The JOURNAL *of* ACCOUNTANCY

Official Organ of the AMERICAN INSTITUTE OF ACCOUNTANTS

Vol. 47 APRIL, 1929 No. 4

Industrial Pensions and Wages*

BY JOHN WHITMORE

The advent of insurance companies in the field of industrial pensions appears to date from the year 1922. Conant's *Critical Analysis* speaks of a single plan then recently effected through the instrumentality of an insurance company and says that in that year the two insurance companies giving chief attention to the subject were still working on the details of their contracts. It is spoken of as "a system of cumulative single premium annuities." It is described in the *Critical Analysis* (p. 111) as follows:

> "Every worker who has completed a limited period of service with an establishment (say three to five years, roughly covering the period of initial heavy labor turnover) would, for each additional year, receive a paid up annuity policy assuring him of an income of, say, $10 per year, beginning at age of 65. There would be no condition attached to the issuance of a policy other than the completion of an additional year of service. The policy when once turned over to the worker would be absolutely his property and could not be forfeited."

And in *Industrial Pensions in the United States* (p. 58):

> "It is a contributory arrangement by which the employee authorizes a stated proportion of his wage to be deducted and to be paid periodically, together with an additional contribution from the employer, to an insurance company. The latter issues to the employee at the end of each year a certificate which entitles him to draw an annuity, say, at age 65, equivalent to the income from the combined funds invested for his account during that year. Each year's contributions and certificate mark a completed transaction, and the benefits are cumulative. The employer is free, in case of necessity, to alter or discontinue the arrangement at the close of any year without detriment to the employee who is assured of the benefits already earned. The employee, on his part, is free to withdraw from the plan, or even from the service of the company, without forfeiting his equity up to date. In the event of withdrawal, even of dismissal, he has several options which may include the surrender of his certificates for cash. If he chooses to leave his investment intact, whether he continue his regular payments or not, he remains in possession of the policy paid for by the contributions already made by himself and by the employer on his account."

* An earlier article by Mr. Whitmore, on the same subject, appeared in THE JOURNAL OF ACCOUNTANCY for March, 1929.

And, further:

> "The theory underlying this automatic type of pension differs from the other contractual forms in that it does not presuppose a lifetime of service before pension benefits can be earned . . . it does not favor the use of a pension plan for binding the employee to the company irrespective of his conceived interests or inclinations."

This plan has been put into effect in probably quite a fair number of cases up to the present time, but apparently it has been fully adopted as described in the quotations above in very few indeed. The plan has received quite general praise from students of the pension problem, but not all employers are enthusiastic about it. Many are reluctant to let the administration of the pension scheme pass so completely out of their hands, believing that they thereby sacrifice a position of some advantage. In this connection it is interesting to note an opposite view. In the *Critical Analysis*, among the advantages of the single premium annuity plan, is included that "tangible evidence of the benefit is brought annually to the attention of the worker." In the next place probably many employers believe that the services of the insurance company would add materially to the cost. The contrary is maintained not unconvincingly by representatives of the insurance companies.* Much more important is the fact that nearly all employers object to contributing to pensions for employees who do not stay with them to retirement age. Consequently (except perhaps in a few cases) annual policies purchased by the employer's and the employees' contributions combined are not delivered to the latter unconditionally year by year. Matters are so arranged that if the employee withdraws from the service before retiring age, he gets the benefit of his own contributions, but not of the employer's contributions. It appears, therefore, that in most cases where the plan has been adopted it has been minus its essential principle, which is that "each year's contributions and certificate mark a completed transaction."

Some gains there are, however, and in themselves they are unquestionably very great. The plan is contractual, though on the condition that the employee remain in the service to retirement age. The provision for the pension is funded. The employer settles his full labor bill in each year, and so no present costs are deferred to be borne by the future in unknown amounts, with all the illusions and dangers of such a condition.

* See paper by Reinhard A. Hohaus, Jr., in *Transactions Actuarial Society of America*, October, 1925.

On the other hand the employee's freedom is still hampered. If he changes his employment it is at the cost of the benefits accruing from all of his employer's contributions. He knows this and his employer knows it, and it must have an effect upon their relations with each other, upon the employee's sense of independence and quite possibly upon his fortunes in life. Instead of a completed transaction each year, there is here, as in the discretionary plans, the condition of long continuous service to retirement age.

And even if the plan were adopted in the otherwise almost perfect form outlined in the quotations above, it would still involve one evil, serious enough to be fatal. Nothing is said in the above outlines of the cumulative single premium annuity system concerning a maximum hiring age, but, avowed or unavowed, it will inevitably enter into the operation of every private pension system. The employer must consider economy of operation, and this will depend upon employees' entering the service early in life. If a full retirement pension is to be paid it must, generally speaking, be paid in relation to full length of service; and if under the single premium annuity plan it is recognized that the employer's responsibility is only for actual years of service, many or few, the employer must as far as possible avoid bearing the higher premiums of the later years of a man's working life, unaveraged with the lower premiums of the earlier years.

Apart, however, from external and easily traceable effects, there are, as I have already said, questions as to the obscurer workings of industrial pension systems that are not to be ignored in any serious consideration of the subject.

The first question is whether the remuneration of labor will in the long run be any greater, because it is divided between immediate wages and a retirement pension, than it would be if there were immediate wages only.

There is in the *Critical Analysis* quotation of a saying that "industry, as a whole, is morally bound to provide the workers as a whole with sufficient income to meet not only present needs, but all the normal contingencies of life, including disability and old age." * This should be the minimum remuneration of labor, and under sound industrial conditions wages should not fall short of this standard. It is, however, unlikely that the worker will receive wages sufficient to enable him to provide for old age, and

* The Rev. John A. Ryan, D.D., director of the National Catholic Welfare Council.

that his old age will be again provided for by a pension. There intervenes the standard of living of the time, for which no individual is responsible, which is one of the conditions of life which he must meet unless he is to have a sense of failure, and it is unlikely that the total remuneration of labor, in any form, will so outrun this that there will be any double provision for as material an item as the needs of the worker's old age.

One must believe that the economic and social forces in industry press toward the remuneration of labor at a level that is just, and it scarcely seems probable that the operation of such forces will be affected by the splitting up of such remuneration and paying it at different times and calling it by different names. It is fairly certain that what the workers receive as pensions they will not receive as wages. And there is this great difference, that wages are likely to be fairly distributed as earned, and pensions are not.

One or two quotations—and whoever cares to read the *Critical Analysis* will find many more of similar tenor. The president of the Carnegie Foundation for the Advancement of Teaching says in the 1918 annual report: "There is a fallacy concerning the free pension widespread and difficult to combat. . . . The notion that in the free pension the beneficiary gets something for nothing is an illusion. There is no free pension where the questions of wages and pensions are involved together. In the course of a limited number of years such pensions will be adjusted to the salary or wage scale."

And Albert de Roode, *American Economic Review*, June, 1913: "A pension considered as part of the real wages of an employee is really paid by the employee, not perhaps in money, but in the foregoing of an increase in wages which he might obtain except for the establishment of a pension system."

It is difficult to believe anything different. Pension costs may be borne (with minor modifications) in one of two ways: either immediately year by year as they accrue in respect of each year's services; or as they are paid after the services in respect of which they are paid have ceased. In the former case they are part of each year's current labor expense and will be fully considered by the employer as such. In the latter case, as has been shown, they must in time become a heavy burden and are then practically certain to affect even the wages it is possible to pay. In this connection it must be borne in mind that there is no pension system in manufacturing industry in the United States that has been in existence long enough for the expense to have approached its maximum. The full test in practice of the effect of pensions on wages lies in the future.

The second question as to the obscurer workings of pension systems, at least, or especially, as to non-contributory pensions, is whether they must not have an unfavorable effect upon the worker's qualities of thrift and self-reliance and self-respect. The question is stated repeatedly in the *Critical Analysis*: (page 3) "it is extremely difficult to determine the ultimate effects of such systems, not merely upon the worker's efficiency and his material well being, but even upon his character;" and (page 230) "the difference in the effect upon national character of having these workers thus virtually self-supporting in their old age*, instead of objects of charity or recipients of gratuities, can hardly be overestimated." And on page 95 the author quotes the view "that any hope of old age relief from want which is not based upon individual thrift, economy, and foresight, decreases efficiency, independence, and manliness."

The same feeling is in the saying of Samuel Gompers that "where the workers receive an adequate wage they will provide their own pension system, and whatever men do for themselves increases their value as workers." And again in the Carnegie Foundation 1918 report "to lift from the shoulders of the individual a responsibility rightfully his, is to do him in the long run an injury."

The course of the argument running through the successive annual reports of the Carnegie Foundation is steadily in favor of contributory and contractual pension systems. It is against the free and discretionary system, the supposed gift, the uncertainty, the single aim of a retirement pension for the worker himself. But the strongest statement of the separate character of the worker's contributions as savings is in one of these reports and has been quoted herein.

I have also referred to the question raised by the assistant to the president of the Bethlehem Steel Corporation in the discussion of Edward S. Cowdrick's paper *Pensions: a Problem of Management*, and I quote it now as follows:

> "I would like to raise the practical question as to whether it would not be more desirable to set up thrift plans that will stand on their own feet rather than to operate them under the guise of a pension plan. I think, if

* The reference here is to the cumulative single premium annuity system, as described by the author.

> the thrift factor is the one that would justify all the lost work, so to speak, in making deductions under a contributory plan, then a thrift or stock plan, or some other form of savings plan which would have its own identity, would appeal to employees, particularly younger men, to a greater degree than if the savings feature were linked up to the pension plan."

All should save, there is no question about that. There remains to be sought the way of saving that will, first, have the strongest appeal from the very beginning of the working life; and, second, that will be most effective for all the purposes for which saving is imperative. The appeal of retirement pensions to the younger men in industry is admitted to be virtually nil. If it were otherwise I think it would indicate a very unyouthful outlook on life. Even if the younger men in industry could be induced to save by contributing to a retirement pension system I question whether it would not be one of the poorest forms of saving both morally and financially. What I think would be the best and would have the strongest appeal from the beginning of the working life, and what I think the employer's relation to employees' savings might be, I will try to state after I have stated the way in which I believe wages in manufacturing industry can be lifted to a point where there ought to be no need for employers to provide pensions, except for the older employees who have spent their working lives under the older conditions of wages not fully adequate for both present needs and all the normal contingencies of life.

I can scarcely imagine that anyone who has had any considerable experience in manufacturing operations, and who possesses in an ordinary measure the faculties of observation and reflection, doubts that all the workers, each and every one of them, have an influence upon the economy of manufacture. Individual skill, individual industry, observation, forethought, willingness to coöperate, willingness to impart knowledge, care to avoid waste, care for order, care for cleanliness: in one way or another, or in various ways, each worker can contribute something to the ultimate economy of manufacture. There are two ways in which their contributions to that end can be brought to something like a maximum: one is by educating them to a proper conception of their work and their mutual relationships, and of the possibilities that are in these, and the other is by giving them the opportunity to increase their wages as their work, individual and combined, lowers the cost of production.

There is one condition that is essential if the workers in manufacturing industry are so to be educated, or so to be paid proportionately to the results of their work. It is that their employers shall have knowledge of two things: first, what ought to be accomplished at each step in the operations, and second, and continuously, knowledge of what is accomplished. And there is only one way by which such knowledge can be possessed, and that is by factory accounting through which standards of economy are developed and the actual operating results, step by step, and in their final outcome, measured by such standards.

The principle has long been recognized, more it seems to me by the practical men in manufacturing and by professional engineers than by accountants. But its application has, at least generally speaking, been elementary, because it is only by using the resources of accounting that it could be anything else. The simplest example of remunerating labor according to its exact results is the piece-work price. This involves a little accounting but not enough to need an accountant. The modern factory piece-work price is presumably always the result of recording the wages and the production of the individual, and so obtaining a unit labor-cost, and deducing a standard therefrom, and thence a piece price.

Another step is the premium system of wages. No longer a piece price, but an hourly wage rate and a standard of product and a premium for production in excess of the standard, so arranged that the larger the product the higher the labor remuneration per piece. The calculation of economy has now gone beyond mere labor costs. There are other costs as well as, or incident to, labor costs, and if these can be reduced something more per piece can be paid to labor and still the total cost per piece reduced. Accounting was needed for this, and engineers became amateur accountants—amateur inasmuch as I believe they neither know nor care about the principle of double-entry bookkeeping with its indispensable safeguard. The basis of the premium system of wages is the machine rate, or an expense rate, other than a machine rate, incident to productive labor. The machine rate is the result of calculating all the expenses of having and operating a machine for a given period, and dividing this into the calculated normal working hours. If by skill and industry the operator could reduce machine time, and so reduce the machine expense in the product, he could be paid a part of the saving in machine expense as a wages premium.

Again, steam-plant engineers have calculated the value of the unit of steam and have inaugurated bonuses to steam-plant operators measured by the percentage of boiler efficiency.

And bonuses have been paid for furnace results in the metallurgical industries, but here, as indeed everywhere else, there are dangers of illusions unless there is double-entry accounting embracing the whole of the operations.

But while engineers and factory managers have felt their way in the application of the principles of establishing standards and measuring results thereby and paying labor accordingly, and have put these principles in force at what have seemed to them the crucial economic points of the operations in their charge, nothing, it seems to me, is more certain than that there is only one instrumentality by which this can be done systematically and completely from beginning to end of any manufacturing operations, and that instrumentality is double-entry factory accounting.

At some other time, if it seems worth while, I may try to describe the general processes of such double-entry factory accounting. At present I must confine myself to saying that they should be such as to yield a complete series of standards for all the expenses and efficiencies of the manufacturing processes, and to show continuously the variations in practice from the standards so established; and among the necessary uses of the information so obtained will be to impart the same knowledge to the working forces, and by bonuses to individuals, or groups, or to the working forces as a whole (these in the order of their desirability) to make the interest in high wages and the interest in economy of manufacture inseparably one.

In the compass of this article there is not room always duly to qualify. I do not, however, mean that standards of economy are produced through the work of accountants alone, for they are the results of the coöperation of all departments, technical and operating. Nor that the working forces are educated merely by communicating to them the results disclosed by the accounting, for that is a matter to be accomplished by diverse means. Nor that the only motive that will actuate the working forces to achieve a closer economy of manufacture is the prospect of increased wages. Better understanding of the costs and results of the manufacturing processes will go far in this direction. But the additions to wages are necessary to satisfy a sense of justice, and for the needs of the workers if these are understood, as they must be, to include provision for all the normal contingencies of life.

It is, however, said that, whatever wages are, a considerable proportion of industrial workers will arrive at ages at which they must retire, without having provided themselves with the means of living in their later years. The inadequacy of wages is, I believe, by plain implication of pension systems, and in fact, the primary cause of the need for old-age pensions; but the paying of adequate wages is believed to be by itself an insufficient remedy, because improvidence is a common human failing.

For this there is, doubtless, no perfect cure through any reform or adjustment of industrial relations. But improvement must be sought in ways that will not involve other evils even more serious. The ordinary man has many responsibilities to discharge before he reaches retirement age, and if his freedom and self-reliance are injured throughout his working life practical evils at least as great as old-age dependency will result. I think it is fairly plain that old-age pension systems must operate injuriously in some ways which are so serious that one might suspect that they are no effectual remedy for the one evil at which they aim. This is what proves to be the case if we forget all possible disadvantages and consider pension systems in relation to old-age dependency alone. Where is the hope, in any pension system, of pensions for more than a relative few of the great body of workers in manufacturing industry? And the few are those of steady disposition and even flow of life, who have happened to be both inclined and able to stay in one employ always. It is not easy to imagine that these have any very frequent identity with the hopelessly improvident. And for those who have had their share of the ordinary vicissitudes of life, or even a normal share of the human restlessness or ambition that leads to change, where is there more than the rarest individual pension in all the plans I have reviewed?

If no cure, there is surely a way of progress. The first need is adequate wages. I have pointed out the way in which I am clear that these might come.

And beyond this there is the need of wise management in the personal finances of industrial workers. There is nothing in this that is peculiar to industrial workers, for it is just the same with all of us. It is one thing to earn money, and quite another so to use it throughout our lives as to secure the utmost good. To imagine the latter it is necessary to imagine clear views of life from the beginning, and in addition no little business knowledge. Almost all of us acquire something of these but slowly.

It is a very interesting development in the more recent activities of some banking institutions that they are offering to their customers, especially to those of limited means, those to whom the fashion of their savings is of the greatest importance, advice and facilities and plans which aim to turn to the utmost account the savings that are possible in their circumstances. It would I think be difficult even to guess the good such institutions may accomplish by guarding such customers against losses, and by suiting savings plans to particular needs, and by bringing into the operation of the individual's money matters knowledge which the individual himself can but rarely possess.

It seems to me that the industrial employer is in an even more advantageous position to do a similar thing for his employees, if he should organize the means of doing it as he organizes his other business activities.

The employer would not do it for profit or to obtain a hold over his employee. He would at the outset have the advantages of the weight of his position and of practically complete disinterestedness. He could (the larger employers singly, the smaller in combination) command the same order of ability that banking institutions command, and place it at the service of the whole body of the employees. He could offer the employees, men and women, of all ages, with all their various responsibilities, the services of qualified counsellors in regard to all forms of insurance and savings, and systematized means of effecting the same over a period of time.

The greatest advantage is, of course, where the right influence and help and guidance are given at the beginning of the working life. There is nothing discouraging, I think rather the contrary, in the fact that the wrong appeal to the younger men in industry has completely failed. To old-age pension systems, contributory or non-contributory, they have remained completely indifferent.

How different the appeal if, while various savings and insurance plans were offered to employees at various ages and with various responsibilities, there were specially impressed upon young men the great advantages of ordinary life insurance effected when life insurance is at its cheapest. The young man is thinking little or nothing of his old age, but it is his natural expectation that he will marry and have children, and that the responsibilities so arising will be the great affair of his life, and that even very early they are likely to be serious responsibilities financially. Savings accumulate slowly, but at a single stroke he can insure his life for a substantial amount, because at his age premiums are very low. He secures protection and ultimate provision in a sum that would be quite out of his power otherwise, and even very early it is an immediate provision in case of necessity, because of the borrowing privilege in life-insurance policies. Throughout the years of paying premiums they are always so much smaller because the insurance was effected early. Because these payments are small, other kinds of savings may follow. From the beginning of his working life he is a kind of capitalist. He has established his first hold upon a sum that otherwise would exist for him only in distant and dim prospect.

And in insurance and savings plans, so coöperated in by employer and employees, there is available the invaluable mechanism of the uniform routine deduction from wages. I know of one banking institution that, having arranged a savings plan for the individual customer, sends him a monthly bill for the amount he is to save. How much simpler and surer the employer's procedure of making regularly the agreed deduction from wages.

It is not my business, nor would this be the place, to suggest the many various ways in which savings might be arranged and managed for the greatest benefit of a body of employees. Of course, much of the kind is already done, but I am suggesting that, organized upon the right scale and conducted with the right skill and energy, not as a subordinate incidental and uniform scheme, but as a natural and vital part of the relations between employers and employees, adjusted to all varying conditions, it would accomplish far more good than pension systems, at least in manufacturing industry, and be free from all the evils, affecting both employer and employee, that seem inseparable from pension systems.

It is, therefore, through rising wages based upon accounting measurements of economies in manufacturing, and through the maximum encouragement and the scientific management of savings, which it is quite within the power of industrial employers to offer the employees, that I believe the need for pension systems in manufacturing industry should gradually cease.

At best, however, the change in its fullness would require very many years, and in the meantime, as I said at the beginning, it seems not only desirable, but very necessary, that pension plans,, formal or informal, should be generally adopted. The plan to be used would necessarily be a matter for consideration in view of all the particular circumstances in each case. There is much to be said for informal plans. They seem to make it possible to limit the pension expense, and still to deal more adequately with real needs. Among formal plans, the cumulative single premium annuity system seems quite incomparably the best, especially in a time of transition from one set of wage conditions to another, for the reason that each year may mark a completed transaction, and the plan may be terminated at any time without affecting the annuities earned to date.

And inasmuch as some pensions are certain to be paid in any permanent business, and practically some plans must exist, even though quite informal and unannounced, it seems plainly of great importance that there should be forecastings of expense in every case, and the gradual accumulation of reserves. For this purpose, under any conditions, actuarial calculations are necessary. This is especially the case because there is always the question of accrued pension liability; that is, that part of the total pensions ultimately to be paid to workers now in the service that is to the total of the same pensions as their service from the beginning of their employment to date is to their total service from the beginning of their employment to their various retirement dates.