

FOURTH ANNUAL REPORT OF THE BOARD OF
TRUSTEES OF THE FEDERAL OLD-AGE AND
SURVIVORS INSURANCE TRUST FUND

LETTER

FROM THE

BOARD OF TRUSTEES OF THE
FEDERAL OLD-AGE AND SURVIVORS
INSURANCE TRUST FUND

TRANSMITTING

THE FOURTH ANNUAL REPORT OF THE BOARD OF
TRUSTEES OF THE FEDERAL OLD-AGE AND
SURVIVORS INSURANCE TRUST FUND



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LETTER OF TRANSMITTAL

BOARD OF TRUSTEES OF THE FEDERAL
OLD-AGE AND SURVIVORS INSURANCE TRUST FUND,
Washington, D. C., May 22, 1944.

The PRESIDENT OF THE SENATE,
The SPEAKER OF THE HOUSE OF REPRESENTATIVES,
Washington, D. C.

SIR: We have the honor to transmit to you the Fourth Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance Trust Fund, in compliance with the provisions of section 201 (b) of the Social Security Act, as amended.

Respectfully,

H. MORGENTHAU, JR.,
*Secretary of the Treasury, and
Managing Trustee of the Trust Fund.*

FRANCES PERKINS,
Secretary of Labor.

A. J. ALTMAYER,
Chairman, Social Security Board.

FOURTH ANNUAL REPORT OF THE BOARD OF TRUSTEES OF THE FEDERAL OLD-AGE AND SURVIVORS INSURANCE TRUST FUND

INTRODUCTORY STATEMENT

This report is submitted to Congress in accordance with the requirement in section 201 of the Social Security Act, as amended, that the board of trustees of the Federal old-age and survivors insurance trust fund submit an annual report on the present and prospective operations and status of the trust fund. The present report, pertaining to the fiscal year ended June 30, 1943, the 5 fiscal years subsequent to that date, and the long-range actuarial status of the fund, is the fourth annual report which the board of trustees has submitted.

The Federal old-age and survivors insurance trust fund, which was established on January 1, 1940, is held by the board of trustees under authority of the Social Security Act. The three members of this board, each of whom serves in an ex officio capacity, are the Secretary of the Treasury, the Secretary of Labor, and the Chairman of the Social Security Board. The Secretary of the Treasury serves as managing trustee. The present document is a joint report by all three of the trustees.

This is the third report which has been made to Congress during wartime and the first report which covers operations of the trust fund in a fiscal year during all of which the Nation was at war. It is being made at a time when the date of termination of the war is as yet unknown, but when there is evidence on all sides that the war's climax is rapidly approaching. These circumstances have a considerable bearing on the contents of this report. For one thing, they mean that past operations under the old-age and survivors insurance program on which this document reports have occurred in a period characterized by highly abnormal economic and other conditions accompanying prosecution of the war. These operations have not closely paralleled estimates for the period which were originally made before the attack on Pearl Harbor and before developments subsequent thereto could be foreseen. Moreover, the abnormality of the past period under review means that operations during that period provide an inadequate basis for forecasting future developments under the program.

In the second place, the fact that the Nation was at war at the time this report was prepared has tremendously increased the difficulties of reporting on the expected operation and status of the fund during the 5-year period from July 1, 1943, to June 30, 1948. The war itself will probably cause changes in various phases of our economy which will be of long-run significance for the financing of old-age and survivors insurance. The influences of the war, however, will be still more direct and marked on operations during the immediate 5-year period ahead for which this report is required by law to make forecasts. The most important unknown factors are the time at which

the war will end and the nature and duration of economic dislocations accompanying the ending of the war.

In view of these various matters, this fourth annual report—dealing to a considerable extent, as it does, with anticipated future developments—is prepared under considerable difficulty. For the same reasons, the estimates which it contains are presented with considerably more reservation than would be necessary if the times were less abnormal. The likely nature of the effects of the war upon the financing of old-age and survivors insurance is reviewed in some detail in a later section of this report.

NATURE OF THE TRUST FUND

Amounts accumulated under the old-age and survivors insurance program are held in the Federal old-age and survivors insurance trust fund and financial operations under that program are handled through the fund. The primary source of its receipts are amounts appropriated to it under permanent appropriation, on the basis of contributions paid by covered workers and their employers toward old-age and survivors insurance. The Federal Insurance Contributions Act requires all employees and employers, excepting those in employments specifically excluded, to pay contributions with respect to individual wages up to but not in excess of \$3,000 per annum. These contributions are collected by the Bureau of Internal Revenue and are paid into the Treasury as internal-revenue collections. Sums equivalent to current collections (including taxes, interest, penalties, and additions to taxes) are transferred to the trust fund as such collections are received.

The Social Security Act of 1935 fixed the contribution rates for employees at 1 percent of taxable wages for the calendar years 1937, 1938, and 1939; employer rates were also fixed at 1 percent for the same period. The 1935 law provided that these rates should rise to 1½ percent on January 1, 1940, to 2 percent on January 1, 1943, to 2½ percent on January 1, 1946, and to 3 percent on January 1, 1949. The Social Security Amendments of 1939 modified this original schedule of contribution rates to provide that the rate of 1 percent each on employees and employers should continue in effect through 1942, but left the remainder of the schedule as originally enacted. The Revenue Act of 1942 provided that the 1-percent rates should continue through 1943. Public Law 211 of the Seventy-eighth Congress extended the 1-percent rates further through February 29, 1944, while the Revenue Act of 1943 extended the same rates throughout 1944. At the end of 1944, accordingly, the 1-percent rates of contribution will have been in effect for 8 years. Existing provisions of law thus provide for the 2-percent rates to go into effect on January 1, 1945, the 2½-percent rates on January 1, 1946, and the 3-percent rates on January 1, 1949.

The second source from which receipts of the trust fund are derived is interest received on investments held by the fund. The investment procedures of the fund are described below.

A third potential source of revenue for the trust fund is provided in section 902 of the Revenue Act of 1943, which authorizes, as a Government contribution, the appropriation to the trust fund of such additional sums out of general revenues as may be required to

finance the benefits and payments provided in title II of the Social Security Act.

Expenditures under the old-age and survivors insurance program are paid out of the trust fund. These expenditures include old-age and survivors insurance benefits provided in title II of the Social Security Act and such reimbursements to the Treasury for administrative expenses incurred by the Social Security Board and the Treasury Department under the program as are authorized by section 201 (f) of the Act. The Social Security Board certifies benefit payments to the managing trustee, who then makes payment from the trust fund in accordance therewith. Payments are made from an uninvested balance held in the fund to the account of the disbursing officer of the Treasury.

The Treasury is reimbursed from the trust fund for expenditures incurred by the Social Security Board and the Treasury Department in the administration of title II of the Social Security Act and the Federal Insurance Contributions Act. These reimbursements from the trust fund are made at 3-month intervals. Although limited to the amounts annually appropriated by Congress for such purposes, the cost of administering old-age and survivors insurance, thus, is not borne out of regular governmental revenues but out of the old-age and survivors insurance trust fund itself.

The managing trustee invests that portion of the trust fund which in his judgment is not required for meeting current expenditures for benefits or administration. The Social Security Act restricts permissible investments of the trust fund to interest-bearing obligations of the United States Government or to obligations guaranteed as to both principal and interest by the United States. Regular obligations of these types may be acquired on original issue at par or by purchase of outstanding obligations at their market price. In addition, the Social Security Act authorizes the issuance of special obligations exclusively to the trust fund. Such special obligations are required to bear interest at a rate equal to the average rate of interest, computed as of the end of the calendar month next preceding the date of their issue, borne by all interest-bearing obligations of the United States forming a part of the public debt (where such average rate is not a multiple of one-eighth of 1 percent, the rate of interest on such special obligations is required to be the multiple of one-eighth of 1 percent next lower than such average rate).

Interest on regular obligations held by the trust fund is received by the fund at the time the interest becomes payable on the particular series held. Interest on special obligations is received annually on June 30. These interest receipts are available for investment in the same manner as other receipts of the fund. Regular obligations acquired by the fund may be sold at any time by the managing trustee at their market price. Special obligations may be redeemed at par plus accrued interest.

The trust fund serves in part as a reserve against fluctuations in total contribution and benefit amounts, counteracting the financial effects of these fluctuations on the old-age and survivors insurance program and providing a margin of safety against relatively short-term contingencies to insure the payment of benefits without sharp changes in rates paid by contributors. These reserves will provide additional resources against a sudden increase in total benefit amounts

or a sharp decline in contributions, both of which could occur simultaneously from any reversal in business activity.

The trust fund, furthermore, can provide an interest-earning reserve to meet a part of the inevitable future long-term rise in benefit disbursements, and serves as a safety factor against the first impacts which may result from an acceleration in the rate of this long-term rise. Benefit disbursements under the program are expected to increase markedly over a long period. Such a substantial increase is anticipated because it is expected that for many decades the number of persons aged 65 and over will be increasing and that an increasing proportion of such aged persons will be qualifying for benefits under the old-age and survivors insurance system. At the beginning of 1940 there were about 9,000,000 persons aged 65 and over, equivalent to 6.8 percent of the total population. According to carefully developed estimates, the number of persons aged 65 and over may increase to about 22,000,000, or 14.4 percent of the population, within 40 years. The effect of such expected change in the number of aged persons will be even greater on the finances of the old-age and survivors insurance system than may at first appear, because a larger proportion of aged persons 40 years hence will be eligible to receive benefits under the program than the corresponding proportion of the aged persons in the present population. The future financial soundness of the system, with its rising rates of disbursements, must rest on higher contribution rates or on the provision of income from other sources, or both. Prudent financial management of this system is of the utmost importance to the millions of persons who are already within its scope and to the Nation as a whole.

INFLUENCES OF THE WAR ON THE TRUST FUND

During the fiscal year 1943, as a consequence of the war, the assets of the trust fund continued to increase more rapidly than was anticipated. Contributions increased markedly, from \$691 million in the fiscal year 1941 to \$1,130 million in the fiscal year 1943. This increase has been a result of the greater volume and continuity of covered employment and also of the rise in rates of earnings. Approximately 47 million workers received taxable wages in the calendar year 1943, as compared with only 35 million in 1940 and less than 32 million in 1938.

Benefit payments, on the other hand, have been less than were expected, due in part to increased employment opportunities resulting from war production. Many thousands of workers who were eligible for benefits and who probably would have claimed them in more normal times have remained at their jobs. In addition, many persons already on the benefit rolls have suspended their benefit status by returning to covered employment. At the end of June 1943 about 19 percent of the aged workers, wives, and widows with young children already on the benefit rolls were not in actual receipt of benefits, for the most part because they had returned to covered employment.

In net terms, influences of the war on the trust fund are not clear. There are many complex relationships—involving contributions, benefits and insured status—which make it impossible to give a clear and categorical answer to the question as to what the eventual over-all effect of the war will be on the assets of the fund.

The present discussion of the effects of the war and of the relationships between contributions and benefit payments takes no account of the more or less permanent changes which may be wrought by the war in the long-run level of wages, in the composition of the labor force and of the population, or in the characteristics of employment. The length of the war is a prime factor; some elements which would operate to increase the assets of the fund if the war ends soon would operate to decrease the assets if war conditions continue for a longer period.

(a) *Increased employment, steadier work, and higher wages.*—The general availability of steady work at higher rates of wages has increased total earnings in covered employment. Average taxable wages rose from \$834 in the calendar year 1938 to \$934 in the calendar year 1940 and to an estimated \$1,310 in 1943. As a consequence of this increase in average earnings, as well as of the rise in number of workers in covered employment, aggregate contributions, which are levied as a percentage of pay roll, have been at a very high level, totaling over \$1.1 billion in the fiscal year 1943.

The increases in wages and employment also have an obverse effect in that the higher wage credits accumulating will increase future monthly benefits payable at death or retirement. Also, the tax rates applicable to these higher wage levels have been at the initial 1 percent rates established in the act, which are one-third of the rates prescribed for later years. Therefore, while the war situation has resulted in an abnormal insurge of contributions during this period, there may be said to be created a more or less offsetting liability to be met over many years in the future when more and larger benefits will come due. The net ultimate effect on the assets of the fund is indeterminate at this time.

(b) *Employment of women and other temporary workers.*—Several million women not usually employed are currently at work in employments covered by the program. Many other persons not regularly in covered occupations are also temporarily employed in such occupations. About 8.5 million covered workers in the calendar year 1942 and an estimated 7 million in 1943 had no covered employment prior to those years. These figures may be compared with the 4.2 million workers who entered covered employment for the first time in 1940, a figure which includes many workers in employments to which coverage was extended for the first time in that year.

To have insured status for survivors' benefits, at least 6 quarters of recent covered employment are generally necessary, and to have insured status for purposes of retirement at age 65 or later, 40 quarters are required (except for persons already above or nearing that age). Married women with insured status, whose husbands are also retired, derive their old-age benefits either as primary beneficiaries from their own wage credits or as wives by reason of their husbands' credits, whichever result in the greater benefit rate. To the extent that women now temporarily at work in covered employment are married or later marry, it may be expected that benefits for them will usually derive from their husbands' accounts rather than their own. Furthermore, the employment of married women does not increase substantially the amount of survivors' protection afforded by the program, because survivors' benefits for children derive from the father's employment in most instances. Married women who become insured during the war have a temporary insurance protection, however, in

the form of a lump-sum payment in the event of death. It seems likely on balance that the contributions paid by married women and their employers during the war will result in a net gain to the fund.

Contributions paid by unmarried women also will bring about a net increase in the fund, unless they remain in covered employment long enough to gain fully insured status either as a result of a very long war or as a result of continued employment after the war. Men who shift only temporarily from noncovered employments to covered employment would increase the fund more or less, depending on the proportion with families and the duration of their covered employment.

In summary, it may be said that the heavy increases in covered employment of men and women not normally a part of the system should result in a net addition to the fund if the war is not greatly prolonged, and if a large proportion of these persons return to noncovered employment or, in the case of married women, return to the home.

(c) *Deferred retirements and suspensions of benefits.*—With the need for maximum use of available manpower, many individuals above the age of 65 who are already eligible for retirement benefits have remained on the job or returned to work, and thereby deferred or interrupted their retirement. It is estimated that such persons totaled 600,000 at the end of June 1943. Inasmuch as monthly benefits are not payable for months in which an individual is earning \$15 or more in covered employment, and to the extent that these deferments and suspensions exceed those which, except for the war, would have taken place, there is an obvious net increase in the assets of the fund. The monthly benefits that will be payable to those who have deferred retirement will be greater in amount by reason of their being determined, partly at least, on the current high wage levels, but the average length of time during which these individuals will receive benefits will be decreased. The net result of the factors mentioned in this paragraph will probably be a net increase to the fund.

(d) *Suspensions among survivors.*—Widows and their children who have qualified for survivors' benefits are not eligible to receive monthly benefits for the months in which they are in covered employment and, in addition, children aged 16 to 17 are ineligible for benefits for the months in which they are not in school. The present tendency for widows and older children to find work in covered employment results in a net gain to the fund, in the same way as that discussed in the preceding paragraph. Although the present employment of many of these widows and children is only temporary, the wage credits received during this period may increase their own protection later, and thus have some effect on the fund in the opposite direction.

(e) *Military service.*—Military service is not covered employment under the present law. As a consequence, those who enter the armed forces from covered employment cease to pay contributions and have decreasing protection. After a period of time in the service—in general, equal to the period previously worked in covered employment—they will lose any established insured status. The board of trustees does not believe, however, that any advantage should accrue

to the fund at the expense of the loss of coverage by persons in the armed forces as it believes that such loss of coverage is an inequity which should be and will be repaired. The President has already made recommendations to Congress to extend coverage to military service so that this loss in protection will be prevented.

(f) *Governmental civilian employment.*—Public employment is excluded from coverage under the system. Including turn-over, there have probably been 3 million additional persons in this type of work since the beginning of the war. As in the case of military service, those individuals with previous covered employment have decreasing insurance protection under the system and many may eventually lose insured status; in any event, their average wage for benefit purposes is permanently lowered. Wartime Government civilian employees include a large proportion of married men with families. The married men who die while insured will have survivors' benefits payable in smaller amounts than if they had not entered Government service; and those who remain in public employment for a sufficient period will have no survivors' benefits payable because of the expiration of their insured status prior to their death. In either case, the result will be a smaller outgo from the fund than otherwise. On the other hand, there will be no contributions paid nor benefit rights accumulated by Government workers while they are working in the public service. The contributions otherwise payable during this period might have exceeded the value of the added benefit rights. Consequently, for Government civilian employees, the net effect on the fund appears to be indeterminate.

SUMMARY OF OPERATIONS OF THE TRUST FUND, FISCAL YEAR 1943

A statement of the income and disbursements of the Federal old-age and survivors insurance trust fund in the fiscal year beginning July 1, 1942, and ending June 30, 1943, and of the assets of the fund at the beginning and end of the fiscal year, is presented in table 1.

TABLE 1.—*Statement of operations of the Federal old-age and survivors insurance trust fund during the fiscal year 1943*¹

Total assets of the trust fund, June 30, 1942.....		\$3, 227, 194, 145. 25
Receipts (fiscal year 1943):		
Appropriations equivalent to contributions collected.....	\$1, 130, 495, 200. 70	
Interest on investments.....	87, 403, 022. 48	
Total receipts.....	<u>1, 217, 898, 223. 18</u>	
Disbursements:		
Benefit payments.....	149, 303, 977. 71	
Reimbursements for administrative expenses.....	27, 492, 407. 40	
Total disbursements.....	<u>176, 796, 385. 11</u>	
Net addition to the trust fund.....		<u>1, 041, 101, 838. 07</u>
Total assets of the trust fund, June 30, 1943..		<u>4, 268, 295, 983. 32</u>

¹ On basis of the Daily Statement of the United States Treasury.

The total receipts of the trust fund during the fiscal year 1943 amounted to \$1,217.9 million. Of this total, \$1,130.5 million represented the sum of the amounts, equal to contributions received under the Federal Insurance Contributions Act and covered into the Treasury, which were appropriated to the trust fund during the year under the continuing appropriation in section 201 (a) of the Social Security Act. The total amount appropriated exceeded that in the preceding fiscal year by 26 percent. The additional \$87.4 million of receipts consisted of interest received on investments of the fund.

Disbursements from the trust fund during the fiscal year 1943 totaled \$176.8 million, of which \$149.3 million consisted of benefit payments and \$27.5 million of reimbursements to the general fund for administrative expenses of the insurance program. The total amount paid from the fund in the form of benefits during the fiscal year exceeded that paid in the fiscal year 1942 by \$39.0 million, reflecting the larger number of beneficiaries on the rolls. The manpower scarcities accompanying the war led to an increasingly large volume of interrupted and delayed retirements which accounted for a smaller increase in benefit payments than in the previous year.

A summary of receipts, expenditures, and changes in the assets of the old-age and survivors insurance trust fund during each fiscal year since it was established on January 1, 1940, is presented in table 2.

TABLE 2.—Operations of the old-age and survivors insurance trust fund, by specified period, Jan. 1, 1940, to June 30, 1943

[In millions]

	Fiscal year ended in—			
	1940 ¹	1941	1942	1943
Receipts:				
Assets transferred from old-age reserve account on Jan. 1, 1940.....	\$1,724.4			
Appropriations (equal to taxes) to trust fund.....		\$688.1	\$895.6	\$1,130.5
Interest on investments.....	42.5	56.0	71.0	87.4
Total receipts.....	1,766.9	744.1	966.6	1,217.9
Expenditures:				
Benefit payments ²	9.9	64.4	110.2	149.3
Reimbursement for administrative expenses.....	12.3	26.8	26.8	27.5
Total expenditures.....	22.2	91.2	137.0	176.8
Total assets at end of period.....	1,744.7	2,397.6	3,227.2	4,268.3

¹ January-June 1940, fund having been established in place of the old-age reserve account on Jan. 1, 1940.

² Based on checks cashed and returned to Treasury.

The distribution of benefit payments by type of benefit in fiscal years 1942 and 1943 is presented in table 3. About three-fifths of the amounts paid from the fund as benefit payments in the fiscal year 1943 were accounted for by monthly benefits to persons age 65 and over—retired wage earners and their wives, and aged widows and parents of deceased wage earners. This proportion was about the

same as in the preceding year, but with a slightly smaller proportion during 1943 in the form of primary benefits. Approximately 28 percent of the 1943 payments represented monthly benefit payments on behalf of children of deceased or retired workers, and payments to widows who had children of deceased wage earners in their care; most of these widows were under age 65. The balance of the benefits paid in the fiscal year 1943, consisted almost entirely of lump-sum amounts paid in cases where no survivor of an insured wage earner dying after 1939 was immediately entitled to monthly benefits; only \$0.1 million was paid in 1943 for cases where the death of the wage earner occurred prior to 1940.

TABLE 3.—Estimated distribution of Treasury disbursements for benefit payments under the old-age and survivors insurance program, by type of benefit, fiscal years 1942 and 1943

Type of benefit	1942		1943	
	Amount [000,000]	Percentage of total	Amount [000,000]	Percentage of total
Total (monthly and lump-sum benefits).....	\$110.2	100	\$149.3	100
Total monthly benefits.....	96.1	87	132.6	89
Primary (retired wage earners 65 or over).....	54.9	50	72.4	48
Wife's (wives 65 or over of primary beneficiaries).....	8.4	8	11.4	8
Widow's (widows 65 or over of wage earners).....	3.8	3	7.4	5
Parent's (parents 65 or over of deceased wage earners).....	.3	(1)	.5	(1)
Child's (dependents of retired or deceased wage earners).....	18.1	16	26.6	18
Widow's current (widows of wage earners with child beneficiary).....	10.6	10	14.3	10
Total lump sum (no survivor of deceased wage earner entitled to monthly benefits or wage earner died before 1940).....	14.1	13	16.7	11

¹ Less than 0.5 percent.

² Includes \$25.3 million paid to children of deceased insured wage earners and \$1.3 million paid to children of primary beneficiaries.

At the end of the fiscal year 1943, approximately 676,000 persons were receiving monthly benefits, amounting to \$146 million on an annual basis. At the end of the preceding fiscal year, the monthly benefit rolls included 530,000 persons to whom monthly benefits were being paid at an annual rate of \$115 million.

The total assets of the old-age and survivors insurance trust fund, as reported in the third annual report of the board of trustees, amounted to \$3,227 million on June 30, 1942. These assets increased to \$4,268 million by the end of the fiscal year 1943, as the result of an excess of receipts over disbursements amounting to \$1,041 million during the fiscal year. Table 4 compares the total assets of the trust fund and their distribution by type at the end of the fiscal years 1942 and 1943. The assets of the fund at the end of the fiscal year 1943 consisted of \$4,237 million in the form of obligations of the United States Government, \$7 million to the credit of the fund account, and \$24 million to the credit of the disbursing officer.

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TABLE 4.—*Distribution of assets of Federal old-age and survivors insurance trust fund at end of fiscal years 1942 and 1943*¹

	June 30, 1942	June 30, 1943
Total assets.....	\$3,227,194,145.25	\$4,268,295,983.32
Total investments.....	3,201,634,250.00	4,236,834,250.00
3-percent special Treasury notes:		
Maturing June 30, 1943.....	497,400,000.00	
Maturing June 30, 1944.....	26,400,000.00	
2½-percent special Treasury notes:		
Maturing June 30, 1944.....	283,000,000.00	283,000,000.00
Maturing June 30, 1945.....	725,900,000.00	725,900,000.00
Maturing June 30, 1946.....	319,200,000.00	319,200,000.00
2¾-percent special Treasury notes maturing June 30, 1946.....	603,000,000.00	603,000,000.00
2¼-percent special Treasury notes:		
Maturing June 30, 1946.....	228,000,000.00	228,000,000.00
Maturing June 30, 1947.....	450,400,000.00	450,400,000.00
2½-percent special Treasury notes maturing June 30, 1947.....		240,000,000.00
2-percent special Treasury notes maturing June 30, 1947.....		459,000,000.00
1½-percent special Treasury notes:		
Maturing June 30, 1947.....		275,000,000.00
Maturing June 30, 1948.....		460,000,000.00
Treasury bonds:		
2½-percent Treasury bonds, 1967-72.....	44,334,250.00	44,334,250.00
2½-percent Treasury bonds, 1963-68.....		100,000,000.00
2½-percent Treasury bonds, 1962-67.....	24,000,000.00	49,000,000.00
Unexpended balances.....	25,559,895.25	31,461,733.32
To credit of fund account.....	5,176,138.57	6,966,360.58
To credit of disbursing officer.....	20,383,756.68	24,495,372.74

¹ On basis of the Daily Statement of the United States Treasury.

That portion of the assets of the trust fund not required in his judgment for the meeting of current withdrawals was invested by the managing trustee during the fiscal year 1943, in accordance with the provisions of section 201 (c) of the Social Security Act, as amended. That section provides that direct obligations of the United States Government as well as obligations guaranteed as to both principal and interest by the United States may be purchased for the trust fund, and that regular obligations may be acquired through purchase of outstanding obligations in the open market as well as on original issue at par. Investments made for the fund during the fiscal year, however, as in previous years, consisted only of direct obligations of the United States purchased on original issue.

The net increase in the investments owned by the fund during the fiscal year 1943 amounted to \$1,035 million. New securities, totaling \$1,559 million, were acquired through the investment of receipts accruing to the fund and the reinvestment of \$378 million of 3-percent special old-age reserve account notes which matured on June 30, 1943. An additional \$146 million of 3-percent special Treasury notes maturing either on June 30, 1943, or on June 30, 1944, were redeemed at various times throughout the fiscal year, raising the total amount of securities redeemed during the year to \$524 million.

All but \$125 million of the new securities purchased were in the form of special Treasury notes, which mature at the end of the fiscal years 1947 or 1948. These notes were acquired at par and bear interest at rates varying from 1½ to 2½ percent, these rates being determined by the average rate of interest on the interest-bearing public debt at the end of the month preceding the date of the issue of these securities. The \$125 million was invested in publicly offered series of 2½ percent Treasury bonds—\$100 million in the 1963-68 series and \$25 million in the 1962-67 series. Interest accrues on these bonds from the time

of their issue. The investment transactions of the trust fund during the fiscal year 1943 are summarized in table 5.

TABLE 5.—*Investment transactions of the old-age and survivors insurance trust fund, fiscal year 1943*¹

Purchases.....		\$1, 559, 000, 000
Special Treasury notes.....	\$1, 434, 000, 000	
Treasury bonds.....	125, 000, 000	
Redemptions of special Treasury notes.....		523, 800, 000
Net increase in investment.....		1, 035, 200, 000

¹ As recorded in the Daily Statement of the United States Treasury.

The average rate of interest on the interest-bearing public debt, which determines the rates at which special obligations are issued to the old-age and survivors insurance trust fund, varies with changes in the composition of the public debt. During the fiscal year 1943 the average rate of interest on the public debt declined steadily, with the exception of 1 month, from 2.29 percent as of June 30, 1942, to 1.98 percent at the end of June 1943. This resulted in part from a refunding of debt issued at higher rates in earlier years and in part from a change in the composition of the debt through the issuance of securities of shorter average maturity than those previously outstanding. The decline in the average rate of interest on the total public debt was responsible for a decrease in the rate of interest borne by special issues owned by the trust fund. As a result of changes during the fiscal year 1943 in the amounts and distribution of the invested assets of the fund, the average interest rate on investments held by the fund as of June 30, 1943, was 2.26 percent, as contrasted with 2.51 percent as of June 30, 1942.

STATEMENT ON THE EXPECTED OPERATIONS AND STATUS OF THE TRUST FUND DURING THE FISCAL YEARS 1944-48

The board of trustees is required, under the provisions of section 201 (b) of the Social Security Act, as amended, to report each year to the Congress on the expected operation and status of the trust fund during the next ensuing 5 fiscal years. The report is required to include estimates of both the income and disbursements of the trust fund in each of the 5 years. The income of the fund depends largely upon the amount of taxable pay rolls in covered employment as well as upon rates of contribution. The disbursements from the fund depend not only upon the number of persons eligible for benefits, but also on the number of these eligible persons who choose to receive benefits rather than work in covered employments. Consequently, both the income and disbursements of the fund are intimately related to economic conditions.

Economic conditions during the next 5 years will be determined primarily by the course and duration of the war and by the nature of the readjustments following the war if it should terminate during the period. A number of different possible courses of future developments have therefore been studied in the preparation of this report, each on the basis of specific assumptions as to the duration of the war and the level of economic activity during and after the war. From these, two alternative sets of estimates of income and disbursements were selected: one illustrating a pattern yielding a relatively high increase

in trust fund assets and the other yielding a relatively low increase in trust fund assets.

Both sets of estimates assume that the present statutory coverage of old-age and survivors insurance will remain unchanged throughout the period under consideration. The computations related to tax income are based on the present statutory rates of contribution, which are 1 percent each on employer and employee on wages paid during the calendar years 1943 and 1944, 2 percent during the calendar year 1945, and 2½ percent during the calendar years 1946, 1947, and 1948.

The two sets of estimates of the income and disbursements of the trust fund for each of the fiscal years 1944 to 1948, together with the resulting assets of the fund at the beginning and the end of each fiscal year, are presented in table 6. The basic assumptions underlying the two sets of estimates differ primarily with respect to the duration of the war and the level of production after the war; the board of trustees has been forced to make assumptions as to the termination of the war in order to carry out the requirements of section 201 (b) of the Social Security Act, the assumptions made being considered reasonable for the illustrative purposes of this report. In alternative I the war is assumed to be of somewhat longer duration than in alternative II. Both alternatives assume that employment will be at a high level as long as war needs dominate the economy, but that peak employment has been reached and that in the remaining war years, moderate declines in employment will take place. Overtime payments and concentration of workers in high-wage war industries are assumed to result in high average earnings during the war in both sets of estimates. Assumed increases in average earnings, however, are greater in alternative I because larger price increases have been assumed.

TABLE 6.—*Estimates of the operations of the Federal old-age and survivors insurance trust fund, fiscal years 1944-48, subject to the assumptions and limitations stated in the text*¹

[In millions]

	Alternative estimates for fiscal years 1944-48, assuming—									
	I. Longer duration of war with shorter reconversion period of moderate decline; medium rate of retirement among the aged					II. Shorter duration of war with longer reconversion period of moderately severe decline; moderately high rate of retirement among the aged				
	1944	1945	1946	1947	1948	1944	1945	1946	1947	1948
Fund at beginning of year	\$4,268	\$5,468	\$7,041	\$9,815	\$12,904	\$4,268	\$5,430	\$6,935	\$9,332	\$11,400
Transactions during year:										
Appropriations (taxes) ²	1,306	1,690	2,900	3,220	2,640	1,268	1,624	2,542	2,275	2,080
Interest on investments	104	128	161	209	259	104	126	156	193	226
Total income	1,410	1,818	3,061	3,429	2,899	1,372	1,750	2,698	2,468	2,306
Benefit payments	181	214	255	307	365	181	214	268	365	455
Administrative expenses	29	31	32	33	34	29	31	33	35	37
Total disbursements	210	245	287	340	399	210	245	301	400	492
Net increase in fund	1,200	1,573	2,774	3,089	2,500	1,162	1,505	2,397	2,068	1,814
Fund at end of year	5,468	7,041	9,815	12,904	15,404	5,430	6,935	9,332	11,400	13,214

¹ In interpreting the estimates in this table, reference should be made to the accompanying text which describes the uncertainties of the underlying assumptions.

² The appropriations are estimated on the statutory rates of contribution—1 percent each on employers and employees in the calendar year 1944, 2 percent in 1945, and 2½ percent in 1946-48.

The post-war reconversion to production of civilian goods is assumed in alternative I to take place in an orderly manner. Pay rolls are assumed to drop during the reconversion period because of reduction in hours of work and the consequent termination of overtime payments, shifting of workers from high-wage to low-wage industries, and a relatively large volume of short-term unemployment. With the completion of reconversion, economic activity is assumed to increase as long-deferred market demand, both foreign and domestic, makes itself felt through the expenditure of wartime savings and the rehabilitation of war-devastated countries; as a consequence, pay rolls in covered employment are assumed to rise. Since a relatively high level of employment is assumed during most of the period, there would be a rather large number of persons otherwise eligible for retirement benefits who remain in covered employment.

Under alternative I, aggregate income during the period of 5 fiscal years ending in 1948 would amount to \$12.6 billion. Aggregate disbursements for the period would be about \$1.5 billion, with the highest expected annual disbursement about \$0.4 billion. The trust fund at the beginning of the fiscal year 1944 would amount to 10.7 times the highest expected annual disbursement during the succeeding period of 5 fiscal years.

Reconversion of physical facilities is assumed to take place more slowly in alternative II than in alternative I, and peacetime production is assumed to rise at a much slower rate. Pay rolls in covered employment are assumed to decline to a greater extent than in alternative I, primarily because of a greater drop in employment. This decline is accentuated by the larger decreases assumed in hours of work and duration of employment. Because of less favorable employment conditions, it is assumed that a larger number of persons eligible to receive benefits would retire from covered employment than under alternative I.

The aggregate income of the fund for the 5 fiscal years 1944-48, under alternative II would amount to about \$10.6 billion. Aggregate disbursements would be about \$1.6 billion, with the highest expected annual disbursement about \$0.5 billion. The trust fund at the beginning of the period would amount to 8.7 times the highest expected annual disbursement during the period.

The above alternative sets of estimates serve to illustrate developments resulting in relatively large and relatively small net additions to the trust fund. The assumption of a relatively long war has been combined with one that the ensuing period will be characterized by relatively high economic activity, inasmuch as these factors reinforce each other in producing a comparatively high figure for the net additions to the fund. Similarly, the assumption of a shorter war has been combined with one of a relatively low level of economic activity in the immediate post-war period to illustrate a consistently lower estimate of net additions to the fund. Although a range in the net additions to the fund is thus indicated, the possible range of variations has by no means been indicated; other combinations of military and economic developments would produce different results.

As has been indicated, conditions of war tend to result in high collections and low current disbursements. A longer duration of war than assumed in alternative I, therefore, would result in a longer period of large net increases in the fund and in a higher figure for total net income in the 5-year period. Similarly, different assumptions with respect

to the level of economic activity in the reconversion and post-reconversion periods would produce different estimates of contributions to and disbursements from the trust fund. A more difficult reconversion and a lower level of production of civilian goods than assumed in alternative II is entirely possible. Consequently, a lower estimate of net increases in the fund would also be reasonable. Finally, no attempt has been made to illustrate the effect of large price increases on the income of the trust fund. Such price increases would substantially change the dollar amount of income, and could produce much larger variations from the figures shown than the other factors cited.

The extent of employment covered by the program, its distribution among different classes of workers (e. g., older workers, very young workers, women, workers not previously engaged in covered employment, etc.), and the level of wages, will have a decided effect upon the amount of benefit payments to be anticipated.

In general, the larger the volume of employment the larger will be the number of workers who are insured under the program and, therefore, the larger will be the number of deaths which will give rise to valid claims for survivors' benefits under the program. It does not necessarily follow, however, that payments of survivors' benefits will increase more rapidly under high employment conditions than under low conditions. If the high employment conditions are due to a prolonged war, a relatively larger proportion of the insured population may consist of women and of older men whose deaths do not generally give rise to substantial survivors' benefits as would the deaths of men having young children. Moreover, high employment conditions will induce many of the younger widows and older children eligible for survivors' benefits to forego them by working in covered employment.

As a result, the number of survivors' benefit payments is expected to increase with a somewhat greater degree of rapidity under the low employment assumptions than under the high. The amounts of survivors' benefits under alternatives I and II, as shown in table 7, are expected to be more nearly the same than the corresponding numbers of survivors' benefit payments, because of the counterbalancing effect of the slightly greater average size of benefit under the higher wage levels of alternative I.

TABLE 7.—*Treasury disbursements for benefit payments, distributed by classifications of beneficiaries, fiscal years 1941-48, subject to the assumptions and limitations stated in the text*¹

[In millions]

Fiscal year	Total benefit disbursements	Disbursed to primary beneficiaries	Disbursed to wives and children of primary beneficiaries	Disbursed to survivors of deceased insured workers			
				Monthly benefits			Lump-sum payments
				Total	Aged widows and parents	Younger widows and children	
Past disbursements: ²							
1941.....	\$64.3	\$31.4	\$5.3	\$15.3	\$1.5	\$13.8	\$12.3
1942.....	110.2	54.9	9.6	31.6	4.1	27.5	14.1
1943.....	149.3	72.4	12.7	47.5	7.9	39.6	16.7
Estimated future disbursements:							
1944.....	181.0	84.0	15.0	63.0	12.0	51.0	19.0
1945.....	214.0	94.0	17.0	81.0	18.0	63.0	22.0
1946:							
Alternative I.....	255	100	21	101	24	77	24
Alternative II.....	268	120	23	102	24	78	23
1947:							
Alternative I.....	307	131	27	123	32	91	26
Alternative II.....	365	183	32	126	32	94	24
1948:							
Alternative I.....	365	155	35	148	41	107	27
Alternative II.....	455	239	43	149	40	109	24

¹ In interpreting the estimates in this table, reference should be made to the accompanying text which describes the uncertainties of the underlying assumptions.

² Partly estimated.

On the other hand, the lower the conditions of employment during the next 5 years, the larger will be the volume of benefit payments to retired workers who have attained age 65 and to their wives and children. As is indicated in table 8, a considerable proportion of the workers aged 65 and over who have been eligible for primary benefits in the past have remained in covered employment (or, if they had left covered employment, later returned to it) and are not receiving benefits. Under a continuation of high or relatively high employment conditions, it may be expected that, for any one attained age, the proportion of eligible workers receiving primary benefits will remain relatively constant; though, since the average attained age of eligible workers will continually increase, the over-all proportion receiving primary benefits may be expected to increase under any except the most unusual conditions.

TABLE 8.—*Wage earners eligible for and receiving primary benefits by attained age of wage earners, fiscal year 1941-48, subject to the assumptions and limitations stated in the text*¹

Middle of fiscal year	All wage earners age 65 and over			Wage earners 65-69			Wage earners age 70 and over		
	Number eligible for benefits	Persons receiving benefits		Number eligible for benefits	Persons receiving benefits		Number eligible for benefits	Persons receiving benefits	
		Number	Proportion of total number eligible		Number	Proportion of total number eligible		Number	Proportion of total number eligible
Actual experience:	<i>Thous.</i>	<i>Thous.</i>	<i>Pct.</i>	<i>Thous.</i>	<i>Thous.</i>	<i>Pct.</i>	<i>Thous.</i>	<i>Thous.</i>	<i>Pct.</i>
1941.....	545	112	21	382	84	22	163	28	17
1942.....	687	200	29	469	134	28	218	66	31
1943 ²	825	260	32	540	153	28	285	107	38
Estimated future experience:									
1944.....	959	306	32	594	155	26	365	152	42
1945.....	1,091	340	31	631	144	23	460	197	43
1946:									
Alternative I.....	1,215	401	33	655	150	23	560	251	45
Alternative II.....	1,193	439	37	642	168	26	551	271	49
1947:									
Alternative I.....	1,347	482	36	685	164	24	662	318	48
Alternative II.....	1,271	652	51	647	234	36	624	418	67
1948:									
Alternative I.....	1,487	569	38	729	182	25	758	388	51
Alternative II.....	1,340	847	63	654	288	44	686	559	81

¹ In interpreting the estimates in this table, reference should be made to the accompanying text which describes the uncertainties of the underlying assumptions.

² Data for middle of fiscal year 1943 partly estimated.

Under the lower employment assumptions used in alternative II, it is assumed that much larger proportions of eligible workers will be obliged to leave covered employment, even at the ages close to 65. The result is that, despite a slightly lower number of eligible workers, the number of workers receiving primary benefits will be considerably greater under alternative II than under alternative I. It is not believed that there will be any appreciable difference between the average primary benefits actually paid under the two alternatives.

Table 8 contains an analysis of workers eligible for primary benefits according to attained age for the middle (January 1) of each of the fiscal years 1941 through 1948. For attained ages 65-69, the growth in the number of eligible workers is gradual but virtually uninterrupted under both alternatives. This growth reflects not merely an increase in the population at these attained ages, but primarily the fact that with each passing year a larger proportion of the persons attaining age 65 have fully insured status. In the calendar year 1940, a worker attaining age 65 could not be fully insured if he had left covered employment more than 1½ or 2 years previous to his attainment of age 65, but in the calendar year 1948 numerous persons attaining age 65 will be fully insured even though they left covered employment before the age of 60.

The aging of the program has an even greater effect on the number fully insured at attained ages 70 and over. This number is expected to quadruple between January 1, 1941, and January 1, 1948, even under the low employment assumptions of alternative II. At the latter date, the number eligible at these attained ages should comprise

more than one-half of the total number of eligible persons. Moreover, the average age of all persons within the age group 70 and over will be continuously increasing.

One of the sources of increase in the insured population at the older ages is the entrance or reentrance of new employees to covered employment at these ages. Under the high employment conditions assumed in alternative I, this has an appreciable effect on the number insured at the older ages, though recent statistical studies have shown that the effect is not nearly so marked as was believed at the time of the preparation of the estimates appearing in the third annual report of the board of trustees. Under the lower employment assumptions of alternative II for the years 1946-48, there is practically no increment to the number eligible through such entrances or reentrances.

It may be seen that under alternative I the proportion of those eligible who are expected to be receiving primary benefits remains practically constant at ages 65-69, while at ages 70 and over the proportion increases in conformity with actual past experience. This increase is due to an increase in the average age of the group of eligibles among those age 70 and over. Under alternative II the proportion increases sharply during fiscal years 1946-48 for the ages 65-69, while for the ages 70 and over, it increases rapidly though remaining well under 100 percent.

The over-all proportion of the eligibles expected to be receiving benefits under alternative II in the fiscal year 1948 is 63 percent. Were it a full 100 percent instead of 63 percent, the amount of primary benefits in fiscal year 1948, comparable to the figure shown in table 7, would be about \$400 million instead of \$239 million. The amount of benefits to wives and children would be about \$75 million instead of \$43 million. Total disbursements, including administrative expenses, accordingly, would be about \$700 million instead of \$492 million. Thus, assuming 100 percent retirement during fiscal year 1948 under alternative II, the trust fund at the beginning of the 5-fiscal-year period would be about 6 times the highest annual disbursements of the period.

ACTUARIAL STATUS OF THE TRUST FUND

The third annual report of the board of trustees indicated that actuarial study was under way to make use of additional data on population, coverage, and other pertinent subjects in a revision of the illustrations of the long-run costs of old-age and survivors insurance. Such revision is a continuous process. The transition from the large volume of unemployment in the recession of 1938 to the full wartime employment of 1943 and 1944 has involved striking changes due to the war, many of which have been discussed both in the third annual report and in the present one.

Under the old-age and survivors insurance system, benefits accrue to the aged and to orphaned children and their widowed mothers surviving deceased wage earners. Thus, there are certain basic cost factors which must be continuously recognized in analysis of the costs of the old-age and survivors insurance program. These factors include (a) population; (b) mortality; (c) family composition; (d) number of years of credited employment prior to qualification for benefits; (e) remarriage of widowed beneficiaries; (f) employment of widowed

more than one-half of the total number of eligible persons. Moreover, the average age of all persons within the age group 70 and over will be continuously increasing.

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beneficiaries, older children, and aged; and (g) income in covered employment and its distribution among calendar quarters (as affected by a changing workweek, changing productivity, effectiveness of collective bargaining, long-term trends, cyclical changes, etc.).

(a) *Population.*—Population development depends upon the progress of the existing population as changed by future births and immigration and by future deaths and emigration. The 1940 census showed some 600,000 more persons aged 65 and over than had been indicated as probable from an examination of the 1930 census and the deaths and migration between the 2 censuses. It is also thought that the familiar under-registration of children has continued into the 1940 census. The Bureau of the Census has made comprehensive reports as to the many types of error and bias believed present in the latest enumeration.

Birth rates declined for a number of years, due to the increasing percentage of the population completely above the childbearing ages, the increasing proportion at the higher ages where childbearing is less frequent, and changed attitudes toward the size of the family. However, the long decline of birth rates lasting into the thirties has been reversed since 1937. There also appears to be a marked increase in the rate of first births, tending to increase the proportion of the insured population with dependents. This increases the amount of insurance for survivors' benefits under old-age and survivors insurance. The diminution in the proportion of large families has had only a limited effect upon benefits under this program, since aggregate benefits for a family are not increased for children beyond the fourth child in the absence of a mother drawing benefits, nor beyond the third child with the mother drawing benefits.

Immigration which had been heavy up to the end of the nineteenth century and rather intermittent in the early portion of the twentieth century was definitely checked in the 1930's, and most population forecasts have assumed that no return to the old immigration rates may be expected.

Another population factor to be considered is that of emigration. The war has already led to one type of emigration of considerable magnitude in the American Expeditionary Forces to Africa, England, Europe, Asia, and the Pacific. After the last war, some members of our Expeditionary Forces did not return, but continued to live as private individuals in the countries where they had been stationed during the war. There is continuous discussion concerning the extent of the manpower requirements of the Allied Military Government and the use of American technicians in many countries of the world after the war. The 1943 report of the National Resources Planning Board on future population development gives certain adjustment figures to recognize the effects of the war. Extensive analysis of this and similar material will be made over the next few years. It will call for continuous adjustment in cost estimates.

The possible future progress of the population has been indicated in two different reports:

- (1) The 1935 report prepared by the staff employed by the Committee on Economic Security in developing long-range cost estimates for the original program of old-age benefits.

(2) The National Resources Committee's report on future population trends issued in 1938. The actual experience from which projections were made in that report did not go beyond 1936.

In the light of the as yet unpredictable population results of the war, it has seemed well to retain in the low-cost assumptions the rather cautious population forecast made by the staff of the Committee on Economic Security, as representative of one reasonable rate of growth. At the same time the National Resources Committee's medium population forecast of 1938¹ which has been used in other studies seems suitable as an indication of the potential increase under high-cost assumptions. Table 9 indicates the two assumptions used as to population growth for the group aged 20 to 64, inclusive, and the group aged 65 and over.

TABLE 9.—Estimated population of United States aged 20 to 64 and 65 and over, in selected years, 1955-2000

[In thousands]

Calendar year	Ages 20-64			Ages 65 and over		
	Total	Men	Women	Total	Men	Women
Low assumptions (Committee on Economic Security)						
1955.....	88,400	44,100	44,300	12,200	6,000	6,200
1960.....	89,400	44,600	44,800	13,600	6,600	7,000
1980.....	90,600	45,600	45,000	17,000	7,900	9,100
2000.....	87,400	44,100	43,300	18,200	8,600	9,600
High assumptions (National Resources Committee medium)						
1955.....	88,200	43,900	44,300	12,800	6,200	6,600
1960.....	89,500	44,600	44,900	14,800	7,100	7,700
1980.....	91,600	46,300	45,300	22,100	10,400	11,700
2000.....	90,800	46,300	44,500	26,400	12,800	13,600

It is not believed that future population progress is exactly represented by either of the two series used. The striking sequence of depression, recovery, recession, and war, with tremendous unsettled influences throughout the world, leave doubtful in any nation the future trends of mortality, fertility, or migration. The figures shown in table 9 represent two possible developments. Because both series have been used for some time and because the detailed 1940 census data and the National Resources Planning Board population study of 1943 have not yet been adequately adapted for cost purposes, use of these older bases has been continued in this report, with both series extended from their terminal year of 1980 to the year 2000.

(b) *Mortality*.—Mortality rates by age and sex have been steadily improving since the turn of the century for both sexes and virtually all ages up to 60, with very little change at ages above 60. Both the National Resources Committee study of 1938 and the National Resources Planning Board study of 1943 make assumptions of a future improvement in mortality as plausibly indicated by the past history

¹ A new report of the National Resources Planning Board, dated August 1943 and entitled "Estimates of Future Population of the United States, 1940-2000," was published at the end of 1943.

of mortality improvement. In the low-cost assumptions discussed in this section, very little improvement in mortality rates is assumed. In the high-cost assumptions, some improvement is assumed but their assumption of improvement beyond age 65 is believed by many to be too optimistic.

Mortality is of major importance for estimates of future benefits for the aged, and of importance also in determining potential deaths among the younger fathers which will give rise to mothers' and childrens' survivor benefits. Studies are still under way, both in the Social Security Board and in the Bureau of the Census, as to what current mortality rates may be after allowing for corrections of errors and bias in the most recent census; and following these there will be further studies along the line of the recent National Resources Planning Board's mortality forecasts. Such remarkable developments as insulin, penicillin, the sulfa drugs, and other more recent discoveries carry potential mortality improvements, particularly at the middle and higher ages, which may yet justify the lighter mortality assumed in the high-cost illustrations.

(c) *Family composition.*—Births have significance for old-age and survivors insurance costs, not alone because of their importance in building up the population of the future, but also because the system provides an orphaned child under the age of 18 with one-half of a primary benefit and a widowed mother with three-fourths of a primary benefit so long as she has children in her care. The maximum benefit payable to a family is twice the primary benefit. Thus, the distribution of families by size is of importance in determining the extent of prospective benefits.

The early claims experience is probably not typical because of lags in getting under way and the sequence of falling and rising birth rates over the last dozen years. During the next few years, as a result of the currently increased birth rate, a smaller proportion of nonchild families and a change in the distribution of orphan children by age is expected.

It is also important to consider the trends in those deaths which terminate husband-wife families, the trends in divorce which have the same effect, and determinations as to what constitutes a "separation" of spouses to be recognized under the law. Important also are the age relationship between husband and wife and the differential mortality by sex and by marital condition. Experience has shown that at almost all ages women have a lighter mortality than men and that the mortality of married persons is significantly lower than that of single or ex-married persons. The large proportion of marriages in which the wife is younger than the husband results in a predominance of terminations of marriage by the husband's rather than the wife's death. Further studies concerning these various factors are planned in order to secure a more complete understanding of the relationships.

Thus, the three elements of population, mortality and family composition, constitute the warp and woof for estimates of future potential beneficiaries, with the other influences discussed in (d) through (g) below forming the specific patterns of beneficiaries.

Old-age-insurance beneficiaries are composed of several different types of recipients. Table 10 shows the various illustrative rates of

progress in the number of beneficiaries, distinguishing between male primary beneficiaries, female primary beneficiaries, wives of male primary beneficiaries, children of primary beneficiaries, aged widows of male primary beneficiaries or of deceased employees, and "wholly dependent" aged parents of deceased covered employees without widows or children.

TABLE 10.—*Old-age-insurance recipients of monthly benefits in selected years, 1955–2000*

[In thousands]

Calendar year	Male primary beneficiaries	Female primary beneficiaries	Wives of primary beneficiaries	Children of primary beneficiaries	Aged widows	Dependent parents
Low assumptions						
1955.....	1,300	200	400	60	450	80
1960.....	1,700	350	550	80	750	110
1980.....	3,700	1,100	1,100	160	2,300	130
2000.....	4,500	1,400	1,400	170	3,300	130
High assumptions						
1955.....	1,800	250	600	85	450	140
1960.....	2,500	450	850	100	800	200
1980.....	5,700	1,500	2,100	250	2,600	300
2000.....	8,400	2,500	3,400	300	4,500	250

Whereas old-age-insurance beneficiaries make up the bulk of the prospective recipients under old-age and survivors insurance, the young survivors composed of half-orphaned and full-orphaned children and widowed mothers of the former, will be responsible for a considerable amount of benefits. Table 11 lists the two groups separately for inspection and for comparison between the high and low examples. In table 10 the high assumptions show, as expected, a larger number of beneficiaries; this is because the lighter mortality rates of the National Resources Committee population projections result in a greater number and proportion of aged persons. This lighter mortality, plus the assumed lower birth rate, has the opposite effect in table 11; here the assumed population projection results in a smaller number of child and mother beneficiaries under the high assumptions than under the low.

TABLE 11.—*Young survivor insurance recipients of monthly benefits in selected years, 1955–2000*

[In thousands]

Calendar year	Low assumptions		High assumptions	
	Orphaned children	Widowed mothers	Orphaned children	Widowed mothers
1955.....	1,200	300	1,100	250
1960.....	1,400	350	1,200	300
1980.....	1,600	400	1,200	250
2000.....	1,600	400	1,200	250

(d) *Credited employment and insured status.*—The number of persons who gain protection through becoming “insured” under old-age and survivors insurance depends upon the volume and pattern of their work in employments covered by the program and upon the amount of taxable wages earned in such work. A discussion of the latter factor is presented later under item (g). The old-age and survivors insurance program covers primarily employees in industry and commerce. Illustrations are presented in table 12 showing the percentage of the population insured by virtue of current or previous work experience for age groups above and below 65.

TABLE 12.—*Proportion of the population insured¹ under old-age and survivors insurance in selected years, 1955–2000 (including primary beneficiaries)*

Calendar year	Low assumptions				High assumptions			
	Men		Women		Men		Women	
	20-64	65 and over	20-64	65 and over	20-64	65 and over	20-64	65 and over
	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
1955.....	54	30	18	5	64	34	22	5
1960.....	56	34	19	7	66	40	24	7
1980.....	59	54	21	18	71	60	30	19
2000.....	60	60	21	21	71	71	32	32

¹ “Insured,” as distinct from “covered,” means sufficient participation in covered employment to have become eligible for benefits upon death or retirement; a person may be “covered” (i. e. with past or current wage credits) without having reached or maintained an “insured” status.

The percentages shown in table 12 for ages 65 and above include primary beneficiaries drawing benefits to the extent shown by table 13, which indicates the proportion under both low and high assumptions.

TABLE 13.—*Proportion of the population aged 65 and over receiving primary benefits (excludes women eligible to receive benefits as wives, widows, and parents)*

Calendar year	Low assumptions		High assumptions	
	Men	Women	Men	Women
	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
1955.....	22	3.5	29	4
1960.....	26	5	35	6
1980.....	46	13	55	13
2000.....	52	14	66	14

The proportions of the population shown in tables 12 and 13 are derived from application of the coverage and insured status specifications of old-age and survivors insurance to the end results of qualification through a sufficient number of quarters with a covered wage of at least \$50.

In the several tables presented above, only potential long-range trends have been set down without recognition of cyclical or periodic

irregularities. Bearing this in mind, certain trends may be observed in these illustrative tables of numbers of beneficiaries:

- (1) An over-all uptrend in beneficiaries under all types of old-age benefits—save in the relatively unimportant case of dependent parents;
- (2) A very slight increase after 1960 in the number of children and the widowed mothers who are beneficiaries;
- (3) The relatively and increasingly small proportion of survivors' benefits in relation to old-age benefits;
- (4) The relatively rapid advance in the percent insured at age 65 and over (including those drawing benefits) when compared with the percent insured aged 20 to 64, inclusive; and
- (5) The rapid rise in the percent drawing primary benefits from 1955 to 1980, and the slowing down of the increase in the percent in the following 20 years.

(e) *Remarriage rates.*—Remarriage of "young widows" is a rather important cost factor. The greatest possible duration of benefits occurs among the younger widows, who as mothers of young children can expect to receive benefits for many years. These are also the women with the greatest chance of remarriage. Among the older women with fewer prospective years of benefit receipt (their children being nearer age 18), the probability of remarriage is lower. Remarriage rates are affected both by age of widow and duration of widowhood. Use of these rates results in considerable reduction in the prospective cost of benefits to young widows. It also results in considerable reduction in the deferred portion of benefits otherwise payable to widows upon reaching age 65. This serves as a tangible reduction in the volume of "life insurance" afforded by the program when such "life insurance" is interpreted as the present value, in case of the worker's death, of prospective benefit payments to his surviving dependents. It is estimated that at the present time the program is providing approximately \$50 billion of "life insurance" protection for survivors.

(f) *Employment of beneficiaries.*—During the depression, it is probable that many children who should have been in school were working. Moreover, the labor market was increased by many married women seeking employment to reinforce what they hoped might be only a temporary inadequacy in their husband's income. As indicated quantitatively earlier in this report, during the war years a very large group of elderly persons have acquired eligibility for benefits under old-age and survivors insurance. Many of these after receiving some benefits have returned to work and suspended their benefits. There are also many instances where covered employees have announced their intention to retire but have postponed retirement. The greatest proportion of those eligible, however, have shown no evidence of intention to retire. The abnormal work opportunities are also shared by older children, by widowed mothers, and by aged wives of potential primary beneficiaries. Thus, assumptions as to the employment of beneficiaries are indissolubly woven in with all

the other cost elements entering into the number and cost of benefits.

(g) *Income in covered employment.*—One of the most striking changes in earned income on record has taken place between 1938 and 1943. Whereas a considerable group of individuals in non-war employments have had very little change in their incomes, large groups in manufacturing have had marked increases both in their basic rates of pay and in the number of hours in their working week. Moreover, there has been a great falling off in partial unemployment with a greater stability of work from week to week. This change in income status will give a great many more persons quarters of coverage than had been the case in pre-war years. The increase in the persistency of employment and thus in the number of quarters credited results, at least temporarily, in an increase in the number of persons with an insured status—either fully or currently insured.

Assumptions as to future covered wages are essential in developing illustrative actuarial projections. The trend of wages in the past has been unquestionably of an upward character. The level of earnings at the end of the reconversion period and their movement thereafter will, of course, affect contributions and benefits under the program, since both are geared to covered earnings. Some indirect recognition of uncertainties with respect to wages is given in the adoption of low and high sets of average wage assumptions. This point is discussed further in connection with the illustrative cost charts presented below.

None of the data derived from old-age and survivors insurance records are yet fully useful for long-range cost purposes. Average reported wages were much lower in the early years of the system than they are currently. The increase which has occurred is indicated in table 14.

TABLE 14.—Average taxable wages of workers with taxable wages under old-age and survivors insurance, by year and sex, 1937-43

Calendar year	Average taxable wage			Calendar year	Average taxable wage		
	Total	Men	Women		Total	Men	Women
1937.....	\$901	\$1,042	\$541	1941.....	\$1,023	\$1,197	\$581
1938.....	834	961	507	1942 ¹	1,143	1,349	640
1939.....	881	1,016	536	1943 ¹	1,310	1,589	753
1940.....	934	1,078	556				

¹ Preliminary estimates.

The high assumptions use an average annual taxable wage of \$2,000 for men working in four quarters of a year, \$1,000 for men working three quarters, \$400 for men working two quarters, and \$200 for those working one quarter. The corresponding average wage figures used for women under the high assumptions are \$1,200 for four quarters, \$600 for three quarters, \$250 for two quarters, and \$100 for one quarter. Under the low assumptions, the four-quarter average wage assumption used for males is \$1,500, with \$750 used for three quarters, \$300 for two quarters, and \$150 for one quarter. The low four-quarter average used for women is \$900, \$450 being used for three quarters, \$200 for two quarters, and \$90 for one quarter. The ratios to the annual four-quarter averages of approximately 50 percent for three

quarters, 20 percent for two quarters, and 10 percent for one quarter parallel fairly closely the actual ratios observable in old-age and survivors insurance wage data for 1940 and 1941.

For purposes of determining the number of employed men under the low assumption, the male labor-force percentages by age of the 1940 census after subtraction of those seeking work were applied to the assumed future male populations; for the high assumption, corresponding percentages from the 1930 census of gainful workers were applied, they being relatively high in comparison with subsequent years. For women, percentages of the total female population represented by the 1940 female labor force minus those seeking work were applied against the assumed future female populations for the low assumption, while the total 1940 female labor force percentages were used for the high assumption, these being higher than those for 1930. It has been further assumed that the labor-force characteristics of those in covered employment will bear the same relation to those of all workers as existed in 1940 under old-age and survivors insurance.

Because the coverage of the system excludes several large categories of employment (agricultural, domestic, railroad, and public employment and the self-employed), there is a flow of workers between covered and noncovered employments as well as between covered employment and unemployment. The restricted coverage necessarily will result in large numbers of workers who have not had sufficient contact with the program to establish or maintain the insured status necessary for benefit qualification. The extent of contact is a function both of stability of covered jobs and of age; older persons are more settled in their work than younger persons. Table 15 illustrates differences in the extent of contact workers had with the program in 1941. Other data pertinent to this matter were presented by the Chairman of the Social Security Board in his testimony before the Ways and Means Committee of the House on January 13, 1944 (Hearings on an amendment, adopted by the Senate, to the Revenue bill of 1943 (H. R. 3687) freezing the Social Security tax rate at 1 percent for 1944, pp. 17-18).

TABLE 15.—Percentage distribution of covered workers under old-age and survivors insurance, by numbers of quarters with taxable wages, 1941¹

Classification	Total	Those with taxable wages in—			
		1 quarter only	2 quarters only	3 quarters only	4 quarters only
A. By 2 classes of taxable wages					
	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
Taxable wages under \$1,000.....	100	23.1	22.0	15.9	39.0
Taxable wages \$1,000 and over.....	100	.1	.5	1.4	98.0
All workers.....	100	13.1	12.6	9.6	64.7
B. By 2 age groups of workers					
Workers under age 35.....	100	15.3	15.2	11.1	58.4
Workers age 35 and over.....	100	10.1	9.3	7.6	73.0
All workers.....	100	13.1	12.6	9.6	64.7

¹ Includes all persons who earned any taxable wages during the calendar year. Data partly estimated.

The carrying through of the prospective progress of the program using the elements discussed above furnishes reasonable illustrations of future beneficiaries and costs, neither the lowest nor the highest conceivable, the values derived being within the outside boundaries of possibility. Experience to date is very limited, the payment of monthly benefits having begun only in 1940. As payments got under way, the limitations of coverage and the insured status requirement excluded large numbers of potential beneficiaries. Payments were further delayed by the "lag" with which any new program commences. In recent years, as the lag has lessened, payments among the relatively small number yet eligible to receive them have been limited by delays in the claiming of benefits occasioned by the war. The long-range illustrations look beyond these various limitations, and furnish some indication of the trend in the costs of the old-age and survivors insurance program.

Table 16 sums up the previous discussion in terms of illustrative numbers of beneficiaries. The category "younger survivors" comprises orphaned children and their widowed mothers. Widows age 65 and over are included under the "old age" category.

TABLE 16.—*Old-age and survivors insurance beneficiaries in receipt of benefits in selected years, 1955-2000*

[In thousands]

Calendar year	Low assumptions			High assumptions		
	Old-age beneficiaries	Younger survivors	Lump sum ¹	Old-age beneficiaries	Younger survivors	Lump sum ¹
1955.....	2,500	1,500	270	3,300	1,300	270
1960.....	3,500	1,700	300	4,900	1,500	300
1980.....	8,500	2,000	550	12,500	1,400	550
2000.....	10,800	2,000	600	19,300	1,400	750

¹ Represent number of deaths during the year resulting in lump-sum benefits.

It is to be noted that in addition to the assumptions already discussed, the long-range cost illustrations include assumptions relating to the length of the period of retirement, invalidity, and interest rates.

There now follows a presentation of the illustrative cost results of combining values for the various elements discussed earlier in this section. The revised long-range cost illustrations, which are subject to continual testing, refinement, and adjusting, are presented in the accompanying charts and in table 17. These exhibits commence with the year 1955. The gap between 1948, for which alternative figures are shown earlier in this report, and 1955 is purposely left open to emphasize the very great uncertainty with respect to the transition period following the war.

TABLE 17.—Two illustrations of benefit payments and tax income of the Federal old-age and survivors insurance trust fund, by quinquennial years, 1955–2000¹ (subject to the limitations stated in the text)

[In billions]

Year	Low assumptions		High assumptions		Year	Low assumptions		High assumptions	
	Benefit payments	Tax income	Benefit payments	Tax income		Benefit payments	Tax income	Benefit payments	Tax income
1955.....	\$0.9	\$2.1	\$1.2	\$3.3	1980.....	\$2.6	\$2.2	\$3.9	\$3.4
1960.....	1.2	2.1	1.7	3.3	1985.....	2.9	2.2	4.6	3.4
1965.....	1.5	2.2	2.2	3.4	1990.....	3.1	2.2	5.3	3.4
1970.....	1.9	2.2	2.7	3.4	1995.....	3.2	2.2	5.8	3.4
1975.....	2.3	2.2	3.2	3.4	2000.....	3.2	2.2	6.1	3.4

¹ The figures in this table correspond to the values used in the charts.

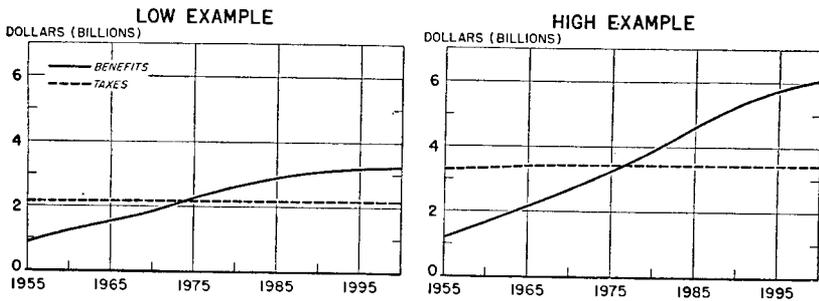
As indicated in the charts and table, taxes at the rate of 6 percent of taxable pay roll (the rate scheduled to become effective in 1949) would exceed benefits during the 50's and 60's under both low and high examples. This would result in increases in the funds accumulated, and the interest earnings thereon would be available later to meet a portion of the benefit payments. This could forestall, perhaps indefinitely in the case of the low example, the necessity for (i) an increase above 6 percent in pay-roll tax rates; (ii) contributions on the part of the Treasury derived from general taxes as distinct from pay-roll taxes; or (iii) liquidation of the trust fund for purposes of meeting benefit obligations when these come to exceed pay-roll contribution income. Under the high example, such interest income would substantially defer, but only defer, the time when one or more of these other sources would have to be tapped to assist in financing statutory benefits.

The charts show the steady rise in benefit payments under the two widely different sets of conditions discussed earlier in this section. They show the large increases, relatively and in absolute quantities, which would occur even after 1980, particularly within the framework of the high assumptions. Because of the fixed nature of the assumptions, the charts result in smooth curves and hence do not show the irregularities and periodic cyclical variations which would surely develop. These irregularities are expected to be far more pronounced in the curves pertaining to taxes than in those representing benefits. This is because the dollar amount of the benefit roll, after the system is well established, will contain a large proportion of fixed payments to permanently retired persons. The pay roll of covered workers wherefrom the tax income springs is, however, quite sensitive to current fluctuations, through increases or decreases in job opportunities, ups and downs in the workweek, and changes in unit rates of pay. Thus, the charts indicate more smoothness of income and disbursements, especially the former, and more stability in the percentage relationship of the two than actually can occur. In fact, for demographic reasons alone, as discussed earlier in this section, the system cannot be expected even eventually to level out to a fixed relationship between contributions and benefits.

Another factor mentioned earlier but not used in the actuarial projections is the trend, exhibited in the past, of an irregular but upward movement in earnings, both on a dollar basis and in the form of real wages. If this secular trend continues, then—other things being equal—the curves of benefits and taxes would both be more steeply ascending than shown. The upward change in the tax curves, however, would be far more accentuated than would be such change in the benefits curves. There are several reasons for this, the important one being that the benefit increase would be dampened because (i) the basis for benefits is the average monthly wage up to the maximum \$250; 40 percent is taken on the first \$50 thereof and 10 percent operates on that part above \$50; as average wages increase, and as more persons reach the \$250 maximum, a larger portion of such wages falls in that part of the benefit formula to which the 10 percent rather than the 40 percent rate applies, thus reducing benefits in relation to wage, and consequently in relation to taxes; and (ii) any year's taxes are substantially based on the covered wages of that year, while any year's benefits in force are based on weighted composite wages of all previous years in which the insured persons on whose account the benefits are

ILLUSTRATIVE LONG-TERM TRENDS OF BENEFITS AND TAXES*

(SUBJECT TO THE LIMITATIONS STATED IN THE TEXT)



*THESE CURVES IMPLY SMOOTHER PROGRESSION THAN IS LIKELY TO OCCUR. THE TAX CURVES PARTICULARLY WOULD BE SUBJECT TO VARIATIONS REFLECTING TEMPORARY FLUCTUATIONS IN EMPLOYMENT CONDITIONS. THE BENEFIT CURVES WOULD BE MORE STABLE AS THEY APPLY LARGELY TO PERMANENTLY RETIRED INDIVIDUALS. ALTHOUGH CHANGES IN EMPLOYMENT CONDITIONS CAN HAVE CONSIDERABLE INFLUENCE ON THE RATE AT WHICH PERSONS RETIRE, (SEE TEXT FOR FULLER DISCUSSION)

paid worked in covered employment, thus including in future years, wages of as much as 60, 70, or more years previously. In view of these facts, continuation of the past upward trend in wages would postpone for a longer period, or possibly even permanently, the time at which benefits computed under the present formula would rise above taxes at the rates now scheduled.

In addition to excluding the assumption of increasing wages, the cost examples given have avoided dealing with various other important secular trends with diverse effects on costs which cannot now be adequately extrapolated into the future, such as: (i) Lengthening of the period of childhood or preparation for work; (ii) an earlier age of retirement, conceivably reversible under circumstances of improved health and good employment conditions; (iii) the long-time trend of migration out of agriculture and domestic service into occupations

now covered by the program; (iv) the downward trend in hours of work; and (v) the upward trend in the employment of women outside the home. Recognition of these trends is another factor, in addition to those discussed in more detail above, which prompts the board of trustees to present the long-range cost figures with reservations.

SUMMARY AND CONCLUSION

The board of trustees has repeatedly emphasized in its annual reports that the primary consideration with respect to the size of the trust fund is its adequacy to assure the financial integrity of the old-age and survivors insurance program. There is a large measure of uncertainty with regard to economic developments in the next 5 years—particularly if a part of the period should be in the post-war phase. Neither the present nor the immediately prospective level of employment can be confidently considered representative of what is likely to be the long-term experience. The probable post-war level of benefit payments is high and the trend of such payments will be an ascending one over the next generation and longer. With present benefit payments in the magnitude of \$180 million a year, over the period of several decades disbursements will increase some 25 to 30 times. Prudent management requires emphasis on the long-range relationship of income and disbursements.

It is estimated that the level premium cost of the benefits now provided by the system is between 4 and 7 percent of the covered pay roll. This means that if pay-roll taxes of this magnitude (employer tax and employee taxes combined) had been levied from the beginning, and were continued indefinitely, the system as a whole would be just self-supporting. But Congress has now maintained old-age and survivors insurance tax rates at 1 percent each on employees and employers for over 7 years instead of permitting the scheduled increases of the act to become effective, although in recent years economic conditions have imposed no obstacle in such increases. The tax rates maintained during this period have been equal to only one-half of the low estimate of the level premium cost of the system.

It is clear that the present rates of contributions even under the most favorable prospects are not more than half the minimum level premium cost of the system. Moreover, they are only one-third the ultimate maximum rates provided by statute. The board believes that since the existing rates of contribution are less than those necessary to support the system on a level-premium basis (or bear such proportion of the total cost as it is believed suitable to meet by employer and employee contributions), and general economic conditions are such that increased rates of contribution could be borne without injury to the economy, the rates of contribution should be raised. It is clear, in the opinion of the board, that, under present conditions, an increase in contribution rates would cause no hardship; but, on the contrary, would assist the economic stabilization program by the absorption of excess purchasing power. The board of trustees believes, therefore, that in the interest of the long-run welfare of the system and of the general economy, contribution rates should be immediately increased to 2 percent each for employers and employees.