5

OTHER COMPENSATION ARRANGEMENTS

While salary and bonus, pensions, deferred compensation, and stock options certainly comprise the bulk of the corporate executive's compensation package, they are not the whole story. Most firms make at least some use of other devices. For our purposes such arrangements may be separated into two groups: those which are very important in a particular firm's reward structure and are well reported on in its proxy statements; and those which are common to almost all firms but of lesser significance and are not spelled out for individual executives in any published source. The first category, which includes such schemes as profit-sharing and stock bonus plans, commands attention because it is occasionally important enough to distort both time series data and comparisons among firms if ignored. For example, one company in the sample uses a profit-sharing plan as a substitute for a pension; it would be inappropriate to group the experience of that firm's executives with the experience of those of other firms which do provide pensions unless their profit-sharing rewards are also evaluated by means of a "current equivalent." The second category, however, consisting of the now-familiar "fringe benefits," such as life insurance, medical insurance, expense account privileges, etc., is almost certainly more uniform in terms of value among different companies and is also likely not to represent a very sizeable proportion of the total pay package for the top executives of the large publicly held firms which comprise the current sample.[1] The complete lack of information about these ar-

[1] Some support for this claim insofar as expense accounts are concerned can be found in Challis A. Hall, Jr., *Effects of Taxation on Executive Compensation and Retirement Plans*, Cambridge, Mass., 1951, where he says (p. 14): "Ac-

rangements in proxy statements would, of course, make it impossible to evaluate them empirically in any event. Nonetheless, because they *could* be handled within the same sort of analytical framework that has been developed above for more visible instruments, if sufficient information were available, they will be discussed briefly here, in the interest of comprehensiveness, before we turn to profit-sharing and stock bonus plans. Even the latter need not be examined in the detail afforded the three major supplements to salary and bonus, since much of the analysis thus far presented is directly applicable to them as well.

Life and Medical Insurance

The group insurance benefits financed by a corporation for its employees may cover a broad range of contingencies. Whatever the combination of provisions in question, their monetary value can readily be appraised by determining whether and to what extent similar arrangements are available to individual employees elsewhere should they seek to obtain equivalent protection on their own. The worth of a firm's insurance program to one of its executives, for instance, can be measured by asking: How much would his salary have to be increased in order that he be as well off via that increase as he is as a participant in the observed plan? The amount of the required increase is the current income equivalent of whatever the arrangement may include. Since individual life and medical insurance policies which duplicate the features of almost any corporate plan are sold by private insuring agencies, the job of finding an appropriate index of value from the executive's standpoint is a simple one. The annual premium which would enable him to purchase an individual insurance policy having the same benefit structure as his firm's plan is precisely the after-tax current equivalent of the latter instrument.[2]

One issue in this connection might be the time period over which

cording to executives interviewed, company-paid-for expenses of the type which really reduce executives' buying costs and represent extra income are of negligible importance in large companies."

[2] As was true before, it may be necessary to define "same" in terms of present value if for some reason the company plan cannot be exactly duplicated on an individual basis. It is also necessary, of course, to deduct the present value of the contributions the executive must make toward the plan, if it is contributory.

such premiums should be thought of as being spread. For medical insurance this is not a problem, since premium rates do not depend on the policyholder's age and are, in fact, quoted on an annual basis subject to change depending on the insurance experience. The only possible figure is the relevant calendar year's current annual rate. In the case of life insurance, however, the time period *is* a decision variable. The position here is that, if the insurance remains in effect only so long as the executive in question is an active employee, the equivalent individual arrangement should be considered to be a *term* life insurance policy covering—and paid for in annual installments over—that same interval.[3] If, instead, the insurance supplied by the corporation becomes paid up and the executive acquires title to it upon retirement, then a standard "x-payment" individual life insurance policy is the appropriate alternative—where x is the number of years from the time the executive first comes under the company's plan through his normal retirement age. In either case, if the amount of the death benefit is raised by the corporation as the man's career progresses, the complete after-tax current equivalent over his working life will consist of several concurrent and overlapping streams of premium payments, each one corresponding to a particular benefit increase.[4]

Both life and health insurance can therefore be analyzed with little difficulty. Very close, or even perfect, substitutes are available to executives individually from insurance companies. The annual premium cost of those substitutes is a convenient and precise statement of the value —in terms of additional current income—of a corporation's group insurance program.

Expense Accounts and Payments in Kind

The compensation represented by the provision of various goods and services to the executive by his employer, either through assuming their

[3] Take, for example, a man who joins a firm at age 25 and is provided with $10,000 worth of life insurance good until his retirement at age 65. The after-tax current equivalent of that benefit is, in the view here, the forty equal annual premiums that would purchase a $10,000, forty-year individual term insurance policy. If term life policies of this duration are not commonly available, the premiums for a *series* of, say, five- or ten-year policies would do as well.

[4] In the same manner in which increases in pension benefits were treated.

cost, as with meal and travel allowances, or by furnishing them directly —company cars and rent-free housing, for example—is still easier to assess, at least in theory. To the extent that expense account payments permit the executive to consume rather than merely meet legitimate business-induced expenses, they should be defined as additions to income. Their after-tax current equivalent in any year would simply be the dollar amount by which such payments exceed actual expenses in that year. The really sticky definitional problems of where and how to draw the line between consumption and "necessary" expenses will be left open, however, since it is not possible to do anything empirically with this component of the pay package for lack of published figures on even *gross* expense account awards to particular individuals. Nonetheless, the principle is clear and the methodology of valuing such devices in a "current equivalent" manner an obvious one. They are, in fact, extra current income and should be so regarded. Employer-provided housing, automobiles, domestic servants, and similar emoluments fall in the same category. These items are worth to their recipient exactly their replacement cost on the open market and may be characterized by an after-tax current equivalent equal to that cost. If the beneficiary of such services is unfortunate enough—or perhaps unskillful enough—already to be taxed on the basis of their market value, then the indicated current equivalent should be smaller by the amount of the tax.

It seems fair to conclude, therefore, that there are no conceptual barriers to measuring the compensation implicit in these schemes. The approach is simply to determine the outlay that would be required of the executive were he to provide the same services or benefits on his own. That figure then provides an index of the value of the compensation arrangement in question which not only enables a comparison with other rewards but does so in what should be the clearest possible manner: as an equivalent salary increase.

Stock Bonuses

The stock bonuses employed by corporations come in several different forms. While in each instance they consist of awards made to the executive in shares of his company's stock, the timing and duration of the payments involved may vary considerably. The variant which is easiest to handle is that in which, like a straight cash bonus, there is but a single payment occurring at the end of the year during which the services that gave rise to the bonus were performed. Such a payment is taxed to the executive as ordinary income and valued for that purpose by the IRS at the market price of the shares on the date they are transferred.[5] This type of bonus may be treated just as a cash award would be. It is worth, in after-tax terms, the gross market value of the stock received minus the applicable tax liability, and its "after-tax current equivalent" is simply that same amount.[6]

A second common arrangement is also very much like a form of cash bonus already discussed. In it, payments are spread over a period of several years immediately following the award year rather than being made in a single lump sum. A series of four or five equal annual installments is the most frequent choice. In this case again, the installments are taxed as ordinary income at their market value when received, and therefore their after-tax current equivalent will be defined as the corresponding series of net additions to salary. The only difference between this scheme and that in which the bonus is in the form of cash is that the final value of the award is not fixed at the time it is made but instead depends in part on stock price developments during the next few years. This means that it is necessary to record the price of the firm's stock on four or five separate dates rather than on just one in order to construct the desired current equivalent. This is a simple task, however, and merely implies that the appropriate alternative to this kind of stock bonus is conceived to be a series of salary increments which themselves are a function of the firm's stock price

[5] *Internal Revenue Code*, Section 402.

[6] It should be stressed that it is again irrelevant to the valuation process whether the executive under consideration promptly disposes of the shares he receives or instead retains them in his portfolio. In the latter case he will, upon their eventual sale, be taxed in addition at capital gains rates on any appreciation in their value subsequent to the date they were received (*Internal Revenue Code*, Section 402). On that date, however, he formally acquires a particular valuable asset, is assessed a tax thereon, and is then free to do with it as he pleases. Whatever his decision, the results experienced are not part of the bonus transaction itself and should not be regarded as such. The same argument was made earlier in connection with stock option profits.

over time. There is nothing conceptually incorrect—or even administratively inconvenient—in such an arrangement.

The third, and most interesting, variety of stock bonus is really just another form of deferred compensation. Rather than a given amount of cash being set aside for payment to the executive following his retirement, a given number of shares of stock are so allocated. Thus, the executive may stand to receive a series of stock allotments beginning at age 65, continuing for a specified number of years, and taxable at ordinary income rates. If he should die before attaining retirement age or thereafter before receiving his bonus in full, his estate is entitled to the remaining shares. As is evident, the difference again between such a promise and a cash-payment contract is the dependence of the value of the ultimate receipt on interim stock price movements. However, since the objective is to derive a current income equivalent which applies—as all previous ones have—only to the executive's active working life, it is not possible to wait until the time of each scheduled receipt of stock before fixing the amount of that equivalent.[7] An alternative must be designed which, as in the case of a stock option, anticipates the final outcome. The approach that is suggested here defines the after-tax current equivalent of a deferred stock bonus to be a series of annual salary increments which: (1) begin in the year the bonus is awarded; (2) continue to the executive's normal retirement age; (3) have the same prospective after-tax present value as that estimated for the deferred bonus payments; (4) are revised each year in response to any change in this estimate.

For example, suppose that, in 1950, an executive age 50 is promised a deferred stock bonus of 1,000 shares per year in each of the first five years following his retirement at age 65. At the time of this promise, the market price of his firm's stock is $25 per share. The initial estimate of the ultimate value of his bonus is therefore $25,000 per year, before taxes, for five years. Given the size of the man's salary in 1950, some "outside income" may be projected for him in retirement.[8] With that figure and an estimate of deductions and exemptions, the after-tax value of the five bonus payments can be determined, as in the case of

[7] In which case, of course, it would not really be a *current* income substitute for the deferred payments.

[8] See pp. 21–22.

a conventional deferred compensation arrangement. The present value of this expectation as of 1950 is then calculated,[9] and the first stage of the after-tax current equivalent specified to be simply that series of fifteen equal annual additions to after-tax salary which, if received from 1950 through 1964, would have the same present value.[10] The amount of the current equivalent for the year 1950 is, accordingly, the first payment in that series. Suppose further that, in 1951, the stock rises in price to $30 per share. Our estimate of the worth of the deferred bonus is now revised upward by $5,000 per year, the additional after-tax present value implied by that revision computed, and a second stream of *fourteen* payments established having a present value equal to the *increment*. The current equivalent for 1951 is then the sum of this new figure plus the one from the 1950 calculations. The process is repeated every year up to and including age 65, the result being a current equivalent consisting once again of a number of overlapping "layers" and covering the full time period from the date the bonus arrangement is instituted up to the executive's retirement. By this latter date, the executive will have been credited with extra income over the years equal in value to that dollar amount which, after taxes, his bonus now promises him. He, therefore, will have been made as well off—which is the test here of "equivalence." [11]

The effect, then, is to consider the deferred stock bonus to be simply a deferred compensation contract which happens to require not just one but a series of appraisals in order to be analyzed completely. All the ancillary arguments offered previously in support of the current equivalent designed for such contracts are therefore applicable and will not be

[9] Discounting for both futurity and mortality, using for the latter the 1951 Group Annuity Table referred to earlier. The present value of the death benefits payable under the bonus arrangement is also included in this calculation. They are of the same form as in the case of a regular deferred compensation contract.

[10] Mortality as well as futurity is relevant to *this* computation also. Again, the reasoning has been developed previously in connection with deferred compensation arrangements.

[11] He also, it may be noted, would in practice have been provided during this period with the same incentive to concern himself with the price of his firm's stock as the bonus in question would have engendered, since the size of the current equivalent constructed is tied to *actual* stock price developments over time. See the related discussion in connection with stock options.

reiterated.[12] In the empirical portion of the study, in fact, the two devices are treated as a single category of reward.

Profit-Sharing Plans

If the valuation model just outlined is accepted, there is little that need be added to permit profit-sharing plans to be dealt with. The typical arrangement, including all the ones there will be occasion to examine here, provides that in each year a certain sum related to his firm's profits be set aside in the executive's name and used to purchase shares of its stock for him on the open market.[13] The award, however, is not taxed to the executive when it is made. Instead, the shares purchased are kept in trust by the company until he retires, at which time he takes title to them and is taxed on the full amount of their then-current market value at the capital gains rate.[14] This sort of plan, therefore, differs from a deferred stock bonus in two respects: the award is made initially in terms of a specified dollar figure rather than a given number of shares: and the executive receives all his benefits immediately upon retirement instead of in several installments.[15]

The first of these differences is purely nominal, since the "cash" awarded is immediately transformed into stock. In fact, the number of shares thus acquired is specifically recorded in the firm's proxy statements. The second may appear a more substantive difference, but in fact simply means that the present value of only a single prospective receipt need be considered for plans of this kind. In addition, since the capital gains tax—at the income levels relevant here—is a flat rate, the

[12] One change that should be made is in the discount rate used to arrive at the various present values. In the case of deferred compensation arrangements, 2½ per cent per annum was adopted and rationalized on the basis of the low degree of uncertainty associated with the postretirement benefits anticipated. A deferred stock bonus is more like a stock option in this respect, however, since the eventual outcomes may well vary considerably. Accordingly, the 5 per cent per annum after-tax figure used for stock options is taken to be an appropriate choice for stock bonuses as well.

[13] In some cases, authorized but unissued or treasury shares are "purchased" from the company itself.

[14] *Internal Revenue Code*, Section 402.

[15] As with deferred compensation and stock bonuses, the executive's estate claims his accumulated profit share if he should die *prior* to retirement.

computations are actually a bit easier than in the stock bonus situation. As stock prices vary following an award, the after-tax value of the lump-sum benefit anticipated changes by precisely 75 per cent of that amount.

Given the similarity between such plans and deferred stock bonuses, the conclusion is that their "current equivalents" may be constructed in the same manner. Thus, when stock is allotted in a particular year to an executive's profit-sharing account, its observed market price at that time is used as an initial estimate of the size of the benefit he will eventually receive. A series of equal annual payments beginning then, running through his expected retirement age, and having the same after-tax present value as the estimate thus obtained, constitutes the first component of the current equivalent for that award. Each time stock prices change thereafter up to retirement, an additional—and successively shorter—series of payments is added to this basic stream.[16] The total of all such payments over time represents the complete after-tax current income counterpart of the profit-sharing award. In effect, the valuation procedure established in the last section is adopted virtually without alteration, and its suitability depends on the validity of the arguments made there.[17]

Other Benefit Formats

Every stock bonus and profit-sharing plan does not, of course, look exactly like the arrangements described above as "typical." The precise duration and timing of benefit payments may vary widely from company to company, as may the conditions to be satisfied by the executive in return for those payments. Space limitations and a desire not to become too preoccupied with detail militate against examining here each possible combination of provisions. It should be true, however, that just about any peculiarity that may arise can be taken care of within the framework discussed on the preceding pages, simply by computing

[16] In order to keep the number of computations and the data collection effort required within manageable bounds, the stock price will be examined for change only once a year—on the anniversary of the original award.

[17] Including the appropriateness of a 5 per cent per annum discount rate and the desirability of discounting for mortality as well as futurity in determining the size of the payments in the current equivalent.

the after-tax present values of the relevant benefits and proceeding from there to the same sort of sequentially adjusted current income equivalent suggested. Appendix H contains full statements of the present value and current equivalent formulas for the prototype deferred stock bonus and profit-sharing plans, and may be used as a reference point for the analysis of other devices in these two general categories.

One variant of these basic arrangements which does deserve mention here should serve to illustrate the kind of adaptation to different circumstances that is possible. It sometimes happens that a particular plan will provide for benefits payable partly in cash and partly in shares of stock. If this should occur, the plan may simply be treated as two separate instruments, the cash-benefit portion analyzed as would be a conventional cash bonus or deferred compensation contract and the stock-benefit portion as just indicated. The current equivalents of the two pieces thus determined can then be added together to form the current equivalent of the whole package.

Savings Plans

There is a final class of compensation arrangements which has not yet been considered and which does not quite fit into either of the two groupings that were established at the beginning of this chapter. In recent years there has been a small but growing trend toward adoption by corporations of what are usually referred to as "savings" or "thrift" plans. While it is not difficult in principle to evaluate the compensation these devices provide and to redefine them in equivalent current income terms, the information which appears in published sources is almost invariably insufficient to permit the application of those techniques to the experience of actual executives. On the other hand, it is not possible either to say with the confidence displayed in the case of group insurance benefits that we may safely ignore savings plans and not be concerned about introducing some distortion into an empirical analysis of compensation histories. It is not that such plans are more valuable in the aggregate than company-provided insurance—indeed, they are not—but they are less universally employed and also less uniformly designed. Therefore, for a few of the firms which use them, they can be a reasonably important item of compensation. There is little choice here but to ignore them, however, since the reporting in proxy statements is just not complete enough to allow the necessary story to be told in a systematic fashion. Certainly for the large majority of the companies in the present sample, savings plans were either insignificant or nonexistent as of the end of the time period studied. In no case did a rough estimate of the value of a particular scheme even approach that of any of the major compensation devices employed by the same firm, let alone their combined worth. Of necessity, and with some justification, therefore, savings plans are excluded from the current empirical investigation.

It may be useful, however, to indicate how such arrangements would be analyzed if it were possible to do so. The typical savings plan involves an annual contribution by the executive of a portion of his salary—usually on the order of 2 to 6 per cent—to a fund which is managed for its employees by the corporation. The firm itself also contributes a specified amount to the fund in the man's name, in some cases matching his contribution but more commonly adding, say, 50 per cent as much. The fund is then invested in a specified portfolio of securities and the results thereof distributed to the executive upon his retirement. Contributions to the plan by the executive are not tax-deductible, but neither is he taxed on his employer's contributions until he actually collects his benefit. At that time he pays a capital gains tax on the difference between the payment received and his own total contributions.[18]

Variations in plans among companies arise not only in the size of the executive's contributions [19] and in the degree to which the firm supplements those amounts but also in the composition of the portfolio to which the investment fund is committed. In connection with this last item, three choices predominate: all government bonds, part governments and part common stock of the employer corporation, all common stock of the employer. Seldom are the bonds or the shares of other firms acquired—or even permitted. As it turns out, the reason savings

[18] *Internal Revenue Code*, Section 402.

[19] In most instances, the executive is free to choose from among a range of possible contribution rates in deciding upon the extent of his participation in the plan. In one situation observed, for example, he could pick any figure from 2 to 5 per cent of his salary and have the company automatically match that contribution.

plans are difficult to treat empirically is the inadequate reporting of the investment results realized from the plan's portfolio, especially as they relate to an individual executive's account.[20] In the case of a stock bonus or profit-sharing plan, because we are told the number of shares involved to begin with, it is possible to trace changes in their value over time and therefore to construct a current equivalent which reflects those changes. The same kind of information is unavailable for savings plans, however, and there is no indication given of the effect of subsequent transactions by the fund's managers. All one can do is speculate on the status of a particular individual's account at any point in time—and then only in the most general way. Were it necessary for corporations to publish such a statement each year for their senior executives, savings plans could be converted into current income equivalents with little difficulty. Appendix H outlines the suggested approach, which is similar to that developed for profit-sharing arrangements and utilizes the same kind of sequential adjustment process. In fact, a savings plan which specifies that its funds are to be invested entirely in the common stock of the employer corporation is really just a contributory profit-sharing plan.

Summary

The manner in which a group of rewards which are either not commonly used or not thoroughly reported on by corporations may be evaluated by means of "current income equivalents" has been described. Intentionally, the discussion has been less exhaustive than it was for the major compensation devices treated in previous chapters. That it could appropriately be so illustrates what seems an important point: Once an analytical framework and some basic principles of valuation are established, they can be adapted to virtually any compensation arrangement, no matter how peculiar its characteristics.

Company-provided life and medical insurance, expense accounts, payments in kind, and savings plan benefits must be excluded from the empirical investigation that follows because of a lack of published information relating to the experience of individual executives. For all

[20] Occasionally, however, even the rate of the executive's contributions and the nature of the portfolio are not clearly stated.

but the last device, this omission is deemed very unlikely to affect the profile of the results. While the same conclusion is perhaps less appropriate for savings plans, the problem is still not a serious one, and its impact is widely scattered in any event. Were sufficient data available, however, all these rewards could easily be converted into current income equivalents and compared with the other components of the pay package.

The reporting of stock bonus and profit-sharing plans permits a more satisfactory solution. There is enough evidence in proxy statements about such plans to allow their role in compensating the executive to be fully assessed. The key to an analysis of both instruments was seen to be a periodic reappraisal of the size of the benefits anticipated thereunder and a corresponding series of adjustments in their current income counterparts. Hopefully, the procedures described have succeeded in capturing the spirit as well as measuring the monetary value of the two devices.