

# How to Design and Implement a Cash Balance Plan

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The Pension Protection Act of 2006 (PPA 2006) reopened the door for a type of defined benefit plan called a cash balance plan. The Act clarifies that cash balance accruals in a defined benefit plan are not age discriminatory. Successful litigation against cash balance plan sponsors and hesitation on the part of the IRS to endorse cash balance plan features in defined benefit plan documents scared many plan sponsors away from adopting cash balance provisions until now. Since the Act was passed, higher courts have overturned many of the prior decisions made against cash balance plan sponsors and the IRS has begun to review cash balance provisions and provide determination letters.

### **What is a Cash Balance Plan?**

A cash balance plan is a defined benefit plan which contains a defined contribution-like accrual for some or all of the participants in the plan. Participants covered by the cash balance feature of the plan earn pay credits and interest credits which accumulate in a “hypothetical” cash balance account. When the participant leaves employment, they are entitled to the accumulation of their cash balance account, or any number of equivalent annuity options. To the participant, it looks and feels like a defined contribution plan.

The participant’s account is hypothetical because contributions are not invested directly in individual accounts. It is a defined benefit plan. The assets of the plan are pooled in one single fund and invested by the plan’s trustees. The individual hypothetical accounts are kept track of like any other defined benefit accrual. The sum of the individual accounts may be higher or lower than the plan’s assets at any given point in time. Flexibility in how and when the sponsor funds the plan can provide significant advantages over a traditional defined contribution plan.

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### Who should consider a Cash Balance Plan?

Small employers who are concerned about the long term costs of their defined benefit plan but do not want to cut back benefits for current employees will often convert their plan to a cash balance plan. They may continue to provide the traditional defined benefit accruals for some or all of the existing employees and provide cash balance accruals for all others including new employees. Even though there are two separate accrual formulas in the plan, it is still considered just one single plan.

Some employers may wish to freeze the defined benefit plan to new employees. They would preserve the defined benefit plan for existing employees and provide new employees with a profit sharing contribution or enhanced 401(k) match instead. Unfortunately, they would run into problems. Internal Revenue Code requires that all defined benefit plans that benefit at least one highly compensated employee must benefit at least 50 employees (or 40% of all nonexcludable employees of the employer, if less) at all times. With normal turnover and retirements, a small employer who freezes their plan to new employees will find that they soon run afoul of these rules.

By keeping new employees in the plan but giving them a cash balance accrual, an employer can achieve the same results as freezing the plan without risking failure of the participation and nondiscrimination tests. All employees continue to benefit under the defined benefit plan, albeit under a separate accrual formula.

Large employers (those with more than 500 employees) and small employers who will never have a highly compensated employee may be able to freeze their plan to new employees without encountering the problems discussed above. Highly compensated employees are generally officers who earn more than \$100,000 (indexed with inflation).

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## Designing the plan

Because a cash balance plan is a defined benefit plan, the cash balance features of the plan can be combined with traditional defined benefit features to preserve promised benefits for selected participants. Several key decisions have to be made when designing a cash balance feature in a defined benefit plan:

- Who should be grandfathered under the traditional defined benefit formula?
- What level of pay credits should be provided?
- What interest rate should be credited?
- What other provisions of the plan should be changed?
- How should the plan be funded and invested?

## Grandfathered Participants

Cash balance plans are usually converted from traditional defined benefit plans. Participants selected to continue to earn benefits under the prior defined benefit formula are called “grandfathered” participants. Any reasonable classification of employees can be used to define a grandfathered participant. Usually grandfathered participants are selected based on age and/or service. As long as the benefits can be determined to be nondiscriminatory on the basis of compensation, any criteria can be used.

Grandfathered participants will not have a cash balance account. Their entire benefit will be provided under the defined benefit formula. The IRS has recently raised objections concerning cash balance plans that define the benefit payable as the greater of the defined benefit formula or the cash balance account, stating that such plans violate the accrual rules under the Internal Revenue Code, unless certain restrictions are imposed. The IRS’s position has come under fire by employee benefits organizations and employer groups who have called upon Congress to legislatively resolve this issue. To date, these efforts seem to be working, but no formal resolution to this problem has yet been reached.

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Participants who are not grandfathered participants will earn benefits under the cash balance features of the plan. The cash balance account begins at zero on the conversion date. Pay credits and interest credits are added to the account beginning in the year following the conversion date. Benefits earned prior to the conversion under the defined benefit formula are paid in addition to the cash balance account after the participant leaves employment.

When deciding who to grandfather, you should consider that some participants may actually prefer a cash balance accrual. These would normally be younger employees who do not see significant defined benefit accruals.

### **Pay Credits**

The cash balance features of the plan can be designed with as much, or more, creativity as a profit sharing plan. However, it is common to keep the design of the pay credits simple. Pay credits are usually defined as a single percentage of pay which applies to all non-grandfathered participants in the plan. The percentage that you choose must provide a meaningful benefit. The IRS has not provided specific guidance on what constitutes a meaningful benefit; however, three percent of pay is usually considered the minimum pay credits that can be provided.

To be eligible to receive pay credits, a participant will usually be required to earn a year of service as defined by the plan. That normally requires at least 1000 hours of service in a plan year. The pay credit percentage is applied to the actual pay a person receives during the year. A participant who works 1000 hours in a plan year and then terminates employment will earn a pay credit for that plan year based on the actual pay they received up to the termination date.

When deciding how high to set the pay credits, consideration should be given to not only your budget, but the adequacy of the benefit that the participant will earn if they work until retirement. The table below shows the replacement ratio of different levels of pay credits. The replacement ratio is the percentage of a person's income at retirement that will be replaced by the benefits provided by the cash balance accumulation if they convert it to a monthly annuity.

Age at hire	Cash Balance Pay Credits		
	3%	5%	7%
20	21%	35%	48%
30	15%	24%	34%
40	9%	16%	22%
50	5%	8%	12%

*Assumed interest credits: 6%*  
*Assumed salary increases: 4%*  
*Assumed retirement age: 65*

In other words, an employee who joins the plan at age 20 and works 45 years will receive only 21% of his income from the cash balance accumulation when he retires if the plan provides only 3% pay credits. If you are also providing a 401(k) plan with a match, that may be enough, but by itself, it may not provide an adequate benefit.

### Interest Credits

Interest credited to the cash balance account is defined by the plan. It must be the same rate for all participants in the plan and must generally be less than a “market rate of return.” The “market rate of return” maximum on the interest credit has not yet been defined by the IRS. Interest credits can be negative, but interest credits cannot cause the cash balance account to fall below the sum of all prior pay credits.

Normally, plans are defined to base interest credits on a common investment index. It is common for plans to specify that the interest credit rate is equal to the “applicable interest rate” used to determine lump sums under the defined benefit portion of the plan. This technique is used to prevent the “whipsaw” effect. The whipsaw effect is an actuarial phenomenon by which the cash balance account is converted to a monthly benefit at one rate and then converted back to a lump sum at a lower rate causing the lump sum benefit to be greater than the cash balance account.

Interest is credited on pay credits from the first day of the plan year even though the pay credit is not earned until the participant works 1000 hours.

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## Vesting and other provisions

A provision of the Pension Protection Act of 2006 requires defined benefit plan with cash balance accounts to **provide full vesting after three years of service**. If the current vesting schedule of the plan does not provide for 100% vesting after three years, the vesting schedule will have to be changed. Changing the vesting schedule is not usually a costly change.

Benefits provided by cash balance provisions can usually be taken as **lump sum** distributions. Since the benefits are accrued as a lump sum and communicated to employees as lump sums, it would be awkward if the plan did not allow them to be paid as lump sums. It's not uncommon for traditional defined benefit plans to not allow participants to take their benefits in a lump sum. However, it may seem unfair to allow some employees to take lump sums and not others. If a defined benefit plan does not allow for lump sums, it is usually amended to allow for lump sums when it is converted to a cash balance plan.

**Death benefits** in cash balance plans are usually based on the full value of the cash balance account like it is in a 401(k) plan. In defined benefit plans, the minimum required benefit payable in the event of death is only the 50% survivor portion of the plan. It would seem odd to take away half of a participant's cash balance account when they die. Again, in order to maintain consistent benefits for all employees, defined benefit plans that offer only the minimum required death benefit are usually amended upon conversion to a cash balance plan.

## Funding a Cash Balance Plan

The sponsor retains all control over the funding and investment of the plan. The sponsor can choose to invest more aggressively and reduce costs or remain conservative and try to match the interest credits being provided to each participant. The decision of how to invest the assets of the plan should take into account the sponsor's investment philosophy and the characteristics of the plan. An investment advisor should be consulted on a regular basis when setting and monitoring the investment policy.

The sponsor can choose to pre-fund the plan and allow investment earnings to pay for the plan's benefits. The plan is still covered by the accounting rules which apply to defined benefit plans. Any excess assets in the plan are assets on the sponsor's balance sheet. The expense of the plan is determined by the cost of the benefit accruals less the expected investment return. The cost of benefit accruals for participants earning cash balance accruals is roughly equal to their pay credits plus interest credits in a given year.

Cash Balance Account		Assets	
Beginning of Year	\$90,000	Beginning of Year	\$200,000
Pay Credits (5% of pay)	\$10,000	Contributions	\$0
Interest Credits (6%)	\$6,000	Investment Earnings (8%)	\$16,000
End of Year	\$106,000	End of Year	\$216,000

The expected investment earnings on the assets equal the sum of the pay credits and the interest credits in the cash balance account resulting in a net pension expense of zero. The sponsor's balance sheet will show an asset of \$110,000 at both the beginning and the end of the year.

Pre-funding should be limited to maximum deductible contribution limits, if applicable. Some credit unions may be subject to the maximum deductible contribution limits even though they are tax-exempt organizations.

### Implementing a cash balance conversion

A cash balance conversion requires an amendment to the defined benefit plan. Because of the numerous provisions required to be added to the plan by the cash balance feature, the plan will normally have to be completely restated. In addition, if you do not grandfather all existing participants, you will have to provide a 45 day notice (15 days for plans with less than 100 participants).

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The list below shows some of the key steps required to implement a cash balance conversion:

- choose group to be grandfathered,
- choose level of pay credits,
- make decisions with regard to vesting, lump sum and death benefits, if necessary,
- notify non-grandfathered participants, and
- review and sign the restated plan document.

An annual valuation will continue to be performed; one 5500 form will be prepared and accounting under FAS 158 will continue. From that perspective, it is business as usual as if the plan were never changed.

Each year after the conversion, a benefit statement will be provided to each cash balance participant to show the pay credits, interest credits and total balance in their cash balance account. In addition, the statement will show a projection of their balance and the benefits that the cash balance account may provide at retirement. Grandfathered participants will continue to receive their usual defined benefit statement.

One differentiation you will want to seriously consider is that your program sits in a credit union. Think about how you can leverage the credit union's brand to support your own.

## Conclusion

Sponsoring a defined benefit plan has become a challenge due to the unusual economic environment experienced in the early part of this century. Although they understand the value which the defined benefit plan has for their employees, sponsors of such plans have been looking for alternatives. The cash balance option is a viable option for employers who wish to transition to a plan that has "defined contribution" features but do not want to put the retirement income of their older employees in jeopardy. The Pension Protection Act of 2006 has reopened the door for this option.

If you wish to explore the option of converting your defined benefit plan to a cash balance plan, please send an email to the **Retirement Service Center** at [prc\\_mail@cunamutual.com](mailto:prc_mail@cunamutual.com).

**About the author:**

**Ken Newhouse** is is director of Enrolled Actuary Services at CUNA Mutual Group. His primary responsibility involves the certification of annual valuation work performed for defined benefit plans, sponsored by credit unions. Newhouse also oversees the processing of benefit calculations and payouts for defined benefit plans.

Prior to joining CUNA Mutual Group in 1994, Newhouse worked for Milliman and Robertson, an actuarial consulting firm. He has more than 26 years of experience as an employee benefits actuary and has worked with many types of retirement programs.

Newhouse earned a bachelor's degree in mathematics from the University of Wisconsin-Milwaukee.

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