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**CASH BALANCE, FLOOR BENEFIT, TARGET BENEFIT
AND OTHER VARIATIONS OF TRADITIONAL
RETIREMENT PLANS**

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Recorder: TIMOTHY J. MARNELL

- o Discussion of the design and funding of nontraditional retirement plans.
 Review of appropriate uses and their advantages and disadvantages over
 traditional arrangements.

MR. TIMOTHY J. MARNELL: This session is on nontraditional retirement plans. Let me introduce the panelists. Mr. Larry Stahl is from Buck Consultants, and he will discuss cash balance plans. Mr. Gordon Gould is from Towers Perrin, he will discuss floor plans. My name is Tim Marnell, also from Towers Perrin, and I will discuss target benefit plans and something that's been termed K-SOPS. My portion will be relatively short.

First, target benefit plans. Most people know what they are and how they work. Target benefit plans are defined contribution (DC) plans in which you target a benefit based on a person's service; you define retirement ages, early retirement reductions, all of the things typical in a defined benefit plan. Once you have targeted that benefit, the plan becomes a DC plan where the contribution is determined every year. At retirement, however, the person is paid an account balance. And at that point, it bears no resemblance to the targeted benefit. There is simply an account balance that is paid, and whatever benefit it can provide, so be it. The contribution is adjusted annually.

There have been changes for target benefit plans with some of the recent changes in the law. First, discrimination -- or probably more appropriately, the integration rules are going to cause problems with target benefit plans. Under the prior rules, if the contribution was determined using Individual Level Premium with an interest rate somewhere between 5% and 6%, and the benefits were not discriminatory, then the contributions were deemed not to be discriminatory. Under the new nondiscrimination rules, or the new integration rules, that's not going to work any longer. A target benefit plan is a DC plan, and the contributions, not the benefits, must satisfy the integration tests. So a plan may have problems meeting the new nondiscrimination rules applicable in 1989.

A further problem is that contributions cannot end at age 65. But what do you do with a target benefit where the person's benefit is "targeted" at 65? At the recent enrolled actuaries meeting, there was some discussion about this. Is the contribution redetermined assuming that the benefit is actuarially increased after age 65? Once a person has reached that magic targeting age, will contributions

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continue? I doubt that we'll get a lot of guidance from the IRS, but maybe the EEOC will step into it somehow.

The last thing that I wanted to talk about is something that has been termed K-SOPS. Many clients have 401(k) plans, where the matching company contribution is put into company stock. It's fairly common to do this. One of the ideas that's surfacing recently is to go ahead and convert the 401(k) plan to a K-SOP by making the company matching portion an employee stock ownership plan (ESOP). Salary deferrals continue for the employee, but all of the company match that had previously been going into company stock anyway is now designated as going into an ESOP. I'm not sure that there are any negatives except that under an ESOP you must allow diversification of the funds within a certain period before retirement. These plans, however, have all the advantages of an ESOP: company ownership, the company's ability to borrow at reduced lending rates to buy the stock that's going to be contributed, and deduction of interest on the loan. To the extent that a company borrows money and gets rid of other debt that's at a higher rate, it has saved some money. Also, any dividends paid on the stock and distributed to participants within a certain period of time after they're paid, are deductible to the company. Normally, dividends are not deductible. This eliminates the double taxation of dividends. Employees simply have a plan that was a 401(k) plan, with the match going into company stock that is now called an ESOP. This is an easy way to make simple changes to the plan and get a few advantages such as being able to borrow money at lower rates and get the interest deductible on the contribution.

We will hold questions until the end, when I'll ask you to use the microphones. These sessions will be recorded and questions will go into the documentation. Next, Mr. Stahly will talk about cash balance plans.

MR. LARRY D. STAHLY: I'd like to give an overview of cash balance plans: what they are, what a typical plan design is, what some of the problem areas are, how you fund them, and basic advantages and disadvantages.

As a starting point, a cash balance plan is a defined benefit (DB) plan, usually communicated to employees as a DC plan. This is done by setting up phantom or nominal accounts, to which annual accruals are added. The second part that makes it a DB plan is that there is a guaranteed interest rate credit. Annuity benefits are then derived from these phantom balances by converting to an underlying career average plan indexed to inflation. The interest rate credit on the account is usually the same as the index for the increasing annuity. Assume no mortality until age 65, because upon death, the full account balance is paid to a beneficiary. From actuarial principles, if the interest rate credit is equal to the escalating annuity factor, you are converting using a 0% interest rate. Then by assuming no mortality until age 65, you're basically converting all benefits using a life expectancy factor of age 65.

Because it's a DB plan, the employer is taking the benefit risk. The PBGC premiums guarantee that the employee has the protection of PBGC. Typically, these plans have faster vesting and greater preretirement distributions. A typical plan design has the amount credited to the employee's account each year between 3% and 4%. Reproducing a career average plan of about 1% of pay will require an 8% contribution to the cash balance plan. The interest credited is usually tied to some current market rate: PBGC rates, GIC rates, or the prime rate. Often, the easiest is the PBGC rates because of the ways some factors interrelate. The increase factor is usually tied to the interest accrual rate to

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make the plan easier to communicate and understand. To make the plan more like a DC plan and give it more appeal to employees, the main payout form is usually lump sum. Other options are provided, and some care has to be taken in how these factors are developed to convert from the lump sum to the annuity, so that you don't get whipsawed by fluctuations in the market rates. I would try to build in flexibility when designing interest rate credit and the conversion factors.

When you're converting a DB plan to a cash balance plan, you will have to do several things. First, set up the appropriate transition benefits, converting accrued benefits to a lump sum account.

Older employees typically aren't as well off under this kind of plan, so you may want to do some grandfathering. You may also want to add some minimum benefits. I've also heard of people using a cash balance plan as a minimum benefit within another plan. Once a plan is in operation, you can make periodic updates. The interest rate credit is quite often changed at the end of the year. It's essentially a one-year update, giving additional interest accrual on the account. As I mentioned, vesting is usually faster. Most of the other provisions (e.g., eligibility and participation) are standard provisions.

A sample cash balance plan works as follows: take an employee hired at age 30, and an underlying career average formula of 1/2% of pay. In this example, assume an interest accrual rate of 6% and a salary increase of 6%. The next item, the key item, the lump sum conversion factor (the life expectancy at age 65) is basically 20 times the annual benefit, using the 83 group annuity mortality table on a certain mix of male and female. It's a unisex rate by which you divide the individual account balances to come up with the indexed annuity. The annual accrual is the life expectancy (20) times the 1/2%, or 10% of pay. In reality, most employers who have cash balance plans really start with the 10% and work backwards to get the 1/2%. Interest starts accruing in the second year on the prior year's account balance. At the end of 35 years, there's been an accumulation of about \$635,000. Converting, using the 240 factor, yields an indexed monthly annuity of \$2,643. For comparison purposes, the life annuity amount is a little over \$5,000.

Funding is more flexible with more control than a typical DC plan. This is because you're not funding the account balances; you're funding the underlying benefit. The valuation is a typical valuation including turnover discounts and a margin over the crediting rate for excess investment earnings. If you had a 10% cash balance plan, you might only have to contribute 8%. Typically, these plans are funded on the unit credit funding method. The Financial Accounting Standard (FAS) 87 affected this flexibility, since now we must contend with various interest rate corridors. A final point related to funding and expense is that because you are paying out more money in lump sums, you may have a different kind of investment policy than you would for a typical DB plan.

Problems include no clear IRS national position on many key issues. Most of the plans that have been qualified have been qualified at the local offices. It's not easy to give an employer an ironclad assurance that the plan is going to be qualified. The second point is more critical, since a cash balance plan must meet all typical DB rules. It must comply with integration, benefit accrual rules, backloading, and Section 415 DB rules, not DC rules. Expense has to be reported under FAS 87, and you still must provide for joint and survivor and the spousal consent requirements. An area where I think some of the glitter has

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gone off cash balance plans is that lump sums don't have as many advantages as they had before the Tax Reform Act of 1986. With the disappearance of ten-year averaging and the emergence of an excise tax on large distributions, some of the appeal has gone from these plans.

A big problem is communication to employees. An employee actually has more or less than reported in these phantom accounts. What is guaranteed is the amount that goes in, the interest rate credit, and the conversion factors.

The final problem area is rehires who want benefits reinstated. Young people may have some problems with the Section 415 limits if you try to do exotic things.

Who do these plans appeal to? Where are the advantages? Our experience has been that, because these plans reward shorter term, younger employees, they're very popular with banks and high-tech companies where key people stay three to five years. This plan means much more to them than the typical career average or final average plan. Cash balance plans basically provide equal benefits for equal pay, a basic tenet of modern compensation. There is also greater portability and visibility. Employees seem to understand these plans better than their career average plan. The account balances are more like a bank account balance, which aids in recruiting. As I mentioned earlier, usually there's faster vesting, more ancillary benefits, and greater control and flexibility in the funding process. Cash balance plans are also very helpful in restructuring your plans if you have DB plans and DC plans that aren't doing the job. Quite often a company having a very rich DB final average plan and a 401(k) plan will have benefit replacement ratios, along with Social Security, that are well over 100% of compensation. You may want to change benefits, but how do you do it and still keep the employees happy? A cash balance plan may be effective. Another way is to replace a profit sharing plan that has had sporadic contributions or poor investments. Cash balance plans also provide more benefit security than DC plans. Cash balance plans can also be very helpful in acquisitions and divestitures in that it's pretty easy to blend in someone's accrued benefit from another plan if it can be rolled over. Also, cashouts are lump sums that potentially can be taken to the next plan. And a cash balance plan is typically easier to administer than your normal DC plan. You don't have the recordkeeping problems you usually have with DC plans, including tying trust reconciliation to account balances.

It is, however, more difficult to reward the older long-term employees. Also, employees really don't have investment choices, and they continually want to have them. They can't withdraw their money. For the employer, PBGC premiums and annual actuarial valuations are required. Not necessarily every year, but with this kind of plan, I would recommend it. If you don't, the flexibility you build into the funding will possibly result in less adequate funding and, with today's PBGC premium structure, I would be a little concerned. Fast track employees typically are better rewarded by a final average plan. This is a compromise between career average plan and a final average plan. It's also not going to do well for some of the key officers of most organizations. A lot of employers feel that lump sums aren't necessarily the best vehicle for retirement, believing the employee uses the money irresponsibly.

A final comment, the bottom line is, should everybody have a cash balance plan? I would say, no. But I think if you're having problems with your current plan,

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if there's something lacking in it, then it's a definite vehicle to consider. But just to put one in to have a cash balance plan is a lot of work.

MR. GORDON L. GOULD: I'm going to talk about floor benefit arrangements. I'll cover some of the recent legal environments surrounding the design of the plan, funding and expense implications, and what some good candidates would be for this type of an arrangement.

What would be a good candidate? Some people have been thinking that the integration rules are a little stricter and that perhaps a floor plan offers a way around them.

A floor plan is two plans: a DB plan and a DC plan. The DB plan benefits are offset by the annuity equivalent of the DC balance. Because of this, the DC plan where you will always accrue benefits is typically considered to be the base plan. In the DB plan, you usually have to reach a certain age for that benefit to begin. For younger employees, this approach has a lot of the advantages of a DC plan. It's portable, and the benefits are highly visible. From the employer's perspective, you don't have PBGC premiums; there's no unfunded liability and the cost is very stable. And for older employees, you do get the protection of the DB plan. You can also have retirement planning for a mid-career or late career hire and you can provide substantial past service credits. The fast track employees who are typically hurt by a DC plan can be made whole when they terminate and their benefits kick over into the DB plan.

A little history on floor plans. Before ERISA, floor plans were not permissible for two reasons. First, the DBs were not considered to be definitely determinable because the DC offset was unknown until termination; second, the DC balance was not considered to be for the exclusive benefit of employees because as that balance grew, it would merely offset the DB, benefiting the employer. In 1976, Revenue Ruling 76-259 was passed, expressly permitting these arrangements. It's practically the only thing in the code, the regulations, or revenue rulings that specifically mentions these plans. Revenue Ruling 76-259 says that a floor offset arrangement is okay, provided that the DB plan by itself meets the accrual rules of Section 411 (e.g., backloading), that the procedure for converting the DC balance to an annuity is specified and precludes employer discretion, and that the offset is not more than the vested balance. In other words, when someone leaves, only the vested balance from his or her DC plan can be used.

There's been some recent legislative activity in the area of floor plans. The Tax Reform Act of 1986 added Section 401(k)(4) to the code, saying that DB plan benefits cannot be contingent on an employee's election to defer under a 401(k) plan. This doesn't mean that you can't have a 401(k) plan as part of the floor offset arrangement; it just means that everyone must be entitled to a DB plan benefit regardless of whether they defer in the 401(k). Now, there are a couple of ways that you might be able to get around this, and I'll mention those in a few minutes. The recently passed the Omnibus Budget Reconciliation Act of 1987 contains some legislation on the ESOP floor plan. Essentially, an ESOP floor plan can no longer have more than 10% of the combined plan assets in employer stock. This will effectively kill new floor ESOPs. Naturally, there was a grandfather for ESOP floor plans existing on December 17, 1987. However, Congress has an obvious dislike for floor ESOP arrangements, and there is a good chance that something else will come up in the future.

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Some design aspects are that, for a younger employee, the plan is essentially going to look like a straight DC plan. In a typical arrangement, the DB plan might not kick in until age 45 or 50, or even be designed to not kick in at all. In some ways, a floor plan has a lot of positive features of both DB and DC plans. One thing that I think is good about it is that, even for an older employee, it provides some availability of the DB plan benefit. Also, imagine if we just had a straight DB plan and the employee was in need of money for a hardship. Unless the employer provides DB plan loans (which virtually no one does), there's no money out there. Whereas, if we had a floor offset arrangement, the amount of money in the DC plan could be available through a plan loan, or through hardship provisions. So there's some versatility that you don't have in just a straight DB.

Probably, the key design issues are as follows: What's the DB accrual formula? What kind of DC plan is the underlying account balance plan? And what is the actuarial basis for converting the DC balance into an annuity? In terms of the timing of payouts, there are really only two choices: you convert the account balance to annuity when the employee terminates or you do it when the employee retires. From the employer's perspective, you probably want to do it when the employee terminates, so that the employee's benefit from the DB plan can be determined and fixed. Otherwise, the employer has to continue to bear the investment risk on the account balance as it grows. There could be a small problem here for an employee who leaves his money in the DC plan and the plan performs poorly from then to retirement. Remember the offset was determined at a time when the DC balance was healthier. There is another question when you convert the balance to an annuity. Do you take the balance and divide by an immediate annuity factor or do you take the balance and divide by a deferred annuity factor? For most situations, you're going to find it's the deferred annuity factor. The choice of a conversion rate is probably one of the most critical decisions. You can use a level rate or a rate that varies (e.g., the PBGC rate). There's no real legislative guidance on what's a reasonable rate to use in this situation. A variable to consider is that the higher the conversion rate you use, the older the age at which the DB plan is going to kick in. Rather than play around with the conversion rate, you might as well play around with the DB formula. For example, suppose an employee reaches age 65 with a gross DB of \$20,000 and an account balance of \$100,000. If the conversion rate is 10%, the account balance is worth, say, \$15,000 per year. The balance of the \$20,000 annuity (\$5,000) is payable from the DB plan. If the retiree takes the \$100,000 and is only able to buy an annuity for, say, \$10,000, then his total retirement income is \$15,000 rather than \$20,000. From that situation, it makes more sense to have a conversion rate that's in line with what the employee can actually do with the balance, and so if you want to have a \$15,000 gross benefit instead of \$20,000, go ahead and change the DB formula. Another thing is to make sure that if you're taking this annuity approach, you look at individual annuity rates and not group annuity rates. You might want to consider a variable rate (e.g., the PBGC or another external index). The problem with that is, the variability in your plan could be extreme. For example, look at the FAS 87 situation where interest rates are high, causing your annuity conversion rate to jump to, say, 10%.

At the same time, your discount rate also jumps because you have to use a current settlement rate. This increase in your DC conversion rate has decreased your DBs. At the same time, you're discounting those decreased benefits at a higher rate. So the liability has a double whammy downward. And naturally, when the situation reverses itself, the liability has that same double

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whammy upwards. This could introduce a tremendous amount of volatility. Be careful in considering a variable rate. You could alleviate this somewhat by assuming that account balances would grow more rapidly. But there's still going to be a lot of volatility.

Should the DB floor be a final pay plan or a career average plan? The career average plan could be designed to only guarantee a certain investment amount. In an extreme situation, you could even set up a cash balance plan that mimics the DC plan, and all you're really getting out of the DB floor is an actual guaranteed interest rate. I wouldn't recommend a plan like that since you're expecting to pay no benefits from the plan. And you'd have PBGC premiums and possibly some problems with this new minimum participation rule. But it's something you should consider.

Another question is integration. These arrangements are fairly complicated and employees will have a hard time understanding them. Adding integration to the scheme might push the plan over the edge and give you a program that no one can understand at all. On the other hand, if you're looking to replace an excess only integrated plan, a floor arrangement is a possibility. For example, you could have a final pay plan with a 1% benefit up to the wage base and 1.5% over the wage base, with your DC plan designed in such a way that it cancels out the 1% of benefits up to the wage base. What you're left with under the DB plan is 1.5% excess only plan. The only problem with that as I mentioned is the new minimum participation rule that says a plan must benefit 50 employees. It doesn't say that the plan must have 50 participants; it must benefit 50 employees. There's also some wording in the conference report alluding to floor offset arrangements, specifically in this light. So until regulations come out, it's not clear whether you can have a floor offset plan in which less than 50 people ultimately benefit. I don't know how anyone can put regulations together, because you could have a plan where no one currently has an accrued benefit and yet on a projected basis, people do have benefits. One last thing on integration is that the offset from the DC plan is not subject to the 50% limit in the integration rule. In other words, you can offset the DB gross benefit by more than 50% through the DC account balance. It's not subject to that rule.

Turning to investments, the general feeling is that the employer should retain the investment discretion. The reason most often given is that employees would be prone to wild speculation because they have nothing to lose. I think that the reverse is probably a better reason for not giving employees discretion. Employees tend to be very conservative with their DC balances. Surveys show that 60% to 70% of employees go into the money market fund or the guaranteed investment fund. In that situation, you might actually have the employee balances grow at too low a rate, thereby increasing the cost of the DB plan. In any event, it's probably a good idea not to give employees discretion on how to invest that money. For a small plan, you have to be careful of the top-heavy rules. You could have only one person benefiting from the DB plan, making it top-heavy. But I think that you can pass the top-heavy rule by using the minimum 2% accrual formula. I don't know what happens, however, when you go to that minimum accrual formula and you still have people not getting any DBs.

What should the DC plan be? You could have a 401(k), a straight profit sharing, or an ESOP: these are the most common. A 401(k) plan could be a very good alternative to a contributory DB plan. In a contributory plan, the employee monies are after-tax and are credited with a low interest rate. And, with tax reform, they are distributed with those horrible exclusion ratio rules. So a

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401(k) floor, where you subtract from the DB plan benefits the annuity value of the 401(k) balance, could be constructed so that from the employer's standpoint the cost is about the same. The employee gets the same benefit from the DB plan and more money in his account. So naturally, Congress objected because the loser in that situation was the government; hence, the rule that benefits in the DB plan could not be contingent on the election to defer into the 401(k). There are three ways that this could be overcome. First, you could have a 401(k) floor offset plan where the DC offset was the employer match. Everybody would then get a DB, offset by the annuity value of the employer match, not the employee money. Because the DB plan benefits are not contingent on the elections to defer, this would be acceptable. And the employee still gets a good benefit out of the plan because of the pretax deferral that could be worth a significant amount of money. The money is also available through a loan or hardship withdrawal, which you wouldn't get with just a DB plan.

Another way is to make participation in the 401(k) mandatory as a condition of employment. Obviously, there are some problems if you have lower-paid employees who can't afford the 401(k) and, in some states, this might not be legal.

The third thing is a phantom approach where the gross DB is offset by what an employee would have had in a 401(k) plan assuming some deferral. The offset would be the person's phantom balance regardless of whether he or she did in fact defer. There's a problem with this in that RR 76-259 says you can only offset the vested account balance. Obviously, if a person doesn't actually defer, there is no vested account balance. Some plans have been qualified where the offset was what the employee's money would have grown to if it was left in the guarantee fund.

Another type of floor offset is the ESOP floor offset plan, where the DC account balance is the employer stock in an ESOP. If you don't now have a floor ESOP, then you can only put in one in which the ESOP stock is no more than 10% of the total assets in both plans. The reasons that Congress clamped down on these are, first, the floor ESOP is a subterfuge or could be used as subterfuge to get around the 10% rule. You could have a DB plan that essentially provided no benefits because the ESOP floor more than offset the entire DB. In that case, in effect, you've got a DB plan, in which all the money is in employer stock. The other thing is that with the excise-tax-free reversion from a DB plan into an ESOP, an employer could transfer surplus to the ESOP, then use that transferred money in a floor offset arrangement. Another reason is that the PBGC would be stuck with one of these plan if the company is doing poorly and the value of the company stock declines drastically, resulting in the DB plan's picking up the entire difference. So just at the time that the company is really in trouble, they have to put massive additional funds into their DB plan. So the PBGC would be stuck with the entire liability. Another thing about the ESOP is the additional minimum liability under FAS 87 would also crop up when the ESOP stock fell drastically and the DB liability went way up. In that situation, your balance sheet hit for minimum liability would be significant and it would be just like a spiral.

As far as valuing these plans go, all cost methods are available. For a new plan, you might want to be a little conservative, because initially no benefits may accrue. Sometime later when benefits do accrue, you may want to have done some advance funding. Unfortunately, if you have a new floor plan and the accrued benefits are very low, the new 150% full funding limit will make it hard to do much advance funding. We've had some informal discussions with the IRS

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as to how they think you should fund a floor plan if you're using unit credit or projected unit credit (PUC). Our understanding is that to value the DB plan, use PUC on an individual basis as if no DC plan existed. Then for each individual, take that gross DB PUC liability and subtract the DC account balance, giving the liability for the whole plan. This ignores the actuarial conversion factors that are inherent in the plan because it assumes that the value of your DC account is equal to what you would convert it to as an annuity discounted at the valuation interest rate. Surprisingly, when you value a plan this way, the offset is greater than if you projected the balance, then prorated by service over service. That happens when your interest rates are higher than your salary scale. In actual practice, depending on your historical investment return and salary scale, this may or may not be true. But in a theoretical sense, if your interest rate is higher than your salary scale, the unit credit offset will exceed the projected unit credit offset.

Two assumptions are needed to value these plans that you don't typically have in a regular DB plan. You need an assumption for your DC account balance growth and an assumption as to continuing contributions to the DC plan.

Forecasting might help because these plans can be very leveraged and very volatile. For instance, if you look at a single employee plan where the DC balance exceeds the DB, there's no reason to do a risky investment because you have no liability in your DB plan. You could have a situation where a risky investment with expected higher return gives you a higher expected liability in your DB plan. There are some other issues such as whether or not changes in the DC plan are plan amendments or gains or losses: for example, the change in the \$30,000 limit and the \$7,000 401(k) limit when indexed upwards. I would guess that those are treated as gains and losses, since they're not directly part of the DB plan. One last thing on valuation is, for the ESOP floor plan, you have to be careful because of the volatility. A few years ago, the PGBC said the actuary wasn't using high enough plan shutdown decrements. I wonder if they want us to use a "black Monday" decrement in an ESOP floor plan.

For FAS 87 valuation purposes, the floor offset arrangement is treated as one plan. So your net periodic pension cost is the sum of your DC plan contributions and your DB pension cost. It's not clear how the PUC method is applied for FAS 87 purposes. You could look at the IRS method; try a traditional project and prorate on the net benefit; or a more precise way, where you build the actual accrual pattern in the DB plan. Another thing to consider is your assumed return on the DC plan to your long-term asset rate and your funding and conversion rates.

I tried to identify some reasonable candidates for a floor offset approach. First, a smaller company that originally had a DB contribution plan, for obvious reasons. It has matured and wants to provide investment protection to employees without getting into the whole DB program. They could wrap a DB plan around the profit sharing plan, which is just a floor offset arrangement, thereby providing some benefit security for their older longer-service employees. Another candidate is if you're considering a cash balance approach. Typically, in a cash balance plan you look at your replacement ratios, and people who are 55 tend to lose. So we grandfather them. What you end up with is a floor offset plan whereby, for the younger employees, the benefit buildup is straight DC. Then all of a sudden you hit an age and kick over to a DB plan. So, if your client is looking for alternate approaches and likes the cash balance approach, you might suggest a floor offset because it has a lot of the same attributes. Another

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candidate is an employer with a very generous 401(k) plan and a DB plan. Replacement ratios at age 65 with the 401(k), DB, and Social Security are up to 120% or 130% of final pay. The floor offset approach on the employer match may alleviate this cutback on the duplication of benefits. Other candidates are companies that have problems with the new participation rules. If you have a DB plan that might not pass and you have a DC plan, you could put all your employees into the DB plan using the floor offset approach. Thereby, everyone participates in a DB plan and the plan passes the new participation rules. As I mentioned earlier, there could be some problems with the 50 participant rule. Another situation arises if you would like to transfer DB money into a DC plan. Such transfers have been held up for the last couple of years, and no one seems to be able to get approval for them. However, you could freeze your DB plan and put in a DC formula with a floor offset approach. In a short time you could end up transferring all the liability from the DB plan into the DC plan.

The last candidate is a supplemental executive retirement plan (SERP). Many SERPs have a floor benefit approach where you target a percentage of final average pay for your executives offset by all other qualified company benefits. We are going to see many new SERPs in the next few years because of the \$200,000 limit on compensation and the new more restrictive 415 limits. Rather than replacing all the benefits that were lost because of the \$7,000 and \$200,000 caps using all the gyrations and spreadsheets of projecting these losses, just pick out what you want the executive to have and then offset it by all other benefits.

MR. CHARLES E. HIATT*: As I understand your cash balance plan illustration, each participant would get the same credit for contributions to their accounts, reflecting only the fact that they had X years of service times some percentage for each year of service. In a target benefit plan, as I understand it, not only can you do that, but in addition, you can recognize the age of the participant when they enter into the plan. Is it possible to structure the cash balance plan, which obviously avoids the 25%, \$30,000 limit that the target benefit has so that it also reflects age and service as well as compensation?

MR. STAHLY: I don't believe so, but I'd have to look into it.

MR. HIATT: The reason I ask is, it seems to me, that if we did this like the "old garden variety" DB plan that we all know and love, we could use individual aggregate funding and calculate what the individual asset allocation is based upon accrued liability plus normal cost. We would then calculate what the individual contribution would be based upon the present value of future benefits minus the allocated assets divided by a temporary annuity. That would give an individual contribution level which we could say to each person was their contribution this year. The assets would be clearly allocated. Would that fit the definition of cash balance?

MR. STAHLY: I don't believe so, but I'd have to think about that.

MR. DAVID P. FRIEDLANDER**: It seems to me that you spoke before about the possibility of having a floor plan in which the 401(k) deferral was mandatory

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as a condition of employment. And that would, of course, have always passed the average deferral test. It sounds like that's a cash deferred arrangement without any kind of a cash option. And I'm not sure how you do that.

MR. GOULD: If you made it mandatory as a condition of employment, that is a good point. If your money had to go into that plan, you no longer have the option to take cash-in-hand, and therefore you don't have a cash or deferred arrangement. Good point. I don't know what the answer is, but I have seen them. I've seen a couple of plans make the transition from a mandatory contributory DB plan to a mandatory contributory 401(k) plan, but I don't know whether that was an issue. Can anybody from the audience answer that?

MR. MICHAEL MELNICK: I have a question on the delayed retirement in a target benefit plan. What seems like a logical approach is to let them accrue a target benefit under the basic formula started out with the year in question. And then use the unit credit normal cost as the contribution. I'd just like your comment on that.

MR. MARNELL: I'm sorry, use the unit credit normal cost for years after they met the target? After age 65, for instance?

MR. MELNICK: Right. Based on accruing an additional target benefit geared to the original formula. For example, if the original formula was 1% of pay per year, then at age 66, they would accrue a target benefit of 1% of pay with the contribution for them being the unit credit normal cost.

MR. MARNELL: You've actually changed the plan slightly. But that's a way to get around the problem of stopping accruals at age 65, if that's your targeted age.

FROM THE FLOOR: I've got two questions on cash balance plans. First, what approaches you have to update these plans or give past service credit treating the cash balance plan as if it had been in effect before the effective date. Second question is, since you use increasing annuities in the plan design, making the plan documents very complex, with factors and increasing annuities and things that satisfy the IRS, but don't relate to anything that the employees are going to see, do you ever write the documents in a much more straightforward way by simply defining the cash balance directly?

MR. STAHLY: To answer your second question first, no, I've never seen the document without it. It would seem to me it's possible, but it could end up making your communications even more complicated than your document.

One problem is, it's got to be written as a DB plan. You must define the benefit and then define how you get to the cash balance. You can't say, here's the balance. That's not a DB. It's got to be written first as a DB plan.

On the first question about past service updates, I know they're possible, but I think it would be very complex to do most of the things that I mentioned that you could do. Retiree increases would be limited probably to those who don't take lump sums. And I think you'd have similar problems with trying to do updates. But I have not had any experience with that.

PANEL DISCUSSION

Typically, cash balance plans don't have any retirees. So retiree increases are easy. But you would be discriminatory because of the one retiree who is highly paid.

FROM THE FLOOR: I have a question for Larry. You had mentioned funding cash balance plans using a benefit approach. Just to elaborate, what we have done is to use an accumulation for the cash balance in the future, but discount at a higher rate assuming a margin and projected unit credit. Is that the sort of thing you were thinking of?

MR. STAHLY: I think you can use projected unit credit if your assumptions are within a certain range. But I think if the assumptions have a certain relationship, the method degenerates into the unit credit method.

FROM THE FLOOR: Just an observation here. You had mentioned the issue of minimum benefits and cash balance plans. Surely in a situation where you have a minimum benefit based on final average pay that would preclude use of traditional unit credit.

MR. STAHLY: Yes.

FROM THE FLOOR: And the interesting result that we have found is that whenever the assumed interest rate is higher than the accumulation rate, you have the odd result that the Accumulated Benefit Obligation is bigger than the Projected Benefit Obligation. A final question, the annuity conversion factor, which is in essence, a life expectancy, is there a 0% interest rate? Surely that would almost guarantee that nobody is going to take an annuity but rather take a lump sum and go out and buy one at a better rate.

MR. STAHLY: That's what Tim was saying. It's really geared to lump sums, the bottom line of a cash balance plan. With the draw of cash plus that kind of conversion rate, you just don't see anybody ever taking an annuity. A bit of caution, in light of the required J&S distributions, that we're in a position of perhaps shortchanging someone who could not get the necessary spousal consent.