Cash Balance Renaissance

by Richard J. Bottelli Jr. and Zorast Wadia

Plan sponsors can benefit in many ways from thawing out their frozen pension plans: There's a lower net cost than a defined contribution/401(k) plan, and asset-liability matching strategies can effectively neutralize the volatility. Plus, employees receive a guaranteed return without having to manage investment risk.



hat is the best way to provide an attractive retirement benefit for today's workers?

The conventional wisdom would probably suggest a defined contribution (DC) plan. Today's workers don't necessarily stay

at a job throughout their career, so many benefits professionals would recommend a quick-vesting plan with a company match of 5-6% of annual pay. But is committing corporate cash to an employee-managed 401(k)-type vehicle really the best use of those dollars?

We believe there's a different vehicle that's more cost-effective for employers and provides more security for employees. It's a hybrid vehicle commonly known as the *cash balance plan*. Lawsuits in the 1990s caused many companies to scrap existing cash balance plans or put off conversions that were in the planning stage. But now those issues have been litigated, and court decisions have favored sponsors of cash balance plans. Also, aspects of the Pension Protection Act (PPA) provide new incentives for employers to unfreeze abandoned defined benefit (DB) pension plans and put them back in service—or back on the table.¹

A DIFFERENT DECISION-MAKING FRAMEWORK

To understand the relative costs and benefits, it helps to review the logic of a plan that is starting from scratch. We'll quickly walk through the decision-making process that we used initially to create the model we're recommending.

The first step for the plan sponsor is to define the nature and purpose of the benefit being offered. Let's assume we want to be competitive with other companies offering DC plans. Therefore, we're prepared to contribute 5% of pay (similar to the match in a DC plan) and we also want a portable benefit. Let's further assume that the recent market downturn has made us extremely risk-averse. We don't want to deal with market volatility that leads to unpredictable pension expense.

Given these parameters, most benefits professionals would assume that the appropriate vehicle would have to be a DC plan. This is where the cash balance plan enters the picture. Cash balance plans are known as hybrid plans because they share features of both DB and DC plans. The cash balance plan is clearly a DB plan in that the plan sponsor is responsible for investing the assets and paying participants a defined benefit. But instead of an annuity at the end of three decades, a cash balance plan's payout is structured like that of a DC plan. Participants can see their assets grow each year in a (hypothetical) account, where they receive their annual employer contribution plus an investment return that's based on a predefined benchmark. PPA specifies that cash balance plans must fully vest in three years, so the benefit is extremely portable.

In this context, the cash balance plan easily achieves two of the three main objectives—the 5% annual contribution and portability. But what about investment risk? In DC plans, participants make the decisions and bear all of the risk (with mixed results, we might add). There's no way a DB plan can avoid taking on market risk, is there?

In fact, there is. In the cash balance plan, each year the sponsor credits participants' accounts with a fixed percentage of pay, plus an interest credit that could be tied to a conservative benchmark, for example, the yield of one-year Treasuries. Traditionally, DB sponsors have tried to lower the expense of the plan by investing some percentage of assets in equities. But if the goal is truly to avoid market risk, the plan can employ basic asset-liability management (ALM) strategies to immunize its entire exposure. The result is a fully secured benefit, with limited market risk for either the plan sponsor *or participants*. Other sources of risk, not related to market movements, are discussed later in this article.

With this framework in mind, let's take a closer look at the unique historical circumstances that make cash balance plans an attractive option right now.

A GOOD TIME TO THAW OUT FROZEN PLANS

Our recommended strategy is to shift an employer's DC contributions into a cash balance plan, where they can be funded at a discount using ALM strategies. The ideal candidate for this strategy is an employer that already has a frozen pension plan in place. Throughout the 1980s and 1990s, many companies decided to move away from traditional "final average pay" pensions, often choosing a cash balance plan as an alternative (or a supplement) to a DC plan. In 2003, cash balance plans covered approximately two million workers at hundreds of companies.² In July of that year, a federal district court ruled in favor of IBM employees who claimed that cash balance plans discriminate against older workers. In response, many companies froze their plans.

However, it's important to recognize that a frozen or dormant DB plan still has financial implications for the company and may demand administrative attention. There's a large liability pool and a large pool of assets that cannot be ignored. The plan sponsor continues to pay an actuary, auditors, recordkeepers, investment advisors to manage the assets and attorneys to deal with plan documents and miscellaneous legalities. The employer is paying for all of these services, but the plan is no longer building retirement security for employees. At the same time, the employer is most likely funding a DC benefit, such as a match or even a profit-sharing or money-purchase contribution, which may amount to 5-10% of each employee's pay.

Fortunately, there is good news on the legal front that provides relief to companies that have been, essentially, paying twice—one time in the frozen DB plan and again in the active DC plan—while participants benefit only once. In August 2006, the Seventh Circuit U.S. Court of Appeals overturned the *Cooper v. IBM* decision. The court dismissed the charge of age discrimination, saying, "Treating the time value of money as a form of discrimination is not sensible."³ Also in 2006, Congress passed PPA, which included clear legal guidelines for cash balance plans.⁴

As a result, plan sponsors now have a firm prospective road map to guide them in designing and administering cash balance plans. The opportunity is particularly compelling for employers that froze their plans and shifted to DC. By shifting those contributions back to the cash balance plan, employers can provide the same benefit promise at lower cost.

COST SAVINGS EXAMPLE

The savings result from the employer's ability to profit from the spread between corporate bonds and Treasuries. Under PPA, sponsors have two ways to value the plan's underlying liabilities. Both are linked to a blend of A through AAA corporate bond rates. One method is called *full yield curve*, and it is based on spot corporate bond rates over a participant's expected working and retired lifetime. The other method is called *segment rates*, which involves a blended rate of corporates.

Either way, the plan sponsor derives a single equivalent rate, which currently might be in the neighborhood of 6%. At the same time, the actuary's long-term best estimate of one-year Treasuries might be a 3.5% yield. Essentially, the plan's savings result from the difference between the cash balance promise—which is valued using a rate of 6%—and the Tbill rate that's only 3.5%. Assuming an average period to payment of 12 years, a basic calculation shows that the plan sponsor can provide a 6% cash balance pay credit for a net cost of roughly 4.5% of pay.

For a large plan, this difference can generate substantial savings. We were recently working with an employer whose DC budget was approximately \$40 million. By shifting the company contributions into a cash balance plan, we estimated savings in the neighborhood of \$7 million a year. The plan sponsor was excited about that—and we were too!

ALM MANAGES VOLATILITY

Of course, employers are not compelled to use ALM to fund their cash balance plans. Those that feel comfortable with risk, and their ability to manage it, can choose to invest in equities or other highreturning assets. Over the long run, they probably can fund their promised benefits at an even lower cost than described above.

However, following the declines of 2008-09, many employers are wary of losses in the equity markets and the accompanying volatility. They may have some unfunded liabilities already on their books, and the concept of unfreezing a cash balance plan in order to invest in risky, loss-prone assets may be a stretch. Instead, an easier transition might be realized through a strategy of fully immunizing the ongoing accrual by investing in corporate bonds of duration similar to the cash balance accumulations.

The ALM strategy eliminates volatility from both a funding perspective and an accounting perspective,

because in the post-PPA world both measures of liability are essentially tied to corporate bond rates (AA for accounting and a mixture of A, AA and AAA for funding). When structured carefully, even if the markets experience a significant shift in general interest rates and bond rates spike higher, the funded status of the cash balance plan won't suffer. True, the value of the plan's bond holdings will decline. But the higher corporate bond rate also causes the plan's liabilities to go down as well; they basically move in lockstep.

Other sources of volatility, not tied to interest rates, are relatively minor. Mortality rates are reasonably predictable, and the frequency of employees' retiring is a variable that is relatively easy to manage, compared to interest rate or market risk.

THE EMPLOYEE'S PERSPECTIVE

How will employees react to receiving the company contribution in the cash balance plan instead of in their 401(k)s? As with any change, employers should expect a full range of opinions. In our view, the pros far outweigh the cons:

- The most important benefit of the cash balance plan is security. Under designs contemplated herein, plan sponsors can state that *the promised benefit is fully secured*, in the sense that the employee's account can never lose principal. This assumes that the benefit promise will be fully funded.
- Unfreezing the cash balance plan is clearly a positive. It frees up assets and gives the employer additional resources and flexibility to provide benefits.
- Employees don't have to contribute in order to receive matching funds. DB rules require employers to treat all participants equally.
- PPA accelerated the vesting requirement for cash balance plans, from five years to three. That benefits employees in general and younger employees in particular, because they don't have to stay in the job as long to fully own the company contribution.
- Finally, because cash balance plans are DB plans, participants can elect to receive annuities as a distribution option on retirement.

On the other side of the ledger, some employees will certainly express dissatisfaction in losing the ability to choose how to invest the company contribution, which they currently enjoy in their DC plans. During a bull market, these voices likely would be a formidable chorus. However, after the stunning losses following the real estate meltdown, we predict that most employees will be grateful to have a secure alternative.

Keep in mind that employees still have the opportunity to invest more aggressively in other accounts where multiple options are available. In the scenario we've been discussing, employers will maintain their DC plans, but current and future company contributions will be made into the cash balance plan. Participants who are savvy investors can increase their equity exposure and invest more aggressively in their DC or personal investment accounts, because they know that the benefit from the cash balance plan can never go down. All of that risk is taken off the table—and that's a major benefit for employees.

OTHER BENEFITS

It's also worth pointing out a few benefits of cash balance plans relative to final average pay pension plans. The accrual pattern in a cash balance plan each year is simply an additional accrual. There's no leveraging effect on prior accruals, unlike what you'd find in a traditional final average pay plan. That results in reduced cost volatility relative to traditional benefit plans where sponsors are finding that benefits can become unaffordable as the workforce ages.

Cash balance plans also do a better job of controlling volatility during inflationary periods than final average pay plans. If inflation were to return to levels like we experienced in the 1970s and early 1980s, employers would experience rising payrolls. Sponsors of cash balance plans would find their pay credit going up. But at least it would stay at the same percentage of payroll expense. In a final average pay plan, if you have five, six, seven years of high inflation, liabilities can go through the roof. This is another example of a

THE AUTHORS

Richard J. Bottelli Jr., MAAA, is a principal and consulting actuary in Milliman's New York City office. He is a member of the American Academy of Actuaries and a frequent speaker on retirement and employment benefit programs. Bottelli's expertise spans retirement planning and taxation, plan design, legal and technical requirements, funding alternatives, plan terminations and actuarial analysis.

Zorast Wadia, MAAA, is a consulting actuary with the New York office of Milliman, where he works with clients in the financial services, retail and not-for-profit sectors. He has expertise in actuarial valuations for qualified and nonqualified plans, plan design and pricing, nondiscrimination testing of pension plans and annual compliance for defined benefit pension plans. Wadia is a member of the American Academy of Actuaries and a fellow of the Society of Actuaries. non-interest rate source of volatility that would be very important in a final average pay plan but is nearly inconsequential in a cash balance plan.

MORE FLEXIBLE DESIGN THAN DC

Compared to DC plans, cash balance plans offer much greater leeway in plan design. The array of possible cash balance plans is so broad that plan sponsors can accomplish almost any goal they've defined within their overall human resources rewards strategy. Here are a few ideas that we've seen implemented:

- If the employer's mind-set is that employees are worth only what they've put into the company in the last year, they can institute a flat pay credit for all workers.
- Another company may value taking care of its older participants. In this case, they can age-weight the formula to provide larger pay credits for older participants or those with longer service.
- Pay credits are often integrated with Social Security so that higher pay credits can be delivered to those whose wages are above the taxable wage base.
- Under another type of hybrid plan called a *pension equity plan*, typically the interest credit is zero and each employee's benefit is equal to the sum of his or her pension equity credits over the years. This strategy, in effect, pushes down the reward to short-term employees.
- A cash balance plan can be designed to limit the lump-sum payout to participants who have reached a specific age, for example, 55 or older. This provision enforces the point that the monies are intended to support *retirement*—and not other spending goals. This provision would also help mitigate the risk of participants retiring or terminating employment earlier than expected.
- On the other hand, the employer can set up an early retirement window in order to encourage workers to leave the company at a younger age. For example, the employer could offer to increase the cash balance account by 20% for those who voluntarily retire within the next six months. Such an incentive could not be implemented in a DC plan because of Internal Revenue Service (IRS) limitations.

The flexibility of cash balance plan design allows employers to create incentives that are specifically tailored to their financial and human resources objectives.

CONCLUSION: HISTORICAL INTENT

To briefly recap, cash balance plans are often called *hybrid* plans because they share characteristics of both DC and DB plans. The structure we've been describing uses a cash balance plan to provide a safe, conservative benefit that can never lose principal. Participants can then complete their retirement investment strategy as they see fit in their DC, individual retirement account (IRA) or personal accounts.

In a curious coincidence, this structure is precisely what was intended by the authors of Section 401(k) of the Internal Revenue Code. It was an historical accident that 401(k) plans became the main retirement vehicle. They originally were intended as a deferred compensation tool that would supplement a traditional pension. However, when employers saw that employees liked the portability of DC plans, they were happy to accommodate, as the shift away from DB would allow them to off-load investment risk.

Now we are coming full circle. Thanks to advances in investment technology, PPA and a newfound appreciation of downside volatility, we have developed an innovative "hybrid" model that brings together the best of DB and DC—providing both portability and a more equitable sharing of risk between employer and employee.

Endnotes

1. For full details, see "Born Again: Cash Balance Plans Get New Lease on Life with Latest Rulings, Pension Reform 2006 Legislation," by Richard J. Bottelli Jr. *Benefits Quarterly*, First Quarter 2007, pp. 28-33.

2. "Judge Says IBM Pension Shift Illegally Harmed Older Workers," by Mary Williams Walsh. *New York Times*, August 1, 2003.

3. Kathi Cooper et. al., on behalf of a class versus IBM Personal Pension Plan and IBM Corporation. August 7, 2006, p. 5.

4. Admittedly, some plan sponsors today remain frustrated because key issues that impact them are still awaiting a decision by regulators. However, these issues are largely peripheral to the basic approaches discussed in this article.

International Society of Certified Employee Benefit Specialists

Reprinted from the Fourth Quarter 2010 issue of *BENEFITS QUARTERLY*, published by the International Society of Certified Employee Benefit Specialists. With the exception of official Society announcements, the opinions given in articles are those of the authors. The International Society of Certified Employee Benefit Specialists disclaims responsibility for views expressed and statements made in articles published. No further transmission or electronic distribution of this material is permitted without permission. Subscription information can be found at iscebs.org.

©2010 International Society of Certified Employee Benefit Specialists