Introduction

The AICPA Employee Benefit Plan Audit Quality Center has developed this primer to provide Center members with a general understanding of cash balance plans. This document provides information about the nature and characteristics of cash balance plans, references to the relevant accounting and auditing professional literature, and information about other helpful resources.

Cash Balance Plans

Cash balance plans are defined benefit pension plans that embody some characteristics of defined contribution pension plans.

A cash balance plan is a type of defined benefit pension plan that, like a traditional defined benefit pension plan, offers participants a specified benefit at retirement. However, the benefit calculation for a cash balance plan generally is much simpler, which makes the costs of those plans much easier to manage.

The simplicity of these plans appeals to companies establishing new retirement programs. Additionally, because the Pension Protection Act of 2006 established rules for converting traditional defined benefit pension plans to cash balance plans — effectively eliminating legal uncertainties about the viability of such plans — many companies likely will convert their traditional plans to cash balance plans due to the simplicity of the benefit calculation, the opportunity they provide plan sponsors to contain pension expense, and the ease with which participants can understand their benefits. Such a conversion would allow those employers to continue to offer their employees a defined benefit pension option, while more effectively managing pension costs.

Cash balance plans are often referred to as hybrid defined benefit pension plans because they embody some characteristics of both defined benefit pension plans and defined contribution pension plans. The benefit provided by such plans is based on a specified percentage of current earnings with a guaranteed rate of interest. The employer makes a required annual contribution, and adjusts for any difference between the guaranteed return and the actual return on the funds.

Employers may favor cash balance plans because the annual pension expense is easily calculated and the costs are more controllable than with a defined benefit pension plan. Cash balance plans eliminate many of the uncertainties due to changes in the economic environment and population demographics from year to year.

These plans are also popular with younger employees because the benefits are quantifiable, relatively easy to understand, and accrue at a faster rate than do the benefits associated with a traditional defined benefit pension plan. (Under traditional plans, the benefit is based on years of service and final average salary, which both are difficult to anticipate early in a career.)

Additionally, in a mobile work environment where employees tend to change employers more often than in years past, vested accrued benefits in a cash balance plan are paid to the terminated employee and can be rolled into an IRA or 401(k) plan, while most traditional defined benefit plans do not allow cash-out options.
Cash Balance Plans vs. Traditional Defined Benefit Pension Plans

*While cash balance plans are defined benefit pension plans, the benefit calculation is unique.*

Cash balance plans are similar in many ways to traditional defined benefit pension plans. Like those plans, cash balance plans typically are funded by the employer in a lump sum amount, without allocations to individual participant accounts. The investment risk is borne by the employer rather than by the employee. And because cash balance plans are considered to be defined benefit plans, they are subject to the same rules as traditional defined benefit pension plans. For example, actuarial valuations are required for determining annual plan funding. Cash balance plans must offer an annuity at retirement like a defined benefit pension plan; most plans offer a lump sum distribution option as well. The amount needed to fund a cash balance plan is determined by actuaries. And these plans are insured, within certain limitations, by the Pension Benefit Guarantee Corporation.

The primary difference between a cash balance plan and a traditional defined benefit pension plan is the method used to calculate benefits. In traditional plans, the benefit is calculated based on estimated future earnings, expressed as a percentage (based on years of service) of the average of some finite number of years (typically final years of service). As such, the funding amounts are determined by actuaries based on anticipated employee demographics and years of service. In a cash balance plan, however, the benefit is calculated as a percentage of current earnings plus an annual interest accrual. As a result, the benefit formula for a cash balance plan generally is much simpler and understandable than for a traditional plan.

Cash Balance Plans vs. Defined Contribution Pension Plans

*Certain aspects of cash balance plans are similar to defined contribution pension plans.*

Cash balance plans share some features of defined contribution pension plans. As in a defined contribution pension plan, cash balance plan contributions are based on current earnings rather than future earnings. Each individual employee has a hypothetical account balance equaling the accumulated promised benefit plus interest accrued. And although cash balance plans must offer an annuity upon termination, in accordance with applicable vesting rules employees typically can roll these funds over into other retirement accounts via a lump sum distribution.

Unlike defined contribution pension plans, employers are not required to segregate funds into individual participant accounts. Cash balance plans generally are funded entirely by the employer, whereas defined contribution pension plans generally are funded fully or in part by the employee. Additionally, the employees have no control over where the funds are invested. The employer guarantees an interest rate and selects the investment portfolio — which may include any combination of stocks, bonds, money market accounts, or other investments — maintained to achieve that return. Any earnings in excess of the guaranteed rate can be used by the plan to offset employer contributions. Likewise, any shortfall in earnings must be made up by the employer, whereas in a defined contribution pension plan, the employee bears all risk of the investment return.
Guaranteed Interest Rate

The guaranteed interest rate is the rate of return earned by plan participant.

The guaranteed interest rate is the rate stipulated by the plan document that the participants will receive. The guaranteed interest rate may be modified prospectively, as long as there are no reductions in the participants’ benefits accrued to date. Generally, this rate will either be fixed or will vary in accordance with a stated index, such as the one-year Treasury bill (T-bill) rate.

Some plans will guarantee a minimum interest rate (for example, the plan document states that the plan will earn interest based on the T-bill rate, but in no instance will the plan earn less than 4%). Under this scenario, if the T-bill rate falls below 4%, the plan sponsor has agreed to pay the difference between the T-bill rate and 4%. The plan sponsor may use earnings in excess of the T-bill rate to reduce plan expenses or offset future contributions. However, if the T-bill rate exceeds 4%, the plan sponsor would be prohibited from using excess earnings that are greater than 4% but less than the T-bill rate to reduce plan expenses or offset future contributions.

Accumulated Plan Benefits and Plan Funding

The accumulated plan benefits and plan funding amount are based on an annual actuarial valuation.

Because cash balance plans are a type of defined benefit pension plan, they must meet the same regulatory requirements as traditional plans, including the requirement to obtain an annual actuarial valuation. This valuation is used to determine the total plan benefit obligation, and serves as the basis for calculating the plan funding requirements, the amount of variable premium owed to the PBGC, information that will be disclosed in the employer's financial statements, and information to be included in the plan's Statement of Accumulated Plan Benefits and Statement of Changes in Accumulated Plan Benefits.

As with a traditional plan, the actuary will calculate the projected benefit at retirement based on the following factors:

- Formula for the annual contribution (i.e., percentage of salary)
- Future salary increases
- Employee turnover
- Type of payout (i.e., lump sum distribution vs. annuity)
- Mortality rate

In addition, the actuary will consider the guaranteed interest credit in performing the calculation for a cash balance plan. Once the total plan obligation is determined, the actuary will use a discount rate to calculate the present value of the plan's benefit obligation. The minimum and maximum funding requirements are then calculated based on the cost method selected. Employers can contribute any amount within this range.

Participant Accumulated Benefit

Cash balance plans do not actually maintain individual participant accounts.

Under a cash balance plan, a participant's accumulated benefit is calculated based on a hypothetical account, which is credited on an annual basis with a pay credit or “promised benefit” and a guaranteed
interest rate credit (either a fixed rate or a variable rate that is linked to an index). This promised benefit is typically calculated by taking a predetermined percentage of the employee’s annual salary. The percentage may be tied to years of service (for example, 3% for less than 5 years of service, 5% for 5 to 10 years of service, and 7% for more than 10 years of service), or some other factor.

In calculating the hypothetical account balance, the pay credit typically is assumed to be paid at the end of a plan year, with the interest component calculated as the end-of-year balance, prior to current year pay credit, times the applicable guaranteed interest rate. If the accumulated asset balance in the plan is less than the aggregate participant account balances (total beginning account balance plus interest earned and the current year contribution) the employer is responsible for the difference.

In actuality, separate participant account balances are not maintained, and increases and decreases in the value of the plan’s investments do not directly affect the participant’s accumulated benefit. Thus, the investment risks and rewards are born solely by the employer. When a participant terminates employment - either through resignation or retirement - the benefit they are entitled to is the vested amount in the participant’s hypothetical account balance on the termination date.

The exhibit below illustrates a simplified participant cash balance account over a 10 year period. If the employee left at the end of a service year, he or she would be entitled to that year’s ending balance, assuming all employer contributions are 100% vested.

**Exhibit**

*Illustrative Individual Participant Accumulated Benefit.*

**Assumptions:**
- **Pay increases:** 5% each year
- **Employer Contribution:** 5%, made at end of each service year
- **Guaranteed Interest Rate:** 7%, reinvested at beginning of each service year

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<th>5% Employer Contribution (Pay credit)</th>
<th>7% Annual Interest Rate (Interest credit)</th>
<th>Ending Participant Accumulated Benefit</th>
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Plan Conversions

*The Pension Protection Act of 2006 gave Plan Sponsors the ability to convert their traditional defined benefit pension plans to cash balance plans without worry of age-discrimination lawsuits.*

Despite their relative popularity, cash balance plans are not embraced by all employee groups. Converting from a traditional defined benefit pension plan to a cash balance plan actually may result in a reduction of future benefits for older workers.

As noted above, cash balance plans generally are more favorable to the younger employees, as their benefits are based on the average earnings over their entire career at the employer and vested benefits are portable. Alternatively, a conversion tends to penalize older workers with many years of service: while ERISA does not permit an employer to eliminate any accrued benefits to an employee, the individual’s future benefits may be reduced in the conversion.

Much of the past controversy surrounding these conversions was attributable to the transition to the new plan. The most controversial method—the wearaway—allowed the plan sponsor to contribute to a participant’s hypothetical account only when the accrued benefits under the new plan exceeded the accrued benefits under the traditional defined benefit plan. This resulted in some employees—typically senior employees—not receiving any additional retirement benefits for a number of years. The Pension Protection Act of 2006 has disallowed this method for conversions, and has stated that for plan amendments adopted after June 29, 2005, the accrued benefit of any individual who was a participant immediately before the adoption of the amendment is not less than the sum of (1) the participant’s accrued benefit for years of service before the effective date of the amendment, determined under the terms of the plan as in effect before the amendment; plus (2) the participant’s accrued benefit for years of service after the effective date of the amendment, determined under the terms of the plan as in effect after the terms of the amendment.

In converting a traditional plan to a cash balance plan, employers may offer the following options:

- Convert all employees to the new plan.
- Allow either a specific sector of the employee population (for example, employees with 15 years of service or more) or all currently participating employees to choose between participating in the old plan or converting to the new plan.
- Allow a transition period to the new plan for specific employees (for example, employees with 15 plus years of service or more will continue in the old plan for 5 additional years before being converted to the new plan).
- Convert all employees to the new plan but give additional credits to more senior employees.

Upon conversion, the employer would establish an opening account balance for each plan participant by calculating the lump-sum present value of each participant’s accrued annuity benefit under the traditional defined benefit formula. This account increases each year by a percentage of the participant’s salary plus the annual interest credit.
References to Auditing and Accounting Literature

Please refer to the auditing literature for discussions of audit objectives, planning and procedures related to cash balance plans. Please refer to the accounting literature for more detailed information on accounting for and reporting by cash balance plans.

**AICPA Audit and Accounting Guide, Employee Benefit Plans** discusses aspects of a cash balance plan audit, including audit objectives, planning and auditing procedures.

**Financial Accounting Standards Board (FASB) Accounting Standards Codification™ (ASC) section 960, Plan Accounting—Defined Benefit Pension Plans** provides accounting and reporting guidance for cash balance plans.

**Resources**

Additional information about cash balance plans:

- **Cash Balance Plans Questions & Answers**, a publication by the U.S. Department of Labor
- **Benefits in the News, Retirement Plans — Cash Balance, Hybrid, Benefits Link Web site**
- **Pension Protection Act of 2006, Title VII**
  Technical analysis prepared by the staff of the Joint Committee on Taxation: *Technical Explanation of H.R. 4, the “Pension Protection Act of 2006,” as Passed by the House on July 28, 2006, and as Considered by the Senate on August 3, 2006 (JCX-38-06)*, pages 150 to 158
- EBPAQC's **Pension Protection Act of 2006 Summary of Key Provisions**

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