10. Cash Balance Pension Plans and Other Hybrid Retirement Plans

Introduction

An increasing number of employers have been offering retirement plans that combine features of both defined benefit and defined contribution plans. There are a variety of these plans, called hybrid plans, the most well-known of which is the cash balance plan. Other hybrid plans (including pension equity, life cycle, floor-offset, age-weighted profit-sharing, new comparability profit sharing, and target benefit) are discussed briefly at the end of this chapter.

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 profit-sharing, 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.

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. Data from the Bureau of Labor Statistics indicate that 3 percent of full-time defined benefit plan participants in medium and large private establishments had the cash account method of determining retirement payments in 1993 (U.S. Department of Labor, 1994).

A cash balance plan is a defined benefit plan that bears a close resemblance to a defined contribution plan. (For more information on pension plans, see chapter 4.) Each participant has an account that is credited with a dollar amount that resembles an employer contribution and is generally determined as a percentage of pay. Each participant’s account is also credited with interest. The plan usually provides benefits in the form of a lump-sum distribution or annuity.

Despite the similarities to a defined contribution plan, a cash balance plan is actually quite different because it defines future pension benefits, not employer contributions. Each account expresses the current lump-sum value of the participant’s accrued benefit; in so doing, the account is merely a bookkeeping device and does not relate directly to plan assets. Similarly, employer contributions are based on actuarial valuations, so they may be less than the sum of the additions to participants’ accounts. Finally, interest is credited at a rate specified in the plan and is unrelated to the investment earnings of the employer’s pension trust.

Benefits—

• Credits to Accounts—The annual benefit accrual in a cash balance plan is expressed as a lump-sum amount and is added to each participant’s account balance. This cash balance credit 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.¹ 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.

**Transitional Benefits**—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 (a career average defined benefit plan) is such that benefits accrue at a faster rate early in the career and at a lower rate later in the career, when compared with a final average defined benefit plan.² Without the grandfather provision, older and/or longer service employees could lose benefits due to the conversion. In addition, most cash balance plans do not have subsidized early retirement benefits, whereas defined benefit plans often have this feature, so grandfathering employees who are nearing retirement may be necessary or these benefits would be lost.

**Investment of Assets**—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. The sponsor promises to credit each participant’s account with the interest rate specified in the plan 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.

**Sec. 415 Limits**—Cash balance plan benefits are limited by Internal Revenue Code (IRC) sec. 415 in the same manner as any other defined benefit plan (see chapter 4 on pension plans). These limits are applied to the annuity equivalent of the cash balance account, not—as in a defined contribution plan—to the annual addition to the account.

**Minimum Standards**—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, vesting, and funding. (These standards are described in detail in chapter 3 on ERISA.) The following discussion addresses areas specific to cash balance plans.

**Vesting**—Like other qualified retirement plans, a cash balance plan is required to meet ERISA’s minimum vesting requirements of full vesting after five years (cliff) or graded vesting over years three through seven. Many cash balance plans provide earlier vesting than other defined benefit plans, which often only provide the minimum required vesting schedule. Usually cash balance plans provide cliff vesting rather than graded vesting.

**Funding**—Minimum funding requirements apply to cash balance plans in the same manner as for other defined benefit plans (i.e., the normal cost plus amounts required to amortize any unfunded accrued liability over a period of years, subject to the full-funding limit). (See chapter 4 for a detailed discussion of pension funding.)
**Distributions**—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 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 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 benefit to continue to grow with investment earnings. 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.

The usual joint and survivor and preretirement survivor requirements apply to cash balance plans. (For further discussion of these requirements, see chapter 4 on pension plans.) Thus, in general, benefits for a participant with an eligible spouse must be paid in the form of a qualified joint and survivor annuity unless the participant and spouse elect otherwise. The preretirement survivor annuity requirements apply to cash balance plans in the same manner as to other defined benefit plans. However, almost all cash balance plans go beyond the minimum requirements and pay the full account balance in the event of the employee’s death.

**Loans**—Loans to participants are permitted under cash balance plans, but as a practical matter may be complicated to administer—just as with other defined benefit plans. Under a defined contribution plan, when a distribution is made, the loan can be automatically paid off, but under a defined benefit plan, if the participant elects a monthly annuity, there is no way to assure repayment of the loan.

**Plan Termination Insurance**—Like any defined benefit plan, a cash balance plan is subject to plan termination insurance and must pay annual premiums to the Pension Benefit Guaranty Corporation (PBGC). Also, as with other defined benefit plans, a cash balance plan may be terminated only if plan assets are sufficient to cover all benefit liabilities (i.e., all accrued benefits), unless the employer is in distress.

On standard termination of a cash balance plan, all participant accounts vest to the extent funded, and plan assets are allocated among plan participants. If the plan has residual assets, these may be used to provide additional benefits or may revert to the employer, whichever the plan provides.

If plan assets are less than the sum of account balances (either because plan assets declined in value or because the employer contributed less than the sum of the additions to individual accounts), the plan can terminate only in a distress situation. Several areas remain unclear, including how, under a distress termination, the PBGC would determine guaranteed benefits, allocate plan assets, and value benefit liabilities. (See chapter 3 on ERISA for more information about plan termination insurance.)

**Comparison with Defined Contribution Plans**—A cash balance plan is similar in many ways to a defined contribution plan, particularly a money purchase plan or a profit-sharing plan, under which the employer contributes at a fixed rate. An employer’s cost under a cash balance plan is typically lower than the cost under a defined contribution money purchase plan with the same level of additions to participant accounts, because the actuary may anticipate both forfeitures and investment earnings in excess of the rates to be
credited to account balances. To the extent experience differs from the actuarial assumptions, future contributions to a cash balance plan will be adjusted, which may lead to more cost volatility. The employer’s pension expense must be determined in accordance with the Financial Accounting Standards Board’s accounting rules for all defined benefit plans. (See Allen et al., 1992, for a detailed explanation of these rules.) If a defined contribution plan is qualified as a profit-sharing plan, elective salary deferrals are permissible under IRC sec. 401(k), but this is not permitted under a cash balance plan.

A defined contribution plan is not subject to PBGC premiums and plan termination insurance provisions. Because all benefits are always fully funded under a defined contribution plan, plan termination insurance is not needed. Under a cash balance plan, as in a defined benefit plan, it is possible for participants to lose part of their accrued benefits on plan termination in spite of the plan termination insurance.

A cash balance plan will generally be less difficult and expensive to administer than a defined contribution plan. Account recordkeeping is much simpler under a cash balance plan because there is no need to reconcile account balances with trust assets, and there are typically no employee contributions, loans, withdrawals, or fund transfers. However, an actuarial valuation is required. Defined contribution plans and cash balance plans are attractive to younger, shorter service employees, who generally find the accounts concept attractive and who may have little interest in retirement or in a traditional defined benefit plan.

Annuities can be paid directly from the trust of a cash balance plan and are generally larger than the policies employees could obtain from an insurance company themselves using their account balances. Under a defined contribution plan, an employee wishing an annuity must have his or her balance transferred to an insurance company.

Comparison with Defined Benefit Plans—Under a typical defined benefit plan, two employees with equal pay but differing ages will earn the same amount of retirement income for each year of service. Because the money invested for a younger employee can grow with interest for many more years than that invested for an employee close to retirement, the cost of funding the pension earned for a younger employee is less than that for an older employee. For employees who terminate employment at younger ages, both the accrued benefits and the costs are low. The lower benefits are likely one of the reasons younger employees place low value on traditional defined benefit plans.

Traditional pension plan benefit formulas are oriented to the total retirement benefit, taking retirement age and length of service into account. In contrast, cash balance plans emphasize annual accumulations and may therefore not be as flexible as traditional plans in providing specified levels of retirement income.

A cash balance plan may be more difficult and costly to administer than a traditional defined benefit plan. Records of plan accounts must be kept. In practice, the cost may be more or less than a traditional defined benefit plan, depending on the number of employees, plan design, and data processing facilities.

Pension Equity Plans

Pension equity plans first became widely known when RJR Nabisco implemented one in 1993. Both cash balance and pension equity 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. For each year worked under a pension equity plan, employees are credited with a percentage that will be applied to their final average
earnings. As an employee ages or as an employee’s years of service increase, the percentage earned increases. Organizations may also choose to apply additional percentages to earnings above a threshold amount to provide an additional benefit for the portion of pay not eligible for Social Security benefits. On termination of employment or retirement, most employers allow employees to receive a lump-sum benefit that is equal to final average earnings multiplied by the sum of the percentages earned during a career (since lump-sum distributions do not guarantee that retirees will have continuing retirement benefits, some employers offer only annuities). Employees can take the lump sum as cash, convert it to an annuity under the plan, or roll it over into either an IRA or another employer’s retirement plan.

**Life Cycle Pension Plans and Retirement Bonus Plans**

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. 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 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 transition credits 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 based on final average pay (rather than career average pay), enabling it to provide protection against inflation and to recognize the accelerated earnings of fast-track employees. The necessity of recordkeeping to account for individual account balances is eliminated.

**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 (which may take into account age, service, and/or compensation) to establish a minimum benefit level that is dependent on 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. 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, although the defined contribution portion of a floor-offset plan is often a standard profit-sharing plan. The defined benefit formula is unrestricted. The investment risk in a floor-offset plan is usually borne by the employer; i.e., the employer is typically responsible for the investment of assets in both the defined benefit
and defined contribution plans. According to Robinson and Small (1993), the majority of firms with floor plans in 1993 had between 5,000 and 20,000 employees. Such plans typically provided a floor benefit for a career employee of between 40 percent and 60 percent of preretirement compensation.

**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. All of the basic requirements that apply to regular profit-sharing plans also apply to age-weighted profit-sharing plans.

**New Comparability Profit-Sharing Plans**

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. 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 the IRC sec. 410(b) minimum coverage test, the allocation as a whole passes the IRC sec. 401(a)(4) general test. New comparability plans usually require annual testing and are very sensitive to employee demographics.

**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. 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. 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. 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. 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 what was assumed, the employer is not obligated to provide funding that will restore the balance to the targeted level. The accounts may provide for several investment options and for both fixed and variable annuities, and benefits may vary substantially among similar participants. 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. U.S. Department of Labor data indicate that in 1992, there were 219,000 participants (202,000 active) in 10,137 target benefit plans (U.S. Department of Labor, 1996).

Conclusion

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.

Bibliography


Additional Information

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Integration is a feature of some qualified retirement plans that coordinates plan benefits or contributions with Social Security. (For more information on pension plan integration, see chapter 13.)

For a discussion of career-average and final-average defined benefit plan formulas, see chapter 5 on defined benefit and defined contribution plans.

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

According to Geisel (1995), about 15 employers have set up pension equity plans.

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

Also known as mobility bonus pension plans.

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.

For more information on adjusted equivalent accrual rates, see Grubbs (1994).

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 et al. (1994).

A money purchase pension plan is a type of defined contribution plan under which employer contributions are usually determined as a fixed percentage of pay. The benefits for each employee are the amounts that can be provided by the sums contributed to his or her account plus income from investment gains. Forfeitures for separation of service prior to full vesting can be used to reduce the employer’s contributions or be reallocated among remaining employees.