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CHANGING ROLE OF DEFINED BENEFIT AND DEFINED CONTRIBUTION PENSION PLANS

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Pension benefits as an asset from the plan participant's point of view:

- o Degree of risk to the participant in meeting retirement income objectives
- o Impact of legislative changes, Financial Accounting Standards, Board (FASB) reporting requirements, plan termination liabilities and other factors on the relative roles of defined benefit and defined contribution plans
- o Trends in plan design
- o Investment choices in defined contribution plans
- o Implications with Social Security, Employee Retirement Income Security Act (ERISA), 401(k) plans, etc.

MR. PAUL R. ZWILLING: This topic is one of special interest to my company, Mutual of America, because the underwriting of group pension plans is our primary business. We are probably somewhat unique among life insurance companies with our product mix, and I would like to take a minute to describe the characteristics of our business so you know where I'm coming from.

We currently have 1,600 defined benefit and 1,600 defined contribution plans in effect. The average defined benefit plan has 29 active lives in it. Since we have a number of plans which cover several thousand lives or more, we also have a large number of defined benefit plans with 10 or fewer lives in them. The average defined contribution plan covers 17 active lives. Approximately 90% of our premium income comes from group pension business and plans which provide for individual accumulations of employee contributions where the employee determines the amount of the contribution, such as tax sheltered annuities and Individual Retirement Accounts.

Our clients are non-profit health and welfare agencies, which tend, on average, to be less knowledgeable concerning pensions and related matters than larger groups. There also tends to be a reasonable amount of transfer between employers both of whom have pension plans with us, which results in portability of benefits being of importance in the design of our plans. Therefore, we feel that it is important that we be able to provide guidance as to the best plan to meet their circumstances. With a few large plan exceptions, we provide full actuarial and consulting services to our plan holders.

We have generally felt that the characteristics of defined benefit plans provide a better match to what we perceive to be the pension needs of a group of average employees. These would include a benefit which is based on all years of service, which is formulated towards continuing a certain percentage of pre-retirement income intended to maintain a pre-retirement standard of living for an employee with a certain period of service, such as 30 years. Ideally, the standard of living should continue to be maintained after retirement by appropriate adjustments to counteract the effects of inflation. An important element is that the benefit should be predeterminable, and, subject to the solvency of the employer, certain of being paid.

The defined contribution plan, from our viewpoint, does not meet these needs well. It is basically a future service only program, with contributions starting on the effective date of the plan. The benefits provided at retirement, being dependent on the accumulated amount of contributions with interest, may not bear a reasonable relationship to the employee's pre-retirement income level. Indeed, too high a level of benefits may result as easily as too low a level, depending on the amount of service that the employee has. Benefits provided under a defined contribution plan are seldom increased to offset the effects of inflation after retirement.

Defined contribution plans provide a savings vehicle under which employees may accumulate assets. While pensions originally may have been thought of as an obligation of the employer to provide for the future well being of his employees after retirement, they are increasingly being thought of as deferred wages, and defined contribution plans are consistent with such a view. With the current emphasis on investment opportunities available with products such as IRAs, employees covered by defined contribution plans are likely to want to make the choice as to how their money is invested.

Under a defined contribution plan, the plan participant takes the risk of having his potential benefit reduced if his investment choices are not favorable and, conversely, stands to profit if his or her investment choices do well. Under a defined benefit plan, it is the employer who derives the advantages of favorable investments and who makes up the difference if the investments are below the standard expected.

Many employers are unwilling to take the chance of adverse economic conditions resulting in increasing costs and are now establishing a defined contribution plan, where a defined benefit plan would have been the choice a few years ago. This is especially true of employers of smaller groups of employees, who do not have the resources to meet increased plan costs if experience is unfavorable.

Defined benefit plans do not usually provide a plan participant access to the plan benefits, or to their value, until he has at least satisfied the requirements for early retirement. Even then, most plans still provide that the benefit must be taken in installments of one form or the other instead of a lump sum.

With a defined contribution plan, the perception that the contributions are deferred wages is more likely to lead to cash options being available at retirement. Some plans also provide that the accumulated contributions

are available for other purposes before retirement, such as children's college expenses, purchase of a home, etc. To the extent that the accumulations are used for such purposes, the benefits payable at retirement will be reduced. Thus, the basic purpose for which a pension plan is established, the provision of retirement benefits to replace pre-retirement income, is more likely to be circumvented under a defined contribution plan than under a defined benefit plan.

Over the past decade there have been a number of legislative and regulatory changes which have made defined benefit plans more expensive and administratively burdensome to maintain than defined contribution plans. The passage of ERISA not quite ten years ago, introduced the following major provisions which are applicable to defined benefit plans:

- The Minimum Funding Standard Account requirements, which removed a good deal of the flexibility in determining contribution levels.
- The necessity of periodic actuarial valuations, even though most plans did have annual valuations in any event.
- Minimum vesting and eligibility requirements which often increased the size of the covered group of employees and the level of accrued benefits, thus resulting in increased costs.
- Termination insurance, to be provided by the PBGC at a premium which is soon to be increased from \$2.60 to at least \$7.00 per employee. In addition, the employer is subject a liability of up to 30% of his net worth if the plan terminates with unfunded liabilities.

Only the minimum vesting and eligibility provisions apply to defined contribution plans. Defined contributions plans do not require actuarial valuations, there is no minimum funding required (other than the payment of the defined contribution percentage of pay), there is no PBGC premium, and there is no further employer liability on termination of the defined contribution plan.

TEFRA, which was passed in August of 1982, put further restrictions on both defined benefit and defined contribution plans. However, while both types of plans were affected, the heavier burden does seem to be on defined benefit plans.

The TEFRA top-heavy provisions provide that a plan is top-heavy when 60% or more of the value of accrued benefits under a defined benefit plan, and 60% of the accumulations under a defined contribution plan are for key employees. Both types of plans are affected and, since smaller plans are more likely to be top-heavy, it may be that proportionately more defined contribution plans will be top-heavy than will be defined benefit plans. But the minimum benefit provision of 2% a year for up to ten years of service for defined benefit plans seems to be a much stiffer requirement than the minimum contribution of 3% a year for defined contribution plans. The great majority of defined contribution plans provide for contribution level of well over 3% to start with.

TEFRA also revised the section 415 limits, down to a maximum annual benefit of \$90,000 for defined benefit plans and a maximum annual contribution of \$30,000 for defined contribution plans. Again, it seems

that the greater burden is on defined benefit plans, at least from our perspective, since a long term employee is more likely to be affected by the \$90,000 benefit limit in a defined benefit plan, especially if the plan is non-contributory. The potential for a contribution of over \$30,000 a year under a defined contribution plan would seem to be limited.

Also having an effect on defined benefit plans are the 1983 changes in Social Security and the Financial Accounting Standards Board proposals for accounting for defined benefit plans.

Most qualified defined benefit plans recognize Social Security benefits by either deducting a portion of the anticipated Social Security benefit from the plan benefit, or by providing a higher level of benefit on salaries over some breakpoint. The 1983 amendments to Social Security took a first step towards reducing the Social Security benefit by postponing the cost of living adjustment for six months, increasing the retirement age and taxing part of the benefit above certain income levels. Already, there is talk less than a year and a half after the 1983 amendments, of the probable need to either raise taxes or reduce benefits in the future. If the employer wishes to maintain the same total level of income replacement after retirement, it will cost him more to provide a greater portion of the benefit through the pension plan. Defined contribution plans on the other hand do not typically provide for integration with Social Security.

The FASB proposals for the accounting for defined benefit plans specify the valuation method to be used to determine the plan liabilities. This may lead to dual valuations and increased cost to the employer, where it is desirable to use a method other than the unit credit method to determine the proper plan contribution. Placement of the plan liabilities on the balance sheet, instead of in a footnote as is usually currently done, may have a significant impact on the employer's overall financial position that may lead him to modify his defined benefit plan.

Over the past several years the federal government appears to be giving implicit approval to and to be encouraging defined contribution plans through the provision of various tax preferences. These include the establishment of IRAs by the Economic Recovery Tax Act of 1981, Qualified Voluntary Employee Contribution plans, Tax Deferred Annuities for employees in non-profit fields and, most recently, 401(k) plans.

What impact does all of this have on the growth of defined benefit and defined contribution plans? Data published by the Employee Benefit Research Institute shows that prior to ERISA there was consistently greater growth in the number of defined benefit plans as compared to defined contribution plans. In both 1973 and 1974, approximately 31,000 new defined benefit plans were established as compared to 24,000 new defined contribution plans. In this context, "new" plans means the net increase of plans qualified during the year less those plans terminated. In 1975, right after ERISA was passed, the increase in both types of plans fell sharply to about 11,000 plans, with the net increase in defined contribution plans slightly outpacing the increase in defined benefit plans.

The number of defined benefit plans actually decreased by 4,000 plans in 1976, compared to an increase of over 14,000 defined contribution plans in that year. In 1977, only 1,600 new defined benefit plans were established

while 18,000 new defined contribution plans were set up. In 1978 through 1981 the number of new defined benefit plans increased each year to over 19,000 in 1981. But, during this period, new defined contribution plans varied from 34,000 to 49,000 each year. In 1981 the number was 49,000, which was 2 1/2 times the number of new defined benefit plans for that year.

Over this period, the average number of participants in new defined benefit plans has been 2 to 3 times the average number of participants in defined contribution plans. Therefore, defined benefit plans clearly continue to have a majority of the participants in them.

When I checked, the Employee Benefit Research Institute did not have similar statistics for 1982 or 1983, so it is difficult to gauge the impact of TEFRA on defined benefit and defined contribution plan growth. However, review of our own plans at Mutual of America showed that there was no significant increase in terminations, and only a small number of changeovers occurred from defined benefit to defined contribution plans for those years. So, from our viewpoint, TEFRA does not seem to have a significant impact on the number of plans involved.

These statistics, however, certainly indicate that the governmental legislation and regulations of the past decade have had an effect on the relative growth of defined benefit plans versus defined contribution plans. Defined benefit plans do provide unique advantages and will continue to play an important role in retirement planning. But, by their nature, defined benefit plans will apparently require more safeguards and regulations in order to preserve the security of the participants' benefit expectations.

It is up to us to determine the clients needs and advocate the best pension plan possible to meet those needs. If the best plan proves to be a defined benefit plan, we should provide all assistance possible to aid the client in meeting the administrative requirements set forth by law and regulations. We should also do what we can to modify laws and regulations where appropriate and where feasible, to ease the administrative burden on defined benefit plans. And, of course, if a defined contribution plan best meets the needs of the client and his employees, that is the plan which we should recommend and stand behind.

The final part of my presentation concerns trends in plan design. Among the more prominent ones which we see are:

- Lump Sum Cash Options: Many defined contribution plans already include provision for lump sum payments. As a result of the Norris decision, many plans have eliminated installment annuity payments and now pay a lump sum only. We are getting more frequent requests for lump sum options for defined benefit plans as well. Employees are becoming aware of the value of their benefits and more of them want to have control over what could be the largest single sum of money that they will have an opportunity to use.
- Supplemental Executive Retirement Plans: As a result of the TEFRA amendments reducing the limits in section 415, and the introduction of section 416 of the Internal Revenue Code, and due to restrictions

imposed on the benefit provided to an employee under a deferred compensation agreement under a qualified plan, the benefit payable at an employee's retirement may be reduced from the benefit provided by the pension plan. A non-qualified plan which is not subject to ERISA and TEFRA requirements can be developed to make up the benefits lost by people affected by these restrictions.

- Liberalized spouse protection: The spouse's benefit which becomes payable upon an employee's death soon after age 55 provides a basically inadequate benefit, due to the loss of future service and salary increases and the application of early retirement and optional form reduction factors. This impacts mostly on defined benefit plans. Usually a defined contribution plan does not have this problem, especially if the plan provides that upon death the full accumulated value is paid out to the beneficiary. There is also talk in Congress of requiring that the spouse's benefit become payable at an earlier age in a greater amount. We have, for the past several years, offered as an option what we call an "Extended Survivor Benefit", which provides a benefit to the spouse of an employee who dies after age 45 with ten years of service. Under this option, the benefit payable is the benefit which would have been payable to the spouse on a joint and survivor form if the employee had remained alive at the same salary to his or her normal retirement date.
- Provisions Permitting Greater Employee Mobility: ERISA set forth certain minimum eligibility and vesting requirements for pension plans. Since then, various laws and regulations have reduced the minimum vesting requirements even further. There are presently bills in Congress which would reduce the age for eligibility in a pension plan from 25 to 21 and which would require a five year vesting period. These bills are specifically intended to allow employees to change jobs or to leave the workforce completely for a period of time without loss of accrued benefits or contributions.
- Further Development of Voluntary Savings Plans: Salary reduction plans provided under Section 401(k) of the Internal Revenue Code have attracted a lot of interest. Many employers are introducing 401(k) plans to encourage their employees to save for their retirement while taking advantage of the tax deductibility of the contributions. This also eases the burden on the employer of having to provide a high level of benefit under the pension plan.
- Cafeteria Plans: The employee has the choice of allocating the employer's contributions to where he sees the greatest need, whether that be for life insurance, health insurance, voluntary savings or pension plan benefits. A defined contribution plan is the most logical pension vehicle to be used to provide pension benefits where the employee has such choices.
- Greater Selection of Investment Choices: Employees are becoming more and more knowledgeable about various investment choices and are increasingly asking for more freedom in making the choices themselves. This is typified by the criticisms being raised of the TIAA plans as to the lack of investment choices and the lack of transferability of an employee account, which has led to the Carnegie Study Commission review of that plan. We at Mutual of America are planning to introduce four new

investment options, including a money market fund, to participants in our individual accumulation plans later this year and to our regular pension plan holders soon thereafter.

MR. STANLEY H. TANNENBAUM: Based on my experience, I work for a compensation firm, we look at the fact that defined benefit and defined contribution plans each have a viable role in the employee's planning for retirement and in the employer's providing employee benefits.

Dan McGinn has done a lot of work for many of his clients who want to know: What is the best plan for me? Who will benefit from this plan? How much will it cost me for these people? What will happen should different economic scenarios occur? Dan has agreed to share with us some of his observations, the results of some of his studies for a client who asked: What happens if I have a defined benefit plan and I want to change it to a defined contribution plan, or I want to add a defined contribution plan? Also, if I do change this, who is at risk? If the risk happens, who is going to collect the money and where is it going to come from?

MR. DANIEL F. MCGINN: I'd like to just comment that I think that Paul has done a very outstanding job of describing the kinds of things that have created the environment that's moving many, many corporations from defined benefit plans to defined contribution plans.

The one thing that wasn't mentioned, but which does touch upon some of our clients very gravely, is the impact of plan termination insurance and employer withdrawal liability under multiemployer plans. What we've been seeing, both at the corporate level and the multiemployer plan level, is almost a snowball effect of the attitude that defined contribution plans really are the way to go, the wave of the future, and they sort of resolve all the problems.

It was this kind of environment which caused me to try to find an objective way of evaluating the nature of the benefits provided under defined benefit plans versus defined contribution plans, and what it means with respect to the allocation of employer contributions. And so I prepared a slide presentation which reflects the results of an initial study that we've made for one financial institution.

Introduction

In the recent several years there has been a clear movement by employers away from defined benefit plans which promise a specific benefit to defined contribution plans without such a promise. Some of the reasons relate to employer concerns over (1) potential plan termination liabilities under Title IV of ERISA; (2) anticipated PBGC premium rate increases and other restrictions on plan terminations; (3) unpredictable costs since

actuarial estimates are required; and (4) efforts by the FASB to require employers to carry pension liabilities in their financial statements. In addition to this litany of employer concerns, employers find defined contribution plans easy to understand and most younger employees prefer them.

Purpose of Study

But how do these plans satisfy employer and employee goals: which type of plan does the best job? In order to compare these types of plans adequately, we must evaluate the differences in emphasis of both types of pension plans on how funds are distributed upon termination of employment, death and retirement. We can then compare, in a general way, the efficiency of each plan in satisfying specified needs, especially retirement needs.

Basis of Study and Methodology

To develop a meaningful analysis of the differences between each type of plan, we developed a computer model to project future benefit streams, using the data base of one of our clients. In order to project consistent results, we

- o assumed defined benefit and defined contribution plans both began on 1/1/84;
- o assumed that employer contributions to both plans would be identical;
- o used the same actuarial assumptions;
- o assumed both the defined contribution and defined benefit plans allow full and immediate vesting so that a level schedule of employer contributions applied to both plans. (Under money purchase type defined contribution plans forfeitures due to deferred vesting can only be applied to reduce employer contributions);
- o projected and compared emerging yearly benefit values - that is, we compared the defined contribution plan distributions with the lump sum value of the defined benefit plan pensions.

In addition to these assumptions, we adopted the following provisions as the principal elements to determine benefit eligibility:

- o Plan participation: Attainment of age 25 and completion of one year of service
- o Normal retirement eligibility: Age 65
- o Early retirement eligibility: Age 55 and ten years of service.

Basis of Projected Benefit used in the Study

The defined contribution plan benefits, of course, would be simply the single sum distribution of each participant's account value upon the employee's voluntary termination of employment, death in service or retirement.

The defined benefit plan benefits would be prospective only and determined by the actuarially projected experience assumed for both plans, the cost method adopted and types of benefits commonly provided under such plans. By making benefit accruals prospective, the defined benefit plan would be comparable with the defined contribution plan under which all benefit accruals are normally prospective.

Actuarial Assumptions

The actuarially projected experience of both plans assumed the following:

- o Employer contributions would be a level 10% of pay per annum;
- o The investment return would be at the annual rate of 8%;
- o Participant mortality would follow the 1971 Group Annuity Table;
- o Employee turnover would be moderate and have a pattern based on a modification of the T-5 Table from the Pension Actuary's Handbook, by Crocker & Sarason. For this purpose we constructed a simple select and ultimate table with a five year select period, grading from 200% of "T-5" in the first year to 100% of "T-5" after five years.
- o Age retirements would follow this pattern:

<u>AGE</u>	<u>RATE*</u>
62	50%
63	35
64	25
65	100%

*Percentage of active participants at the beginning of each year who would retire during the year of age.

- o Salary increases would be projected at the rate of 6% per annum. For projection purposes, which require the assumption that new employees replace those who terminate, this salary scale anticipates an annual inflation rate of 5% and merit/promotion increases of 1% each year.
- o No expenses would be charged against employer contributions or asset values.
- o Asset values would increase according to actuarial assumptions.
- o TEFRA limitation would not apply. TEFRA imposes sharply different types of limits on each class of plan. Consequently, disregarding such benefit limitations avoids creation of distortions in the comparisons of these plans.

"Defined Benefit" Plan Benefits

Using the numerous actuarial assumptions and assuming employer contributions of 10% of pay, we used the entry age actuarial cost method with a 30 year amortization period for the unfunded liability to develop the pension benefit formula. Yearly benefit values were then projected based on the following plan of benefits:

- o A unit benefit earned for each year of future service at the rate of 1.98% of final pay;
- o Unreduced pension benefits payable for retirements at ages 62 and above.
- o A 50% reduced spouse annuity benefit, payable upon a participant's death during retirement eligibility.

To make meaningful comparisons of these benefits with the defined contribution plan benefits, we also assumed that the actuarial value of each type of benefit was disbursed in a single sum upon retirement, termination or death and that the benefits of vested terminated employees would be the lump sum value of the benefit deferred until age 65. Additionally, we assumed that there would be no experience gains or losses, in order to maintain a constant contribution/benefit structure over the 30 year period prior to the amortization of the initial liability calculated under the entry age actuarial cost method.

Data Base Characteristics

As mentioned earlier, we used the data base of one of our clients (which is a financial institution), and the data had these demographic characteristics:

	<u>INITIAL POPULATION</u>		
	<u>MALE</u>	<u>FEMALE</u>	<u>TOTAL</u>
NUMBER OF PARTICIPANTS	671	1,365	2,036
AVERAGE AGE	40.4	38.5	39.1
AVERAGE ANNUAL SALARY	\$34,160	\$15,480	\$21,636
AVERAGE AGE AT HIRE	30.9	32.4	31.9

We assumed there would be a level active population and that new entrants would replace all participants who terminate, die or retire. A cohort of employees were presumed to become new participants each year, and they were assumed to have age and sex characteristics like those of new plan entrants during recent years. Entry salaries of each year's cohort were projected as 1984 salaries, adjusted for 5% inflation from 1984 to the year of entry.

The new entrant characteristics during the most recent three year period were:

	<u>MALE</u>	<u>FEMALE</u>	<u>TOTAL</u>
NUMBER	114	340	454
AVERAGE AGE	32.4	33.2	33.0
AVERAGE 1984 SALARY	\$21,660	\$13,260	\$15,370

You should note that these entry ages are somewhat higher than the entry ages of the current total data base, implying somewhat lower aggregate employee turnover in the future, compared with that experienced in the past.

Projection of Defined Benefit/Defined Contribution Plan Benefits

Using these myriad assumptions, we made a 30 year projection of retirement, termination and death benefit values for each plan. For comparing the plans, we calculated an "Efficiency Ratio", the ratio of aggregate yearly benefit value distributions of the defined benefit plan, divided by the corresponding values of the defined contribution plan. If the ratio were greater than 1.000, then, for a specified class of benefits, the defined benefit plan is more effective in providing those benefits. On the other hand, if the ratio were less than 1.000, the defined contribution plan is more effective. The results developed for benefits payable upon retirement were as follows:

		<u>RETIREMENT BENEFITS</u>					
		<u>COMPARISON OF BENEFIT DISTRIBUTION VALUES</u>					
		<u>YEAR</u>					
		<u>1989</u>	<u>1994</u>	<u>1999</u>	<u>2004</u>	<u>2009</u>	<u>2014</u>
<u>DEF. BENEFIT PLAN</u>							
<u>BENEFIT VALUES</u>	\$	911	2,747	\$6,036	\$11,049	\$18,168	\$29,540
(IN \$1,000'S)							
<u>DEF. CONTRIB. PLAN</u>							
<u>BENEFIT VALUES</u>		554	1,728	3,912	7,575	12,871	21,778
(IN \$1,000'S)							
EFFICIENCY RATIO:		1.644	1.590	1.543	1.459	1.412	1.356

Clearly, the defined benefit plan is more effective than the defined contribution plan in providing benefits for those persons retiring directly from service. Also, after 2014, the end of the 30 year period for amortizing the initial actuarial liability, this superiority would increase because the same level of employer contributions affords a higher level of benefits earned each year thereafter.

We also re-calculated the defined benefit plan values if benefit credit were allowed for service before 1984. In this latter instance, the benefit factor was reduced from 1.98% to 1.38% of compensation per year of service, but the "Efficiency Ratio" increased to more than 5.000 in 1989, but of course, declined thereafter more sharply than in the basic study. This result illustrates quite clearly the flexibility of a defined benefit plan in recognizing past service to provide an effective retirement program.

When employee termination benefit values are examined, the defined contribution plan is vastly superior to a defined benefit plan and is very effective in providing severance benefits. The following table shows that

the defined contribution plan provides between almost five times the benefits initially (the reciprocal of the Efficiency Ratio, 0.214) and more than three and one-half (3-1/2) times the benefits of the "defined benefit" plan in the thirtieth year (the reciprocal of the Efficiency Ratio, 0.275). These facts demonstrate the orientation of a defined contribution plan to short-service, younger employees who are subject to the highest level of employee turnover.

TERMINATION BENEFITS

COMPARISON OF BENEFIT DISTRIBUTION VALUES

	YEAR					
	<u>1989</u>	<u>1994</u>	<u>1999</u>	<u>2004</u>	<u>2009</u>	<u>2014</u>
<u>DEF. BENEFIT PLAN</u>						
BENEFIT VALUES* (IN \$1,000'S)	\$ 260	\$ 550	\$ 835	\$ 1,059	\$ 1,208	\$ 1,344
<u>DEF. CONTRIB. PLAN</u>						
BENEFIT VALUES* (IN \$1,000'S)	1,217	2,144	2,929	3,546	4,128	4,892
EFFICIENCY RATIO:	.214	.257	.285	.299	.293	.275

*Present Values of Deferred Benefits

When we evaluated the death benefit value distributions, we also found that the defined contribution plan provided roughly 70% to 120% more benefits. This is because the entire account value is paid upon death at any age, whereas only a reduced 50% survivor annuity is allowed under the typical defined benefit plan. The next table shows the results of these projections.

DEATH BENEFITS

COMPARISON OF BENEFIT DISTRIBUTION VALUES

	YEAR					
	<u>1989</u>	<u>1994</u>	<u>1999</u>	<u>2004</u>	<u>2009</u>	<u>2014</u>
<u>DEF. BENEFIT PLAN</u>						
BENEFIT VALUES (IN \$1,000'S)	\$ 46	\$ 126	280	\$ 497	\$ 742	\$ 927
<u>DEF. CONTRIB. PLAN</u>						
BENEFIT VALUES (IN \$1,000'S)	103	528	519	868	1,253	1,571
EFFICIENCY RATIO:	.447	.488	.539	.573	.592	.590

When all types of benefits are aggregated, as shown in the following table, the defined contribution plan is obviously superior in the early

years to the defined benefit plan with immediate vesting and no benefit service for past service. But, the defined benefit plan becomes superior after about fifteen years, and the superiority reflects the long-term impact on benefits of forfeitures due to pre-retirement deaths and the deferral of benefit distributions for voluntary terminations.

COMPARISON OF BENEFIT DISTRIBUTION VALUES

(All Benefit Distributions Combined)

	YEAR					
	<u>1989</u>	<u>1994</u>	<u>1999</u>	<u>2004</u>	<u>2009</u>	<u>2014</u>
<u>DEF. BENEFIT PLAN</u>						
BENEFIT VALUES (IN \$1,000'S)	\$1,217	\$3,423	\$7,151	\$12,605	\$20,118	\$31,811
<u>DEF. CONTRIB. PLAN</u>						
BENEFIT VALUES (IN \$1,000'S)	1,874	4,130	7,360	11,989	18,252	28,241
EFFICIENCY RATIO:	.649	.829	.972	1.051	1.102	1.126

If the level of employer contributions to both plans were the same but the defined benefit plan did not allow full and immediate vesting rights, all benefits under the plan would be increased since the benefit formula would reflect a redistribution of forfeited values, reducing the time required to make the aggregate benefits of the defined benefit plan superior to those of the defined contribution plan. Also, if past service credits were allowed under the defined benefit plan, the time required for the aggregate benefits under the defined benefit plan to exceed those of the defined contribution plan would be sharply decreased.

Conclusions

This comparative study shows that defined benefit plans satisfy retirement goals more efficiently than defined contribution plans, but defined contribution plans provide higher cash-out benefits upon employment termination and, in general, substantially greater death benefits. However, defined benefit plans are more flexible since benefit credits can be granted for service before a plan's establishment or to enhance retirement benefit adequacy. From another perspective, defined contribution plans are not flexible in satisfying the needs of older employees when a plan is first established or when pensioner benefits are inadequate: all funds are fully-allocated, and, in a money purchase plan, there cannot be redistributions of forfeited values under a deferred vesting schedule.

Since adoption of a deferred vesting schedule under a money purchase defined contribution plan produces forfeitures which must be applied to reduce employer contributions, actuarial calculations are required to estimate the net effective level of employer contributions. In any event, the pattern of net employer contributions under a deferred vesting defined contribution plan can be erratic, and the out of pocket employer contributions may be at a maximum when the budget is tight and may be very sharply limited when the coffers are full and maximum tax deductions are desirable.

Because defined contribution plans emphasize termination benefits, they are oriented strongly to younger, short-service employees and may be considered, from the plan sponsor's viewpoint, as an inefficient vehicle for allocation of employer contributions in high employee turnover groups. These plans generally cannot satisfy retirement goals as efficiently as defined benefit plans and are devoid of the degree of flexibility often required to design an effective retirement plan.

Closing Commentaries

Because the adequacy of a defined contribution plan in providing benefits, especially retirement benefits, is directly related to the increases in account values produced by investment results, these plans shift a major risk to the employees: the investment risk. Again, the degree of risk depends on the employee's investment options and choices. Therefore, under these plans, investment results which are subject to volatile market value adjustments can severely impact the single sum distributions at retirement unless assets are invested systematically in short-term government obligations or in some other form of investment with stable values before scheduled retirements. However, the timing of employee terminations is not always controllable, and account values of a defined contribution plan invested heavily in equity-oriented assets may be unduly low at the time when a benefit is payable.

By definition, the benefits payable under a defined benefit plan may reduce an employer's immediate concerns (over potential increases in PBGC premiums, plan termination liabilities, FASB rules, and so forth), but it is possible that such plans may increase the employer's ultimate financial burdens if the defined contribution plan proves inadequate in providing retirement benefits.

In the current environment in which younger employees want more meaningful benefits under security programs and older employees continue to need predictable retirement benefits, perhaps a balanced program would be the best benefits plan. In other words, perhaps a combination defined benefit and defined contribution plan might reduce employer concerns, recognize desires of young workers and still adequately satisfy retirement security goals.

MR. TENNENBAUM: A lot of the numbers that Dan came up with are based on the actuarial assumptions and the demographics of his population. Clearly, if you had chosen a different investment assumption, and a different salary scale assumption, you would have come up with different results. I believe the trends that he has come up with are valid. The issue is the magnitude of what has happened. Another thing, before it comes up on the floor: There is a Pension Equity Bill in Congress that may change age 25 to age 21, and age 22 to age 18, meaning that benefits provided will have to come earlier. This may change the structure of defined contribution plans. You may be adding more employees who are

early leavers, the non-vested terminations. Another idea that occurs to me is the whole idea of total compensation. Maybe Dan wasn't too far wrong when he said you could have immediate vesting. You tell the employee that, either in the defined contribution or defined benefit plan, you are putting the money away for them. It is their money. It is deferred compensation in lieu of salary. If that were to be something that future legislation mandates, then all benefits, once promised, are vested. Our ultimate employer liability short of absolute bankruptcy, would be for accrued benefits. Maybe some of these changes support the validity of the comparisons in Dan's slide presentation.

The last thing that Dan did touch on is his combination plan, where you have a defined benefit and a defined contribution plan. It could be money purchase and defined benefit; it could even be a profit sharing plan. The choice is between employer flexibility and employee security. What does the employer want to promise? What has the employer, in fact, promised? I'm sure there are many other ideas in the audience.

I'll now open the floor for questions, comments, observations, criticisms. Please come to a microphone, state your name and company affiliation. Also as one additional item, if you would like your remarks included, think about what you want said, write it down and send it to us. You cannot find either my current address or Owen's current address in the year book. Owen is a new Associate and I recently joined Hay/Huggins. The address is 229 S. 18th Street, Philadelphia.

MR. JOHN CLEARY: I'm from Hay/Huggins in Philadelphia also. As Mr. Zwilling pointed out, it appears to be becoming more commonplace to allow participants in defined benefit plans to unilaterally elect lump sum distributions at retirement. In this respect, what interest rate do you or Mr. McGinn feel is appropriate in determining the amount of a lump sum? For instance, should it be the valuation interest rate, or should it be something pegged higher than the valuation rate, or should it be a varying rate that ties into the levels of interest rates that are available at the time the distribution is determined?

MR. ZWILLING: Our current thinking on this is to do it at an interest rate that is related to the current interest rate being credited to the employer's fund. We certainly feel that in times of rising interest rates it is the investment opportunity that is motivating the employee to some extent to want to take the lump sum and to use the valuation interest rate will give them such a large value that we would only be encouraging this. We feel, maybe a little bit too paternalistically, that the defined benefit plan is there to provide a benefit and not investment opportunities for the employee. And the thought that the employee could take something that is valued at a much lower interest rate for valuation purposes, walk out the door and substantially increase his benefit also does not seem to be a correct way of handling things. So we would tend to use something close to the rate that we are crediting on new money into that employee's fund or the general account.

MR. MCGINN: We've recently been asked to suggest or propose methods of determining lump sum distributions as you've suggested. We're recommending basically trying to remove the determination from the plan actuary's assumptions and shift them to PBGC assumptions in such a manner that within a certain interval of change, if PBGC assumptions don't change

within a half of one percent, then the PBGC assumptions would be used for purposes of determining lump sum values. We think that that's important, in so far as you'd have an objective index. It could be stipulated in the plan document. Even as those rates change, it doesn't effect the accrued benefits or create any accrued benefit value changes from the point of view of the IRS. We think it's a workable method, and I think it makes some sense because PBGC rates do reflect, to some degree, the current marketplace.

MR. TANNENBAUM: One thought that has occurred to me in doing this is that employers have funded a plan, and they believe that the assets there will provide a benefit. In a defined benefit plan I think it is appropriate to cash out the assets at that rate which will permit the benefit to be provided, whichever rate that ultimately turns out to be. It must be in the plan document per Revenue Ruling 79-90, but still that it something that could be done. I prefer PBGC rates because they are objective and they are usually, within reason, close to what is available in the marketplace. Many actuaries from insurance companies have told me that they can always guarantee a higher rate than the PBGC. So the PBGC rate probably is a conservative estimate and may cost the plan money in relation to the actual investment climate.

MR. DWIGHT K. BARTLETT: I want to compliment the panel on the fine job they've done. I think the slide presentation that Dan McGinn made was the most impressive presentation on the subject that I've ever seen. I suspect that most employers or plan sponsors who are making decisions about defined contribution and defined benefit plans, particularly those that are opting for the defined contribution plans, really have never been exposed to that kind of analysis. And I think we would see much different results than are published by EBRI and so on in terms of defined benefit versus defined contribution plans if the plan sponsors were exposed to that kind of presentation. So I'm glad to see Dan make that presentation and have it become part of our literature, because hopefully it will motivate actuaries who are advising on these plans to do a better job in doing that kind analysis for their plans, and I congratulate you again.

MR. TANNENBAUM: I have a question for my co-panelists: What do you think the impact of FASB may be on the design of pension plans: How do you want to discuss with an employer that FASB is here to stay? You may modify preliminary views, but it is going to require disclosure of what your benefit promises are. Should the employer have a different attitude toward designing a benefit program in order to have the balance sheet rule the personnel policy?

MR. ZWILLING: Gee, I'm not too sure where to start with that one. I think the answer from our viewpoint would be pretty obvious, that the balance sheet should not dictate what your pension plan is going to be. And of course, with our type of client, I don't believe that the FASB requirements will have as severe an impact on them as it would on a regular manufacturer or another type of business where they are in a different position. I guess I really don't have too much more to say on that topic.

MR. MCGINN: The only thing I have to say is that I talked on this topic at the Atlanta meeting. I guess maybe I haven't come to grips with the fact

that FASB proposals may actually become reality. I think I couldn't grasp that anyone with a common intelligence would subscribe to such nonsense. I think it's initially going to lead to a further slowing down in the formation of defined benefit plans. Perhaps it might encourage even more terminations of plans and recapturing of assets by employers, and the setting up of defined contribution plans just to try to insulate corporate net worth from all the vagaries of these crazy intangible assets, measurement valuation allowances and how they all impact on the net worth of a corporation. With those vague remarks, that's all I have to say.

MR. FREDERIC SELTZER: I have a question about the number of new plans being created. Do the panelists know the distribution of the size of the firms who are still creating defined benefit plans and defined contribution plans, because every data that I've seen still showed about 15,000 new defined benefit plans created last year. I was wondering who these firms might be.

MR. ZWILLING: I do agree roughly with the 15,000 number. That seems to be where they are heading. I think the EBRI statistics were somewhere around eighteen or nineteen thousand a couple of years ago. From our viewpoint, certainly the larger plans are still going defined benefit, but from the types of plans we have, I don't know that I can quantify other than what the not-for-profit field would be doing. The plans there don't tend to be very large in any event, compared to some of the large corporations.

MR. MCGIN: Since we have had no new defined benefit plan clients I can't comment. Everything we have is other than defined contribution plans sponsored by employers.

MR. TANNENBAUM: One of the things that I've noticed recently is that many of the new defined benefit plans that I've been asked to get involved in are either small employers or possibly spin-off/merger situations where you've created a parallel plan. They are not new plans, they are statistical plans. Most of the large companies, if they don't have a defined benefit plan now, are not really going looking for one. They are tending to put in more defined contribution plans. And maybe the question is, how many defined benefit plans are they terminating? Are they terminating them, or just freezing them? I don't think the IRS statistics or the EBRI statistics really show frozen plans which may be the same as a termination, for the purposes of your question.

MR. ZWILLING: I would also say that we have seen in the last couple of years some requests for the thrift-type plan, where the employer will match a certain part, and he's looking for the employee contribution to be tax deductible. We are seeing requests for that as opposed to the typical defined benefit plan.

MR. STANLEY I. GOLDFARB: I have three brief points to make if I could. First, a small point about one of the slides. Based on the plan and the way it was funded, and the assumption of no gains or losses, I didn't see how there could be any sort of unfunded that would need to be amortized. You mentioned that there was a 30 year amortization period, and it just didn't seem right. If it's a future service benefit only, no actuarial gains or losses, everyone participates in the plan on 1/1/84, it didn't seem that there could be any past service benefit that would need to be amortized over 30 years.

MR. MCGINN: You're right. There is no past service liability, but there's the unfunded actuarial liability which is a direct by-product of the use of the entry age actuarial cost method.

MR. GOLDFARB: But how can it be unfunded, if there's no gains or losses and the full normal cost, at least, is paid each year and the actuarial assumptions are exactly met. When the plan's established, if there is no past service liability and you use an entry age normal cost method, there would be no unfunded liability, there wouldn't be any liability at all. And each year if the amount you contribute is exactly equal to the normal cost, and gains and losses are assumed not to occur, then there cannot be an unfunded liability that needs to be paid off.

MR. MCGINN: Well, keep in mind that each benefit credit that's earned prior to the year of any year's normal cost payment is constantly being adjusted upwards to reflect the final pay and when you calculate it on an actuarial basis, you'll find that there is an unfunded actuarial liability. There always has been in that kind of calculation.

MR. GOLDFARB: You account for those in your 6% future salary increase assumption, and if people exactly have the 6% future salary increases and its a strict final pay plan, it seems as if the assets under the setup you have here would always exactly equal the accrued liability. It's just a small point I'm making. It just didn't seem under the setup which you had, there would ever be a chance for there to be anything there needed to be paid off.

MR. CLEARY: I don't know if this is the problem or not, but even though the benefits did not start accruing until 1/1/84, the entry age of each individual could have been their date of hire, 1/1/70, 1/1/75, etc. That generates an initial unfunded past service liability.

MR. MCGINN: It's lower than it otherwise would be, right. I think that maybe the difference is that if this had been an attained age level cost method there would be no unfunded actuarial liability, but we've used an entry age normal cost, so the normal cost is lower than that attained age normal cost, and you do generate an unfunded actuarial liability.

MR. GOLDFARB: Ok, that was just a small point. One slide I would have liked to have seen was one which graphed the account balance year by year for a particular employee versus what the actuarial present value is of his deferred benefit, so that you could see from such a graph that the money in the defined benefit plan clearly goes to the retirement benefits and the money in the defined contribution plan clearly goes to the people in the early years. That's just a thought on a graph that you might want to include.

MR. MCGINN: I appreciate that. I will say that I made this commitment and I decided to put together a slide presentation, but I didn't realize that the slides would not be delivered until last Saturday and I didn't realize how tough it was to do the programming to create the models to get the results. And so, to tell you the truth, I could have bored you to tears with all the slides I would have loved to have here to demonstrate, and I think that would be a very good addition.

MR. GOLDFARB: OK, the last point I wanted to make: If you grant lump sums under a defined benefit plan, usually the folks that take those will not be able to get future adhoc increases, at least in all the plans I've seen that give those lump sums. They do not grant those to the folks that they give the lump sums to. I don't know if anyone has any plans where they still do grant those adhoc amounts or once you grant a lump sum you do fully discharge the plan's obligation.

MR. JAMES F. VERLAUTZ: I guess we (at Touche Ross & Co.) do have a couple of plans that do allow a lump sum, and part of their theory is that if you're getting this lump sum then you're probably going to be able to invest it to take advantage of additional asset gains. It sort of obviates the need for adhoc increases.

MR. ZWILLING: That would be the general feeling, and also I think that many plans won't give somebody a lump sum unless they can in effect prove that they don't really need it, that they have other assets there. And on that basis I guess I would support the position that you can provide for your future increase in benefits yourself, in the event of ahoc increases for those that don't take the lump sum.

MR. DEAN A. CONNOR: In Canada, pension reform is imminent, and some are predicting that extra costs coming with pension reform will force sponsors to defined contribution plans and away from defined benefit plans. They go on to observe that employees given the choice of investing their own money tend to invest in fixed income type securities, i.e. not equities. The third point is that this will have a devastating impact on the capital markets, sort of draining this risk capital out of capital accumulation plans. I was wondering if you would see a similar situation in the United States, a similar sort of cautiousness on the part of individual plan members. Any comment that you'd have on that?

MR. MCGINN: From my viewpoint I think that the participants that I'm aware of tend to be cautious in cautious times and not so cautious in boom times. The stock market looks fabulous and they wish they'd had a piece of the action when it looks fabulous, and when it looks bad they're happy they don't have a piece of the action. So I think that a substantial number of these participants will tend to gamble if, when they get a distribution, it's a boom time and everybody's talking about how fast the stock market is growing, and the great growth expected in the next year or two. On the other hand, the same people, perhaps if their distribution were made in a time of depressed common stock, would probably go conservative. I don't know if anybody can predict, but typically, at least that's the impression I get from the participant contacts I have had.

MR. RICHARD G. RUSH: My question to the panel concerns the recapturing of assets on a plan termination with a terminal funding arrangement. The recent developments we've seen involve the termination of defined benefit plans and the starting up of defined contribution plans, where retired lives and vested terminated lives are provided for by buying immediate and deferred annuities. I'd like the panel's observations on the future of this type of a market based upon different legislative and different economic outlooks.

MR. ZWILLING: We have seen a few situations where a defined benefit plan has terminated, and in a number of situations what has happened is that employees under the defined benefit plan have their money rolled over into

either a defined contribution plan through some allocation procedure, or are given the option of putting it into some other type of vehicle (such as a tax deferred annuity or an individual retirement account roll over) where they can find it more convenient later on to get their hands on the money if they want to. Of course there's always the benefit to them that the investment income is not taxable. In most of our plans, the retirement benefits are already purchased when somebody retires, so we don't have any problem there. Terminated vested employees may not be given this choice and the tendency might be in some cases to buy a paid-up deferred annuity for them. The option may be to put it into a regular individual account as in a defined contribution plan and not give them a choice. It may be hard to track them down later or it may be a little more administratively burdensome to worry about these terminated vested people.

MR. MCGINN: I haven't had much experience with that situation, but my impression, in one particular situation, to the extent that you had older employees and an overwhelming proportion of their benefits had been earned, they were purchased from an insurance company and then they were switched into a defined contribution plan. There wasn't any large anxiety about it. They seemed to accept that as a very happy situation. By switching like this, the younger people looked to the defined contribution plan as the only way to go, because they never grow older and they never are going to need the retirement benefits that a defined benefit plan will provide them. So I've seen these things happen, at least in a couple of situations we've been involved with, where the transition, the recapturing of assets, can be accomplished with the setting up of a defined contribution plan on a very favorable basis where the employees accept it enthusiastically. But I personally feel that what we are going to see in the future with the defined contribution plans is, if they prove that as people do stay employed and do get to retirement age and do find that the account value won't provide the adequate income, then there's going to be pressure in some form on employers to do something about it. Perhaps the resurgence of either defined benefit plans or pressure in some groups to get some union representation together to get them a defined benefit plan. My own opinion is that most employers have taken a very superficial and expedient view of terminating their plans to recapture those assets. All they are looking at is the recaptured assets and they are not looking far enough ahead to see how it's going to impact on their personnel policies, their retirement policies, the retention of long term qualified employees.

MR. DOUGLAS K. GERMAN: For Mr. Zwilling: You suggested that as actuaries, we be interested in influencing the things that are working against the establishment of defined benefit plans. In particular there's been an actuary advising FASB and I've assumed, perhaps naively, that one of the actuarial organizations has input to drafting new legislation such as TEFRA. Would you have any comment on that or any suggestions on how we could expand our influence to encourage the drafting of defined benefit plans?

MR. ZWILLING: Well, unfortunately, it doesn't seem to have really done that much good, but certainly the Academy is the main spokesgroup for such things and I know that they do appear in an advisory capacity and give evidence before Congress when certain things are being discussed before subcommittees. It's a little bit hard to figure out how the top-heavy provisions could have gotten through as far as TEFRA is concerned. But as

far as I know, this was kind of a last minute thing pushed through after the Academy had given whatever presentation they wanted to. The top-heavy rules just seemed to come out of the blue. Now, I really don't know how you guard against that. You do the best you can based on what you know of the provisions of the bill that are before the subcommittee and hope that nobody suddenly says, gee, we can pick up a few more bucks here if we start limiting these top heavy plans that are set up primarily to take care of individual lawyers and doctors and so on. Certainly we may or may not agree that that is a commendable thing to do if we think they are setting these plans up to accumulate large sums of money. I suppose that's not really the point. Now one concern we have is that we feel that the client we have, for instance, is not a type of client that should be affected by the top-heavy provisions. We may have some relatively small plans but they are non-profit organizations. Clearly, if one or two people there are making a little bit higher salary in relation to others they are in no way nearly in the same class as a doctor or lawyer with a very high salary with a few administrative people around that will wind up getting nothing from the plan. We have, by using a lobbyist in Washington and speaking to some people ourselves, tried to get something through that would put on some kind of a limit as far as the salary is concerned. Whether or not that will be successful, we don't know. I certainly think as actuaries, individually, we can always write our own Congressmen and take various steps such as that. But basically, as far as the profession is concerned, that is up to the American Academy of Actuaries to try to handle this, and I think that they have had some very good expert people down there and are doing the best they can. But in this climate, especially, I think there are many other considerations on Congress' mind as far as raising money is concerned, and reducing some of the tax breaks they think people have gotten for pension plans, so that's what they are looking at primarily.

MR. BRYAN R. OSBORNE: I would like to make an observation concerning these slides. It would seem to me that, if we had done similar projections and assumed that the terminated vested participants under the defined benefit plan were updated for inflation, that there would be very little difference in the defined benefit to defined contribution ratios that you presented. It would seem to me that the only significant difference you have would be who bore the risk of investments not being up to expectations. I was wondering if you had any comments on that?

MR. MCGINN: Well, we did crank in a 5% inflation assumption for compensation purposes that's reflected in the contributions that would go into the defined contribution plan and for salary purposes that would go into the benefit accruals of the defined benefit plan. So we did take into account inflation. Basically, I think that the intention of the slide presentation, and it really is like a beginning, was to show what it means to have a defined contribution plan versus a defined benefit plan. If you have the same money going into a program, and you have exactly the same experience, basically it's a case of allocation. Where is the employer putting his money and what this says, and you can prove it mathematically, is that if you have a defined benefit plan by its nature, you are emphasizing retirement benefits and you have a modest emphasis on other benefits. In defined contribution plans, you are emphasizing to a much greater degree, severance benefits, death benefits, and to a much lesser degree, retirement benefits. It's as simple as that. You have the same money. There is very little difference in the scenario. It's an allocation question.

MR. OSBORNE: This is exactly the point I was trying to make. Correct me if I'm wrong. The vested benefits of terminated employees under the defined benefit plan were not indexed from date of termination to date of retirement.

MR. MCGINN: You're correct.

MR. OSBORNE: I'm saying that, as you say, it is a question of allocation. The reform proposals in Canada right now are requiring that those benefits be indexed to inflation and obviously this is where the transfer of asset values is taking place. We come back to the question. Do those monies belong to the people, to the plan participants, in the form of deferred compensation? And if you accept that argument that it's their money, it seems incumbent upon the plan sponsor in the defined benefit case to be sure that benefits are indexed for the real return on assets above inflation. So what I'm saying is that under the two scenarios, that if you're preserving values at termination or retirement, that you're getting the same thing except who bears the risk of investment performance. In defined contribution plans it's the participant, and in defined benefit plans it's the employer. And the question we have to ask ourselves as a society is who is responsible for bearing that inflation risk?

MR. MARTIN STEMPLE: As regards the long term trend for the future of defined benefit plans, I think there are conflicting national policy issues relative to retirement security that have to be resolved. The relative roles of the government, private plans and individual savings are being changed.

Within the Congress, there are conflicting concerns over tax increases to reduce budget deficits, philosophies of diminished governmental involvement with individual security, and pension equity issues which will add further burdens to the private pension system. On the one hand, a portion of Social Security benefits has become taxable while on the other hand, the ability of plans to provide benefits for the highly compensated has been severely restricted. The net effect of these changes, together with the public's interest in raising IRA contribution limits and the ability to rollover plan distributions, will be to shift more emphasis on the role of individual savings in providing security. In my opinion, this trend and the relatively more onerous and growing burdens of defined benefit plans will accelerate the shift to defined contribution plans.

Also affecting this shift, there has been, I believe, a changing view of how the assets in a defined benefit plan are regarded by some plan sponsors. Previously, assets were set aside to accumulate to meet the long term benefit obligations. In part, due to the increased value of equities, the focus is shifting from concern over unfunded liabilities to interest in the so-called excess assets that have been built up. In certain corporate takeovers, the so-called excess assets have played a significant role in funding the cost of the takeover. In fact, shortly after some notable acquisitions, defined benefit plans have been terminated and their assets used to payoff part of the debt of the acquisition itself.

MR. PRESTON C. BASSETT: Dan, on your slides and illustrations, you're giving nice overall average figures. Do you also plan to give the client an individual comparison for the top people in the company who will

probably make a decision between the benefits under the defined contribution or the defined benefit plan?

MR. MCGINN: It took two months to create this modeling system to develop this kind of an analysis and we haven't even gotten to that point yet. Basically, this is hopefully for informing clients before they make decisions and, as you might guess, the client base that we use doesn't have a plan like this. It's a plan that's been in existence for many, many years. If I were to have used their actual plan formula, the advantages of the retirement benefits under the defined benefit plan versus defined contribution plan would have been overwhelming, and I think that the executives would know it intuitively. But anyway, we haven't gone to that point. I was lucky to get this material ready for this session.

MR. BASSET: I'm not so sure that these executives know it intuitively, and I would urge that in making the comparison between defined benefit and defined contribution plans, that individual illustrations be given for the top executives so they can see the tremendous impact on their equity that switching from a defined benefit to a defined contribution plan would have.

MR. MCGINN: I have to acknowledge that that's exactly what must happen before anyone's going to make a decision. Thanks.

MR. TANNENBAUM: I would like to make a comment on one of the things Dan said before when he was talking about his 10% contribution and the idea of asset allocation. We had a question asking, "Will you show the asset accumulations?" I think that may be the way to demonstrate how the money accumulates. We've said that 10% funds a 2% per year benefit from attained age. But while 10% may fund it, it does not mean that 10% is accruing on a defined benefit basis every year. And that's one of the reasons that that vested benefit question is important. When you have a vested term, when he cashes out a defined contribution plan, he's cashing out 10% a year accumulated. When he cashes out a defined benefit plan, only at retirement will he have that 10% accumulated and then he probably will have more because that 10% is artificially low because of replacements. So that's really why we see the shift in percentages. What we would like to be able to show is that in fact the assets are the same in both defined benefit and defined contribution plans, and then say if that were the case, what are the benefits that would accrue under the defined benefit plan? You'd find it would be a very difficult formula to write such that you have a level contribution that's going to be accruing a different benefit for each employee with all the other actuarial assumptions.

MR. MCGINN: I just think there is a problem with a defined contribution plan. The assets can never be the same; if you have lump sum distributions you are going to have your cash flow each year and your funds available for investment are going to be different from a defined benefit plan, so that's one of the advantages of a defined benefit plan: that you do have greater positive cash flows, greater potential for excess investment income, and greater funds that can be used to improve benefits or to support the retirement benefits under the formula.

