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

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LETTER OF TRANSMITTAL

Board of Trustees of the
Federal Old-Age and Survivors Insurance Trust Fund,
Washington, D. C., January 2, 1950.

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 Tenth Annua 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.
Maurice J. Tobin,
Secretary of Labor.
Oscar R. Ewing,
Federal Security Administrator.

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

INTRODUCTORY STATEMENT

The Federal old-age and survivors insurance trust fund was established on January 1, 1940, under the provisions of section 201 of the Social Security Act, as amended. The fund is held by the Board of Trustees comprised of three ex officio members. The members of the Board are the Secretary of the Treasury, who is also the managing trustee; the Secretary of Labor; and the Federal Security Administrator.

This report, which is submitted jointly by the three trustees, describes the operations of the trust fund during the fiscal year ended June 30, 1949, the expected receipts and disbursements of the fund in the five fiscal years subsequent to that date, and the long-range actuarial status of the fund. It is the tenth annual report submitted by the Board of Trustees as required by the act.

Although employment in the last months of the fiscal year was less than in the corresponding months of the preceding fiscal year, for the year as a whole employment was at a high level. Average civilian employment in the 12 months ending June 1949 reached 59.2 million as compared with 58.7 million for the previous 12 months; average nonagricultural employment rose 0.5 million to a total of 51.1 million. Unemployment rose to 3.8 million in June 1949, and the average for the fiscal year was 2.6 million as compared with 2.1 million in the preceding 12 months.

These economic conditions affected both the receipts and the disbursements of the trust fund. Total wage payments on which contributions and wage credits are based were higher in the period affecting tax collections in fiscal year 1949 than in any corresponding prior period. As a result, contributions collected during the fiscal year were almost 5 percent above the collections in the preceding year and the largest on record. At the end of fiscal year 1949 there were 212,000 more persons receiving monthly benefits on the basis of their own wage records than at the end of fiscal year 1948; the corresponding increase from June 1947 to June 1948 was 171,000. The number of beneficiaries receiving benefits as wives or children of these primary beneficiaries increased by 67,000 as compared with 55,000 in the preceding year. The increase in the number of survivors of deceased workers who were receiving benefits amounted to 112,000 as compared with 105,000 in the preceding year.

The economic changes that have been produced by the war and its aftermath will have long-range effects on the financing of old-age and survivors insurance. These effects resulting, for example, from higher money earnings in covered employment, shifts in the labor force, increased employment of women, and the deferred retirement of older workers, cannot be fully appraised at this time. In the present report, these developments are taken into account in the statements on the expected operations of the trust fund during the next 5 years and on the actuarial status of the trust fund; but there are many uncertainties, and these uncertainties are present, of course, in the estimates contained in the report.

NATURE OF THE TRUST FUND

Amounts accumulated under the old-age and survivors insurance program are held in the Federal old-age and survivors insurance trust fund, and financial operations under 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, except 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 act 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 Act 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.

Successive annual acts of Congress, however, extended the 1-percent rates from 1943 through 1947. The Social Security Act Amendments of 1947 extend the 1-percent rates through 1949; at the end of 1949, accordingly, the 1-percent rates will have been in effect for 13 years. The amendments of 1947, however, provide that the rates shall rise to 1½ percent on January 1, 1950, and to 2 percent on January 1, 1952.

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 act 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. Section 210 (d) of these amendments authorizes Federal appropriations to reimburse the Federal old-age and survivors insurance trust fund for such sums as are withdrawn to meet the additional cost (including administrative expenses) of the payments to survivors of World War II veterans under the amendments.

Public Law 642, enacted June 14, 1948, which amends the definition of the term "employee" as used in the Social Security Act, results in the exclusion from coverage of certain services previously held covered under title II of the act. While the amended definition is made retroactive to August 14, 1935, certain wage credits established under the former definition will remain credited to the individual's account. The law authorizes an appropriation to the trust fund from general revenues equal to the estimated total amount of benefits paid and to be paid under title II of the Social Security Act that would not have been paid had the amended definition been in effect beginning August 14, 1935.

Expenditures for benefit payments and administrative expenses 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 included such reimbursements to the Treasury for administrative expenses incurred under the program as were authorized by section 201 (f) of the act. Successive acts of Congress have modified the procedures in accounting for these expenses. Thus, during fiscal years 1947 and 1948 progressively increasing portions of the program's administrative expenses incurred by the Federal Security Agency were charged directly to the trust fund and not reimbursed from the fund as they had been in the preceding fiscal years. Beginning with fiscal year 1949, all expenses incurred by all offices of the Federal Security Agency in carrying out the provisions of title II of the Social Security Act, as amended, are charged directly to the trust fund. Under the President's Reorganization Plan No. 2, effective July 16, 1946, the Federal Security Administrator 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 semiannually on June 30 and December 31. 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. Interest receipts and proceeds from the sale or redemption of obligations held in the trust fund are available for investment in the same manner as other receipts of the fund.

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.

On June 30, 1949, there were about 11,300,000 persons aged 65 and over, a number equivalent to 7½ percent of the total population. It is estimated that by the end of 50 years the number of persons aged 65 and over may be 1½ to 2½ times as large as on June 30, 1949, and represent from 10 to 16 percent of the population. 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 because, compared with the present situation, a much larger proportion of aged persons 50 years hence is expected to be eligible to receive benefits under the program. The future financial soundness of this system, with its rising rates of disbursements, 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, 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 during any reversal in business activity.

SUMMARY OF OPERATIONS OF TRUST FUND, FISCAL YEAR 1949

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, 1948, and ended on June 30, 1949, 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 1949* [1]

Total assets of the trust fund, June 30, 1948		$10,046,681,157.89
Receipts, fiscal year 1949:		
Appropriations equivalent to contributions collected	$1,690,295,704.58	
Transfers from general fund	3,279,400.00	
Interest and profits on investments	230,194,240.15	
Total receipts	1,923,769,344.73	
Disbursements, fiscal year 1949:		
Benefit payments	607,036,339.93	
Administrative expenses	53,464,875.11	
Total disbursements	660,501,215.04	
Net addition to trust fund		1,263,268,129.69
Total assets of the trust fund, June 30, 1949		11,309,949,287.58

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

The total receipts of the trust fund during the fiscal year 1949 amounted to $1,923.8 million. Of this total, $1,690.3 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 represented a 5-percent increase over appropriations in the preceding fiscal year. The additional $233.5 million of receipts consisted of $230.2 million of interest and profits on investments of the fund and $3.3 million transferred from general funds of the Treasury in accordance with section 210 (d) of the Social Security Act, as amended.

Disbursements from the trust fund during the fiscal year 1949 totaled $660.5 million, of which $607.0 million consisted of benefit payments, and $53.5 million 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 1948 by 19 percent, the increase reflecting primarily the larger number of persons drawing benefits. A summary of receipts and disbursements of the old-age and survivors insurance trust fund during each of the 9 years from July 1, 1940, through June 30, 1949, is presented in table 2.

TABLE 2.—*Operations of the old-age and survivors insurance trust fund by specified period, Jan. 1, 1940, to June 30, 1949*

[In millions]

	Fiscal year ended in—									
	1940 [1]	1941	1942	1943	1944	1945	1946	1947	1948	1919
Receipts:										
Appropriations equivalent to contributions collected	[2] $1,724	$688	$896	$1,130	$1,292	$1,310	$1,238	$1,459	$1,616	$1,690
Transfers from general fund [3]								([4])	1	3
Interest on investments	42	56	71	87	103	124	148	163	191	[5] 230
Total receipts [6]	1,767	744	967	1,218	1,395	1,434	1,386	1,623	1,807	1,924
Disbursements:										
Benefit payments	10	64	110	149	185	240	321	426	512	607
Administrative expenses	12	27	27	27	[7] 33	[8] 27	37	41	47	53
Total disbursements [6]	22	91	137	177	217	267	358	466	559	661
Total assets at end of period [6]	1,745	2,398	3,227	4,268	5,446	6,613	7,641	8,798	10,047	11,310

[1] January-June 1940, fund having been established in place of old-age reserve account on Jan. 1, 1940.
[2] Represents assets transferred from old-age reserve account on Jan. 1, 1940. Appropriations equivalent to contributions collected became effective July 1, 1940; appropriations authorized under sec. 201 (a) of the Social Security Act of 1935 were made prior to Jan. 1, 1940.
[3] To meet the additional costs of benefits to survivors of certain World War II veterans as defined in title II of the Social Security Act amendments of 1946.
[4] Less than $0.5 million.
[5] Includes $138,668 profit on investments.
[6] Totals do not necessarily represent the sum of rounded components.
[7] Includes some reimbursements applicable to outlays in other fiscal years.
[8] Adjusted for overreimbursements in prior years.

The ratio of administrative expenditures of the fund to contributions collected and benefits paid is shown in table 3.

TABLE 3.—*Relationship of administrative charges against old-age and survivors insurance trust fund to old-age and survivors insurance contributions and benefit payments*

Fiscal year	Administrative charges against the OASI trust fund as a percentage of—		Fiscal year	Administrative charges against the OASI trust fund as a percentage of—	
	OASI contributions collected	Benefit payments		OASI contributions collected	Benefit payments
1941	3.9	41.7	1946	3.0	11.7
1942	3.0	24.3	1947	2.8	9.6
1943	2.4	18.4	1948	2.9	9.3
1944	2.5	17.7	1949	3.2	8.8
1945	2.1	11.2			

The distribution of benefit payments in fiscal years 1948 and 1949 by type of benefit is shown in table 4. Approximately 73 percent of the total benefit payments from the fund in the fiscal year 1949 were accounted for by monthly benefits to persons aged 65 or over—retired wage earners and their wives, and aged widows and parents of deceased wage earners. Approximately 22 percent of the 1949 benefit payments represented monthly benefits on behalf of children of deceased or retired workers and payments to widows—practically all of them under age 65—who had children of deceased wage earners in their care. The balance of the benefits paid in the fiscal year 1949 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 4.—*Estimated distribution of Treasury disbursements for benefit payments under the old-age and survivors insurance program, by type of benefit, fiscal years 1948 and 1949*

[In millions]

Type of benefit	1948		1949	
	Amount	Percent of total	Amount	Percent of total
Total	[1] $511.7	100	[1] $607.0	100
Monthly benefits	480.4	94	574.8	95
Primary (retired wage earners 65 or over)	272.4	53	333.0	55
Wife's (wives 65 or over of primary beneficiaries)	44.2	9	53.8	9
Widow's (widows 65 or over of wage earners)	41.9	8	53.6	9
Parent's (parents 65 or over of deceased wage earners)	1.8	(2)	2.1	(2)
Child's (dependent of retired wage earners)	3.3	1	4.0	1
Child's (dependents of deceased wage earners)	81.5	16	90.6	15
Widow's current (widows of wage earners with child beneficiary)	35.3	7	37.8	6
Lump-sum benefits (no survivor of deceased wage earner immediately entitled to monthly benefits or wage earner died before 1940)	31.3	6	32.2	5

[1] Includes additional benefits of $3.5 million for fiscal year 1948 and $3.6 million for fiscal year 1949 paid under sec. 210 to survivors of certain deceased World War II veterans. Amount is reimbursable to trust fund from the general fund of the Treasury.

[2] Less than 0.5 percent.

The total of $607.0 million paid in benefits during fiscal year 1949 includes $2.9 million for additional monthly benefits and $0.7 million for additional lump sums paid under section 210 to survivors of certain deceased World War II veterans. Under the provisions of the Social Security Act Amendments of 1946, the trust fund will be reimbursed for these payments to the survivors of veterans.

At the end of the fiscal year 1949, approximately 2.6 million persons in 1.8 million families were receiving monthly benefits at an annual rate of $618 million. At the end of the preceding fiscal year, the monthly benefit rolls included 2.2 million persons in about 1.5 million families to whom monthly benefits were being paid at an annual rate of $509 million. The average monthly benefit in current payment status for different types of family groups as of June 30, 1949, was as follows: Retired male worker only, $26.20; retired worker and wife, $41; retired female worker only, $20.40; widow (aged 65 and over) only, $20.70; widowed mother and one child, $36.30; widowed mother and two children, $50.20; and widowed mother and three or more children, $53.30.

The total assets of the old-age and survivors insurance trust fund, as reported in the ninth annual report of the Board of Trustees, amounted to $10,047 million on June 30, 1948. These assets increased to $11,310 million by the end of the fiscal year 1949, as the result of an excess of receipts over disbursements amounting to $1,263 million during the fiscal year. Table 5 shows a comparison of the total assets of the trust fund and their distribution at the end of the fiscal years 1948 and 1949. The assets of the fund at the end of the fiscal year 1949 consisted of $11,231 million in the form of obligations of the United States Government, $12 million to the credit of the fund account, and $67 million to the credit of the disbursing officer. The asset value of these obligations, as carried on the books of the Treasury Department and shown in this report, is the principal cost—gross purchase price less amount paid for accrued interest—at time of acquisition.

In accordance with the provisions of section 201 (c) of the Social Security Act, as amended, the managing trustee invested during fiscal year 1949 that portion of the assets of the trust fund which, in his judgment, was not required to meet current withdrawals. 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 or on original issue at par. Prior to fiscal year 1948, investments made for the fund consisted only of direct obligations of the United States purchased on original issue. During fiscal years 1948 and 1949, however, investments included purchases of outstanding obligations of the United States in the open market.

TABLE 5.—*Assets of Federal old-age and survivors insurance trust fund, by type, at end of fiscal year 1948 and 1949* [1]

	June 30, 1948		June 30, 1949	
	Par value	Principal cost [2]	Par value	Principal cost [2]
Investments:				
Treasury bonds (public issues):				
2¼-percent bonds of 1959–62	$4,205,000	$4,222,974.87	$4,205,000	$4,222,974.87
2½-percent bonds of 1962–67	58,650,000	58,909,070.33	58,650,000	58,909,070.33
2½-percent bonds of 1963–68	116,480,000	116,777,993.79	116,480,000	116,777,993.79
2½-percent bonds of 1964–69	83,654,000	84,116,525.45	83,654,000	84,116,525.45
2½-percent bonds of 1965–70	455,447,500	[3] 456,062,334.34	455,447,500	456,043,047.54
2½-percent bonds of 1966–71	305,677,500	305,848,805.58	305,677,500	305,848,805.58
2½-percent bonds of 1967–72	1,197,023,250	1,201,841,652.46	1,197,023,250	[4] 1,201,751,208.25
Total Treasury bonds	2,221,137,250	2,227,779,256.82	2,221,137,250	2,227,670,225.81
Special issues:				
Certificates of indebtedness:				
2⅛-percent certificates:				
Maturing June 30, 1949	7,709,000,000	7,709,000,000.00		
Maturing June 30, 1950			9,003,000,000	9,003,000,000.00
Total special issues	7,709,000,000	7,709,000,000.00	9,003,000,000	9,003,000,000.00
Total investments	9,930,137,250	9,936,779,256.82	11,224,137,250	11,230,670,225.81
Uninvested balances:				
To credit of fund account		35,014,860.78		12,409,429.90
To credit of disbursing officer		74,887,040.29		66,869,631.87
Total assets		10,046,681,157.89		11,309,949,287.58

[1] On basis of Daily Statement of the U. S. Treasury.
[2] Gross purchase price less amount paid for accrued interest.
[3] Includes $18,686.80 accrued interest paid on investments.
[4] Includes $6,756.42 accrued interest paid on investments.

The par value of the net increase in the investments owned by the fund during the fiscal year 1949 amounted to $1,294 million. New securities whose gross purchase price totaled $10,281 million were acquired through the investment of receipts of the fund and the reinvestment of funds made available from the sale or maturity of securities during the year. Securities, consisting entirely of 2⅛ percent special certificates of indebtedness, were redeemed during the year at their par value of $8,979 million. In addition, $8 million of Treasury bonds were sold in the open market for the first time, providing an additional source of income to the fund in the form of a profit amounting to $138,668.43. This profit represents the difference between the proceeds received at time of sale, after deduction for accrued interest and investment expenses, and the principal cost at time of purchase.

Of the new securities acquired, $10,273 million were in the form of special certificates of indebtedness, $1,270 million of which were redeemed during the year and $9,003 million of which mature on June 30, 1950. These certificates were acquired at par and bear an interest rate of 2⅛ 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 $8 million of securities acquired during the fiscal year were 2½ percent Treasury bonds purchased at a premium in the open market but yielding a higher rate of return than special securities issuable to the trust fund at the time such marketable issues were acquired.

The average rate of interest on the interest-bearing public debt, which determines the interest rate 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 1949 the average rate of interest on the public debt rose slightly: The rate was 2.236 percent on June 30, 1949, as compared with 2.182 percent on June 30, 1948. Because the rate exceeded 2⅛ percent but remained less than 2¼ percent during the entire fiscal year, the interest rate on all special issues acquired during the fiscal year continued to be 2⅛ percent.

STATEMENT OF THE EXPECTED OPERATIONS AND STATUS OF THE TRUST FUND DURING FISCAL YEARS 1950–54

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 operations 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 industries, rates of contributions, transfers from the general funds of the Treasury to meet the additional cost of benefits payable to survivors of certain deceased World War II veterans, and 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, the amounts of benefit to which they are entitled on the basis of past earnings, and the mortality rates among insured workers and beneficiaries. Consequently, both the income and the disbursements of the fund are substantially affected by the general economic conditions.

In this as in previous reports 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 somewhat less optimistic assumptions. Because alternative II does not reflect the effect on income should a deep depression materialize during the next 5 years, the differences between the two estimates are not great.

For both alternative I and alternative II, it is assumed that 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 year 1949, 1½ percent each during the calendar years 1950 and 1951, and 2 percent each during the calendar years 1952, 1953, and 1954.

The two sets of estimates of the income and disbursements of the trust fund for each of the five fiscal years 1950 to 1954, together with the resulting assets of the fund at the beginning and the end of each year, are presented in table 6. In addition, the figures for actual experience in fiscal years 1941 to 1949 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 through calendar year 1954. Hourly wage rates, and therefore weekly earnings and average annual taxable wages, are assumed to increase gradually in accordance with established long-time trends. Unemployment is assumed to remain at a low level. Benefit disbursements are assumed to increase substantially, primarily because of the long-range upward trend in the number of beneficiaries.

Under alternative I, aggregate income during the period of five fiscal years ending in 1954 would amount to $17.3 billion, including $15.5 billion in contributions and appropriations and $1.8 billion in interest. Aggregate disbursements for the period would be about $4.8 billion, with the highest expected annual disbursement about $1,130 million. The trust fund at the beginning of the fiscal year 1950 would amount to about 10.0 times the highest expected annual disbursement during the succeeding five fiscal years.

The other set of estimates, alternative II, is based on the assumption of a moderately severe economic readjustment beginning in the middle of calendar year 1951. It is assumed that during the adjustment period there will be a substantial increase in unemployment and in short-term and part-time employment, and that the long-time upward trend in wage rates will be interrupted for about 2 years, with subsequent gains in average hourly earnings less rapid than under alternative I and a fairly slow rate of recovery during the remainder of the period. As a result, estimated covered pay rolls in the periods affecting tax collections during fiscal years 1952–54, and therefore estimated contributions, are lower under alternative II than under alternative I. Estimated benefit disbursements, on the other hand, increase more rapidly under alternative II than under alternative I because a larger number of older workers withdraw from or are unable to find jobs in covered employment.

The aggregate income of the fund for the five fiscal years 1950–54 under alternative II would amount to $15.5 billion, including $13.8

billion in contributions and appropriations and $1.7 billion in interest. Aggregate disbursements would be $5.1 billion, with the highest expected annual disbursement about $1,233 million. The trust fund at the beginning of the fiscal year 1950 would amount to about 9.2 times the highest expected annual disbursement during the period.

The 1946 amendments to title II of the Social Security Act 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. Disbursements arising from these amendments, and reimbursements therefor, are included in the amounts shown in tables 6 and 7.

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. In addition, some survivors who in any event would have been eligible under old-age and survivors insurance will now receive larger benefits. 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. It is believed, however, that the net additional disbursements, if any, will not constitute a serious drain on the trust fund during the five fiscal years 1950–54.

Public Law 642, enacted June 14, 1948, which amends the definition of the term "employee" as used in the Social Security Act, results in the exclusion from coverage of certain services previously held covered under title II of the act. While the amended definition is made retroactive to August 14, 1935, certain wage credits established under the former definition will remain credited to the individual's account. The law authorizes an appropriation to the trust fund from general revenues equal to the total amount of benefits paid and to be paid under title II of the Social Security Act, as estimated by the Federal Security Agency, that would not have been paid had the amended definition been in effect beginning August 14, 1935. The estimate has been submitted to the Congress. Since the timing of this appropriation is uncertain, income from this source is excluded from the appropriations shown in table 6.

TABLE 6.—*Operations of the Federal old-age and survivors insurance trust fund, fiscal years 1941–54, subject to the assumptions and limitations stated in the text* [1]

[In millions]

Fiscal year	Fund at beginning of year [2]	Transactions during year							Fund at end of year
		Income			Disbursements			Net increase in fund	
		Total	Appropriations [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
1947	7,641	1,623	1,460	163	466	426	41	1,157	8,798
1948	8,798	1,807	1,617	191	559	512	47	1,248	10,047
1949	10,047	1,924	1,694	230	661	607	53	1,263	11,310
Estimated future experience:									
1950	11,310	2,506	2,249	257	783	725	58	1,723	13,033
1951	13,033	2,818	2,519	300	868	807	61	1,950	14,983
1952:									
Alternative I	14,983	3,534	3,190	344	957	894	63	2,577	17,560
Alternative II	14,983	2,903	2,565	338	1,034	968	66	1,869	16,852
1953:									
Alternative I	17,560	4,140	3,737	403	1,045	980	65	3,095	20,655
Alternative II	16,852	3,560	3,178	382	1,142	1,077	65	2,418	19,270
1954:									
Alternative I	20,655	4,257	3,789	468	1,130	1,064	66	3,127	23,782
Alternative II	19,270	3,715	3,311	434	1,233	1,167	66	2,512	21,782

[1] In interpreting the estimates in this table, reference should be made to the accompanying text which describes the underlying assumptions. Alternative I assumes a continuing high level of employment and earnings throughout the period; Alternative II assumes a moderately severe readjustment with a fairly slow recovery. Estimates were prepared November 1949.

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

[3] Include 100 percent of contributions which are automatically appropriated to the trust fund, and reimbursements equivalent to any additional payments arising from the extension of survivors insurance protection to certain veterans of World War II (Social Security Act Amendments of 1946). Estimated contributions for fiscal years 1950-54 are based on statutory rates of 1 percent each on employers and employees in calendar year 1949, 1½ percent each in 1950 and 1951, and 2 percent each thereafter.

[4] Represent charges against trust fund in respective fiscal years; administrative expenses, after adjustment for bookkeeping transfers, were about $30,000,000 in fiscal year 1944 and about $29,000,000 in fiscal year 1945.

Benefit disbursements during the next 5 years, like contributions, are dependent to a considerable extent 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, over the short range 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 older children eligible for survivors benefits to forego them by working in covered employment. On balance, the amount paid out for survivors benefits over the next few years 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).

TABLE 7.—*Treasury disbursements for benefit payments, distributed by classification of beneficiaries, fiscal years 1941–54, 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
1947	425.6	219.2	38.4	139.4	33.8	105.6	28.5
1948	511.7	272.4	47.5	160.5	43.7	116.8	31.3
1949	607.0	333.0	57.7	184.0	55.6	128.4	32.2
Estimated future disbursements:							
1950	725	410	71	210	69	141	34
1951	807	455	79	237	84	153	36
1952:							
Alternative I	894	504	87	265	101	164	38
Alternative II	968	568	97				
1953:							
Alternative I	980	550	95	295	119	176	40
Alternative II	1,077	634	108				
1954:							
Alternative I	1,064	595	102	325	138	187	42
Alternative II	1,167	683	117				

[1] In interpreting the estimates in this table, reference should be made to the accompanying text which describes the underlying assumptions. Estimates were prepared November 1949.
[2] Totals do not necessarily equal the sum of rounded components.
[3] Partly estimated.

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, to their aged wives, and to their 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. Since fiscal year 1945, however, this proportion has decreased as the volume of withdrawals of older workers from covered employment has increased more rapidly than the growth in the number eligible for primary benefits. This trend is expected to continue for some time to come, even under the favorable employment conditions assumed under alternative I, with a consequent increase in the proportion in receipt of primary benefits.

If the lower employment conditions assumed in alternative II should materialize, it is expected that still 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 1954. The growth in the numer 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 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 1953 numerous persons attaining age 65 will be fully insured even though they left covered employment after reaching age 56.

TABLE 8.—*Wage earners eligible for and receiving primary benefits by attained age of wage earners, fiscal years 1941–54, subject to the assumptions and limitations stated in the text* [1]

Middle of fiscal year (Jan. 1)	All wage earners aged 65 and over			Wage earners aged 65–69			Wage earners aged 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	1,016	306	30	608	156	26	408	151	37
1945	1,253	378	30	708	167	24	545	211	39
1946	1,465	518	35	794	212	27	671	306	46
1947	1,653	702	42	860	271	32	793	430	54
1948	1,817	875	48	920	325	35	897	550	61
1949	1,964	1,048	53	975	380	39	989	668	68
Estimated future experience:									
1950	2,125	1,285	60	1,030	475	46	1,095	810	74
1951	2,275	1,395	61	1,080	500	46	1,195	895	75
1952:									
Alternative I	2,420	1,520	63	1,130	530	47	1,290	990	77
Alternative II	2,395	1,685	70	1,110	635	57	1,285	1,050	82
1953:									
Alternative I	2,565	1,645	64	1,175	560	48	1,390	1,085	78
Alternative II	2,500	1,880	75	1,130	720	64	1,370	1,160	85
1954:									
Alternative I	2,705	1,760	65	1,220	585	48	1,485	1,175	79
Alternative II	2,610	2,005	77	1,160	760	66	1,450	1,245	86

[1] In interpreting the estimates in this table reference should be made to the accompanying text which describes the underlying assumptions. Estimates were prepared November 1949.
[2] Figures for 1941-49 are partly estimated.

Although the number of eligible workers aged 65–69 is expected to treble between January 1, 1941, and January 1, 1954, 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 eightfold during this period, even under the lower-employment assumptions of alternative II. At the latter date, the estimated number eligible at these attained ages will comprise about 55 percent of the total number of eligible persons.

The estimates presented above result in a net increase in the trust fund during the 5-year period of about $12.5 billion under alternative I and about $10.5 billion under alternative II. It is entirely possible under alternative I that the amount of contribution income may be greater and benefit payments lower than has been estimated. The total result would be an even greater growth in the trust fund than is indicated under this alternative. On the other hand, lower contribution and interest income together with higher benefit payments than shown under alternative II, would lead to smaller net increases in the trust fund.

ACTUARIAL STATUS OF THE TRUST FUND

Section 201 (b) of the Social Security Act requires the Board of Trustees to present each year a statement of the actuarial status of the trust fund. In the seventh annual report of the Board, new cost illustrations were presented taking into account the foreseeable effects of the war and the brief postwar period to the date of that report. In the succeeding reports no essential changes were made in these cost estimates other than to allow for the new contribution schedule introduced in the Social Security Act Amendments of 1947. The consideration of social security legislation by the Congress, resulting in the passage of H. R. 6000 by the House of Representatives on October 5, 1949, necessitated extensive actuarial cost estimating for various proposed changes. Accordingly, new cost bases involving postwar developments have not been fully developed but are being worked upon.

In view of the striking economic changes due to the war, many of which have been discussed in some length in previous reports, two sets of cost illustrations have been prepared, one being based on "high" economic assumptions (intended to represent close to full employment with average annual wages at about the level prevailing in 1944–46), 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 the annual wage level prevailing in 1941–42). In view of the current level of wage and 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 and very likely even above the high economic assumptions.

Within each of the two sets of assumptions 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, and movement between covered and noncovered employment. In other words, assumptions as to each of these factors were combined so as to yield a cost illustration which indicated low costs possible under reasonable assumptions, and similarly for the high-cost illustration. For instance, low mortality produces higher cost for the program as a whole.

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 combinations of assumptions which would show a significantly wide range in absolute dollar costs would not necessarily yield a range of percent of pay-roll 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 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. There are a number of basic cost factors which must be continuously recognized in analysis of the costs of this program.

(*a*) *Population.*—The future trend of the population depends 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 female 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. During the war years quite high rates were reported, the wartime peak having been reached in 1943. Although the birth rate declined somewhat after 1943, it remained higher than at any time during the thirties despite the effect of the war in removing from this country many young potential fathers. Beginning in the middle of 1946, the birth rate again rose very rapidly, and for the 12-month period ending June 1947 the birth rate was higher than at any time since before the beginning of the First World War. Since that time there has been some decline, but the rate has been well above the prewar level.

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 regard to the latter factor 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 entitled to 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 many war brides have come to this country, and some refugees or displaced persons are being admitted.

As a basis for the cost illustrations, two population estimates were 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; 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 starting with a different population base and short-range demographic factors but using in general the same long-range assumptions with respect to future trends in mortality and fertility has recently been released by the Bureau of the Census, Forecasts of the Population of the United States, 1945–75. However, the results were not available at the time the cost analysis here presented was made, and in addition, data showing a range in population were needed for a longer period than 30 years.

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 that 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 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 resulting for the total population, for the group aged 20 to 64, and for the group aged 65 and over. The high-cost projection shows a larger aged population than the low-cost projection because of the assumed lower mortality, but a somewhat lower population in age groups under 20 and 20 to 64, 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 relatively little change above that age. The National Resources Committee study of 1938, the National Resources Planning Board study of 1943, and the Bureau of the Census report of 1948, all make assumptions of a future improvement in mortality, as plausibly indicated by past history.

TABLE 9.—*Estimated population of the 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 estimates for 1948								
1948	147	73	74	86	42	43	10.9	5.2	5.7
	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

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 for the ultimate condition, the year 2000. 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 and to the impairments caused by disease; the possibilities of increasing the survival of impaired lives for only temporary periods; and the effects of future uses of atomic energy.

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

(*c*) *Marital and family composition.*—Marital relationship 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 benefits 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 cost 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 an important role in this connection since it determines not only the total number of children, but how they are divided up into families. The actual claims experience is valuable as a guide.

There must also be considered the various factors affecting termination of married status, chiefly divorce and mortality. The distribution of ages of husbands and wives 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 lower than those 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, 1960–2000*

[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 1949					
1949	1,013	169	360	28	236	13
	Low-employment, low-cost assumptions					
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					
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					
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					
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.

TABLE 11.—*Estimated younger survivor insurance recipients of monthly benefits in selected years, 1960–2000*

[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
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 1949: 587,000 orphaned children and 150,000 widowed mothers.

The high-cost assumptions for each of the two economic assumptions show, as expected, a larger number of beneficiaries than the low-cost assumptions (table 10); 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 of the population assumed to be insured as a result of the in-and-out movement between covered and noncovered employment. On the other hand, the lower mortality, despite the somewhat higher birth rate, tends to have the opposite effect in regard to young survivors (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 10 years of operation of the system. As would be expected, those who are fully insured are concentrated at the longer periods of employment, followed by those only currently insured, with those not insured having had employment in only 1 or 2 years in the majority of the cases.

TABLE 12.—*Percentage distribution of workers in covered employment under old-age and survivors insurance at some time during 1937–46, by number of years with wage credits, and by insured status* [1] *as of Jan. 1, 1947*

Number of years with wage credits	Male			Female		
	Fully insured	Currently insured only	Uninsured	Fully insured	Currently insured only	Uninsured
Total	100.0	100.0	100.0	100.0	100.0	100.0
1	(2)	(2)	29.4	(2)	(2)	33.4
2	1.1	1.7	23.3	2.0	5.7	25.9
3	4.8	10.9	17.2	7.9	18.2	17.0
4	7.5	19.5	12.2	13.4	28.2	10.5
5	6.7	26.6	7.9	13.2	25.3	6.5
6	8.1	18.1	5.1	11.9	11.3	3.5
7	9.6	10.4	2.9	9.8	5.6	1.8
8	10.4	5.6	1.3	9.1	3.2	.9
9	10.7	2.9	.5	8.7	1.6	.4
10	40.9	1.3	.2	24.0	.9	.1

[1] Not adjusted to reflect changes in insured status arising from (*a*) combined earnings under coordinated survivor provisions of the old-age and survivors insurance and railroad retirement programs; (*b*) veterans deemed to be fully insured only as result of sec. 210 of title II as amended in 1946.
[2] Inapplicable.

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

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

Age [1]	Men				Women			
	Total	Insured [2]	With wage credits but not insured [3]	With no wage credits	Total	Insured [2]	With wage credits but not insured [3]	With no wage credits
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 persons either fully or currently insured.
[3] Includes those with some wage credits during 1937–44 (although not necessarily in 1944), but not sufficient to be insured.

Illustrations are presented in table 14, showing for the future the percentages of the population insured by reason of current or previous work experience, subdivided by sex and by age groups above and below 65. The percentages 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 parents' benefits, which instead they would receive as reduced supplementary amounts. 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 to receive solely the full benefits of the other category.

TABLE 14.—*Estimated proportion of the population insured under old-age and survivors insurance in selected years, 1960–2000*

[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 [1]	Ages 20-64	Ages 65 and over [1]	Ages 20-64	Ages 65 and over [1]	Ages 20-64	Ages 65 and over [1]
	Men							
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 [2]							
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] Including primary beneficiaries.
[2] Excludes wives and widows of fully insured men except such 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] 1960–2000*

[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
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 and for wife's, widow's, or parent's benefits are shown as primary beneficiaries.

NOTE.—Actual data for June 1949: Men 19.1 percent and women 2.9 percent.

In tables 10, 11, 14, and 15, 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 number of beneficiaries:

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

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

(3) The relatively, and increasingly, small proportion that younger survivor benefits bear to old-age benefits;

(4) A relatively rapid advance in the percent of insured persons aged 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 factor produces 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 more than $80,000,000,000 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 in any month in which the beneficiary earns $15 or more of covered wages, assumptions as to the employment of beneficiaries rank high among the various cost elements. As of June 1949, less than 55 percent of those age 65 and over who were fully insured were actually receiving benefits (table 8). This low proportion is due to the apparently abnormal work opportunities for the aged now prevailing, and also to the element of lag in that the aged insured population now contains relatively few at the more advanced ages (say, 75 and over) where work opportunities are relatively sparse. In the future this proportion is bound to increase, if for no other reason than the aging of the insured population.

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 chart 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.

TABLE 16.—*Average wage credits of workers under old-age and survivors insurance by year, 1937–48*

Calendar year	Workers with any wages in year			Workers with wages in all 4 calendar quarters		
	Total	Male	Female	Total	Male	Female
1937	$899	$1,037	$539	(1)	(1)	(1)
1938	832	958	508	$1,211	$1,359	$783
1939	881	1,014	536	1,246	1,400	800
1940	926	1,070	553	1,305	1,465	831
1941	1,014	1,188	574	1,466	1,646	910
1942	1,127	1,364	609	1,703	1,939	1,047
1943	1,289	1,581	787	1,913	2,205	1,271
1944	1,369	1,681	887	1,996	2,300	1,402
1945	1,328	1,591	895	1,982	2,293	1,384
1946	1,387	1,624	928	2,027	2,262	1,478
1947 [2]	1,561	1,820	1,034	2,159	2,372	1,598
1948 [2]	1,663	1,910	1,130	2,250	2,450	1,700

[1] Data not available.
[2] Preliminary.

The high-employment assumptions use an average annual creditable wage throughout the period up to 2000 of $2,400 for men working in four quarters of a year and correspondingly $1,440 for women. Under the low-employment assumptions the four-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 three-quarter workers is about 50 percent of that for four-quarter workers (i. e., at a lower rate per quarter), while the corresponding proportions for two- and one-quarter workers are about 20 and 10 percent, respectively. These ratios of the part-time average covered wage to the four-quarter average parallel very closely the actual ratios observed in the old-age and survivors insurance wage data. The four-quarter wage assumptions may be compared with the actual experience for such workers in the past years as shown by the last two columns of table 16. It will be observed that the high-employment assumption for men corresponds roughly to the 1947 experience, while for women with 1946. This seems to indicate a need for revision of the basic wage assumptions which were made shortly after the war when the postwar trend was not at all clear.

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 in recent years 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 employment contact that workers had with the program within the single calendar year 1947.

TABLE 17.—*Percentage distribution of workers in employment covered by old-age and survivors insurance, by number of calendar quarters with wage credits, 1947* [1]

Calendar quarters with wage credits	Total	Male	Female	Age [2]		
				Under 25	25 to 44	45 and over
Total	100.0	100.0	100.0	100.0	100.0	100.0
1	12.7	10.5	17.2	19.8	10.6	9.3
2	12.4	10.7	15.9	19.8	10.4	8.6
3	12.9	11.8	15.1	17.3	11.8	10.6
4	62.0	67.0	51.9	43.1	67.2	71.5

[1] Preliminary.
[2] Age at birthday in 1947.

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 survivor 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 net 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 at this time.

Table 18 summarizes the previous discussion by showing illustrative number 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, 1960–2000*

[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					
1960	4,400	1,030	340	5,800	890	320
1980	8,800	1,150	580	13,400	680	500
2000	10,000	1,300	770	19,500	600	850
	High-employment assumptions					
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 1949: 1,818,000 old-age beneficiaries and 737,000 younger survivors. Actual lump-sum death payments in 12-month period ending June 1949: 198,000 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 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 the cost illustrations here presented are such miscellaneous factors as differential retirement rates by marital status and the effect on the size of survivor benefits of lowered earning capacity during last illness.

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 long range cost illustrations, which are subject to continual testing, refinement, and readjustment, are presented in chart 1 and in table 19.

ILLUSTRATIVE LONG-TERM TRENDS OF BENEFITS AND CONTRIBUTIONS

(SUBJECT TO THE LIMITATIONS STATED IN THE TEXT)

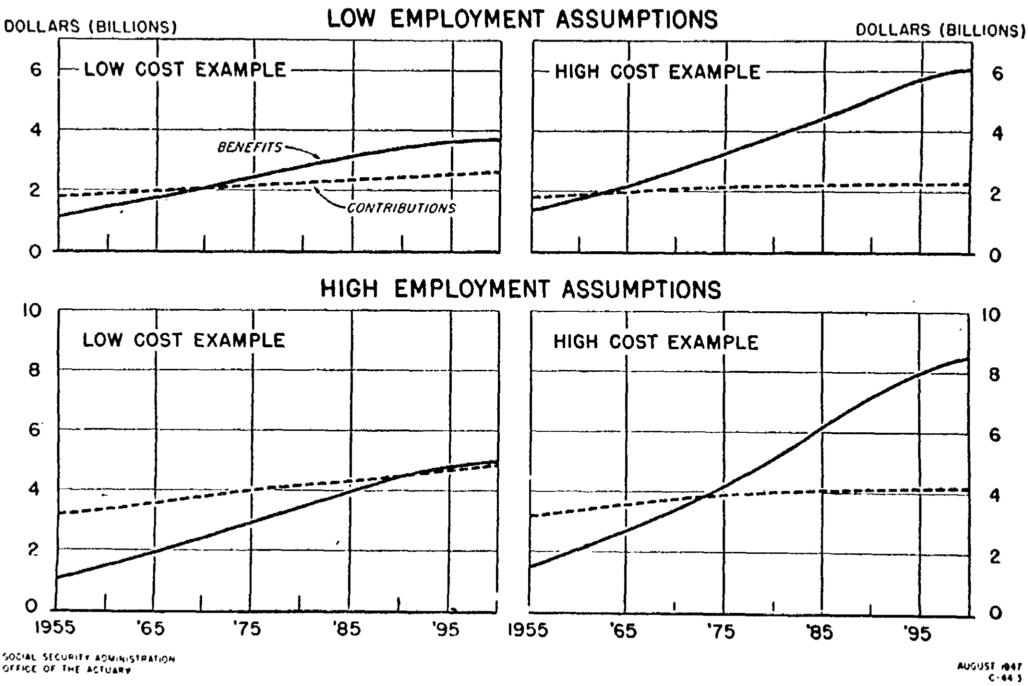


TABLE 19.—*Illustrations of benefit payments and contribution income of the old-age and survivors insurance trust fund in selected years, 1960–2000* [1]

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					
1960	$1.4	$1.9	3.1	$1.7	$1.9	3.7
1970	2.1	2.1	4.0	2.7	2.1	5.2
1980	2.8	2.3	5.0	3.9	2.2	7.2
1990	3.5	2.4	5.7	5.1	2.2	9.2
2000	3.8	2.6	5.8	5.9	2.2	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					
1960	$1.5	$3.4	1.8	$2.1	$3.4	2.5
1970	2.4	3.8	2.6	3.4	3.8	3.7
1980	3.5	4.2	3.3	5.2	4.0	5.2
1990	4.5	4.5	4.0	7.1	4.1	6.9
2000	5.1	4.8	4.2	8.5	4.2	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 limitations stated in the text and correspond to the values used in chart 1. Contribution income is based on the 4 percent statutory rate.

[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 Daily Statement of the U. S. Treasury) for calendar year 1948: $0.56 billion benefit payments, $1.68 billion contribution income, and benefits 0.66 percent of taxable pay roll.

As indicated in the chart and table, assuming a constant average wage throughout the period considered, contributions at the rate of 4 percent of taxable pay roll (the rate scheduled to become effective in 1952) would exceed benefits until 1990 under the high-employment, low-cost example and even thereafter would be only slightly lower. Under both the high-employment, high-cost example, and the low-employment, low-cost example, contributions would exceed benefits until about 1970, while for the low-employment, high-cost example, this point would come somewhere between 1960 and 1965. In all instances, for at least the next 15 years there would result increases in the funds accumulated, and the interest earnings thereon would be available later to meet a portion of the benefit payments.

In the case of the high-employment, low-cost example, this income from interest could forestall indefinitely the necessity for (1) an increase above 4 percent in pay-roll contribution rates; (2) contributions on the part of the Treasury derived from general taxes as distinct from pay-roll contributions; (3) liquidation of the trust fund for purposes of meeting benefit obligations when these come to exceed pay-roll contribution income; or (4) any combinations of these. Under the other three examples, however, 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.

The chart shows the steady rise in benefit payments under the widely different sets of conditions discussed earlier in this section. It shows 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 chart shows only smooth curves and hence does 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 contribution income is derived is 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 chart indicates 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 contribution 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 benefits are determined in large part by the average monthly wage up to the maximum of $250; 40 percent is applied to the first $50 thereof and 10 percent to 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 portion of the benefit formula to which the 10-percent rather than the 40-percent rate applies. Thus benefits are smaller 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 far-distant future years—wages of as much as 60, 70, or more years previously.

Under the assumptions of a 1-percent compound annual rate of increase in 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 chart 1). 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. Under such a wage assumption, the cost expressed as a level premium into perpetuity taking into account discounting at 2 percent interest, would show a range of from 2½ to 6 percent, as contrasted with the range of from 3 to 7 percent as shown in table 19.

The assumption of steadily rising average wages in conjunction with an unamended benefit formula has an important bearing in consideration of the long-range cost of the program. With such assumption, the future 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 the benefits paid to beneficiaries would steadily diminish in relation to current wage levels. In such a case, offsetting this apparent savings in cost, it is likely that the present benefit 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 wage level as average benefits under the present formula were in relation to the 1939 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 the 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 in the future, 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 possibility is a drastic change in the average age of retirement either to a considerably lower effective age so that practically all persons would retire at the minimum age of 65, or conversely 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 CONCLUSIONS

At the end of the fiscal year 1949, aggregate old-age and survivors insurance benefit payments were being made at an annual rate of about $670 million; in the last of the five fiscal years ahead, annual payments are expected to total from $1,064 to $1,167 million. The trend of such payments will be upward throughout the present century; by 1970, benefit disbursements are expected to increase to three to five times their current level.

Contributions paid by employers and employees in each of the five fiscal years immediately ahead are expected to be wholly sufficient to meet the disbursements of the old-age and survivors insurance program in each of those years.

Since January 1, 1937, employers and employees have contributed 1 percent each on taxable wages and pay rolls in industries covered under the program. The Social Security Act Amendments of 1947 increase this rate to 1½ percent each on employer and employee, effective January 1, 1950, and to 2 percent each, effective January 1, 1952.

As stated in earlier reports the Board is convinced that prudent management of the finances of the trust fund requires special emphasis on the long-range relationships between the income and the disbursements of the fund. According to the calculations summarized in this report, the level-premium cost of benefits under the system into perpetuity at a 2-percent interest rate may range between 3 and 7 percent of pay roll. These figures are lower than the estimated costs of the program when it was adopted in 1939 and below the level-premium figures contained in some of the earlier reports of the Board. The war and its aftermath, as well as the recovery from the depression of the thirties, have been accompanied by important changes in many of the long-range factors which determine the relationship between contributions and benefits under the program. Among the more important factors which have led to a reduction in the illustrative costs, measured as a percent of pay roll, are the increased level of earnings and the expanded employment in covered industries.

The Board wishes to emphasize that the present cost figures are predicated on the maintenance of level wage rates. The evidence available from historical experience and from the past development of our economic system indicates that the level of income and earnings in the Nation is likely to rise in the future. Increases in the past have been somewhat uneven, but on the whole they have been persistent over the decades. Taking into account this tendency for wages to rise, the range of level-premium costs might be reduced from 3–7 to 2½–6 percent.

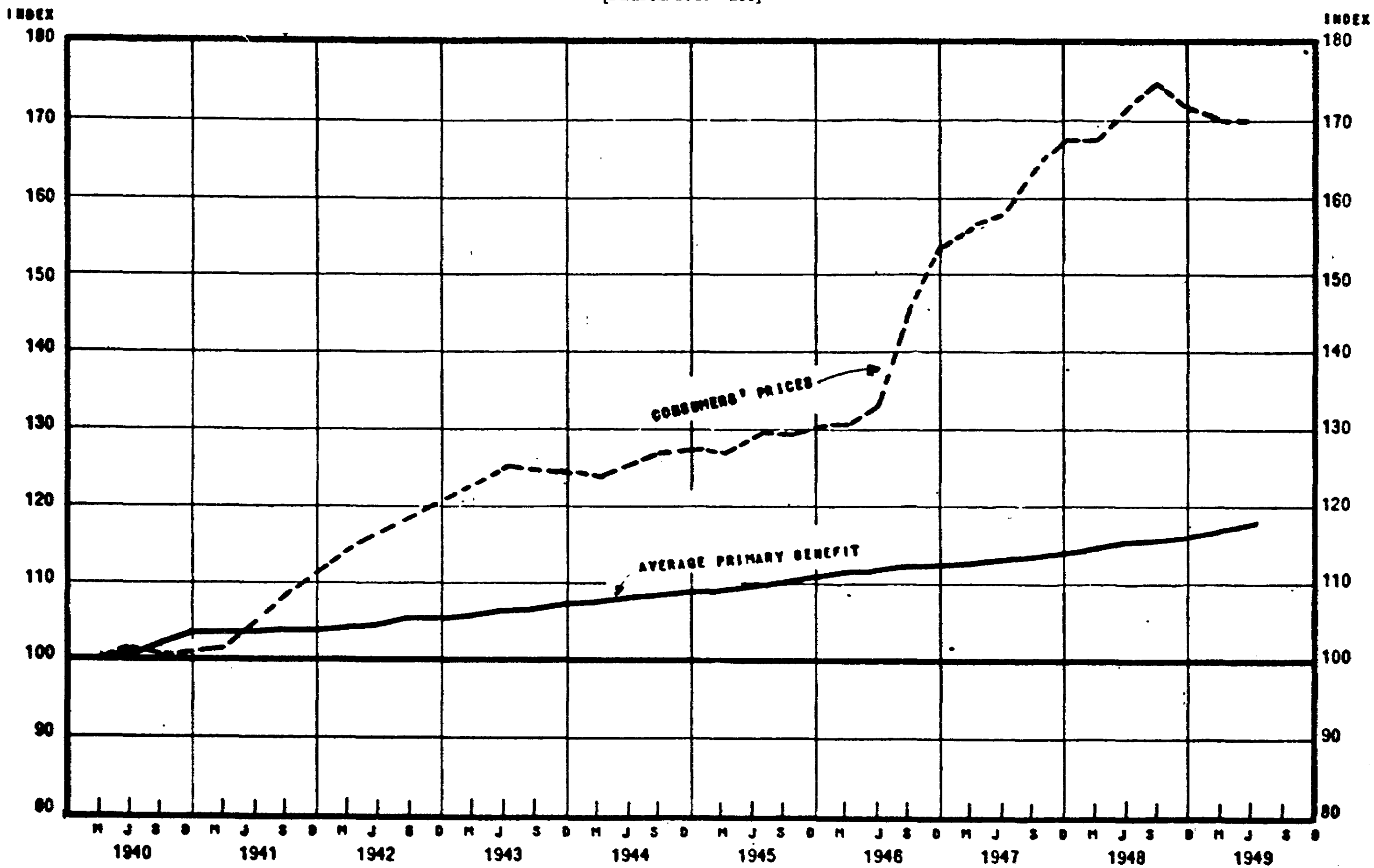
The factors which, in large part, account for the anticipated favorable financial position of the program in the period immediately ahead, and for the reduction shown in the figures on the long-range cost as a percent of pay roll, at the same time have seriously impaired the adequacy of benefits based on present benefit provisions. From the first quarter of calendar year 1940, when monthly benefits began to be paid, to the middle of 1949, the cost of living rose 70 percent, while the average primary benefit rose 18 percent—from $21.84 to $25.72 (chart 2). One in every ten aged insurance beneficiaries was receiving old-age assistance payments in 1948. Undoubtedly other beneficiaries could have obtained assistance if they had applied for it. From a study made in 1946, it has been estimated that in one large eastern city a little more than a third of all aged beneficiaries who were retired were either receiving public assistance, or, on the basis of their meager resources, probably could have qualified for it. The inadequacies of the benefits paid will become increasingly pronounced unless the benefit formula is adjusted upward to reflect the rise in wages, national income, and living standards.

In their annual reports to Congress, the Federal Security Agency and the Social Security Administration have pointed out that there are many inadequacies and gaps in present coverage and benefit provisions—gaps which in large measure have developed or been intensified by war and postwar developments. Similar views were expressed by the Advisory Council on Social Security in its report submitted to the Senate Committee on Finance in April 1948, and by the Ways and Means Committee of the House of Representatives in its report on H. R. 6000 in August 1949. The Board of Trustees is hopeful that the comprehensive review of the old-age and survivors insurance program which has now been undertaken in Congress covering not only the benefit formula, the coverage of the system, and the scope of protection afforded, but also the contributions and financial policy, will lead to the development of a total program more nearly in accord with current and prospective conditions.

In conclusion, the Board wishes to emphasize the soundness and propriety of investing the trust fund in interest-bearing obligations of the United States in accordance with section 201 (c) of the Social Security Act, as amended. As both the Advisory Council on Social Security of the Senate and the Ways and Means Committee of the House of Representatives recently have stated, such investment is as reasonable and proper as is the investment by life-insurance companies of their own reserve funds in Government securities. The accumula-

CHART 2.—*Index of average monthly primary benefit in current-payment status and consumers' price index, last month of each calendar quarter, 1940–1949*

[March 1940=100]



tion of a trust fund so invested does not mean, as some have erroneously alleged, that the people will be taxed twice for the benefits they will receive. This "double taxation" fallacy counts payments on the Federal debt as social-security costs. Actually these debt payments will have to be made by the Federal Government whether or not there is a trust fund. The Government obligations held by the trust fund represent a part of the Federal debt. If these obligations were not held by the trust fund they, or their equivalent, would be in the hands of private investors. Payment of interest charges on these securities, or the cost of their redemption, does not increase total Federal expenditures on account of the public debt. Receipt of interest by the trust fund, on the other hand, decreases the amount of contributions that will be required in the future to finance benefit payments under the insurance system.

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