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SOME ADVANCE MUNICIPAL STEPS[1]

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DURING the past year three very important subjects have received much attention from municipalities. The rapidly increasing debt of cities and the fact that many cities have made no provision at all or inadequate provision for the payment of city bonds at maturity has led to the adoption by many cities of a plan of making bonds fall due in a certain proportion annually until all the issue has been paid.

In a number of cities pension systems for employes were established in the past without adequate provision for meeting pension liabilities. The whole subject has been under investigation by many cities. It seems that in some form pensions for municipal employes are likely to be provided in the future.

After more than three years' study, the city of New York adopted an ordinance last July regulating the height, bulk and use of buildings by districts. The regulations are elaborate and comprehensive. The city of New York was aided in this work by what had already been done in Boston, Baltimore, Los Angeles, Minneapolis and elsewhere. There is a growing need of such regulation and the sooner appropriate ordinances are adopted by every city, the better it would be for their future growth.

SERIAL BONDS

City bonds arranged to fall due at regular intervals, usually of one year instead of at the expiration of a longer term, are commonly called serial bonds so as to distinguish them from bonds issued for ten, twenty or more years all of like tenor and date of maturity. There has been much discussion of late concerning the advantage of serial bonds as compared with the amortization of public debts by the creation of sinking funds. Statements have been made claiming that the serial bond plan necessarily effects a great saving to taxpayers. The saving has usually been greatly exaggerated, and in some cases the claims have been misleading because the facts presented have been incomplete.

The sinking fund plan contemplates that an equal sum shall be paid annually on account of principal and interest, which shall be sufficient to pay the principal at maturity. If the annual payments on account of principal could be so invested immediately as to earn the same rate of interest as is paid on the debt the cost to the taxpayer would exactly

[1] Annual address of the president of the National Municipal League, Springfield, Mass., November 23, 1916.

equal the cost if the same sum paid on principal were applied to the final payment of so much of the debt.

The advantage of the sinking fund plan is that lenders have usually preferred a bond running for a long term and all bonds offered at one time were for the same period. It was assumed that under these conditions a loan could be obtained at the lowest rate of interest. The most serious defect in the sinking fund is not due to the plan but to poor administration. It has often happened that cities have failed to comply with the law and have not set aside annually the amount necessary to amortize the debt. Sometimes they have made a mistake in calculation and in good faith have saved too small a sum, and sometimes have wilfully or negligently refused to make the appropriation required. Again, by careless investment the earnings of the sinking fund have been reduced so much below the rate of interest paid on the debt as to cause great loss.

It must be admitted that it is practically impossible so to invest a sinking fund that all of it, at all times, shall earn as much as the rate of interest on the debt. If other conditions remain the same and serial bonds can be sold at an equal rate of interest with bonds for a long term, there is, therefore, a saving by the serial plan of the difference between the interest earned by the sinking fund and the interest paid on an equal amount of the debt for the same time.

Because of the failure of some cities to provide and maintain an adequate sinking fund, the plan has lost favor with investment bankers.

So far we have considered only the payment of debt by the appropriation of an equal sum each year during the whole term of the debt. In the first years of the term, by either plan, most of this appropriation would be for interest and in the last years, most of the payment would be for principal. This fact has been ignored by advocates of serial bonds and their claims of interest saving have been based upon the practice of issuing bonds of which an equal amount of the principal is to be paid annually. The results of this serial plan and the sinking fund plan, under these circumstances, may thus be compared. If $50,000 be borrowed payable in 50 years with 4 per cent interest, the annual cost would be about 5 per cent or $2,500 a year. If the bonds were made payable $1,000 a year for 50 years, the cost would be $3,000 the first year, $2,600 the eleventh year, $2,200 the twenty-first year and only $1,040 the last year. If the serial plan were so arranged as to payment that $2,500 should be paid annually, only $500 of principal would be paid the first year and the amount applicable to principal would increase at an accelerating ratio until in the last year about $2,400 would be paid on account of principal.

To this last plan no objection can well be made provided the bonds can be sold on satisfactory terms as to interest.

The usual serial plan of paying an equal amount of principal each year is unjust to the present generation of taxpayers whether the life of the bonds be long or short.

Debt is incurred by cities, as a rule, to meet the needs of an increasing population. The increase in population causes the erection of more buildings and increases the value of land, thus the assessable value of real estate is enhanced. The increase in assessed value ought ordinarily to take care of the increased cost of administration as well as pay the interest and principal of the debt created for the benefit of the new population, without requiring any addition to the tax rate. The reason for borrowing money to pay for public improvements is not only that they will endure for the benefit of the citizens for a number of years. If a community were stationary in wealth and population, it would be better to pay for most public improvements without borrowing, but when it is growing in population and wealth it is only fair to put part of the burden on the increased values the public improvements have helped to create.

CIVIL SERVICE PENSIONS

Pension systems for city employes have been subjected lately to careful analysis because nearly all such systems have broken down. They were started at a time when little was commonly known of what the cost would be. The provisions for pensions was totally inadequate. The same experience has attended pension funds as followed the efforts to establish life insurance by means of assessments. Nearly every assessment company has been transformed into an ordinary level premium life company. Most of these assessment companies made such a transformation at great loss to the policyholders.

The city of New York embarked on pension plans fifty-nine years ago, but over 61 per cent of the disbursements of all city pension funds were made from 1905 to 1914. The city had paid more than 83 per cent of the total pension disbursements. On the basis of the disbursements in 1914, pensioners of the police pension fund received over 16 per cent as much as all of the active employes. Fire department pensioners received over 14 per cent. Others received much less because their funds have only recently been established. The pensions paid in 1914 were almost 5 per cent of the city's total pay-roll.

Cities that contemplate the establishment of pension systems must face the fact that the payment of pensions will add a large percentage to the pay-roll. London police pensions amounted in 1914, after 70 years of operation, to 30 per cent of the pay-roll. The present proportion of the active pay-roll paid in pensions in the French national civil service is 17 per cent; in the Austrian civil service 33 per cent and in the municipal civil service of Berlin 37 per cent. These statements are taken from the report of the commission on pensions of the city of New York.

The worst feature of pension funds so far established is the fact that after many years of operation the proportion paid continues to increase and will continue to be a heavy proportionate burden, which will never grow less.

If it be possible it would seem desirable to make a pension system an asset instead of a liability. If we are not in too great haste but are content to proceed slowly, we can make our pension systems an asset. Let us assume for the sake of illustration that 100 persons of the average age of 25 years enter a city service annually and that the number of persons now in the city service, who are not over 70 years of age, would be that number who would be living at the present time if 100 persons had entered the service annually for the last 45 years, and those persons had all been of the average age of 25 years. We start our system then with employes of various ages, the majority of whom are less than 45 years old. Create a capital fund the principal of which shall never be spent by making a contribution on behalf of every such employe to this capital fund annually. That contribution might be given in addition to present salaries or it might be deducted from present salaries, or the expense might be shared. Persons hereafter entering the service would enter on the basis of a certain sum received annually for themselves to spend now and a certain sum contributed to a capital fund for their benefit. The essence of this plan is the preservation of the capital fund intact forever and its constant increase.

When an employe reaches 70 years of age he is entitled to retire and draw a pension. His pension would be the earnings of his own contributions, plus his share of the earnings of persons of the same age as himself who died before him. He would also be entitled to a per capita share, together with all other pensioners, of the income of the general endowment which would be created by the death of all persons of a year class.

In order to make easy computations I have used the sum of $100 a year as the uniform contribution for every employe. The calculations were kindly made for me by an actuary of the Metropolitan life insurance company. If there are any mistakes they are mine and not his, but I think they are accurate. At the end of 50 years a person who was 70 years old would receive $1,228 a year; a person 75 years of age would receive $1,678 a year; a person 80 years old would receive $2,191. One who is 90 years old would receive over $15,000.

At the end of 75 years the general endowment fund would amount to over twenty million dollars, and at the end of 100 years to over forty-seven million dollars. The increase thereafter would be ten million dollars every ten years. All this would be accomplished by the contribution of 100 persons entering the service annually and paying $100 a year. It is quite obvious that after the fund has been in operation for a moderate length of time, the annual income would be sufficient, not only

for pensions but to make the contributions for persons subsequently entering the service. Thereafter the income would be sufficient to pay pensioners and pay all contributions to the pension fund and still leave a large surplus for other purposes. The following table will show the amount which could be paid in pensions from the fund after 50 years, 75 years, and 100 years, at the ages of 70, 80 and 90. All computations are based on 4 per cent as the rate of interest.

Income

	At Age of		
	70	*80*	*90*
After 50 years	$1,228	$2,191	$14,937
After 75 years	2,971	4,564	36,890
After 100 years	5,634	7,229	41,568

It might be deemed undesirable to have pension payments rise to such a high figure as $40,000 a year. The amount can be regulated in accordance with any contract that may be made with any employe entering the service. If a maximum sum is fixed as the payment to employes, the balance can be used to meet annual installments at an earlier date than would be the case if the entire fund were distributed to pensioners.

If any city should start such a plan as this, it might well permit any employe leaving the service to continue to make the annual payments. And it might also permit any citizen to make such payments into the fund as he might desire provided the payments were in reasonable amounts and at regular intervals. Thus any citizen could share in the great advantages which would come to those entitled to pensions. For the purposes of this calculation the age of 70 years has been fixed as the retiring age. The retiring age might be made lower and the only effect would be to reduce the pension payments. Ultimately they would become so large that they would have to be reduced by law anyway.

BUILDING REGULATIONS

Since the adoption by the city of New York of an elaborate code of building regulations by districts, the city of Philadelphia and various others have started to study appropriate regulations for those cities. The need for height regulation has become imperative with the invention of the steel structure. Before that time, foundations and walls had to be so thick for a heavy building that economic considerations prevented the erection of buildings of more than eight or nine stories. With the erection of the steel frame it became possible to build forty stories or perhaps more. One forty-story building might be a thing of beauty although it probably would not be a thing of profit. When tall buildings are crowded together none of them are satisfactory as investments. All of them are unhealthful and the streets become intolerably congested. In the city of New York the failure to regulate the use to which property should be put has cost the owners of real estate hundreds of millions of dollars, and brought upon the community economic loss and great inconvenience. It behooves every city and village to make regulations controlling the height, area and use and to do it at the earliest possible day before more damage has been caused than has been done already. There is not a city in the country that has not suffered now from foolish building. It should be stopped for the benefit of owners and residents alike.

As I see the problems which confront us, we must devote our immediate efforts to secure proper provision for the payment of the ever-increasing city debt, so that our municipalities may not become bankrupt and discredited; to the establishment of a pension system, which shall neither burden the city nor its employes, but be an ever-increasing asset and encouragement to the workers; and to the adoption of building regulations that will preserve health, safety and values and will tend to beautify our city. These three steps will do much toward the upbuilding and perfecting of our municipal life.