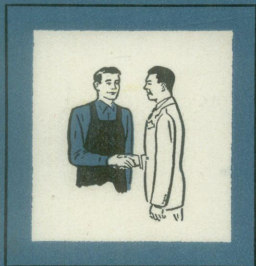


# TODAY'S COSTS OF TOMORROW'S PENSIONS:

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by ROBERT C. TYSON  
*Comptroller*

*[New York]* UNITED STATES STEEL CORPORATION *[1950]*



**Additional copies available**

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# TODAY'S COSTS OF TOMORROW'S PENSIONS

by ROBERT C. TYSON



When historians of the future write our history for the first half of the twentieth century, they will undoubtedly say that it went out in a blaze of welfare, security and deficit financing. The opportunity and obligation of the accountant is to make sure that the brightness of the blaze does not blind us to the danger of the fire. Pensions, their costs and their consequences, are complicated and obscure to most people. Pensions, by their very nature, are arrangements which cover the life-spans of individual men and women and reach out even beyond that when groups of men and women are concerned. The things we do today about pensions will have consequences long after we are dead. We had better be sure that those consequences will be good, not evil. The fact that the consequences may be long deferred does not mean that they can

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be disregarded; it means, on the contrary, that these consequences must be even more vividly envisioned and so brought to bear on our present-day decisions.

The inherent nature of pensions presents an especial opportunity and obligation to the accountant as a member of the management team, and one which his occupation especially equips him to undertake. His obligation begins long before any names are signed to any pension contracts.

Let me tell you why I think this is true. Take the simplest possible example: A company hires a youth at the age of twenty and agrees with him at that time that he will have a pension beginning forty-five years later when he stops working. Now look at the questions that pop up: How much will the pension be? Will he live forty-five years? If so, how much longer? Will he stay with the company? Where is the money to come from to pay his pension? How is it to be provided? These are only some of the questions. They multiply in their complexity as soon as you begin to consider the pensions of more than just one man. Now who is to answer these questions and answer them *before* the pension arrangement is made? After that it will be too late. I submit to you that all such questions are to be answered only in terms of records — records of people, their mortality, their

turnover in employment, their probability of disability, their normal advancement in the pay scale, their survival spans in retirement, the normal growth of the business and its employment, the sources of funds, the methods of ascertaining and allocating costs, the nature of sinking funds, and so on. These are the things about which accountants and their actuarial counsels are supposed to know more than any other element in the management team. Pensions, I repeat, are matters that present both opportunities and obligations to the accountant.

### THE PENSION BASES

In deciding upon a pension plan the first thing to be determined is usually the bases upon which the actual amounts of pension payments are to be determined. In the case of United States Steel's plan the bases are the length of service, age and reason of retirement, average earnings over the last ten years of employment, with the added feature of minimum amounts inclusive of social security benefits. An immediate next consideration is what is the cost and can the company stand it. Depending on the cost, the bases are subject to reconsideration and revision.

Once the bases for granting pensions have been proposed, trained actuaries can reasonably

determine the actual dollar amounts to be paid to prospective pensioners in years to come. The accountant had best rely upon the skilled actuary for such estimates, supplying to him the necessary company records of employee numbers, sex, age distribution, compensation and turnover.

### METHODS OF COSTING PENSIONS— “CASH DISBURSEMENT”

Once the actual dollar amounts to be paid to prospective pensioners are established the accountant is immediately confronted with the necessity of determining the method of meeting the cost of those payments.

There are a number of methods of providing for the cost of pensions. One method is to operate the pension plan on what has come to be called the “cash disbursement basis.” In this case no provision is made for the pension cost during active employment of the pensioner. Upon his retirement he is, in effect, continued on the payroll at a reduced rate of compensation. Some companies use this plan, and some sincere individuals endorse it on principle. Others endorse it because it calls for the least immediate cash outlay.

I personally believe that the cash disbursement method is unwise from a management point

of view, improper from an accounting point of view and undesirable from the employee point of view. I think it is unwise from a management point of view because even though we know that it inescapably results in a pyramiding fixed cost through good times and bad, the initially low cost insidiously and deceptively leads both management and employees to think that pensions do not cost very much. An attitude of "after me the deluge" is, almost unconsciously, provoked.

I believe that the cash disbursement plan is improper from an accounting point of view because it ignores in the cost of the product currently produced the cost of the pension currently earned but paid after the employee stops producing. There seems to be no justification for an accountant to ignore a part of a cost simply because the payment of that part of the cost is divorced in time from the performance of the service for which it is paid. No accountant, for example, would defer or ignore the current social security tax cost until such time as the employee upon whose earnings the tax is paid starts to receive social security benefits.

I believe that the cash disbursement plan is undesirable from an employee point of view because there is no assurance to the employee that the money for his pension will be available when he

qualifies to receive it. It is a matter of record that during the 1930's many pension plans using the cash disbursement method were terminated or the pensions had to be reduced, including the pensions of those already retired.

Mr. George B. Buck, a distinguished actuary regularly consulted by business, government bodies and labor organizations, has publicly stated: "Generally speaking, the cash disbursement method of providing for pension costs is being discarded as inequitable, unsound, and dangerous to the pension security of retired employees."

#### FUNDING OR RETIREMENT METHOD

So much for the cash disbursement method. A second method of providing for the cost of pensions is to make no provision for an employee's pension during his active service, but to pay into a fund at the time of his retirement an amount of money which, with the interest it should earn, is calculated to be sufficient to pay his pension over his remaining life. From the employee point of view this is slightly better than the cash disbursement method, because once the money is paid into a fund, the employee is assured of receiving the payments to which he has become entitled. From the company point of view this plan in its early



years requires heavier payments than the cash disbursement plan. But over the life of the plan the required company payments are less, by reason of the interest earnings of the fund, which earnings cover part of the payments to pensioners.

Like the cash disbursement method, however, this second method fails to recognize the cost of the pension during the period of active service. From the company's standpoint it also has the added and serious disadvantage of obligating the company to provide large lump sum payments at the very times it may prove difficult to do so. This results from the natural and historical fact that in times of good business and labor shortage, retirements for age or for disability both tend to be deferred. But when business subsequently declines and losses may replace profits, the accumulated deferred retirements are added to normal retirements to impose a sometimes embarrassingly heavy drain on the company's finances.

#### METHODS RECOGNIZING COSTS CURRENTLY

A third method of providing for the cost of pensions is that which meets the minimum funding requirements under the United States Treasury Department tax regulations. This minimum requirement is that the past service cost at the effec-

tive date of the plan must not be permitted to increase. Stated another way, the annual future service cost must be met in full, and an amount at least equal to the interest on the past service cost, at the rate assumed in actuarial estimates, must also be met. The terms, *future service cost* and *past service cost*, present something of a mystery to many people. However, their meaning can readily be developed.

Thus this third method of providing for the cost of pensions starts out by recognizing that the current cost of an employee's service is greater than the amount currently paid to him as wages because, as he works, he concurrently establishes a possible claim to a pension. In a sense this is a claim to more pay for the same work; it is therefore deemed to be a part of the cost of that work and hence a part of the cost of the product currently resulting from that work. Under this method, the actuary computes for the employees as a group the probable pensions that will be paid to surviving members of the group. He next determines an amount which, if paid into a fund currently, will, with the interest earned by the fund, provide the amounts necessary to pay the pensions to the survivors of the group based on their service rendered subsequent to the installation of the plan. This

annual amount is the item which is given the name, *normal or future service cost*.

Note carefully that this normal or future service cost does not provide for the cost of any pension payments based on service rendered *prior* to the installation of the plan for which employees may be retroactively entitled to credit for pension purposes. As its name implies, the future service cost looks to the future — that is, to pensions based on service rendered subsequent to the date the plan goes into effect.

This leads us to a consideration of the means of providing for pensions based on service previously rendered, and to their cost. This is the part of the cost of a pension plan which has provided the greatest confusion and greatest controversy. These are the more intensified because there is something of a moral question involved. Thus a claim made today for a pension based on service rendered in the yesterdays is tantamount to a retroactive claim to greater compensation. But since the greater compensation was not a part of the employment arrangement in the past it was neither recognized nor provided for. If it is now retroactively to be granted, its cost must be borne by someone in the future. In business life this means that prices today and in the future must be higher

in order to pay for the retroactively higher wage costs of products produced and used up in the past.

The retroactivity of the claim to pensions based on prior service finds no ready counterpart in financial ledgerdom. If the clock could really be turned backwards, and the company state its costs all over again, it would have provided in the past for the same normal cost of that prior period as it now begins to provide for the future. On the date the plan is installed the company would then have already provided sufficient funds which, together with interest already earned and to be earned thereon, would meet that part of the cost of future pensions based on service rendered prior to the start of the plan. The amount of this hypothetical fund at the date the plan is installed is the item to which is given the name, *past service cost*.

Since the fund is a "what might have been" fund and does not in fact exist, the immediate question is what to do about it. Because the fund does not exist it obviously cannot earn interest. Unless some provision is made to cover the interest amount, the unfunded past service cost will rise each year. Meeting this interest, in addition to providing what I have described as the normal or future service cost, is the Treasury's minimum requirement for funding pensions. This minimum funding, however,

leaves the actual financing of the principal of the past service cost to be covered in some other way. So long, however, as the amounts being paid into the fund are greater than the money paid out to those qualifying for benefits the plan may be expected to operate without getting into financial difficulties.

A fourth method of providing for the cost of pensions is to pay the future service cost, the interest on the past service cost and, in addition, to fund the past service cost. Under Treasury regulations the maximum amount of funding, including interest on the past service cost, that is permissible in any one year for tax deduction purposes is ten per cent of the past service cost at installation date. This means that, at a maximum permissible funding rate, it would take about eleven and a half years to complete the funding. Under this method, after the past service cost is completely funded, the company has only the future service cost to pay.

#### **EFFECTS OF COST RECOGNITION**

From the employee point of view it is to be noted that methods three and four, which have just been described as recognizing the cost of an employee's pension during the period of his active employment, provide much greater certainty that when the employee retires the funds will be avail-

able to provide for his pension than do the first two methods. Methods three and four are thus obviously more desirable from the employee point of view, since they afford him more protection. Indeed, this is well recognized by union negotiators, who in recent negotiations have demanded that pensions be funded in accordance with methods three or four.

From the management and the accounting points of view, methods three and four have the virtue of more nearly stating the true cost of pensions when the work on which they are based is being performed. Under these methods the future service cost can be expressed as a level percentage of payroll. Absolute dollar costs will then fluctuate directly with payroll rather than sometimes oppositely, with possibly embarrassing consequences, as in methods one and two. In other words, methods three and four, by preventing the expansion of any unrecorded pension cost, protectively put management on notice of the true costliness of any pension proposal.

Remember that I said at the outset that I thought that part of the accountant's opportunity and obligation, with respect to pensions, arose before any names were signed to any pension agreement. The accountant's responsibility is to point

out to management the extent of the true cost of any proposed pension plan over a long period of time. The preceding discussion of the four basic methods of costing and paying for pensions shows that the accountant and actuary — with one reservation I will mention in a moment — can determine with reasonable accuracy that portion of cost which would be recognized annually over a period of years under each method. Only with this information is management in a position to measure the consequences of adopting a proposed pension plan — the effect upon the company in relation to its competitors both in and outside of its own industry and upon the economy generally. Only with the consequences measured is management able with intelligence to illuminate pension negotiations and to adopt or reject a particular pension proposal.

### YIELD ON INVESTMENT

Once the benefits have been decided upon and the method under which the costs will be recognized has been determined, the reflection of these pension costs in the income accounts follows the pattern of other cost reflections in accordance with company accounting policy. Needless to say, good financial management will provide that any recognized pension cost not immediately payable to

pensioners will be represented in funds with an insurance company or trustee for the purpose of paying pensions when they come due. From there on the treatment of the funds becomes primarily an investment rather than an accounting problem. However, the two are by no means inseparable because the investment policy as reflected in the yield on the funds has a major bearing upon the amounts the accountant must enter as cost. The bigger the yield on the invested funds the less are the accruing costs of the benefits under the plan. For example, if the future service costs have been estimated on the basis of a  $2\frac{1}{2}$  per cent yield, each one-half percentage point increase in the yield will reduce those estimated costs by about fifteen per cent. If the past service cost is to be funded over a specified period this cost also would be reduced although not so greatly. If, however, it is intended merely to pay the interest on this past service cost, the higher rate which must be paid will more than offset any gain through reduction in the principal of the past service cost. I only mention these matters to indicate that, although the actual investment of pension funds is not the function of the accountant, the results of that investment nevertheless must enter into the accountant's cost calculations.



## RECORDING PAST SERVICE COST

Having considered the income account treatment of pension costs there then remains the problem of how to treat the unfunded past service amount. It has been proposed by some that the past service cost should be reflected as a liability in the body of the balance sheet, the offset being a reduction of net worth or some sort of deferred asset. Others would be satisfied to have it shown merely in a footnote of some sort of contingent liability. Still others believe — and I am one of them — that, since we are in what may be termed a “new era” as concerns such an item, it is preferable to move slowly and not reach hard and fast procedures until we have had an opportunity to live with the problem for a while. These latter hold that we are in a period of change as regards old age benefits under both federal and company plans. Any amount which might be set forth in the accounts would thereby achieve an appearance of finality that might prove to be unwarranted. For example, the benefits under most company plans are tied in with federal old age benefits, and any increase in the latter will result in a corresponding decrease in the company’s pension obligation. Up to this time the accounting profession and the Securities and Exchange Commission have reached

no conclusion as to a suggested disposition of this problem.

I do not wish to leave any false impression about the cost consequences of changes in the amounts of federal old age benefits. While an increase in these benefits will cause a decrease in company paid benefits under many plans and so reduce the company's pension costs as such, it does not necessarily mean that there will be a reduction in the company's total costs. Taxes will have to be increased to support the increased public pensions or else a deficit will accumulate in the social security fund.

#### EMPLOYEE INSURANCE PLANS

So much then for what might be thought of as the accountant's particularized responsibilities to his company and to his profession in the matter of pensions. May I next say a few words about the problems involved in employee insurance plans? These problems, for the most part, are quite similar to those involved in pension plans. An estimate of the cost of any proposed insurance benefits is just as important as is the estimate of pension costs. In such cost determination the same factors must be considered even though the problem of past service cost is less in the case of insurance since

the benefits, except for life insurance, usually carry no retroactivity. The problem of administration of insurance plans, however, is usually more complicated because of the multitude of federal and state laws which apply to any company having employees in a number of states. It is also complicated for a company dealing with more than one union. Achievement of reasonably uniform and fair treatment of all employees requires, therefore, seemingly different plans and different administration in different localities. Then, too, when a company is dealing with several unions, each union progressively wants "a better deal" than that to which other unions have agreed. This rivalry seems more intense in the case of insurance than in the case of pensions, presumably because the benefits could apply immediately to anyone on the current payroll, whereas pensions are more remote in time and will be paid only to those who survive in the service. Most people, I guess, place higher value on immediate gain than upon ultimate benefit.

Another difficulty is that of controlling the benefits to be paid. For example, it is not difficult to determine when a man retires and to make, for all time, the one calculation needed to determine the amount of his pensions; but it may be difficult to determine when and for how long a man may

be actually prevented from working because of covered illness. It is for that reason that many companies have provided in their agreements with employees that the company portion of the cost of insurance benefits shall be fixed at, say, so many cents per man hour worked. This provides a limit on its cost.

### A CERTAIN MORAL RESPONSIBILITY

Thus far I have adhered rather closely to the accounting aspects of pensions and insurance, concerning which I believe the accountant has a particular responsibility. There are certain other aspects of pensions, the responsibility for which the accountant shares with management and, indeed, with all thoughtful citizens.

There is no doubt that large numbers of Americans in the past twenty years have renounced in considerable measure their independent responsibility to take care of their own individual needs, each in his own way. Instead they have turned to their government and to their pressure groups in efforts to get something for nothing from each other. They have sought — and with some success — to use the power of government directly or by delegation to take from the more productive and

thrifty for the benefit of the less productive and less thrifty. As Kipling put it succinctly,

“In the Carboniferous Epoch we were promised abundance for all,  
By robbing selected Peter to pay for collective Paul;  
But, though we had plenty of money, there was nothing our money would buy,  
And the Gods of the Copybook Headings said: ‘If you don’t work, you die’.”

These matters are pertinent to one’s contemplation of certain possible long-term consequences of mass pensions established under the direct or indirect compulsion of government. Can you think of a handier and more popular device for power-hungry people to employ in obtaining support than promises to take good care of people when they get old — that is, later on? The “later on” is very important to the promiser; he gets the popularity he seeks *today*; and as for paying up tomorrow — well, tomorrow is another day, and, if necessary, the currency can be debased. It has been in other times and places. In this country it already has been debased by nearly one-half since social security was first promised to numerous voters.

This brings me back to my opening com-

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ment on deficit financing, and to one reservation I made a moment ago. The accountant's calculations of pension costs and his provisions for meeting them are meaningless except on the hypothesis of "honest money" — money whose buying power does not change very much over the years. Thus if there is a continuing debasement of the money, with resulting price and wage inflation, then the dollar amounts of pensions based, as in many company plans, upon the wage level of the last ten years of service will be greater than were provided for during the earlier years of service at lower levels of dollar wages. The dollars set aside during these earlier periods therefore may prove insufficient and have to be made up as higher costs than were previously calculated. If no money is set aside in anticipation of pensions to be paid later, then the burden of paying the pensions when they come due will be still further aggravated.

In addition to this, as we have already seen in the recent history of both company and federal old age benefit plans, the diminishing buying power of the dollar becomes a springboard for demanding still greater dollar pensions. The greater pensions that might be granted would naturally result, as I have already explained, in retroactively creating a new and bigger past service cost.

I suppose that nearly everyone, at least somewhere in the back of his mind, realizes that the maintenance of honest money is important to a country and to its welfare. What I am here pointing out is that, in the matter of pensions, the accountant has an especial reason for realizing and endorsing the need for honest money. The pension contracts, as I noted at the outset, deal with the whole life-spans of men and women.

Pension plans are arrangements announced in terms of dollars to be paid in the far future and to be provided for in the interim. Misery, unhappiness, and failure to provide the expected pension benefit in terms of the real things implicitly involved can be the results if money is not enduringly kept honest. Here then is an intangible but terribly important moral obligation that falls upon the accounting and management professions when they undertake to take care of people as they grow old and are no longer able to take care of themselves. It is an obligation to exert their utmost to make and to keep the dollar honest. I commend this last thought to your especial consideration.

