OLD-AGE AND SURVIVORS INSURANCE IN ITS RELATION TO PUBLIC EMPLOYEES

D. C. Bronson *

During 1940, it is estimated, some 4 million persons will be employed by the Federal Government, States, and localities in services which are excluded from coverage under the Federal system of old-age and survivors insurance. Except for agriculture and self-employment, such services constitute the largest area of employment excluded from this program. Some of these 4 million individuals—probably less than two-thirds of the total—are in employment covered by special Federal retirement programs or by similar programs of States, counties, and municipalities; many of these persons may expect to qualify for retirement benefits under such plans. Others doubtless will engage in employment covered by title II of the Social Security Act at some time in their lives to an extent sufficient to qualify for benefits under that program. Still others may have considerable periods of employment under one or more of the special plans for public employees and also under the general social security system without being able to fulfill the qualifications for benefits under any of them. It is the purpose of this article to explore the advantages to public employees and others of coordination of the special systems with the general social security program.

In a report made to the President and the Congress in December 1938, the Social Security Board recommended that the Federal old-age insurance program be broadened to include services performed in the employ of the United States or its instrumentalities, adding that in such an extension “it would be necessary to give consideration to the effect on other retirement systems for Federal employees, with a view either to excluding from the Federal system public services covered by other plans or by coordinating the general and special systems, with adaptation of the latter to take account of a basic protection afforded by the Social Security Act.

It is with this second possibility—coordination—that the present article is concerned. For the purposes of this discussion it is proposed that the Federal old-age and survivors insurance system be made a “floor of protection,” with provisions for a materially higher level of benefits for employees who stay through to retirement under the civil-service or other public retirement plans, just as is done by many private employers. No effort is made in the present article to outline a specific plan or to discuss various types of coordination plans. The purpose is, rather, to indicate problems which arise because of the existence of these unrelated plans and principles which might be used in a coordination of the general and special systems.

Among the large number of existing retirement

---

*Assistant Actuary, Office of the Actuary.
plans for Federal, State, and local employees, there is anything but uniformity. In qualifying requirements they range from liberality to harshness; in financing, from fully reserved systems to those with shaky structures; in scope of benefits, from retirement allowances alone to provisions which include payments to survivors and disability benefits. The Federal plans comprise about a dozen contributory systems and about the same number of noncontributory ones. The latter represent mainly the "retired pay" available to commissioned officers and men of the Army and Navy. Among the contributory systems by far the largest—comprising about 600,000 persons—is that for employees in the classified civil service of the United States. Other contributory Federal systems are administered for civil-service employees of the Canal Zone and the Alaska Railroad and for the Foreign Service, and there are special systems for employees of the Federal Reserve Board and the Tennessee Valley Authority, for public-school teachers in the District of Columbia, and others.¹

In any specific proposal to adjust other Federal plans to take into account the system of old-age and survivors insurance it would obviously be necessary to consider the variations in existing provisions. Similar variations and additional factors would have to be taken into consideration if it were found feasible to propose an extension to public employment by States and localities.

Anomalies Under Separate Systems

The anomalies in the present situation of public employees are not unlike those which confronted many persons in private employment at the time the Social Security Act was passed. Then some business concerns—a relatively small number and, in general, only large concerns—had established retirement plans for their own employees. In some instances these plans provided soundly financed and liberal benefits for retiring workers, though the number of persons they covered was very limited in relation to the total working population. Under any individual plan, moreover, a worker ordinarily could qualify for benefits only after a considerable period of employment, which might be as much as 30 years or more with the given employer.


Mobility in Employment

A worker who was dropped or quit before he had served the number of years required by the plan and had reached the age specified for retirement ordinarily did not retain any right to a deferred pension on reaching retirement age. When the plan was contributory, the worker usually received some agreed refund of his own contributions on leaving the employer, and the employer retained the amount he had contributed in behalf of that worker. A cash refund is likely to be spent quickly, especially if the worker has lost or left his job and is delayed in finding another. An individual could work for many years in concerns which had individual retirement plans yet reach retirement age without pension rights and with little or nothing to represent contributions he himself had made. Because of the mobility which characterizes employment in industry and commerce, relatively few of the individuals covered by the private plans could count on remaining with a particular concern for a sufficient number of years and until the age which qualifies them for retirement benefits.

When Congress was considering the social security legislation in 1935, a proposal was made to exempt employers who had adequate private retirement programs for their own workers. In the discussion of this proposal (the "Clark amendment"), it was pointed out that such exclusions would be detrimental to the broad objectives of the Social Security Act, since large numbers of employees would, in the course of their working life, "pass through" one or more of such exempted employments. Thus they would carry no retirement credits for such employments and, unless they were in one of those employments at time of retirement and with enough years of service to qualify under that plan, would have no old-age protection representing those periods. A remedy to this situation, involving a transfer of funds, was subsequently proposed but was thought to be too cumbersome. In view of this and other considerations brought forward in the discussion, this proposed amendment was rejected. Many concerns which have retirement plans for their employees have adjusted their programs so as to provide additional benefits to those of their employees who fulfill its conditions while at the same time, of course, all their employees have the basic protection afforded under the Social Security Act,

Bulletin, May 1940
whether they remain with the same concern or obtain jobs elsewhere in covered employment.

A situation similar to that which previously existed under the plans of private employers now obtains for many persons covered by public retirement systems. These systems are likely to require a long period of service and employment up to the specified retirement age. An individual who leaves public service may receive a refund based on the contributions he has paid under the plan, but ordinarily he retains no right to the contributions that the public agency has made in his behalf or to a deferred pension when he reaches retirement age. In this respect his situation is wholly different from that of the worker covered by the Federal system of old-age and survivors insurance. Under the old-age and survivors insurance program all wages received by an individual in covered employment at any time in his life and at any place are considered in determining his qualifications for benefits.

**Family Protection**

Moreover, practically all the contributory systems for public employees, like the plans of private employers, fail to give the broad protection of family security that has been established through the 1939 amendments to the Social Security Act. Under most of these plans the amount payable in the event of death prior to retirement is geared to the amount of the employee's contributions, often with the addition of accumulated interest. This form of death benefit provides, of course, an amount increasing with length of participation, which reaches its maximum just before the individual's retirement. For many individuals the need for insurance protection is less acute at that period of life than in earlier years, when family responsibilities are likely to be heavier. Under the usual staff-pension plan, therefore, the death benefit is in inverse direction to presumptive need.

The provisions for survivors insurance in the 1939 amendments to the Social Security Act introduced a volume of protection that is not fully realized. Private companies now provide life insurance protection estimated at $110 billion. The amendments to the act in 1939 provided protection amounting at the start to perhaps $40 billion in insurance value. Exclusion of public employment from the old-age and survivors in-

---

**Table 1.—Examples of monthly retirement benefits under the Federal civil-service retirement System, and amounts payable under assumed conditions, through a coordination of these systems**

<table>
<thead>
<tr>
<th>Example number</th>
<th>Years of employment, from age 30 to age 65 at level annual salary of $1,500</th>
<th>Monthly amount payable under present systems from—</th>
<th>Monthly amount payable under assumed coordinated plan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>----------------</td>
<td>--------------------------------</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Successive periods</td>
<td></td>
<td>$102</td>
<td>$102</td>
</tr>
<tr>
<td>1.</td>
<td>CS: 35, OASI: 35</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>2.</td>
<td>CS: 25, OASI: 15</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>3.</td>
<td>CS: 15, OASI: 15</td>
<td>37</td>
<td>37</td>
</tr>
<tr>
<td>4.</td>
<td>CS: 20, Farming: 15</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>5.</td>
<td>CS: 20, State: 15</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>6.</td>
<td>CS: 20, Farming: 15, OASI: 10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7.</td>
<td>CS: 15, Farming: 15</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>8.</td>
<td>CS: 20, State: 15</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9.</td>
<td>CS: 20, Farming: 15, OASI: 10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Alternating periods</td>
<td></td>
<td>$102</td>
<td>$102</td>
</tr>
<tr>
<td>10.</td>
<td>CS: 5, OASI: 5, etc.</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>11.</td>
<td>CS: 3, OASI: 10, etc.</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

1. On nonforfeiture basis.
2. Assuming concurrent payment of wife's insurance benefits.
4. It is assumed that any civil-service employment counts as covered employment under Title II if this procedure results in larger total benefits.
5. Although no annuity is payable, the individual receives a cash refund.
6. An annuity would be payable if redeposit is made of previous refunds received, plus interest.
7. Assumes service in a State which has a retirement plan.

---

**Illustrations of Coordination**

In the following pages illustrations are given of amounts payable and of insurance values, in specified circumstances, under separate retirement systems and under one possible plan which would coordinate special provisions for public employees with the general system of Federal old-age and survivors insurance. For purposes of illustration, certain of the basic provisions of the present Federal civil-service retirement system are used to represent a special plan for public employees. It must be emphasized that any one of many other plans might have been used for illustration and that amounts cited would vary with choice of the plan and with characteristics of an individual (age, salary level, marital status, and the like) assumed for the examples cited, as well as with...
the specific coordination plan adopted. It is believed, however, that the situations here assumed give a valid indication of the patterns and general relationships that would obtain under a coordination plan which used the social security system as a "floor of protection."

Examples of Retirement Benefits

Table 1 presents examples of the monthly retirement benefits that would be payable, in the given circumstances, under the Federal old-age and survivors insurance system, under an independent system for public employees, and under a plan coordinating these two systems. In the examples, the amounts developed under certain of the existing civil-service retirement provisions assume a level annual salary of $1,800, on which contributions are made at 3½ percent, with the $1 per month "tontine" deduction. For those reaching retirement age the total so accumulated to the employee's credit, with 4-percent interest, is used to purchase such annuity as develops, on a nonforfeiture basis, from the tables now in use under this system. Added to this amount is the present Government share, amounting to $30 a year for each year of service (up to a maximum of 30 years). The appropriate minimums, as established by the present Civil Service Retirement Act, are taken into account in the figures cited.

It has been assumed further in the examples cited in table 1 that the employee has a wife of the same age as his own and that the experience covers the years from age 30 to retirement at age 65. The benefits under the Social Security Act indicated in table 1 would be lower if the individual did not have a wife of an age which entitled her to the wife's supplementary benefit provided in that program. Farming and State employment are used as examples of employment not covered by the Social Security Act; their inclusion, or other alterations in either program, would, of course, alter the amounts payable.

It will be observed that in the examples cited in table 1 there is no change, under the coordination plan and the circumstances assumed, in the monthly retirement benefits payable with respect to persons whose whole period of service is in employment covered by the provisions of either the Civil Service Retirement Act or the Social Security Act (examples 1 and 2). There is likewise no change in the instance (example 6) in which an individual is assumed to have had at least the minimum period of service needed to qualify for monthly retirement benefits under each program and is in a job covered by the civil-service plan when he reaches age 65.

The changes which would result from use of the proposed principles arise in circumstances in which an individual is in the Federal civil service for considerable periods in his life but not at the time he reaches retirement age (examples 3, 5, 7, 9, 10, 11) and in which the duration of his employment under the one system or the other is insufficient (examples 4, 10, 12) to meet the requirement for retirement under one or both. Under the conditions assumed in example 12, an individual might spend all the years from age 30 to age 65 in alternating periods of employment covered by either the civil-service system or the retirement provisions of the Social Security Act, yet reach old age with no rights to monthly benefits under either. In this instance and in the circumstances assumed in examples 7 and 10, use of a plan which provides a mechanism for crediting all employment covered by either plan toward the coordinated benefit would result in a substantial monthly benefit in cases in which at present nothing is payable; in all other instances cited in which the proposed coordination would effect a change, the result would be to increase the monthly amount payable under present provisions.

Examples of Survivors' Benefits

Consideration should be given also to the relative merits of a coordination plan which would enable public employees to receive the family protection afforded to workers under the Federal old-age and survivors insurance program rather

---

1 The employee may choose to take a relatively larger "pure annuity," under which nothing is payable to his survivors or estate at his death. Another option provides a smaller amount during his lifetime and an annuity to his widow should she survive him. If no election is made, the employee receives what is known as the nonforfeiture annuity; this provides that, should he die before receiving from the annuity purchased from his own contributions as much as his accumulative credit, the balance is payable to his estate or otherwise. The amount of this annuity must obviously be less than if he had taken the pure annuity, since a certain amount of death protection is included.

4 Table 1 relates only to monthly payments at retirement. Under the civil-service retirement system, specified refunds are made to employees who leave the service without qualifying for retirement; these payments are discussed subsequently. Provision is made also for monthly payments to persons separated involuntarily after age 45 with at least 15 years of service. This and other subsidiary provisions and characteristics of both the civil-service retirement system and the Federal old-age and survivors insurance system are for the sake of simplicity omitted from the present discussion of general principles of coordination.
than the lump-sum death payments generally made under staff-retirement systems. Such a comparison is made in chart I, which takes as an example a family with husband and wife both aged 30 in 1937 and two children aged 1 and 3 in that year; it is assumed that the husband has a level annual salary of $1,800.

The solid line, using the civil-service retirement plan as an illustration, indicates the amount of the lump sum payable to the family at the husband’s death at a given age. This sum is almost negligible in the early years, when the children are young, but increases to more than $4,000 in the later years. Since the amount is payable in a lump sum, the widow or others are faced with difficult problems of administering it wisely and at best probably only rarely is it translated into old-age protection.

The broken line indicates the “insurance” value, at the time of the husband’s death, of the monthly benefits payable under the general Federal system to the surviving members of an insured worker’s family. This value starts out (in the example at age 33, since survivors’ benefits were not payable until January 1, 1940) at more than $9,000. It gradually decreases at later ages of the worker, as the children approach age 18, when benefits no longer are payable on their behalf or to the widow. Because of the deferred benefit payable to the widow of a fully insured worker at age 65, the broken line starts upward again in later years and rises until age 65, when it is not far below the value of the civil-service lump-sum death benefit.

If the nonforfeiture option under the civil-service provisions was chosen, a lump-sum amount may be payable in the event of the husband’s death after his retirement at age 65. This amount decreases steadily by the amount of “purchasable annuity” received prior to his death until it reaches zero. The broken line, representing values under the social security system, does not reduce to zero as long as the wife lives, since it represents the value of the life income continued to the widow after her husband’s death.

A program of coordination might provide substantially for a death-benefit value illustrated by

---

**Chart I.—Value of survivors’ benefits at death of employee, under Federal civil-service retirement and Federal old-age and survivors insurance systems**

<table>
<thead>
<tr>
<th>VALUE</th>
<th>OLD-AGE AND SURVIVORS INSURANCE</th>
<th>CIVIL-SERVICE RETIREMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
1. Assuming level annual salary of $1,800. Family comprises employee and wife, both aged 30 in 1937, and 2 children aged 1 and 3 in 1937. Values represent lump sum payable under civil-service retirement system, monthly benefits payable under old-age and survivors insurance; in this example value of monthly benefits starts with age 33, since survivors’ benefits not payable until 1940.

---

**Values at Withdrawal From Both Plans**

Doubtless some individuals may drop out of either the general insurance system or a special system for public employees without reentering employment covered by either. One may consider, therefore, the equity involved in these relatively rare cases. For the civil-service or the usual staff-retirement plan this equity is measurable by the lump-sum cash value paid. For the
The Social Security Act provides two kinds of benefits: old-age and survivors' benefits. The benefits are determined by the individual's average wage and the number of years of covered employment.

Under the Federal old-age and survivors insurance system no cash withdrawal is permitted; the employee who permanently leaves all employment covered by the program receives his value in the form of continued eligibility to benefits. This continuation may exist for only a limited period, during which survivors' benefits would be payable in the event of his death; or his qualifications may entitle him to a permanent status under which, in addition to continued eligibility of his dependents for survivors' benefits, he retains eligibility to old-age benefits upon reaching age 65 and such benefits are also payable to his wife or widow at that age.

Whether the value thus granted under the Social Security Act is temporary or permanent depends upon the amount of the taxable wages the individual has received and the incidence of his covered employment. In general it may be said that the period or periods during which an individual continues to have protection for his survivors is equal to the period or periods during which he has paid contributions; and that if he attains, whether in continuous or intermittent covered employment, 10 years (40 quarters) of such active participation, he then becomes permanently insured with respect to both survivors' and old-age benefits. In either case, whether the insurance is temporary or permanent, the amount of the benefits is determined from his legally defined average wage.

Chart II shows an example of the civil-service cash value at various ages of assumed withdrawal and the discounted or "present value" of the continuing deferred protection to an insured worker and/or his wife at age 65 under the Social Security system. The solid line on the chart indicates the cash value payable under civil service upon withdrawal at any given age. The broken line gives the social security withdrawal equity expressed as "present value" at time of withdrawal.

The individual in this illustration, for example, who withdraws at age 45, after 15 years of service, would receive a lump sum of a little more than $1,000 under the civil-service retirement system. Several possible benefits would have to be evaluated under social security, and this evaluation results at withdrawal at age 45 in a "present value" of a little less than $2,000. The benefits evaluated by such figure are the old-age benefit commencing at age 65, if both the man and his wife attain that age; the benefit at age 65 in the event that only the husband is alive; and the benefit to the widow at age 65 if the husband does not survive to that age. Thus for this particular example the chart shows the considerably larger value of the potential social security benefit against the lump-sum cash surrender value of the civil-service retirement plan. Even so it is an under-

**Chart II.—Insurance value at permanent withdrawal of employee from Federal civil-service retirement and Federal old-age and survivors insurance systems**

![Chart II](image_url)
statement of the social security value, for in many cases children will also be present and will be protected for survivors' benefits after the termination of covered employment. It may be pointed out also that the benefits under the social security plan are available to the employee and his wife or to his widow at the time—old age—when they are likely to be most needed.

Under a program of coordination, it would seem reasonable to reduce values paid in cash and place emphasis on the continued protection of the terminating employee for benefits to his survivors and for his own old age. The full value of benefits shown by the broken line in chart II would be available to this terminating civil-service employee in addition to such cash value as the particular plan of coordination would produce.

**Conclusion**

Until some plan is worked out for coordination of the various retirement programs for public employees and coverage of those now not included in any program, anomalous situations such as those exemplified in this article will increase greatly as individuals move in and out of the coverage of the separate systems. Among persons working side by side in government service, some will have had periods of coverage under the general Federal old-age and survivors system so that their survivors would be protected in the event of the employee's death by thousands of dollars in "insurance" value, while the survivors of others, who have not been so covered, would be entitled to only a small cash death payment. The longer the independent functioning of the separate plans, the greater in number and degree will be the disparities.

The concept of coordination used in the present discussion is that of a social security "floor of protection" with a materially higher level of benefits for individuals who stay through to retirement under the civil-service or other retirement plan. As responsible employers in industry have continued their contributory retirement plans, generally modified to produce larger combined benefits than were in effect before the establishment of the social security program, so the civil-service plan and others affected would continue under a coordinated system, and would provide greater aggregate protection.