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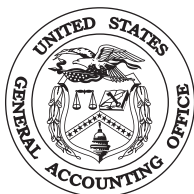
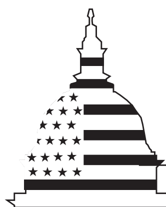
Report to the Chairman, Special Committee on Aging, United States Senate

September 2000

CASH BALANCE PLANS

Implications for Retirement Income





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Abbreviations

ADEA	Age Discrimination in Employment Act
BLS	Bureau of Labor Statistics
ERISA	Employee Retirement Income Security Act of 1974
FAP	final average pay
IRS	Internal Revenue Service
PBGC	Pension Benefit Guaranty Corporation
PEP	pension equity plans
PWBA	Pension and Welfare Benefits Administration
SPD	summary plan description

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Health, Education, and
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September 29, 2000

The Honorable Charles E. Grassley
Chairman
Special Committee on Aging
United States Senate

Recognizing that pensions are an important source of income for many retirees, the Congress provides preferential tax treatment under the Internal Revenue Code (the Code) for pension plans that meet certain qualification requirements. Congress estimates that in fiscal year 2000 the Treasury will forgo about $76 billion due to the tax treatment of qualified employer-sponsored pension plans. Pensions are the largest of such "tax expenditures" in the federal budget, exceeding those for home mortgages and/or health benefits.[1] In exchange for preferential tax treatment, an employer is required to design the pension plan within legal limits that are intended to improve the equitable distribution and security of pension benefits. Recently, firms that sponsor plans and plan participants have expressed concern about the application of these qualification requirements to newly emerging plan designs, particularly "cash balance" formulas.[2]

In response to such concerns, you asked us to describe (1) the prevalence and features of cash balance plans and (2) the factors employers

[1]Fiscal year 2000 estimate, from the Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2000-2004*, prepared for the Committee on Ways and Means and the Committee on Finance, JCS-13-99, Dec. 22, 1999, p. 23. "Tax expenditures" are revenue losses attributable to provisions of federal tax laws and include any reductions in income tax liabilities that result from special tax provisions or regulations that provide tax benefits to particular taxpayers. Pension contributions and investments earnings on pension assets are not taxed until benefits are paid to plan participants. As a result, these tax preferences largely represent timing versus permanent differences in tax revenue generation.

[2]Cash balance plans express benefits as an "account balance" based on hypothetical pay credits (percent of salary or compensation) and hypothetical interest credits to employee accounts. As with other defined benefit plans, benefits are paid from commingled funds invested in a pension trust on behalf of all participants, and plan trustees have a fiduciary responsibility for all assets in the pension trust. Hypothetical account balances need not be related to investment returns on assets in the plan's pension trust, nor are hypothetical accounts credited with investment gains or losses. Employees do not own these "accounts" or make investment decisions.

considered in making a decision about whether or not to use a cash balance formula and to discuss (3) the effects of using cash balance formulas on the adequacy of individual workers' retirement income.

We also discuss the effects of current disclosure practices on plan participants' ability to address issues regarding the adequacy of their retirement funds.

To address your questions, we surveyed a random sample of 420 firms on the 1999 Fortune 1000 list and asked these firms about the types of pension plans they sponsor. To examine the characteristics of cash balance plans, we reviewed summary plan descriptions and other plan documents from cash balance plan sponsors identified among the Fortune 1000 firms. We selected Fortune 1000 firms for two reasons. First, they are a well-recognized group of some of the largest publicly traded firms in the country. Second, pension experts advised us that these firms would be among the most likely to sponsor cash balance plans. Because the Fortune 1000 list is selected solely on the basis of revenues and does not include nonprofit firms, the results cannot be generalized to all firms or even to all large firms. We also conducted indepth interviews with officials from 14 firms, including two nonprofit firms, with cash balance or similar plans. We discussed reasons why they adopted such plans and obtained information about how firms communicated pension plan changes to plan participants. To examine the effect of cash balance plans on the adequacy of retirement income, we interviewed pension consultants and actuaries, performed a review of the relevant literature, and created simplified simulations of plan formulas to illustrate certain design features associated with these plans.

We conducted our work between November 1999 and August 2000 in accordance with generally accepted government auditing standards. A more detailed description of our scope and methodology appears in appendix I. In conjunction with this report, we are also issuing a report that provides additional information on cash balance plans, particularly on the implications of converting traditional defined benefit plans to cash balance plans.[3]

[3] *Private Pensions: Implications of Conversions to Cash Balance Plans* (GAO/HEHS-00-185, Sept. 29, 2000).

Results in Brief

Our survey of firms from the 1999 Fortune 1000 list indicated that about 19 percent of these firms sponsor cash balance plans covering an estimated 2.1 million active participants; more than half of these plans have been established within the last 5 years. Firms in many sectors of the economy sponsor these plans, but greater concentrations are found in the financial services, health care, and manufacturing industries. Of the firms we surveyed that sponsor such plans, about 90 percent previously covered their workers under a traditional defined benefit plan. As with traditional defined benefit plans, there is significant variation in the design and operation of cash balance plans. For example, some plans provide the same annual hypothetical pay and interest credits for all participants while most select from a wide variety of options to provide extra benefits for participants who are older or who have been with the firm for a long period of time.

Cash balance plans have had such visibility in recent years that most firms we surveyed had at least considered adopting such a plan. These firms reported that their decisions to adopt or not to adopt a cash balance plan were based on many factors, including corporate philosophy, the need to remain competitive, and the potential impact on workers. Key reasons firms gave for adopting a cash balance plan included lowering total pension costs, increasing the portability of pension benefits, and the ease of communicating the value of plan benefits. Key reasons firms gave for not adopting a cash balance plan included possible adverse effects on workers who are older, longer-tenured, and less mobile; uncertainty about possible changes in the regulation of cash balance plans; the impact of adverse employee and public reactions to cash balance plan conversions; and increased costs.

Cash balance plans offer both opportunities and challenges to workers seeking to ensure adequate retirement income. Cash balance plans generally are structured such that workers accrue benefits earlier in their careers than they would under most traditional defined benefit plans. This feature, combined with the lump sum payouts also common to such plans, provides opportunity for more mobile workers to secure and retain higher benefits, even when they change jobs, than they would under most traditional defined benefit plans. The extent to which such workers realize this opportunity can depend on their career and investment choices. Whether they stay in the plan long enough to vest, for example, is crucial to whether they will benefit from earlier pension accruals. Special challenges exist for workers who accrue part of their retirement benefits under a

traditional defined benefit plan, where they accrue few benefits until late in their career, and accrue part of their benefits under a cash balance plan. Older workers may be disadvantaged if their employer converts from a traditional defined benefit plan to a cash balance plan or if they leave a firm with a traditional plan for one with a cash balance plan. These workers may have little time to make up for benefits expected under a traditional plan. To mitigate the impact of conversion, many Fortune 1000 employers provide transition provisions for workers previously covered under their traditional defined benefit plans.

Because the decisions of individual participants play a more significant role in maximizing retirement income under cash balance plans than under traditional defined benefit plans, cash balance plan participants have a particular need for clear and timely information about their plans. We found a wide variation in the quality of information that firms provided to participants in cash balance plans. However, most plans provided insufficient information to allow a participant to make informed career- and retirement-related decisions. For example, more than half of the Fortune 1000 firms we surveyed did not inform participants that the individual cash balance account was hypothetical in nature. Documents we reviewed that Fortune 1000 firms provided to plan participants did not provide an explanation of the difference between the accrued benefit and the hypothetical account balance. Participants would need such information to assess accurately the impact of career decisions on their pension benefits.

We are making recommendations to the Secretary of Labor concerning the improvement of disclosure requirements to help provide plan participants with the information they need to make informed decisions affecting their retirement income.

Background

With respect to private pensions, the Congress has used the Code to encourage employers to sponsor pensions to help workers achieve adequate income for retirement. In exchange for providing preferential tax treatment, Congress has imposed requirements that plans must meet for tax qualification through the Code and the Employee Retirement Income Security Act of 1974, as amended (ERISA). The administration of ERISA for new and ongoing plans is divided between the Department of Labor's Pension and Welfare Benefits Administration (PWBA) and the Internal Revenue Service (IRS). IRS is tasked with ensuring that plans meet the qualification requirements for receiving tax preferences. PWBA is

responsible for ensuring that plans are operated in the best interest of their participants. The Pension Benefit Guaranty Corporation (PBGC) insures most private defined benefit plans, including cash balance plans, within certain limits.

Types of Tax-Qualified Pension Plans

The Internal Revenue Code defines pension plans as either defined benefit or defined contribution plans and has established separate requirements for the two types of plans. In a defined benefit plan, the retirement benefit is expressed as an annual payment that would begin at the normal retirement age specified in the plan.[4] The retirement benefit is determined by a formula based on a worker's years of employment, earnings, or both. The employer is responsible for funding the plan at a level sufficient to pay the promised benefit and to insure a portion of that benefit through PBGC. According to the Bureau of Labor Statistics,[5] most participants in large- and medium-sized firms' defined benefit plans are covered by a formula referred to as "final average pay" because the formula uses only the earnings in the most recent years—those closest to the employee's retirement date—to calculate benefits.[6] As shown in figure 1, under a defined benefit plan with a final average pay formula, the retirement benefit is a percentage of the participant's final years of pay multiplied by his or her length of service.

[4]ERISA requires that tax-qualified plans allow participants to retire with full benefits at no later than age 65 with 10 years of service. Many plans allow normal retirement sooner than these limits.

[5]Based on the 1997 *Employee Benefits in Medium and Large Private Establishments*, Bureau of Labor Statistics, Sept. 1999.

[6]Another formula, called "career average," operates in the same way but bases benefits on the employee's pay averaged over all years of service with an employer rather than the final years.

Figure 1: Example of Traditional Final Average Pay Formula Used to Calculate an Annual Pension Benefit

Multiplier	×	Average of Final 3 Years Pay	×	Years of Service	=	Annual Pension Benefits
1.3%	×	$48,500*	×	30	=	$18,915

*$\frac{\$45,000 + \$48,000 + \$52,500}{3}$

In a defined contribution plan, the retirement benefit is expressed as the account balance of an individual participant. This balance results from contributions that the employer, the worker, or both make and subsequent investment returns on the assets in the account. Retirement benefits are not guaranteed, and employees bear the risk of poor investment performance. The best known of these defined contribution plans is the 401(k) plan, named for the section of the Code that sets out rules for providing tax preferences to such plans. The 401(k) plan generally provides that a specific percentage of pay be contributed to an individual account, by either the employer, the employee, or both (see fig. 2). The principal in the account is typically invested based on options specified in the plan. The sum of principal and investment earnings or losses minus administrative expenses—the individual account balance—determines the pension benefit.

Figure 2: Example of Annual Increase in Pension Benefit Under a 401(k) Defined Contribution Plan

Contribution (Employee + Employer Match)		Earnings		Increase
(6% + 3%)*	+	6% of Account Balance**	=	$6,525

* 9% of 52,500 = 4,725
** 6% of 30,000 = 1,800

Federal pension law defines any pension plan that does not provide actual individual accounts as a defined benefit plan.[7] Furthermore, while firms sponsoring defined benefit and those sponsoring defined contribution plans may pay pension benefits in a lump sum amount, ERISA requires that defined benefit plans provide participants with the option of receiving benefits as an annuity, specifically, a series of payments for life beginning at the plan's normal retirement age.

For a summary of selected key differences between defined benefit and defined contribution plans, see table 1.

Table 1: Selected Differences Between Defined Benefit and Defined Contribution Plans

Characteristic	Defined benefit plan	Defined contribution plan
Benefit formula	Determines pension due at normal retirement age.	Determines amount regularly contributed to individual account.
Form of benefit expressed by formula	An annuity—a series of payments beginning at the plan's normal retirement age for the life of the participant.	A single lump sum distribution at any time.

[7] 26 U.S.C. 414(j).

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Characteristic	Defined benefit plan	Defined contribution plan
Funding	Annual funding is based on an actuarial formula subject to strict limits set by the Code and is not equivalent to annual increases in pension benefits.	Annual contributions and investment earnings are held in an individual account.
Investment risk/profit	Employee is guaranteed benefits regardless of investment returns on trust. Employer is responsible for ensuring sufficient funding to pay promised benefit.	Employee bears the investment risk, which can result in higher investment returns or the loss of previously accumulated pension benefits.
Insured benefit	Generally insured by PBGC.	Depends on insurance provided by individual investment vehicle, if any.

Cash Balance Plans Combine Features of Both Plan Types

Innovation in plan designs has resulted in "hybrid" plans that have the characteristics of both types of plans. The most well known of the hybrid plans is the cash balance plan. A defined benefit plan under the law, the cash balance plan contains features that resemble a defined contribution plan. Cash balance plans are not specifically identified in the law, but IRS guidance describes a cash balance plan as "a defined benefit plan that defines benefits for each employee by reference to the amount of the employee's hypothetical account balance."[8] The cash balance formula, like all defined benefit plan formulas, determines the amount of pension benefits to be paid rather than the amount to be contributed. The cash balance plan resembles a defined contribution plan in that the formula expresses pension benefits as a lump sum rather than a series of payments. It also bases the lump sum amount on periodic pay and interest credit contributions to employee "accounts," as shown in figure 3. Pay credits are specified as a percentage of salary, such as 5 percent, and interest credits are often fixed to the yield on a particular Treasury security, such as the yield on 30-year Treasury bonds.

[8] 26 CFR §1.401(a)(4) – 8 (c)(3)(i). Section 414(k) of the Code addresses the requirements for a combination of defined benefit and defined contribution arrangements, which some have referred to as a form of hybrid plan. However, section 414(k) does not address cash balance and similar hybrid arrangements where one formula has components of both.

Figure 3: Example of Annual Increase in a Hypothetical Account Balance Under a Cash Balance Formula

Opening Balance	Pay Credit (5% of $20,000 Salary)	Interest (6% of Opening Balance)	Closing Balance
$10,000	5% = $1,000	6% = $600	$11,600

Note: For purposes of illustration, we assume an annual salary of $20,000.

The relationship between the account balance and plan funding is a key difference between cash balance plans and the defined contribution plans they resemble. In a defined contribution plan, the account represents actual funds held on behalf of the individual participant, whereas in a cash balance plan the amounts are purely hypothetical. In a defined contribution plan, the account balance is equivalent to actual assets held in trust for the individual plan participant. Under cash balance plans, employers make annual contributions to a pension trust fund on behalf of all participants. These annual contributions are not equivalent to the annual increases in hypothetical account balances but are determined based on complex federal rules designed to ensure that the trust has sufficient assets to pay expected benefits without allowing unwarranted tax expenditures. As a result, the trust fund for a cash balance plan is not required to—and often will not—have assets equal to the sum of all individual account balances. Furthermore, trustees rather than individual plan participants have investment control over all assets in the cash balance pension trust. Hypothetical account balances are related to the interest rates specified in the plan rather than the actual investment returns on assets in the plan's pension trust; hypothetical accounts are not credited with actual investment gains or losses.

Requirements Relating to Reductions in Pension Benefits

Federal law does not require that employers sponsor pension plans nor does it mandate the value of the benefit provided by plans that the employer voluntarily sponsors. The law does, however, set specific requirements for tax-qualified plans relating to the accrual rate, or the rate at which plan participants must earn the right to a retirement benefit. Firms

are prohibited from amending a plan's benefit formula to reduce benefits that have already accrued. However, the law does not protect future benefit accruals under the plan's formula. Consequently, firms can change the plan's benefit formula to reduce or freeze the future rate of accrual. For example, defined benefit plan formulas can be amended on a prospective basis to reduce the percentage of final pay used to determine the annual benefit or to limit the number of years over which benefits accrue. The Age Discrimination in Employment Act (ADEA), the Code, and ERISA prohibit a defined benefit plan from ceasing accruals or reducing the rate of accrual because of the attainment of any age.

Firms can also terminate their pension plans altogether. Defined benefit plan sponsors that terminate their plans are subject to a tax on any surplus assets in their pension trusts. When defined benefit plans that are overfunded terminate and surplus assets revert to the plan sponsor, these assets are counted as income to the corporation. As such, the assets are subject to corporate income tax. In addition, an asset reversion excise tax of up to 50 percent can be levied on the same assets if certain conditions are not met.

ERISA mandates the types of information that must be disclosed to plan participants. The law requires firms to provide all plan participants with a summary plan description describing the terms of the plan. Furthermore, whenever there is a significant change to the plan (a plan amendment), firms must provide participants with a summary of the changes, known as a "summary of material modification," no later than 210 days after the end of the plan year in which the changes are adopted. Firms must notify participants of amendments that will result in a significant reduction in the rate of future benefit accrual at least 15 days before the effective date. This notification can entail providing either a copy of the amendment to the plan or a written summary of the change.

Cash Balance Plans Are Increasingly Common, But Plan Features Vary

The number of firms sponsoring cash balance plans has increased in the last few years. While few firms sponsored such plans before the early 1990s, by the year 2000, 19 percent of Fortune 1000 firms sponsored one or more cash balance plans. Although these plans can be found in many sectors of the economy, greater concentrations are found in the financial services, health care, and manufacturing industries. Although there is continuing interest in cash balance plans, few firms we surveyed expected to adopt such a plan in the near future. As with traditional defined benefit plans, there is significant variation in plan design among cash balance plans.[9]

About One in Five Fortune 1000 Firms Sponsor Cash Balance Plans

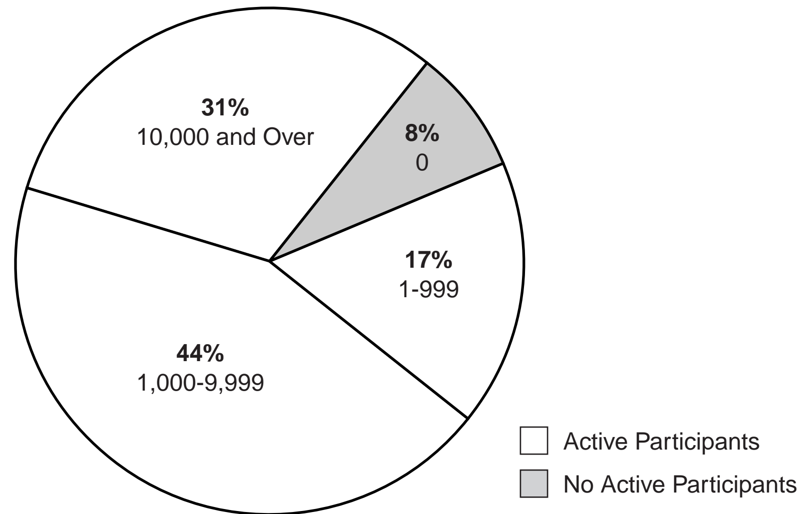
About 19 percent of Fortune 1000 firms sponsor cash balance plans, covering an estimated 2.1 million active participants. It is difficult, however, to determine the total number of cash balance plans and affected participants because pension plan data collected annually by the government cannot be used to identify all plans that use cash balance formulas. Determining the extent to which small plans use cash balance formulas is particularly difficult because little is known about the structure of small plans. Pension experts have generally described the use of cash balance formulas as a large employer phenomenon, although pension practitioners have provided anecdotal information about the recent interest of small firms in such plans.[10]

[9]We also identified one firm that provided a nonqualified cash balance plan exclusively for executives.

[10]In addition to cash balance plans, about 4 percent of firms we surveyed sponsor pension equity plans (PEP). Under these plans, employees earn a percentage of final average pay expressed as a lump sum amount. PEPs are similar to cash balance plans in that higher benefits accrue earlier in a career, and lower benefits accrue later in a career than under traditional defined benefit plans.

Similar to traditional pension plans, many cash balance plans that we identified do not cover all workers at a firm. Instead, these plans cover particular segments of a firm's workforce, such as management, salaried employees, or certain workers in a firm's subsidiary. An estimated 69 percent of the cash balance plans we identified in our survey have fewer than 10,000 active participants (see fig. 4). Eight percent of these plans have no active participants because benefit accruals are frozen.[11] The most common reason for a frozen cash balance plan was that it was acquired as part of a merger or acquisition, and the firm did not want to continue with a cash balance plan.

Figure 4: Percentage of Fortune 1000 Firms' Cash Balance Plans, by Number of Participants



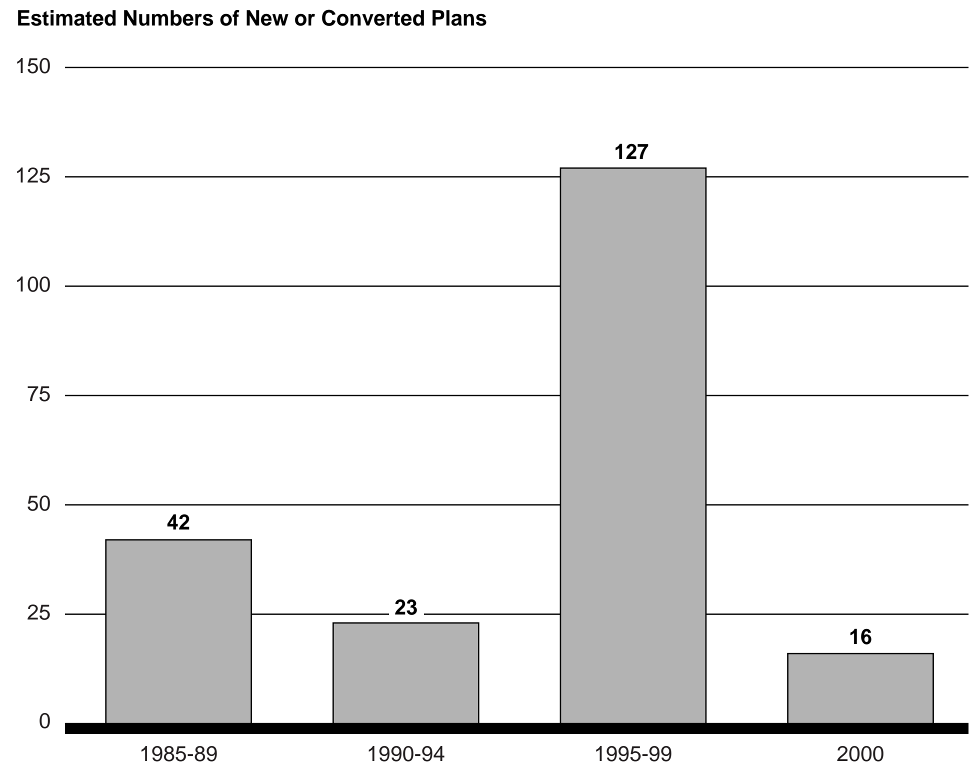
Cash balance plans have become more prominent since the early 1990s.[12] As shown in figure 5, the earliest a firm in our survey had adopted a cash balance plan was 1985; over 60 percent of the cash balance plans in our

[11]Frozen plans have stopped participants' benefit accruals and allow no new entrants into the plans. However, they cover the vested benefits of employees and retirees.

[12]During our indepth interviews, we identified one firm that had sponsored a cash balance plan since 1925.

survey had been adopted in the last 5 years. Firms sponsoring these plans exist in many sectors of the economy, but greater concentrations are found in the financial services, health care, and manufacturing industries. Some of these firms have undergone mergers or acquisitions and have adopted cash balance plans to “harmonize” benefits, that is, to provide the same pension plan for employees that had been covered by different plans. Participants in about 90 percent of the cash balance plans had been covered previously by a traditional defined benefit plan. Firms had either frozen the benefits of the plan and begun a new plan or they had amended an existing plan formula. Firms where participants had no previous defined benefit plan started cash balance plans as their first pension plan, supplemented existing defined contribution plans, or added a cash balance component without changing the existing defined benefit plan.

Figure 5: Numbers of Firms Adopting Cash Balance Formulas Since the 1980s



Although pension practitioners, employer associations, and agency officials spoke to us of the continuing interest in cash balance or similar hybrid plan designs, few firms we surveyed expected to adopt a cash balance plan in the future. About 3 percent of firms we surveyed told us that they were considering the adoption of a cash balance plan within the next 5 years and about one-third of these, or 1 percent of Fortune 1000 firms, told us that they were considering or planning to adopt a cash balance plan next year. All the firms considering the adoption of a cash balance plan told us that continued uncertainty about whether such plans violate pension and age discrimination laws might discourage them from doing so.

Variations in Plan Design Features

As with traditional pension plans, significant variation exists in cash balance plan designs, particularly the benefit formulas. Thirty-five percent of cash balance plans in our survey provide level pay credits for all participants, regardless of age or years of service. Most plans, however, provide pay credits that increase based on participant age or service. For example, one plan provides an annual pay credit of 3 percent of salary for participants under age 30 that increases in increments up to 11 percent for participants age 50 and older. Another plan provides annual pay credits of 3 percent for participants with 4 or fewer years of service, with incremental increases up to 9 percent for participants with 25 or more years of service. About 30 percent of the cash balance plans in our survey, because they are integrated with Social Security, provide participants with higher pay credits on pay above the Social Security wage base.[13] For example, two plans provide 4 percent of pay for earnings that are subject to Social Security taxes ($76,200 in 2000) and 8 percent for earnings that are not subject to Social Security taxes.

Cash balance plans generally credit interest to participant hypothetical accounts using an index tied to a Treasury security. About 80 percent of the cash balance plans in our survey tie interest credit rates in their plan formulas to the rate of return on a Treasury security. For example, we found that many cash balance plans credit interest based on the rate of return to 30-year Treasury bonds, but some cash balance plans credit interest based on the rate of return to 1-year Treasury bonds or another Treasury index.

Firms Adopt Cash Balance Plans for Different Reasons

Firms sponsoring cash balance plans told us that their decision to adopt these plans was based on a combination of factors, such as the desire to become more competitive within their specific industry and the need to address changing workforce demographics. For example, some firms decided to adopt cash balance plans to improve their ability to recruit new workers by providing them with higher pension benefits earlier in their careers and allowing lump sum distributions so that pension benefits are more portable. Other firms told us, however, that they decided not to use

[13]For additional information about the integration of pensions with Social Security, see *Integrating Pensions and Social Security: Trends Since 1986 Tax Law Changes* (GAO/HEHS-98-191R, July 6, 1998).

cash balance plans because they had older or long-tenured workforces that could be adversely affected by a plan change.

Reasons Firms Gave for Adopting a Cash Balance Plan

Some firms we surveyed that chose to convert their plans cited the financial implications of changing to a cash balance plan as a key reason for their decision. Reducing the overall cost of the defined benefit plan was a primary reason some firms converted to a cash balance formula. For example, some firms have reduced costs by eliminating early retirement subsidies on future accruals. A survey of 100 cash balance plan sponsors by PricewaterhouseCoopers found that 56 percent of firms expected the long-term cost of their defined benefit plans to decrease after conversion. Even when enhancements to other retirement programs were considered in conjunction with a conversion, 33 percent of the firms expected a decrease in the costs of their total retirement benefits package.[14] However, a few firms we surveyed reported that converting to a cash balance plan increased the cost of their defined benefit plan because their plan provided a higher level of benefit for all workers.

Firms that adopted cash balance plans reported that the opportunity for the increased portability of benefits influenced their decision to adopt such plans. The lump sum benefit distribution feature common to many cash balance plans allows eligible workers, upon separation, to gain access to their pension benefit.[15] These firms believed that offering a pension plan with such a benefit feature would enhance their recruitment of younger, relatively mobile workers. While traditional defined benefit plans can provide lump sum payments, historically many of these plans have not done so. Most of the plans in our survey did not allow lump sum distributions above $5,000 before converting to a cash balance plan. Instead, participants received most, if not all, of their benefits as an annuity at retirement. The percentage of plans in our survey offering lump sum distributions at both separation and retirement increased from 15 percent for traditional defined benefit plans before conversion to 83 percent for

[14]*A UNIFI Survey of Conversions From Traditional Pension Plans to Cash Balance Plans*, PricewaterhouseCoopers, 2000. The report presented the results of a survey of 100 conversions of traditional defined benefit formulas to cash balance formulas.

[15]Lump sum distributions received before age 59-1/2 are subject to a 10-percent excise tax in addition to ordinary income taxes. Generally, employers are required to withhold 20 percent of any distribution not rolled over into an individual retirement account or a qualified employer retirement plan.

cash balance plans after conversion. Most of the firms with whom we conducted indepth interviews stated that, after conversion, the majority of vested participants who had separated from the firm or retired opted for a lump sum payment, indicating its popularity.

Finally, firms that decided to convert told us that employees better understand benefits under cash balance plans than under traditional defined benefit plans. Because benefits under cash balance plans are expressed as lump sum values rather than retirement age annuities, employees may better understand and value such plans. Furthermore, according to company officials, given that many of these employees also have a 401(k) plan, the cash balance plan is more "visible" and comparable to benefits under 401(k) plans.[16] This contrasts with the way many employees view their benefits under traditional defined benefit plans. Human resource and benefits officials at several firms we visited said that defined benefit plans have been one of the least understood and least appreciated benefits in a worker's compensation package. Employees rarely focus on the benefits of a defined benefit plan until they near retirement age.

Converting to cash balance plans is also an alternative to terminating a pension plan. Firms can terminate their defined benefit plans but doing so imposes various economic costs. When plan sponsors terminate defined benefit plans, the sponsors must pay income and excise taxes on any surplus assets, immediately vest participants in their accrued benefits, and provide participants with annuities or lump sum payments. These costs may prevent some firms from terminating their plans.[17] Instead, firms can convert to cash balance plans and achieve economic benefits from surplus pension funds without incurring certain costs related to plan termination. For example, converting to a cash balance plan can extend the period of time a firm would not have to make a contribution to the pension plan while still having the plan considered fully funded or overfunded; that is, the value of plan assets would meet or exceed the value of currently

[16]Conversely, visibility in the press and employee response to adverse publicity resulting from some conversions were cited by firms that decided not to convert as significant drawbacks of cash balance plans.

[17]Participants generally earn a nonforfeitable right to benefits after meeting a plan's vesting requirement. Federal pension law sets specific minimum vesting requirements. When firms terminate their plans, affected participants become 100 percent vested in their accrued benefit as of the date of termination.

accrued pension benefits. Also, after a conversion, if the pension fund assets can achieve a higher rate of return than the interest rate credited to hypothetical employee accounts, plan sponsors can use these gains to fund future pension benefits.

Reasons Firms Gave for Not Adopting a Cash Balance Plan

Most firms that had not adopted a cash balance plan reported that they had considered doing so. They cited the potential of changing plan type to have an adverse effect on older, longer-tenured, and less mobile workers; regulatory uncertainty; the impact of adverse employee and public reaction to cash balance plan conversions; and increased costs as key reasons for their decision not to adopt such plans. Increased costs included increased administrative costs, such as consultants' fees to design the plan formula and the costs of developing individualized participant statements. In addition, cash balance plans can have ongoing administrative costs that are higher than those typically incurred by traditional defined benefit or defined contribution plans. Firms also cited the potential cost of special plan provisions to protect the benefits of workers nearing retirement as another reason not to convert.

Cash Balance Plans Offer Opportunities and Challenges to Ensuring Adequate Retirement Income

The effect of cash balance plans on retirement income varies with plan features and participant choices, offering both opportunities and challenges to workers seeking to ensure adequate retirement income. Cash balance plans are generally structured so that workers earn benefits more quickly earlier in their careers than later. This feature, combined with the lump sum payouts also common to such plans, provides the opportunity for more mobile workers to secure and retain higher benefits when they change jobs than they would under most traditional defined benefit plans. The extent to which such workers realize this opportunity depends to a large extent on their career and investment choices. Whether they stay in the plan long enough to vest, for example, is crucial to whether they will benefit from these earlier pension accruals. Special challenges exist for workers who earn part of their retirement benefits under a traditional defined benefit plan where they earn few benefits until late in their career and earn part under a cash balance plan. Older workers may be disadvantaged if their employer converts from a traditional plan to a cash balance plan, or if they leave a firm with a traditional plan for one with a cash balance plan. These workers may have little time to make up for the benefits they expected under a traditional defined benefit plan. To mitigate the impact of conversion, many Fortune 1000 employers provide transition

provisions for workers they had previously covered under a traditional defined benefit plan.

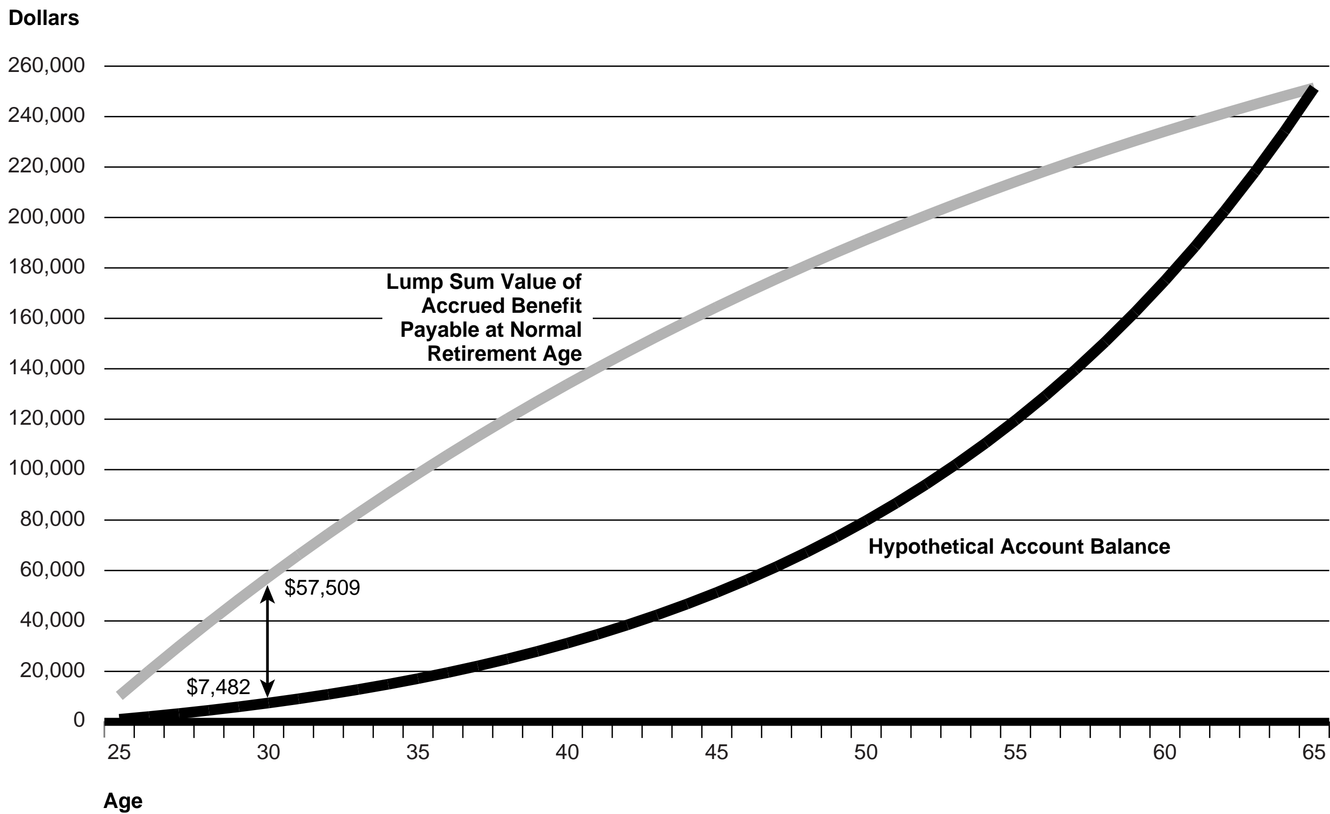
Cash Balance Plan Participants Earn Benefits Earlier Than Under Certain Other Plan Types

Workers covered by many cash balance plans tend to earn or "accrue" benefits faster the further they are from normal retirement age, compared with traditional defined benefit pension plans.[18] IRS requirements for tax-qualified plans are part of the reason for this difference in the rates of accrual. In accordance with IRS Notice 96-8, cash balance plans generally treat hypothetical, future interest on annual pay credits as accruals for the year in which the pay credit was made. Thus, future interest is included in the determination of the accrued benefit even though the employee may terminate employment and begin receiving a benefit before normal retirement age. The accrued benefit in lump sum dollars will be equal to the hypothetical account balance only when the participant reaches the normal retirement age specified in the plan. However, as shown in figure 6, the accrued benefit in lump sum dollars payable at normal retirement age is higher than the hypothetical account balance up until that point.[19] As a result, as in the illustration in figure 6, a 25-year-old participant is entitled to a pension benefit at normal retirement age based on an amount far higher than the hypothetical account balance after 1 year of work. Assuming a pay credit of 5 percent, salary increases of 3 percent, and a fixed interest credit of 6 percent, at age 30, after 6 years, the participant has a hypothetical account balance of about $7,500. However, he or she is entitled to a pension benefit based on approximately $57,500 payable at age 65 even if he or she leaves the firm at age 30.

[18]The accrual rate is the change in the accrued benefit for an individual plan participant from one year to the next.

[19]In calculating the actual lump sum benefit payable before retirement, the hypothetical account balance is projected forward with plan-specified interest earnings to the plan-specified normal retirement age. Next, the projected balance is converted into a normal retirement age annuity using a plan-specified discount rate and mortality assumptions. Finally, the value of the annuity is discounted back to current dollars, using mortality factors and the federally mandated discount rate, which is the rate specified by federal regulation that must be used to convert the normal retirement age annuity benefit into an equivalent lump sum in current dollars.

Figure 6: Comparison of a Cash Balance Accrued Benefit With the Hypothetical Account Balance

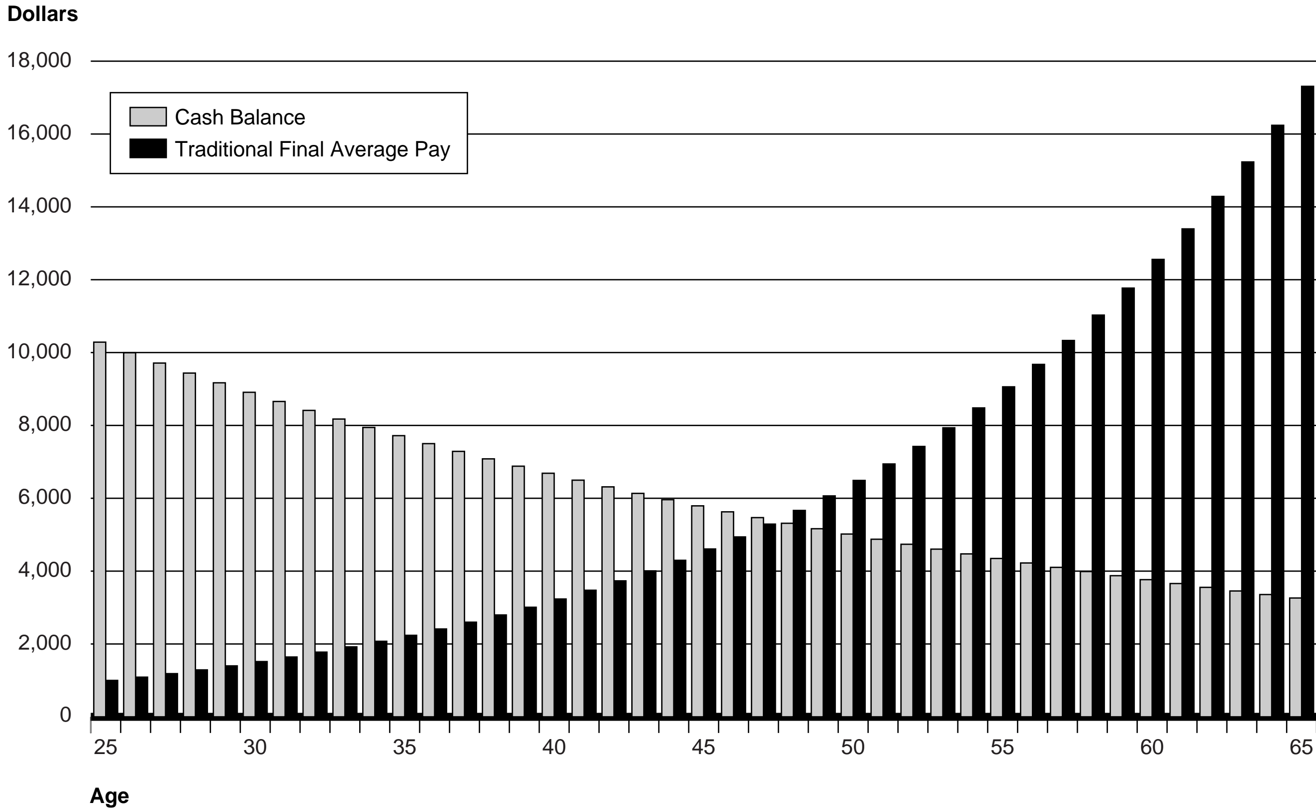


Note: For purposes of illustration, the accrued benefit payable at age 65 and the hypothetical account balance are both expressed as a lump sum and are cumulative. For simplification, we assumed a 3-percent salary increase, 5-percent pay credit, a 6-percent interest credit, and a normal retirement age of 65.

Cash balance plans also have a different rate of accrual than do traditional defined benefit plans. When the increase in the cumulative accrued benefit (expressed in lump sum dollars at normal retirement age), discussed above and shown in figure 6, is converted into annual incremental amounts, as shown in figure 7, the simple cash balance formula provides a larger share of a participant's total accrued benefit earlier in the worker's career. This is commonly referred to as "frontloading." Because the annual accrued benefit for the cash balance plan includes all the hypothetical interest the annual pay credit would earn until the normal retirement age specified in the plan, the younger a participant is, then the more years of interest will be

included in the benefit accrued in any one year. This differs from the accrual patterns of a traditional defined benefit plan, in which participants earn higher benefits the closer they come to retirement, a pattern referred to as “backloading.” Typically, participants under a traditional defined benefit plan using a final average pay formula accrue the greatest share of their benefits in the final years of their careers because benefits are based on completed years of service and final average salary, both of which generally increase the longer the worker stays with the same employer. As shown in figure 7, plan participants in the simplified final average pay plan in our illustration earn less than 5 percent of their normal retirement benefit in the first 5 years of their career but almost 25 percent in the final 5 years of their career.

Figure 7: Comparison of Annual Changes in Accrued Benefits for a Cash Balance Plan and a Final Average Pay Plan

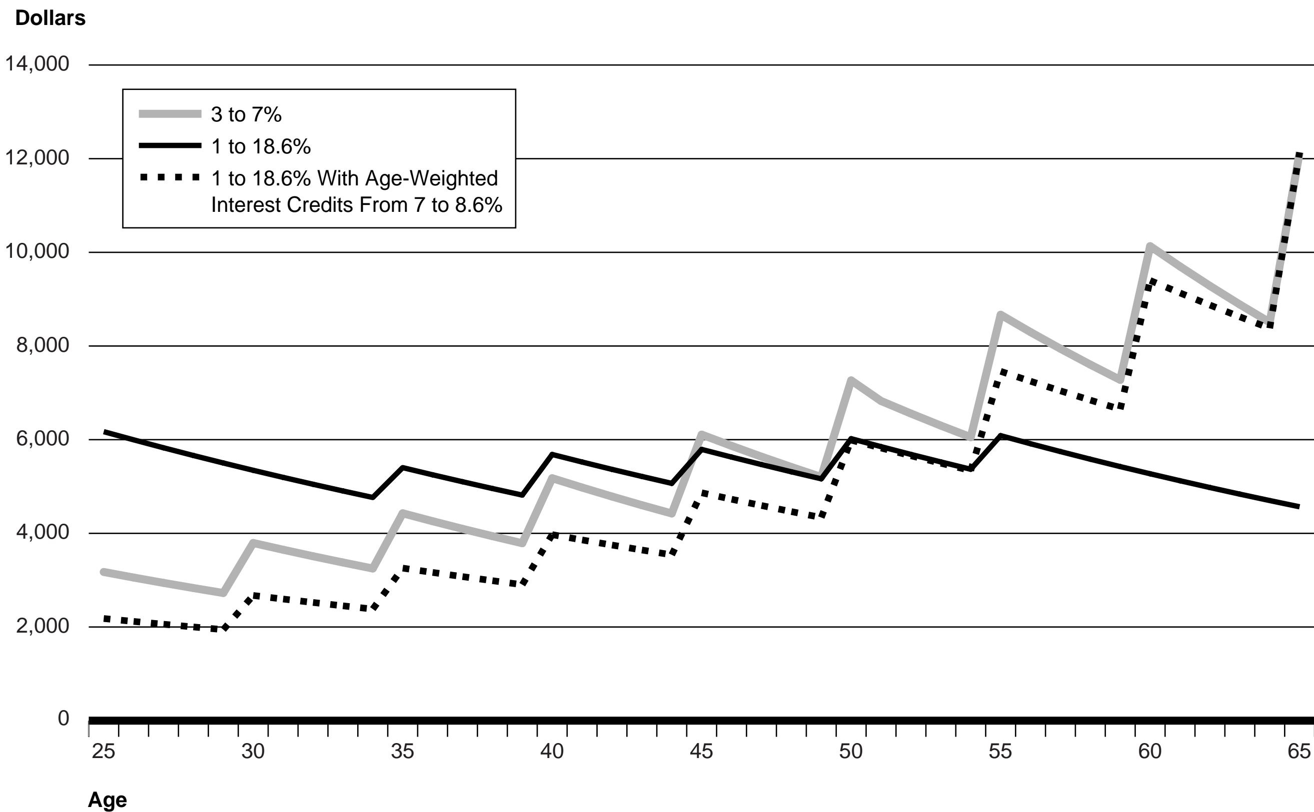


Note: For purposes of illustration, we assume that both plan types result in the same benefit at normal retirement age. This assumption does not mean that the formulas used in this illustration would provide equivalent benefits at times other than normal retirement age or would result in equivalent costs to the sponsor. Both the cash balance and traditional defined benefit plans are expressed as changes in a lump sum payable at normal retirement age. For simplification, we assumed a 3-percent salary increase, 5-percent pay credit, 6-percent interest credit, and a normal retirement age of 65.

Many Fortune 1000 cash balance plans exhibit features that vary from the simple cash balance formula illustrated above. The use of more complex cash balance formulas beyond those illustrated in figures 6 and 7 can reduce the extent to which plan participants earn higher normal retirement benefits earlier in their careers. Increasing cash balance pay credits for older and longer-service workers makes annual accrual rates in cash balance plans more like those of traditional defined benefit plans. Many cash balance plans provide such higher pay credits. For example, one complex plan formula we examined included as many as 1,265 different

pay credits based on age and service. The extent to which variable pay credits result in benefit accruals more like those of traditional defined benefit plans varies depending on the range of pay credits used in the plan. For example, one Fortune 1000 firm has pay credits ranging from 1 to 18.6 percent. With all other factors being equal, this would result in a benefit accrual pattern more like that of a traditional plan than that of a firm that had pay credits ranging from 3 to 7 percent (see fig. 8).

Figure 8: Comparison of Annual Change in Benefit Accruals for Cash Balance Plans With Differing Age-Weighted Formulas



Note: For purposes of illustration, the annual change in accrued benefits is expressed as a lump sum payable at age 65. The formulas are based on actual plans in our survey and would not result in equivalent benefits at normal retirement age. For simplification, we assumed a 3-percent salary increase, 5-percent pay credit, 6-percent interest credit, and a normal retirement age of 65.

The difference in the value of the accrued benefit and the hypothetical account balance in a cash balance plan can be significant for all plan

participants as they choose when and in what form to receive their pension benefit. Under current law, all defined benefit plans are required to offer participants an annuity payable at normal retirement age. Workers covered by plans that offer retirement benefits in the form of an annuity but do not offer a lump sum option will receive the value of the accrued benefit at normal retirement age rather than the hypothetical account balance if they terminate employment before retirement. Therefore, a worker in our simplified illustration in figure 6, without knowing the difference between the accrued benefit and the hypothetical account balance, could assume that, upon leaving the firm after 6 years at age 30, he or she would get an annuity at retirement based on the hypothetical account balance of about $7,500. In fact, the worker would get an annuity at retirement based on an amount almost 8 times greater.

In addition to the annuity benefit, current law also allows firms sponsoring defined benefit plans to offer workers the option of receiving their benefit as a lump sum, either at retirement or at termination. However, workers who are given this choice cannot determine which option would ultimately provide the greater retirement benefit without understanding that, if they do not select an immediate lump sum, the annuity at retirement will be based on the projected account balance at the plan's normal retirement age rather than the hypothetical account balance. Workers who select an immediate lump sum need to know that the lump sum may not be equivalent to but can be larger or smaller than the hypothetical account balance. The relationship between the two is dependent on whether the plan-specified interest rate is the same as, larger, or smaller than the rate used to determine the present value of the benefit payable at normal retirement age.

Cash Balance Plans Can Benefit Mobile Workers

Consistent with the views of many firms we surveyed, cash balance plans can lead to greater retirement income for more mobile workers. With other factors being equal, workers employed by more than one employer during their career can receive more retirement income under multiple cash balance plans than under multiple traditional defined benefit plans. This difference in retirement benefits is a function of how benefits are accrued under each plan type.

Workers under multiple cash balance plans can get higher benefits at the normal retirement age than under multiple final average pay (FAP) plans. As shown in table 2, the worker under multiple cash balance plans will receive a larger retirement benefit than the worker who retired under

multiple FAP plans. The benefit earned by the worker who changed employment under multiple cash balance plans will accrue a retirement benefit that is almost 22 percent larger than the benefit received by the workers under multiple FAP plans.

Generally, the final average salary increases as the worker progresses through his or her career due to increased experience, productivity, and the effects of inflation. For a worker who remains under a final average pay plan until normal retirement age, the worker will receive a benefit based on a formula that includes total service and some measure of the worker's final salary. However, for a worker who changes jobs under a FAP, the salary level used to calculate the benefit from the first year of service will generally be lower.

The accrual pattern under a FAP plan is illustrated in table 2, where we first compare two workers employed for 30 years who have the same career salary pattern. Both workers are continuously covered by FAP plans with identical formulas. However, they have different employment histories; one changed employers (and FAP plan) after 15 years, while the other remained with the same employer and plan for 30 years. As shown, although both workers were covered by identical FAP plans and had identical salaries, the worker who changed employers will receive only 82 percent of the annual retirement benefit of the worker who remained with the same employer.

Table 2: Comparison of Effect of Changing Jobs on Annual Pension Benefit Under a Traditional Final Average Pay Plan and a Cash Balance Plan

		Worker who remains with same employer for 30 years		Worker who changes employers after 15 years	
	Salary (starting at $20,000)	Final average pay plan benefit	Cash balance plan benefit	Final average pay plan benefit	Cash balance plan benefit
After 15 years	$30,252			$4,538 (15% of $30,252)	$8,564
After 30 years	$47,131	$14,139 (30% of $47,131)	$14,139	$7,070 (15% of $47,132, 15 years with second employer)	$5,575 (15 years with second employer)
Final annual retirement benefit		$14,139	$14,139	$11,608 (benefits from both employers)	$14,139 (benefits from both employers)

Note: Salary for each employee is assumed to increase at 3 percent per year. Pension benefits for the FAP plan are calculated through the formula: 1 percent x prior final average salary x years of service. The benefit for the cash balance plan is calculated to ensure that the benefit at normal retirement age, assumed to be age 65, with the same age and years of service, is equivalent to the FAP plan benefit.

This does not assume that the plans would be equivalent in cost to the sponsor. The pay credit is approximately 7 percent, and the interest rate is approximately 6 percent.

Because a key variable in the FAP formula is final salary, the retirement benefit a worker earns for any one year of service is unknown until the worker terminates employment or reaches the normal retirement age. In our simplified illustration, the normal age 65 retirement benefit that the first worker earned, after retiring with 30 years of continuous service, was 1 percent of $47,131 or $471, based on his or her first year of service with the employer. The normal age 65 retirement benefit that the second worker earned for the same year working for the same firm was 1 percent of $30,252 or $303.

The accrual pattern under cash balance plans is different. The worker who switches jobs under a simple cash balance plan does not experience this difference in accrued benefit for leaving an employer prior to normal retirement age. The benefit earned under a cash balance plan can be determined in the year it was earned because it is based on the worker's pay and age that year, regardless of future earnings or service. If we were to calculate the normal retirement benefits for the two workers under a simple cash balance formula, their normal retirement benefits would be equal, as shown in table 2.[20] In addition, including all interest on the pay credit until normal retirement age in the normal retirement accrued benefit, regardless of when the participant terminates employment, partially mitigates the effects of inflation.[21]

[20]The diversity in plan features and worker characteristics would likely make our scenario rare. However, this illustration highlights the underlying dynamics of the accrual patterns of FAP and cash balance plans and should be viewed in that context.

[21]In our scenario, the workers under cash balance plans did not obtain their benefits until normal retirement age. However, making reasonable assumptions about interest rates, these results would hold even if a lump sum payment feature was available, either to both workers under multiple final average pay plans and cash balance plans or to workers under multiple cash balance plans alone.

Value of Increased Benefit Earned Early in Career Is Limited by Maintaining Maximum Permissible Vesting Requirements

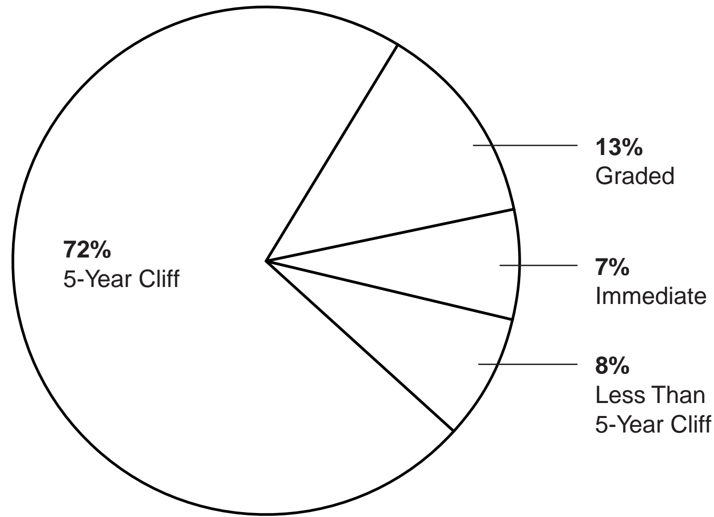
The extent to which younger and more mobile workers gain the benefits of increased normal retirement pension accruals early in their career under cash balance plans is greatly influenced by the vesting requirements the employer has chosen to include in the plan design. “Vesting” refers to the length of time a plan participant must work for a firm to gain a nonforfeitable right to an accrued pension benefit. In general, federal rules require that firms must allow participants full rights to their accrued benefits after no longer than 5 years of service; the employee can receive no pension benefit if he or she leaves before 5 years, regardless of the accrued benefit he or she has earned.[22]

While some Fortune 1000 firms we surveyed reported that a major reason for adopting a cash balance plan was to improve their ability to recruit younger workers by providing them with higher pension benefits earlier in their careers, most firms did not alter their vesting requirements to complement this objective. As shown in figure 9, most firms retained the 5-year vesting requirement. Although separate data on employee turnover are not readily available for firms with cash balance plans, nationally, a majority of adult workers are not likely to stay with their firms long enough to reach the 5-year vesting period.[23]

[22]Plans can offer a “graded” vesting schedule in which participants gain a legal right to a portion of their benefits after 3 years and the requirement for full vesting is delayed until 7 years of service have been completed.

[23]The Bureau of Labor Statistics reported that, in 2000, the median number of years any employee had with one employer was 4.7 years, while the median number of years for younger employees was less. For example, the median tenure for those aged 25 to 34, when cash balance plans are accruing benefits at their fastest rate, was 2.6 years. See BLS, *Employee Tenure in 2000*, the Current Population Survey, 2000.

Figure 9: Percentage of Fortune 1000 Firms Maintaining a 5-Year Vesting Requirement After Conversion



Prudent Investment of Lump Sum Is Needed to Protect Retirement Income

Designing a plan to include a provision for lump sum benefits can have both a positive and negative effect on the amount of money a plan participant has available for retirement, depending on the individual participant's preferences and behavior. The impact of lump sum benefits from cash balance plans differs from that of lump sum benefits from traditional defined benefit plans because of the significant differences in the rate at which participants can accrue benefits under the different formulas.

Cash balance plans are more likely than traditional defined benefit plans to offer participants the option of receiving their benefits in a lump sum either at retirement or at termination of employment. Fifteen percent of firms in our survey who converted a traditional defined benefit plan into a cash balance plan had allowed plan participants to elect a lump sum benefit over $5,000 rather than an annuity in their prior final average pay plans.[24] After conversion, 95 percent of firms allowed a lump sum distribution, although 13 percent limited the option by offering it only at normal retirement age or on only a portion of pension benefits. Numerous plan sponsors told us that they converted to a cash balance plan because they wanted to offer a lump sum benefit. However, many were unaware that they could legally offer a lump sum benefit in a traditional defined benefit plan.

Employers who did offer lump sum benefits—under either the traditional defined benefit plan or the cash balance plan—generally reported that almost all employees chose that option. Furthermore, some expressed concern that, as a result, the firm was losing a key benefit of an employer-sponsored retirement plan, namely, the assurance that employees would have sufficient retirement income to be able to terminate work at an appropriate time. This concern was a key reason that some firms provided for choosing not to allow a lump sum distribution. For example, one employer we interviewed reported that plan participants leaving the firm prior to retirement took lump sum payments even though the plan was designed so that the value of the annuity payments was significantly higher. Furthermore, they told us that terminating workers often asked that the firm distribute the lump sum for nonretirement purposes directly to businesses such as auto repair shops. This is consistent with numerous studies on participant behavior that found that, in spite of incurring tax penalties, many workers who receive lump sum distributions cash out the funds, potentially reducing future retirement income in exchange for current consumption.[25] For example, the Congressional Research Service recently reported that 33 percent of recipients report having reinvested their lump sum distribution in another tax-qualified plan. In addition, they

[24]The Code allows both tax-qualified defined benefit and defined contribution plans to distribute pension benefits either as a series of payments or as a lump sum amount. It requires only defined benefit plans to provide plan participants the option of receiving an annuity or series of payments at normal retirement age when the present value of the accrued benefits exceeds $5,000.

[25]*What Happens When You Show Them the Money?: Lump-Sum Distributions, Retirement Income Security, and Public Policy,* Leonard Burman, Norma Coe, and William Gale, Nov. 1999.

found that younger workers were less likely than older workers to reinvest their retirement benefit; 27 percent of workers ages 25 to 34, compared with 42 percent of those ages 45 to 54, reinvested their retirement benefit.[26]

Assuming that a worker preserves the lump sum benefit as retirement savings, he or she could have more assets available for retirement than with the benefit most often offered under a traditional defined benefit plan—a series of payments or annuity payable at normal retirement age. There are two primary reasons for this. First, under a cash balance plan, the value of the benefit is not frozen at the time the worker leaves the plan. Second, the lump sum benefit could earn greater returns on actual investments rather than a plan-specific hypothetical interest credit. Assuming the continuation of historical investment returns, the rates of return on individual investment of lump sum benefits could be higher than the hypothetical interest credit provided under a plan. For example, several cash balance plans offered fixed interest credits of 6 percent while inflation-adjusted returns on stock market investments have averaged roughly 7 or 8 percent over the past 60 to 70 years.[27] Nevertheless, earning higher returns would require investing in riskier assets such as stocks. Therefore, the impact of lump sum distributions on the income available for retirement would depend on how workers, who may have little investment experience, invest their pension benefit and whether they actually earn higher returns.

Challenges Resulting From Changing Types of Plans

With the increased prominence of cash balance plans, workers are increasingly faced with the consequences of a move from a traditional plan to a cash balance plan. This can happen when the employer changes the type of plan it is sponsoring or when workers change employers. The employer changes the type of plan either by freezing or terminating a prior plan or by amending the plan formula. Differences in the rate at which benefits accrue over time under different types of plans can affect the amount of money that participants who change plans receive from private

[26]Patrick J. Purcell, *Pension Issues: Lump-sum Distributions and Retirement Income Security*, Mar. 14, 2000. The report is based on CRS's analysis of the Census Bureau's Survey of Income and Program Participation.

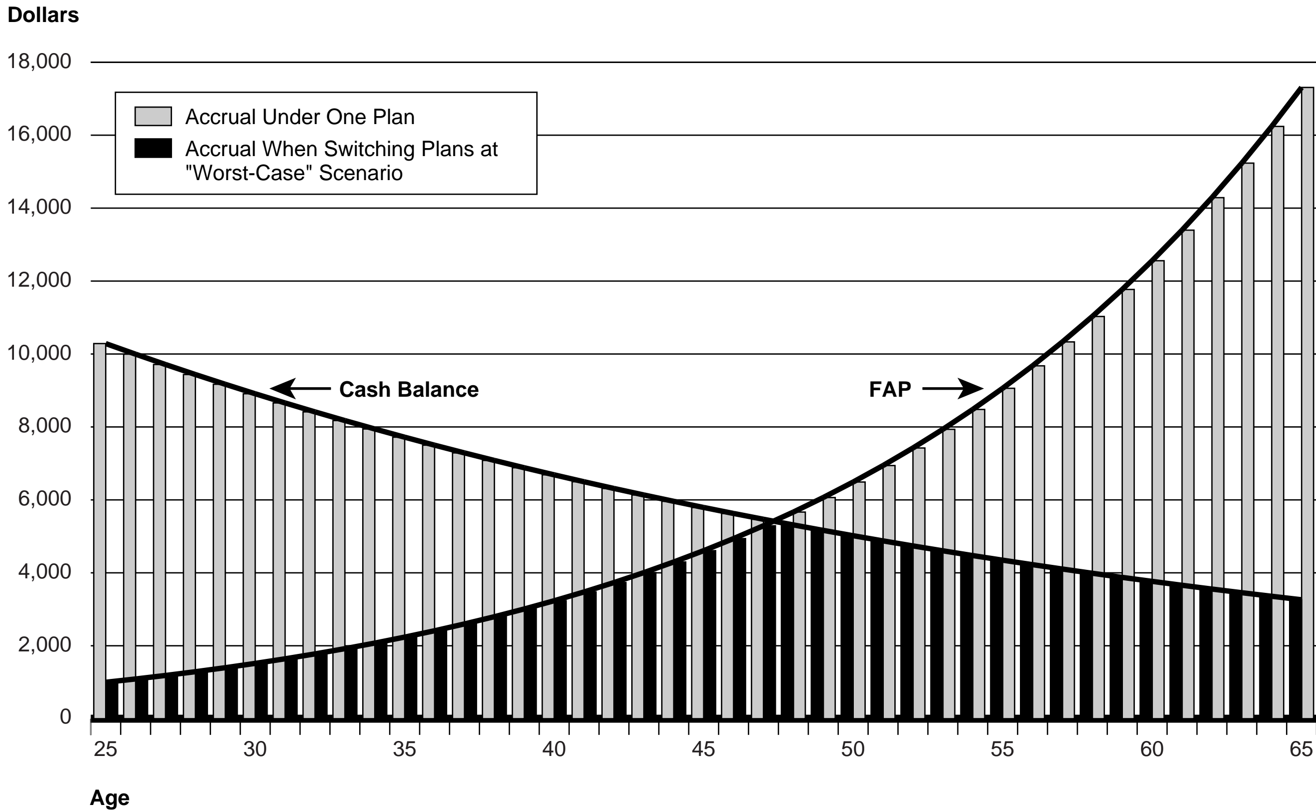
[27]Depending on the interest rate that plan sponsors credit to hypothetical accounts, a terminating worker could be better off if he or she left the benefit in the cash balance plan until normal retirement age rather than opting for the lump sum payment. For example, one plan we surveyed used interest rates as high as 16 percent in their benefit formula.

pension plans. For example, as illustrated in figure 10, if a participant begins pension coverage under a traditional defined benefit plan and moves to a simple cash balance plan, he or she could accrue benefits under each plan where the rate of accrual is the lowest.[28] The illustration represents a "worst case" scenario and would result in decreased pension benefits. In contrast, a worker moving from a cash balance plan to a traditional defined benefit plan could accrue benefits under each plan where the rates of accrual are the highest. Assuming that these funds are not withdrawn, a participant moving from a defined contribution 401(k) plan to a cash balance plan would continue to accrue interest on his or her 401(k) account balance even after moving to the cash balance plan.[29]

[28]Changing from a traditional defined benefit plan to a cash balance plan can result in a reduction in the rate at which normal retirement benefits accrue at any age. However, the effect on expected retirement income is greater the closer the participant is to normal retirement age when the change occurs.

[29]We provide a more detailed explanation of the impact of changing plan type in *Private Pensions: Implications of Conversions to Cash Balance Plans* (GAO/HEHS-00-185, Sept. 29, 2000), which we are issuing concurrently. In this report, we model conversion from a FAP to a cash balance plan, including periods of time when older participants may earn no additional pension benefits while younger workers do, a phenomena commonly referred to as "wearaway." Under the rules for defined contribution plans, employees can withdraw their funds under certain conditions and with certain penalties.

Figure 10: Annual Accrued Benefit With Mid-Career Change From Traditional Final Average Pay Plan to Cash Balance Plan

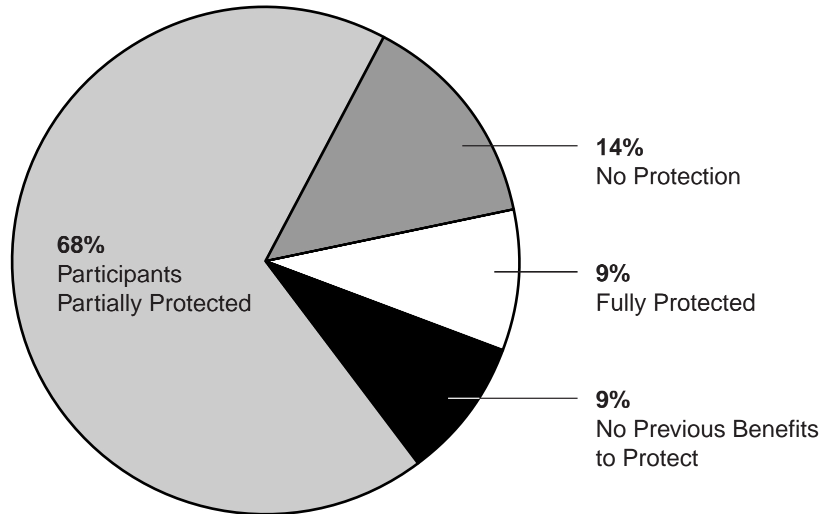


Note: For purposes of illustration, we assume that the traditional final average pay formula and cash balance formula result in the same benefit at normal retirement age. This assumption does not mean that the formulas used in this illustration would provide equivalent benefits at times other than normal retirement age or would result in equivalent costs to the sponsor. Both the cash balance and traditional defined benefit plans are expressed as annual changes in a lump sum payable at normal retirement age. For simplification, we assumed a 3-percent salary increase, 5-percent pay credit, 6-percent interest credit, and a normal retirement age of 65.

Many employers design cash balance plans to reduce the adverse effect of changing plan type on workers. Federal pension rules require only that tax-qualified plans guarantee the benefit a worker has accrued to date and do not guarantee future expected benefits. Nevertheless, an estimated 84 percent of the Fortune 1000 firms that adopted a cash balance plan for workers previously covered under a traditional defined benefit plan included transition provisions in their plan design to mitigate at least partially the effect of changing to a cash balance plan on workers' expectations of future benefits. In 11 percent of cash balance plans that

replaced a final average pay plan, or 9 percent of cash balance plans in our survey, there will be no reduction in expected normal retirement benefits for any plan participant. Participants will experience no reduction because the plan guarantees future expected benefits under the old plan for all current workers, as shown in figure 11. All but one of these plans do this by keeping current workers under the prior plan or by offering all workers the greater of the benefits earned under both formulas until they terminate or retire, which is commonly referred to as "grandfathering." The one exception guarantees benefits by offering employees a choice of benefits under the old or new formula at retirement.

Figure 11: Percentage of Participants With Expected Benefits Protected by Transition Provisions



Note: Determining the extent to which transition provisions for plans categorized as "partially protected" protect the expected normal retirement benefit of participants is based on the circumstances of each plan and the individual worker.

The majority of plans offered partial protection by (1) limiting their protection to only a specific group of workers, (2) limiting the period of time the protection is offered, and/or (3) providing weighted pay credits to a designated group, which may not fully mitigate reduction in expected benefits. For example, 78 percent of the firms from our survey who offered workers the greater of the benefit earned under both formulas, often referred to as “grandfathering,” limited the offer to those employees who met specific age and/or service criteria, or limited the period of time for employees to accept the offer, such as 1 or 5 years. One firm allowed participants age 45 and older with at least 10 years of service to continue accruing benefits under the prior formula. Another firm allowed participants with a minimum combination of 60 years of age and service to receive the better of pension benefits provided by the prior formula or the cash balance formula at retirement. About one-half of the firms offering transition provisions provided additional pay or interest credits or increased the value of the benefit accrued under the old formula for workers who met specific age and/or service criteria at the time they adopted the cash balance formula.[30] Two plans offered workers a choice of participating in the traditional or the cash balance plan at conversion.[31]

The greater amount of choice often afforded to workers under cash balance plans can complicate efforts to estimate retirement income. In general, the traditional defined benefit plan generally expresses the replacement rate by expressing normal retirement benefits as an annual payment that is a percentage of the worker’s pay.[32] Social security benefits are represented as a monthly allowance that can be easily converted into a percentage of pay. To determine the effect of the lump sum on the replacement of his or her annual income at retirement, the participant must be able to estimate the annual value of the lump sum benefit at a future retirement age, either through an annuity and/or through projected investment returns. This is a complex assessment that requires making numerous assumptions, including assumptions about expected termination

[30]These firms include some of the firms offering limited grandfathering.

[31]According to some pension practitioners, choice at conversion can be problematic because participants may not have the information needed to decide which formula would provide the greatest benefit. Some also believe that choice would have to be offered again any time a plan that offered choice is amended.

[32]One common measure of retirement income adequacy is the replacement rate, which seeks to measure the retirement income for a single worker or household in relation to a measure of preretirement earnings, such as the earnings in the year before retirement.

or retirement date, the future value of money, future investment returns, and life expectancy.

Current Disclosure Often Inadequate

Individual participant choices play a more significant role in maximizing retirement income under many cash balance plans than under most traditional defined benefit plans. Consequently, participants need clear and timely information to make choices that will increase rather than decrease their future retirement income. Current disclosure requirements provide minimum guidelines that firms must follow concerning the type of information they provide participants about plan provisions. We found, however, that many employers do not provide such information. These findings supplement those we reported on in a concurrently issued report that focuses on issues of conversion from one plan type to another rather than on cash balance plans in general.[33]

ERISA establishes specific requirements concerning disclosure of information to plan participants, including a written summary of plan provisions. Department of Labor regulations implementing the summary plan description (SPD) requirements provide that the material must be "sufficiently comprehensive to apprise the plan's participants of their rights and obligations under the plan." However, we found significant variation in the quality of information explaining the cash balance formula that was provided to plan participants. For example, about three-quarters of the SPDs we reviewed provided no information that would allow participants to understand the difference between the accrued normal retirement benefit and the hypothetical account balance. Also, documents we reviewed that firms provided to plan participants did not address these differences directly.

We found a range in the quality of information contained in the SPDs we reviewed. Some SPDs provided a clear statement about the nature of the cash balance plan, indicating that the accounts were hypothetical and that employees did not own the assets in the accounts. One plan, for example, described the hypothetical nature of the account as follows:

> A cash balance account differs from a traditional pension plan in that you have a "cash balance account" for recordkeeping purposes. Your cash balance account is only a

[33]See *Private Pensions: Implication of Conversions to Cash Balance Plans* (GAO/HEHS-00-185, Sept. 29, 2000).

bookkeeping account because even though it represents the actual lump sum amount you are entitled to under the Plan if your employment terminates, no assets are segregated into a separate account for your benefit. Therefore, when this summary indicates that contributions will be made to your cash balance account, it means that the Plan's records will reflect that your cash balance account is being increased by the amount of the contribution.

The information provided in some SPDs, on the other hand, could easily lead participants to believe that the cash balance formula or hypothetical account was similar to a 401(k) plan. For example, one plan described the cash balance plans as a plan that "… sets up an account in your name. Each year, your account receives a basic credit, an additional credit (if eligible) and interest." Not stating that the accounts are hypothetical and/or making claims that the cash balance accounts are similar to 401(k) plan accounts prevents plan participants from understanding how cash balance plans work and what benefits they are entitled to receive.

Understanding that the cash balance is hypothetical is also essential to understanding the difference between the hypothetical account balance and the accrued benefit payable at normal retirement age. While 60 percent of SPDs we reviewed advised participants that interest credits continue after termination of employment with the firm, no SPD explained that there was a difference between the hypothetical account balance and the accrued benefit. In fact, some SPDs specifically stated that the account balance was equivalent to the accrued benefit. As a result, workers do not have sufficient or accurate information to assess the effect that changing jobs or the implications of choosing a lump sum payment rather than an annuity payable at normal retirement age will have on the amount of money available to them at retirement.

Conclusions

Cash balance pension plans provide opportunities and challenges to individual participants seeking a safe and secure retirement. Under many cash balance plan designs, workers do not have to wait until late in their careers to earn significant retirement benefits. These plans also often have a lump sum payment option upon separation, which can be reinvested. Some firms have adopted new cash balance plans or have converted from traditional defined benefit plans precisely because these features are attractive to younger workers who exhibit greater labor market mobility. Provided that they are invested in a prudent manner, larger early accrual rates and lump sum payments can lead to greater retirement income.

Yet these features also pose challenges to retirement security. Cash balance plans can make more retirement money available to younger workers who are historically more likely to spend the funds for current living expenses than those closer to retirement. Because cash balance plans feature lower rates of accrual later in an employee's career, younger workers who fail to invest responsibly early on may have less opportunity to make up these losses when they are closer to and more focused on retirement. Older workers, particularly those affected by a conversion to a cash balance plan, may be more focused on saving for retirement but have fewer years to reach it and could accrue benefits under a cash balance plan at a lower rate than they would under a defined contribution plan such as a 401(k).

For all workers, cash balance plans place a greater reliance on personal responsibility and choice. For workers to take advantage of this greater choice, they must have the information necessary to understand the implications of their choices for their future retirement income. However, our work has shown that cash balance plan participants do not generally get the information they need to make informed choices. We found wide variation in the quality, clarity, and comprehensiveness of the information disclosed to employees covered by cash balance plans. At a minimum, employees should know how their benefit accruals differ from previous or supplemental plans the employer has offered them. They should also have clear and understandable information to allow them to calculate the benefits they have earned and detailed instructions about what to do if this information is not forthcoming.

Recommendations for Executive Action

We recommend that the Secretary of Labor direct the Assistant Secretary of the Pension and Welfare Benefits Administration to amend the disclosure requirements under their respective authorities, as provided under ERISA for Summary Plan Descriptions, to include

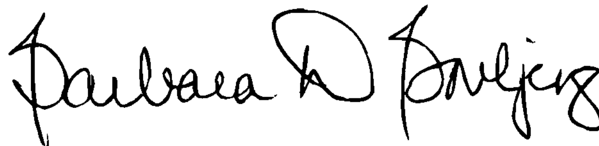
- a clear statement regarding the difference between the hypothetical account balance and the accrued benefit payable at normal retirement age under the cash balance plan,
- specific information about the impact the timing of interest crediting has on deferred pension benefits for terminating workers, and
- standardized language providing plan participants with their rights to contact PWBA and/or IRS if they are unable to understand the information provided and the relevant addresses and telephone numbers necessary for such contacts.

Agency and Other Comments

We provided Treasury and Labor with the opportunity to comment on a draft of this report. Labor's comments are included in appendix II. Labor generally agreed with our findings and conclusions, noting that the report was consistent with an administration proposal to amend current law regarding the disclosure provided to pension plan participants. Labor is currently giving consideration to the appropriate action to be taken in response to our recommendations. Treasury and Labor also provided technical comments, which we incorporated as appropriate.

We are sending copies of this report to the Honorable Major R. Owens, Ranking Minority Member, Subcommittee on Workforce Protections; the Honorable Robert E. Andrews, Ranking Minority Member, Subcommittee on Employer-Employee Relations, House Education and Workforce Committee; the Honorable William J. Coyne, Ranking Minority Member, Subcommittee on Oversight, House Committee on Ways and Means; and other interested congressional committees. In addition, we are providing copies to the Secretary of Labor, the Secretary of the Treasury, the Chairwoman of the Equal Employment Opportunity Commission, and the Executive Director of the Pension Benefit Guaranty Corporation. We will also make copies available to others on request. If you have any questions concerning this report, please contact me at (202) 512-5491, Charles Jeszeck at (202) 512-7036, or George Scott at (202) 512-5932. Other major contributors include Lise L. Levie, Dan F. Alspaugh, Jeremy F. Citro, Andrew M. Davenport, and Roger J. Thomas.

Sincerely yours,



Barbara D. Bovbjerg
Associate Director
Education, Workforce, and
Income Security Issues

Scope and Methodology

Survey of 1999 Fortune 1000 Companies

To determine the prevalence of cash balance plans among large employers and to describe the major features of cash balance plans adopted by large employers, we conducted a telephone survey of 420 employers listed among the 1999 Fortune 1000. We selected the firms randomly. We obtained responses from 409 firms or about 97 percent of the companies we sampled.

Of the 409 firms that responded to our survey, 19 percent reported sponsoring a cash balance plan. Because the survey was based on random sampling with equal probabilities of selection, the sample proportion is a reasonable estimate of the total population of 1999 Fortune 1000 companies sponsoring a cash balance plan. Applying the sample proportion (19.3 percent) to the 1999 Fortune 1000 list provides an estimate of 193 firms among the 1999 Fortune 1000 firms with cash balance plans as of July 2000.[1]

We obtained plan documents, including Summary Plan Descriptions from the cash balance plan sponsors we identified in the sample survey. We summarized the major features of cash balance plans sponsored by the 1999 Fortune 1000 firms we surveyed. Information extracted from plan documents provided by the cash balance plans we identified included data on whether the plan was a new or converted plan, participation and vesting requirements, procedures for establishing opening balances, cash balance plan features, and whether transition provisions were provided.

We developed a database to compile and analyze plan data for each variable in the data collection instrument and for information on plan features that we obtained from plan documents. Counts were performed to generate the frequency of occurrence for each variable in the database and for particular plan features. The percentage and number of 1999 Fortune 1000 firms that sponsor cash balance plans and the number of participants in those plans were calculated at the 95 percent confidence level. The other statistics that we report from our survey on cash balance plans represent sample statistics.

[1]To calculate the population estimate from the sample proportion, the assumption was made that the population of 1999 Fortune 1000 companies not selected for the survey has the same proportion of cash balance sponsors as the number of survey respondents. Confidence intervals were computed at the 95 percent level for the number and proportion of 1999 Fortune 1000 companies sponsoring cash balance plans.

Interviews With Cash Balance Plan Sponsors

We conducted indepth interviews with officials from 14 firms that sponsor cash balance or similar hybrid plans; 13 of these firms converted traditional pension plans to cash balance or pension equity plan formulas. These interviews allowed us to examine the reasons that employers converted to cash balance plans and the ways in which plan sponsors implemented those conversions. We selected firms on the basis of several criteria. Selection criteria included company industry, geographic region, and whether the company had received favorable or unfavorable press regarding its conversion. Two of the 14 companies were nonprofit organizations. Information from these interviews is included in the body of this report to provide relevant examples and context. We provided a pledge of confidentiality to firms that provided us proprietary information. We therefore do not mention the names of firms to preserve confidentiality.

Comments From the Department of Labor

U.S. Department of Labor

Pension and Welfare Benefits Administration
Washington, D.C. 20210

SEP 27 2000

Ms. Barbara D. Bovbjerg
Associate Director
Education, Workforce, and Income Security Issues
United States General Accounting Office
Washington, D.C. 20548

Dear Ms. Bovbjerg:

Thank you for providing the Department of Labor (DOL) with the opportunity to comment on the General Accounting Office's draft report Cash Balance Plans: Implications for Retirement Income (GAO/HEHS-00-207). For your convenience, we have already provided your staff with a technical markup of the draft report. I would like to take this opportunity to offer a few general comments concerning improvements to current disclosure requirements.

The Department has heard from hundreds of employees, employers, and their representatives about the need for employees to receive accurate and timely information about changes to their pension plans when there are conversions of traditional defined benefit plan structures into cash balance formulas. Although some plan sponsors have given plan participants extensive information regarding the conversion, other employers have not, and many affected employees have had difficulty understanding the impact of the change on the retirement benefit they can expect to receive when they retire.

We agree with your conclusion that there is "...a wide variation in the quality, clarity, and comprehensiveness of the information disclosed to employees covered by cash balance plans. At a minimum, employees should know how their benefit accruals differ from previous or supplemental plans the employer has offered them and have clear and understandable information to allow them to calculate their accrued benefit and detailed instructions about what to do if this information is not forthcoming."

The Department has taken a number of steps to address the participant's need for information on a timely basis. We have added information on cash balance plans to our website, including commonly asked questions and answers specific to cash balance plans, as well as a dedicated Internet mailbox for participants with cash balance inquiries to reach us with additional questions and/or comments. In a broader context, on September 14, 2000, we requested

information from the public on the adequacy and nature of current disclosure practices, including the disclosure obligations of plan fiduciaries under ERISA. A copy is enclosed for your convenience. The information received in response to this notice is intended to assist the Department in assessing the need for changes in the disclosure area.

We also agree that under Title I of ERISA, the summary plan description (SPD) is the primary vehicle for informing participants and beneficiaries about their rights and benefits under the employee benefit plans in which they participate. However, the SPD and the summary of material modifications are not required to be distributed to participants and beneficiaries until long after the conversions have occurred. For this reason, the Labor Department helped develop the Administration's proposal for legislation to ensure that workers receive meaningful and timely information when their traditional pension plan is converted to a cash balance plan. (See enclosed.)

The Department appreciates the opportunity to comment on this draft report.

Sincerely,

Leslie Kramerich
Acting Assistant Secretary

Enclosures

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