

COMPARISON OF ACTUAL ECONOMIC EXPERIENCE AND ASSUMPTIONS IN
TRUSTEES REPORTS, 1971-80

by Joseph A. Applebaum, F.S.A.
Office of the Actuary

This note compares the actual economic experience with the assumptions contained in the 1971 through 1980 reports of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds. Because income and outgo are, to a major extent, affected by automatic indexing procedures, the financial stability of the OASDI system is linked to the nation's economy. In projecting its financial operations, assumptions must be made as to price inflation, wage growth, and the size of the work force. It is inherent in making projections of economic assumptions that actual experience will not correspond exactly to that assumed, and such "errors" should not necessarily be taken to imply mistakes or oversights.

The accompanying table shows, for each calendar year from 1971 through 1980, actual values for: average unemployment rate, year-to-year percentage increase in the CPI, year-to-year percentage increase in average covered wages, and annual real wage increase--the difference between the increases in wages and in prices. Also shown are the values that were given for each of these measures of economic activity under the intermediate set of assumptions in various OASDI Trustees Reports. ^{1/}

A brief inspection of the table reveals one important fact. The values assumed in the reports were rather consistently optimistic, particularly with respect to price inflation and real wage growth, in comparison with what actually occurred. Thus, the reports projected more robust financial pictures for OASDI than what, in fact, occurred. A forthcoming actuarial note will analyze in greater detail the effects and implications of differences between actual and assumed economic experience.

The actual experience on real wage increases (which is probably the most important economic element from a cost standpoint), for each of the years from 1971 through 1980, was less favorable than the estimates made in the Trustees Report for the fourth preceding year. Further, this situation was also generally so for the reports for the third and second preceding years as well. For example, for 1980, the 1976-78 reports assumed real wage increases of about 2.4 percent, but the actual experience was a real wage decrease of 5.0 percent.

The foregoing analysis makes it clear that decisions about the short-range financing of the OASDI program should take into consideration the possibility that actual experience with respect to the economic assumptions will be less favorable than "best guess" estimates. This is especially so at the present time, when the level of the trust funds is so low.

^{1/} It should be noted that, for any particular year, data are shown for the estimated assumptions in the Trustees Report for the following year, which as to the increases in covered wages and the real wage increase generally differ from the actual experience for that year (although not by much). The reason for this is that the Trustees Report is prepared in the early part of the year, before actual data on increases in wages for the previous year are available (although actual CPI and unemployment data are obtainable).

COMPARISON OF ESTIMATES FROM VARIOUS TRUSTEES REPORTS
WITH ACTUAL EXPERIENCE

<u>Trustees Report</u>	<u>Average Unemployment Rate</u>	<u>Increase in CPI</u>	<u>Increase in Average Covered Wages</u>	<u>Real Wage Increase</u>
<u>For 1971</u>				
1971 Report	5.2%	4.3%	6.0%	1.7%
1972 Report	6.0	4.3	5.5	1.2
Actual Experience	5.9	4.3	4.9	.6
<u>For 1972</u>				
1971 Report	4.4%	3.5%	8.2%	4.7%
1972 Report	5.5	3.1	6.0	2.9
1973 Report	5.6	3.3	6.8	3.5
Actual Experience	5.6	3.3	7.3	4.0
<u>For 1973</u>				
1971 Report	4.0%	3.1%	6.1%	3.0%
1972 Report	5.0	2.9	5.8	2.9
1973 Report	4.7	4.5	7.1	2.6
1974 Report	4.9	6.2	7.5	1.3
Actual Experience	4.9	6.2	6.9	.7
<u>For 1974</u>				
1971 Report	4.0%	2.8%	5.5%	2.7%
1972 Report	4.2	2.8	6.0	3.2
1973 Report	4.5	3.0	6.9	3.9
1974 Report	5.8	9.1	7.9	-1.2
1975 Report	5.6	11.0	6.5	-4.5
Actual Experience	5.6	11.0	7.4	-3.6
<u>For 1975</u>				
1971 Report	4.0%	2.8%	5.2%	2.4%
1972 Report	4.0	2.7	5.5	2.8
1973 Report	4.5	2.8	6.3	3.5
1974 Report	5.8	5.7	8.5	3.3
1975 Report	8.8	9.0	7.2	-1.8
1976 Report	8.5	9.1	6.8	-2.3
Actual Experience	8.5	9.1	6.6	-2.5
<u>For 1976</u>				
1972 Report	4.0%	2.7%	5.1%	2.4%
1973 Report	4.5	2.8	5.2	2.4
1974 Report	4.8	4.5	8.0	3.5
1975 Report	8.0	6.6	9.0	2.4
1976 Report	7.7	6.3	7.7	1.4
1977 Report	7.7	5.7	7.5	1.8
Actual Experience	7.7	5.8	7.9	2.1

<u>Trustees Report</u>	<u>Average Unemployment Rate</u>	<u>Increase in CPI</u>	<u>Increase in Average Covered Wages</u>	<u>Real Wage Increase</u>
<u>For 1977</u>				
1973 Report	4.5%	2.8%	5.2%	2.4%
1974 Report	4.5	3.2	7.6	4.4
1975 Report	7.0	6.5	11.0	4.5
1976 Report	6.9	6.0	8.5	2.5
1977 Report	7.1	6.0	8.4	2.4
1978 Report	7.0	6.5	7.7	1.2
Actual Experience	7.0	6.5	7.3	0.8
<u>For 1978</u>				
1974 Report	4.5%	3.0%	5.5%	2.5%
1975 Report	6.2	5.7	8.8	3.1
1976 Report	6.6	6.0	9.4	3.4
1977 Report	6.3	5.4	8.1	2.7
1978 Report	6.3	6.1	7.2	1.1
1979 Report	6.0	7.6	8.5	0.9
Actual Experience	6.0	7.6	8.0	0.4
<u>For 1979</u>				
1975 Report	5.4%	4.6%	7.7%	3.1%
1976 Report	6.2	5.5	8.5	3.0
1977 Report	5.7	5.3	7.8	2.5
1978 Report	5.9	6.1	7.9	1.8
1979 Report	6.0	9.4	8.3	-1.1
1980 Report	5.8	11.5	8.4	-3.1
Actual Experience	5.8	11.3	9.3	-2.0
<u>For 1980</u>				
1976 Report	5.7%	5.0%	7.7%	2.7%
1977 Report	5.2	4.7	7.1	2.4
1978 Report	5.4	5.7	7.9	2.2
1979 Report	6.2	7.4	8.0	0.6
1980 Report	7.2	14.2	9.6	-4.6
Actual Experience	7.2	13.5	8.5	-5.0