiss Francs (about $6,000, as of June 2009). This annuity conversion rate for benefits only applies to the mandatory part of the pension system.

[62]Officials in Switzerland told us that the current minimum annuity conversion rate is scheduled to gradually decrease to 6.8 percent by 2014. There is ongoing debate on whether to decrease it further.

rate is that using the same rate for all individuals in a given group generally benefits those with greater longevity. Insurers in Switzerland have been involved in a debate with the government in the last several years about using a lower annuity conversion rate, particularly for women because on average women live longer than men and therefore collect pensions for a greater number of years.

The United Kingdom's pension plan law requires retirees to annuitize at least 75 percent of their accrued benefits from pension plans, including Personal Accounts plans, by the age of 75, according to officials. Annuitizing benefits guarantees that retirees will have income for the rest of their lives, but it limits their access to their entire accrued benefit, which could, in the event of an emergency, be problematic. The government will facilitate the purchase of the annuities from private insurers. However, officials we spoke to in the United Kingdom said there could be some challenges in annuitizing small account balances because monthly payments will be very small and not cost effective to administer. Government officials said they are addressing this issue by allowing small account balances to be distributed as lump-sums.[63] Like other pension plans, the Personal Accounts plan also will allow all retirees to take a one-time lump-sum distribution of up to 25 percent of the accrued benefit; if no lump-sum is taken by age 75, the entire account balance is converted into an annuity. This approach helps reduce the risk that retirees will outlive their savings while providing individuals access to some portion of their accrued benefits.

In some cases annuity payments are also adjusted for inflation to mitigate the risk that an increase in prices erodes the purchasing power of retirement income. According to officials, pension boards in the Netherlands and Switzerland decide on a plan-by-plan basis whether to index retirees' annuity benefits for inflation. In both countries, officials said indexation is usually applied to retirees' benefits conditional on the funding level of the pension fund; also, there is no guarantee that retirees' benefits will be adjusted for inflation each year. Specifically, in the Netherlands, officials said that if the pension plan's funding level is above the minimum standard set by the Central Bank, benefits can be fully

[63]Officials in the United Kingdom told us that, consistent with existing policy, Personal Accounts plans will permit small account balances below a specified threshold to be taken as a lump-sum, known as "trivial commutation." This threshold is set at £16,500 (about $27,000 as of June 2009) in the 2008-2009 tax year.

indexed for inflation.[64] However, if the pension fund is below the required funding level, then retirees' benefits cannot be so indexed. Officials in the Netherlands told us that while pension funds have regularly adjusted retiree benefits for inflation in the past, they are unlikely to do so in 2009 because of the current market downturn. Additionally, officials told us that negotiations about benefit adjustments between active workers and retirees can be difficult. For example, pension fund boards, made up of employer and worker representatives, can decide to adjust workers' and retirees' benefits differently, although this decision is sensitive because it directly affects retirees' benefits that are in payment.[65] Pension boards in Switzerland also decide on a plan-by-plan basis whether to index pension benefits for inflation. Although the indexation of retirees' benefits is not guaranteed, benefits are usually adjusted based on the funding levels of the pension fund. If pension funds in Switzerland are fully funded, the pension board usually grants adjustments to benefits; however, if plans are less than fully funded, indexation of retirees' benefits is prohibited.

In contrast, officials said the United Kingdom's Personal Accounts plan will not require benefits to be indexed for inflation. Officials expect that most workers will use the savings accrued in their Personal Accounts to purchase basic low-cost annuities which generally do not adjust benefits for inflation. Officials said that because inflation has been low in the past, it was not a concern in designing the system. However, it represents a possible risk workers face in the future in terms of preserving the purchasing power of their benefits.

[64]Pension funds must have a minimum funding ratio of 105 percent to apply indexation, according to officials.

[65]Officials said that in the Netherlands the law specifies that the indexation rate applied to retirees' pension benefits be the same as the one applied to the accrued benefits of workers who have left the employer but whose benefits are still part of the fund.

Domestic Proposals Incorporate Different Approaches to Reduce Retirement Risks to Workers but also Pose Trade-offs

Proposals for alternative pension plans designs in the United States use a variety of voluntary and mandatory approaches to address the risks that workers face; however, they also pose trade-offs. Four key proposals address a broad range of risks and two additional proposals focus specifically on addressing risks associated with retirees' drawdown of lump-sum benefits by presenting options for increasing the use of annuities. However, the proposals also present trade-offs, including higher costs for workers, employers, and the federal government. Nonetheless, our computer modeling projections, based on a sample of workers born in 1990, show that options to expand pension coverage can considerably increase the amount of income available for retirement, especially for low-income workers

Key Proposals in the U.S. Use Voluntary and Mandatory Approaches to Reduce a Broad Range of Risks

Several proposals for alternative pension plan designs in the United States incorporate approaches to mitigate the risks that workers face, such as voluntary incentives to increase coverage or mandatory annuitization. Four proposals address a broad range of risks in the key areas we outlined: (1) The Urban Institute's Super Simple Saving Plan, (2) The ERISA Industry Committee's New Benefit Platform for Life Security, (3) The New America Foundation's Universal 401(k) Plan, and (4) The Economic Policy Institute's Guaranteed Retirement Accounts Plan (GRA). We selected these plans because they incorporate strategies to address risks workers face, are developed in enough detail to allow us to fully analyze them, are not duplicative, and have been proposed or considered in the last 5 years. [66] Table 7 summarizes the approaches these proposals use to mitigate retirement income risks faced by workers and some of the approaches used in each are discussed below.

[66]In some cases multiple proposals may exist for similar designs. For example, proposals for a Universal 401(k) type plan also were developed by the Center for American Progress in *A Progressive Framework for Social Security Reform* and as part of the Conversation on Coverage (Retirement Investment Account). When this occurred, we selected the proposal that best fits the criteria we outline in appendix I. In addition, proposals for a DB(k) plan were not included in our analysis because their basic design principles were incorporated into the Pension Protection Act of 2006's "eligible combined plan." Pub. L. No. 109-280, § 903, 120 Stat. 780, 1040-48 (codified at 26 U.S.C. § 414(x) and 29 U.S.C. § 1060(e)).

Table 7: Key Domestic Proposals for Alternative Pension Plan Designs

	Super Simple Saving Plan	A New Benefit Platform for Life Security	Universal 401(K) Plan	Guaranteed Retirement Accounts Plan
Proposal description	Simplified private sector DC plan	System of private-sector "Benefit Administrators" providing DB and DC plans	Government-established DC plan	Government-established hybrid DB/DC plan
Coverage	Voluntary; employers given incentives to offer; workers automatically enrolled if employer offers plan but can opt out.	Voluntary; employers can offer a DB or DC plan through the centralized system instead of sponsoring their own plan; workers can also set up plans on their own through the centralized system	Voluntary; available to workers without an employer-sponsored plan; workers automatically enrolled but can opt out	Mandatory; all workers without an equivalent or better DB plan required to participate
Contributions	Mandatory minimum employer contributions of 3% (or matching formula that would achieve the same end); default worker's contribution of 4% suggested with automatic escalation to 8%; government match provided	No minimum contributions required; employers and workers can contribute to DB and DC plans, auto-escalation for DC plans is an option Proposal also includes an optional supplement calling for mandatory minimum worker contributions	Employer contributions allowed but not required; default contribution rates between 3% and 5% and auto-escalation suggested for workers; government match for all workers	Mandatory minimum contributions from workers and employers of 2.5% each; government refundable tax credit of $600 for all workers, regardless of income
Investment	Not addressed	Minimum return for DB plans guaranteed by Benefit Administrators providing plans in the centralized system; preset fund mixes, such as life cycle funds, are offered for DC plans	Default investment allocation into life cycle funds	Minimum 3% annual real return guaranteed by the government
Portability[a]	Fully portable; all contributions are fully vested	Fully portable due to centralized structure; all contributions are fully vested	Fully portable; all contributions are fully vested	Fully portable due to centralized structure; all contributions are fully vested
Leakage	Prohibits leakage of employer and government contributions; allows loans and hardship withdrawals of workers' contributions	Prohibits leakage from DB plans but not DC plans; short-term savings account is an alternative tax-deferred vehicle designed to limit leakage	Prohibits loans, allows hardship withdrawals; prohibits any leakage of government contributions	Prohibits loans, allows hardship withdrawals only in case of disability

	Super Simple Saving Plan	A New Benefit Platform for Life Security	Universal 401(K) Plan	Guaranteed Retirement Accounts Plan
Fees	Administrative fees expected to be lower than in current DC plans due to simplified plan design	Administrative fees expected to be lower than in current DC plans due to economies of scale	Administrative fees expected to be lower than in current DC plans due to economies of scale and limited number of investment options	Administrative fees expected to be lower than in current DC plans due to economies of scale
Drawdown of benefits	Not addressed	Mandatory annuitization of DB plans	Default annuitization but can opt out and take a lump-sum instead	Mandatory inflation adjusted annuity; partial lump-sum allowed

Source: GAO analysis of key domestic proposals for alternative pension plan designs.

[a]When we discuss portability in this section of the report we are referring to the ability of plan participants to transfer accrued benefits from one plan to another.

Super Simple Saving Plan

The Super Simple Saving Plan proposes a voluntary system of private sector DC accounts that includes features designed to expand coverage and increase contributions.[67] Its goal is to establish a minimum base of retirement security for low- to middle-income workers by converting certain DC plans in the existing retirement system to a single, simplified DC plan.[68] The Super Simple Plan is modeled on the United Kingdom's new plan for Personal Accounts but, unlike the U.K. plan, employers are not required to offer it to their workers. The Super Simple Plan adopts approaches intended to address risks related to coverage, contributions, portability, leakage, and fees (see table 7). The proposal's authors told us that many of the details about the approaches used in the Super Simple plan are subject to variation, such as the contribution rates, although they offer suggestions with respect to those details. In particular, the plan suggests the approaches outlined in table 8 to address risks related to coverage and contributions.

[67]Pamela Perun and C. Eugene Steuerle. "Why Not a "Super Simple" Saving Plan for the United States?" Washington, D.C., The Urban Institute, 2008.

[68]All current standard 403(b) plans and SIMPLE and Safe Harbor plans could be converted to Super Simple plans. Existing 401(k) plans would be grandfathered in, but would also have the option of converting to Super Simple plans.

Table 8: The Super Simple Saving Plan's Approaches to Coverage and Contributions

Risk area	Employer	Worker	Government
Coverage	Voluntary—Incentives Provides incentives for employers to adopt the plan, including a simplified plan design intended to lower administrative costs by eliminating annual nondiscrimination testing and reporting requirements, and providing government matching contributions and higher contribution limits than allowed in standard 401(k) plans.[a]	Voluntary—Automatic enrollment If employer adopts the plan, all but very short-term workers are covered and are automatically enrolled. Workers can opt out if they do not want to participate.	Not applicable
Contributions	Mandatory—if participating 3% of pay suggested amount of mandatory minimum contribution (or matching formula that would achieve the same end). Employers can contribute more as long as they contribute the same percentage of pay for all their workers.	Mandatory—if participating 4% of pay default contribution suggested with automatic escalation up to 8% through annual or biennial 1% of pay increases. Workers can choose to contribute more or less than the default.	Matching contribution—refundable tax credit Design has been left open to discussion, but authors suggest some potential match rates: Equal to a percentage of employer and worker contributions up to some amount 1% match of pay 2% match of pay on the first $10,000 of wages

Source: GAO analysis of Super Simple Saving Plan proposal.

[a]In 2008, workers participating in standard 401(k) plans could contribute up to $15,500 from their own funds and the total contribution including employer contributions could not be more than $46,000. The Super Simple plan would allow all workers to contribute up to a flat dollar amount, such as $46,000, minus any employer contributions. Business owners can also establish plans for themselves as employees of the company and make tax-preferred worker contributions up to the legal limit.

Administrative and legal changes required by the Super Simple proposal include eliminating the reporting and nondiscrimination testing requirements and replacing the Saver's Credit with government matching contributions (see app. III).[69]

A New Benefit Platform for Life Security

The New Benefit Platform for Life Security proposes a voluntary system in the private sector to provide DB and DC plans as an alternative to the employer-based system and includes features to increase coverage and portability, and guarantees a minimum investment return to DB plans. [70] A primary goal of the New Benefit Platform is to expand benefits to a larger base of the population. The plan's structure separates plan governance from the employer, which is similar to the independent governance structures that private pension plans have in the Netherlands, Switzerland, and the United Kingdom The plans would be administered and managed independently from employers by a system of either non- or for-profit Benefit Administrators that compete with each other in the private sector on quality, design, and cost, according to the proposal's author. Benefit Administrators could either provide the benefits directly or arrange for third parties to provide them. Benefit Administrators will assume the liability deemed appropriate for the benefits they provide. According to the proposal's author, fiduciary responsibility should follow function, thus the Benefit Administrators would bear much of the fiduciary responsibility. Employers would still have some responsibility for due diligence related to the arrangements they offer through the plan. The New Benefit Platform includes approaches intended to reduce risks related to coverage, contributions, investments, portability, leakage, fees, and the drawdown of benefits in retirement (see table 7). In particular, the plan uses the approaches outlined in table 9 to address risks related to coverage, portability, and investments.

[69]Nondiscrimination requirements provide that private employers who sponsor tax-qualified pension plans must meet certain requirements regarding how benefits or contributions are distributed between rank-and-file employees and highly compensated employees, such as company executives and owners. The Saver's Credit is a tax benefit for low- and moderate-income individuals that make voluntary contributions to employer-sponsored retirement plans or individual retirement arrangements. In 2009, married couples filing jointly with incomes below $55,500, taxpayers filing as head of household with incomes below $41,625, and single taxpayers (including married individuals who file separately) with incomes below $27,750 qualify for the credit. It is provided in addition to other tax benefits which may result from the retirement contributions. For example, most workers at these income levels may deduct all or part of their contributions to a traditional IRA.

[70]The ERISA Industry Committee. "A New Benefit Platform for Life Security" Washington, D.C., The ERISA Industry Committee, 2007. The New Benefit Platform also includes a tax-preferred short-term savings account and health care benefits in its system.

Table 9: The New Benefit Platform for Life Security's Approaches to Coverage, Portability, and Investments

Risk area	Employer	Worker	Government
Coverage	Voluntary Employers can offer their workers a DB plan, a DC plan, or both through Benefit Administrators instead of sponsoring a traditional DB or DC plan. Employers can add an automatic-enrollment feature to the DC plan	Voluntary All workers may be automatically enrolled into a DC or DB plan, but can opt out. Workers whose employers do not offer a plan, including self-employed, part-time, and contingent workers, can also independently join a Benefit Administrator's plan.	Not applicable
Portability	The centralized plan structure facilitates portability, as workers can keep the same account when they change employers.		The government establishes uniform service areas throughout the country for each of the core benefits (retirement and health) so that two or more Benefit Administrators would be available to every employer and individual worker.
Investments	In the DB plan, Benefit Administrators guarantee the principal—employers' and workers' contributions—and a rate of return on the investments, such as 3%, or an indexed rate.[a] Benefit Administrators providing the plans manage DB plan assets; there are no self-directed DB accounts.		Not applicable

Source: GAO analysis of A New Benefit Platform for Life Security proposal.

[a]The proposal suggests options for a guaranteed rate of return but does not specify a set amount. The author anticipates that Benefit Administrators would develop competing products that could provide real or nominal rates of return.

Administrative and legal changes required by the New Benefit Platform include transferring most fiduciary liability from employers to Benefit Administrators, and simplifying nondiscrimination rules.[71] The federal government would also have to set standards for Benefit Administrators and regulate the system (see app. III).

[71]Under current law, plan sponsors are generally plan fiduciaries. 29 U.S.C. § 1002(21). With limited exception, they retain liability for ensuring that plans are administered solely in the interest of participants and, for example, to provide plan benefits and defray reasonable expenses for administration, even if they utilize the services of third parties to assist with plan administration. 29 U.S.C. § 1104.

Universal 401(k) Plan

The Universal 401(k) Plan proposes a voluntary system of DC accounts that incorporates several automatic and default features.[72] Its primary goal is to give every worker access to a government-administered DC retirement savings account. It is similar to the United Kingdom's Personal Accounts Plan, which was established by the government to increase saving by low- and middle-income workers and the author told us it is intended to supplement, not replace, the existing retirement system.[73] The Universal 401(k) accounts are provided through a centralized clearinghouse structure that is established and administered by the federal government as an alternative to the current system of employer-sponsored retirement plans geared toward low- and middle-income workers whose employers generally do not offer any plan. The Universal 401(k) Plan adopts approaches intended to reduce risks related to coverage, contributions, investments, portability, leakage, fees, and the drawdown of benefits in retirement (see table 7). In particular, the plan uses the approaches outlined in table 10 to address risks related to coverage, contributions, investments, and the drawdown of benefits in retirement.

Table 10: The Universal 401(k) Plan's Approaches to Coverage, Contributions, Investments, and the Drawdown of Benefits in Retirement

Risk area	Employer	Worker	Government
Coverage	Employers facilitate enrollment through W-4 forms unless they already cover their workers in an employer-sponsored plan.	Voluntary—Automatic enrollment All workers not participating in an employer-sponsored retirement plan, including part-time workers and recent hires not yet eligible for employer-sponsored plans, are automatically enrolled in the Universal 401(k). Workers can opt out if they do not want to participate.	The government establishes a Universal 401(k) plan that gives every worker access to a retirement savings plan.

[72]Michael Calabrese, "A Universal 401(k) Plan," Washington, D.C., The New America Foundation, 2007. See also, Michael Calabrese, "Universal 401(k): A Retirement Saving Plan for Every Worker," Testimony before the Subcommittee on Health, Employment, Labor & Pensions, Committee on Education and Labor, U.S. House of Representatives, Washington, D.C., 2007.

[73]Unlike the United Kingdom's plan, which transfers the plan management and administration to a nongovernmental trustee corporation, the U.S. government retains responsibility for running the Universal 401(k) plan.

Risk area	Employer	Worker	Government
Contributions	Voluntary Employers can contribute but are not required to. If employer contributions are made, they are limited to a flat percentage of wages or a flat dollar amount and must be made for all workers, including part-time workers.	Voluntary—Default levels 3% to 5% of pay default contribution with automatic escalation up to 8% through annual 1% of pay increases suggested. Workers can choose to contribute more or less than the default amount.	Matching contribution—refundable tax credit deposited directly into workers' accounts; suggested match levels: 1:1 match on the first $2,000 in savings for workers earning up to $40,000. 1:2 match on the first $4,000 in savings for workers earning more than $40,000.
Investments	Not applicable	Default investment allocation, such as a life cycle fund, is provided. Workers who want to make their own investment decisions can choose from a limited number of broad and low-cost index funds.	The government offers a very limited number of broad and low-cost index funds for workers to invest in, as well as a default investment option, such as a life cycle fund.
Drawdown of benefits	Not applicable	Account balances are automatically converted to annuities that are purchased through the federal government at group rates.[a] Workers can opt out of the annuity and take a lump-sum distribution.	Facilitates annuity purchases either by contracting with one or more private sector insurers or by managing the annuity payments through the Pension Benefit Guaranty Corporation, a federally chartered corporation established to insure pension benefits in qualified DB plans.

Source: GAO analysis of Universal 401(k) Plan proposal.

[a]Inflation-adjusted annuities and deferred annuities are not addressed in the proposal but the author told us they could be options.

Key legal and administrative changes required by this plan include establishing a federally chartered clearinghouse to set up and manage workers' accounts, as well as expanding the Saver's Credit and making it refundable (see app. III).

Guaranteed Retirement Accounts Plan

The Guaranteed Retirement Accounts Plan proposes a mandatory system of hybrid accounts with DB and DC features designed to increase coverage and contributions and preserve retirement benefits.[74] Its goal is to increase retirement saving by low- and middle-income households and provide a basic retirement income for workers. Many of its features are similar to those found in the Swiss pension system except it is a government-

[74]Teresa Ghilarducci, "Guaranteed Retirement Accounts: Toward Retirement Income Security" Washington, D.C., Economic Policy Institute, 2007.

sponsored system instead of an employer-based system. The accounts are similar to the hypothetical accounts set up in hybrid DB plans, like cash balance plans, and are established and administered by the federal government. The proposal adopts approaches to address risks related to coverage, contributions, investments, portability, leakage, fees, and the drawdown of benefits in retirement (see table 7). In particular, the plan uses the approaches outlined in table 11 to address risks related to coverage, contributions, investments, and the drawdown of benefits in retirement.

Table 11: The Guaranteed Retirement Accounts Plan's Approaches to Coverage, Contributions, Investments, and the Drawdown of Benefits in Retirement

Risk Area	Employer	Worker	Government
Coverage	Mandatory Employers must provide the GRA for all workers who are not covered by a qualifying DB plan.[a]	Mandatory All workers who are not covered by an equivalent or better employer-sponsored DB plan must participate. Workers whose employers are not required to cover them, for example independent contractors, must enroll on their own.	The government establishes a hybrid DB/DC plan for all workers that are not covered by a qualifying DB plan.
Contributions[b]	Mandatory Mandatory minimum 2.5% of pay contribution, up to the Social Security earnings cap. Higher contribution rates are allowed.	Mandatory Mandatory minimum 2.5% of pay contribution, up to the Social Security earnings cap. Higher contribution rates are allowed.	Contribution—$600 refundable tax credit for all workers (adjusted for inflation). If the amount of the worker's contribution is less than $600, the difference is deposited directly into the worker's account.[c]
Investments	Not applicable	Minimum 3% real return on investment guaranteed.	Guarantees a minimum 3% real annual return on investment. If actual investment returns are lower than 3% in a given year, uses surplus funds it saved in years when returns were higher to contribute the difference to workers' accounts.[d]
Drawdown of benefits	Not applicable	Mandatory annuitization Workers must convert most of their accumulated benefits to an inflation-adjusted annuity. Workers also can take a partial lump-sum distribution, either $10,000 or 10% of their account balance, whichever is higher, and leave half of their remaining account balances to their heirs.[e]	Facilitates annuity purchases at group rates from an insurance company.

Source: GAO analysis of Guaranteed Retirement Accounts proposal.

[a]A DB plan qualifies for the exemption criteria if the plan sponsor contributes at least 5 percent of payroll to it each year and pays out retirement income as an annuity. A 5-year average contribution rate would be used to determine whether plans met the exemption criteria. DB plan sponsors who make sporadic and uneven contributions would not qualify, but hybrid plans like cash-balance plans would qualify as long as contributions to it are at least 5 percent of payroll and retirement income is paid out as an annuity.

[b]All contributions (employer, worker, and government) are apportioned evenly between husbands and wives.

[c]The new $600 tax credit replaces the current favorable tax treatment of employer and worker contributions to DC plans. However, a revenue tax credit of $400 would allow tax-qualified contributions up to $5,000 per year to DC plans and would be adjusted for inflation.

[d]If actual returns are consistently higher than 3 percent over a number of years, part of the surplus could be distributed to participants. The government would have the ability to lower the amount of the guarantee in the event of a protracted period of low returns.

[e]Workers may bequeath their own contributions plus interest earnings on them, but not the employer's contributions, to their heirs.

Key legal and administrative changes required by this plan include establishing and administering a system of retirement accounts by the federal government, information sharing by state and local governments, and reducing the current preferential tax treatment of DC plans, such as 401(k) plans (see app. III).[75]

Annuitization Proposals

Two additional proposals focus specifically on addressing risks associated with retirees' drawdown of lump-sum benefits by presenting options for increasing the use of annuities as a way to pay out benefits accumulated in DC plans.[76]

[75]The original Guaranteed Retirement Accounts proposal calls for an elimination of tax preferences for DC plans, such as 401(k) plans. The author has since updated this provision of the proposal and would now allow tax preferences for contributions to DC plans up to $5,000, adjusted for inflation.

[76]Annuities are the standard benefit payment option for DB plans, although some DB plans also allow lump-sum payments.

Types of Annuities

Annuities come in a variety of forms, and new products are being developed by the insurance industry. Well-known annuity products include:

Single-life annuity—Provides fixed monthly benefit payments guaranteed for life. No survivor benefit is paid after the annuitants' death (also called a straight-life annuity).

Joint and survivor annuity—Provides fixed monthly benefit payments guaranteed for life and, upon the annuitants' death, continues partial payments to the surviving spouse or other beneficiary for the rest of his or her life.
Inflation-indexed annuity—Provides monthly benefit payments guaranteed for life that increase to keep up with inflation. Annual increases may be cost-of-living increases or linked to the Consumer Price Index.

Variable annuity—Provides monthly benefit payments guaranteed for life that may increase or decrease based on performance of underlying investments the purchaser selects.

Deferred annuity—Monthly benefit payments are purchased over time but are not scheduled to begin until a person retires and then are guaranteed for life.

Longevity annuity—A type of deferred annuity generally purchased at the time of retirement that provides a guaranteed stream of income typically starting after a late age, such as 85.

Although retirement experts agree that annuities can reduce longevity risk and complex decision making about how to draw down retirement assets over time, the annuity market faces challenges. In the private market, people who buy individual annuities tend to be those who expect to live longer than average. A person who chooses to purchase an annuity may have information about his or her health, habits, or family history that the insurance company does not have regarding their risk of living longer than average. This phenomenon, called "adverse selection," leads to higher annuity premiums than insurers would otherwise have to charge if the longevity risk were spread over the entire population so that gains from early deaths would be aggregated with longer than average lives, for cost purposes. Two proposals seek to overcome this challenge by increasing the number and type of workers that purchase annuities and providing access to group rates, which tend to be lower than rates for individual annuities.

Automatic Trial Income. Retirees with DC plans would have a substantial portion of their account balance directed into a 2-year trial annuity when they retire unless they affirmatively choose to opt out.[77] After the 2-year period, the trial annuity would convert to a permanent one unless the retiree made an affirmative decision to take a lump-sum distribution instead. Employers could contract with insurance companies to provide the trial and permanent annuity products to workers at group rates. Employers also select the types of annuity products that would be offered to their workers, for example, annuities that are adjusted for inflation.

Security "Plus" Annuity. Workers with DC plans have a one-time opportunity during their first year of retirement to purchase a basic life annuity, of up to $100,000.[78] The annuity is intended to be low cost, simple, widely available, and easy to understand and purchase. Annuities are purchased from private sector insurance companies at group prices through a program facilitated by the federal government. Through a competitive bidding process, the federal government pre-selects a private market annuity provider to underwrite Security "Plus" annuities on a group basis. The federal government provides record-keeping, marketing,

[77]W.G. Gale, J.M. Iwry, D.C. John, and L. Walker. "Increasing Annuitization in 401(k) Plans with Automatic Trial Income." Washington, D.C., The Retirement Security Project, 2008.

[78]The Aspen Institute. "Savings for Life: A Pathway to Financial Security for All Americans." New York, NY, The Aspen Institute, 2007.

distribution and other administrative services and pays out annuity benefits with Social Security benefits. The basic annuities are a single life annuity for single retirees and a joint-and-survivor annuity for married retirees. Whether or not the annuities are adjusted for inflation or offer other features depends on the willingness and ability of the insurance companies to offer them.

Proposals also Pose Trade-offs for Workers and Employers

The approaches the proposals use to address risks present trade-offs and costs for workers and employers, and in some cases the federal government. In particular, important trade-offs and concerns arise with mandating coverage and contributions, guaranteeing investment returns, using life cycle funds, and annuitizing benefits. Trade-offs also arise with approaches to prohibiting preretirement benefit leakage, centralizing the private pension system, and changing existing tax incentives for contributing to DC plans.

Mandates

Mandating employers to provide retirement benefits or workers to participate and contribute to a pension plan, as the GRA does, ensures that most, if not all, workers will have some level of retirement income beyond Social Security; however, such mandates also can pose burdens for some workers and employers.[79] Several retirement experts and industry professionals we spoke to, including one who would not support the use of mandates in practice, said that making participation mandatory is a way to increase retirement plan coverage. However, such mandates represent a significant departure from the existing voluntary private pension system in the United States, and several retirement experts said that their adoption may not be feasible.[80] Furthermore, requiring workers and employers to contribute to any type of pension plan diverts funds from other uses, including employers' business expenses and workers' competing demands for basic necessities. For example, employers may pass on the cost of

[79]A mandatory retirement system cannot ensure 100 percent coverage if certain groups, such as very low-income workers, are exempt from the mandate.

[80]Because all DC plans and some DB plans will not meet the GRA proposal's mandatory eligibility requirements, the proposal could potentially replace a significant part of the existing private pension system. A DB plan meets the criteria if the plan sponsor contributes at least 5 percent of payroll to it per year and pays out retirement income as an annuity. A 5-year average contribution rate would be used to determine whether plans met the exemption criteria. DB plan sponsors who make sporadic and uneven contributions would not qualify, but hybrid plans like cash-balance plans would qualify as long as contributions to it are at least 5 percent of payroll, and retirement income is paid out as an annuity.

contributing to a pension plan by reducing workers' current compensation. The impact of this diversion may be disproportionately greater for lower-income workers and small businesses whose financial resources are more constrained.

On the other hand, voluntary approaches to increasing coverage and contribution rates allow individual workers and employers to choose whether or not to participate in a pension plan but, as the current system illustrates, cannot ensure that all workers will be covered by a pension plan. Several retirement experts have noted that voluntary approaches that change the decision-making framework, such as an auto-enrollment approach that allows workers to opt out, default contribution levels, and automatic contribution escalation, as used in the Super Simple and Universal 401(k) plans, overcome workers' inertia because they do not require active decision making about the extent of their participation and are effective alternatives to a mandate. However, increasing participation also may increase costs for employers that contribute to DC plans because now they would be making contributions for a greater number of workers, unless they reduced the amount of their contributions to all workers to keep the total cost the same. In addition, because such approaches are still voluntary, some workers will continue to lack coverage or contribute too little.

Guarantees

Guaranteeing investment returns, an approach used in the GRA and New Benefit Platform proposals, also has advantages and disadvantages. A guarantee can protect workers from market fluctuations and can ensure a minimum level of benefit. In the short term, particularly when stock market investment returns are negative, guarantees can protect workers' pension plan balances from significant losses and, depending on their design, can also protect benefits from being eroded by inflation. However, guaranteeing investment returns raises several issues related to its design and cost. A key consideration is determining who will be responsible for providing the guarantee. The provider could be from the private sector, for example an insurance company or a Benefit Administrator as in the New Benefit Platform proposal, or the federal government could provide the guarantee as the GRA plan proposes. Additionally, what the guarantee covers and the level at which it is set is a key design factor that can have a significant impact on its cost and its effectiveness. For example, the higher the level of the guarantee, the more costly it could be. However, higher guarantees can also be more effective at protecting workers from market fluctuations. Conversely, setting guarantees at lower levels, while potentially cheaper, does not offer workers as much protection. The guarantee would have to be set at a level that the provider is able to sustain or it may result in significant governmental costs.

Additional issues raised in designing a guarantee include what to do with surpluses, if any, realized from investment returns that exceed the guarantee level and how to fund shortfalls when investment returns are lower than that level. For example, the guarantee's provider could save surpluses and use them to cover shortfalls or pass the surplus returns on to workers. While passing the surplus on to workers increases their pension benefits, it also leaves less available for shortfalls and could deplete the surplus more quickly, potentially increasing the guarantee provider's costs. One way for the provider to manage this cost is to design the guarantee in a way that allows it to lower the level of the guarantee in the event of a protracted period of low investment returns, as the GRA plan proposes. However, lowering the guarantee also could reduce workers' and employers' confidence in the pension plan. Alternatively, the provider could pass on this cost to plan participants, or if the government provides the guarantee, taxpayers.

Life Cycle Funds

Another approach used to address investment risk in DC plans, life cycle funds, also has strengths and weaknesses. While industry officials told us that life cycle funds are an important step forward in reducing the complexity of individual decision making about appropriate investment allocations, they also said they are not a complete solution and are still evolving. Workers still bear investment risk individually and recent experiences show that this risk may be substantial. For example, life cycle funds with a target retirement date of 2010 are reported to have lost 25 percent of their value on average in 2008, just 2 years before workers investing in them plan to retire. Officials at one retirement policy organization told us that one of the challenges life cycle funds face is striking the right balance between providing a steady stream of income in the near term and obtaining sufficient investment returns to address longevity and inflation risks in the long term.

Annuities

Trade-offs also exist with using annuities to distribute benefits accumulated in DC plans during retirement. Annuities are advantageous because they provide a stable and predictable stream of income that is guaranteed to last retirees for the rest of their lives and reduce the burden of actively managing the drawdown of benefits. However, many retirement experts have noted their drawbacks, including their costs. A key concern is that some annuitants may die early in their retirement and will not realize much benefit from their purchase. This also raises equity issues about annuities, as those in certain income groups tend to live longer than others and women tend to live longer than men. While annuities by their nature depend on such differences to spread risks among a large pool of retirees, mandating annuities for groups which have lower average life expectancies, such as low income workers, raises questions about fairness. Also, annuitants no longer have access to their assets in the event of an emergency and generally cannot leave a bequest to their heirs. While retirees could choose to annuitize a portion of the account balance (which would provide a lower monthly benefit) and leave the remainder as a lump sum that they could access in an emergency or leave to their heirs, insurance industry officials told us that not many people realize they have this option.

Other Trade-offs

Other trade-offs arise in prohibiting leakage, centralizing the private pension system, and changing tax incentives. Prohibiting or further restricting leakage, as proposed in the Super Simple, Universal 401(k), and GRA plans, preserves the amount of retirement savings available for retirement and allows workers to accrue higher benefits in the long term than if they withdrew funds from their DC accounts early. However, retirement experts have noted that prohibiting hardship withdrawals and loans also can make workers worse off in the short term if they face a financial emergency, such as a pending home foreclosure, and do not have other savings to draw from. GAO has reported in the past that allowing the possibility of loans and hardship withdrawals provides a strong incentive for participation in a voluntary system, especially among low- to middle-income workers.[81] In addition, loans that are repaid may not have an adverse effect on workers' retirement savings because the worker returns the money to the retirement account.

As an alternative to the current employer-based system, centralizing the private pension system in either the private sector or the government has advantages such as facilitating portability and taking advantage of economies of scale to manage administrative costs. While establishing such a system may also reduce employers' administrative duties and, potentially, some of their individual fiduciary responsibilities, it may also be a costly and complex effort that requires new regulatory and oversight efforts. These costs could be passed on to workers, employers, and taxpayers in general.

[81] See GAO *401(k) Pension Plans: Loan Provisions Enhance Participation But May Affect Income Security for Some*, GAO/HEHS-98-5 (Washington, D.C.: Oct. 1, 1997).

In addition, providing a government contribution or credit by expanding the Saver's Credit, as suggested in the Super Simple, Universal 401(k), and GRA proposals, increases retirement benefits for workers, but also increases costs for the government because more people would receive it. Reducing preferential tax treatment for contributions to DC plans, such as 401(k) plans, could partially offset this cost, as proposed in the GRA plan, however workers currently contributing more than the $5,000 limit to those plans would be made worse off. Some workers would have to pay income taxes on more of their earnings because the amount of the government's refundable tax credit to offset the cost of contributions is $600 for all workers regardless of their income or amount of their contribution.

Options to Expand Coverage Substantially Increase Projected Benefits

Our microsimulation modeling projections, based on a sample of workers born in 1990, show that options to expand pension coverage considerably increase the amount of income available for retirement, especially for low-income workers.[82] While there are various options that could be used to address a number of key risks workers face in accumulating and preserving pension benefits, we modeled three options to expand coverage to provide an example of how such changes might affect the amount of income available for retirement as compared to a baseline scenario reflecting current law and trends. These options incorporate some generic features of U.S. proposals, but do not represent any proposal in its entirety. The trade-offs these options entail are similar to those discussed above for mandatory and voluntary approaches to increasing coverage and contributions. The first option we model expands access to a DC plan for workers by requiring all employers that do not currently offer a pension plan to sponsor a DC plan with no employer contribution (i.e., universal access). The second and third options we model build on universal access by incorporating automatic enrollment and mandatory participation, respectively. While each option increases pension benefits and the percentage of workers with DC savings at retirement, mandatory participation in combination with universal access provides the largest overall gains compared to the baseline. Although these assumptions

[82]We used the 1990 birth cohort for our simulations so that policy options, if implemented in the near future, would be in effect for the majority of this cohort's working life.

represent stylized scenarios, they illustrate the potential effect of such changes on coverage and benefits.[83]

Modeling scenarios to expand coverage **Universal access**—All employers that do not sponsor a plan are required to provide a DC plan with no employer contribution. Existing employer-sponsored plans are not affected. **Universal access with automatic enrollment**—In addition to universal access, as described above, all DC plans have automatic enrollment in which individuals must affirmatively opt out of participating in the plan. **Universal access with mandatory participation**—In addition to universal access, all workers with access to a DC plan are required to participate.

We project DC pension benefits for a stylized scenario where all employers that do not currently offer a pension plan are required to sponsor a DC plan with no employer contribution (universal access). Requiring universal access where participation is voluntary increases the share of workers with DC savings at retirement from about 67 percent to just over 79 percent (see table 12). The increase in coverage is greatest for low-income workers—the share of workers with DC savings at retirement increases from about 48 percent to about 63 percent for those in the first income quartile, an increase of about one-third. Overall, requiring universal access increases the average amount of annual income in retirement provided by a DC plan, as measured by the annuity equivalent, by about 12 percent.

[83]Our projections assume stocks return an annual non-stochastic real rate of return of 2.9 percent, equivalent to the government bond rate. In an alternate simulation, we assume stocks earn an annual non-stochastic real rate of return of 4.9 percent and find similar effects for each policy option (see app. I, table 13). Using different rates of return reflects assumptions used by the Social Security Administration's Office of the Chief Actuary (OCACT) in some of its analyses of trust fund investment.

Table 12: Projected Average Household Annuity Equivalents and Projected Percentage of Workers with DC Savings at Retirement, by Income, under Different Scenarios

	By income quartile				
	Overall	**1**	**2**	**3**	**4**
Baseline results					
Household annuity equivalent (per year, 2008 dollars)	$15,217	$2,761	$7,780	$16,331	$33,996
Percentage of workers with DC savings at retirement	66.9%	47.5%	64.6%	74.3%	81.3%
Universal access					
Household annuity equivalent (per year, 2008 dollars)	$17,058	$3,211	$8,943	$18,614	$37,465
Percentage of workers with DC savings at retirement	79.2%	62.9%	78.4%	85.8%	89.8%
Universal access with auto-enrollment					
Household annuity equivalent (per year, 2008 dollars)	$18,556	$3,921	$10,276	$20,340	$39,668
Percentage of workers with DC savings at retirement	90.6%	84.3%	90.4%	93.1%	94.6%
Universal access with mandatory participation					
Household annuity equivalent (per year, 2008 dollars)	$21,312	$5,157	$12,367	$23,461	$44,260
Percentage of workers with DC savings at retirement[a]	96.6%	95.6%	96.5%	97.0%	97.2%

Source: GAO calculations of PENSIM simulation.

Note: Some of the model assumptions include the following: (1) workers use all accumulated DC plan balances to purchase an inflation-adjusted annuity at retirement, between ages 62 and 70; (2) participants invest all plan assets in life cycle funds; (3) stocks earn an average annual 2.9 percent real return. Quartiles are based on the distribution of lifetime earnings. No default or minimum contribution rates were specifically defined for the three scenarios, rather the contribution rates are produced by PENSIM in the same manner as they are for those who voluntarily participate in the baseline scenario. We have no evidence on what contribution rates new participants would choose under the three scenarios we analyzed, but it may be lower than the contribution rates chosen by those that voluntarily participate in the baseline scenario. See appendix I for more details.

[a]Our modeling assumptions do not alter current standards for eligibility. Thus, under universal access with mandatory participation, some workers, such as part-time workers who work less than 1,000 hours a year, may not be eligible for pension coverage according to plan provisions.

Under the second scenario, automatic enrollment is added as an additional requirement for all DC plans and further raises projected DC pension coverage and benefits. Combining the requirement for universal access to a plan with automatic enrollment where workers can opt out of coverage increases the share of workers with DC savings at retirement to almost 91 percent. The largest increase occurs for those in the lowest earnings quartile—the share of workers with DC savings at retirement increases from about 63 percent under universal access to just over 84 percent under universal access with automatic enrollment. Overall, average projected DC pension income further increases to $18,556 a year.

Finally, we model a third scenario in which, in addition to universal access, all workers with a DC plan are required to participate. Our simulations show that, of the three options modeled, mandatory participation provides the largest overall gains compared to the baseline in the percentage of workers with savings at retirement and the amount of pension benefits. For each income quartile, the share of workers with DC savings at retirement increases to more than 95 percent.[84] The biggest gain occurs for low-income workers—the share of workers with DC savings at retirement increases from 84 percent under universal access with automatic enrollment to almost 96 percent under mandatory participation. Accordingly, the average amount of DC pension income available in retirement further increases by about 15 percent overall compared to universal access with automatic enrollment. Unsurprisingly, among low-income workers, average DC pension income increases by about 32 percent with universal access and mandatory participation compared to universal access with automatic enrollment.

Concluding Observations

The current financial crisis clearly illustrates the need to make the employer-sponsored pension system more secure, but even in good economic times many U.S. workers are exposed to numerous risks. Despite significant tax incentives, only about 50 percent of the private sector workforce is covered by a retirement plan. Employers continue to freeze and terminate traditional DB plans. For workers who have access to a DC plan, account balances are low, even for many of those close to retirement. Many experts agree reforms are needed to make the U.S. private pension system more effective in protecting workers from risks to accumulating and preserving adequate savings for retirement. If no action is taken, a considerable number of Americans face the prospect of a reduced standard of living in retirement.

[84]Our modeling assumptions do not alter current standards for eligibility. Thus, under universal access with mandatory participation some workers, such as part-time workers who work less than 1,000 hours a year, may not be eligible for pension coverage according to plan provisions.

The international systems and domestic proposals we reviewed represent different approaches to addressing key retirement risks and point the way toward possible solutions to some of the problems faced by the U.S. pension system. For example, alternative models could be used to distribute investment risks across workers, employers, and retirees, which may reduce the volatility workers face with self-directed individual accounts. In the current economic environment, approaches used in other countries and domestic proposals to address risks workers face in accumulating and preserving pension benefits may warrant consideration. However, new approaches raise a number of issues that would have to be addressed, including the relative roles of workers, employers, and the government, particularly with regard to contributions, how such a system would be administered, and its relationship to both Social Security and the existing private pension system.

Neither the pension systems in other countries we reviewed, nor the domestic proposals constitute a panacea for the challenges of the U.S. pension system. No system or proposal is perfect and each requires careful consideration of the trade-offs between its advantages, costs, and responsibilities. Despite important social, economic, and institutional differences between the United States and these countries, key features from these models, as well as the domestic proposals, are relevant and could potentially offer some solutions for the U.S. pension system. Taken together, these key features could be used to more comprehensively address risks workers face. The challenge for Congress will be to balance the interests and responsibilities of workers, employers, and the government and find the most promising steps to help Americans achieve retirement security.

Agency Comments and Our Evaluation

We obtained technical comments on a draft of this report from the Department of Labor and the Department of the Treasury, and incorporated them throughout the report, as appropriate. The Department of State did not have any comments on the draft report.

As agreed with your office, unless you publicly announce it contents earlier, we plan no further distribution of this report until 30 days after its issue date. At that time, we will send copies of this report to the Secretary of Labor, Secretary of the Treasury, and Secretary of State.

If you or your staff have any questions concerning this report, please contact me at (202) 512-7215. Contact points for our offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix IV.

Sincerely yours,

Barbara Bovbjerg
Director, Education, Workforce,
and Income Security

Appendix I: Scope and Methodology

To identify key risks workers face from traditional defined benefit (DB) and defined contribution (DC) plans, we reviewed the relevant research and interviewed industry experts, pension consulting firms, academics, and other relevant organizations. The scope of this study is limited to risks workers face that are directly related to their pension benefits and does not focus on other significant but more indirect risks to retirement security, such as retiree health care costs. In addition, while we also acknowledge the importance of analyzing risks facing certain subpopulations, such as specific minority groups, the study does not include specific discussions of such subpopulations. There was broad consensus among those we interviewed that we correctly identified the key risks that workers face, within the scope of our study. We developed a framework for analysis based on the key risks we identified and applied it when conducting our analysis for the second and third research questions.

To identify approaches used in other countries that could address risks in the U.S. pension system and the trade-offs they entail, we examined the employer-sponsored pension systems of three countries: the Netherlands, Switzerland, and the United Kingdom. We selected these countries after completing an initial review of employer-sponsored pension plan designs in Organisation for Economic Co-operation and Development (OECD) countries. We focused on OECD countries in order to increase our opportunity to identify practices used in countries with well-developed capital markets and regulatory regimes comparable, if not always similar, to the United States. We acknowledge that there may be relevant plan design features from a non-OECD country that we did not address in this report. We identified 13 OECD countries based on interviews with pension experts, including the OECD, and our review of retirement-related research. We then examined the key pension plan design features of each of the 13 country's private pension systems and selected 3 based on the following criteria:

- The private pension system was identified through our research and the consensus of external experts as having strong potential for yielding useful lessons for the U.S. experience.
- The private pension system is an important pillar of the country's retirement system.
- The private pension system directly addresses the risks identified in the first research question. The selected countries as a group address all of our key risk areas, although no single country was required to address all of them.

- The private pension system is not duplicative. Where similar plans exist in multiple countries, we chose the one that best addresses the other selection criteria and provided travel efficiencies for the job.

To identify the approaches used in the employer-sponsored pension systems of the Netherlands, Switzerland, and the United Kingdom we analyzed how each country's plan design addresses the risks that workers face, using the risk framework developed in the first research question. Although we did not independently analyze each country's laws and regulations, we collected information about each country's plan design and identified potential lessons for the United States by reviewing available documentation and research and interviewing pension experts and government officials in each country. We recognize that some of the design details are still being developed for the United Kingdom's new system, scheduled to be implemented in 2012. We also interviewed academics and other experts based in the United States about each plan's strengths and weaknesses, the trade-offs it entails, and potential lessons it could provide for the United States. In addition, our analysis recognized that the applicability of lessons learned from these countries' plan designs is shaped by the public retirement systems and other social welfare supports in each country and we considered these contextual differences.

To identify the approaches that key proposals for alternative pension plan designs in the United States use to address the risks that workers face, we analyzed four domestic proposals against the risk framework developed in the first research question. We selected the four proposals from a larger group that we identified by reviewing retirement-related research and conducting interviews with pension consulting firms, national experts, and other relevant organizations. We assessed the group against the following selection criteria and selected those proposals that met each of them:

- The proposal has been identified through our research and the consensus of external experts as a major proposal.
- The proposal directly addresses the risks identified in the first research question; the selected proposals as a group address all the major risk areas, although no single proposal was required to address all of them.
- The proposal is from a source that GAO and external experts judge to be credible, such as universities and policy research organizations with demonstrated expertise in retirement issues.

- The proposal is presented as a formal proposal, as opposed to a partial or preliminary reform idea.
- The proposal is current (i.e., proposed or considered in the last 5 years and not already adopted for use in the United States).
- The proposal is not duplicative. When similar proposals were identified, we selected the one that best addressed the other selection criteria.

We reviewed each proposal in its entirety and interviewed each of the authors to determine how the proposal addresses the risks areas we identified. Our review of the proposals focuses primarily on their approaches to address risks, although each proposal includes additional information that is beyond the scope of our report. We also clarified certain information about each proposal during interviews with the authors, including its trade-offs and the legal or administrative changes it would require. We also reviewed related research about the general approaches used in the proposals and interviewed national retirement policy experts about these approaches. In addition, we assessed two other proposals that specifically focused on increasing the use of annuities. We reviewed each of those proposals in their entirety and interviewed their authors to clarify details of those proposals.

To analyze how certain options for pension reform may affect coverage and benefits, we used the Policy Simulation Group's (PSG) microsimulation models to run various simulations of workers saving in DC plans over a career. The PSG Pension Simulator (PENSIM) is a pension policy simulation model that has been developed for the Department of Labor to analyze lifetime coverage and adequacy issues related to employer-sponsored pensions in the United States. It has been used by GAO, the Department of Labor, other government agencies, and private organizations to analyze lifetime coverage and adequacy issues related to employer-sponsored pensions in the United States[1] We projected account balances at retirement for PENSIM-generated workers under different scenarios representing different pension features and market assumptions. These features are used in some of the proposals we reviewed but do not

[1] See, for example, GAO, *Private Pensions: Low Defined Contribution Plan Savings May Pose Challenges to Retirement Security, Especially for Many Low-Income Workers*, GAO-08-8 (Washington, D.C.: Nov. 29, 2007) and *Private Pensions: Information on Cash Balance Pension Plans*, GAO-06-42 (Washington, D.C.: Nov. 3, 2005).

represent any proposal in its entirety. See below for further discussion of PENSIM and our assumptions and methodologies.

Methodology and Assumptions Using PENSIM Microsimulation Model

To project lifetime savings in DC pensions and to identify the effects of certain changes in policies, we used PENSIM.[2] PENSIM is a dynamic microsimulation model that produces life histories for a sample of individuals born in the same year.[3] The life history for a sample individual includes different life events, such as birth, schooling events, marriage and divorce, childbirth, immigration and emigration, disability onset and recovery, and death. In addition, a simulated life history includes a complete employment record for each individual, including each job's starting date, job characteristics, pension coverage and plan characteristics, and ending date. The model has been developed by PSG since 1997 with funding and input by the Office of Policy and Research at the Employee Benefits Security Administration (EBSA) of the U.S. Department of Labor with recommendations of the National Research Council panel on retirement income modeling.

PENSIM simulates the timing for each life event by using data from various longitudinal data sets to estimate a waiting-time model (often called a hazard function model) using standard survival analysis methods. PENSIM incorporates many such estimated waiting-time models into a single dynamic simulation model. This model can be used to simulate a synthetic sample of complete life histories. PENSIM employs continuous-time, discrete-event simulation techniques, such that life events do not have to occur at discrete intervals, such as annually on a person's birthday. PENSIM also uses simulated data generated by another PSG simulation model, SSASIM, which produces simulated macro-demographic and macroeconomic variables.

PENSIM imputes pension characteristics using a model estimated with 1996 to 1998 establishment data from the Bureau of Labor Statistics Employee Benefits Survey (now known as the National Compensation

[2]For more information on PSG microsimulation models, see http://www.polsim.com. For more details on PENSIM, see Martin Holmer, Asa Janney, and Bob Cohen, *PENSIM Overview*, available from http://www.polsim.com/overview.pdf.

[3]While these models use sample data, our report, like others using these models, does not address the issue of sampling errors. The results of the analysis reflect outcomes for individuals in the simulated populations and do not attempt to estimate outcomes for an actual population.

Survey, or NCS). Pension offerings are calibrated to historical trends in pension offerings from 1975 to 2005, including plan mix, types of plans, and employer matching. Further, PENSIM incorporates data from the 1996-1998 Employee Benefits Survey to impute access to and participation rates in DC plans in which the employer makes no contribution, which the Bureau of Labor Statistics does not report as pension plans in the NCS. The inclusion of these “zero-matching” plans enhances PENSIM’s ability to accurately reflect the universe of pension plans offered by employers. The baseline PENSIM assumption, which we adopted in our analysis, is that 2005 pension offerings, included the imputed zero-matching plans, are projected forward in time.

PSG has conducted validation checks of PENSIM’s simulated life histories against both historical life history statistics and other projections. Different life history statistics have been validated against data from the Survey of Income and Program Participation (SIPP), the Current Population Survey (CPS), Modeling Income in the Near Term (MINT3), the Panel Study of Income Dynamics (PSID), and the Social Security Administration’s Trustees Report. PSG reports that PENSIM life histories have produced similar annual population, taxable earnings, and disability benefits for the years 2000 to 2080 as those produced by the Congressional Budget Office’s long-term social security model (CBOLT) and as shown in the Social Security Administration’s 2004 Trustees Report. According to PSG, PENSIM generates simulated DC plan participation rates and account balances that are similar to those observed in a variety of data sets. For example, measures of central tendency in the simulated distribution of DC account balances among employed individuals is similar to those produced by an analysis of the Employee Benefit Research Institute-Investment Company Institute 401(k) database and of the 2004 Survey of Consumer Finances. GAO performed no independent validation checks of PENSIM’s life histories or pension characteristics.

In 2006, EBSA submitted PENSIM to a peer review by three economists. The economists’ overall reviews ranged from highly favorable to highly critical. While the economist who gave PENSIM a favorable review expressed a “high degree of confidence” in the model, the one who criticized it focused on PENSIM’s reduced form modeling. This means that the model is grounded in previously observed statistical relationships among individuals’ characteristics, circumstances, and behaviors, rather than on any underlying theory of the determinants of behaviors, such as the common economic theory that individuals make rational choices as their preferences dictate and thereby maximize their own welfare. The reduced form modeling approach is used in pension microsimulation models and the feasibility of using a nonreduced-form approach to build such a model may be questionable given the current state of economic research. The third reviewer raised questions about specific modeling assumptions and possible overlooked indirect effects.

Assumptions Used in Projecting DC Plan Balances at Retirement

PENSIM allows the user to alter one or more inputs to represent changes in government policy, market assumptions, or personal behavioral choices and analyze the subsequent impact on pension benefits. Starting with a 2 percent sample of a 1990 cohort, totaling 126,518 people at birth, our baseline simulation includes some of the following key assumptions and features. For our report, we focus exclusively on accumulated balances in DC plans and ignore any benefits an individual might receive from DB plans or from Social Security. Our reported benefits therefore capture just one source of potential income available to a retiree.

- Workers accumulate DC pension benefits from past jobs in one rollover account, which continues to receive investment returns, along with any benefits from a current job. At retirement, these are combined into one account. Because we focus on DC plan balances only, we do not track Social Security benefits or benefits from DB plans.
- Plan participants invest all assets in their account in life cycle funds, which adjust the mix of assets between stocks and government bonds as the individual ages. Stocks return an annual non-stochastic real rate of return of 2.9 percent, equivalent to the government bond rate. In an alternate simulation, we assume that stocks earn an annual non-stochastic real rate of return of 4.9 percent and find similar effects for each policy option (see table 13).[4] Using different rates of return reflect assumptions used by the Social Security Administration's Office of the Chief Actuary in some of its analyses of trust fund investment.

[4]The difference between the return on equities and Treasury bonds represents the compensation that individuals require for the higher risk of holding equities. Since our projections do not stochastically model stock returns, assuming a rate of return on assets equal to the historical return on stocks does not capture the risks associated with stock returns; we therefore also model DC savings under a scenario in which all assets return the government bond rate of return. Using the government bond rate of return, we find similar results for the relative impact of each policy option. For more discussion of the appropriate rate to use in projections, see "Analysis of H.R. 3304, Growing Real Ownership for Workers Act of 2005," Congressional Budget Office, September 13, 2005, 63-65.

Table 13: Projected Average Household Annuity Equivalents and Projected Percentage of Workers with DC Savings at Retirement, by Income, under Different Scenarios

	By income quartile				
Baseline results	**Overall**	**1**	**2**	**3**	**4**
Household annuity equivalent (per year, 2008 dollars)	$18,081	$3,351	$9,344	$19,397	$40,231
Percentage of workers with DC savings at retirement	67.1%	47.6%	64.8%	74.5%	81.5%
Universal access					
Household annuity equivalent (per year, 2008 dollars)	$20,228	$3,882	$10,686	$22,031	$44,311
Percentage of workers with DC savings at retirement	79.4%	63.2%	78.6%	86.0%	90.0%
Universal access with auto-enrollment					
Household annuity equivalent (per year, 2008 dollars)	$22,087	$4,773	$12,305	$24,206	$47,065
Percentage of workers with DC savings at retirement	90.7%	84.4%	90.5%	93.2%	94.7%
Universal access with mandatory participation					
Household annuity equivalent (per year, 2008 dollars)	$25,672	$6,354	$15,028	$28,166	$53,137
Percentage of workers with DC savings at retirement[a]	96.7%	95.7%	96.6%	97.1%	97.3%

Source: GAO calculations of PENSIM simulation.

Note: Model assumptions include the following: (1) workers use all accumulated DC plan balances to purchase an inflation-adjusted annuity at retirement, between ages 62 and 70; couples separately purchase individual life annuities which are added together for the household annuity equivalent; (2) workers invest all plan assets in life cycle funds; (3) stocks earn an average annual 4.9 percent real return, except where specified. Quartiles are based on the distribution of lifetime earnings. No default or minimum contribution rates were specifically defined for the three scenarios, rather the contribution rates are produced by PENSIM in the same manner as they are for those who voluntarily participate in the baseline scenario. We have no evidence on what contribution rates new participants would choose under the three scenarios we analyzed, but it may be lower than the contribution rates chosen by those that voluntarily participate in the baseline scenario.

[a]Our modeling assumptions do not alter current standards for eligibility. Thus, under universal access with mandatory participation some workers, such as part-time workers who work less than 1,000 hours a year, may not be eligible for pension coverage according to plan provisions.

- Workers purchase a single, inflation-adjusted life annuity, typically at retirement, which occurs between the ages of 62 and 70.[5] Anyone who becomes permanently disabled at age 45 or older also purchases an immediate annuity at their disability age.[6] We eliminate from the sample cohort members who: (1) die before they retire, at whatever age; (2) immigrate into the cohort at an age older than 25; (3) emigrate prior to retirement; or (4) become permanently disabled prior to age 45.[7]

Starting from this baseline model, we vary key inputs and assumptions to see how these variations affect pension coverage and benefits at retirement. Scenarios we analyzed include:

1. Universal access. Existing employer plans stay as they are in the baseline simulation, but all employers that did not sponsor a plan are required to provide a DC plan with no employer contribution. Participation and employee contributions for those who newly have access are based on current model assumptions regarding participation in employer-sponsored DC plans with no employer contribution.

2. Universal access with automatic enrollment. In addition to universal access, as described above, all DC plans have automatic enrollment where individuals must affirmatively opt out of participating in the plan.

3. Universal access with mandatory participation. In addition to universal access, all workers with access to a DC plan are required to participate (i.e., no opt out).

[5]Annuity equivalents are calculated by converting DC-derived account balances at retirement into inflation-indexed retirement annuity payments using annuity prices that are based on projected mortality rates for the 1990 birth cohort and annuity price loading factors that ensure that the cost of providing these annuities equals the revenue generated by selling them at those prices.

[6]We classify as retired those workers who become disabled after age 62. We do not classify as disabled those workers who recover from a disability prior to age 62.

[7]We drop cohort members who die before retiring because we assume annuitizaton at retirement, but someone who dies before retiring would never annuitize his DC savings. We apply the other conditions because such cohort members are likely to have fewer years in the workforce to accumulate DC plan savings.

PENSIM Cohort Summary and Cross-Sectional Statistics

Lifetime summary statistics of the simulated 1990 cohort's workforce and demographic variables give some insight into the model's projected DC benefits at retirement that we report (see table 14). By restricting the sample to those who have some earnings, do not immigrate into the cohort after age 25, emigrate prior to retirement, and retire (or become disabled at age 45 or older), we reduce the full sample of 126,518 individuals to a sample of 66,859 individuals.

Table 14: Sample Summary Statistics, PENSIM 1990 Cohort, Medians

		By income quartile			
Demographic and workforce variables	**Sample (n = 66,859)**	**1**	**2**	**3**	**4**
Percentage female (average)	52	64	54	49	41
Education	Some college	High school graduate	High school graduate	Some college	College degree
Years working full time	29.8	20.2	29.1	31.4	34.0
Years working part time	2.2	6.3	2.4	1.5	0.8
Steady earnings (annual, 2008 dollars)	$46,838	$20,070	$40,071	$65,508	$124,510
Number of jobs over lifetime	5	5	5	5	5
Duration of longest job, years	17.4	14.7	17.3	18.2	19.1
Retirement age	63	63	63	63	63
Years eligible for a DC plan	18.8	11.3	17.8	21	24.1

Source: GAO calculations of PENSIM simulation.

Appendix II: Examples from Private Sector Pension Systems in the United Kingdom, the Netherlands, and Switzerland

Example of How a Worker Accumulates Pension Benefits in the United Kingdom

This example is based on the Personal Accounts plan, a type of DC plan. Key design features of the Personal Accounts plan include: automatic enrollment, mandatory minimum contributions, default investment allocations, and annuities with a lump-sum option.

- A 22-year-old worker takes a job with a small employer that does not have its own pension plan. The employer automatically enrolls the worker into a Personal Accounts plan. The worker chooses not to opt out of the plan.
- For the specified earnings band, the employer deducts 4 percent of the worker's earnings from her paycheck and deposits them into her Personal Accounts plan because the worker has chosen not to contribute more than the mandatory minimum amount. The employer also makes its mandatory minimum contribution equal to 3 percent of the worker's earnings into her account. The government also effectively contributes an amount equal to 1 percent of the worker's pay into her account through normal tax relief.
- The worker does not make an active investment allocation so all contributions are invested into the default option.
- Over the course of her career, the worker's benefits accumulate. She experiences investment gains and losses; the actual amount of the worker's contributions increase as her salary increases (although the 4 percent contribution rate remains the same); the worker changes employers but keeps the same Personal Accounts plan and she and the new employer continue to contribute to it. The worker does not withdraw any of the accumulated benefits until she retires.
- At age 65 the worker retires and has accumulated a retirement nest egg equal to the total contributions and investment earnings less investment losses and fees. The worker takes a lump-sum distribution equal to 25 percent of her account balance and annuitizes the remaining 75 percent. The annuity provides the worker with a monthly pension benefit for the rest of her life.

Example of a How a Worker Accumulates Pension Benefits in the Netherlands

This example is based on a typical career-average DB plan in the Netherlands which is negotiated between workers and employers. Key plan design features include: mandatory industry plan, contribution levels specified in the labor contract for this particular plan, pooled investments, conditional indexation in good and bad years, portability, and annuitization with conditional indexation.

- A 25-year-old worker starts a job in an industry with a mandatory pension plan and becomes enrolled in the plan.
- The worker and employer contribute to the plan in the amounts specified in the industry plan's agreement. Contributions for this specific industry plan (as negotiated by the worker and employer representatives) are: worker 5 percent of pay (one-fourth of total contribution); employer 15 percent of pay (three-fourths of total contribution) for a total of 20 percent of the worker's pay.
- All the contributions to the plan are combined into a single pool and invested collectively. The pension fund's board decides how to invest the contributions.
- The worker accrues benefits at the rate of 2 percent of earnings each year according to the plan rules negotiated by worker and employer representatives.
- In years when the plan is sufficiently funded (e.g., when investment returns are high), accrued benefits are indexed (i.e., adjusted upward to reflect price and wage increases) in accordance with this particular plan's rules; in years when the plan is not sufficiently funded (e.g., investment returns are low), accrued benefits are partially indexed or not indexed at all.
- Over the course of his career, the worker changes jobs but stays in the same pension plan because the jobs are all in the same industry. The new employer now contributes to the plan.
- At age 65, the worker retires and has accrued pension benefits equal to 2 percent of his annual earnings multiplied by 40 years, with adjustments made for indexation. The accumulated benefits are paid out as an annuity that provides him with a monthly benefit for the rest of his life. As long as the plan is sufficiently funded, the annuity payments will be indexed (i.e., adjusted upward to reflect price and wage increases).

Example of How a Worker Accumulates Pension Benefits in Switzerland

This example is based on a typical DB cash balance plan that meets the mandatory minimum requirements under Swiss law. Key features of the plan design include: mandatory coverage, mandatory minimum contributions that vary with age, minimum guaranteed returns on investment, full portability, annuitization of pension benefits at the mandatory minimum conversion rate, and a lump-sum option for drawing down benefits in retirement.

- A 25-year-old worker starts a job with an employer that provides a pension plan which meets the mandatory minimum standards under Swiss law and becomes enrolled in the plan.

- For the specified earnings band, the worker and employer contribute an amount equal to 7 percent of pay to the plan, the minimum amount required by law for a 25-year-old worker. Because the employer is required by law to make at least half of the contribution, it contributes 3.5 percent and the worker contributes the other 3.5 percent by payroll deduction. The amount of the mandatory minimum required contribution will increase with the worker's age in accordance with the schedule below.

  - Ages 25-34: 7 percent of pay
  - Ages 35-44: 10 percent of pay
  - Ages 45-54: 15 percent of pay
  - Ages 55-65: 18 percent of pay

- All the contributions to the plan are combined into a single pool and invested collectively. The pension fund's board decides how to invest the contributions within the guidelines established by the government.

- The worker accrues benefits based on the amount of the contributions and the investment returns. This particular pension plan provides the minimum return on investment guaranteed by law. The mandatory minimum return is 2 percent this year, but was higher in past years and may vary in future years.

- Over the course of his career, the worker changes jobs and the value of his accumulated benefits is calculated each time and transferred to his new employers' pension plans.

- The worker retires at age 65 and has accumulated a retirement nest egg. Although he has the opportunity to take 25 percent of his nest egg as a lump sum he chooses to annuitize the entire amount. He also had the opportunity to withdraw funds prior to retiring when he bought his first home; he choose not to, and the nest egg equals the total value of all contributions made and the minimum investment returns guaranteed each year. The accumulated benefits are paid out as an annuity that provides him with a monthly benefit for the rest of his life. Each year his total benefits equal 7 percent of the total nest egg, in accordance with the mandatory minimum annuity conversion rate. In years when the pension plan's funding levels are sufficient, his pension benefits will also be indexed for inflation (i.e., adjusted upward).

Appendix III: Summary of Administrative and Legal Changes Associated with Key Domestic Proposals

Table 15: Administrative and Legal Changes Associated with Key Domestic Proposals for Alternative Pension Plan Designs

Proposal	Administrative and legal changes
Super Simple Saving Plan	• Employers not subject to annual nondiscrimination testing or reporting requirements; contribution levels monitored and enforced through the tax system. • Government matching contributions replace the Saver's Credit, but the authors leave the design of the match open for discussion. Match deposited directly in accounts through the tax system under a separate record-keeping system maintained by financial service providers; workers would not have to file taxes to receive the match. • Workers allowed to make higher contributions than under standard 401(k) plans. Maximum combined contribution from the employer and worker together is $46,000. • All standard 403(b), SIMPLE, and Safe Harbor plans required to convert to Super Simples. Existing 401(k) plans grandfathered in, but 401(k) plan sponsors could adopt the Super Simple by amending their plans.
A New Benefit Platform for Life Security	• Establish a centralized system of third-party Benefit Administrators in the private sector. Federal government establishes uniform service areas throughout the country for each of the plan's core benefits (retirement and health care); two or more Benefit Administrators would be available to every employer and individual worker. • Federal government establishes, or arranges for, a uniform national regulatory structure and uniform standards for the benefits included in the plan. • Current nondiscrimination rules would be replaced with simplified standards, including "safe harbor" designs. • Benefit Administrators will assume liability deemed appropriate for the benefits they provide but employers would still have some responsibility for monitoring the plan.
Universal 401(k) Plan	• Federal government establishes a federally chartered clearinghouse structure that sets-up and manages workers' accounts. • Saver's Credit made refundable and directly deposited into workers' accounts; Internal Revenue Service forwards the government match to individual accounts and reconciles workers' and employers' contributions with tax records. Workers receive the credit regardless of their tax liability; expanded on a sliding scale so that workers at higher income levels also receive government contributions. • Federal government facilitates annuity purchases, either by contracting with one or more private sector insurers or by managing the annuity payments through the Pension Benefit Guaranty Corporation.
Guaranteed Retirement Accounts Plan	• Federal government (Social Security Administration) establishes and administers a system of retirement savings accounts and manages and invests plan assets (Thrift Savings Plan or similar body) and guarantees a specified rate of return on the savings accounts. • Tax preferences for defined contribution plans, such as 401(k) plans and Individual Retirement Accounts are reduced and replaced by a uniform tax credit; tax-qualified contributions to DC plans would be reduced to $5,000 per year, adjusted for inflation. • State and local governments have to notify the federal government of marriages and divorces so that contributions can be apportioned evenly between husbands and wives. • State governments have to report who is receiving unemployment benefits to the federal government (Internal Revenue Service) so that those workers can receive the $600 tax credit.

Source: GAO analysis of key domestic proposals for alternative pension plan designs.

Appendix IV: GAO Contact and Staff Acknowledgments

GAO Contact

Barbara D. Bovbjerg, (202) 512-7215 or bovbjergb@gao.gov

Staff Acknowledgments

In addition to the contact named above, Charles Jeszeck, Acting Director; Michael Collins, Assistant Director; Sharon Hermes and Annamarie Lopata, Analysts-in Charge; Meghan Hardy; Susan Aschoff; Seyda Wentworth; Joseph Applebaum; and Craig Winslow made key contributions to this report.

Related GAO Products

Defined Benefit Plans: Proposed Plan Buyouts by Financial Firms Pose Potential Risks and Benefits. GAO-09-207. Washington, D.C.: March 16, 2009.

Private Pensions: Low Defined Contribution Plan Savings May Pose Challenges to Retirement Security, Especially for Many Low-Income Workers. GAO-08-08. Washington, D.C.: November 29, 2007.

Private Pensions: Changes Needed to Provide 401(k) Plan Participants and the Department of Labor Better Information on Fees. GAO-07-21. Washington, D.C.: November 16, 2006.

Private Pensions: Information on Cash Balance Pension Plans. GAO-06-42. Washington, D.C.: November 3, 2005.

Highlights of a GAO Forum: The Future of the Defined Benefit System and the Pension Benefit Guaranty Corporation. GAO-05-578SP. Washington: D.C.: June 1, 2005.

Private Pensions: Implications of Conversions to Cash Balance Plans. GAO/HEHS-00-185. Washington, D.C.: September 29, 2000.

Cash Balance Plans: Implications for Retirement Income. GAO/HEHS-00-207. Washington, D.C.: September 29, 2000.

GAO's Mission

The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through GAO's Web site (www.gao.gov). Each weekday afternoon, GAO posts on its Web site newly released reports, testimony, and correspondence. To have GAO e-mail you a list of newly posted products, go to www.gao.gov and select "E-mail Updates."

Order by Phone

The price of each GAO publication reflects GAO's actual cost of production and distribution and depends on the number of pages in the publication and whether the publication is printed in color or black and white. Pricing and ordering information is posted on GAO's Web site, http://www.gao.gov/ordering.htm.

Place orders by calling (202) 512-6000, toll free (866) 801-7077, or TDD (202) 512-2537.

Orders may be paid for using American Express, Discover Card, MasterCard, Visa, check, or money order. Call for additional information.

To Report Fraud, Waste, and Abuse in Federal Programs

Contact:

Web site: www.gao.gov/fraudnet/fraudnet.htm
E-mail: fraudnet@gao.gov
Automated answering system: (800) 424-5454 or (202) 512-7470

Congressional Relations

Ralph Dawn, Managing Director, dawnr@gao.gov, (202) 512-4400
U.S. Government Accountability Office, 441 G Street NW, Room 7125
Washington, DC 20548

Public Affairs

Chuck Young, Managing Director, youngc1@gao.gov, (202) 512-4800
U.S. Government Accountability Office, 441 G Street NW, Room 7149
Washington, DC 20548