

---

# Actual Costs of the Social Security System Over the Years Compared With 1935 Estimates

by Robert J. Myers\*

---

It is believed by many that the cost of the Social Security program currently is considerably higher than it had been estimated that it would be when the program was enacted in 1935. The analysis in this article indicates that the cost of the Old-Age and Survivors Insurance program in 1980, when expressed as a percentage of taxable payroll, was almost exactly the same as it was estimated initially to be then. Such cost, however, does not include the Disability Insurance and Hospital Insurance programs and, moreover, is estimated to increase by about 50 percent over the next 50 years, whereas the initial estimates showed no cost increases after 1980.

---

One often-stated criticism of the Social Security system is that it is costing far more than was anticipated when enacted in 1935. For example, the original law called for a maximum employee tax of only \$30 in 1937, but by 1981, such tax had increased to \$1,975, an amount 66 times as large. In addition, the average monthly benefit payable to a retired worker was \$23 in 1940, but in 1981 it was \$385—about 17 times as large.

Of course, the Social Security program has been expanded over the years in a number of ways. Part of this expansion was due to extending coverage of the program to more types of employment, while another significant part was because of the addition of new types of benefits, such as disability benefits in the 1956 Act and Medicare benefits in the 1965 Act. Yet another significant reason for the much larger level of expenditures is the inflation that occurred in the past 45 years. For example, wage levels are now about 13 times as high as they were in the late 1930's, while the price level is about 6-1/2 times as high.

Beyond all of the increases and expansions of the past 45 years, the future cost of the program will rise even further. This trend is indicated by the actuarial cost estimates contained in the 1981 Annual Report of the Board of Trustees of the Old-Age and Survivors Insurance (OASI) and Disability Insurance (DI) Trust Funds. The report shows that the program is facing significant

financial problems over both the short run and long range. In early 1981, the Reagan Administration proposed changes that would remedy this situation. Some of those changes have already been enacted in the Omnibus Budget Reconciliation Act of 1981 and the amendments thereto enacted on December 29, 1981.

Although the OASI program has been changed markedly over the years, estimates prepared almost half a century ago for the Social Security Act of 1935 were remarkably accurate when viewed from one perspective—the cost of the program as a percentage of taxable payroll. The actuaries of the Social Security Administration have always emphasized that, in long-range cost projections, this is the element of greatest significance and importance, because it gives an explicit indication of the appropriate and necessary tax rates needed to adequately finance the program.

Table 1 compares the 1935 estimates of the cost of the original program, which involved only old-age retirement benefits and lump-sum refund benefits,<sup>1</sup> with the actual costs of the Old-Age and Survivors Insurance program, each expressed as a percentage of taxable payroll, over the period 1940-80. It is appropriate to use for this comparison only the OASI program, even though the original program did not include survivor benefits. When the latter were added in the 1939 Act, the old-age retirement benefits were reduced in size over the long

---

\*Deputy Commissioner for Programs, Social Security Administration, from March 16, 1981, until his resignation effective January 8, 1982. He was also Chief Actuary, Social Security Administration, from 1947 to 1970. Mr. Myers is currently the executive director of the National Commission on Social Security Reform. This article is adapted from Actuarial Note No. 110 (SSA Pub. No. 11-11500), November 1981.

<sup>1</sup> In the event that a worker died before receiving monthly benefits at least equal to 3.5 percent of the cumulative covered wages, a lump sum amounting to the difference was payable. Such a procedure was also followed for workers who attained age 65 and did not meet the eligibility conditions for old-age benefits.

**Table 1.**—Comparison of estimated cost of original Old-Age Benefits program with actual cost of Old-Age and Survivors Insurance benefits as percentage of taxable payroll, 1940–80

[Dollar amounts in millions]

Calendar year	Original estimated benefit payments <sup>1</sup>	Original estimated taxable payroll <sup>2</sup>	Benefit payments as percent of taxable payroll	
			Estimated <sup>1</sup>	Actual
1940 .....	\$48	\$28,690	0.2	0.2
1945 .....	218	30,056	.7	.5
1950 .....	538	31,423	1.7	1.2
1955 .....	921	32,789	2.8	3.3
1960 .....	1,430	34,155	4.2	5.6
1965 .....	1,875	35,521	5.3	7.2
1970 .....	2,355	36,887	6.4	7.3
1975 .....	2,934	38,254	7.7	9.3
1980 .....	3,576	38,254	9.3	9.4

<sup>1</sup> Robert J. Myers, *An Analysis of Benefits and the Progress of the Old-Age Reserve Account under Title II of the Social Security Act* (Actuarial Study No. 8), Social Security Board, June 1938, table 11.

<sup>2</sup> *Ibid.*, table 13. Also, can be exactly derived from table 1 in W. R. Williamson and Robert J. Myers, *Cost Estimate for Various Modifications of the Old-Age Insurance Benefits under Title II Suggested to the Social Security Board* (Actuarial Note No. 1), Social Security Board, November 1937.

run, so that the cost of the program would remain the same.

This result is indicated by data from an early study of the Office of the Actuary, Social Security Board.<sup>2</sup> The average cost of the program over the period 1937–80 was shown, for the low-cost estimate, to be 4.21 percent of taxable payroll for the 1935 Act, as compared with 4.69 percent for the 1939 Act. The corresponding figures under the high-cost estimate were 6.41 percent and 6.25 percent, respectively. Thus, it can be seen that the estimated long-range cost of the program as it was modified by the 1939 Act was just about the same as was the cost of the original program. (The year-by-year cost estimates for the 1939 Act were not published, and so the analysis made here necessarily uses the published estimates for the 1935 Act.)

The original actuarial cost estimates, expressed as a percentage of taxable payroll, were amazingly close to what actually developed. For the first decade, the actual costs were below those estimates, but then for the next 30 years, the reverse was the case. However, for 1980—obviously because of a considerable number of counterbalancing elements—the cost estimated for the original program was almost exactly the same as what actually occurred.

One such element was the relative level of the maximum taxable earnings base. In the late 1930's, it applied to 92 percent of all earnings in covered employment. Then, in 1950–72, the corresponding figure was gener-

<sup>2</sup> Robert J. Myers, *An Analysis of the Benefits and Costs under Title II of the Social Security Amendments of 1939* (Actuarial Study No. 14), Social Security Board, 1941, table 14.

ally 70–80 percent, but since then—as a result of both ad hoc and automatic adjustments of the base—it rose to 88 percent for 1980 and to 89 percent for 1981. These fluctuations in the relative level of the taxable earnings base have tended to widen the differences between the actual experience and the estimates for the 1935 Act; otherwise, the figures in the last two columns of table 1 would have been much closer.

The original estimates were not so accurate in other respects, as can be seen from examining the dollar figures as to income, outgo, and trust-fund balance, presented in table 2. Many factors limit comparability of the two sets of figures, but a comparison is interesting. However, it is most important to bear in mind that the technique of using level earnings assumptions (begun in 1935 and used until 1972) was never intended to yield dollar values that would be meaningful for long-distant future years. Rather, the significant figures were always emphasized as being the percentage-of-payroll ones.

The actual tax income for the OASI program for 1980 was 45 times that estimated in 1935. The difference is due not only to the much higher proportion of the labor force covered by the program than under the original law and the inflation in earnings levels that has occurred, but also because the original program contemplated that the financing would be on a modified-reserve basis, rather than a pay-as-you-go basis, as under present law. Thus, under the original program, it was planned that a relatively large interest-earning fund would be built up (as discussed later) and that, consequently, the necessary ultimate contribution rates would be lower than if the program had been based on pay-as-you-go financing.

**Table 2.**—Comparison of estimated income, outgo, and fund balance for original Old-Age Benefits program with actual experience for Old-Age and Survivors Insurance program, calendar year 1980

[Dollar amounts in millions]

Item	Original estimate <sup>1</sup>	Actual experience	Ratio of actual experience to original estimate
Tax income in year .....	\$2,295	\$103,456	45.1
Interest on fund in year ..	1,399	1,845	1.3
Benefit outgo in year ....	3,576	105,082	29.4
Administrative expenses in year .....	114	1,154	10.1
Fund balance at end of year .....	46,641	22,824	.49

<sup>1</sup> Robert J. Myers, *An Analysis of Benefits and the Progress of the Old-Age Reserve Account under Title II of the Social Security Act* (Actuarial Study No. 8), Social Security Board, June 1938, table 11. The figure for tax income is derived from the published figure of \$2,180.5 million by dividing it by 95 percent to reflect that the figures shown for "Appropriation to Reserve" are net of estimated administrative expenses (see page 31 of the Actuarial Study). Correspondingly the figure for administrative expenses is merely the difference between the Social Security tax income and \$2,180.5 million.

---

The actual interest earnings of the OASI Trust Fund in 1980 were only 32 percent larger than the estimated interest receipts for the original program—the result of several somewhat offsetting factors. First, the actual fund balance was only about half as large as that estimated for the original program (as will be discussed later). Second, the actual average interest rate was much higher than was assumed for the original program—8.9 percent versus 3 percent.

Actual benefit outgo in 1980 was 29 times as high as estimated in 1935. At the same time, actual administrative expenses were 10 times as high. The differential would have been much larger had it not been for the fact that the 1935 estimates assumed that, ultimately, administrative expenses would be 5 percent of contribution income, whereas this ratio has been only about 1-1/4 percent for OASI in recent years.

Finally, the reverse situation occurred for the fund balance at the end of 1980. The actual OASI Trust Fund at that time was only about half as large as was originally estimated for 1980 (\$46.6 billion). This difference, of course, reflects the change in the financing basis mentioned previously. Also, in the actual past experience as to end-of-month trust-fund balances, the OASI Trust Fund reached a peak of \$40.6 billion for May 1975; the peak for the OASI and DI Trust Funds combined was

\$48.6 billion in the same month. Thus, the original estimate of almost \$47 billion was—because of many counterbalancing elements—almost fulfilled in the recent past.

In conclusion, although the actual current cost of the OASI program as a percentage of taxable payroll is quite close to the estimates for 1980, made when the initial program was enacted, this does not mean that the overall cost of the Social Security program has not grown beyond the original expectations. For one thing, the Social Security program has been expanded, from a cost standpoint, by the addition of the Disability Insurance (DI) and Hospital Insurance (HI) programs. In 1980, for example, these two programs resulted in the total cost being 13.0 percent of taxable payroll (compared with 9.4 percent for OASI only).

The estimates for the original law assumed that the cost would level off after 1980. Now, however, the ultimate—beginning with year 2030—costs (as a percentage of taxable payroll) for the OASI program are estimated to be about 45-55 percent higher than the current cost (according to the intermediate cost estimates in the 1981 Trustees Report, which gives estimates to 2055). Furthermore, the costs of the DI and HI programs are estimated to increase significantly (as a percentage of taxable payroll) in the long-range future.