



INTEREST CREDITS AND CASH BALANCE PLANS

Cash Balance plans have become an increasingly popular form of tax qualified retirement plan. A Cash Balance plan is a defined benefit plan that looks like a defined contribution plan only with substantially higher contribution limits. In a Cash Balance plan, a hypothetical account balance is established for each participant. Each year this account balance is credited with contribution and interest credits as specified in the plan document. When a participant is entitled to receive a distribution, the amount is equal to the vested balance in the participant's hypothetical account.

On October 18, 2010 the IRS issued both final and additional proposed regulations addressing many aspects of Cash Balance plan operation, including how interest credits may and may not be determined. The regulations permit several interest crediting methodologies, each with wide ranging ramifications. The challenge presented by the regulations is to help prospective cash balance plan sponsors select the methodology that best meets their goals and objectives.

A complete list of the permissible interest crediting methodologies can be found in Exhibit A to this paper. In general, the alternatives fall into the following categories:

1. A fixed rate of not more than 5.0%.
2. A specified bond rate of return such as a specific treasury bill yield or one of the yield curve segments specified for funding calculations.
3. An equity based rate such as the return on an indexed mutual fund (RIC) like the Vanguard 500.
4. The actual return on a diversified investment portfolio.

For any of the alternatives, an annual maximum or reduction may be specified. For the bond rate alternative, an annual minimum of up to 4% may also be specified. For the RIC and actual return alternatives there is no provision for an annual minimum. However, the plan may specify a cumulative minimum at the payout date of up to 3% per year. The mutual fund or diversified investment portfolio options can presumably be equities, fixed income or a mix.

We developed a series of criteria to evaluate the advantages and disadvantages of the possible interest crediting methodologies, both from the viewpoint of what we have observed meet our clients objectives and what complies with applicable law. We eventually narrowed our analysis to three key considerations:

1. **Matching interest credits with actual investment returns.** This allows annual contributions to more closely approximate the annual contribution credits and avoid potential problems that can arise from material over or under funding. This can be accomplished either by designing the investment strategy to match the interest credit rules, or the other way around. For example, if your plan specifies the RIC alternative and you invest plan assets in the same fund as is used to determine the interest credit, your interest credits and actual returns would be exactly matched, except for the effect of any minimums or maximums on the interest credit and the effect of timing of the contributions.
2. **Simplicity of administration.** The potential intricacies of some of the alternatives are likely to lead to higher administration costs and carry greater risk and liability for error. For example, keeping track of the cumulative minimum allowed under the RIC and actual return alternatives introduces a whole new set of recordkeeping challenges and questions.



3. **Compliance testing.** In most Cash Balance plans, the optimum plan design involves setting up multiple contribution tiers, with generally higher contributions for owners and minimal contributions for staff. This kind of design must be tested to insure compliance with many parts of the Internal Revenue Code (IRC), including sections 401(a)(4)-non discrimination, 401(a)(26)-minimum participation, 415-maximum benefit payout, 436 and 401(a)(4) -restrictions on payments of lump sums, 411(b)- accrued benefit requirements and sometimes 416-top heavy minimums.

While the first two considerations may seem more obvious, the third is often paramount, especially when the plan design is bumping into the limits of one or more of the compliance tests, as is often the case. For example, suppose a plan uses alternatives 2, 3 or 4, all of which can produce a crediting rate that varies from one year to the next. The plan may pass non-discrimination testing in year 1 when future interest credits of 5% are assumed. However, suppose the interest credits for year 2 is 7%. When contribution credits are tested assuming 7% future interest credits, the plan may fail and cause the plan sponsor to give additional contribution credits for employees to correct the failure. This kind of uncertainty can be problematic for most plan sponsors.

Taking into account all of the above we expect to recommend one of the following most of the time:

1. **A fixed rate of 5.0%.** Obviously, this is both simple and stable, making it easy for the plan to avoid unpleasant surprises and satisfy required compliance testing. It is neither high nor low, and as such walks a middle path between which is better for the various compliance tests. In some cases, depending on investment strategies and which compliance tests are most problematic, we may recommend a fixed rate less than 5.0%.
2. **The lesser of 5.5% or the third segment of the 24 month average yield curve.** This will result in a crediting rate of 5.5% most of the time and, since IRC 415 maximums are based in 5.5%, it minimizes the chance of interest credits resulting in an account balance that is larger than what IRC 415 allows the plan to pay.

The reason we are less likely to recommend a rate based on either an equity based on the RIC or actual return alternatives is the effect rate volatility has on compliance. For example, suppose a plan using one of these alternatives is designed assuming a 5.5% interest crediting rate. Contribution credits for the owners are set at or near the maximum that the limits of IRC 415 and the testing requirements of 401(a)(4) will allow and contribution credits for the employees are set near the lowest level that the requirements of IRC 401(a)(4) and 401(a)(26) allow. If the actual interest credits exceed 5.5% by too much in any year, the owners will find that their accounts build up to a level greater than what the law will allow them to receive and the plan may fail non-discrimination testing. If the actual interest credits fall to far below 5.5%, the plan may fail to satisfy the meaningful benefit requirements of IRC 401(a)(26).

These volatility issues may be addressed to some degree by setting a maximum on the crediting rate. In addition, the concerns can be lessened by conservative investment strategies. However, because the only minimum that is allowed is cumulative, it is difficult to protect the plan from the effect of interest credits that end up being too low.

Perhaps the bottom line here is that in adopting an interest crediting rate that is more volatile, one gives up some opportunity to design the plan more aggressively regarding the various compliance limits.

As is the case with all new regulations, it will take some time for the Cash Balance plan community to sort through the many unanswered questions the regulations create. We will continue to monitor interest crediting methodologies as practices mature. If you'd like to discuss this in greater detail, please do not hesitate to visit us at: www.independentactuaries.com.



Exhibit A

COMPLETE LIST OF INTEREST CREDITING METHODOLOGIES

Final and Proposed Regulations Issued October 18, 2010

1. A fixed, constant rate of not more than 5.0%
2. The rate of return on an annuity contract for the employee, provided the contract is not structured to provide a crediting rate that is greater than a market rate of return.
3. Yield on Treasury Bills, Bonds or Constant Maturities, plus an optional margin of up to 175 basis points, depending on the duration of the instrument. The shorter the duration, the bigger the margin.
4. A corporate bond yield, as represented by any of the yield curve segment rates either averaged over the prior 24 months, as is required for funding calculations, or for a single month.
5. A cost of living index plus an optional margin of up to 300 basis points.
6. The actual return on plan assets. Annual returns can be either positive or negative but the cumulative return cannot be negative. A plan providing interest credits based on actual return is subject to rules requiring diversification of investments and minimization of risk.
7. An RIC (Registered Investment Company) rate of return. This is the return from specific mutual fund, as long as the fund is not significantly more volatile than either the broad U. S. equity market or a similarly broad international equity market. Annual returns can be either positive or negative but the cumulative return cannot be negative.
8. Any of the above, subject to a maximum.
9. Any of the above reduced by some amount or procedure.
10. Any of the above, with or without a maximum or reduction, subject to a minimum as follows:
 - a. For alternatives 2 - 5, an annual minimum of not more than 4.0%.
 - b. For alternatives 6 -7 a cumulative minimum of not more than 3.0%. Note that there is no provision for an annual minimum.