



The New Era of Cash Balance Plans

Due to the passage of pension reform legislation, beneficial court rulings and renewed interest from cost-conscious plan sponsors, cash balance plans are poised for a rebirth in the coming years.

This is the first part of a two-part series on cash balance plans. In Part I, we will offer a basic explanation of these plans, and describe the effects of the Pension Protection Act on the cash balance plan landscape. In Part II, we delve into investment strategies available for cash balance plans, and discuss the effects of these strategies on pension plan financials.



Investment Management for Cash Balance Plans

Part I – Cash Balance Plan Basics

By

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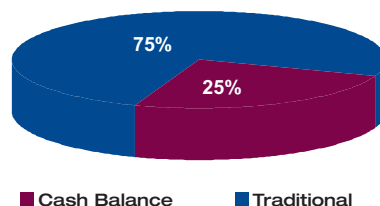
The traditional DB plan market has been in a state of decline for decades. In the 1990's, the cash balance craze began to take hold, with numerous companies switching their traditional plans to cash balance plans. These transitions continued until the early 2000's, when a slew of lawsuits were brought upon companies who had switched their plans, with plaintiffs claiming that the new plan formulas were age discriminatory.

Since that time, other traditional DB plan sponsors considering alternative defined benefit plan designs have been locked out of cash balance formulas due to unfavorable court decisions and legislative inaction. Now, **sweeping pension reform and recent court decisions have enabled the rebirth of the cash balance plan.**

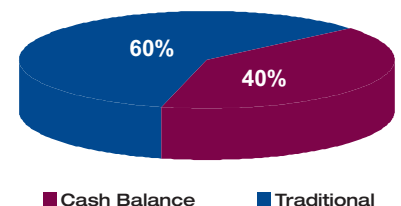
Exhibit 1 shows the percentage of DB participants and assets in cash balance plans compared to the overall DB market as of 2003.

Exhibit 1

Defined Benefit Participant Breakdown



Defined Benefit Asset Breakdown



Source: Federal Reserve Board report *Cash Balance Plan Conversions and the New Economy* – Coronado and Copeland; November 2003

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The recently passed Pension Protection Act of 2006 gives *prospective* clarity to the cash balance rules (for both design and discrimination purposes). In addition, a recent ruling by the 7th Circuit Court of Appeals¹ found IBM’s cash balance formula to be nondiscriminatory – a huge win for cash balance plan sponsors, and an encouraging sign for those considering cash balance plans.

Cash Balance Plan Basics

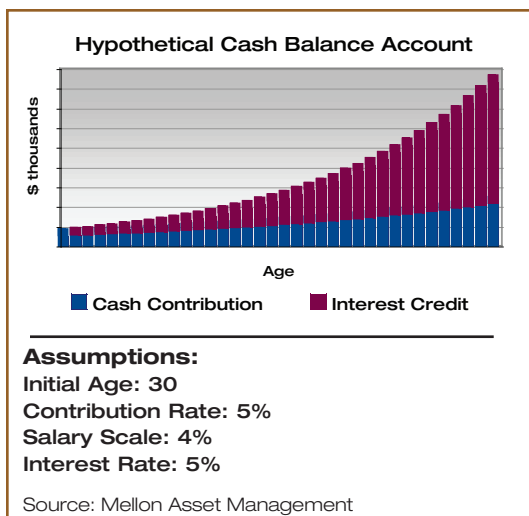
Cash balance accounts are made up of two components – cash contributions and interest credits.

Cash Contributions – the employer sets a fixed contribution rate that is typically a percentage of pay that will be added to each account with some frequency (annually, monthly, each pay period, etc.)

Interest Credits – the employer sets an interest-crediting rate, which can be credited with the same frequency as the cash contributions, and is applied to the beginning-of-period account balance. (Exhibit 2)

The new rules say this interest-crediting rate can be no greater than a “market rate of return,” but it can also be a fixed minimum guaranteed rate of return, in case there are low or negative market returns in a given year.

Exhibit 2



The cash balance plan concept is similar to a recurring investment in a one-year certificate of deposit (CD). The interest credited on the CD may change, but the cash amounts placed into the CD are always returned. The difference is that the annual interest earned on the cash balance plan may not be guaranteed (depending on the plan design).

Why Cash Balance? – A Participant’s Perspective

Cash balance plans are attractive because they remove all of the uncertainty regarding the present value of a participant’s benefit. While a traditional DB plan’s benefit is usually an age-65 annuity, the cash balance plan uses an ongoing account balance to describe benefits. (Exhibit 3)

Participants can quickly determine how much money will be contributed to their cash balance account in any given year, and depending on the design, may be able to calculate their account balance at retirement – with or without additional employer contributions. Traditional DB plan formulas do not make these calculations easy.

Exhibit 3

Issue	Traditional DB Plan	Cash Balance	Defined Contribution	Employee Preference
Benefit Type				
- Age 65 annuity	✓			
- Account balance		✓	✓	✓
Investment Decisions				
- Employer	✓	✓		✓
- Employee			✓	
Portability				
- Portable		✓	✓	✓
- Not portable	✓			
Vesting				
- 3-year		✓	✓	✓
- 5-year	✓			

Source: Mellon Asset Management

A cash balance plan relieves employees from the worrisome task of making their own investment decisions, where they may not have the interest or experience to do so. Studies show that employees tend to make poor investment decisions.²

Employer Advantages for Cash Balance Plans

From an employer’s perspective, the primary benefits of cash balance plans are much greater predictability and increased transparency in financial reporting. Due to minimal interest rate risk exposure (see Exhibit 4), a cash balance plan’s liabilities are much more predictable than those in a traditional DB plan.

¹ Cooper et al vs. IBM Personal Pension Plan et al, No. 05-3588, 7th Cir; 2006 U.S. App.

² Munnell et al, Center for Retirement Research, Boston College, September 2006.

In addition, pension funding reform has added account balances as an acceptable “accrued benefit,” which avoids the need for annuity conversion when calculating a cash balance plan’s liabilities in any given year. **Thus account balance = liability.**

Exhibit 4

Liability Duration Ranges (active employees, in years)	
Tradition DB	16-20
Cash Balance	0-3

Source: Mellon Asset Management

Like traditional DB plans, cash balance plan sponsors retain the benefit of decreased contributions when the assets outperform the liability growth. The sponsor can also tie corporate performance to the benefits provided by the plan. In a strong performance year, the sponsor can make a one-time amendment to the plan to increase the cash contribution (percent of pay) to each active participant’s account balance.

Cash balance plans fill the gap between traditional DB and DC plans. Reduced interest rate risk allows cash balance plan investments to use a variety of absolute return strategies in lieu of long-duration (or LDI) approaches.

When properly implemented, absolute return strategies can help to reduce the level and volatility of cash contribution requirements, and help to control pension expense. (Part II of this series will further discuss cash balance durations, as well as appropriate investment strategies and their financial implications.)

What the Nay-sayers Are Saying

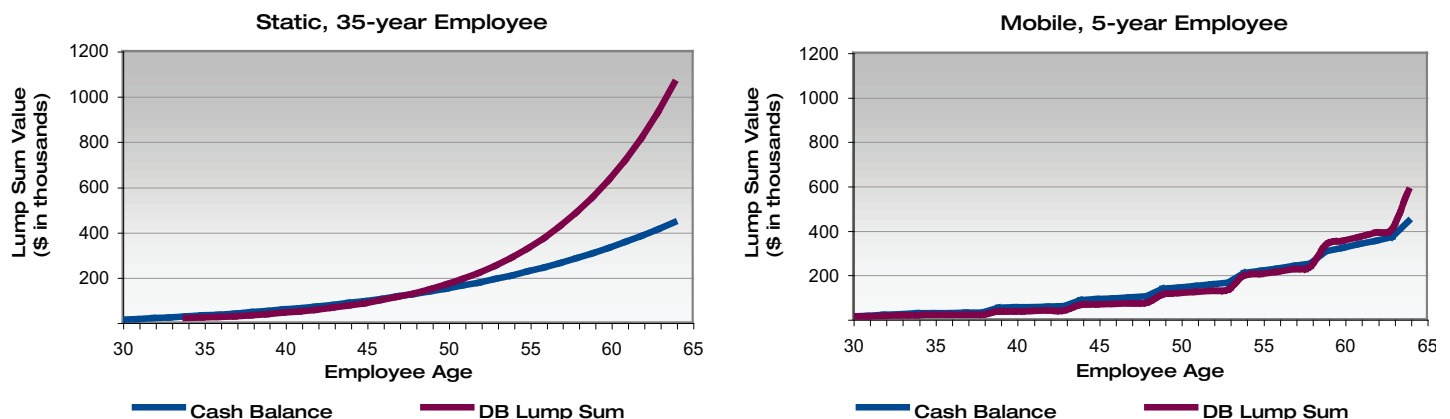
No benefit plan is without its shortcomings, and cash balance plans are no exception. The biggest concern regarding cash balance plans is their effect on older, long-service employees who are transitioned into them. These participants will likely miss out on a significant portion of their final average benefit.

The good news is that the Pension Protection Act protects the benefits earned under the prior plan formula. This protection helps avoid situations where benefits are not earned during the early years after the conversion, also known as *wear-away*.

Another disadvantage is that a cash balance plan’s age 65 lump sum benefit for a *long service* employee is dwarfed by the benefit earned under a traditional DB formula (Exhibit 5 – left). When considered for a mobile employee, in this case an employee who changes employers every 5 years (Exhibit 5 – right), we see that not only is the cash balance benefit greater until age 60, but the difference between the benefits at age 65 is much smaller compared to the static, 35-year employee.

Thus, the mobile employee of the future will likely prefer the cash balance plan for its ease in understanding, value and portability, and the employer of the future will be rewarded with reduced volatility and increased transparency.

Exhibit 5



Source: Mellon Asset Management / Hypothetical returns reflect assumptions detailed on the following page and do not guarantee any investment return.

Assumptions for Exhibit 5

Demographic Information

Employee hire age – 30
Starting salary – \$55,000
Salary increases – 4.00%

Traditional DB Plan

Final average pay formula – 1.50% x service
Lump sum interest rate³ – 5.50%
Lump sum mortality³ – RP-2000
projected to 2010 using Scale AA – Male
Interest earned on lump sums for mobile
5-year employee – 5.00%

Cash Balance Plan

Cash contributions – 5.00% of
annual salary
Interest credits – 5.00%

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Al is Assistant Director of Research and Analysis within Mellon Asset Management. He has substantial knowledge of defined benefit plan funding and accounting. Al has assisted in the development of Mellon's proprietary asset/liability models, and advised plan sponsors in the development of strategic asset allocations. Al is an Associate of the Society of Actuaries, a Member of the American Academy of Actuaries, and has a B.S. in Mathematics from Allegheny College.

³Reflects expectations based on new rules mandated by the Pension Protection Act of 2006

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