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Chapter 3
Cash Balance Pension Plans

Anna M. Rappaport, Michael L. Young, Christopher A. Levell, and Brad A. Blalock

Over the last fifty years, analysts have repeatedly claimed that defined benefit plans are dead. Some of the rationales given include the views that they are old fashioned and too complex, younger employees don't appreciate them, and they are too risky for the plan sponsors.

In spite of these contentions, larger employers who have analyzed their options have often decided to continue with their defined benefit plans. One reason for this is that, for employees who stay to retirement, DBs have delivered the most return per dollar the employer contributed, a goal of many employers in designing retirement plans. Additionally, employers who have managed their assets well have been well-rewarded for taking the risks associated with offering a defined benefit pension.

The Environment of the 1990s

Many employers today are again reexamining their retirement strategies in response to major shifts in the business environment. Some of the new factors include a greater concern about employee appreciation and a focus on an evolving and different social contract.

In the past, larger employers offered what was seen as an implied promise of the availability of lifetime employment. An employee who performed could count on his or her job being there as long as the employee wanted the job. There was the option to stay to retirement. A retirement plan, which offered those who stayed to retirement the greatest share of the benefits, was generally offered by these employers. These plans offered substantial incentives to retire before "normal retirement age," usually 65, so that many employees retired between 55 and 62.

More recently, however, an oversupply of trained people resulting from the baby boom and from restructuring has changed the employment bargain. Employers often do not have to compete for good people or worry about retaining them. As a result, many organizations have implemented reengineering and downswing programs. Downsizing measures undermine the expectation of lifetime employment, and many large employers no longer offer any "promise" of lifetime employment. Employees now believe that performing well offers no guarantees since companies and jobs are often restructured. Furthermore, many companies have experienced changes in ownership of the entire organization or of parts of the organization. Individual operations are often sold to other organizations so that employees may find that they have a new employer, one with a different culture.

The transition to different cultures is difficult, both for employees and for employers. For employees over age 45 with long service, this is particularly true since many built their lives based on expectations which grew out of the old culture. In looking at the accrual pattern under a traditional defined benefit plan, one human resources officer summarized the needs of the new environment, stating, "We need to offer a plan such that if an employee leaves at any point in time we are square and treat the employee fairly. We need to protect our employees in the event we are acquired. In our industry, 25 percent to 33 percent of the employees will usually lose their jobs after an acquisition." The traditional defined benefit pension plan with its steep accrual pattern was not perceived as meeting these needs.

Plan Choices in the Present

In addition to traditional defined benefit and defined contribution plans, there are a number of hybrid plan types available. Hybrid plans offer a combination of the features of both traditional defined benefit and defined contribution plans. Two examples of hybrid plans illustrate that a range of combinations of features is possible:

1. *Cash balance plan.* A defined benefit plan where the benefit is defined as an individual account within the plan. The plan specifies the rates of contribution and investment return (independent of plan asset performance) to be credited to the participant's account. This plan looks to the participant like a defined contribution plan for benefit accrual purposes.
2. *Target benefit plan.* A defined contribution plan where the account is calculated to reproduce the benefits in a defined benefit formula by individual. The benefit accrual pattern in this type of plan is more like a defined benefit plan than a defined contribution plan

with a non-age-related contribution. This plan looks to the participant like a defined benefit plan, but it is subject to defined contribution legal requirements.

This article focuses primarily on cash balance plans, because they offer a good response to a changing employment contract, and on the pros and cons of using these plans relative to more traditional defined benefit and defined contribution plans. Table 1 compares the characteristics of cash balance, traditional final average pay defined benefit plans, and traditional defined contribution plans.

Choosing a Plan

The traditional choice between defined benefit and defined contribution plans is based on setting objectives and considering plan characteristics. However, new ways of thinking about this choice are helpful. The key differences in the *traditional* plan designs include the following:

Benefit accrual. Defined benefit (final average earnings) plans provide for larger benefit accruals later in the employee's career. In contrast, in defined contribution plans, account additions pay for greater benefit accruals earlier, if translated to income. From the individual's perspective, retirement assets grow slowly early in the employee's career in a traditional defined benefit plan, and much more rapidly in a defined contribution plan.

Method of payout. Defined benefit plans usually offer payout as monthly income, and defined contribution plans usually offer payout as lump sums. Either can offer the other form as an option.

What the employee sees. For defined benefit plans, the employee sees a monthly income at age 65, but for defined contribution plans the employee sees an account balance.

Hybrid plan designs combine the features of both defined benefit plans and defined contribution plans so that the employer can offer a plan called a cash balance defined benefit plan. Several distinctive features of this plan design stand out. First, benefits accrue as under a traditional defined contribution plan (or in a pattern selected by the employer). Second, lump-sum distributions are the usual form of benefit payout. As a defined benefit, a life income minimum is guaranteed and is the "normal form" as required by law. Third, benefit values are communicated as an "account balance." Fourth, the interest earned on the "account balance" is based on a credited rate defined by the plan. The rate may

TABLE 1

	Traditional DB	*Cash Balance*	*Traditional DC*
Allocation of dollar cost	Heavily to later years of service/older age	Heavier to early years of service/younger age (can modify with formula)	Heavily to early years of service
Investment risk is borne by	Employer; benefits do not vary based on investment results	Employer; benefits do not vary based on investment results	Employee; benefits vary substantially based on investment results (see Table 2)
Ability to grandfather prior defined benefit formula inside plan	Yes	Yes	No
Ability to offer early retirement windows inside plan	Yes	Yes	No
Investment choices available to employees	No	No	Yes
Ability to vary accruals by age/length of service	Formula does automatically	Yes, subject to passing nondiscrimination tests	Yes, subject to passing nondiscrimination tests
Can base benefits on profits	No	No	Yes
Inflation risk			
Prior to retirement	Employer	Employer	Employee
After retirement	Employee	Employee (but offset by opportunity to keep investment return)	Employee (but offset by opportunity to keep investment return)
Mortality risk after retirement	Employer	Employee; if lump sum chosen	Employee

be based on an external index (such as a T-bill rate) or it may be a fixed rate (such as 5 percent). For the plan to be a defined benefit plan, the benefit must be "definitely determinable" and the plan sponsor cannot be allowed discretion in defining the crediting rate each period. The crediting rate is not tied to the actual investment results of the plan.

Cash balance plans are like defined benefit plans along several dimensions. Most critically, assets are pooled in a single fund; there are no individual investment accounts. This reduces recordkeeping requirements. The same principles are used to manage assets as in any defined benefit plan, although, because the expected cash flow pattern can be quite different, actual asset mix may differ. Additionally, the sponsoring employer retains investment risk on plan funds. Depending on objectives, this can be seen as an advantage or disadvantage, but, overall, funds where employers have made the investment decisions generally have earned higher returns than employee-directed investments. Cash balance plans also are covered by Pension Benefit Guaranty Corporation (PBGC) insurance on the benefits side, and PBGC premiums are required. Depending on one's point of view, this might be perceived as an advantage or a disadvantage. Employers would tend to view the premium cost as a disadvantage, but the insurance is a benefit to participants. In the calculation of costs, the employer can recognize expected terminations of employment in advance. Initial costs are lower than under defined contribution plans because future non-vested terminations are recognized through actuarial assumptions rather than after they occur. In contrast, under a defined contribution plan, the impact of non-vested terminations occurs through forfeitures after the termination. Depending on the defined contribution plan type and provision, forfeitures either reduce contributions or are distributed to remaining participants.

Other ways in which a cash balance plan resembles a defined benefit pension include the facts that increases in benefits for past periods can be granted and that early retirement window benefits can be offered inside the plan (accomplished with a benefit enhancement beyond the normal account addition). Finally, a change to a cash balance formula from a traditional defined benefit plan requires a plan amendment, not a termination. If the plan is overfunded at the change, the surplus is used to reduce future contributions (as it would with the traditional plan). If the plan is underfunded, the unfunded liability is amortized as it would be in any defined benefit plan.

Method of Benefit Payout

Both defined benefit and defined contribution plans can pay out benefits as lump sums or as annual incomes. Traditional defined benefit plans usually pay benefits as monthly income, except for small accumulations. Some plans offer lump sums for all benefit levels. Traditional defined contribution plans generally offer lump sums that can be rolled over into an IRA or taken as cash, though some plans offer annuity options. Cash balance plans generally offer both lump-sum options and communicate the benefit as a lump sum, although the normal form is income.

There are risk implications from the participant's perspective of the form of benefit payout. With a lump sum, the participant assumes both the investment and mortality risk after the time of payout. With an annuity, the plan sponsor, or organization offering the annuity if insured, assumes the post-retirement mortality and investment risk. Benefit payout can be a significant issue because many employees are not in a good position to evaluate the risk of outliving their retirement funds and may not focus on the issue of mortality risk.

Annuity options are also available to pay benefits over joint lifetimes, and ERISA requires a normal form of annuity payout for married participants of a 50 percent joint and survivor annuity. The average future period of widowhood for women in their forties today has been predicted as fifteen years. On average, elderly single persons are much less well off than couples, and women are less well off after widowhood. Issues related to choice of payment option are quite important and should be considered in helping individuals plan for retirement.

Time of Access to Plan Funds

Many defined contribution plans, particularly 401(k) plans, offer the option to the employee to access funds prior to retirement through the use of loans and/or hardship withdrawals. No options for access to funds prior to termination of employment or retirement are available in cash balance plans. All defined benefit plans are likely to make available small lump sums at termination of employment. These can be rolled over and saved for retirement, but often are not. There is an important issue in retirement security: the value of plans in providing for retirement security is tied to whether the funds will still be available for retirement.

Transition to Cash Balance Plans

Several methods of transition from another defined benefit formula are possible. Under the most common method, the benefits already earned under the prior defined benefit formula are calculated as lump sums and used as opening "account balances." If the prior plan provided a final average pay formula and subsidized early retirements, there are transition issues of whether to protect the future earnings increase applied to prior service and whether to offer a benefit to compensate for the value of the prior subsidized early retirement benefit. Legally, the benefit payable if the employee terminated employment on the day before transition is protected, but many employers will want to offer a greater benefit to longer-service employees.

Several transition methods are available. One approach is to pay the greater of the benefit that would have been paid under the old plan and the benefit due under the new formula for a subset of the employees for a limited time period. Another is to extend that period until termination or retirement for the subset of employees. A third technique is to provide extra account balances at transition to make up for the greater benefit which would have been available at early retirement. This makes sense where there was heavily subsidized early retirement in the old plan. Alternatively, the employer may provide extra account additions to make up for the fact that final average earnings will not be directly used in the formula. Finally, an employer may provide a supplemental additional benefit.

The second method, known as the traditional grandfathering approach, has the drawback of being complex, taking a longer period until the new plan is accepted, and having a potentially large difference in benefits for people on the two sides of the grandfathering line. On the other hand, the main advantages of this method is that it ensures that longer-service employees will not receive less than under the prior plan.

The new cash balance formula can have credits which vary by age or length of service. When this is utilized, extra benefits during transition are usually reduced since the benefit is closest to that provided under the prior plan. Transition based only on conversion to account balances generally favors junior employees. Added benefits to longer-service employees balance the transition, so that depending on the amount of added benefits and who receives them, either a more junior or a more senior group might be favored.

Cost and Financial Implications of the Choice

We have modeled the cost from a financial statement perspective of a defined contribution plan versus a cash balance plan, both with an annual contribution level of 6 percent of pay. The annual expense for an average employee (age 40 with ten years of service and an annual salary of about US $50,000) is as follows:

Expense for defined contribution plan	US $2,932
Expense for cash balance plan	US $1,845
Ratio of cash balance to defined contribution	.63

The assumptions used in the calculation are shown in Table 2. The expense for the cash balance plan is lower because we anticipate that plan assets will earn more than the crediting rate and because forfeitures at

TABLE 2 Assumptions Used in Expense Calculation and Modeling (US $)

Deterministic Forecasts	
Starting Salary	$30,000
Hired at age 30	Valued at age 40 with 10 years of service
Annual Credit	6.00%*
Diversified Return	8.00%
GIC Return	6.00%
Unlucky Return	−3.00%
Cash Balance Crediting Rate	7.00%*
Discount Rate	8.00%*
Return on DB Assets	10.00%*
Salary Increases	5.00%*
% of GIC Employees	70.00%
Stochastic Forecasts	
Starting Salary	$30,000
Years in Payout	30
Inflation Expected Return	5.00%
Inflation Standard Deviation	3.00%
Contribution Level	6.00%
Portfolio Expected Return	8.00%
Portfolio Standard Deviation	14.00%

*Assumptions used in expense calculation.
Note: Salary increases were tied to the stochastic inflation system.

the time of non-vested terminations are recognized in advance. The plan sponsor is rewarded for assuming the investment risk. The expense for the defined contribution plan will ultimately drop somewhat as terminations occur and as forfeitures are recognized.

The expected benefit at age 65 from the defined contribution plan depends on the actual investment choices and returns. If the employee chooses fixed-income investments which provide an average return of 6 percent to age 65, while the cash balance plan credits participants' accounts with 7 percent, then the cash balance benefit at age 65 will be 120 percent of the defined contribution benefit. The higher balance will be a direct result of the higher investment return credit. The cost/value ratio of the defined contribution plan with a choice of fixed income investments versus the cash balance benefit can be viewed as 53 percent for the cash balance plan in this case because the cost is 63 percent and the benefit is 20 percent higher (63% divided by 120% = 53%). The differences in benefits delivered and the impact of investment returns are explored further below.

TABLE 3

Attribute	*Cash Balance*	*Defined Contribution*
Overall ongoing benefit cost (excluding administrative cost)	Account addition as a percentage of pay offset by value of anticipated non-vested terminations and investment earnings in excess of crediting rate	Account addition offset by prior period forfeiture amounts not added to participant accounts
Ability to consider any unfunded liability at transition in calculating costs	Can be considered; if there is surplus, it is in effect amortized and reduces ongoing cost as described above	Cannot be considered; prior plan must in effect be considered separately if continued, or terminated
Ability to consider any unfunded liability at transition in calculating costs	Can be considered; additional payment would be required to amortize	Is not considered in defined contribution cost, but this amount would be paid separately either to fund and terminate prior plan or maintain it on an ongoing basis
Ability to optimize investments for best return	Very good	Limited, since fluctuations have direct impact on individual benefits

Overall, financial implications of the choice can be summarized as shown in Table 3:

Implications of Offering Investment Choice and Shifting Investment Risk

A key difference between cash balance plans and traditional defined contribution plans is that investment risk remains with the employer in cash balance plans. In defined contribution plans, it is also common to give employees investment choices.

A key question is the significance of investment risk bearing for employees. Several issues arise, including the fact that in a defined contribution plan returns on investment directly impact each individual employee; if returns are lower, that means a lower account balance. Also, if investment choices are offered, there will be a wide variation in the actual choice made by individuals, and poor choices can have a major impact on an individual's benefits. As noted elsewhere in this volume, where employees have investment choices, they often choose conservatively, and choose fixed-income investments. Long-term investment results indicate that, by choosing fixed-income investments they give up some of the potential investment return. Finally, fluctuations in actual returns have a very different impact in defined benefit and defined contribution plans, both from year to year and at the point of retirement.

The effects of fluctuations are very important and generally are not a focus in the defined contribution setting. However, since they affect benefits rather than cost, employers have not focused on this issue in budgeting and financial planning. In contrast, in the defined benefit setting, investment return fluctuations affect the employers' costs and have been modeled extensively. They have an impact on employer contributions which can be smoothed by the use of asset valuation techniques as well as through the actuarial liability valuation method. Unless a plan is close to the full funding limit, considerable spreading of fluctuations in asset values is possible. Many plan sponsors can tolerate considerable asset fluctuation because the amount of fluctuation is modest when viewed in the context of the firm's financial structure.

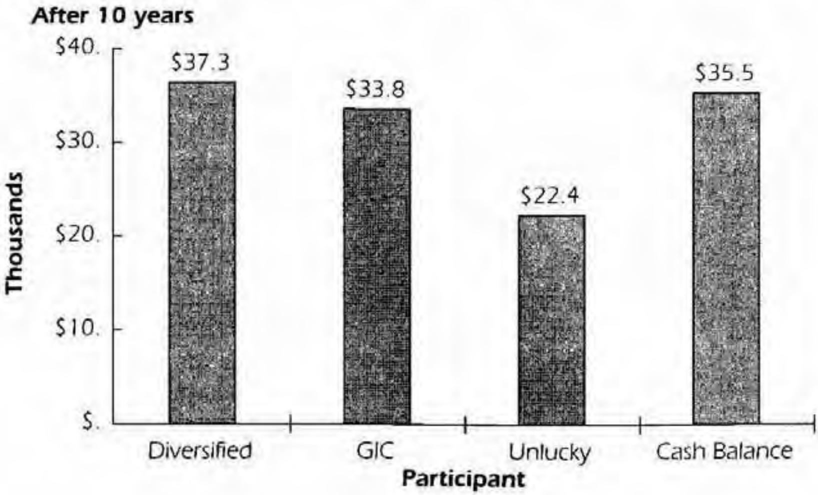
Of course, in the defined contribution setting, each account is one person's benefits. Fluctuations at different points in time have a very different impact on the individual. During the time prior to withdrawal of the funds, fluctuations are tolerable, except that the individual may make decisions based on such fluctuations which are adverse to achieving a better return long term. However, at the point when the lump sum is withdrawn, the value is fixed. It can be argued that if the market is down, the lump sum can be reinvested in equities so that the fluctuation is still smoothed out, but for many participants that is not a reasonable scenario. These participants will want a more certain strategy after retirement.

To illustrate the effects of defined contribution plan fluctuations for the average employee, we have modeled plan outcomes under different investment scenarios. The investment scenarios are as follows:

A. Employee chooses a diversified portfolio and averages 8 percent.
B. Employee chooses fixed-income investments and averages 6 percent.
C. Employee makes poor choices, is unlucky, switches between asset classes at wrong time, and averages −3 percent.
D. Cash balance with crediting rate equivalent to 7 percent.

Figure 1 shows the lump-sum balances under these four scenarios at the end of ten years and at age 65 for a single employee.

Since employees will make different choices in the defined contribu-



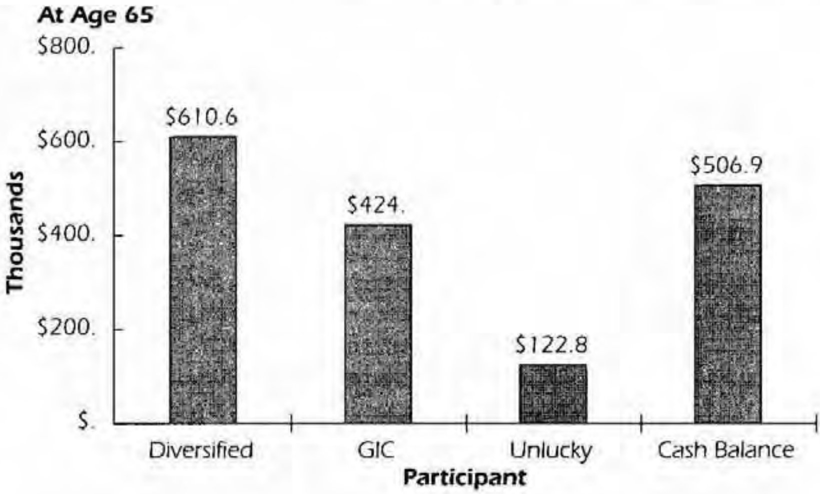


Figure 1. Individual account balances in DC plans under investment scenarios alternative.

tion plan, an average outcome will be a composite of the individuals' choices. Table 4 shows the average composite results for several different election patterns, again illustrated as lump sums at age 65, and also as age 65 replacement ratios (i.e., equivalent annual benefit as a percentage of final pay).

TABLE 4 Impact of Election Pattern on Average DC Balances versus Cash Balance Account at Age 65 (US $)

Defined Contribution	*Sample Election Patterns*			*Average Balance*	*Income Replacement*
	Diversified	*GIC*	*Unlucky*		
Sample 1	20%	80%	0%	$461,299	31%
Sample 2	30%	60%	10%	449,841	30%
Sample 3	50%	40%	10%	487,162	33%
Sample 4	70%	20%	10%	524,483	35%
Sample 5	90%	10%	0%	591,921	40%
Cash Balance	– no election permitted –			$506,891	34%

TABLE 5 Diversified Employee Percentile Ending Balances at Age 65 (US $)

	Percentile	*Balance ($US)*
Defined Contribution	10	255,938
	25	364,062
	50	553,393
	75	816,248
	90	1,130,877
Cash Balance		506,891

Impact on Individual Employees

An additional concern is the impact of variation in investment returns on individual employees. This table shows the impact of variability on an individual employee's lump sum amount at age 65. Variability will have a direct impact in each situation, but it is greatest in investment Scenarios A and C. Table 5 shows results based on a simulation for the diversified portfolio. Assumptions have been made for each asset class as to both expected return and standard deviation. Based on this modeling, the lump sums at age 65 are shown at different probability levels. The lowest number is the 10th percentile; it is expected that the lump sum will exceed this number 90 percent of the time or more if investments are chosen according to the assumptions for the diversified portfolio. The second amount is the 25th percentile; 75 percent of the time the lump sum will be this amount or greater. The next value is the median; half the time the results will be equal to or greater than this amount. The 75th and 90th percentiles are also shown.

Variability of individual account balances is a major issue in defined contribution plans. For each individual, it is only their results that count;

averaging with the rest of the group does not matter. Variability can have a major impact of the personal security of each individual.

Case Studies

In our line of business we consult with many different clients, some of whom have recently examined cash balance plans. One was a not-for-profit organization that sponsored a traditional final average earnings defined benefit plan. When this firm analyzed its culture, work patterns, and workforce it found that few employees stayed as long as ten years, and there were different job groups with different characteristics at hire, including younger professionals who joined the firm in order to get initial experience which would help them in building a career; senior professionals who came as an "end of career" or "second career" job which depended on their credibility and experience; and clerical and administrative staff who were essentially like these groups at any organization. Furthermore the existing pension plan was not valued or appreciated, and employees were not being encouraged to save although there was a savings program, but without a match.

Focus groups were conducted with both rank-and-file employees and managers. The manager group was used to test and provide input into alternative plan design concepts. The organization then implemented a cash balance plan and added a match to the savings program that worked to encourage employee savings. Longer-term employees at the time of change were given the greater of the benefit under the old plan or the cash balance plan. Benefit statements were produced which combined balances under the matched savings program and the cash balance plan, and focused employees on the total retirement program. After 10 years of operation, the organization continues to be pleased with the results.

A second case was that of a multi-location, integrated health care organization that sponsored a mix of plans. A traditional final average earnings defined benefit plan was in place at its hospitals and some of its other locations, but at other locations a defined contribution plan was in place. This organization was making acquisitions to respond to the changing market and had new services such as home health, physician offices, and nursing homes along with its traditional hospital business. In evaluating their situation, they found that the diverse approach to benefits was a barrier to transfers and to meeting federal requirements. Also, with the new businesses, the requirements for professionals were increasingly diverse. The firm's culture which had supported paternalism in the past was changing and needed to move from that attitude. Simultaneously, the existing plan was not valued or appreciated, particularly by younger employees. Employees were not being encouraged to save although there was a savings program, but without a match.

A task force of human resource and financial managers representing diverse business units studied retirement strategy and developed a policy for retirement benefits. Focus groups were conducted with rank-and-file employees. Subsequently, the organization decided to move all employees into a new cash balance approach, which permitted effective integration of groups from both prior plans. Existing employees who participated in the defined benefit plan were given the better of the two plans—their old plan or the new plan with the calculation done at termination. The existing defined benefit plan had a surplus which was used to help fund the benefits under the amended plan.

A Comparison of Cash Balance Versus Defined Contribution Plans

Cash balance plans have several pros and cons versus traditional defined contribution plans. Among the advantages are that the plan sponsor may be able to invest funds more effectively than the participant over the long term. As a result, the cost to the plan sponsor per dollar of benefit delivered should be lower in the long term due to more favorable investment returns. Additionally, employers have some flexibility in contribution timing in many situations.

Another advantage of cash balance plans is that plan termination is not required in the transition process. Surplus can be used to help fund additions to accounts, and there is time to make up any deficits. Also, retrospective benefit improvements can be offered by providing additional benefits as income or added account balances. For an organization involved in multiple acquisitions, these plans offer a reasonable transition from either defined benefit or defined contribution plans. The plan sponsor need not be concerned about the impact of fluctuations in investment returns on employees.

Of course there are also some disadvantages of cash balance plans, as compared to defined contribution pensions. First, risk is retained by the employer, and costs can fluctuate. Second, administrative and management requirements of defined benefit plans such as actuarial valuations still apply. Third, these plans are somewhat more difficult to explain than traditional defined contribution plans. Another key difference relates to payment of PBGC premiums. They are required for cash balance plans, and these plans are insured. Whether this is seen as an advantage or disadvantage depends on one's point of view.

A Comparison of Cash Balance Versus Traditional Defined Benefit Plans

Cash balance plans are increasingly perceived as more modern and are more appreciated by younger employees. They have benefit accrual patterns similar to defined contribution plans, and allocate more money to those with less service and at younger ages as well as to those who leave early. The accrual pattern can be modified by setting step accrual rates, that is, varying accruals by length of service. For example, a plan might offer 5 percent of pay as an annual credit, or it could offer 3 percent for five years, 4 percent the next five years, 5 percent for the next five years, and so on.

Cash balance plans may not be well suited to employers who find that traditional final average pay plans meet their needs, but for those who want an accrual pattern more slanted to early years of employment, this hybrid plan offers an excellent combination of features. Employers considering a transition to defined contribution plans should look at cash balance as an option.

Other Approaches to Meet the Changing Employment Environment

The cash balance approach discussed here assumes that the focus of employer-financed benefits will be a plan sponsored and managed by the employer, and we have argued that the cash balance approach is an excellent alternative for employers favoring such an approach. There are other plan options which meet some of the same goals, including a multi-employer pension scheme. One such program is TIAA-CREF (Teachers Insurance Annuity Association and College Retirement Fund), a national nonprofit pension company offering a defined contribution program to college and university faculty. Individual annuity contracts are provided to each covered person, and the employer contributions are deposited in these contracts, which are fully owned by the individuals. Plan participants are fully mobile across the academic community.

There are several reasons why this program probably would not be acceptable for business in general. One is that persons accepting teaching positions often stay within the occupation for life, although they may change institutions. This is not the case in other fields, as we have seen recently. Second, TIAA-CREF has a unique situation as compared to commercial insurance companies in that it is authorized by special legislation which makes it tax exempt. Third, TIAA-CREF has very strong acceptance and status within the academic community, but it is unlikely that an insurance company would achieve such stature with business. The program identity is with TIAA-CREF and not the employer, but this is widely accepted within the profession. Private businesses generally want more identity for their benefits and more credit for them. Contributions are often considerably higher than most private businesses are willing to devote to benefits. (This is part of the reason why TIAA-CREF accumulations tend to be considerable at the point of retirement.) At the (lower) level of contributions commonly made to defined benefit plans, results would be much less satisfactory.

Another possible model is that of the multi-employer defined benefit plan. Such plans have been common for negotiated groups and are the only way to provide effective retirement benefits for certain groups tied to a union but working for many employers. Examples are longshoremen, construction workers, and milk truck drivers. While this model is appealing in theory, it has not worked well in practice in many cases. Corporations eligible to participate in these plans for selected groups of workers are reluctant to do so. Problems with these plans have arisen when an industry declines. In this case multi-employer plans have been left with many retirees and not enough money. The surviving participating companies were often left with liabilities related to those who withdrew. This has been partly solved by requiring employers who leave the plan to pay a withdrawal liability. Nevertheless, participating employers have limited control over the plan and factors that influence their costs. In addition, these plans address the needs of the changing work environment only so long as people move within covered employment. Otherwise, they do not work well.

Conclusion

As the workforce and employment contract are changing, pension plans will also need to be revisited. For many employers, there are weaknesses in both traditional defined benefit and traditional defined contribution plans. Because cash balance plans offer an alternative well suited to many situations, they will be used increasingly in the future.