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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

PURSUANT TO LAW THE SEVENTH ANNUAL REPORT OF THE BOARD OF TRUSTEES OF THE FEDERAL OLD-AGE AND SURVIVORS INSURANCE TRUST FUND

MARCH 5 (legislative day, FEBRUARY 19), 1947.—Referred to the Committee on Finance

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LETTER OF TRANSMITTAL

BOARD OF TRUSTEES OF THE FEDERAL
OLD-AGE AND SURVIVORS INSURANCE TRUST FUND,
Washington, D. C., January 3, 1947.

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

SIRS: We have the honor to transmit to you the Seventh 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,

JOHN W. SNYDER,
Secretary of the Treasury, and Managing Trustee of the Trust Fund.
L. B. SCHWELLENBACH,
Secretary of Labor.
WATSON B. MILLER,
Federal Security Administrator.

SEVENTH 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, 1946, the five fiscal years subsequent to that date, and the long-range actuarial status of the fund, is the seventh 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 serve in an ex officio capacity. From January 1, 1940, through the fiscal year covered by this report, 1945–46, the three members of the Board were the Secretary of the Treasury, the Secretary of Labor, and the Chairman of the Social Security Board. On July 16, 1946, the President's Reorganization Plan No. 2 went into effect; this plan abolished the three-member Social Security Board, and the functions of the Chairman of the Social Security Board as ex officio member of the Board of Trustees were taken over by the Federal Security Administrator. By agency order, the Commissioner for Social Security has been designated by the Administrator as his alternate on the Board. The remaining membership of the Board is unchanged. The Secretary of the Treasury serves as managing trustee. The present document is a joint report of the three trustees.

The fiscal year 1946 was dominated by the economic dislocations and readjustments occasioned by the reconversion from war to peace. Following VJ-day unemployment as measured by the United States Bureau of the Census rose and total industrial production declined sharply. The upward movement in unemployment, however, was checked in a relatively few months after reaching a peak of less than 3,000,000 in the first week of March 1946. In the last quarter of the fiscal year, unemployment was less than a third of the 1940 average. Total civilian employment declined after VJ-day but the drop in the early part of the year was partially offset by increases in employment in the last quarter. In June, due in large part to a seasonal rise in the labor force, total employment reached almost 57,000,000—a new peak of civilian employment. Nonagricultural employment in June 1946, however, was only slightly above the level in June of the previous year. Although production was considerably below wartime levels, production of goods and services in the last half of the fiscal year 1946 was at the highest point in peacetime history.

Despite the record volume of production of civilian goods, the high level of consumer income coupled with war-born shortages in consumer and producer's goods caused inflationary pressures on prices and wage rates.

Operations under the old-age and survivors insurance program have been substantially affected by reconversion activities. Wages on which contributions and wage credits were based declined in the first quarter of the fiscal year to approximately 8 percent below the level of the corresponding period of the preceding year; by the last quarter of the fiscal year wages covered under the program rose to approximately the wartime level. Contributions collected for the entire fiscal year 1946 were only 5 percent below the war peak. As a result of the cut-backs in war industries, many aged persons and women withdrew from the labor force. The number of claims for old-age and survivors insurance benefits rose sharply. During the fiscal year, 256,000 workers aged 65 and over entered the benefit rolls, in contrast to 133,000 in the preceding 12 months. The greatest relative increase in beneficiaries was in the number of retired workers and their wives, in contrast to years before in which survivors' claims rose more rapidly than claims for retirement benefits.

The war undoubtedly caused long-run changes of a more or less permanent character in various phases of our economy which will significantly affect the financing of old-age and survivors insurance. In earlier reports of the Board of Trustees an effort was made to outline the special influences of the war on the trust fund and to suggest the ways in which the higher wartime earnings, the shifts in the labor force during the war, the increased employment of women, the entrance of many other temporary workers, and the deferred wartime retirements would affect the finances of the old-age and survivors insurance trust fund in the years ahead. In the present report, a detailed analysis of these factors is omitted; however, in the statements on the expected operations during the immediate 5-year period ahead and on the actuarial status of the fund, wartime influences as well as the economic activities during the reconversion period have been taken into account. There are, of course, many uncertainties involved. Because of these uncertainties, the estimates which are contained in the report are of necessity uncertain, being subject to the assumptions regarding the economic outlook.

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 the program are handled through this fund. The primary source of the fund's receipts is amounts appropriated to it under permanent appropriation, on the basis of contributions paid by workers and employers in employments covered by the Federal Insurance Contributions Act. The Federal Insurance Contributions Act requires all employees and employers, excepting those in specifically excluded employments, to pay contributions with respect to the wages of individual workers, disregarding amounts 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 100 percent of 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. Public Law 495 of the Seventy-eighth Congress further continued the 1-percent rates throughout 1945, while the Revenue Act of 1945 extended them through 1946. The Social Security Act amendments of 1946 continued the 1-percent rate for an additional year through 1947.

At the end of 1947, accordingly, the 1-percent rates of contribution will have been in effect for 11 years. Existing provisions of law provide for the 2½-percent rates to go into effect on January 1, 1948, and the 3-percent rates 1 year later 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 source of revenue for the trust fund is provided in section 902 of the Revenue Act of 1943. This law amended section 201 of the Social Security Act and authorizes 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. No appropriations have yet been made under this authorization.

The Social Security Act Amendments of 1946 provide survivorship protection to certain World War II veterans for a period of 3 years following their discharge from the armed forces. The 1946 amendments authorize a Federal appropriation to reimburse the Federal old-age and survivors insurance trust fund for such sums as are withdrawn to meet the payments to survivors of World War II veterans under the amendment.

Expenditures under the old-age and survivors insurance program are paid out of the trust fund. These expenditures for the fiscal year ended 1946 and previous years 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 under the program as are authorized by section 201 (f) of the act. Beginning with the fiscal year 1947, pursuant to the Labor-Federal Security appropriation Act of 1947, approved July 26, 1946, wages and salaries for the Bureau of Old-Age and Survivors Insurance are charged directly to the trust fund and are not reimbursed from the fund as they were in the preceding fiscal years. After July 16, 1946, the effective date of the Reorganization Plan No. 2, the Federal Security Administration certifies benefit payments to the managing trustee, who makes the payments from the trust fund in accordance therewith. Prior to July 16, 1946, certifications for payments were made by the Social Security

Board. Payments are made from an uninvested balance held in the fund to the account of the disbursing officer of the Treasury.

The managing trustee invests that portion of the trust fund which, in his judgment, is not required to meet 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 to meet a portion of the inevitable future long-term rise in benefit disbursements, and is 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 both because the number of persons aged 65 and over will be increasing for many decades, and because an increasing proportion of such aged persons will be qualifying for benefits under the old-age and survivors insurance system.

At the beginning of 1946 there were about 10,000,000 persons aged 65 and over, equivalent to 7.3 percent of the total population. According to a "medium" estimate of the United States Bureau of the Census, the number of persons aged 65 and over may increase to about 20,000,000 or about 12 percent of the population, at the end of 40 years. The effect on the finances of the old-age and survivors insurance system of this expected change in the number of aged persons will be even greater than may at first appear. This is because, compared with the present situation, a larger proportion of aged persons 40 years hence is expected to be eligible to receive benefits under the program. 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.

The trust fund, furthermore, serves in part as a reserve against short-run 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.

SUMMARY OF OPERATIONS OF TRUST FUND, FISCAL YEAR 1946

A statement of the income and disbursements of the Federal old-age and survivors insurance trust fund in the fiscal year which began on July 1, 1945, and ended on June 30, 1946, 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 1946* [1]

Total assets of the trust fund, June 30, 1945		$6,613,380,619.69
Receipts, fiscal year 1946:		
Appropriations equivalent to contributions collected	$1,238,218,447.01	
Interest on investments	147,765,515.37	
Total receipts	1,385,983,962.38	
Disbursements, fiscal year 1946:		
Benefit payments	320,510,091.90	
Reimbursements for administrative expenses	37,426,918.22	
Total disbursements	357,937,010.12	
Net addition to trust fund		1,028,046,952.26
Total assets of the trust fund, June 30, 1946		7,641,427,571.95

[1] On basis of the Daily Statement of the U. S. Treasury.

The total receipts of the trust fund during the fiscal year 1946 amounted to $1,386.0 million. Of this total, $1,238.2 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, as amended. The total amount appropriated dropped only 5 percent below the record wartime appropriation in the preceding fiscal year. The additional $147.8 million of receipts consisted of interest received on investments of the fund.

Disbursements from the trust fund during the fiscal year 1946 totaled $357.9 million, of which $320.5 million consisted of benefit payments and $37.4 million of reimbursements to the general fund of the Treasury for administrative expenses of the insurance program. The total amount paid from the fund in the form of benefits during the fiscal year exceeded benefits paid in the fiscal year 1945 by 34 percent, reflecting the larger number of beneficiaries on the rolls.

A summary of receipts, disbursements, 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, January 1, 1940, to June 30, 1946*

[In millions]

	Fiscal year ended in—						
	1940 [1]	1941	1942	1943	1944	1945	1946
Receipts:							
Assets transferred from old-age reserve account in Jan. 1, 1940	$1,724.4						
Appropriations equivalent to contributions collected		$688.1	$895.6	$1,130.5	$1,292.1	$1,309.9	$1,238.2
Interest on investments	42.5	56.0	71.0	87.4	103.2	123.9	147.8
Total receipts [2]	1,766.9	744.1	966.6	1,217.9	1,395.3	1,433.8	1,386.0
Disbursements:							
Benefit payments [3]	9.9	64.3	110.3	149.3	184.6	239.8	320.5
Reimbursements for administrative expense	12.3	26.8	26.8	27.5	[4] 32.6	[5] 26.9	37.4
Total disbursements [2]	22.2	91.2	137.0	176.8	217.2	266.8	357.9
Total assets at end of period [2]	1,744.7	2,397.6	3,227.2	4,268.3	5,446.4	6,613.4	7,641.4

[1] January-June 1940, fund having been established in place of old-age reserve account on Jan. 1, 1940.
[2] Totals do not necessarily represent the sum of rounded components.
[3] Based on checks cashed and returned to Treasury.
[4] Includes some reimbursements applicable to outlays in other fiscal years.
[5] Adjusted for overreimbursements in prior years.

The distribution of benefit payments by type of benefit in fiscal years 1945 and 1946 is shown in table 3. Approximately 64 percent of the amounts paid from the fund as benefit payments in the fiscal year 1946 were accounted for by monthly benefits to persons age 65 or over—retired wage earners and their wives, and aged widows and parents of deceased wage earners. Approximately 28 percent of the 1946 payments represented monthly benefits 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 65. The balance of the benefits paid in the fiscal year 1946 consisted almost entirely of lump-sum amounts in cases where no survivor of an insured wage earner dying after 1939 was immediately entitled to monthly benefits.

TABLE 3.—*Estimated distribution of Treasury disbursements for benefit payments under the old-age and survivors insurance program, by type of benefit, fiscal years 1945 and 1946*

[In millions]

Type of benefit	1945		1946	
	Amount	Percent of total	Amount	Percent of total
Total	$239.8	100	$320.5	100
Monthly benefits	214.1	89	294.5	92
Primary (retired wage earners 65 or over)	109.1	46	153.9	48
Wife's (wives 65 or over of primary beneficiaries)	17.8	7	25.2	8
Widow's (widows 65 or over of wage earners)	16.9	7	23.7	8
Parent's (parents 65 or over of deceased wage earners)	.8	(1)	1.0	(1)
Child's (dependents of retired or deceased wage earners)	46.6	19	[2] 60.9	19
Widow's current (widows of wage earners with child beneficiary)	22.9	10	29.8	9
Lump-sum benefits (no survivor of deceased wage earner entitled to monthly benefits or wage earner died before 1940)	25.7	11	26.0	8

[1] Less than 0.5 percent.
[2] Includes $58,900,000 paid to children of deceased insured wage earners and $2,000,000 paid to children of primary beneficiaries.

At the end of the fiscal year 1946, approximately 1.5 million persons were receiving monthly benefits, amounting to $339 million on an annual basis. At the end of the preceding fiscal year, the monthly benefit rolls included 1.1 million persons to whom monthly benefits were being paid at an annual rate of $242 million. The average monthly benefit in current payment status for different types of family groups as of June 30, 1946, was as follows: Retired male worker only (with no eligible dependent), $24.80; retired worker and wife, $38.80; retired female worker only (with no eligible dependent), $19.80; widow (aged 65 or over) only, $20.20; widowed mother and one child, $34.20; widowed mother and two children, $48; and widowed mother and three or more children, $51.

The total assets of the old-age and survivors insurance trust fund, as reported in the sixth annual report of the board of trustees, amounted to $6,613 million on June 30, 1945. These assets increased to $7,641 million by the end of the fiscal year 1946, as the result of an excess of receipts over disbursements amounting to $1,028 million during the fiscal year. Table 4 compares the total assets of the trust fund and their distribution at the end of the fiscal years 1945 and 1946. The assets of the fund at the end of the fiscal year 1946 consisted of $7,549 million in the form of obligations of the United States Government, $44 million to the credit of the fund account, and $49 million to the credit of the disbursing officer.

TABLE 4.—*Assets of Federal old-age and survivors' insurance trust fund, by type, at end of fiscal year 1945 and 1946* [1]

	June 30, 1945	June 30, 1946
Total assets	$6,613,390,619.69	$7,641,427,571.95
Total investments	6,546,281,050.00	7,548,734,250.00
Treasury bonds (public issues)	1,238,681,050.00	1,638,334,250.00
2½-percent bonds of 1962-67	49,000,000.00	49,000,000.00
2½-percent bonds of 1963-68	100,000,000.00	100,000,000.00
2½-percent bonds of 1964-69	50,000,000.00	50,000,000.00
2½-percent bonds of 1965-70	400,000,000.00	400,000,000.00
2½-percent bonds of 1966-71	295,000,000.00	295,000,000.00
2½-percent bonds of 1967-72	344,681,050.00	744,334,250.00
Special issues	5,307,600,000.00	5,910,400,000.00
Treasury notes:		
2½-percent notes: Maturing June 30, 1946	319,200,000.00	
2⅜-percent notes: Maturing June 30, 1946	603,000,000.00	
2¼-percent notes:		
Maturing June 30, 1946	228,000,000.00	
Maturing June 30, 1947	450,400,000.00	450,400,000.00
2⅛-percent notes: Maturing June 30, 1947	240,000,000.00	240,000,000.00
2-percent notes: Maturing June 30, 1947	459,000,000.00	459,000,000.00
1⅞-percent notes:		
Maturing June 30, 1947	251,000,000.00	251,000,000.00
Maturing June 30, 1948	1,109,000,000.00	1,109,000,000.00
Certificates of indebtedness:		
1⅞-percent certificates of indebtedness:		
Maturing June 30, 1946	1,648,000,000.00	
Maturing June 30, 1947		3,401,000,000.00
Uninvested balances	67,099,569.69	92,693,321.95
To credit of fund account	32,007,240.42	43,526,625.17
To credit of disbursing officer	35,092,329.27	49,166,696.78

[1] On basis of Daily Statement of the U. S. Treasury.

That portion of the assets of the trust fund not required, in his judgment, to meet current withdrawals was invested by the managing trustee during the fiscal year 1946, in accordance with the provisions of section 201 (c) of the Social Security Act, as amended. This 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 acquired through purchase of outstanding obligations in the open market as well as an 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 1946 amounted to $1,002 million. New securities totaling $4,489 million were acquired through the investment of receipts accruing to the fund and the reinvestment of securities maturing during the year. Securities redeemed during the year totaled $3,486 million, including the following which matured on June 30, 1946: $319 million of 2½ percent special Treasury notes; $603 million of 2⅜ percent special Treasury notes; $228 million of 2¼ percent special Treasury notes; and $2,156 million of 1⅞ percent special certificates of indebtedness.

Of the new securities acquired, $4,089 million were in the form of special certificates of indebtedness, $688 million of which were redeemed during the year, and $3,401 million of which mature on June 30, 1947. These certificates were acquired at par and bear an interest rate of 1⅞ percent, this rate being determined by the average rate of interest on the interest-bearing public debt which prevailed at the end of the month preceding the date of issue of these securities. The remaining $400 million of securities acquired during the fiscal year were 2½ percent publicly offered Treasury bonds, 1967-72 series, dated November 15, 1945, on which $489,600 of accrued interest was paid. During the year, $346,800 of accrued interest paid out in the preceding fiscal year was received. The investment transactions of the trust fund during the fiscal year 1946 are summarized in table 5.

TABLE 5.—*Investment transactions of the old-age and survivors insurance trust fund, fiscal year 1946* [1]

Purchases		$4, 488, 653, 200
Special issues: Certificates of indebtedness	$4, 089, 000, 000	
Public issues: Treasury bonds	399, 653, 200	
Redemptions, special issues		3, 486, 200, 000
Treasury notes	1, 150, 200, 000	
Certificates of indebtedness	2, 336, 000, 000	
Net increase in investments		1, 002, 453, 200

[1] As recorded in 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 and with changes in the particular rates of interest on different classes of securities. During the fiscal year 1946 the average rate of interest on the public debt rose slightly: The rate was 1.996 percent on June 30, 1946, as compared with 1.936 on June 30, 1945. Because the rate remained below 2 percent, the interest rate on all special issues acquired during the fiscal year continued to be 1⅞ percent, the same rate at which special issues were acquired during the previous fiscal year. The average interest rate on all investment holdings of the fund declined in about the same degree in the fiscal year 1946 as it did in the previous fiscal year; it was 2.05 percent as of June 30, 1946, as compared with 2.13 percent on June 30, 1945, and 2.19 percent on June 30, 1944.

STATEMENT OF THE EXPECTED OPERATIONS AND STATUS OF THE TRUST FUND DURING FISCAL YEARS 1947–51

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 five fiscal years. The Board is required to include in the report estimates of both the income and the disbursements of the trust fund in each of the 5 years.

The income of the fund depends on the amount of taxable pay rolls in covered employment and the rates of contributions, and on the interest earnings of the fund. The disbursements from the fund depend on the number of persons, among those eligible for benefits, who apply for and receive benefits instead of continuing to work in covered employments, on the amounts of benefit to which they are entitled on the basis of past earnings, and on the operation of mortality rates on covered workers and beneficiaries. Consequently, both the income and the disbursements of the fund are substantially affected by general economic conditions.

The end of the war and the near-completion of reconversion have removed some of the uncertainty that dominated the estimates prepared for earlier reports. Nevertheless it is not possible to predict the course of economic events during the next 5 years with complete confidence. Although the outlook appears to be good, there is no assurance that economic activity will continue at a high level throughout the ensuing 5-year period.

In this report, the Board presents two sets of estimates of income and disbursements based on alternative economic assumptions. Alternative I shows the effect of reasonably optimistic assumptions; alternative II, the effect of reasonably pessimistic assumptions. Alternative II does not reflect the effect on income and disbursements should a deep depression materialize during the next 5 years. Therefore, the differences between the two estimates are not great.

For both alternative I and alternative II, it is assumed that the present statutory coverage of old-age and survivors insurance will remain unchanged throughout the period under consideration. The computations of tax income are based on present statutory rates of contribution, which are 1 percent each on employer and employee on wages paid during the calendar years 1946 and 1947, 2½ percent each during the calendar year 1948, and 3 percent each during the calendar years 1949, 1950, and 1951.

The two sets of estimates of the income and disbursements of the trust fund for each of the five fiscal years 1947 to 1951, together with the resulting assets of the fund at the beginning and the end of each fiscal year, are presented in table 6. In addition, figures for actual experience in the fiscal years 1941 to 1946 are shown.

Alternative I, which shows a relatively large increase in trust fund assets, is based on the assumption that a high level of employment and earnings is maintained without any major break at least through calendar year 1950. It is assumed that as current production approaches demand the upward movement of the price level will taper off, but that hourly wage rates will continue to increase slowly. Weekly earnings are assumed to increase somewhat less than hourly wage rates because of a gradual shortening of the work week. Unemployment is assumed to remain at a low level. On this assumption, the normal growth of the labor force plus some increase in average annual earnings push estimated pay rolls above the wartime peak.

TABLE 6.—*Operations of the Federal old-age and survivors insurance trust fund, fiscal years 1941–51, subject to the assumptions and limitations stated in the text* [1]

[In millions]

Fiscal year	Fund beginning of year [2]	Transactions during year							Fund at end of year
		Income			Disbursements			Net increase in fund	
		Total	Contributions [3]	Interest on investments	Total	Benefit payments	Administrative expenses		
Past experience:									
1941	$1,745	$744	$688	$56	$91	$64	$27	$653	$2,398
1942	2,398	967	896	71	137	110	27	830	3,227
1943	3,227	1,218	1,130	87	177	149	27	1,041	4,268
1944	4,268	1,395	1,292	103	217	185	[4] 33	1,178	5,446
1945	5,446	1,434	1,310	124	267	240	[4] 27	1,167	6,613
1946	6,613	1,386	1,238	148	358	321	37	1,028	7,641
Estimated future experience: [5]									
1947:									
Alternative I	7,641	1,565	1,403	162	464	423	41	1,101	8,742
Alternative II	7,641	1,572	1,409	163	464	423	41	1,108	8,749
1948:									
Alternative I	8,742	2,186	1,994	192	552	507	45	1,634	10,376
Alternative II	8,749	2,126	1,935	191	622	576	46	1,504	10,253
1949:									
Alternative I	10,376	4,069	3,829	240	635	590	45	3,434	13,810
Alternative II	10,253	3,645	3,411	234	728	683	45	2,917	13,170
1950:									
Alternative I	13,810	4,803	4,489	314	720	674	46	4,083	17,893
Alternative II	13,170	4,300	4,004	296	828	782	46	3,472	16,642
1951:									
Alternative I	17,893	4,951	4,556	395	807	761	46	4,144	22,037
Alternative II	16,642	4,411	4,046	365	916	870	46	3,495	20,137

[1] In interpreting the estimates in this table, reference should be made to the accompanying text which describes the underlying assumptions and their uncertainties. Alternative I assumes a continuing high level of employment and earnings throughout the period; alternative II assumes a brief recession with a fairly rapid recovery. Estimates were prepared September 1946.

[2] Totals shown for this and other columns do not necessarily equal the sum of rounded components.

[3] Amounts equal to contributions are automatically appropriated to the trust fund. Estimates for fiscal years 1947–51 are based on statutory rates of 1 percent each on employers and employees in calendar years 1946 and 1947, 2½ percent each in 1948, and 3 percent each thereafter.

[4] Represent charges against trust fund in respective fiscal years; actual administrative expenditures were about $30,000,000 in fiscal year 1944 and about $29,000,000 in fiscal year 1945.

[5] Excludes any payments, or reimbursements therefore, arising from (1) extension of survivors insurance protection to certain veterans of World War II (sec. 201, Public Law 719, 79th Cong.); and (2) coordination of survivors insurance provisions under the Railroad Retirement Act and title II of the Social Security Act (Public Law 572, 79th Cong.).

Benefit disbursements are assumed to increase substantially under alternative I, primarily because of the long-range upward trend in the number of beneficiaries. This trend, it is assumed, is augmented somewhat in the first year of the estimate period by the continued withdrawal from employment of persons eligible for benefits who were at work because of the wartime conditions in the labor market. The level of estimated disbursements, however, is lower under alternative I than under alternative II.

Under alternative I, aggregate income during the 5-fiscal-year period ending in 1951 would amount to $17.6 billion, including $16.3 billion in contributions and $1.3 billion in interest. Aggregate disbursements for the period would be about $3.2 billion, with the highest expected annual disbursement about $805 million. The trust fund at the beginning of the fiscal year 1947 would amount to about 9½ times the highest expected annual disbursement during the succeeding 5 fiscal years.

The other set of estimates, alternative II, is based on the assumption that prices will rise rapidly through most of the calendar year 1947. Wage rates and earnings are assumed to rise also, though less rapidly than prices. This development is assumed to terminate in a recession when prices reach levels that consumers and businesses are generally unwilling or unable to pay. During this downswing it is assumed that there will be a substantial increase in unemployment and in short-term and part-time work. The recession, however, is assumed to be brief and recovery fairly rapid.

In each of the 5 years except the fiscal year 1947, estimated pay rolls are smaller under alternative II than under alternative I because of a lower level of employment. Estimates of benefit disbursements under alternative II, on the other hand, increase more rapidly than under alternative I because a much larger number of older workers are assumed to withdraw from or to be unable to find jobs in covered employment.

The aggregate income of the fund for the 5 fiscal years, 1947–51, under alternative II would amount to $16.0 billion, including $14.8 billion in contributions and $1.2 billion in interest. Aggregate disbursements would be $3.6 billion, with the highest expected annual disbursement about $915 million. The trust fund at the beginning of the period would amount to about 8½ times the highest expected annual disbursements during the period.

The 1946 amendments to title II of the Social Security Act (Public Law 719) provide survivors insurance protection for a limited period to certain veterans of World War II. Specific provision is made in this legislation authorizing appropriations, out of general revenues,to the trust fund of amounts necessary to meet the additional cost of these benefits. These disbursements are clearly in the nature of reimbursable transactions, independently financed and employing the trust fund primarily as a practical mechanism for facilitating coordination of these benefit payments with potential survivors benefits under the old-age and survivors insurance program. It has, accordingly, been deemed appropriate to exclude from tables 6 and 7 estimates of any payments, or reimbursements therefor, arising from these amendments.

The 1946 amendments to the Railroad Retirement Act, contained in Public Law 572, establish a system of survivors insurance, and, in effect, amend the present survivors insurance system contained in title II of the Social Security Act. Under both systems, eligibility for and the amount of benefits payable to survivors, in general, will be based on an insured worker's combined earnings record under the two programs. As a result of this coordination, some survivors will become eligible under old-age and survivors insurance who otherwise would not have become eligible; on the other hand, some survivors who would have become eligible under old-age and survivors insurance will instead receive railroad survivors benefits. Because of the lack of relevant data, it is not possible at present to prepare estimates of the effect of these amendments on short-range disbursements from the trust fund. However, it is believed that the net additional disbursements, if any, will not constitute a serious drain on the trust fund during the five fiscal years 1947–51. Moreover, although no specific provision is contained in these amendments for the allocation of costs between the two systems, the legislation states that, not later than January 1, 1950, a joint report should be made setting forth the actual experience under each system and recommending such legislation as deemed advisable for the equitable distribution, between the two systems, of the financial burdens arising from awarded claims. Therefore, tables 6 and 7 do not include any estimates of disbursements arising from these amendments.

The estimates of benefit disbursements, like the estimates of contributions, are dependent primarily upon economic developments and so have a considerable range of possible variation. The number of workers in covered employment, their 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 all 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. However, the amount paid out for survivors' benefits will not be affected significantly by variations in economic conditions. While favorable opportunities for employment will operate to increase the number of new death claims, such a high employment situation will tend to have counterbalancing effects such as that of inducing many of the widows and other children eligible for survivors' benefits to forego them by working in covered employment. On balance, the amount paid out for survivors' benefits will differ so little whether the economic conditions of alternative I or alternative II are assumed that a single set of estimates is deemed appropriate for both alternatives (table 7).

On the other hand, the lower the level 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 were eligible for primary benefits in the past remained in covered employment (or, if they left covered employment, later returned to it) and did not receive benefits. During the course of fiscal years 1945 and 1946, however, this proportion began to decrease—slowly at first and then accelerating—as the volume of withdrawals of older workers from covered employment increased; thus, in the last 6 months of fiscal year 1946, 148,000 older workers were awarded primary benefits, as contrasted with 77,000 in the corresponding period of fiscal year 1945 and 53,000 in 1944. This represents the effect of an increased rate of withdrawal on the part of older workers, which may be expected to continue for some time to come, even under the favorable employment conditions assumed under alternative I, with a consequent decrease in the proportion of older workers remaining in covered employment and an increase in the proportion in receipt of primary benefits.

TABLE 7.—*Treasury disbursements for benefit payments, distributed by classifications of beneficiaries, fiscal years 1941–51, subject to the assumptions and limitations stated in the text* [1]

[In millions]

Fiscal year	Total benefit disbursements [2]	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: [3]							
1941	$64.3	$31.4	$5.3	$15.3	$1.5	$13.8	$12.3
1942	110.3	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
1944	184.6	86.8	15.2	63.6	12.1	51.5	19.0
1945	239.8	109.1	19.2	85.8	17.7	68.1	25.7
1946	320.5	153.9	27.2	113.4	24.7	88.7	26.0
Estimated future disbursements: [4]							
1947	423	218	39	140	33	107	26
1948:				164	43	121	28
Alternative I	507	268	47				
Alternative II	576	327	57				
1949:				189	54	135	30
Alternative I	590	315	56				
Alternative II	683	395	69				
1950:				214	66	148	31
Alternative I	674	364	65				
Alternative II	782	457	80				
1951:				240	79	161	33
Alternative I	761	414	74				
Alternative II	870	507	90				

[1] In interpreting the estimates in this table, reference should be made to the accompanying text which describes the underlying assumptions. Estimates were prepared September 1946.
[2] Totals do not necessarily equal the sum of rounded components.
[3] Partly estimated.
[4] Excludes any payments arising from (1) extension of survivors insurance protection to certain veterans of World War II (sec. 201, Public Law 719, 79th Cong.) and (2) coordination of survivors insurance provisions under the Railroad Retirement Act and title II of the Social Security Act (Public Law 572, 79th Cong.).

If the lower employment conditions assumed in alternative II should materialize, it is expected that even larger proportions of eligible workers will be obliged to leave covered employment, even at ages 65–69. Hence, despite a slightly smaller number of eligible workers, the number receiving primary benefits under alternative II would considerably exceed that under alternative I. Moreover, it is expected that the average primary benefit amount payable under alternative II would exceed the average under alternative I, inasmuch as many of the more steadily employed and, therefore, higher-paid older workers who would not withdraw from covered employment under the conditions of alternative I would not be employed under the conditions of alternative II. In consequence, alternative II would result in a substantially higher volume of benefit payments to primary beneficiaries and their wives and children.

Table 8 contains an analysis of workers eligible for primary benefits by age attained as of the middle (January 1) of each of the fiscal years 1941 through 1951. The growth in the number of eligible workers aged 65–69 is gradual but uninterrupted under both alternatives. This growth results partly from the increase in the population at these attained ages, but primarily from 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 would not have been fully insured if he had left covered employment more than 1½ or 2 years previous to his attainment of age 65—for example, due to a permanent disability—but in the calendar year 1951 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 increase more than sixfold between January 1, 1941, and January 1, 1951, even under the lower 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 eligible persons within the age group 70 and over will be continuously increasing.

TABLE 8.—*Wage earners eligible for and receiving primary benefits by attained age of wage earners, fiscal years 1941–51, subject to the assumptions and limitations stated in the text* [1]

Middle of fiscal year (Jan. 1)	All wage earners age 65 and over			Wage earners 65–69			Wage earners age 70 and over		
	Number eligible for benefits [2]	Persons receiving benefits: Number	Persons receiving benefits: Proportion of total number eligible	Number eligible for benefits [2]	Persons receiving benefits: Number	Persons receiving benefits: Proportion of total number eligible	Number eligible for benefits [2]	Persons receiving benefits: Number	Persons receiving benefits: Proportion of total number eligible
Actual experience:	*Thous.*	*Thous.*	*Pct.*	*Thous.*	*Thous.*	*Pct.*	*Thous.*	*Thous.*	*Pct.*
1941	548	112	20	376	85	23	172	28	16
1942	680	200	29	445	134	30	235	66	28
1943	831	260	31	522	153	29	309	107	35
1944	1,022	306	30	612	156	25	410	151	37
1945	1,221	378	31	705	167	24	516	211	41
1946	1,426	518	36	789	212	27	637	306	48
Estimated future experience:									
1947	1,597	712	45	844	261	31	753	451	60
1948:									
Alternative I	1,750	871	50	890	301	34	860	570	66
Alternative II	1,728	1,041	60	874	414	47	854	627	73
1949:									
Alternative I	1,908	1,012	53	937	336	36	971	676	70
Alternative II	1,856	1,258	68	902	503	56	954	755	79
1950:									
Alternative I	2,063	1,149	56	984	369	38	1,079	780	72
Alternative II	1,979	1,426	72	937	576	61	1,042	850	82
1951:									
Alternative I	2,215	1,283	58	1,025	397	39	1,190	886	74
Alternative II	2,114	1,549	73	976	606	62	1,138	943	83

[1] In interpreting the estimates in this table, reference should be made to the accompanying text which describes the underlying assumptions. Estimates were prepared September 1946.

[2] Figures for 1941–46 are partly estimated.

The estimates presented above result in a net increase in the trust fund during the 5-year period of about $14.4 billion under alternative I and about $12.5 billion under alternative II. Although a range in the estimated net additions to the fund within which actual experience may fall is thus indicated, it by no means represents the maximum possible range of variation. For example, it is entirely possible under alternative I that the amount of contribution income would be greater and benefit payments lower than has been estimated. The total result would be an even greater growth in the trust fund han is indicated under this alternative. On the other hand, lower contrition and interest income together with higher benefit payments, than shown under alternative II, would lead to smaller net increases in the trust fund. It must be reemphasized that the estimates presented above are based on the statutory contribution rate schedule which provides for a 2½-percent rate each on employers and employees in the calendar year 1948 and a 3-percent rate thereafter, and do not assume a continuation of the present contribution rate of 1 percent each on employer and employee.

ACTUARIAL STATUS OF THE TRUST FUND

In accordance with section 201 (b) of the Social Security Act, the Board of Trustees is required to present each year a statement of the actuarial status of the trust fund. In the previous three reports of the Board, the same cost illustrations were used. These in effect were prepared largely on the basis of prewar data and assumptions. The sixth annual report 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 necessarily a continuous process. With the war over and reconversion well progressed, it is possible to prepare new cost illustrations taking into account the foreseeable effects of the war and the brief postwar period to date.

In view of the striking economic changes due to the war, many of which have been discussed in previous reports, it has been decided to present two sets of cost illustrations, one being based on "high" economic assumptions (intended to represent close to full employment), and the other being based on "low" economic assumptions (intended to represent crudely and on the average employment conditions similar to those prevailing in 1940–41 combined with wage rates prevailing in 1941–42). In view of the current level of business activity and the established national policy of maintaining conditions conducive to full employment (as embodied in the Employment Act of 1946), it seems probable that the actual future experience, on the average, will be closer to the high economic assumptions than to the low ones. Within each of the two sets of illustrative cost figures there is a further subdivision into a low cost example and a high cost example, which will indicate the range present as a result of possible variations in such factors as mortality, fertility, retirement rates, movement between covered and noncovered employment and so forth. If all other cost factors were maintained constant, costs expressed relative to pay roll would be lower under high economic assumptions than under low economic assumptions. However, the absolute dollar cost of benefits might be higher under high economic assumptions than under low economic assumptions. The combination of assumptions which would show a significantly wide range in percent of pay-roll costs would not necessarily yield a range of absolute dollar costs sufficiently wide to reflect the many uncertainties involved in the demographic and economic factors underlying the estimates. It was considered desirable, therefore, to present in effect four cost examples, namely: low employment, low cost assumptions; low employment, high cost assumptions; high employment, low cost assumptions; and high employment, high cost assumptions.

Under the old-age and survivors insurance system benefits are available to the aged and to orphaned children and their widowed mothers in respect to deceased wage earners. Thus, there are certain basic cost factors which must be continuously recognized in analysis of the costs of this program.

(*a*) *Population.*—The future trend of the population deepnds upon the size and age distribution of the existing population as changed by future births and immigration and by future deaths and emigration. There are many types of error and bias in census data, as has been recognized by the Bureau of the Census in its many comprehensive reports on this subject. For instance, the 1940 census showed about 600,000 more persons aged 65 and over than had been indicated as likely by data in the 1930 census and the deaths and migration between the two censuses.

Crude birth rates declined for many years until the middle thirties due in part to the increasing percentages of the population past the child-bearing ages and in the middle ages where child-bearing is less frequent, and in part to a decline in the age-specific birth rates. However, since 1937 the long decline of the birth rate has been reversed and during the war years quite high rates were reported. In fact, even though the peak rate was reached in 1943, the birth rate since then has been higher than at any time during the thirties despite the effect of the war in removing from this country many young potential fathers.

The increase in birth rates in recent years seems to be largely concentrated in the rate for first and second births. The increase in first births tends to increase the proportion of the insured population with dependents as well as the number of such dependents. As a result, the amount of insurance for survivors' benefits is increased despite the counteracting effect of fewer large families; in the latter case, there is only a limited effect upon benefits because aggregate benefits for a family are not increased for children in excess of three where the mother is also drawing benefits.

Immigration had been very heavy prior to 1915 and moderate in the early twenties, but was quite negligible thereafter. Most population forecasts have assumed that no return to high immigration rates may be expected although currently there are many war brides coming to this country as well as discussions of admitting some refugees or displaced persons. Some emigration in the postwar period will occur as a result of ex-members of the armed forces remaining or returning overseas, and the wider use of international organizations and cooperation. However, it is not believed that emigration will be a relatively very large factor.

As a basis for the new cost illustrations, two new population estimates have been developed. These do not reflect the maximum possible range in population which might develop in the future, but rather embody factors which produce either low cost or high cost in regard to old-age and survivors insurance, as for example unfavorable mortality assumptions versus favorable ones. The 12 estimates prepared by the National Resources Planning Board in its report of August 1943, entitled "Estimates of Future Population of the United States 1940–2000," are useful in indicating the possible range of future population, but it was considered desirable not to use any specific one of these estimates although following closely their methodology. A revision of this 1943 report based on different assumptions with respect to future trends in mortality, fertility, and immigration is being prepared by the Bureau of the Census; the results of this study, however, were not available at the time the present cost analysis was made.

One reason that the National Resources Planning Board estimates were not used is that these estimates do not reflect the war deaths, civilian mortality in 1940–45, and births in 1940–45. The official estimates of the Bureau of the Census for 1945 indicate births in 1940–45 were about 10 percent higher than the National Resources Planning Board high estimate. Another reason for developing new estimates is to use a somewhat wider range in mortality assumptions (as will be discussed later), and in fertility assumptions (allowing for somewhat higher fertility, as evidenced by the 1940–45 experience). The population projection used for the low cost assumptions is based on high mortality (level into the future at 1939–41 rates) and high fertility (approximately 10 percent above the National Resources Planning Board high rates). On the other hand, the population projection used for the high cost assumptions is based on low mortality (same as National Resources Planning Board low rates up to age 65, but with greater improvement for the older ages) and medium fertility (same as National Resources Planning Board medium rates). Neither estimate provides for migration, either in or out. Table 9 indicates the alternative trends of population growth assumed for the total population, for the group aged 20 to 64, and for the group aged 65 and over. The high cost assumption projection shows a larger aged population than the low cost projection because of the assumed lower mortality, but a somewhat lower population 20–64, and under 20, because of the assumed declining fertility which more than offsets the improved mortality.

(*b*) *Mortality.*—Mortality rates by age have been improving since the turn of the century for both sexes and for virtually all ages up to 60, with very little change above that age 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 past history. The latter study allowed for appreciably less improvement in mortality at the older ages than did the former, especially beyond age 75. In the low cost assumptions, as mentioned previously, no improvement in mortality rates at any age is assumed. However, in the high cost assumptions, considerable improvement is assumed with even more at the older ages than the most optimistic assumption of the National Resources Planning Board. Although both sets of assumptions are arbitrary they may reasonably bound, for the purposes of this report, the range within which mortality rates will fall. If the range between them seems wide, it should be recalled that no allowance has been made for the effects of such diverse factors as: The application of new discoveries to the prevention of disease, to the impairments caused by disease and to premature deaths; the possibilities of increasing the survival of impaired lives for only temporary periods; and the catastrophic effects of atomic wars.

Mortality rates are of major importance for estimates of future benefits for the aged and of importance also in determining potential deaths among younger fathers which will give rise to widowed mothers' and children's survivor benefits and ultimately to aged widow's benefits. Continuous study must be given to this very important element.

TABLE 9.—*Estimated population of United States in selected years, 1955–2000*

[In millions]

Calendar year	All ages			Ages 20–64			Ages 65 and over		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
	Census estimate for 1945								
1945	140	70	70	83	41	42	10.1	4.8	5.3
	Projection for low cost assumptions								
1955	153	76	77	87	43	44	12.7	6.0	6.7
1960	159	79	80	89	44	45	14.0	6.5	7.5
1980	179	89	90	100	50	50	17.9	7.8	10.1
2000	199	99	100	113	57	56	19.0	8.3	10.7
	Projection for high cost assumptions								
1955	151	75	76	89	44	45	13.1	6.2	6.9
1960	155	77	78	91	45	46	14.9	7.0	7.9
1980	170	85	85	100	50	50	22.8	10.4	12.4
2000	173	87	86	102	52	50	28.5	13.3	15.2

(c) *Marital and family composition.*—Marital relationships by age have great significance for old-age and survivors insurance costs because the system provides benefits for aged wives and widows. A woman over 65 cannot draw both the primary benefit based on her own earnings and a full wife's or widow's benefit based on her husband's earnings. Hence, it is necessary to consider both the marital status of the female covered workers and also the exits from this group because of marriage. It is anticipated that there will be a relatively large offset on account of this provision which prohibits duplication of benefits. The experience to date is extremely limited in this respect, since this factor will not be of major importance until some 30 or 40 years hence when the vast bulk of the current female workers, those in their twenties and thirties, have attained the minimum retirement age.

Family composition data indicating the proportion of men with children and the average number of children in such cases also has great significance because the system provides benefits for orphaned children and their widowed mothers. The future birth rate has a very important role in this connection since it determines not only the total number of children, but how they are divided up into families. The early claims experience, although valuable as a guide, does not yet furnish clear bases for the future because of the lag in getting under way.

There must also be considered the various factors affecting termination of married status, chiefly divorce and mortality. The distribution of ages of husband and wife also affects the cost illustrations. Various studies have indicated that at almost all ages women have lower mortality rates than men, and that the mortality rates of married persons are 10 to 20 percent lower than that for all persons combined. In the present cost illustrations, differential mortality by marital status has been considered in determining costs for the various types of survivors benefits.

Old-age insurance beneficiaries are composed of a number of different categories. Table 10 shows the various illustrative trends in the number of beneficiaries, distinguishing between male and female primary beneficiaries, wives of primary beneficiaries, children of primary beneficiaries, aged widows of deceased insured individuals, and dependent parents of deceased insured workers who left no widow or child under 18.

TABLE 10.—*Estimated old-age insurance recipients of monthly benefits*[1] *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	Aged dependent parents
	Actual data for June 1946					
1946	548	84	193	15	110	7
	Low employment, low cost assumptions					
1955	1,800	250	600	60	550	80
1960	2,200	400	750	70	900	110
1980	3,800	1,500	1,100	120	2,100	130
2000	4,200	2,900	1,100	120	2,500	100
	Low employment, high cost assumptions					
1955	2,300	400	800	80	600	140
1960	2,900	650	1,000	90	950	210
1980	6,300	2,500	1,900	120	2,300	290
2000	8,600	5,300	2,400	70	2,900	270
	High employment, low cost assumptions					
1955	1,400	250	500	40	600	80
1960	1,800	400	600	50	950	110
1980	3,700	1,500	1,100	110	2,300	130
2000	4,800	3,500	1,200	120	2,800	100
	High employment, high cost assumptions					
1955	2,300	450	800	70	600	140
1960	3,000	700	1,000	80	1,000	210
1980	6,900	2,600	2,100	130	2,500	290
2000	10,500	6,500	2,700	80	3,000	270

[1] Women qualified both for primary benefits and for wife's, widow's, or parent's benefits are shown as primary beneficiaries.

Although old-age beneficiaries make up the bulk of the prospective recipients under the program, the young survivors, composed of orphaned children and widowed mothers, will be responsible for a considerable amount of benefits. Table 11 lists these two groups separately.

In table 10 the high cost assumptions for each of the two economic assumptions show, as expected, a larger number of beneficiaries than the low cost assumptions; this is in part because of the lower mortality rates assumed which result in a greater number and proportion of aged persons, and in part because of the higher retirement rates assumed and the greater proportion assumed to be insured as a result of the in-and-out movement. On the other hand, the lower mortality, despite the somewhat higher birth rate, tends to have the opposite effect (table 11); a smaller number of child and widowed mother beneficiaries under the high cost assumptions than under the low cost assumptions are indicated for each of the two economic assumptions separately.

(*d*) *Proportion of time in covered employment prior to qualification for benefits.*—The number of persons who gain protection through becoming either "fully insured" or "currently insured" under old-age and survivors insurance depends upon the volume and pattern of their work in covered employment, and upon the amount of taxable wages earned in such work. A discussion of the latter factor is presented subsequently under item (g). Table 12 indicates for men and women separately, the varying distributions according to number of years with some wage credits for the covered population after the first 8 years of operation of the system. As would be expected, those who are fully insured are concentrated at the longest periods of employment, followed by those only currently insured, with those not insured having had employment in only 1 or 2 years in the bulk of the cases.

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

[In thousands]

Calendar year	Low employment assumptions				High employment assumptions			
	Low cost		High cost		Low cost		High cost	
	Orphaned children	Widowed mothers	Orphaned children	Widowed mothers	Orphaned children	Widowed mothers	Orphaned children	Widowed mothers
1955	740	220	690	240	730	190	690	220
1960	790	240	650	240	810	210	670	220
1980	880	270	480	200	1,000	260	540	200
2000	990	310	410	190	1,160	310	480	190

NOTE.—Actual data for June 1946: 416,000 orphaned children and 120,000 widowed mothers.

TABLE 12.—*Percentage distribution of workers in covered employment under old-age and survivors insurance at some time during 1937–44 by years with wage credits and by insured status as of Jan. 1, 1945*

Years with wage credits	Men			Women		
	Fully insured	Currently insured only	Not insured	Fully insured	Currently insured only	Not insured
Total	100.0	100.0	100.0	100.0	100.0	100.0
1	(1)	(1)	34.8	(1)	(1)	40.3
2	2.4	9.9	28.9	5.2	21.1	30.8
3	6.3	26.7	16.8	12.9	35.3	14.4
4	6.8	28.2	10.0	11.7	21.1	7.4
5	8.9	17.5	5.4	11.7	10.8	3.9
6	12.6	9.9	2.8	12.3	6.1	2.0
7	12.3	5.2	1.0	11.9	3.4	.9
8	50.7	2.6	.3	34.3	2.3	.4

[1] Inapplicable under provisions of the Social Security Act.

Another indication of the relative proportions of the population having contact with the program is given in table 13. Here is shown for certain age and sex groups the proportions of the total population of the United States as of the beginning of 1945, which are insured, or which are covered but not insured (i. e., with some wage credits but not sufficient to be insured), or which never during the 8 years of operation considered had had any covered employment.

Illustrations are presented in table 14 showing for the future the percentages of the population insured by reason of current or previous work experience for men and women, and for age groups above and below 65. The percentages shown in table 14 for age 65 and over include primary beneficiaries. Table 15 relates the primary beneficiaries actually drawing benefits to the total aged population. It has been assumed in these cost illustrations that all persons eligible to receive primary benefits based on their own earnings would apply for and receive such benefits even though they might be entitled to larger wife's, widow's, or parent's benefits, which instead they would receive as a reduced supplementary amount. This assumption has been made because it is always to the individual's advantage to receive primary benefits and reduced supplementary benefits of another category rather than solely the full benefits of the other category.

In tables 10, 11, and 14, 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:

TABLE 13.—*Percentage distribution of total population aged 15 and over as of January 1, 1945, according to insured and covered status, by age and sex*

Age [1]	Men				Women			
	Total	Insured [2]	Covered but not insured [3]	Never covered	Total	Insured [2]	Covered but not insured [3]	Never covered
15 and over	100	51	32	17	100	23	30	47
15 to 19	100	16	56	28	100	14	54	32
20 to 29	100	55	42	3	100	42	41	17
30 to 39	100	69	26	5	100	27	33	40
40 to 49	100	61	27	12	100	22	25	53
50 to 59	100	51	27	22	100	13	18	69
60 to 64	100	43	28	29	100	8	11	81
65 to 69	100	35	23	42	100	5	6	89
70 to 74	100	25	13	62	100	2	2	96
75 and over	100	9	5	88	100	1	0	99

[1] Age on birthday in 1944.
[2] Includes both those fully insured and those currently insured only.
[3] Includes those with some wage credits during 1937-44 (although not necessarily in 1944), but not sufficient to be insured.

TABLE 14.—*Estimated proportion of the population insured*[1] *under old-age and survivors insurance in selected years, 1955–2000*

[In percent]

Calendar year	Low employment assumptions				High employment assumptions			
	Low cost		High cost		Low cost		High cost	
	Ages 20–64	Ages 65 and over[2]	Ages 20–64	Ages 65 and over[2]	Ages 20–64	Ages 65 and over[2]	Ages 20–64	Ages 65 and over[2]
	Men							
1955	55	37	64	42	63	39	73	44
1960	55	41	65	46	65	44	75	49
1980	57	56	67	65	71	64	81	73
2000	57	58	68	69	72	75	83	85
	Women[3]							
1955	21	4	28	6	24	6	31	7
1960	22	6	29	8	27	7	35	10
1980	28	15	36	21	39	16	48	22
2000	29	27	38	35	45	35	54	43

1 "Insured" means sufficient participation in covered employment to have become eligible for benefits upon death or retirement.
2 Including primary beneficiaries.
3 Excludes wives and widows of fully insured men except wives and widows who are insured on the basis of their own employment.

TABLE 15.—*Estimated proportion of population aged 65 and over receiving primary benefits*[1]

[In percent]

Calendar year	Low employment assumptions				High employment assumptions			
	Low cost		High cost		Low cost		High cost	
	Men	Women	Men	Women	Men	Women	Men	Women
1955	30	4	37	6	23	4	37	7
1960	33	6	41	8	27	6	43	9
1980	48	14	61	20	47	14	66	21
2000	51	27	65	35	58	33	79	43

1 Women qualified both for primary benefits and for wife's, widow's, or parent's benefits are shown as primary beneficiaries.

(1) An over-all uptrend in beneficiaries under all types of old-age benefits—except in the relatively unimportant case of dependent parents;

(2) A relatively small increase under some assumptions and a decline in others, after 1960 in the number of orphan child and widowed mother beneficiaries;

(3) A relatively, and increasingly, low proportion that survivor benefits bear to old-age benefits;

(4) A relatively rapid advance in the percent of insured persons at age 65 and over (including those drawing benefits) as compared with the percent insured at ages 20 to 64; and

(5) A rapid rise in the percent of aged persons drawing primary benefits from 1955 to 1980, and a slowing down of the increase 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 can receive benefits for many years as mothers of young children and later as aged widows. These, however, are also the women with the greatest chance of remarriage. Among the older mothers with fewer prospective years of benefit receipt (their youngest child being nearer age 18), the probability of remarriage is lower. Remarriage rates are affected both by age of widow and duration of widowhood. Recognition of the remarriage factor 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 to $70 billion of "life insurance" protection for survivors, exclusive of the temporary survivor protection for veterans provided for by title II of the Social Security Act amendments of 1946.

(*f*) *Employment of beneficiaries.*—Since monthly benefits for all categories of beneficiaries are suspended for beneficiaries with $15 or more of monthly covered wages, assumptions as to the employment of beneficiaries rank high among the various cost elements. At the present time, less than half of those beyond age 65 who possess insured status are actually receiving benefits (table 8). This low proportion is in part due to the apparently abnormal work opportunities now prevailing, and partly due to the element of lag in that the aged insured population now contains relatively few of those at the more advanced ages. In the future this proportion is bound to increase, if for no other reason than that this group will contain a relatively larger number at the more advanced ages (say, 75 and over) where work opportunities are relatively sparse.

Then, too, a large demand for labor draws into employment and away from benefit receipt many widowed mothers and older children. Under the high employment illustrations there is a greater allowance for this savings factor of employment of beneficiaries than in the low employment examples. Likewise, within each employment assumption there is assumed to be more employment of beneficiaries in the low cost assumptions than in the high cost ones.

(*g*) *Income in covered employment.*—One of the most striking changes in earned income on record has taken place since 1938. Not only have there been further rises in the hourly rate of earnings since the end of the war, but also there has tended to be relatively little unemployment including partial unemployment, so that most workers have had a full workweek. The resulting change in wage income gives workers relatively more chance of obtaining credit for quarters of coverage (at $50 per quarter) than had been the case in the prewar years, and as a result produces an increase in number of persons with insured status and in the average wage used for benefit computations. Under the high employment assumptions this increase is assumed to be more or less permanent, whereas under the low employment assumptions it is assumed to be only temporary, although affecting future years to a certain extent.

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, 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 used respectively with the low- and high-employment assumptions. This point is discussed further in connection with the illustrative cost charts presented subsequently.

The data derived from old-age and survivors insurance records are not 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 16.

The high-employment assumptions use an average annual taxable wage throughout the period 1955–2000 of $2,400 for men working in 4 quarters of a year and correspondingly $1,440 for women. Under the low-employment assumptions the 4-quarter average wage used for males is $1,800, with $1,080 being used for women. For both low- and high-employment assumptions and for both men and women the average wage used for 3-quarter workers is about 50 percent of that for 4-quarter workers (i. e., at a lower rate per quarter), while the corresponding proportions for 2- and 1-quarter workers are about 20 and 10 percent, respectively. These ratios of the part-time average covered wage to the 4-quarter average parallel very closely the actual ratios observed in the old-age and survivors insurance wage data for each of the 4 years 1940–43. The 4-quarter wage assumptions may be compared with the actual experience for such workers in past years as shown by the last three columns of table 16.

In determining the number of covered persons under the low-employment assumption, percentages by age were developed through analysis of the 1940 wage data, while for the high-employment assumption the percentages derived were based on 1943–44 conditions with suitable modification to allow for the absence of younger males in military service. It was assumed that in the future the proportion of the population which would be in covered employment would gradually rise for each age group since there has been a definite trend in the past for more and more of the total labor force to be in covered employment. Correspondingly, the rise was assumed to be greater for women since they have been participating more and more in the covered labor force.

Because the coverage of the system excludes several large categories of employment (agricultural, domestic, nonprofit, 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 somewhat more settled in their work than younger persons. Table 17 illustrates differences in the extent of contact workers had with the program in 1944.

TABLE 16.—*Average wage credits of workers under old-age and survivors insurance, by year, 1937–45*

Calendar year	Workers with any wages in year			Workers with wages in all 4 quarters [2]		
	Total	Men	Women	Total	Men	Women
1937	$899	$1,040	$539	(1)	(1)	(1)
1938	832	959	508	$1,211	$1,356	$781
1939	881	1,016	536	(1)	(1)	(1)
1940	926	1,069	553	1,305	1,462	829
1941	1,014	1,185	574	1,466	1,647	910
1942	1,127	1,360	609	1,703	1,928	1,041
1943	1,289	1,579	787	1,913	2,204	1,271
1944 [3]	1,369	1,680	885	1,995	2,300	1,400
1945 [3]	1,336	1,639	864	(1)	(1)	(1)

[1] Data not available.
[2] Up to and including 1942, includes all workers with $3,000 or more of wage credits regardless of reported number of quarters with wage credits. For 1943 and after, includes all workers credited with having wages in all 4 quarters regardless of reported number of quarters with wage credits.
[3] Preliminary.

TABLE 17.—*Percentage distribution of workers in covered employment under old-age and survivors insurance, by number of quarters, with wage credits, 1944* [1]

Calendar quarters with wage credits	Total persons	By sex		By age			By wage credits in 1944	
		Men	Women	Under 25	25 to 44	45 and over	Under $1,200	$1,200 and over
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1 quarter only	14.0	12.3	16.6	21.8	12.5	9.3	28.3	.1
2 quarters only	12.7	10.6	15.8	20.8	11.0	8.7	24.9	1.2
3 quarters only	11.8	10.2	14.3	18.4	11.6	10.5	20.0	6.3
4 quarters	61.5	66.9	53.3	39.0	64.9	71.5	26.8	92.4

[1] Preliminary data, partly estimated and subject to revision.

The carrying through of the prospective progress of the program using the various elements discussed above furnishes reasonable illustrations of future beneficiaries and costs, though neither the lowest nor the highest conceivable, the values derived being within the outside boundaries of possibility. Experience to date is 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 eligible to receive them have been limited by postponements in the claiming of benefits occasioned by the war and immediate postwar conditions. 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.

The Social Security Act amendments of 1946 contained only one major benefit provision in regard to old-age and survivors insurance, namely, the providing of survivor protection for veterans for a limited period after discharge (generally 3 years). These payments are to be on an entirely independent basis but are not in full an addition to benefits otherwise payable on the basis of wage credits. The cost is to be met entirely by appropriations from the general Treasury. Since the protection is on a temporary basis and since the cost is to be met independently of the regular sources of income of the trust fund, these long-range cost illustrations disregard both the benefit payments and the appropriations arising under this special provision.

Another important element affecting old-age and survivors insurance costs arose through amendments made to the Railroad Retirement Act in July 1946 which provide for a coordination of railroad retirement and old-age and survivors insurance covered wages in determining survivors benefits. In some instances such survivor benefits based on the combined wage credits will be paid by the railroad retirement system, whereas in other cases the benefits will be paid by the old-age and survivors insurance system regardless of the fact that each specific individual worker contributed in part under one system and in part under the other. The amendments to the Railroad Retirement Act provide that before 1950 a study should be made setting forth the actual experience and recommending legislative changes necessary for equitable distribution of the financial burden of such awards as between the two systems. In the long-range cost illustrations developed here it is assumed that eventually the impact of the costs of the coordinated benefits between the two systems will be properly allocated, and that there will be such a small effect on the long-range costs that this coordination provision may be safely ignored. Even if it were desirable to consider this element, there are no available data for making any reasonable estimates and it is likely that there will be none in the next year or two.

Table 18 summarizes the previous discussion by showing illustrative numbers of beneficiaries. The category "younger survivors" comprises orphaned children and their widowed mothers. Widows aged 65 and over are included under the "old age" category, as are also dependent children of primary beneficiaries.

TABLE 18.—*Estimated old-age and survivors insurance beneficiaries in receipt of benefits as of middle of selected years, 1955–2000*

[In thousands]

Calendar year	Low-cost assumptions			High-cost assumptions		
	Old-age beneficiaries	Younger survivors	Lump sum [1]	Old-age beneficiaries	Younger survivors	Lump sum [1]
	Low-employment assumptions					
1955	3,300	960	280	4,300	930	280
1960	4,400	1,030	340	5,800	890	320
1980	8,800	1,160	580	13,400	680	560
2000	10,900	1,300	770	19,500	600	850
	High-employment assumptions					
1955	2,900	920	310	4,400	910	300
1960	3,900	1,020	380	6,000	890	350
1980	8,800	1,260	680	14,500	740	640
2000	12,500	1,470	980	23,100	670	1,020

[1] Number of deaths during the year resulting in lump-sum payments.

NOTE.—Actual data for June 1946: 957,000 old-age beneficiaries and 545,000 younger survivors. Actual lump-sum death payments in 12-month period ending June 1946: 184,000 deaths.

It is to be noted that in addition to the assumptions already discussed, the long-range cost illustrations include assumptions relating to retirement rates, interest rates, and various miscellaneous administrative factors. Since the earlier cost illustrations were developed, sufficient actual experience under the operation of the program is available to permit various modifications to be introduced to allow for such factors as the various minimum and maximum provisions as to benefits, and the provision that the lump-sum death payment, in certain instances, may not exceed the actual burial expenses. Also taken into account in these new cost illustrations are such miscellaneous factors as differential retirement rates by marital status, the effect on the size of survivor benefits of lowered earning capacity during last illness, etc.

Illustrative long-range costs

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 adjustment, are presented in the accompanying charts and in table 19. These exhibits commence with the year 1955.

As indicated in the charts and table, assuming a constant average wage throughout the period 1955 to 2000, contributions at the rate of 6 percent of taxable pay roll (the rate scheduled to become effective in 1949) would exceed benefits at all times under the two low-cost examples and for about 30 to 40 years under the two high-cost examples. Even in the latter case, 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 high-employment, high-cost example, the necessity for (i) an increase above 6 percent in pay-roll contribution rates; (ii) contributions on the part of the Treasury derived from general taxes as distinct from pay-roll contributions; (iii) liquidation of the trust fund for purposes of meeting benefit obligations when these come to exceed pay-roll-contribution income; or (iv) any combinations of these. Under the low-employment, high-cost example, such interest income would substantially defer, but not eliminate, the time when one or more of these other sources would have to be tapped to assist in financing the benefits provided by statute.

TABLE 19.—*Illustrations of benefit payments and contribution income of the old-age and survivors insurance trust fund in selected years, 1955 to 2000* [1]

Calendar year	Low-cost assumptions: Benefit payments (in billions)	Low-cost assumptions: Contribution income (in billions)	Low-cost assumptions: Benefits as percent of pay roll	High-cost assumptions: Benefit payments (in billions)	High-cost assumptions: Contribution income (in billions)	High-cost assumptions: Benefits as percent of pay roll
	Low-employment assumptions					
1955	$1.1	$2.7	2.5	$1.3	$2.7	3.0
1960	1.4	2.8	3.1	1.7	2.8	3.7
1970	2.1	3.1	4.0	2.7	3.1	5.2
1980	2.8	3.4	5.0	3.9	3.3	7.2
1990	3.5	3.6	5.7	5.1	3.4	9.2
2000	3.8	3.9	5.8	5.9	3.4	10.5
1946 to 2000 [2]			[2] 4.3			[2] 6.2
Level premium in perpetuity [3]			[3] 4.4			[3] 7.0
	High-employment assumptions					
1955	$1.0	$4.8	1.3	$1.5	$4.8	1.9
1960	1.5	5.0	1.8	2.1	5.0	2.5
1970	2.4	5.7	2.6	3.4	5.6	3.7
1980	3.5	6.2	3.3	5.2	6.0	5.2
1990	4.5	6.7	4.0	7.1	6.2	6.9
2000	5.1	7.3	4.2	8.5	6.3	8.1
1946 to 2000 [2]			[2] 2.9			[2] 4.6
Level premium in perpetuity [3]			[3] 3.0			[3] 5.3

[1] The figures in this table are subject to the limitations stated in the text and correspond to the values used in the charts.

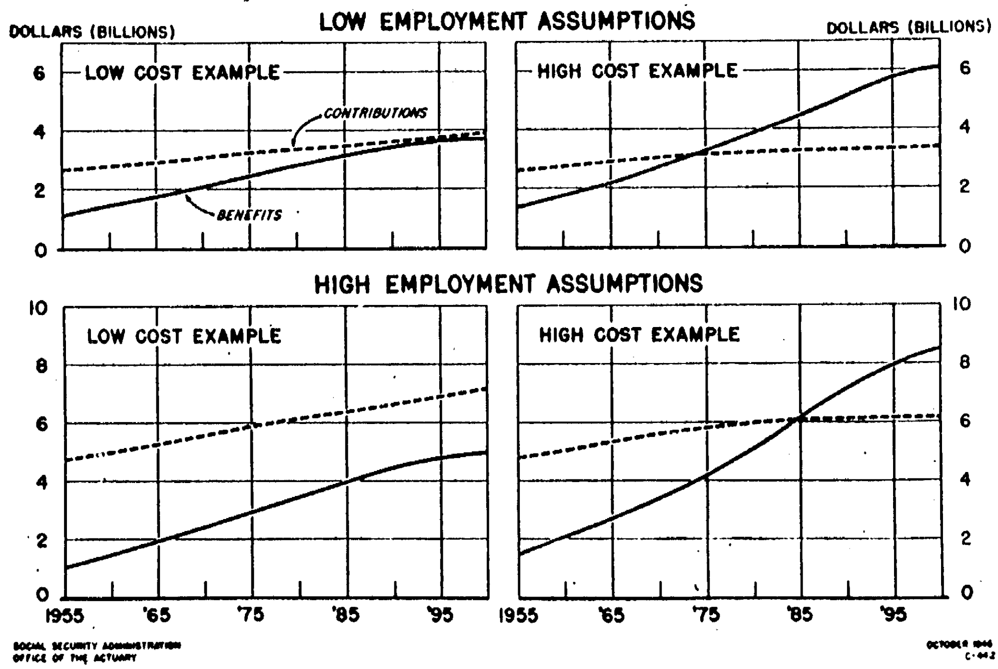
[2] Average or level cost without interest for the 55-year period.

[3] Level cost (based on discounting at 2 percent interest) of benefit payments after 1945 and in perpetuity, taking into account accumulated funds through 1945.

NOTE.—Actual data (based on certifications) for calendar year 1945: $0.29 billion benefit payments, $1.29 billion contribution income, and benefits 0.46 percent of pay roll.

ILLUSTRATIVE LONG-TERM TRENDS OF BENEFITS AND CONTRIBUTIONS

(SUBJECT TO THE LIMITATIONS STATED IN THE TEXT)



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-cost assumptions. Because of the nature of the assumptions, the charts show only smooth curves and hence do not show the irregularities and periodic cyclical variations which may develop. These irregularities are expected to be far more pronounced in the curves pertaining to contributions than in those representing benefits, 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. However, the pay roll of covered workers from which the tax income is derived has been, and will continue to be, 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 is likely to occur. In fact, for demographic reasons alone, as discussed earlier in this section, it is unlikely that the system even eventually would level out to a completely 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 contributions would both be more steeply ascending than shown. The upward changes in the contributions curves, however, would be far more accentuated than would be such change in the benefit curves. There are several reasons for this, the important one being that the benefit increase would be dampened because:

(1) The basis for benefits is the average monthly wage up to the maximum of $250; 40 percent is taken on the first $50 thereof and 10 percent of that part above $50. As average wages increase and as more persons approach or 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 benefits are reduced in relation to wages, and consequently in relation to contributions.

(2) Any year's contributions 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 paid worked in covered employment, thus including—in future years—wages of as much as 60, 70, or more years previously.

Under the assumptions of 1 percent compound annual rate of increase in the wage level and of a static benefit formula unchanging from the present provisions, benefit disbursements in the year 2000 would be only about 10 percent higher than under a level wage assumption (as in table 19 and the preceding charts). At the same time, contributions would be increased by about 50 percent under the low employment (and low wage in the early years) assumptions and by about 35 percent under the high employment assumptions. On this basis the annual benefits related to annual pay roll for the year 2000 would be as follows:

	Rising wage	Level wage
	Percent	*Percent*
Low-employment, low-cost assumptions	4.2	5.8
Low-employment, high-cost assumptions	7.7	10.5
High-employment, low-cost assumptions	3.4	4.2
High-employment, high-cost assumptions	6.6	8.1

Thus, the cost of benefits relative to contributions in a year half a century hence would be decreased by about 20 to 25 percent under an increasing wage, static benefit formula assumption.

The assumptions of steadily rising average wages in conjunction with an unamended benefit formula have an important bearing on the long-range cost of the program. With such assumptions, the rise in wages would seem to offer significant financial help in the financing of benefits because pay-roll contributions at a fixed percentage rate would increase steadily relative to benefit disbursements; but benefits paid to beneficiaries would steadily diminish in relation to current wage levels. In such a case, it is likely that the present formula would not be maintained, but rather revisions would be adopted which would make average benefits at least as adequate relative to the then existing average wage level as average benefits under the present formula were in relation to the 1939 wage level. In revising the benefit schedule to conform with the altered wage level, the changed cost and contribution picture would have to be considered, especially, changes resulting from the fact that a worker's benefit would be based on wages prevailing at that time of retirement while his contributions and the interest accumulated thereon would be based on the lower wages prevailing during the period of his active employment.

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. One illustration is the lengthening of the period of childhood or preparation for work. Another is a drastic change in the age of retirement either to a considerably lower effective age so that practically all persons are retiring at the minimum age of 65, or conceivably in reverse to a higher effective age under circumstances of greatly improved health conditions combined with good employment opportunities, such that few would retire before age 70 or even 75.

SUMMARY AND CONCLUSION

At the end of the fiscal year 1946, aggregate old-age and survivors insurance benefit payments were being made at an annual rate of about $375 million; in the last year of the five fiscal years ahead, annual payments are expected to total from $760 to $870 million. The trend of such payments will be an ascending one throughout the present century; within two decades benefit disbursements are expected to have increased to 5 to 8 times their current level.

Current contributions paid by contributors are expected to be wholly sufficient to meet the current disbursements of the old-age and survivors insurance program in the immediate five fiscal years ahead.

At present, employers and employees are contributing 1 percent each on taxable wages and pay rolls in industries covered under the program. This 1-percent rate has now been maintained for eleven consecutive years by repeated congressional actions delaying the date at which scheduled rate increases become effective. Present statutory provisions call for an increase in the contribution rate to 2½ percent on employees and 2½ percent on employers beginning with January 1, 1948, and to 3 percent on each beginning with January 1, 1949. The Board of Trustees is fully aware that there are adjustment problems, for employees and businesses, resulting from the comparatively sharp increase in contribution rates now scheduled by statute for 1948 and 1949. The Board is also mindful, however, that prudent management of the finances of the trust fund requires emphasis on the long-range relationships between disbursements and income of the fund.

The level-premium cost of benefits now provided by the system, or the average contribution rate required to finance the system into perpetuity at a 2-percent interest rate, is estimated to range between 3 and 7 percent of pay roll. These estimates are lower than level premium cost figures contained in earlier reports of the Board, and below the estimated costs of the program when it was adopted in 1939. The war and its aftermath, as well as the recovery from the depression of the early thirties, have been accompanied by important changes in many of the factors which determine the relationship between benefits and contributions under the program. Among the more important factors which have led to a reduction in the estimates of costs, measured as a percent of pay roll, of the present benefit provisions are the increased level of earnings and the expanded employment in covered occupations.

These revised figures, however, are predicated on the maintenance-of-level wage rates over the next 40 or 50 years ahead. The evidence available from historical experience and from the development of our economic system indicates that the Nation in the future is likely to have a level of income and earnings above that now prevailing. Increases in the past have bee nsomewhat uneven but, on the whole, they have been persistent over the decades. If the cost estimates of the present benefit provisions contained in the actuarial statement of this report were amended to take account of a long-term tendency for wages to increase, the range of the level-premium cost might be reduced from 3–7 percent to 2½–6 percent. But the factors which, in large part, account for the anticipated favorable financial position of the program in the immediate period ahead, and for the reduced estimates of the long-range cost as a percent of pay roll, at the same time have seriously impaired the adequacy of benefits based on present benefit provisions and will continue to do so unless the benefit formula is adjusted upward to reflect the rise in wages, income, and living standards. With further increases in national income and earnings, these inadequacies will become even more pronounced.

The Federal Security Agency and the Social Security Administration have pointed out in their annual reports to the Congress that there are many inadequacies and gaps in present coverage and benefit provisions—gaps which in a measure have developed or been intensified as an aftermath of the war. The board of trustees is taking the present opportunity to call attention to those reports, because the board is of the opinion that the financial provisions of the program should be reviewed by the Congress in conjunction with a reexamination of the benefit formula, the coverage of the system, and the scope of the protection afforded. The annual actions of the Congress in maintaining the 1-percent contribution rate, without revising the basic contribution schedule of the program, have led to considerable uncertainty on the part of the businessmen and employees participating in the program. In the opinion of the board of trustees, concurrent consideration of benefits and contributions is needed with a view to removing uncertainty and to achieving appropriate adjustments of the program to changes which have developed during and out of the war.