



# Cash Balance Primer

## A Primer on Cash Balance Plans

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## A Primer on Cash Balance Plans

Cash Balance Plans have enjoyed a recent resurgence in popularity. However, these plans, which can provide tax-deductible benefits as much as five times greater than 401(k) profit sharing plans, have actually existed for more than 30 years. When the Pension Protection Act of 2006 (PPA) resolved much of the legal uncertainty of these plans, small and large companies alike showed a renewed interest. According to a recent research report, more than 75% of existing Cash Balance Plans are sponsored by companies with fewer than 50 employees.

### What is a Cash Balance Plan?

Before answering this question, some general background information helps put the discussion in context. A defined contribution (DC) plan, such as a 401(k) profit sharing plan, dictates the contributions that go into the plan each year. Contributions, which are usually discretionary, include employee salary deferrals, employer matching contributions and employer profit sharing contributions. The maximum amount a participant can receive in a DC plan each year is \$52,000 for those under age 50 as of 12/31/14 and \$57,500 for those age 50 or older. These contributions and the investment returns they generate determine a participant's ultimate retirement benefit.

A defined benefit (DB) plan promises a benefit using a formula that is usually based on compensation and years of service. For example, a DB plan might provide an annual benefit equal to 1% of average compensation for each year of service. If a participant has average compensation of \$65,000 over 10 years with the company, the annual benefit is equal to \$6,500 ( $\$65,000 \times 1\% \times 10$  years of service) for the rest of the participant's life.

Rather than limiting contributions, the IRS limits the maximum annual benefit a DB plan can provide to a participant to \$210,000 per year (2014 Plan Year). The contribution is a function of how much is needed to fund the promised benefits. While there are a number of variables, the following table summarizes the approximate tax-deductible contributions to fund maximum benefits for DB participants of different ages:

Age	Contribution
35	\$30,000
40	\$41,000
45	\$62,000
50	\$94,000
55	\$155,000
60	\$200,000
65	\$250,000

The employer is said to bear the investment risk because the higher the return on investment, the lower the portion of the funding that must come from the company and vice versa. To the extent a DB plan is not fully funded, contributions are generally required each year.

A Cash Balance Plan is a type of plan that is sometimes referred to as a hybrid plan, because it includes both DB and DC characteristics. Cash Balance Plans generally express benefits in the form of contributions much like a DC plan while requiring regular funding of those promised benefits like a DB plan.



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## Contribution Credits

Unlike traditional DB plans that express benefits using a formula that can appear esoteric to the average employee, Cash Balance Plans express benefits using specific contribution crediting rates that could be percentages or flat dollar amounts. For example, the plan might provide for an annual contribution credit equal to \$1,000 per participant or 1% of each participant's compensation.

Similar to a "New Comparability", i.e. "Cross-tested Profit Sharing Plan", a Cash Balance Plan may provide different levels of benefit to different employees. A typical design might provide \$100,000 per year to owners and 2% of compensation to employees. Keep in mind that the plan's benefits must satisfy nondiscrimination testing, so what works in one situation will not necessarily work in all situations.

The contribution credit is added to a notional or hypothetical account for each participant, and he or she can look at a benefit statement to see the incremental increase each year similar to a 401(k) statement.

## Interest Credits

The interest crediting rate is the rate at which the plan guarantees interest on the accumulated contribution credits. The interest is added to each participant's hypothetical account just like the contribution credits.

Sounds simple, right? Believe it or not, there are hundreds of pages of regulations detailing how Cash Balance Plans can and cannot establish interest crediting rates. In a nutshell, these regulations mandate that plans can only use a "market rate of return." Examples of market rates include the 30-year Treasury rate; the interest rate on long-term, investment-grade bonds; a stock market index such as the S&P 500; or the actual rate of return of the plan's investments.

Selecting a rate for a plan is often an issue of risk tolerance. The higher the crediting rate, the higher the benefit over time; however, since the rate must be guaranteed, a higher rate also means higher risk in the event the actual investments do not achieve the guarantee.

One common question is whether losses can be credited if the market rate the plan uses is negative. The answer is "it depends." A plan can credit investment losses to hypothetical accounts, subject to the "preservation of capital rule." This rule provides that crediting losses cannot reduce a participant's hypothetical account to an amount less than the sum of all contribution credits.

Example: Russell is a participant in a Cash Balance Plan that provides annual contribution credits equal to 5% of compensation and interest credits equal to the S&P 500 annual return.

	2007	2008
Russell's Compensation	\$55,000	\$60,000
S&P 500 Annual Return	5.49%	-37.00%

Russell's benefits over this two-year period would be reflected as follows:

	2007	2008
Beginning Balance	\$0	\$2,900
Contribution Credit	2,750	3,000
Interest Credit	150	-150
Ending Balance	\$2,900	\$5,750



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Note that 2008's interest crediting rate of -37% actually yields a loss of \$2,183 ( $\$5,900 \times -37\%$ ). However, the preservation of capital rule only permits the plan to allocate a loss of \$150 in order for Russell's benefit to remain no less than the sum of his contribution credits.

In order to minimize volatility, many plans simply elect to use a flat rate of 5%.

## **Vesting and Payment of Benefits**

PPA requires that Cash Balance Plans provide full vesting after completion of no more than three years of service, so the six-year graded schedule that is common in 401(k) profit sharing plans cannot be utilized. Since Cash Balance Plans are DB plans, they are required to offer joint and survivor annuities as the default form of benefit payment; however, they can also allow participants to take lump sum distributions.

Whereas traditional DB plans require a number of complex calculations to determine the lump sum equivalent of an annuity, a participant's hypothetical account balance in a Cash Balance Plan is deemed to be the lump sum amount. Cash Balance Plans are also permitted to offer in-service distributions when a participant reaches age 62 or older.

## **Funding**

The plan's actuary calculates the required funding based on a number of factors including the amount of the promised benefits that have accumulated for all participants, each participant's proximity to retirement age and participant life expectancy.

Let's go back to our friend Russell and assume he is 30 years old at the end of 2008. The actuary must calculate what Russell's \$5,750 hypothetical account will be worth 35 years later when he reaches the plan's retirement age of 65. Let's assume that projected value is \$28,000. The actuary must then determine how much the employer must contribute now in order to ensure there is \$28,000 available to cover Russell's future benefit. This process is repeated to arrive at an aggregate funding requirement for the plan based on all the variables for all plan participants.

The funding level the actuary calculates is compared to the actual assets in the plan to determine how much more the employer must contribute to keep the plan fully funded. The higher the plan's funding level, the lower the required contribution; and the lower the plan's funding level, the higher the required contribution. Thus, the required contribution for any given year is not necessarily equal to the sum of the contribution credits and the interest credits for that year, and the amount contributed is not earmarked to fund benefits for any specific participant. Rather, it is applied to increase the funded status of the entire plan.

In order to provide added security to the retirement benefits promised by these plans, the PPA established more strict funding requirements. Plans for which the ratio of actual to required funding falls below 80% are prohibited from increasing plan benefits, and the plan's ability to pay lump sum distributions to departing participants is restricted. Plans with a funding ratio below 60% must freeze future benefits and the ability to make lump sum payments is eliminated.

While it might seem obvious that an underfunded plan should freeze future benefits, employers can find themselves in an unenviable position when they must tell former employees seeking benefit distributions that they cannot receive their full benefit due to a funding problem.

## **Investment Accounts**

While most DC plans allow participants to direct the investment of their own accounts, all of the assets in a Cash Balance Plan are generally maintained in a pooled account and invested by the plan trustee(s) or a professional investment



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manager. Since the plan sponsor must guarantee benefits regardless of the actual return on investment, a disciplined investment strategy is necessary. Some will seek to exactly mirror the plan's interest crediting rate so that the plan's investments are generating the exact amount of income needed. Others will seek to generate slightly higher returns to improve the plan's funding ratio and reduce the amount the employer must contribute.

It is suggested that the plan sponsor work together with the actuary and investment manager to determine the most appropriate strategy given the plan design and the sponsor's risk tolerance and cash flow.

## **Other Considerations**

There are several additional points worth noting. First is that like other qualified retirement plans, the assets held in a Cash Balance Plan are protected from the plan sponsor's creditors and legal judgments. This may be particularly advantageous for business owners in higher-risk occupations.

Second, all types of defined benefit plans are generally required to purchase coverage from the Pension Benefit Guaranty Corporation (PBGC). The PBGC insures a portion of the plan's promised benefits in the event the sponsor becomes insolvent and is unable to satisfy its funding obligation. Certain types of employers such as professional organizations, e.g. doctors and attorneys, with fewer than 25 employees are exempt from coverage. While there are a number of factors that impact the cost of PBGC coverage, the flat rate premium for 2014 is generally \$49 per participant.

## **Is a Cash Balance Plan Right For You?**

Cash Balance Plans are powerful tools that can address a variety of planning needs from tax and retirement planning to estate and business succession planning. One of the most important requirements is consistent cash flow. Since annual contributions are generally required, a business that has irregular cash flow could have trouble meeting its funding obligations during slower years, leading to benefit restrictions and excise taxes. In addition, the annual costs of maintaining the plan are typically paid by the plan sponsor and not from the plan itself since any reductions in plan assets will reduce the funded status and require additional contributions.

To maximize the ability to provide greater benefits to a company's key employees, Cash Balance Plans are usually used in conjunction with 401(k) Profit Sharing Plans. However, the stability of the demographic make-up of the workforce is an important variable to be considered when designing the benefit formulas.

## **Summary**

Cash Balance Plans can provide for much larger contributions and tax deductions than 401(k) plans. When used in conjunction with a 401(k) Plan, the older business owners can be benefited greatly at nominal employee costs. These plans sound complicated, but they are very easy to an Enrolled Actuary for small firms so the client need not be too concerned. To employees they are unstandable – they get an annual statement of their account just like statements they get for 401(k) plans (beginning balance plus contributions plus earnings equals ending balance). Cash Balance Plans are very effective for high earning professionals who have relatively stable income such as surgeons, other specialty doctors, accountants, attorneys, engineers, architects, venture capitalists and investment professionals.