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Valuation of Assets

A. What bases, other than cost or market, are in use for valuing pension trust assets and acceptable under the Internal Revenue Code and Rulings?

B. How can a retirement plan having assets valued on a book or cost basis utilize existing unrealized appreciation for purposes of improving benefits or reducing current funding costs without changing to a market value basis?

MR. GEOFFREY N. CALVERT: With the continued long-term growth in the market value of equities, those responsible for the funding of pension plans have given thought to the effects this growth should properly have on the determination of asset values and annual deposits into a pension fund. The question becomes one of how far recognition can safely be given to some portion of the margin between book and market values. The length of time over which projected obligations can be met without forced selling of equity securities, the interest basis used, and the current stage of the economic cycle each have a strong bearing on this question.

It is our feeling that where the margin of unrealized gains is less than 10% of book values, it would be unwise to take any credit for these unrealized gains. On the other hand, it would be unrealistic to ignore substantial divergence between book and market values. We have in some situations written up book values by 15% (or some similar percentage) of the *excess* of market values over 110% of book values. The effect of this is to adjust book values upwards on a gradual basis. The adjustment is made in respect of the equity portion of the fund as a whole, not in respect of individual securities. A similar method might be applied to the assets of the fund as a whole.

There are other somewhat similar rules currently being used, such as an arbitrary 3% adjustment annually. The rule outlined above gives smaller or greater adjustments depending on how close or how far apart the book and market values are at the valuation date; this rule was found acceptable by the U.S. Treasury. I believe that in the absence of some safe realistic approach to the recognition for capital growth, the U.S. Treasury may in time require that something be done.

It is important to recognize that upward adjustments in book values are made in anticipation of actual realized capital gains. When these occur later, they should be first offset, on a cumulative basis, against adjustments in book values for which credit has already been taken, since otherwise a serious duplication of credits would occur. The mechanics for doing this on a cumulative basis for the fund as a whole are quite simple.

MR. JAMES A. ATTWOOD: Our experience with plans involving trust funds has been that, except for variable annuity plans which have to be

valued at market, only one plan out of several hundred uses a basis other than cost. The one exception uses a five-year moving average based on market and has been approved by the Treasury Department.

As most of us know, the Internal Revenue Service auditor uses a form for review of tax deductions which includes the question, "Describe the method of valuing assets if other than market and show the market value here." In a few instances where the market value of the trust would produce a surplus in excess of the accrued liability, the Treasury auditor has questioned it. Fortunately, in those cases, the companies were amending plans in such a way that an additional accrued liability eliminated any excess.

In order to solve this problem, companies are inclined, in some cases, to realize market appreciation. It seems to us that such action is justifiable only for investment reasons because of a change in investment policy or desire to change to different securities, not just to realize a gain without any plan for utilizing it. Where trustees, for investment reasons, want to sell certain securities that would involve substantial losses, we have suggested that they first review it with the company and with the actuary as to its funding implications. We feel strongly that, even though a plan may be valued on a cost basis, the company should review the market value basis in setting its annual funding policy. We are more and more convinced that the valuation of assets is a many-faceted problem and should be reviewed from all angles.

We sometimes find confusion between valuation of assets and investment balancing. Some trustees balance equity and fixed income investments on a market basis and others on a cost basis. If the balancing is done on a market basis, that does not necessarily mean that you would want to value the assets on a market basis for actuarial valuations.

There is a similar situation under deposit administration contracts. Historically it has been customary for the actuary to value the liabilities for active and terminated vested employees, but not for retired employees for whom annuities have been purchased. Such liabilities are then compared with the value of the deposit administration fund. When an employee commences to receive the benefits, there may be an actuarial gain or loss where the liability is then computed on the annuity rates. Several of our clients have changed this approach so that they are valuing all liabilities of the plan for active and retired employees and including in the offsetting asset value the experience fund in the insurance company. It is felt that this gives a better measure of actuarial gains and losses. A second reason is that the use of the contingency reserve, a possible conservatism in the valuation of retired reserves, is applicable to the

total liability of the plan, rather than to just the retired lives. The retired life liability, in some respects, has less need for conservatism than the active life liability.

This question of valuation of assets raises a number of questions relating to actuarial gains and losses—I have the questions, but not the answers. When you change from cost to market or some measure of market, is the appreciation a gain in the usual sense, or is it a revaluation of unfunded liability? If you maintain a cost basis, should realized appreciation be a gain in the usual sense or a revaluation of unfunded liability or be considered a contribution? The question of how dividends should be handled is another aspect of this problem. There is very little that is definite on these questions and, in considering them with the Internal Revenue Service, we usually find that we have more questions to answer before these can be reviewed with them.

MR. FRANK L. GRIFFIN, JR.: To the question of how to utilize unrealized appreciation without changing to a market value basis, I can repeat the following possible methods:

(1) Sell and rebuy. This is not usually recommended, of course, unless there is occasion anyway to shift emphasis from stocks to bonds—in which case selling is the only way to realize the gain. To sell and rebuy the same securities, however, is wasteful (commissions) and without much purpose.
(2) Adopt a modified valuation basis such that you move to a straight average between market and cost over a period such as five years.
(3) For equity securities, use "cost" plus 1% or 2% or 3% a year from date of acquisition.
(4) Increase the interest assumption, where this seems appropriate.
(5) Do nothing about revaluing assets, but change the employer's philosophy away from maximum funding to intermediate or minimum funding.

It might be well to cite an example of the type of pressure sometimes placed on consulting actuaries by aggressive management. One of our long-standing clients changed ownership a few years ago and the new president took over personal supervision of investments under their pension fund. He also changed the investment policies and managed to gain a return of 8% to 10% over a period of years. While it is difficult to argue with success, when they came to us requesting a 6% interest assumption our conscience put us on quite a spot. Out where I now come from, there are opportunistic Indians lurking in every bush, so the pressure to do something here was rather intense if we wanted to remain their consultants. Therefore, we had to come up with something, and it was this: we agreed to move our interest assumption from 3% to 4% and to use interest gains each year—over the 4% rate—to reduce *that*

year's contribution directly. This has satisfied them. And they are still getting about an 8% yield!

MR. PRESTON C. BASSETT: The question does not inquire whether or not any unrealized appreciation should be recognized, but indicates that the decision has already been reached. We believe that in most cases our clients should continue to value their assets on a cost basis. Current cost reductions which would result from discarding the cost valuation method generally can be accomplished in better ways.

Our experience is that only a few companies have adopted a policy of writing up the assets over their cost valuation basis. This does not mean that for internal purposes the market value of the fund is ignored. On the contrary, and particularly where the market value of the fund exceeds the actuarial liability, the market value is considered informally to set the actual company contribution.

Where the client has reached the decision that he wants to recognize some of the unrealized appreciation in order that he may improve the benefit provided in his plan, we have recommended one of the following methods:

a) The method most commonly used is to assume a higher rate of investment return. Under this method the company continues to value the assets on the cost basis. The decision to liberalize the benefits and the decision to use a higher interest assumption act in opposite directions.

b) The second method is what we term the "one-shot write-up" of the assets. At the time of an amendment to the plan which increases the past service benefit, the assets might be written up by some portion of the difference between the market value and the book value of the fund. We do not recommend a full write-up of the difference. The new value becomes a new "cost basis" for future valuations of the fund. Care must be exercised here that the assumed interest rate does not become out of line on the basis of a new cost value.

c) When the improvement in the benefit formula is of a final-pay type, we prefer a method of writing up assets that will give continuing credits in future years to offset the likely increasing costs of the plan, due to inflation, which cannot be recognized in salary increase scales approved by the Internal Revenue Service. Thus, we recommend the gradual writing up of assets of the common stock portfolio by 3% of its value each year. We have modified this to put ceilings on the amount of write-up and to provide for writing down in certain instances.

We understand that any of the above methods would be approved by the Internal Revenue Service.

We do not recommend writing up assets by a percentage of the difference between market value and book value of the fund or even a

moving average of the difference. The volatile nature of the stock market is such that it is quite likely in profitable years that the client's contribution would be reduced while in less profitable years the required contribution would be increased.

Where the client desires to reduce contributions and pension benefits are not being increased, any of the above methods are satisfactory with the possible exception of the one-shot write-up of assets.

The type of plan sometimes has a bearing on the way the assets are adjusted. With a career pay type plan where they are going to have to update periodically if inflation continues, we strongly urge the client to stay on a cost basis and the time the plan is amended would be the time, perhaps on a one-shot basis, to write up the assets. Contrariwise, if the plan is a final pay type plan with possible losses each year on salaries in excess of those we can anticipate, any recognition of appreciation should be on one of the gradual bases.

MR. ALAN H. COUTTS: The permissible bases for valuing pension trust assets of a qualified plan are set forth in Section E of Part VII of the Internal Revenue Bulletin which says only that any reasonable valuation basis will generally be acceptable provided it is followed consistently and does not result in manipulation of values or estimated costs. The Bulletin also requires that the assumed interest rate reflect any substantial excess of redemption, maturity or market values over the value assigned to the assets.

Apparently the Internal Revenue Service is willing to accept asset valuations based on either market or cost values provided they regard the assumed interest rate as suitable. In one case the stocks were individually valued by taking book value plus a certain percentage of the difference between market and book values, while bonds were valued by an amortization method. This received a favorable ruling, published as Revenue Ruling 57-549. The Internal Revenue Service had proposed a disallowance of a method, developed by the employer himself, in which the assets were individually valued at the lower of cost or market.

Another valuation method is to value assets on an actuarial basis in a way similar to the technique used to put a value on liabilities. This method has been discussed at length in two papers which were published in *JIA* 74 and Volume 15 of the *Journal of the Institute of Actuaries Students' Society*. There seems to be no reason why the Internal Revenue Service should not rule favorably on this method, although it seems to me that as a valuation technique it will raise more problems than it solves.

Turning to the second part of the question, how to take credit for unrealized appreciation without changing to a market value basis, either of the two methods of asset valuation which I mentioned would be possible. But there seem to be two methods by which some or all of this credit can be used without having to change the asset valuation: sell some of the securities which have unrealized appreciation or alternatively increase the valuation rate of interest.

In conclusion, there is not always much to be achieved by taking credit for unrealized appreciation. The minimum contribution requirement in any year may well be at the zero level, and the most advantageous course would seem to be to retain maximum flexibility in contributions by leaving the valuation basis alone.