Hybrid Retirement Plans: The Retirement Income System Continues to Evolve

- This Issue Brief examines the continuing evolution of retirement plans by discussing six hybrid retirement plans (cash balance, pension equity, floor-offset, age-weighted profit-sharing, new comparability profit-sharing, and target benefit plans). Hybrid plans combine features of both defined benefit and defined contribution plans. Often employers implement a hybrid plan and continue to offer a defined benefit and/or a defined contribution plan. Topics discussed include characteristics of hybrid plans, advantages and disadvantages, and the types of organizations that are attracted to these plans.

- Selected results from EBRI’s 1995 survey on hybrid retirement plans are also included in this report. The summaries include discussions of hybrid retirement plan characteristics, hybrid sponsor characteristics, and factors that influenced the decision to offer a hybrid plan.

- According to the survey findings, factors that organizations consider in their decision to implement a hybrid retirement plan include employee understanding and appreciation; changing work force demographics; changing economic environment; regulatory and legislative changes; new philosophy regarding the relationship between retirement benefits and compensation, employee performance, age, service, or profits; new philosophy regarding employer and employee responsibilities for retirement; and cost control.

- Cash balance and pension equity plans are classified as defined benefit plans but have many defined contribution plan characteristics, whereas age-weighted profit-sharing, new comparability, and target benefit plans are classified as defined contribution plans but have some defined benefit plan characteristics. Floor-offset plans consist of two separate but associated plans rather than a single plan design with both defined benefit and defined contribution plan characteristics.

- A cash balance plan expresses benefits in terms of hypothetical accounts which are credited with interest and with a contribution credit. The plans generally provide participants the option of receiving their vested account balances in the form of a lump-sum distribution or as an annuity. Complying with the lump-sum rules of the Internal Revenue Code (IRC) had been problematic for some plans. IRC amendments in the Retirement Protection Act of 1994 and release of an Internal Revenue Service notice providing proposed guidance on application of certain qualifications requirements to cash balance plans will help alleviate the problems faced by some plan sponsors.

- Keep a watchful eye on the new tax reform debate, however, as the game could change significantly as we enter the new millenium.
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In light of changing objectives, strategies, and environments, many employers have taken a fresh look at their compensation and benefits packages in order to ensure that their programs are aligned with the many work force and economic changes. Retirement income plans have been at the center of this sea of change. The debate over defined benefit and defined contribution plans is being held in a new environment, and an increasing number of employers have been offering hybrid retirement plans that combine features of both defined benefit and defined contribution plans. Often employers implement a hybrid plan and continue to offer a defined benefit and/or a defined contribution plan. There are a variety of these hybrid plans, which include cash balance plans, pension equity plans, floor-offset plans, age-weighted profit-sharing plans, new comparability profit-sharing plans, and target benefit plans, among many others. Figure 1 describes the various hybrid plans discussed in this report and the distinguishing characteristics of each plan.

Hybrid plans offer a compromise between conventional defined benefit plans and defined contribution plans and can be designed to fit almost any organization's needs. The emergence of hybrid retirement vehicles such as cash balance plans and pension equity plans signifies how dramatically the pension marketplace is changing. The lack of appreciation by young workers for traditional pension plans, the desire for pension portability, and the complexities associated with conventional defined benefit plans, among other factors, have combined to make hybrid plans more attractive to both employers and employees. As employee demographics, legal requirements, and benefit costs continue to change, hybrid plans have the potential to become more popular as an alternative to traditional pension plans.

In June 1995, the Employee Benefit Research Institute (EBRI) surveyed current hybrid retirement plan sponsors, future hybrid retirement plan sponsors (i.e., organizations that had approved a hybrid retirement plan but had not yet implemented it), and potential hybrid retirement plan sponsors (i.e., organizations that were still considering adoption of a hybrid retirement plan). EBRI received 57 survey responses. The survey was undertaken in response to growing interest by policymakers, the media, and employers in an objective assessment of changes taking place in the pension system. The survey was not designed to allow generalization to all employers but rather was intended to gather information on why current, future, and potential hybrid plan sponsors were interested in these plans. The survey consisted of two parts: Part 1 focused primarily on hybrid retirement plan characteristics, while Part 2 examined each organization's experiences with hybrid plans (such as what influenced the decision to offer or not offer such a plan and the level of satisfaction with the plan). Summaries of selected items on the survey are provided in boxed sections throughout this report and in a section on views of hybrid sponsors. (Detailed survey results will be provided in a later report on the hybrid survey.) The majority of the responses received concerned cash balance plans and pension equity plans, so the survey sections focus on these two plan types.

This Issue Brief discusses the continuing evolution of pension plans. It examines six hybrid retirement plans: cash balance, pension equity, floor-offset, age-weighted profit-sharing, new comparability profit-sharing, and target benefit. Topics discussed include characteristics of these plans, advantages and disadvantages when compared with traditional defined

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1 Thirty survey respondents reported sponsoring a cash balance plan (current sponsors). In addition, four respondents reported that they intend to implement a cash balance plan (future sponsors), and seven respondents reported that they are considering implementation of a cash balance plan (potential sponsors). Five respondents reported sponsoring a pension equity plan (current sponsors), and one survey respondent reported that implementation of a pension equity plan is under consideration (potential sponsor). Not all respondents provided an answer to every survey question.
<table>
<thead>
<tr>
<th>Hybrid Plan Name</th>
<th>Defining Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Balance Pension Plan</td>
<td>A defined benefit plan with defined contribution plan features. A career average(^1) plan that defines benefits in terms of a current lump-sum value rather than a deferred annuity. The plan expresses benefits in terms of hypothesized accounts that are credited with interest and with a contribution credit that may be age or service related. The lump-sum benefit is usually equal to the account balance.</td>
</tr>
<tr>
<td>Also known as:</td>
<td></td>
</tr>
<tr>
<td>Account balance pension plan</td>
<td></td>
</tr>
<tr>
<td>Pension equivalent reserve credit plan</td>
<td></td>
</tr>
<tr>
<td>Individual account defined benefit plan</td>
<td></td>
</tr>
<tr>
<td>Cash account pension plan</td>
<td></td>
</tr>
<tr>
<td>Pension Equity Plan</td>
<td>A defined benefit plan with defined contribution characteristics. A final average pay(^2) plan that defines benefits in terms of a current lump-sum value rather than a deferred annuity. For each year worked, employees are credited with a percentage that will be applied to their final average earnings (the credit may vary by age or service). The lump-sum benefit is equal to final average earnings multiplied by the sum of the percentages earned during a career.</td>
</tr>
<tr>
<td>Similar plans:</td>
<td></td>
</tr>
<tr>
<td>Life cycle pension plan</td>
<td></td>
</tr>
<tr>
<td>Retirement bonus plan</td>
<td></td>
</tr>
<tr>
<td>Mobility bonus plan</td>
<td></td>
</tr>
<tr>
<td>Floor-Offset Plan</td>
<td>This plan consists of two separate but associated plans: a defined benefit floor plan and a defined contribution base plan. The defined benefit plan uses a standard formula to establish a minimum benefit level. If the defined contribution plan provides a benefit that equals or exceeds the minimum established by the defined benefit floor, the participant receives a benefit equal to the defined contribution account only; if the defined contribution plan provides less than the minimum benefit, the floor plan makes up the difference between what the defined contribution plan has provided and the minimum benefit.</td>
</tr>
<tr>
<td>Also known as:</td>
<td></td>
</tr>
<tr>
<td>Feeder plan</td>
<td></td>
</tr>
<tr>
<td>Age-Weighted Profit-Sharing Plan</td>
<td>A defined contribution plan with defined benefit properties. Applies an age factor to the profit-sharing plan allocation formula to provide for large contributions for older employees who have fewer years to accumulate sufficient funds for retirement. The benefit is equal to the employee’s account balance.</td>
</tr>
<tr>
<td>New Comparability Plan</td>
<td>A defined contribution plan with defined benefit characteristics. This plan divides employees into separate and distinct groups in order to provide larger percentage contributions for certain select employees (e.g., owners or supervisors) than for other employees. The benefit is equal to the employee’s account balance.</td>
</tr>
<tr>
<td>Target Benefit Plan</td>
<td>A defined contribution plan with defined benefit features. This plan uses a defined benefit formula to set a target benefit for each participant at normal retirement age and an accepted actuarial cost method to determine a contribution rate for each employee assumed to be sufficient to provide the targeted benefit. Benefits are determined by account balances, which may be higher or lower than the targeted benefit.</td>
</tr>
</tbody>
</table>

Source: Employee Benefit Research Institute.

\(^1\)A career average formula is one in which benefits from a defined benefit plan are calculated as a percentage of average pay received throughout a participant’s entire service, (usually) multiplied by total years of service.

\(^2\)A final average pay formula is one in which benefits from a defined benefit plan are calculated as a percentage of pay received during a participant’s final \(x\) years of service, (usually) multiplied by total years of service. This type of formula is also known as a terminal earnings formula.

benefit and defined contribution plans or with other hybrid plans, and the types of organizations attracted to these various hybrid plans.

**Traditional Plans**

Employers continue to sponsor conventional defined benefit plans and defined contribution plans because of the unique benefits offered by each plan type (figure 2).

A defined benefit plan is a retirement plan in which benefits are calculated according to a formula or rule, typically based on pay or a negotiated flat dollar amount and years of service, and under which benefits are defined as a life annuity. A private defined benefit plan is typically not contributory—there are usually no employee contributions, and no individual accounts are maintained for each employee. The employer makes regular contributions to the entire plan to fund the future benefits of the entire cohort of participants. The majority of defined benefit plan participants become vested, or have a guaranteed right to their accrued pension benefits, after working five years. The employer bears the risk associated with providing the guaranteed benefits.
Figure 2
Characteristics of Traditional Defined Benefit and Defined Contribution Plans

<table>
<thead>
<tr>
<th>Defined Benefit Plans</th>
<th>Defined Contribution Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Funding flexibility</td>
<td>• Potential for stable and predictable expense</td>
</tr>
<tr>
<td>• Reward older and longer service employees</td>
<td>• Possible discretion in funding</td>
</tr>
<tr>
<td>• Employer bears investment risk</td>
<td>• Significant accruals at younger ages</td>
</tr>
<tr>
<td>• Usually not portable</td>
<td>• Employee often bears investment risk</td>
</tr>
<tr>
<td>• Require actuarial valuation</td>
<td>• Portable</td>
</tr>
<tr>
<td>• Relatively low employee understanding and appreciation</td>
<td>• Do not require actuarial valuation</td>
</tr>
<tr>
<td>• Potential for unfunded liabilities</td>
<td>• Relatively high employee understanding and appreciation</td>
</tr>
<tr>
<td>• Pension Benefit Guaranty Corporation costs and insurance</td>
<td>• No significant unfunded liabilities</td>
</tr>
<tr>
<td>• Allow employer to provide postretirement benefit increases</td>
<td>• No Pension Benefit Guaranty Corporation costs and no insurance</td>
</tr>
<tr>
<td>• Permit subsidized early retirement</td>
<td>• No ability for employer to provide postretirement benefit increases</td>
</tr>
<tr>
<td>• Early retirement windows can be funded over time</td>
<td>• Do not permit subsidized early retirement</td>
</tr>
<tr>
<td>• Provide benefits targeted to income replacement level</td>
<td>• Early retirement windows must be funded at one time</td>
</tr>
<tr>
<td>• Usual form of benefit payment is monthly income</td>
<td>• Do not provide benefits targeted to income replacement level</td>
</tr>
<tr>
<td>• May provide past service benefits</td>
<td>• Usual form of benefit payment is a lump sum</td>
</tr>
<tr>
<td>Source: Employee Benefit Research Institute.</td>
<td>• May not provide past service benefits</td>
</tr>
</tbody>
</table>

Level of retirement benefits.

A defined contribution plan is a retirement plan in which specified contributions are made to participants' individual accounts. Sometimes there are only employer contributions, sometimes only employee contributions, and sometimes both. Many defined contribution plans provide at least partial vesting of employer contributions after two or three years of service. Employee contributions are always immediately fully vested. The benefit payable at retirement is based on money accumulated in each employee's account. The accumulated money will reflect employer contributions (if any), employee contributions (if any), and investment gains or losses. The accumulated amount may also include employer contributions forfeited by employees who leave before they become fully vested, to the extent such contributions are reallocated to the accounts of employees who remain.

Despite the inverse relationship that can be observed between the net change in the number of defined benefit plans and the number of defined contribution plans, there is no evidence of a widespread "shift" from defined benefit to defined contribution plans through termination of one and creation of the other. However, new plan creation and new participation opportunities have occurred primarily in the defined contribution area since 1974 (Silverman, 1993).

Many employers recognize that for some organizations no single program can adequately address the needs of both the employer and the employee. One obvious solution is to implement both a defined benefit and a defined contribution plan. That is, some organizations maintain roughly the same dollar commitment to retirement income plans but redistribute the dollars in ways that they hope will enhance employee and employer satisfaction. Some defined benefit plan sponsors maintain their defined benefit plan as the foundation of their retirement program, while other sponsors view it as the appropriate complement to their defined contribution plan. It is not uncommon to keep a defined benefit plan while shifting more of the retirement dollars into a defined contribution plan. One reason a defined benefit plan and a defined contribution plan might work well together is that younger employees (who earn retirement benefits at a lower level under defined benefit plans) have a chance to build up more tax-deferred savings under a defined contribution plan, while older workers benefit from the defined benefit plan (figure 3). One disadvantage of this approach is that young, lower paid employees may be unable to afford to make meaningful contributions to the defined contribution plan. Offering two plans may not be cost effective for the employer. Also, the contributions of highly paid executives are limited by law.

Other employers have implemented nonqualified pension plans to maintain incentives for highly paid

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3 If a participant is covered by both a defined benefit plan and a defined contribution plan maintained by the same employer, a special expanded annual limit is applied under Internal Revenue Code (IRC) sec. 415(e). One of the issues being discussed in the context of pension simplification is the repeal of this additional constraint.
employees. (Currently, the most compensation a qualified plan can recognize is $150,000 annually, indexed for inflation.) Many nonqualified plans are not funded in advance (for a variety of reasons), and the benefits are not protected against change of control or bankruptcy of the plan sponsor.

Some employers have gone beyond asking technical questions about the advantages and disadvantages of defined benefit or defined contribution plans to asking strategic questions about how to use retirement income programs to help achieve organization objectives. Factors that organizations consider in their decision to implement a new retirement plan (including hybrid plans) include:

- employee understanding and appreciation (or lack thereof) of the former/current pension plan;
- changing work force demographics (including perceived changes in tenure patterns);
- changing economic environment (including competitor trends, downsizing, rightsizing, reorganization, outsourcing, restructuring, etc.);
- regulatory and legislative changes;
- new organizational philosophy regarding the relationship between retirement benefits and compensation, employee performance, age, service, or profits;
- new organizational philosophy regarding employer and employee responsibilities for retirement;
- a fundamental change in the employer-employee relationship;
- current trends in retirement plan design; and
- cost control of retirement plans.

Cash Balance Pension Plans

The concept of a cash balance pension plan first became widely known when Bank of America adopted a cash balance plan in the mid-1980s as an alternative to the more traditional retirement vehicles. The bank believed that the best vehicle to satisfy its needs would be a less traditional plan that combined the best features of both a defined benefit plan and a defined contribution plan. On July 1, 1985, Bank of America converted its traditional defined benefit plan into a cash balance pension plan. Other organizations that have implemented a cash balance plan include Bell Atlantic, BellSouth Corporation, Chemical Bank, and Catholic Health Corporation. EBRI hybrid survey results on cash balance plan implementation dates, industrial classification of cash balance plan sponsors, and employee classifications covered by cash balance plans are highlighted in figure 4.
A cash balance pension plan is a defined benefit pension plan that bears a close resemblance to a defined contribution pension plan. Cash balance pension plans are qualified under the Internal Revenue Code (IRC) as defined benefit pension plans. Cash balance plans are subject to the same Employee Retirement Income Security Act of 1974 (ERISA) requirements as other defined benefit plans, including minimum standards for eligibility, funding, and vesting. By nature of its qualification, a cash balance plan is also subject to plan termination insurance and must pay annual premiums to the Pension Benefit Guaranty Corporation (PBGC). As is the case with other defined benefit plans, a cash balance plan determines each participant’s future benefit using a specific formula and provides a specified level of benefits on retirement. As is the case with most defined benefit plans, there are generally no participant contributions; the sponsor determines how the plan assets will be invested and bears the risk of providing the specified level of retirement benefits.

Figure 4
Selected Results—Employee Benefit Research Institute Survey of Hybrid Retirement Plans

<table>
<thead>
<tr>
<th>Cash Balance Plan Sponsors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dates of Implementation for Cash Balance Plans</td>
</tr>
<tr>
<td>Among current sponsors (30):</td>
</tr>
<tr>
<td>• 10 implemented in January 1989¹</td>
</tr>
<tr>
<td>• 5 implemented in 1991</td>
</tr>
<tr>
<td>• 4 implemented in 1987</td>
</tr>
<tr>
<td>• 3 implemented in 1993</td>
</tr>
<tr>
<td>• 2 implemented in each of the years 1986, 1990, 1992, and 1994</td>
</tr>
<tr>
<td>• 1 implemented in each of the years 1922 and 1985</td>
</tr>
<tr>
<td>Among future or potential sponsors (8):</td>
</tr>
<tr>
<td>• expected dates of implementation included 1995, 1996, and 1997</td>
</tr>
</tbody>
</table>

Industrial Classification
Among current, future, and potential sponsors (40):
• 2—agriculture
• 9—finance/insurance/real estate
• 5—manufacturing, durable goods
• 5—manufacturing, nondurable goods
• 6—personal services
• 6—professional and related services
• 3—transportation/communications/other public utilities
• others—the remaining respondents were scattered among retail trade, entertainment and recreation services, forestry and fisheries, the nonprofit sector, and public administration

Employee Classifications Covered by Cash Balance Plans
Among current, future, and potential sponsors (39):
• all employees
• management and/or nonmanagement
• union
• nonunion (salaried, hourly, or perhaps both)
• teachers, professionals, and administrators with a position that is less than 50 percent of a full-time position; nonoccasional employees working 20 or more hours per week

¹This large number may be a result of the decision by many companies to convert existing traditional plans to cash balance plans in connection with bringing their plans into compliance with the Tax Reform Act of 1986, which became effective January 1, 1989.

Figure 5
Selected Results—Employee Benefit Research Institute Survey of Hybrid Retirement Plans

<table>
<thead>
<tr>
<th>Cash Balance Plan Sponsors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Retirement/Savings Plans Covering the Cash Balance Plan Participants</td>
</tr>
<tr>
<td>Among current sponsors (29):</td>
</tr>
<tr>
<td>• 24 reported that participants are also covered by a defined contribution plan (15 specified a 401(k) plan)</td>
</tr>
<tr>
<td>• 3 reported that participants are not covered by any other retirement/savings plans</td>
</tr>
<tr>
<td>Among future sponsors (4):</td>
</tr>
<tr>
<td>• 4 indicated that they expect the participants also to be covered by a defined contribution plan (2 specified a 401(k) plan)</td>
</tr>
<tr>
<td>Among potential sponsors (5):</td>
</tr>
<tr>
<td>• 3 indicated that the employees in the cash balance plan would also be covered by another retirement/savings plan (2 specified a 401(k) plan)</td>
</tr>
</tbody>
</table>

Type of Plan Replaced by the Cash Balance Plan
Among current, future, and potential sponsors (39):
• 22—replace a final average pay defined benefit pension plan
• 10—replace a career average pay defined benefit pension plan
• 4—new retirement plan
• 3—replace both a defined benefit and a defined contribution plan (for example, a profit-sharing plan and a defined benefit plan, or a defined benefit final average pay plan and a money purchase pension plan)
• others—supplement a frozen defined benefit final average pay plan; replace a defined contribution plan

A cash balance plan may have several objectives, including simplicity, portability, equity, and cost control. The sponsor wants to make the benefits simple and easy to understand so that plan participants can perceive the plan’s value and appreciate it. Portability also strengthens participant appreciation, since it typically allows distribution at any age that a participant leaves the organization. Equity may be achieved through age-neutral benefit accruals (i.e., the pay credits are the same for all employees, regardless of age, as in figure 6). A sponsor can achieve cost control objectives by delinking benefits from salary inflation.

Although a cash balance plan qualifies as a
Figure 6
Cash Balance Plan Example

This example illustrates how an employee’s cash balance account grows over five years. A new employee in this example earns $30,000 per year. Each year the employee will earn cash balance pay credits equal to 5 percent of $30,000, or $1,500, and an interest credit of 7 percent.

For purposes of this example, assume that each year’s pay credit earns one-half of the annual interest credit rate in that year (i.e., 3.5 percent), since pay credits normally will be credited throughout the year.

The balance after the first year would be $1,552.50 ($1,500 + 3.5 percent of $1,500). To determine the interest credit for the second year, add 7 percent of the balance at the beginning of the year ($108.67) to 3.5 percent of the pay credit for the year ($52.50) to arrive at $161.17. Continuing in this manner, at the end of five years, the account value will be $8,928.01, or almost 30 percent of annual pay (see table below).

<table>
<thead>
<tr>
<th>Year</th>
<th>Account Value (Beginning of Year)</th>
<th>Annual Pay</th>
<th>Pay Credit (5 percent)</th>
<th>Interest Credit (7 percent)</th>
<th>Account Value (End of Year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$0.00</td>
<td>$30,000</td>
<td>$1,500</td>
<td>$52.50</td>
<td>$1,552.50</td>
</tr>
<tr>
<td>2</td>
<td>1,552.50</td>
<td>30,000</td>
<td>1,500</td>
<td>161.17</td>
<td>3,213.67</td>
</tr>
<tr>
<td>3</td>
<td>3,213.67</td>
<td>30,000</td>
<td>1,500</td>
<td>277.46</td>
<td>4,991.13</td>
</tr>
<tr>
<td>4</td>
<td>4,991.13</td>
<td>30,000</td>
<td>1,500</td>
<td>401.87</td>
<td>6,893.00</td>
</tr>
<tr>
<td>5</td>
<td>6,893.00</td>
<td>30,000</td>
<td>1,500</td>
<td>535.01</td>
<td>8,928.01</td>
</tr>
</tbody>
</table>


Pay credits assumed to receive one-half of the annual interest credit.

defined benefit plan, it is designed to be perceived by participants as having many of the desirable attributes of a defined contribution plan. This is accomplished by expressing the benefits in terms of individual “accounts.” The accounts are hypothetical and serve only as record-keeping devices that facilitate communicating the current value of each participant’s accrued pension benefit to the participant. The individual account balances are determined by the plan’s benefit formula. The formula credits a participant’s account in two ways: an annual sponsor-provided benefit credit (or cash balance credit) and an interest credit. The cash balance credit is added to each participant’s account balance as a lump-sum amount and is usually a percentage of the participant’s pay but may also be a flat dollar amount. The cash balance credits are often age or service related and may be integrated with Social Security. Some organizations credit different amounts for various components of pay or base the credits on company performance. The second type of credit, the interest credit, is specified by the plan. The interest rate is either a specified rate or a rate related to some index, such as the consumer price index (CPI) or the rate on U.S. Treasury bills. The interest credit may vary from year to year, recognizing current economic conditions, and may be communicated to participants before the start of the year. Figure 7 provides EBRI hybrid survey results on the frequency of interest credits under a cash balance plan. Although annual interest credits were most popular among survey respondents, some cash balance plan sponsors also provide credits monthly or quarterly.

One variation on the interest credit is to give employees the option of linking the growth of their account balances to an equities index, such as the Standard & Poor’s 500 index of publicly traded stocks. This variation, sometimes known as a flexible retirement plan (FRP), is especially attractive for employees looking to reap a higher rate of return on their account balances. Detractors of the FRP variation object to introducing an element of risk into defined benefit plans, which they argue are intended to provide a level of retirement benefits whose value does not depend on the underlying assets.

Generally, cash balance plans that are converted from traditional final pay defined benefit plans provide special transitional benefits for employees nearing retirement. These grandfather provisions are necessary, since the accrual pattern under a cash balance plan (career average defined benefit plan) is such that benefits accrue at a faster rate early in the career and at a slower rate later in the career, when compared with a final average defined benefit plan (figure 3). Without the grandfather provision, older and/or longer service employees could lose benefits due to the conversion. In

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4 Integration is a feature of some qualified retirement plans that coordinates plan benefits or contributions with Social Security benefits. Social Security benefits are “progressive,” i.e., they replace a greater proportion of preretirement earnings for lower earners than for higher earners. To compensate for this benefit tilt, plans may provide proportionately (as a percentage of compensation) higher pension benefits or contributions to higher paid participants than to lower paid participants, subject to certain limits. Since passage of the Tax Reform Act of 1986 (TRA ’86), integration is referred to as permitted disparity.
addition, most cash balance plans do not have subsidized early retirement benefits, whereas defined benefit plans often have this feature; thus, grandfathering employees who are nearing retirement may be necessary or these benefits would be lost.

Although the participant receives periodic account statements showing both an interest credit and a cash balance credit, such accounts exist only on paper. Participants’ benefits are payable out of the aggregate plan fund, not out of the so-called accounts. The plan consists of an unallocated pool of assets, and the sponsor simply uses the account statements to facilitate communicating to the participant the present value of the accrued plan benefits. Instead of the benefit being defined as a future income stream, the cash balance amount is expressed as an account balance that is the current value of the employee’s accrued benefit. Figure 8 highlights EBRI hybrid survey results on cash balance plan benefit statements. Most cash balance plan sponsors reported that they provide the statements annually or quarterly.

The cash balance plan statement details the current account value (including cash balance credits and interest credits since the last statement) and may provide benefit projections at retirement age; in contrast, a statement for a traditional plan shows an accrued pension payable at retirement age and may show an estimated projected pension at retirement. The hypothetical account balance is easier for employees to understand than a promised monthly benefit that may not be paid for a number of years. The cash balance account statements are easier for a participant to understand than a traditional defined benefit plan formula, and participants therefore have a better appreciation of this type of plan.

Despite the similarities to a defined contribution pension plan, a cash balance plan is legally a defined benefit plan. The hypothetical account balances are determined by the cash balance credits and interest credits mentioned above and define future pension benefits, not sponsor contributions. That is, the sum of the cash balance credits need not be equal to what the sponsor actually contributes to the plan, and the interest credits need not be equal to the actual earnings of the trust. Since sponsor contributions are based on actuarial valuations, which take into account expected investment performance, projected plan benefits, and employee demographics (e.g., employee turnover, salary adjustments, etc.), they may be less than the sum of the additions to participants’ accounts. The sponsor determines how the plan assets will be invested and bears all of the risk and reward. Investment gains and losses will eventually affect the amount the sponsor contributes. If the rate of return on plan assets is higher than expected, the employer may be able to cut back on future contributions or increase benefits in the cash balance plan. If the cash balance plan suffers an investment loss, or returns are less than expected, a sponsor will amortize the loss...
over a period of years. Similarly, the fixed interest rate specified in the plan is not necessarily tied to the actual investment performance of the plan’s assets. The sponsor promises to credit each participant’s account with the specified rate and then hopes to achieve a rate of return higher than or equal to that credited to the accounts. Although the sponsor may not achieve the set interest rate in any one year, the goal over time is to get a return on investment that is greater than or equal to the set rate. As with other defined benefit plans, the sponsor seeks the highest long-term return consistent with appropriate levels of risk.

Cash balance plans generally provide participants the option of receiving their vested account balances in the form of a lump-sum distribution or as an annuity at the time of retirement or employment termination. If the distribution is a lump sum, it is usually equal to the participant’s vested account balance. If the distribution is in the form of an annuity, the amount of the annuity is actuarially equivalent to the account balance. The majority of traditional defined benefit plans only pay benefits (above $3,500 in present value) as an annuity. The lump-sum option is another characteristic of cash balance plans that is different from traditional defined benefit plans and similar to defined contribution plans. Lump-sum distributions are popular with participants (especially in the case of employment termination), since they can be rolled over into an individual retirement account (IRA) or into a new employer’s retirement plan, enabling the employee to continue to accrue benefits and to stay ahead of inflation. Since lump-sum distributions do not guarantee that retirees will have continuing retirement benefits, some sponsors encourage the selection of an annuity by specifying a favorable actuarial basis to convert accounts into annuities. Terminating employees may also elect to leave their balances in the plan, accruing interest credits, until retirement. Figure 9 provides EBRI hybrid survey results on lump-sum options available to cash balance plan participants on separation from service prior to retirement and on retirement.

Minimum Balance Pension Plan—The minimum balance plan is one variation on the cash balance plan that blends a traditional defined benefit plan and a cash balance pension plan. Participants receive the greater of a predetermined defined benefit pension (usually based on final average pay) or a cash balance account accumulation that represents a guaranteed interest rate applied over the years to percentage-of-pay contributions. In the early years of participation, the cash balance feature outperforms the defined benefit feature, generating

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5 By law, cash balance plans must provide an annuity option, although the lump-sum option is provided at the employer’s discretion.

6 According to a 1993 U.S. Department of Labor survey of medium and large private establishments, less than 0.5 percent of full-time employees with a defined benefit plan had an option to cash out vested pension benefits valued at more than $3,500. The same survey stated that only 10 percent of full-time employees with a defined benefit plan had a lump-sum option available at retirement (U.S. Department of Labor, 1994a). A 1992 Hewitt Associates’ survey found that approximately one-third (34 percent) of the 536 large companies surveyed that sponsored a defined benefit pension plan for salaried employees included a lump-sum option in the plan. Three-fourths of the large companies offering lump-sum distributions offered the option to normal retirees, 72 percent offered the option to early retirees, and 67 percent made the option available to terminated vested employees (Hewitt Associates, 1992).

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**Figure 9**

Selected Results—Employee Benefit Research Institute Survey of Hybrid Retirement Plans

<table>
<thead>
<tr>
<th>Cash Balance Plan Sponsors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Options on Separation from Service Prior to Retirement¹</td>
</tr>
<tr>
<td>Among current sponsors (28):</td>
</tr>
<tr>
<td>• 23 provide the option of an immediate lump sum on separation from service prior to retirement</td>
</tr>
<tr>
<td>• 20 offer a lump sum deferred at the employee’s discretion</td>
</tr>
<tr>
<td>• 23 permit individuals to leave the balance in the plan until retirement</td>
</tr>
</tbody>
</table>

Among future sponsors (4):

• 4 intend to provide the options of an immediate lump sum and leaving the balance in the plan until retirement
• 3 intend to provide the option of a deferred lump sum at the employee’s discretion

Among potential sponsors (3):

• 3 are considering providing an immediate lump sum
• 2 are considering a deferred lump sum at the employee’s discretion and leaving the balance in the plan until retirement

Lump Sums² on Retirement

Among current sponsors (27):

• 24 offer a lump sum (although 2 offer only a partial lump sum)

Among future sponsors (4):

• 4 report that they intend to offer a lump-sum option

Among potential sponsors (4):

• 4 anticipate offering a lump-sum option

¹ For participants with balances over $3,500.

² By law, cash balance plans must provide an annuity option, although the lump-sum option is provided at the employer’s discretion.
greater capital accumulation than a defined benefit plan alone. At retirement, the defined benefit plan outperforms the cash balance plan, providing a benefit based on final average pay. The objective of a minimum balance plan is to meet the needs of both the short-service, mobile worker and the career employee. These plans are similar to floor-offset plans (discussed later in this report), except that minimum balance plans are comprised of two defined benefit plans (one traditional and the other a cash balance), whereas floor-offset plans are comprised of a defined contribution plan (often a profit-sharing plan) and a defined benefit plan. The similarities between minimum balance plans and floor-offset plans indicate that the former may appeal to an employer that is trying to move away from profit-sharing or is in need of a transition feature.

**Cash Balance Plan Statistics**—Data from the U.S. Bureau of Labor Statistics (BLS) indicate that the number of defined benefit plan participants in medium and large private establishments covered by plans using the cash account method of determining retirement payments has continually increased from 1988 to 1993 (figure 10). In 1988, cash account pension formulas were used to determine retirement payments for 1 percent of employees covered by defined benefit plans, rising to 3 percent by 1993. The number of defined benefit participants in small private establishments for whom cash account pension formulas were used remained constant at 1 percent between 1990 and 1992. Among medium and large private establishments in 1993, professional, technical, and related participants were most likely to be covered by a defined benefit plan using a cash account pension formula (6 percent), followed by clerical and sales employees (4 percent). Two percent of blue collar and service employees were covered by a defined benefit plan using a cash account pension formula in 1993.

Although 1993 data are the most recent available from BLS, a KPMG Peat Marwick survey of retirement benefits in the 1990s provides data that supplement the BLS data to some extent. The KPMG survey of 1,183 employers found that the percentage of employees working at an organization that sponsored a cash balance pension plan was 5 percent in 1993, 3 percent in 1994, and 4 percent in 1995 (figure 11).

The 1995 Hay/Huggins Benefits Report (composed of data received from 1,008 organizations) provides data on the prevalence of cash balance plans by

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**Figure 10** Percentage of Full-Time Defined Benefit Plan Participants with Cash Account Method of Determining Retirement Payments: Medium and Large Private Establishments, 1988, 1989, 1991, and 1993; Small Private Establishments, 1990 and 1992

<table>
<thead>
<tr>
<th>Medium and Large Private Establishments</th>
<th>Small Private Establishments</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Employees</td>
<td>1%</td>
</tr>
<tr>
<td>Professional, Technical, and Related</td>
<td>1%</td>
</tr>
<tr>
<td>Clerical and Sales</td>
<td>1%</td>
</tr>
<tr>
<td>Blue Collar and Service</td>
<td>1%</td>
</tr>
</tbody>
</table>


The Bureau of Labor Statistics defines a cash account pension formula as a formula that specifies an employer contribution and a rate of interest on that contribution. Benefits are based on the value of each employee’s account balance. Although cash account pension formulas resemble the formulas in defined contribution plans, the Internal Revenue Service classifies these plans as defined benefit plans because the employer guarantees a certain level of benefits.

In 1988, 1989, and 1991, surveys of medium and large firms covered full-time employees in establishments employing 100 or more workers in all private industries. The 1993 survey of medium and large establishments covered reports on employees in establishments with 100 or more workers in all private nonfarm industries.

The 1990 and 1992 surveys of small private establishments covered employees in establishments with fewer than 100 workers in all private nonfarm industries.

Data not available.

Less than 0.5 percent.

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7 KPMG retained National Research, Inc., to conduct telephone interviews from January 1995 to March 1995 with participants from the 1993 and 1994 surveys. The participants were drawn randomly from a Dun and Bradstreet list of the nation’s private and public employers with 200 or more workers, rather than using client lists and/or mailed questionnaires. Employers declining to participate in the 1995 survey were replaced with randomly selected employers from the same industry, region, and employer-size category.

8 Participants in the 1995 Hay/Huggins Benefits Report include a representative portion of medium and large employers from a broad selection of industry groupings throughout the United States.
Implications for the PBGC—PBGC is a federal government agency created under Title IV of ERISA. It was created to insure payment of certain pension plan benefits in the event a covered plan (i.e., private-sector defined benefit) terminates with insufficient funds to pay the benefits accrued to date. Covered plans or their sponsors must pay annual premiums to PBGC to provide funds from which guaranteed benefits can be paid. Since cash balance pension plans are defined benefit plans, they are covered under the PBGC program, and their sponsors are required to pay annual premiums to PBGC. Voluntary terminations of single-employer plans are restricted to two cases: a standard termination and a distress termination. A standard termination is permitted only if the plan has sufficient assets to pay all of the plan’s benefit liabilities. Underfunded plans may only terminate in a distress situation, which is allowed only if the entire corporate (controlled) group would not be able to pay its debts pursuant to a plan of reorganization without the termination or would be unable to continue business outside the chapter 11 reorganization process. A distress termination is only possible with the approval of the bankruptcy court or PBGC.

According to a 1993 report by Hay/Huggins Company, Inc., PBGC’s exposure9 to potential liability in the event of distress termination under a final-pay plan is significantly different from that under a cash balance plan (Hay/Huggins Company, Inc., 1993).

The Hay/Huggins report compared a final-pay defined benefit plan and a cash balance defined benefit plan of equivalent cost. It found that, given the actuarial assumptions and baseline population in the report and the same unit credit funding method, the cash balance plan would create a greater exposure to potential liability than would the final-pay plan.10 The report further stated that, if all actuarial assumptions were met, there would be little chance of unfunded vested liabilities at plan termination under a final-pay plan. PBGC exposure is likely to be higher under a cash balance plan than under a final-pay plan primarily because of the more rapid accrual of benefits in the early years of service under a cash balance plan. Because actuarial funding procedures generally anticipate that a plan and its sponsor will continue indefinitely, if a cash balance plan terminates prematurely, it is more likely that its existing plan assets will fall short of the value of accrued benefits

9 The degree of exposure under the two plan types is related to the level of unfunded vested benefits in each plan and to the relative impact of the differences between expectations and actual results.

10 At the time of the writing of the Hay/Huggins report, the Pension Benefit Guaranty Corporation (PBGC) had not specified the exact method to be used in determining the guaranteed benefit under a cash balance plan. The analysis assumed that the PBGC individual guarantee would be the cash balance at termination accumulated to normal retirement age at the PBGC immediate rate of interest and then converted to an annuity on the basis of PBGC interest and mortality assumptions. Several areas remain unclear, including how, under a distress termination, PBGC would determine guaranteed benefits, allocate plan assets, and value benefit liabilities.
(RPA '94) amended the IRC to require the use of a prescribed mortality table (currently the 1983 Group Annuity Mortality Table) and the annual rate of interest on 30-year U.S. Treasury Securities rather than rates from PBGC when calculating minimum lump-sum amounts. Defined benefit plans established before December 8, 1994, are not required to switch to the new RPA '94 assumptions until after 1999. Since the Treasury rates are generally higher than the PBGC rates, they are expected to result in lower minimum lump-sum amounts.

Complying with the lump-sum rules had been problematic for some cash balance plans. If a cash balance plan provides interest credits using an interest rate that is higher than the IRC applicable interest rate, payment of a single-sum distribution equal to the hypothetical account balance as a complete distribution of the employee’s accrued benefit may not be sufficient to satisfy the IRC, since the present value of the employee’s accrued benefit, determined using the IRC applicable interest rate, will generally exceed the hypothetical account balance. That is, an employee who elects to receive a lump-sum amount under a cash balance plan may actually receive more than the amount the cash balance account statements report as being in the cash balance account. Since the (generally) higher 30-year Treasury rates required by RPA '94 will result in lower minimum lump-sum amounts, this problem is less likely to occur.

On January 18, 1996, the IRS released a notice providing proposed guidance on application of certain qualification requirements to cash balance plans. Specifically, the proposed guidance addresses the

Effects of the Retirement Protection Act of 1994 and Internal Revenue Service Proposed Guidance on Cash Balance Plans—In calculating the amount of a single-sum distribution under a cash balance plan, the Internal Revenue Service (IRS) appears to take the position that the balance of the employee’s hypothetical account must be projected to normal retirement age and then the employee must be paid at least the present value, determined in accordance with the IRC, of that projected hypothetical account balance. Under former law, the maximum interest rates for determining lump-sum distributions from defined benefit plans were the PBGC rate structure for distributions up to $25,000 and no more than 120 percent of the PBGC rates for larger distributions. The Retirement Protection Act of 1994

11 The relevant sections of the IRC are 411 and 417(e).
application of specific sections of the IRC to single-sum distributions under defined benefit pension plans that are front-loaded interest credit cash balance plans. It is anticipated that the regulations will set forth a list of standard indices and associated margins for use with front-loaded interest credit cash balance plans that provide interest credits equal to the product of the balance of the hypothetical account and the current value of a variable index. The IRS notice proposes standard indices and associated margins based on Treasury securities and the CPI and solicits suggestions for other indices. Under a front-loaded interest credit cash balance plan that specifies a variable index equal to the PBGC immediate rate or the sum of one of the standard indices and a margin not greater than the specified margin associated with that standard index, an employer would not be in violation of the IRC in projecting that the rate used to determine future interest credits for an employee is no greater than the applicable interest rate under the IRC, as amended by RPA '94. Provided the plan has been amended to comply with the changes to the IRC made by RPA '94, the employee's entire accrued benefit could be distributed in the form of a single-sum distribution equal to the employee's hypothetical account balance without violating the IRC, provided that the plan uses the appropriate annuity conversion factors.

Pension Equity Plans

Pension equity plans first became widely known when RJR Nabisco implemented one on January 1, 1993. The primary forces driving RJR’s review of its pension plans wanted to be able to attract mid-career hires. The pension equity plan, like a cash balance plan, was designed to meet the diverse needs of a changing work force by combining portability with the security of a traditional defined benefit pension plan. Both kinds of plans define benefits in terms of a current lump-sum value rather than a deferred annuity, but a pension equity plan is a final average lump-sum plan, whereas a cash balance plan is a career average lump-sum plan. Furthermore, a pension equity plan does not have the individual accounts and interest credits associated with cash balance plans, although most pension equity plans do provide benefit statements to plan participants in order to facilitate communicating the value of the benefit. A pension equity plan may have flat benefit accruals, but benefit accruals as a percentage of compensation that increase with age or service are more common. (The same is true of cash balance plans.) Many employers that have adopted pension equity plans did so after examining demographic trends and deciding that traditional defined benefit plans no longer met their employees’ needs. Figure 14 highlights EBRI hybrid survey results on the types of plans replaced by pension equity plans and the other retirement/savings plans covering pension equity plan participants. Major companies that have adopted pension equity plans include Ameritech Corporation, IBM, Scientific-Atlanta, and Dow Chemical.

For each year worked under a pension equity plan, employees are credited with a per-

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**Figure 14**
Selected Results—Employee Benefit Research Institute Survey on Hybrid Retirement Plans

<table>
<thead>
<tr>
<th>Pension Equity Plan Sponsors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Plan Replaced by the Pension Equity Plan</td>
</tr>
<tr>
<td>Among current and potential sponsors (6):</td>
</tr>
<tr>
<td>• 3—replaced a defined benefit final average pay plan</td>
</tr>
<tr>
<td>• others—replaced a defined benefit modified career average plan; replaced a defined benefit final average pay plan and a 401(k) plan; replaced a defined benefit final average pay plan and a cash balance plan</td>
</tr>
<tr>
<td>Other Retirement/Savings Plans Covering the Pension Equity Plan Participants</td>
</tr>
<tr>
<td>Among current sponsors (5):</td>
</tr>
<tr>
<td>• 5 respondents reported that the participants in the pension equity plan are also covered by a 401(k) plan</td>
</tr>
</tbody>
</table>

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Cash balance plans can be categorized based on when the benefits attributable to interest credits accrue. Under the front-loaded interest credit cash balance plan, future interest credits to an employee’s hypothetical account balance are not conditioned on future service, so if an employee terminates employment and defers distribution to a later date, interest credits will continue to be credited to that employee’s hypothetical account. The back-loaded interest credit cash balance plan does condition some or all future interest credits on further service, so if an employee terminates employment and defers distribution to a later date, interest credits will not continue to be credited to that employee’s account at the rate credited during employment. Since a back-loaded interest credit cash balance plan conditions future interest credits on further service, and since payment of a single-sum distribution indicates termination of employment, it is anticipated that the proposed guidance will address only front-loaded interest credit plans.
The first example assumes that an individual was hired on her 25th birthday. She terminated employment on her 45th birthday with a final average pay of $40,000. Her lump-sum benefit would be calculated as follows: the accumulated percentage is 72.5 percent (see chart below). Multiplying this by $40,000 yields a $29,000 lump sum.

<table>
<thead>
<tr>
<th>Age</th>
<th>Percentage Earned Each Year</th>
<th>Number of Years</th>
<th>Total Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>5–29</td>
<td>2.5%</td>
<td>5</td>
<td>12.5%</td>
</tr>
<tr>
<td>0–34</td>
<td>3.0%</td>
<td>5</td>
<td>15.0%</td>
</tr>
<tr>
<td>5–39</td>
<td>4.0%</td>
<td>5</td>
<td>20.0%</td>
</tr>
<tr>
<td>0–44</td>
<td>5.0%</td>
<td>5</td>
<td>25.0%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>72.5%</td>
</tr>
</tbody>
</table>

A second individual began working at age 43 and retired on his 62nd birthday with a final average pay of $54,000. The calculations for this individual are as follows: the accumulated percentage is 164.5 percent (see chart below). Multiplying this by $54,000 yields an $88,830 lump sum.

<table>
<thead>
<tr>
<th>Age</th>
<th>Percentage Earned Each Year</th>
<th>Number of Years</th>
<th>Total Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>43–44</td>
<td>5.0%</td>
<td>2</td>
<td>10.0%</td>
</tr>
<tr>
<td>45–49</td>
<td>6.5</td>
<td>5</td>
<td>32.5</td>
</tr>
<tr>
<td>50–54</td>
<td>8.5</td>
<td>5</td>
<td>42.5</td>
</tr>
<tr>
<td>55–59</td>
<td>10.5</td>
<td>5</td>
<td>52.5</td>
</tr>
<tr>
<td>60–61</td>
<td>13.5</td>
<td>2</td>
<td>27.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>164.5%</td>
</tr>
</tbody>
</table>


hybrid survey results on the distribution options available to pension equity plan participants on separation from service prior to retirement and on retirement.

Traditional defined benefit plans (especially final average pay plans) provide very little buildup of value early in an employee’s career but have a rapid buildup as the employee approaches retirement, while defined contribution plans provide much less benefit buildup as a percentage of compensation in the later years (figure 3).
In a pension equity plan, benefits build steadily over time, so individuals who serve with an organization for a shorter period of time can earn a much more substantial benefit than they would earn under a traditional defined benefit plan. Since benefits are expressed as a lump sum, they are easy for employees to understand. Figure 17 highlights EBRI hybrid survey results on pension equity plans benefit statements.

Fast-track employees fare well under a pension equity plan. Since benefits are based on final average earnings, employees who earn above average raises throughout their career will have their pensions relate more closely to their final years’ pay as compared with a cash balance plan or a traditional career average pay plan. Basing benefits on final average earnings also benefits employees in that benefits are protected against inflation since they reflect economic conditions at retirement rather than conditions when the benefit was earned. On the other hand, the tie to final average earnings can mean less cost control as compared with a cash balance plan or a traditional career average pay plan.

According to an article in the August 14, 1995, issue of *Business Insurance*, about 15 employers have set up pension equity plans (Geisel, 1995). Figure 18 provides EBRI hybrid retirement plan survey results on the dates of pension equity plan implementation, industrial classification of pension equity plan sponsors, and employee classifications covered by pension equity plans.

**Life Cycle Pension Plan and Retirement Bonus Plan**\(^{15}\)—The concept of a life cycle or retirement bonus plan is very similar to that of a pension equity plan. A life cycle/retirement bonus plan is a final average salary pension plan in which benefits are determined according to salary near retirement and years of service. A participant earns credits for each year of service. The total of the credits is considered a percentage, which is multiplied by the participant’s final average salary to determine what lump sum will be paid at retirement or termination. For example, a life cycle/retirement bonus plan based on a formula of 10 percent of final average pay per year of service would provide an employee leaving the organization after 10 years of service with a lump sum (or annuity equivalent) of 100 percent of final average pay; a mid-career hire retiring after 25 years of service might receive a lump sum of two and one-half times final average salary; and a young hire who becomes a career employee with 40 years of service would receive a retirement benefit of four times final average salary. These plans can be changed to meet the needs of a specific employer by reducing benefits on payment before retirement eligibility, providing higher credits for older employees, integrating with Social Security-covered compensation, or coordinating benefits with other retirement benefits. Any accrued benefit earned under a defined benefit plan prior to the effective date of the life cycle/retirement bonus plan can be preserved as a transition credit that may be added to the regular credits in calculating the lump-sum benefit. Like a pension equity plan, the benefit under a life cycle/retirement bonus plan is

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\(^{15}\) Also known as mobility bonus pension plan.
A notable exception is the TRA '86 restriction that IRC sec. 401(k) cash or deferred arrangements cannot be included in a floor-offset arrangement, although TRA '86 also included a special rule for "qualified offset arrangements" consisting of a cash or deferred arrangement and a defined benefit plan that were in existence on April 16, 1986.

The defined benefit formula is usually offset by 100 percent of the defined contribution plan benefits, although it may be offset by only a portion of the defined contribution plan benefits.

Floor-Offset Pension Plans

A floor-offset plan (also known as a feeder plan) differs from most other hybrid arrangements in that it actually consists of two separate (but associated) plans—a defined benefit “floor” plan and a defined contribution “base” plan—rather than a single plan design with both defined benefit and defined contribution plan characteristics. The defined benefit plan uses a standard formula (that may take into account age, service, and/or compensation) to establish a minimum benefit level that is consistent with the employer’s objectives and constraints. If the defined contribution plan provides a benefit that equals or exceeds the minimum established by the defined benefit floor plan, the participant receives the balance in the defined contribution account, and no benefit is payable from the floor plan. However, if the defined contribution plan provides less than the minimum benefit (perhaps as a result of investment performance or inflation), the floor plan makes up the difference between what the defined contribution plan is able to provide and the minimum benefit (figure 19). In other words, the benefit provided by the defined benefit plan is reduced by the value of the participant’s account in the defined contribution plan. Just about any defined contribution plan can function as the base plan (including an employee stock ownership plan, or ESOP), although the defined contribution

The defined benefit formula is usually offset by 100 percent of the defined contribution plan benefits, although it may be offset by only a portion of the defined contribution plan benefits.

A notable exception is the TRA '86 restriction that IRC sec. 401(k) cash or deferred arrangements cannot be included in a floor-offset arrangement, although TRA '86 also included a special rule for "qualified offset arrangements" consisting of a cash or deferred arrangement and a defined benefit plan that were in existence on April 16, 1986.
portion of floor-offset plans is often a standard profit-sharing plan. The defined benefit formula is unrestricted.

The majority of firms with floor plans in 1993 had between 5,000 and 20,000 employees, according to Robinson and Small (1993). Such plans typically provided a floor benefit for a career employee of between 40 percent and 60 percent of preretirement compensation.

From the participant’s perspective, the floor-offset plan provides some amount of protection against adverse investment experience in the defined contribution plan by guaranteeing a minimum benefit through the defined benefit plan. In addition, any favorable investment experience is received by the participant—yielding a larger benefit than the minimum guarantee. The investment risk in a floor-offset plan is usually borne by the employer; that is, the employer is typically responsible for the investment of assets in both the defined benefit and defined contribution plans. If employees had control over the investment of the funds in their individual defined contribution accounts, and the floor plan was set at a sufficient level, the employees would have an incentive to invest a large percentage of their defined contribution account in equities, knowing that the defined benefit floor plan was sufficient to provide for their needs should they face an investment loss. While some employers may set up the floor plan such that the defined contribution plan serves as the primary vehicle for providing retirement benefits, other employers intend for the defined benefit portion of the floor offset plan to provide a significant portion of the benefit (i.e., there is a recognized defined benefit pension cost at all times).

Floor-offset plans may be an option for organizations that wish to maximize income and security for career employees (older, longer service employees typically receive larger retirement benefits due to the defined benefit floor plan) while still providing portability (through defined contribution lump-sum distributions) and meaningful cash accumulation for younger, more mobile employees. The defined benefit floor plan may provide little or no benefit to vested terminated employees, since the defined contribution base plan is relatively more favorable to the young. Some employers consider this to be a significant disadvantage, since they must pay PBGC premiums for all employees—many of whom will have little or no benefit from the defined benefit plan. However, the floor plan may provide many benefits to early retirees, since the value of a subsidized early retirement benefit may be worth much more than the funds that have accumulated in their defined contribution plan accounts at that point. These plans are often adopted by organizations that offer a profit-sharing plan as the main retirement vehicle and wish to maintain its flexibility and convenience but also wish to provide the benefit protection and security offered by a defined benefit plan. Another scenario in which a floor-offset plan might be used is one where a group of key older employees does not have time to accrue an adequate benefit under an organization’s defined contribution plan, in which case the defined benefit floor plan can be designed to provide the desired benefit level.

As with most hybrid retirement plans, there are many possible plan designs. Due to the presence of both a defined benefit and a defined contribution plan, the floor offset plan may incorporate design features that are usually limited to one plan type or the other. For example, ancillary benefits, death benefits, disability programs, postretirement cost-of-living adjustments, and early retirement and/or window programs traditionally available through a defined benefit plan might be offered in a floor-offset plan along with features such as participant loans and various forms of in-service distributions, which are typical of defined contribution plans.

Since a floor-offset arrangement involves a defined benefit plan and a defined contribution plan, annual reporting and plan administration become more complicated. Another issue with floor-offset plans is that the cost of the defined benefit floor plan depends not only on the level of contributions to the defined contribution
plan but also on the investment performance of the defined contribution plan, so that a highly volatile portfolio in the defined contribution plan could result in losses and a resulting increase in funding requirements in the defined benefit floor plan.

Age-Weighted Profit-Sharing Plans

This hybrid combines the flexibility of a profit-sharing plan with the ability of a defined benefit pension plan to skew benefits in favor of older employees. While cash balance and pension equity plans are generally attractive to large employers, age-weighted profit-sharing plans are primarily small-employer plans. Unlike a typical profit-sharing plan in which each participant receives a contribution based on compensation, employees in age-weighted profit-sharing plans have an age factor applied to the profit-sharing plan allocation formula in order to compensate older employees who have fewer years to accumulate sufficient funds for retirement. At first glance, this type of formula might appear to violate nondiscrimination regulations, since it permits larger contributions for older employees, who tend to receive higher compensation. However, under the regulations, these contributions can be converted to “equivalent benefits” and can pass the general nondiscrimination test. Since annual allocations are projected to retirement age with interest, they will vary according to the plan participants’ ages. The result is comparable to that for a defined benefit or target benefit plan (discussed later in this report) spending a similar amount. All of the basic requirements that apply to regular profit-sharing plans also apply to age-weighted profit-sharing plans.

Age-weighted profit-sharing plans came of age with the release in 1990 of the proposed 401(a)(4) nondiscrimination regulations that allow defined contribution plans (including profit-sharing plans) to base nondiscrimination testing on benefits provided at retirement instead of on annual contributions. In 1993 and 1994, the Department of the Treasury became concerned that age-weighted profit-sharing plans were sometimes being used as substantial tax shelters for high-paid employees while providing little benefit for rank-and-file workers. Legislative language included in an early version of RPA ’94 would have prevented employers from setting up age-weighted profit-sharing plans. However, the law enacted in December 1994 did not include the language that would have disallowed these plans.

The appeal of an age-weighted profit-sharing plan will largely depend on the distribution of ages among the employer’s management team. Age-weighted profit-sharing plans are often recommended for small closely held organizations that want to do something for older (and perhaps higher paid) employees, often employee-owners. An age-weighted profit-sharing plan may work well in a situation in which a subsidiary or division has key managers who are much older than the other employees. Employers that have replaced a defined benefit plan with a defined contribution plan and are looking for a way to provide additional benefits to the older employees most hurt by the change may also be able to make use of an age-weighted profit-sharing plan.

Although reminiscent of both defined benefit pension plans and target benefit plans, age-weighted profit-sharing plans have their own unique advantages and disadvantages. Target benefit plans (historically, the only kind of defined contribution plan that reflects both age and pay in the allocations to participants) were disliked by some sponsors because they use a fixed formula to determine contributions—sponsors wanted more flexibility. Unlike other defined contribution plans, age-weighted profit-sharing plans provide patterns of contributions over employees’ careers that roughly match the patterns of benefit accrual under a typical defined benefit plan. One advantage over conventional defined benefit pension plans (which are subject to minimum funding regulations) and money purchase pension plans is that contributions can be discretionary so that they
The organization allocates $30,000 to the profit-sharing plan. The age and annual compensation of each employee are listed in columns 2 and 3, respectively.

In a traditional profit-sharing plan, each participant receives the same percentage of the contribution as the participant’s compensation bears to total compensation. For example, employee B’s annual compensation is $60,000.00, and the ratio of employee B’s compensation to total compensation is ($60,000.00 / $360,000.00) = 0.16667. Therefore, employee B’s account is credited with approximately 16.67 percent of the $30,000.00 employer contribution, or $5,000.00 (column 4).

Under an age-weighted profit-sharing plan, calculating the contributions for employee accounts is more difficult. The first step is to determine the present value of 1 percent of compensation received at retirement age for each participant eligible to receive an allocation using the present value factor in column 5. The present value factor is based on an interest rate of 8.5 percent and mortality factors (UP-1984 Unisex table with 20 percent female).

For example, 1 percent of employee B’s annual compensation is (0.01) x ($60,000.00) = $600.00. Multiplying this figure by the present value factor for employee B (3.51554) yields $2,109.32 (see column 6), which is the present value of 1 percent of employee B’s compensation. This procedure must be performed for all employees, at which point the results are totaled (see column 6 total). The amount the organization has chosen to allocate to the plan ($30,000.00) is then divided by the total present value from column 6: ($30,000.00) / ($10,280.89) = 2.91804, which is the accrual rate and the basis for the age-weighted profit-sharing allocation. The amount allocated to each participant’s account is then determined by multiplying the accrual rate and the present value of 1 percent of pay. For employee B, the amount allocated under the age-weighted profit-sharing scenario would be (2.91804) x ($2,109.32) = $6,155.07.

<table>
<thead>
<tr>
<th>Employee</th>
<th>Age</th>
<th>Compensation</th>
<th>Annual Compensation Based on Compensation</th>
<th>Present Value Factor</th>
<th>Present Value of 1 Percent of Compensation</th>
<th>Age-Based Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>60</td>
<td>$100,000.00</td>
<td>$8,333.34</td>
<td>5.28617</td>
<td>$5,286.17</td>
<td>$15,425.26</td>
</tr>
<tr>
<td>B</td>
<td>55</td>
<td>60,000.00</td>
<td>5,000.00</td>
<td>3.51554</td>
<td>2,109.32</td>
<td>6,155.07</td>
</tr>
<tr>
<td>C</td>
<td>50</td>
<td>60,000.00</td>
<td>3,333.33</td>
<td>2.33799</td>
<td>935.20</td>
<td>2,728.94</td>
</tr>
<tr>
<td>D</td>
<td>45</td>
<td>60,000.00</td>
<td>5,000.00</td>
<td>1.55487</td>
<td>932.92</td>
<td>2,722.29</td>
</tr>
<tr>
<td>E</td>
<td>45</td>
<td>30,000.00</td>
<td>2,500.00</td>
<td>1.55487</td>
<td>466.46</td>
<td>1,361.14</td>
</tr>
<tr>
<td>F</td>
<td>40</td>
<td>40,000.00</td>
<td>3,333.33</td>
<td>1.03406</td>
<td>413.62</td>
<td>1,206.96</td>
</tr>
<tr>
<td>G</td>
<td>30</td>
<td>30,000.00</td>
<td>2,500.00</td>
<td>0.45735</td>
<td>137.20</td>
<td>400.34</td>
</tr>
</tbody>
</table>

$360,000.00 / $30,000.00 = 12: 10,280.89 / 30,000.00 = 0.343.


16 Although a profit-sharing plan is not required to include a definite predetermined contribution formula or to base contributions on profits, the regulations do require that “substantial and recurring” contributions be made if the requirement of plan permanency is to be met (Allen et al., 1992).
In this example, total contributions are equal to 15 percent of total compensation: \((500,000)(0.15) = 75,000\) for both the age-weighted profit-sharing plan (AWPS) and the new comparability (NC) plan. In the AWPS scenario, both compensation and age are taken into account when the contribution is allocated, and each employee has an equivalent projected benefit at retirement. Under the NC plan, assume that there are 3 group levels: group 1 consists of owners, group 2 includes all nonowner employees with 10 or more years of service, and all other employees are in group 3. In this scenario, 24 percent of pay is allocated to group 1. The long-term employees in group 2 receive a 10 percent of pay contribution, and the balance is allocated to the remaining employees.

In the new comparability scenario, the owners get equal amounts of $30,000 each instead of Owner 2 receiving a contribution smaller than that of Owner 1. In addition, two of the three long-term employees receive a more favorable rate in recognition of their contribution to the success of the organization. Finally, rank-and-file employees with comparable pay receive comparable contributions.

<table>
<thead>
<tr>
<th>Employee</th>
<th>Age</th>
<th>Service</th>
<th>Salary</th>
<th>AWPS Contribution</th>
<th>AWPS Percentage of Pay</th>
<th>NC Contribution</th>
<th>NC Percentage of Pay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner 1</td>
<td>55</td>
<td>13</td>
<td>$125,000</td>
<td>$30,000</td>
<td>24.00%</td>
<td>$30,000</td>
<td>24.00%</td>
</tr>
<tr>
<td>Owner 2</td>
<td>51</td>
<td>13</td>
<td>$125,000</td>
<td>$23,678</td>
<td>18.94%</td>
<td>$30,000</td>
<td>24.00%</td>
</tr>
<tr>
<td>Manager</td>
<td>39</td>
<td>13</td>
<td>$50,000</td>
<td>$3,558</td>
<td>7.12%</td>
<td>$5,000</td>
<td>10.00</td>
</tr>
<tr>
<td>Supervisor</td>
<td>46</td>
<td>8</td>
<td>$40,000</td>
<td>$5,039</td>
<td>12.60%</td>
<td>$1,333</td>
<td>3.33</td>
</tr>
<tr>
<td>Operator 1</td>
<td>37</td>
<td>5</td>
<td>$35,000</td>
<td>$2,116</td>
<td>6.05%</td>
<td>$1,166</td>
<td>3.33</td>
</tr>
<tr>
<td>Operator 2</td>
<td>32</td>
<td>11</td>
<td>$30,000</td>
<td>$1,206</td>
<td>4.02%</td>
<td>$3,000</td>
<td>10.00</td>
</tr>
<tr>
<td>Operator 3</td>
<td>27</td>
<td>8</td>
<td>$30,000</td>
<td>$900</td>
<td>3.00%</td>
<td>$1,000</td>
<td>3.33</td>
</tr>
<tr>
<td>Operator 4</td>
<td>45</td>
<td>4</td>
<td>$25,000</td>
<td>$2,903</td>
<td>11.61%</td>
<td>$834</td>
<td>3.33</td>
</tr>
<tr>
<td>Secretary</td>
<td>61</td>
<td>13</td>
<td>$20,000</td>
<td>$5,000</td>
<td>25.00%</td>
<td>$2,000</td>
<td>10.00</td>
</tr>
<tr>
<td>Clerk</td>
<td>24</td>
<td>3</td>
<td>$20,000</td>
<td>$600</td>
<td>3.00%</td>
<td>$667</td>
<td>3.33</td>
</tr>
</tbody>
</table>

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comparability profit-sharing plans address some of the disadvantages of age-weighted profit-sharing plans; for example, since age-weighted profit-sharing plans provide higher allocation rates to older nonhighly compensated employees as well as to older highly compensated employees, an age-weighted profit-sharing plan sponsor that has older nonhighly compensated employees may be providing a benefit to such employees that is larger than intended.

The new comparability plan divides employees into separate and distinct allocation groups in order to provide larger percentage contributions for certain select employees than for other employees. (In some cases, as much as 80 percent or 90 percent of the employer’s contribution can be allocated to the select group.) Unlike an age-weighted profit-sharing plan, a new comparability plan does not necessarily relate the amount of the contribution to the employee’s age. However, age spreads among the allocation groups can have an impact.

By using the allocation group technique, a plan can be designed to provide one contribution rate to a select allocation group of employees, with a different and much lower rate for employees who are not in the select group. The allocation groups may be based on any reasonable criteria, including percentage of ownership, status as key or highly compensated employee, job description, length of service, age, etc. The allocation groups can be tailored to satisfy specific objectives since they can be set up for owners, officers, supervisors, managers, long-service employees, or salaried employees (figure 21). The structure of the allocation groups must be defined in the plan document and may be changed periodically by plan amendment. Each allocation group has its own allocation method. Within each allocation group, the contribution is allocated uniformly (either as a flat dollar amount or as a percentage of pay). The annual allocation method must also be defined in the plan document and may be changed by plan amendment, provided no individual’s accrued benefit is reduced.

Nondiscrimination testing is satisfied by dividing employees into “rate groups” (not to be confused with allocation groups). If each rate group satisfies IRC sec. 410(b) minimum coverage test, the allocation as a whole passes the IRC sec. 401(a)(4) general test.

19 For purposes of the general test, each employee determines a separate rate group. The group consists of that employee and all others (both highly and nonhighly compensated) with an adjusted equivalent accrual rate equal to or greater than the employee’s adjusted equivalent accrual rate. For more information on adjusted equivalent accrual rates, see Grubbs, 1994.

20 The plan must pass either the ratio percentage test or the facts and circumstances test to meet the 410(b) regulations. For more information on these two tests, see Grubbs, 1994, and Londergan and Vickers, 1994.
Employers who want to allocate the largest possible proportion of the plan contribution to employees in a select group often choose a new comparability plan. These plans are especially attractive if there are large compensation discrepancies between the select group of employees and the remaining employees. The plans best meet an employer’s objectives when key employees are older on average than other employees—some say a spread of 10 to 15 years is ideal. Conceptually, these plans could work just as well for virtually all sizes of organization, although they may be more attractive to small and mid-size employers. New comparability plans usually require annual testing and are very sensitive to employee demographics. Like age-weighted profit-sharing plans, new comparability plans may be difficult to explain to employees and to draft in the plan’s formulas.

Target Benefit Plans

Target benefit plans, also known as target plans, are technically defined contribution plans (specifically money purchase pension plans) but operate as hybrids of defined benefit and defined contribution plans. There are many variations in target plan approaches.

A target benefit plan sets a “target” benefit (e.g., 1.5 percent of final average salary times years of service) for each participant at normal retirement age (usually age 65) using a defined benefit plan formula, and employer contributions are determined actuarially—just like a defined benefit plan—so that they become a fixed obligation of the employer. (In a typical money purchase pension plan, employer contributions are determined and allocated as a percentage of current compensation, but in a target benefit plan, employer contributions are determined so as to meet the targeted benefit.) An acceptable actuarial cost method (along with acceptable assumptions stated in the plan) is used to determine a contribution rate for each employee assumed to be sufficient to provide the targeted benefit (figure 22). Contribution rates may differ considerably among the individual plan participants.

Up to this point, the target plan is essentially defined benefit in nature. However, the target benefit for each participant is not guaranteed as it would be in a defined benefit plan—it is merely a goal to be achieved, not a promise to the participant of a fixed benefit. As in a defined contribution plan, individual accounts are established for employees, and investment gains and losses are credited to their accounts. Most target benefit plans leave investment decisions in the hands of the participants. Ultimate retirement benefits are determined by actual account balances, which may be higher or lower than the targeted benefit. For example, if trust earnings exceed the actuarial assumptions on which the employer contributions are based, the benefit provided may exceed the target. On the other hand, if trust earnings are less than the actuarial assumptions used, the benefit provided will be less than the target. Employers only have an obligation to make the contribution required by the plan formula; if the rate of return on plan assets is less than the rate that was assumed, the employer is not obligated to provide funding to restore the balance to the targeted level.

The accounts may provide for several investment options...
Target Benefit Plan Example

**Target benefit:** Thirty percent of final average pay for employees with 30 or more potential years of service to age 65 (i.e., for employees hired at age 35 or younger); pro rata reduction for less than 30 years of service (e.g., the target benefit for someone hired at age 40 would be 25 percent of final average pay).

**Contributions:** Credited to an employee’s account based on the employee’s W-2 earnings on the previous December 31; however, between the ages of 55 and 65, the contribution is based on the employee’s five-year average pay. In the first year of employment, the formula for the monthly contribution is:

\[(\text{W-2 earnings}) \times (\text{target benefit percentage}) \times (\text{attained age contribution factor})\]

The various age contribution factors are obtained using the following assumptions: 6.5 percent interest factor; expenses of 5 percent; mortality assumptions based on the 1951 Group Annuity Table (Male) with Projection, Bankers Life Company modification, 65 percent male (no setback) and 35 percent female (setback five years); selection of a straight life option; normal retirement at age 65; and retirement income paid monthly.

In subsequent years, the monthly contribution is increased by the increase in earnings times the target benefit percentage times the new attained age contribution factor.

**Example:** Employee begins employment at age 34, earning $20,000. Using the formula above, the monthly contribution for the employee’s first year of participation in the plan would be:

\[($20,000) \times (0.30) \times (0.0086) = 51.60\]

If the employee receives a $1,000 increase in W-2 earnings, the second year monthly contribution would be:

\[($(1,000) \times (0.30) \times (0.0093)) + 51.60 = 2.79 + 51.60 = 54.39\]


There is considerable flexibility in target plan design. Target formulas may be based on years of service and/or compensation (final year’s salary, final average salary, or career average salary). Plan designs may also include provisions for past service benefits and integration with Social Security under the rules that apply to defined benefit plans. In most respects, a target plan is treated as a money purchase plan and is subject to the rules pertaining to such plans.

An advantage cited in favor of target benefit plans is that they offer the contribution scheme of a defined benefit plan while avoiding some of the requirements imposed on such plans, such as insurance premiums under PBGC and the periodic actuarial certifications and valuations that are required under ERISA. One disadvantage of a target benefit plan is that, because it is a defined contribution plan, the maximum annual addition to any participant’s account may not exceed the lesser of 25 percent of compensation or $30,000. This limitation might not allow older, highly compensated employees to receive as large a contribution as would be possible under a defined benefit plan. Another disadvantage is that target benefit plans have the same mandatory contribution requirement as a money purchase pension plan; age-weighted or new comparability profit-sharing plans, on the other hand, can still favor older or highly compensated employees with a higher contribution rate but also have more flexibility in terms of the amount that must be contributed each year. However, one advantage that target benefit plans have over age-weighted profit-sharing plans is that they are not subject to the pay deduction limit for employer contributions of 15 percent of covered compensation that applies to profit-sharing plans.

**Target Benefit Plan Statistics**—Data from the U.S. Department of Labor (DoL) indicate that the number of
target benefit plans decreased between 1989 and 1990 and then increased between 1990 and 1991, although the number of plans in 1991 remained below the 1989 level (figure 23). However, the number of total participants and the number of active participants in target benefit plans increased steadily between 1989 and 1991. In 1989, there were 11,028 target benefit plans covering 202,000 participants (193,000 active). By 1990, the number of target benefit plans had decreased by 11 percent to 9,770, but the number of participants had increased to 210,000 (196,000 active). In 1991, there were 219,000 participants (207,000 active)—an increase of 8 percent since 1989—in 10,150 plans.

Although 1991 data are the most recent data available from DoL, the 1995 KPMG survey provides data that supplement the DoL data to some extent. The KPMG data indicate that the percentage of employees offered a target benefit plan increased from 1 percent in 1993 to 2 percent in 1995 (figure 11). KPMG also provides data on the percentage of employers offering target benefit plans by industry in 1995 (figure 13). Target benefit plans were most prevalent in the services industry (3 percent), followed by the finance industry (2 percent).

Views of Hybrid Sponsors

What is the outlook for hybrid retirement plans? Will the number of these plans continue to increase, along with the number of people covered by such plans? An examination of the reasons why current, potential, and future hybrid sponsors chose to switch or are considering switching to hybrid plans may provide some answers. In Part 2 of the EBRI hybrid sponsor survey, respondents were asked to comment on the way in which each of a list of items was a factor in the organization’s decision to implement a hybrid retirement plan or consider implementing a hybrid plan. These factors are listed below, along with a summary of answers from current, future, and potential cash balance plan sponsors and current and potential pension equity plan sponsors.

| Figure 23 | Target Benefit Private Pension Plans: Number of Private Pension Plans, Total Participants, Active Participants, Assets, Contributions, and Benefits, 1989–1991 |
|---|---|---|---|---|---|
| Number of Plans | 11,028 | 9,770 | 10,150 |
| Total Participants | 202,000 | 210,000 | 219,000 |
| Active Participants | 193,000 | 196,000 | 207,000 |
| Single employer plans | 184,000 | 191,000 | 200,000 |
| Multiemployer plans | 9,000 | 5,000 | 6,000 |
| ($ millions) | | | |
| Total Assets | $4,205 | $4,297 | $5,377 |
| Total Contributions | 517 | 459 | 530 |
| Total Benefits | 391 | 339 | 432 |


Employee Understanding and Appreciation (or Lack Thereof) of the Former/Current Pension Plan—

• Cash Balance Plan Sponsors

In most cases, lack of employee understanding and appreciation was an issue the organizations wanted to address. One organization commented that most of the human resources managers did not even understand the former plan. Difficulty in communicating the former plan was also a factor. Several respondents noted that employees did not value the “richness” of the plan—what it was worth to them or what it “cost” the organization to provide; as one respondent commented, “the company was spending tons of money, but no one appreciated it.” Other organizations responded that only employees near retirement understood the pension formula and
valued the benefit offered; understanding by younger employees was a driving force for such respondents. There is a feeling among cash balance plan sponsors that employees cannot truly appreciate the value of a benefits program unless they understand it. One respondent noted that after implementation of a cash balance plan, employee reaction (both positive and negative) showed a far greater understanding of pension benefits. Sometimes the goal of simplification backfires; one respondent commented that participant understanding was a “key consideration . . . however, by grandfathering the old formula, the plan became more complicated than the prior plan, defeating this objective.” However, employee understanding and appreciation was not a factor for all organizations since several recipients responded that their employees did understand and appreciate the prior plan(s).

**Pension Equity Plan Sponsors**

For several respondents, designing a plan that was easy for employees to understand was a major objective. One respondent noted that the former plan had a Social Security offset formula that was very difficult to understand, so employees did not appreciate the value of the defined benefit plan. Another respondent noted that employees did not seem to notice the pension plan until the organization changed to a pension equity plan. In general, organizations seem to feel that lump sums are easier to explain to employees.

**Changing Work Force Demographics (Including Changes in Tenure Patterns)**

- **Cash Balance Plan Sponsors**
  
  Portability of the cash balance benefit—especially for employees with short service and smaller balances—is an attractive feature for many cash balance plan sponsors and participants, especially for sponsors with an increasingly younger, mobile work force. One employer mentioned that more women in the work force was a factor in the decision to implement the cash balance plan. Another employer noted that the plan design enabled the organization to attract mid-career hires. Many employers recognize that mobility is not always an employee’s choice—events such as downsizing and restructuring can force an employee to leave an organization before he or she is prepared to do so. For example, one employer was anticipating that major work force reductions would have to be implemented at a future date, and the organization implemented a cash balance plan in an effort to address the issue of employees leaving the organization. The account balance can be transferred to an IRA or to the next employer, and the current employer does not face the burden of tracking former employees and assuming liabilities for small benefits. One organization noted that it has a young work force (average age of 32), so the inherent design of the final average pay pension plan did not always meet their needs—the cash balance plan stresses the need for capital accumulation to employees and inspires them to take control of their own retirement planning. Another respondent commented that turnover for its industry runs high (upward of 30 percent); the cash balance plan permits an earlier payment of the retirement benefit and provides a lump-sum feature not found in a traditional defined benefit plan.

- **Pension Equity Plan Sponsors**
  
  Several organizations mentioned the need to attract mid-career hires as well as the desire to have a plan that would encourage workers to leave when they are ready to do so, rather than staying longer than they would like due to the need to qualify for benefits. In all cases, the former plan design did not accommodate these needs.
Changing Business Environment (Including Competitor Trends, Downsizing, Rightsizing, Reorganization, Outsourcing, Restructuring, etc.)

- **Cash Balance Plan Sponsors**
  For many cash balance plan sponsors, the business environment influenced the decision to adopt a new plan. In some cases, competition forced them to reconsider their benefits. In other cases, the cash balance plan was chosen because it fit the needs of the organization at that time. For example, the organization may have been experiencing a merger/acquisition (in which case the cash balance plan was used to facilitate the merging of several pension plans) or a start-up/spin-off (in which case the hybrid plan was a new pension plan). One respondent commented that this factor was and continues to be a major issue: “We needed a pension vehicle that would not impede the process of ‘rightsizing’ (downsizing, upsizing, etc.).” One respondent commented on the need to reposition the retirement program to meet the maturing needs of the organization and still provide portability. Still another organization noted that their cash balance plan was the result of a merger of two organizations—one organization had a cash balance plan and the other had a final average pay plan—which drove the need for a restructuring and merging of the retirement plans.

- **Pension Equity Plan Sponsors**
  As one respondent noted, “Reorganizing and downsizing are made somewhat easier with a plan that provides a more fair benefit for shorter service, younger employees.” Similarly, another respondent commented, “Because of the ‘cliff’ in the old plan, it was difficult to manage work force reduction efforts. The old plan rewards employees who spend virtually their entire career with the company. However, employees no longer expect to spend their entire career with one company.” For one respondent, the pension equity plan brought the retirement plan package back in line with competitive norms. Another respondent noted that, due to restructuring, the organization needed to cut back on contributions to the plan, and the pension equity plan made that possible.

Regulatory/Legislative Changes

- **Cash Balance Plan Sponsors**
  For some sponsors, the regulatory/legislative environment had a direct influence on switching to a cash balance plan as well as on the type of plan chosen. For example, one respondent commented that the cash balance plan has proven to be a vehicle that can handle the regulatory turmoil without serious negative impact to participants—a definite plus, since legislative and regulatory changes cause constant plan modifications and are sometimes hard to explain to participants. One respondent noted that the ambiguity of regulations with regard to cash balance plans has been troublesome. Other respondents noted TRA ’86. One respondent still in the consideration stage noted that changes in lump-sum payments, along with possible IRA, flat tax, capital gains, and corporate tax rate changes, will impact their design choices.

- **Pension Equity Plan Sponsors**
  One respondent commented that these issues were of modest concern, although the organization “did analyze potential issues with lump-sum features and future legislation regarding pay/benefit limits.” Another respondent noted that a consideration in changing plan design was the employer’s desire not to “make changes to the cash balance plan . . . which would have resulted in better benefits for employees who terminated early (not retirees).” Another organization noted that, since the “old Social Security 75 percent offset plan did not comply with TRA ’86, we were required to change the plan formula.”

New Organizational Philosophy Regarding the Relationship Between Retirement Benefits and Compensation, Employee Performance, Age, Service, or Profits
Some organizations adopt a hybrid plan in an effort to shift from a philosophy of paternalism to one of partnership and shared responsibility with employees.

For many companies, the redesign of a benefits package is an effort to get better agreement/alignment with the organization’s strategic employment philosophy, or “employee contract.” In some instances, an organization adopts a cash balance pension plan in order to establish a stronger (or weaker) link between compensation and retirement benefits. In other cases, the adoption of a hybrid plan is an attempt to change the relationship between age and/or service and benefits. For example, one respondent noted that the cash balance plan helped the organization’s objective to tie performance to current compensation; since the organization counts all forms of pay (including bonuses, commissions, etc.), participants’ account balances increase as pay increases in an easily seen manner. That is, credits under the cash balance plan were publicized as tied to the organization’s “pay for performance” compensation program and philosophy. On the other hand, another respondent reported that the cash balance plan separates wage or salary increases from pension increases, since the main driver of the benefit (and therefore the expense) is the interest credit. Still another survey participant noted the prior plan had provided a “full” benefit after 15 years of service, and that the cash balance plan was adopted partly because the organization wanted a plan that accrued benefits over a full career. Similarly, another organization intentionally used a formula that rewards longer, career employees.

New Organizational Philosophy Regarding Employer and Employee Responsibilities for Retirement

• Cash Balance Plan Sponsors
Some organizations adopt a hybrid plan in an effort to shift from a philosophy of paternalism to one of partnership and shared responsibility with employees. In many cases, this was accomplished by “scaling down” the defined benefit plan and “enhancing” the existing defined contribution plan or adding a defined contribution plan. For example, one respondent noted that prior to implementation of a cash balance plan, the defined benefit plan was expected to deliver 70 percent of retirement benefits, with the 401(k) delivering the other 30 percent. As a result of the switch to a cash balance pension plan, the 401(k) now delivers 70 percent of retirement benefits, with the cash balance defined benefit pension plan delivering the other 30 percent. In addition, there was an employer match increase for the 401(k) plan. In other instances, the philosophy shift was communicated to employees by highlighting the three-legged stool approach: personal savings, employer retirement plan, and Social Security. That is, more emphasis was placed on the employer’s other contributions toward an individual’s retirement income security, including matching contributions to the savings plan and the matching amount of Social Security. Several companies noted that the employer’s responsibilities have shifted from paternalism to providing choice and education (e.g., with regard to saving for inflation protection after retirement), while employees become more involved in their own retirement security by sharing funding and decision-making responsibilities.

• Pension Equity Plan Sponsors
For many respondents, this new organizational philosophy was a very significant factor in the decision to implement a pension equity plan, since plan design often includes a total strategy review of the direction of the organization and the new employment relationship. One respondent noted that “the PEP (pension equity plan) formula rewards better performers since the formula is the highest average three out of the last five years of pay. Those whose pay goes up a lot due to promotions or superior performance will get a relatively better benefit than those who plod along with only COL (cost-of-living) increases.”
For many companies, it is increasingly important that employees understand their responsibility to “save and prepare for retirement.” The companies’ role is changing from one of paternalism to one of educating employees to take more responsibility for their retirement planning. However, one employer noted that “the company’s responsibility has not changed—however, under the new plan, employees will have to determine when it is right for them to leave the organization (i.e., when they can afford to stop working).”

Cost Control of Retirement Plan(s)

- **Cash Balance Plan Sponsors**
  Some respondents noted that cost saving was an incentive, while others stated that the switch to a cash balance plan was cost neutral and cost was not a determining factor. In some cases, organizations wanted a plan with costs that were more predictable and less volatile, yet flexible. For example, one respondent noted that the cash balance plan was actually more costly, although the costs were also more predictable and less likely to need expensive updating. Another respondent commented that by implementing a grandfathered benefit, no savings was achieved—although savings was not one of the goals. Another respondent noted that cost control was very much a factor; the cash balance plan provided the cost savings the organization expected, which has led to significant financial opportunities for the organization. Still another organization noted that they had not observed any measurable difference in costs.

- **Pension Equity Plan Sponsors**
  One respondent commented that the move was basically for cost control, and another respondent noted that the organization’s traditional final average pay plan with unreduced early retirement benefit was expensive, which contributed to changing the plan design.

**Defined Benefit Status**

- **Cash Balance Plan Sponsors**
  According to one respondent, tax implications were not an issue at the time of conversion, since the plan was appropriately funded. However, the organization felt that it would begin to face problems in this area. A couple of organizations noted that they are tax-exempt/nonprofit entities, so this was not a consideration for them.

**Planning Issues**

- **Employer size**—For smaller employers, hybrids are most likely to be chosen when they enable larger contributions on behalf of key employees and a benefit accrual pattern that fits the needs of owners or senior employees. For large employers, the key factor is often culture change.

- **Organizational philosophy regarding employer and employee responsibilities for retirement**—Many employers are moving away from a philosophy of paternalism to one of partnership and shared responsibility with employees. Other employers believe that they have a moral obligation to keep a defined benefit program in place yet expect employees to become more involved in planning for their own futures (perhaps through the addition of a defined contribution plan). Still others are unsure about allowing lump-sum distributions from both defined benefit and defined contribution plans, knowing that allowing employees to take a lump sum and (hopefully) invest it on their own is no guarantee that they will have continuing retirement benefits. The lump sums frequently paid under hybrid plans imply that the employer’s investment duration is shorter than that under traditional defined benefit plans that pay annuities from the fund.
The more liquid investments with shorter retention periods can translate into lower expected investment yields. Traditional defined benefit plans can optimally manage assets for the long term, resulting in the lowest cost per dollar of retirement benefit delivered. Some organizations that stick with their defined benefit plans often find that a few adjustments are all that is needed.

- Changing work force demographics—The coming labor force is expected to be characterized by greater mobility, increased participation of women, more ethnic and racial diversity, a significant slowdown in the number of young entrants, and a shortage of well-educated, native-born workers. Competition for highly qualified young workers is likely to become particularly intense. This expectation, in conjunction with the fact that younger employees tend to be the most mobile, has sharpened employer awareness of the need to offer retirement programs that appeal to this group as part of their recruitment efforts without ignoring older, career employees.

- Changing tenure patterns—Although consideration of tenure patterns on an overall basis indicates that the past decade has been much more mobile than previous periods, the perceived increase in mobility is due to the large number of young people in the work force. More young people in the work force has brought average tenure down, since the young are more mobile. An examination of job tenure figures for prime age (25–64 years) workers, both male and female, reveals that tenure levels in the 1980s and beginning of the 1990s were actually higher than those of the 1950s, 1960s, and 1970s. So far, baby boomers have not behaved much differently than their parents (i.e., as boomers age, their tenure increases). As baby boomers continue to age, their perspective on the value of retirement plan features (e.g., portability) may change greatly.

- Employee understanding and appreciation—This consideration is most relevant for defined benefit plan sponsors. Employers want to improve the value-to-cost ratio for retirement programs by creating programs that are recognizable and valued at the right cost to their firm. As organizations continue to focus on value, anything not well appreciated by employees is questioned.

- Regulatory/legislative changes and administrative complexities—Hybrid plans do not always reduce regulatory and administrative complexities. Furthermore, there is still some uncertainty about the application of federal regulations to some of these plans.

- Organizational philosophy regarding the relationship between retirement benefits and human resource strategies—An employer must decide to what extent retirement benefits should be integrated with current compensation, future compensation, age, or service. Employers are increasingly interested in linking retirement benefits to employee performance and/or company profits.

- Cost control of retirement plans—As pressures on costs increase, a key question is how to control the volatility and level of retirement plan spending. Employers must also address the relationship of plans costs to business results and the allocation of dollars across different employee groups. Some employers adopt hybrids as a method of implementing cost-cutting strategies without necessarily sacrificing employees’ appreciation of the retirement benefit.

- Changing business environment—Companies continue to experience downsizing and restructuring, and the portability provided by hybrid plans is highly valued by both employees and employers in such an environment. Competition within an industry also forces employers to reconsider their retirement plans. Under a traditional defined benefit plan, an employee displaced by downsizing who works the last 15–20

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years of his career with the same employer will not be able to accumulate as great a benefit as could have been accumulated if the employee had been able to stay at his or her original employer for 30 years. Some hybrids (e.g., pension equity) are a partial answer to the downsizing dilemma because they promote an even distribution of wealth accumulation over an employee's career. The significance of hybrid plans may not be accurately represented by the number of such plans; perhaps the significance of the hybrid revolution is more apparent if one focuses on the types of organizations that have chosen to implement these plans rather than on the number of such plans. The types of organizations adopting such plans may be more indicative of their future. For example, companies such as Bank of America, BellSouth, and Ameritech have been attracted to these plans for the reasons noted in the section on EBRI hybrid survey results. The world of employee benefits has witnessed a natural evolution of defined contribution plans (especially 401(k) plans), and for the first time employers have the opportunity to examine the success of these plans. For this reason, the present is a very appropriate time for employers to reevaluate their benefit programs. Are programs, as currently structured, producing the acceptable amount of benefits? Can the programs be scaled back and still provide a benefit that the employer feels is sufficient? Are the current programs not providing enough benefits?

The world within which employers and employees operate is continually reshaped by changes in economic goals, management philosophy, employee demographics, technology, and globalization. Employers are challenged to maintain a coherent and consistent human resources strategy that complements the organization’s goals in an environment with an unprecedented magnitude and pace of change. Change presents opportunity. Benefits professionals have the opportunity to create new and dynamic programs that reflect the fundamental changes taking place in the business environment and meet the needs of an increasingly diverse work force. To the degree government rules and regulations permit, the consultants and attorneys designing retirement plans are limited only by their imagination. Keep a watchful eye on the new tax reform debate, however, as the game could change significantly as we enter the new millennium.
Bibliography


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ISSN: 0887-137X 0887-137X/90 $.50 +.50