

BY THE U.S. GENERAL ACCOUNTING OFFICE

Report To The Chairman,
Special Committee On Aging
United States Senate

Stabilizing Social Security--Which
Wage Measure Would Best Align
Benefit Increases With Revenue Increases?

The Social Security Amendments of 1983 included an automatic mechanism to help align Social Security benefit payment increases with revenue increases if Social Security reserves fall below a specified level. GAO was asked which of several wage measures would be the most timely and accurate to use in this alignment.

GAO evaluated eight wage measures and found that two--the currently used Social Security Administration average wage index and the Bureau of Labor Statistics' Employment Cost Index--would be the most timely and accurate to use as an automatic mechanism. Although the Employment Cost Index is slightly better at indicating revenue increases, the limited number of years of data that could be analyzed (only 8) provided inconclusive evidence that it would be the clearly superior measure to use.

The Department of Health and Human Services, the agency responsible for the Social Security program, generally agreed with GAO's overall findings and conclusions.



127970

GAO/IMTEC-85-13
AUGUST 27, 1985

Request for copies of GAO reports should be sent to:

**U.S. General Accounting Office
Document Handling and Information
Services Facility
P.O. Box 6015
Gaithersburg, Md. 20877**

Telephone (202) 275-6241

The first five copies of individual reports are free of charge. Additional copies of bound audit reports are \$3.25 each. Additional copies of unbound report (i.e., letter reports) and most other publications are \$1.00 each. There will be a 25% discount on all orders for 100 or more copies mailed to a single address. Sales orders must be prepaid on a cash, check, or money order basis. Check should be made out to the "Superintendent of Documents".



UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

INFORMATION MANAGEMENT
& TECHNOLOGY DIVISION

B-219175

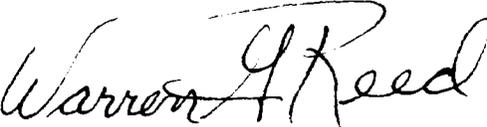
The Honorable John Heinz
Chairman, Special Committee
on Aging
United States Senate

Dear Mr. Chairman:

This report examines the federally available wage measures for use in determining Social Security cost-of-living adjustments under specific circumstances. It evaluates those best suited to help align Social Security benefit payment increases with revenue increases if the need arises. You raised the concern that, although the Consumer Price Index and its effect on Social Security benefits have received careful study, similar attention has not been given to the legislatively designated Social Security Administration average wage index or any other wage measure that might be available to index the benefit payments on a contingent basis.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of the report. At that time, we will send copies to interested parties and make copies available to others upon request.

Sincerely yours,


Warren G. Reed
Director

EXECUTIVE SUMMARY

Since 1975 the annual cost-of-living adjustments --increases to Social Security beneficiaries to maintain their purchasing power--have been based on price increases alone, as measured by the Consumer Price Index. In December 1984 the lower of the increases in either the Consumer Price Index or the Social Security Administration (SSA) average wage index became the basis for the cost-of-living adjustments if Social Security reserves fell below a specified level of estimated annual benefit payments. The Consumer Price Index continues for the cost-of-living adjustments as long as the reserves are at or above the specified level.

A request from the Chairman of the Senate Special Committee on Aging prompted a GAO analysis of federally available wage measures to determine the one that would

- provide the most timely and accurate alignment of Social Security benefit payment increases with revenue increases and
- be most compatible with the wage adjustments already existing in other parts of the Social Security program.

BACKGROUND

In 1981, with the Social Security fund in financial trouble, the President and the Congress unable to agree on a solution, and public confidence eroding, the President established the National Commission on Social Security Reform. The commission recommended and the Congress enacted the Social Security Amendments of 1983 to ensure the solvency of the Social Security fund. One commission recommendation enacted was an automatic mechanism--a stabilizer provision--to help align annual increases in benefit payments to increases in revenues when Social Security reserves dropped below a certain level.

Social Security revenues tend to gain at the same rate as average wage levels. In periods when prices rise faster than wages, basing cost-of-living adjustments on price increases can cause benefit payments to advance faster than revenues, thereby depleting Social Security

EXECUTIVE SUMMARY

reserves. Basing cost-of-living adjustments on increases in wages rather than in prices during these periods should, therefore, help keep benefit payments better aligned with Social Security's ability to make those payments. The commission recommended the SSA index for the stabilizer provision. It believed that of the federally available wage indexes, the SSA index would best indicate changes in revenue flow into the Social Security fund.

Starting with the December 1984 cost-of-living adjustment, the stabilizer provision was to be used if Social Security reserves fell below a specified level. In 1984, the level was 15 percent, as measured by the trust-fund ratio (the beginning-of-year reserves compared to the estimated annual outlays); after 1988 it goes up to 20 percent. Thus far, the stabilizer provision has not been activated; the ratio has been above 15 percent. According to SSA's 1985 trustees' report, the reserves are likely to be above 15 percent through 1988 and above 20 percent for 1989.

RESULTS IN BRIEF

Of all eight federal wage indexes available, the SSA index and another, the Employment Cost Index (ECI), would best help to provide the most timely and accurate alignment. However, neither one is superior to the other.

Using the SSA index in the stabilizer provision would be compatible because it is already used to adjust other Social Security program amounts. However, the ECI also would be compatible.

GAO'S ANALYSIS

GAO looked at eight wage measures, matching them against characteristics for use as wage measures in a stabilizer provision. Overall, the SSA index and the ECI had the most desirable characteristics. Even though the SSA index does not reflect the most current wage data and the ECI only reflects unemployment indirectly (to the extent it affects wage-rate changes), they do have significant advantages. Notably, both offer the broadest coverage of the work force and both

EXECUTIVE SUMMARY

measures are published in final form, rather than preliminary figures that are later revised. (See pp. 7 to 10.)

Neither Wage
Measure is
Superior

GAO compared the lower of the increases in the SSA index or the Consumer Price Index to Social Security revenues derived from tax contribution changes over a 5-year period to determine whether benefit increases would be more in line with revenue increases than using only the Consumer Price Index. GAO made a similar comparison using the ECI. GAO found that using either wage measure would meet the stabilizer's objective of helping to align benefit increases with revenue increases. (See p. 15.)

GAO found the ECI as being a slightly better indicator than the SSA index of changes in both taxable earnings (generally, those earnings upon which people pay their Social Security taxes) and tax contributions (primarily, taxable earnings times tax rates). The ECI was on average about a half percentage point closer to the tax contributions and taxable earnings. These GAO analyses are limited to data accrued from 1977 to 1984, the 8 years since the ECI began its first full year in 1976. In GAO's opinion, the relatively small difference between the measures, coupled with the limited years of data, does not provide conclusive evidence that the ECI would be the better wage measure to use. (See pp. 16 to 18.)

Neither the SSA index nor the ECI provided a precise alignment. For the 8-year period, tax contributions and taxable earnings increases tended to be greater than the two wage measures. For example, tax contributions were approximately 6 percentage points greater and taxable earnings were a little over 2.5 percentage points greater than what was shown by the two measures. One reason for the difference is that the measurement periods of the ECI and SSA index lag behind the cost-of-living adjustment payment period by 1-1/4 to 2 years, respectively. Additionally, other factors, including changes in the number of contributing workers and the legislated tax rates, affect the year-to-year changes in benefit payments and revenues. (See pp. 17 and 18.)

EXECUTIVE SUMMARY

RECOMMENDATIONS

This report provides GAO's analyses of wage measures for the stabilizer provision; it contains no recommendations.

**AGENCY
COMMENTS**

The Department of Health and Human Services generally agreed with a draft of this report's overall findings and conclusions. That Department, the Bureau of Labor Statistics, and the Internal Revenue Service expressed concerns relating primarily to technical matters such as our description of certain wage measures. Changes to the report have been made, where appropriate, to address their concerns. (See pp. 21 to 30.)

C o n t e n t s

	<u>Page</u>
Executive Summary	i
CHAPTER	
1	INTRODUCTION 1
	Social Security: matching revenues with benefit payments 2
	Automatic increases to initial and post-eligibility benefits 2
	Likelihood of using the stabilizer in the near future 4
	The National Commission on Social Security Reform 5
	Objectives, scope, and methodology 5
2	THE SSA AVERAGE WAGE INDEX AND THE EMPLOYMENT COST INDEX ARE THE BEST WAGE MEASURES AVAILABLE 7
	Desirable characteristics of a wage measure for the stabilizer provision 7
	Matching desirable characteristics with available wage measures 8
	The ECI and the SSA index: desirable but limited 10
3	ANALYZING SSA AVERAGE WAGE INDEX AND EMPLOYMENT COST INDEX DATA FOR USE AS THE STABILIZER 15
	Both indexes help align benefit payments with revenues 15
	The ECI: a slightly better reflector of changes in Social Security revenues 16
	Our comments on the National Commission on Social Security Reform's rationale for recommending the SSA average wage index 19
	The SSA wage index and the ECI are compatible with other Social Security adjustments 19
	Conclusions 20
APPENDIX	
I	Letter dated May 15, 1985, from the Inspector General, Department of Health and Human Services, and GAO's response 21

APPENDIX

II	Letter dated April 29, 1985, from the Commissioner, Bureau of Labor Statistics, and GAO's response	26
III	Letter dated May 8, 1985, from the Acting Commissioner, Internal Revenue Service, and GAO's response	29

TABLES

Characteristics of selected wage measures	9
Comparison of annual Social Security tax contributions and taxable earnings to SSA average wage index and ECI, 1977-84	18

ABBREVIATIONS

AHE	Average Hourly Earnings
BLS	Bureau of Labor Statistics
COLA	cost-of-living adjustment
CPI	Consumer Price Index
ECI	Employment Cost Index
GAO	General Accounting Office
HEI	Hourly Earning Index
HHS	Health and Human Services
IRS	Internal Revenue Service
SSA	Social Security Administration

CHAPTER 1

INTRODUCTION

Social Security¹ affects virtually all Americans, as either contributors or recipients, at some time in their lives. It provides financial support upon retirement, death, or disability to contributing workers and their dependents and is the largest federal income-security program. In 1984 about 120 million people were working in jobs covered by Social Security. Approximately 95 percent of the individuals reaching age 65 were eligible for Social Security benefits; the same percentage of children under 18 was eligible if the family provider died. About 80 percent of the population had protection if the family provider had a long-term disability. When a contributing worker dies, a surviving spouse is also eligible.

The Social Security Amendments of 1983 (Public Law 98-21), enacted on April 20, 1983, revised the program. One change was in the way cost-of-living adjustments (COLAs) would be computed were Social Security to find itself in financial trouble. The COLAs began in 1975 as annual, automatic increases to Social Security benefit recipients. The purpose of the COLAs was to guard purchasing power against inflation. Before the 1983 change, COLAs were based solely on the percentage change in the Consumer Price Index (CPI). Now COLAs can be based on the percentage change in the CPI or the Social Security Administration (SSA) average wage index, whichever is lower. Using the SSA index is expected to help align Social Security benefit payment increases with revenue² increases during periods when Social Security reserves fall below a specified level. As long as reserves are at or above the level, the CPI will continue to be the base.

The Chairman of the Senate Special Committee on Aging raised the concern that, although the CPI and its effects on benefits have received careful study, similar attention had not been paid to the SSA average wage index or any other available index. At the chairman's request we evaluated the eight available federal wage indexes, including the SSA index (see p. 7), to see which one would provide the most timely and accurate alignment of Social Security benefit increases with revenue increases and be most compatible with existing wage adjustments in the program.

¹Throughout this report, the term Social Security will be used to identify the Old-Age, Survivors, and Disability Insurance Program.

²Social Security revenues include employee, employer, and self-employed tax contributions; payment from the general fund of the Treasury Department; and interest on marketable investments. In this report, revenue refers to tax contributions, the principal source of income to Social Security.

SOCIAL SECURITY: MATCHING REVENUES
WITH BENEFIT PAYMENTS

Social Security benefits are financed through payroll taxes paid by employers, employees, and the self-employed on earnings up to a maximum taxable amount, which in 1985 is \$39,600. This amount--referred to as the contribution and benefit base--increases automatically in each year that a COLA is paid. The base increases reflect general wage growth. In 1985, the tax rate for employees and employers is 5.7 percent. The self-employed rate is 11.4 percent minus a 2.3 percent tax credit, yielding an effective rate of 9.1 percent. These rates are set by the Congress.

Social Security operates essentially on a pay-as-you-go basis: current tax receipts pay current benefits rather than being held to pay today's workers when they retire. Thus, present workers' future benefits will be paid from the taxes of future workers. In 1984, Social Security taxes collected were \$180 billion; payments to beneficiaries totaled \$176 billion. The end-of-year balance was \$31 billion, including \$12.4 billion borrowed from the Hospital Insurance Trust Fund in late 1982.

The delicate balance between Social Security revenues and benefit payments dictates that whenever benefits are raised there must be a concurrent rise in revenues. In the Social Security program's first 40 years, the Congress provided occasional increases to beneficiaries to maintain their purchasing power. The increases often exceeded the rate of inflation. With each increase the tax rate and the maximum taxable amount were reviewed and raised when necessary to ensure that the additional benefit costs were matched by additional revenues.

AUTOMATIC INCREASES TO INITIAL
AND POST-ELIGIBILITY BENEFITS

Starting in 1972 the Congress began to alter Social Security benefit payment increases from an ad hoc to an automatic approach. Successive legislation in 1977 and 1983 expanded on this automatic approach. The 1972 and 1983 changes (discussed below) dealt with benefit increases arising after an individual has become eligible for benefits (post-eligibility). The 1977 legislation (also discussed below) dealt with initial benefits--the determination of benefit amounts when individuals first become eligible.

The 1972 amendments

In 1972, amendments (Public Law 92-336) to the Social Security Act automatically increased post-eligibility benefits to correspond to changes in the cost of living. (The increase took effect in 1975.) The CPI controlled the increases without requiring any further action by the Congress. The yearly June increases were based on the percentage change in the CPI from the first quarter of the preceding year to the first quarter of the year that the benefit increases will be paid, as long as it was 3 percent or greater.

If the CPI increase was less than 3 percent, no increase would be given that year, though the measurement period would be extended to the following year. The 1983 amendments subsequently shifted the yearly effective date of the benefit increases 6 months later (to December) and the CPI measurement period (from the third quarter of the preceding year to the third quarter of the year that the December benefit increase will occur).

Forecasting stability of the Social Security fund became considerably more complex when automatic COLAs were adopted. The system's cost became very sensitive to the price-wage relationship since benefits were tied to price increases and revenues were tied to wage increases. At the time, wage increases were generally expected to be greater than price increases, although intermittently the opposite might be true. Theoretically, higher wages would provide more tax revenues without increases in the tax rates; the Congress was relying on the higher wages to provide the additional revenues to balance the higher benefit costs.

The 1977 amendments

The Social Security Amendments of 1977 (Public Law 95-216) were enacted, in part, as corrective action (referred to as "decoupling") to withhold the COLA increases from people not yet eligible to retire. Initial and post-eligibility benefit increases would thus be determined separately.

The 1972 amendments tied benefit increases to the CPI for retirees or individuals eligible for benefits, as well as for those not yet eligible to retire, in one basic table of benefit amounts. Persons not yet eligible to retire reaped the same percentage increase in benefits as retirees. Though they did not receive the benefit increases then, when they did retire their benefit levels reflected the earlier increases.

Under the 1977 decoupling provision, the initial benefit computation used a wage measure. (Post-eligibility benefits computations--the COLAs--followed the CPI.) The legislation did not specifically stipulate a wage measure; rather, it cited the use of the average of total wages to be defined in regulations issued by the Secretary of Health, Education, and Welfare (now Health and Human Services). According to SSA, such general language in the law left many possibilities for defining the wage measure. SSA chose to design its own measure--the SSA average wage index--to meet the legislative intent. (This measure is discussed further in ch. 2.)

The 1983 amendments

The Congress enacted the Social Security Amendments of 1983 to ensure the fund's solvency because the country, for 5 years, had experienced a weak economy with high inflation, low productivity gains, and high unemployment. The tax increases and benefit cuts resulting from the 1977 amendments did not provide the fund with

sufficient reserves. With prices rising faster than wages, revenue from workers' taxes (based on wages) fell behind benefit payments (based on prices). In late 1982 SSA had to borrow \$12.4 billion from the Hospital Insurance Trust Fund to ensure benefit payments beginning that November.

The 1983 amendments revised the COLA formula when reserves fell below a specified level. The Congress decided to install a stabilizer mechanism to help align benefit payment increases with revenue increases during periods of high unemployment and/or high inflation. Henceforth, COLA computations would be based on the lower of the increases in the CPI or the SSA average wage index.

The stabilizer mechanism, which took effect with the December 1984 COLA, is designed to operate in specific circumstances. If the trust-fund ratio³ is under 15 percent, the CPI or the SSA average wage index increase, whichever is lower, determines the COLAs. Beginning with 1989, the lower one will be used if the ratio is less than 20 percent. If the fund exceeds that limit, the COLA will be CPI-based. A catch-up provision also provides that if COLAs are based on the increase in wages, the difference between wage and price factors will be given to beneficiaries when the ratio rises to 32 percent. Catch-up payments will be made so long as the fund remains at or above 32 percent.

LIKELIHOOD OF USING THE STABILIZER IN THE NEAR FUTURE

According to SSA, the stabilizer provision is not likely to be activated, at least through 1989. SSA's 1985 trustees' report⁴ states in its short-range projections that the trust-fund ratio used for the December benefit increase is expected to be above the 15-percent limit for 1985-88 and above the 20-percent limit for 1989 (except under its more pessimistic economic assumptions). This improved financial status, according to last year's trustees' report, derives from the Social Security Amendments of 1983. The 1985 report's pessimistic projection is that the ratio will fall below 15 percent in 1988 and 20 percent in 1989 if unemployment is 7.5 and 8.5 percent and inflation is 5.4 and 5.9 percent, respectively, for those years. If such conditions occur, the December 1989 benefit increase will be based on the increases in wages. The December 1988 increase will be based on the price increase because prices are expected to be lower than wages.

³The beginning-of-year reserve funds compared to the estimated total annual outlays.

⁴1985 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Trust Funds, Washington, D.C., Mar. 28, 1985.

A 1983 GAO report⁵ found that SSA's actuarial projections for 1973 to 1981 underestimated the actual rate of increase in the CPI and overestimated the increase in average wages. The projections, although considered reasonable when they were made, did not anticipate the high inflation or the high unemployment of the 1970s and the associated impact on Social Security.

THE NATIONAL COMMISSION ON SOCIAL SECURITY REFORM

The Social Security Amendments of 1983 were enacted, almost without exception, as recommended by the National Commission on Social Security Reform. The commission (established by Executive Order 12335 on Dec. 16, 1981) was created because of the continuing deterioration of Social Security's financial position, the inability of the President and the Congress to agree on a solution, and the concern about public confidence in Social Security. On January 20, 1983, after reviewing Social Security's condition, the commission submitted more than 20 recommendations to the President and the Congress.⁶

The commission proposed the stabilizer provision and selected the SSA average wage index as the wage measure for the stabilizer because it best reflected changes in the flow of revenues into Social Security. Its lag time was its only disadvantage. (Lag time refers to the SSA index's measurement period's preceding the CPI, the price measure used, by 9 months.) Any differences caused by the lag time, according to the commission's executive director, would balance out in the long run. Another factor favoring the SSA index was its existing use in computing initial benefits and other Social Security formula adjustments; hence it was comparable to the existing system.

Before selecting the SSA average wage index, the commission considered two other wage measures, the Employment Cost Index (ECI) and the Hourly Earnings Index (HEI). Both emanated from the Bureau of Labor Statistics (BLS). The lag time prompted the commission staff to examine these BLS wage measures. The ECI had several advantages over the HEI; however, since the ECI does not reflect unemployment, the commission was concerned that the ECI would not help keep benefit payment increases in line with revenue increases.

OBJECTIVES, SCOPE, AND METHODOLOGY

Our objectives were to determine (1) which index of wages and salaries would provide the most timely and accurate alignment of Social Security benefit increases with revenue increases

⁵Social Security Actuarial Projections (GAO/HRD-83-92, Sept. 30, 1983).

⁶Report of the National Commission on Social Security Reform (Washington, D.C.: GPO, 1983).

under stabilizer conditions and (2) whether the wage index selected would be the most compatible with the existing wage adjustments. We did not analyze the wage indexes as alternatives to the SSA average wage index for the existing wage adjustments.

We did our work at three sites in Washington, D.C.: the National Commission on Social Security Reform, Internal Revenue Service (IRS) and BLS headquarters, and the SSA headquarters in Baltimore, Maryland. (IRS provides wage data used to determine the SSA average wage index; BLS is the major producer of other available wage indexes.) We interviewed officials and examined records at the three agencies to obtain information on the methodologies and procedures used in developing the various wage series. We also interviewed commission staff on their selection of the SSA average wage index and reviewed pertinent documents. In addition, we identified other wage measures at the Bureau of the Census and the Bureau of Economic Analysis.

We assessed to what degree the eight wage indexes had certain characteristics and qualities that would make them appropriate to serve in the stabilizer provision for Social Security. Our review criteria included (1) population, occupation, and industry coverage; (2) design and collection methodology; (3) reliability features; (4) compilation and dissemination procedures; and (5) relevancy. Once we selected the most appropriate wage indexes, we then analyzed their historical movements to assess their suitability to serve in the stabilizer provision. We also reviewed existing data relating to the reliability and accuracy of those indexes.

We searched the literature to identify articles, studies, and research performed earlier on the SSA index and other wage indexes to aid us in planning the assignment. We used two computer search systems: SCORPIO, maintained by the Library of Congress, and DIALOG, maintained by Lockheed Information Systems. SSA, BLS, the Congressional Budget Office, and the Congressional Research Service provided additional studies and literature.

We conducted our study in accordance with generally accepted government auditing standards.

CHAPTER 2

THE SSA AVERAGE WAGE INDEX AND THE EMPLOYMENT COST INDEX ARE THE BEST WAGE MEASURES AVAILABLE

The stabilizer provision of the Social Security Amendments of 1983 calls for basing the COLAs on the increase in the lower of two factors--the CPI or SSA average wage index--when reserves fall below a specified level. Using a wage measure to adjust benefit payments should help to stabilize Social Security reserves in periods when price increases outstrip wage increases. We reviewed eight wage measures, considering the characteristics desirable in a wage measure, to determine which one could best act in the stabilizer provision for Social Security. We ruled out six of them for a variety of reasons. We found that the SSA average wage index and the ECI had the most desirable characteristics; however, even these were not without limitations.

DESIRABLE CHARACTERISTICS OF A WAGE MEASURE FOR THE STABILIZER PROVISION

In determining the characteristics a suitable wage measure should possess we considered (1) congressional intent, (2) results of our discussions with National Commission on Social Security Reform staff, and (3) information we found in commission documents. We found that the most desirable characteristics are:

- Timeliness. Indications of wage changes should be as current as possible.
- Scope. The broadest possible range of workers and occupations should be covered.
- Final, not preliminary, form. This obviates complications resulting from revisions. Using a series that is revised later leaves open the possibility of beneficiary complaints when revisions are announced.
- Reliability and accuracy. Design and collection methodology should give the same results on successive attempts. Few errors should result while collecting, processing, analyzing, and tabulating the data.
- Relevance. In addition to measuring wage change, the measure should reflect other factors that affect earnings and thus the flow of revenue going into Social Security. These include changes in: unemployment, the number of hours worked, and occupational distribution and composition of the work force.

MATCHING DESIRABLE CHARACTERISTICS
WITH AVAILABLE WAGE MEASURES

Many wage measures, produced from different sources and for a variety of reasons, are available from federal statistical agencies. BLS compiles five: the ECI, HEI, Average Hourly Earnings (AHE), Median Weekly Earnings, and Compensation Per Hour. SSA, of course, produces the SSA average wage index. The Bureau of Economic Analysis compiles data on wages and salaries per full-time-equivalent employee in the national income and product accounts. The Bureau of the Census amasses wage data as part of its county business patterns program. Since each measure is designed for a different purpose, their characteristics may not be suitable for the stabilizer provision. We investigated all the alternatives, culling some from further consideration. A given wage measure was disqualified if it was "dominated" by any other--if another was at least its equal and better in at least one desirable characteristic. On this basis we eliminated six of the wage measures as being dominated by the remaining two, the SSA wage index and the ECI. A review of all the wage measures and the process of elimination follow.

The wage measures of the Bureaus of Economic Analysis and the Census were eliminated because their desirable characteristics were not better than those of the ECI or the SSA wage measures. Moreover, their final figures are not available until long after the initial estimate or reference year. The wage estimates of the former undergo continual revisions based on subsequently available wage data; final figures are not available for up to 5 years after the initial estimate. Also, Census Bureau data is 6 months older than the year-old SSA index and is, therefore, not available until more than 18 months after the reference year.

The Compensation Per Hour and the Median Weekly Earnings were also eliminated because their characteristics were not better than those of the ECI or the SSA wage measures. Furthermore, the first is subject to the same revisions as the national income and product accounts (the data are revised up to 5 times after first release); the second refers to earnings that are normally, not actually, received during the week by the household and not by individual workers.

The HEI and AHE were ruled out because they, too, were not better than the two dominant measures. Additionally, they had limited coverage of the work force, and their preliminary estimates were subject to revision. The HEI and AHE are similar in several ways. They both derive from the same BLS survey (the Current Employment Statistics Program, a cooperative effort between BLS and state employment security agencies to collect monthly data on employment, hours, and earnings from non-agricultural business establishments). Their coverage of the work force is limited to production and non-supervisory workers. And the measures are published in preliminary form about 3 weeks after the reference week and are revised at least thrice, the last time as much as a year later.

Table 1

Characteristics of Selected Wage Measures

<u>Characteristics</u>	<u>Wage measures</u>			
	<u>ECI</u>	<u>SSA average wage index</u>	<u>AHE</u>	<u>HEI</u>
Changes measured	Wage rate	Annual earnings per worker	Average hourly earnings	Average hourly earnings (excluding overtime pay in manufacturing)
Timeliness	Quarterly, with 5-week publication lag	Annually, with 10-month publication lag	Monthly, with 3-week publication lag	Monthly, with 3-week publication lag
Publication form	Final	Final	Preliminary, with later revisions	Preliminary, with later revisions
Work force	Total, except federal government, private household, and farm workers and self-employed (business and farm)	Total, except self-employed (business and farm)	Private nonfarm production and non-supervisory workers	Private nonfarm production and non-supervisory workers
Percentage of work force	84.7	92.5	59.6	59.6
Reliability features	Controllable sample error and quality controls (over response and processing)	Universe data as reported by individuals	Partially controlled sample error	Partially controlled sample error
Adjustment for non-wage rate changes	Yes	No	No	Partial
Data source	BLS statistical survey	IRS forms 1040 and attached W-2 forms	BLS Current Employment Statistics Program	BLS Current Employment Statistics Program

Several differences exist between the two. The AHE is influenced by wage changes and other factors, including variations in the composition of the work force. The HEI does not account for these work-force changes. The AHE measures average hourly earnings (workers' payrolls divided by payroll hours). The HEI not only measures that but also adjusts for fluctuations in overtime pay in manufacturing (overtime pay does not affect other sectors) and shifts in the proportion of workers between high- and low-wage industries.

Table 1 on page 9 shows characteristics of the ECI, SSA, AHE, and HEI wage measures. The SSA index and ECI (discussed below in greater detail) have the most desirable characteristics, followed closely by AHE and HEI.

THE ECI AND THE SSA INDEX: DESIRABLE BUT LIMITED

Although we found the ECI and the SSA average wage index to have the most desirable characteristics for the stabilizer provision, there are characteristic limitations for both of them. Possible reliability problems exist with both measures. However, the extent of the problems is unknown because the data for a complete assessment are not available. Significant limitations of the ECI and the SSA index that the commission recognized are what it measures and timeliness, respectively. The ECI does not directly reflect wages on which Social Security contributions are based. The SSA index's measurement period is for the calendar year preceding the effective date of the December COLA increase. It measures wage changes between the second year and the year immediately preceding the effective date of the COLA increase. Therefore, the end of the SSA index's measurement period precedes the COLA date by 12 months and the CPI, the price measure used, by 9 months. While 9 months may not appear to make a big difference, changes could occur in the economy that may have a dramatic impact upon Social Security.

The ECI

The ECI, developed to measure variations, over time, in prices employers pay for labor, became available in 1975. It gauges price changes in a standardized mix of labor services, much as the CPI reflects price changes in a standardized market basket of consumer goods and services. For ECI the only item fluctuating from period to period is hourly pay rate; the worker and occupation numbers hold constant. What results is an occupational weighting system. It is the main feature differentiating ECI from other wage measures. ECI is thus the only existing wage series that attempts to measure true wage-rate change. It also measures total compensation (changes in wages and salary and fringe benefits combined and separately). In this report we refer to the wage and salary component only.

Both the ECI and CPI have fixed weights from period to period until revised. Currently, the ECI's occupational weights are based on the 1970 census. BLS plans to have the weights based on the 1980 census by mid-1986.

The ECI is not directly affected by variations in unemployment; however, Social Security contributions are affected by changes in average annual earnings per worker due solely to unemployment. With its built-in controls, the ECI, therefore, will distinguish between changes in average wages and average annual earnings per worker under various economic conditions. If wages are increasing at a constant rate and unemployment is rising, average annual earnings per worker will increase less than the ECI. If unemployment is decreasing, average annual earnings per worker will increase more than the ECI. In any case, as changes in the economy occur, unweighted average earnings, as measured by the SSA average wage index and other wage measures, will reflect those adjustments. The ECI, on the other hand, reflects only wage-rate changes. The ECI will reflect the changes in the economy only to the extent that they affect wage-rate changes.

ECI data limitations

As presently compiled, the ECI has limitations. However, BLS plans to improve it.

Immediate problems with the ECI, according to BLS officials, include its outdated sample design and weights, low response rates, and lack of a measure of sample variance. The present sample and weights are based on the 1970 census. Response rates are about 70 percent, which is acceptable by BLS standards but at the lower end of the acceptable range. Actual measures of sample variance (error due to sampling) based on the survey data have been computed for the ECI's major components, but will not be publicly available for 2 years.

BLS is starting to revise the ECI to make it more able to provide relevant information on wages and fringe benefits during the 1980s. BLS anticipated the \$8.5 to 9.5-million revision would take 5 years, beginning in fiscal year 1984. However, the Administration did not approve funding for 1984 or 1985. BLS began its improvement effort in 1984 within its existing budget, but on a reduced scale and in a longer time frame than originally envisioned.

BLS believes that the ECI should be updated periodically to reflect employment trends: its weights and statistical design are based on the economy and compensation practices that existed at the time of the 1970 census. In the interim, the U.S. economy has undergone dramatic alterations in work force composition. There have been shifts from

- goods to service-producing industries,
- blue-collar to white-collar occupations,

- northern to Sunbelt states (industrial concentrations), and
- wages to fringe benefits.

The major activities in the ECI revision BLS originally planned would include

- updating fixed industry and occupation employment weights based on the 1980 census;
- converting from the limited occupations as reported in the census to the government's standard occupational classification system, which provides a more complete and current occupational structure;
- redesigning the sample to reflect the many structural changes in the economy and in compensation practices since the early 1970s;
- developing and implementing a sample rotation system ensuring that ECI survey respondents will move out of the sample every 3 years to avoid burdening them and to improve response rates; and
- developing an ongoing measure of variance that would provide information on the reliability of the data.

The BLS Commissioner, in commenting on a draft of this report, stated that the following developments are underway to improve the ECI:

- Updating the industry and occupational weights based on the 1980 census will be introduced in the second quarter of 1986.
- The estimates of variance for the ECI's major components are now available; the entire index will be available in 1987.
- The ECI's sample size will be expanded by 700 over the next 5 years as part of a government-wide effort to improve statistical data in the service sector. (Currently, the survey has 2,900 establishments.)

In further elaborating on the commissioner's statements, a BLS official noted that the ECI's occupational coverage will be converted to the government's standard classification system by mid-1986. He also said that though the variances for ECI's major components have been computed, they will not be published or made publicly available until 1987--the date the entire index's variances are scheduled for release. Moreover, as part of its effort to expand the ECI's coverage, BLS began hiring additional staff early in fiscal year 1985.

These improvements, excluding the ECI sample size increase, are occurring within BLS' existing budget, though they will take longer to complete than originally envisioned without funding increases. Funding for the ECI expansion was initiated by the Congress in late fiscal year 1984.

The SSA average wage index

SSA developed its average wage index to meet the Social Security Amendments of 1977, which provided that benefits of individuals eligible to retire (initial benefits), as well as other program amounts, be automatically adjusted to changes in wages. According to an SSA official, little was known about the quality of other federally produced wage indexes in 1977. SSA's main consideration was that the average wage figures be (1) based on the most complete and accurate data available; (2) consistent with the average wage figure already used to index the contribution and benefit base; and (3) a consistent and accurate measure through time of the annual percentage increase in average wages per employee. Also, for indexing initial benefits, SSA needed a data series that showed year-to-year changes in average wages going back to 1951. SSA developed a wage series drawn from data it had maintained since 1937 and a wage series it had used since 1973 for indexing other program formulas.⁷

After 1977, employers, no longer required to report employee wages quarterly, began submitting annual reports to SSA after completion of the tax year. Under this annual reporting, however, SSA could not process 130 million W-2 forms by a November 1 deadline to make the upcoming year's benefit determinations. So it could meet this deadline, SSA gained congressional approval for the IRS to provide average wage data, beginning in 1977.

The procedure is this: IRS prepares the average wage data (for about \$800,000 annually) by keying information, including wage and salary figures and wage earner counts derived from returned 1040 forms, into its computer system. Each September IRS counts the wages reported and the associated wage earners, then divides wages by wage earners to obtain the average annual wage. (About 96 percent of the tax year's total returns are included.) In October, this figure is reported to SSA. SSA uses the IRS figure directly: if IRS data show that the average wage increased by, say, 6.0 percent from one tax year to the next, SSA increases its figures by 6.0 percent to obtain a figure for its wage series.

⁷A detailed description of how the series was constructed is provided in Average Wages For Indexing Under The Social Security Act And The Automatic Determinations For 1979-81, Actuarial Note Number 103, U.S. Department of Health and Human Services, Social Security Administration, Office of the Actuary (SSA Pub. No. 11-11500, May 1981).

The SSA index reflects annual wages on which Social Security contributions are based. The data reflect year-to-year changes in the work force, such as unemployment and shifts in industry, occupation, or full-time/part-time employment; the data also reflect changes in the age/sex composition of the work force. Because the SSA index does not hold constant these changes, it does not provide a consistent measure of an "average" worker's wages from year-to-year. Also, because the SSA index does not hold constant these fluctuations, as does the ECI, it may help increase Social Security funds during high unemployment. If the stabilizer became activated and CPI increases were greater than SSA index increases, the result of higher unemployment would be a smaller COLA increase. For example, if a given number of workers was unemployed while unemployment was high, the resulting lower total wages divided by the number of workers yields a lower average wage figure. The wage change translates into a lower increase in benefits and total payments than if the high unemployment had not occurred and the workers had been employed for the full year.

SSA's use of the IRS wage and salary data to update the SSA average wage index was, and still is, intended to be temporary. SSA expects to be able eventually to obtain the average wage from its annual W-2 forms reported by employers. Once the ongoing enhancement of its computer system has been completed, SSA anticipates processing employer reports in time for the November deadline for benefit determinations.

SSA average wage index data limitations

The SSA average wage index has possible reliability problems associated with both the currently used IRS wage data and SSA's future wage data.

Possible problems resulting from the use of IRS wage data to develop the SSA index involve the impact of taxpayer reporting errors, non-wage income included as wages, and changes in the late filing date. Fully assessing the potential and extent of these problems is not possible because the data are not available. IRS does not compile revised aggregate wage data based on available data after the returns are processed. The IRS information we analyzed indicates that the data may not accurately show year-to-year changes in wages. Furthermore, the information we reviewed comes out only after the SSA average wage index is released; therefore, it could not be used to correct the SSA index.

Similar problems are likely to occur with SSA's wage data. Though SSA plans to stop using the IRS data in favor of its own average wage data, the same lag time problem would exist: the wage data available by November would refer to the previous year. Furthermore, SSA officials foresee additional problems. Employers submit error-prone, duplicate, or late reports and many employers reporting on magnetic tape often fail to follow format instructions and must be followed up for corrections. Although aware of these problems, SSA cannot predict how they would affect the average wage tabulation.

CHAPTER 3

ANALYZING SSA AVERAGE WAGE INDEX

AND EMPLOYMENT COST INDEX DATA

FOR USE AS THE STABILIZER

In examining the history of the SSA average wage index and the ECI, we found that both can help to provide timely and accurate alignment of benefit increases with revenue increases. Based on limited data analyzed, the ECI gave a slightly better alignment.

We also found that using the SSA index for the COLAs would be most compatible because it is already used in adjusting other Social Security program amounts. However, the limited data analyzed indicates to us that using the ECI would have little or no effect on compatibility.

BOTH INDEXES HELP ALIGN BENEFIT PAYMENTS WITH REVENUES

The stabilizer, using either the SSA average wage index or the ECI, will help but should not be expected to provide a precise alignment. However, our analysis of past movements of both indexes shows that using the lower of the increases in two factors, either the SSA index or the ECI with the CPI, would have resulted in benefit increases more in line with revenue increases than using only the increases in the CPI.

Using the increases in the SSA average wage index or the ECI in conjunction with the CPI increases to compute benefit payment increases may not precisely align with Social Security revenues. For our analysis, if the stabilizer becomes activated, the COLA will be based on the current CPI increase compared to the previous year's SSA index or the current year's ECI increase. The following year's Social Security revenues, from which the COLA will be paid, are financed by that year's tax contributions. For example, the COLA increase payable during 1986 will be determined by comparing the percentage change in the SSA average wage index from 1983 to 1984, or the percentage change in the ECI from the third quarter of 1984 to the third quarter of 1985, to the percentage change in the CPI from the third quarter of 1984 to the third quarter of 1985. The ECI or the SSA index may bear little relation to wage changes 1-1/4 or 2 years hence when the COLA will actually be paid. Thus neither should be expected to provide exact alignment of benefit payment and revenue increases. Additionally, other factors affect the year-to-year changes in benefit payments and revenues, such as changes in the number of contributing workers.

Basing the COLAs on the lower increase in either the SSA index or the ECI with the CPI increase will help lessen the effects of

economic fluctuations on the Social Security fund. This is demonstrated by data for 1977 to 1981.⁸ This 5-year period was characterized by high inflation and high unemployment. Social Security benefit payments, which used the CPI increases for the COLAs, were then exceeding revenues from tax contributions each year by an average of about 3.5 percent. The result was a steady decline in reserves over the period. The CPI average third-quarter-to-third-quarter increase that could have been used during the benefit period was 9.0 percent. Using the lower increase--the SSA index or the ECI--with the CPI increases would have resulted in lower benefit payment increases than using only the CPI. The lower of the average CPI or the SSA annual increase that could have been used during the benefit payment period was 7.0 percent, while the lower of the average CPI or ECI third-quarter-to-third-quarter increase was 7.5 percent. Thus, using either the SSA index or the ECI increases with the CPI increases would have resulted in benefit increases more in line with revenue increases than using only the CPI.

THE ECI: A SLIGHTLY BETTER REFLECTOR
OF CHANGES IN SOCIAL SECURITY REVENUES

Our analyses of the historical movements of the SSA average wage index and the ECI revealed the ECI to be a slightly better wage measure to use with the CPI in the stabilizer provision because of the SSA index's lag time. Even though the ECI does not directly reflect changes in unemployment that affect earnings upon which Social Security contributions are based, as the SSA index does, still, for the years examined, the ECI would have provided a slightly better indicator of changes in Social Security revenues derived from tax contributions. The ECI would also have provided a slightly better indicator of changes in taxable earnings.⁹ However, neither of the two measures precisely reflected the revenue changes derived from tax contributions. The two measures did a slightly better job of reflecting the taxable earnings changes.

Little connection exists between current Social Security revenues derived from tax contributions and average earnings measured by either the SSA average wage index of 2 years earlier or wage-rate changes measured by the ECI of 1-1/4 years earlier. This is understandable. There is no reason why current tax contributions should reflect wage conditions existing either 2 or 1-1/4 years

⁸The actual Social Security benefit payments for the 5-year period used first-quarter-to-first-quarter CPI data. Since the Social Security Amendments of 1983 changed the CPI measurement period to third-quarter-to-third-quarter beginning with the 1984 benefit payment year, our analysis used the latter data.

⁹Taxable earnings is technically referred to as taxable payroll, which is the amount that, when multiplied by the combined employee-employer tax rate, yields the total amount of taxes paid by employees, employers, and the self-employed. Taxable payroll includes adjustments to reflect lower tax rates, for example, on the self-employed as compared to the higher combined employee-employer tax rate.

earlier. Additionally, year-to-year changes in the tax contributions, besides reflecting taxable earnings growth, reflect increases in the tax rates and, in the past, ad hoc increases to the contribution and benefit base.

Changes in the SSA average wage index with a 2-year lag and changes in the ECI with a 1-1/4-year lag--the difference in the measurement period of the indexes and the tax year in which contributions are collected--and changes in tax contributions for 1977-84 are shown in table 2. The tax contribution increases were greater than either the SSA index or the ECI increases for the majority of this 8-year period. Since the objective of our analysis is to determine how benefit payment increases align with revenue increases on a year-to-year basis, we used the "absolute average" to compare the annual average differences between changes in revenues and changes in wages over a period of time. Both measures, on an absolute average basis (disregarding positive or negative differences) differed by approximately 6 percentage points from the tax-contribution increase for the tax year collected. Of the two, however, the ECI's absolute average difference was about a half percentage point less than that of the SSA index: 5.91 compared to 6.42. The smaller the absolute average the closer the wage measure is to reflecting changes in tax contributions.

Since the congressional intent was to install an automatic mechanism designed to reduce the chance that the automatic COLAs would lead to serious financial problems during economic fluctuation, we also compared the two wage measures to the percentage change in taxable earnings disregarding the ad hoc contribution base changes. This comparison allows one to view the rate of growth in tax contributions in the absence of legislated tax rate and ad hoc contribution base changes, since they are not part of the automatic mechanism. As with our previous comparison to tax contributions, table 2 shows that the two measures differed from taxable earnings. However, on an absolute average basis, the difference was smaller. The ECI's absolute average difference was still about a half percentage point less than the SSA index: 2.78 compared to 3.29. The taxable earnings increases were also greater than the SSA index and the ECI increases for the majority of the 8-year period analyzed.

These two analyses, comparing the SSA average wage index and the ECI to tax contributions and taxable earnings, suggest that the ECI with its 1-1/4-year lag is a slightly better indicator of changes in Social Security revenues than is the SSA index with its 2-year lag. Because the ECI's first year of full operation was 1976, our analyses cover only 8 years of data. We consider that insufficient to determine whether the small difference between the SSA average wage index and the ECI will continue or whether that difference results from special conditions existing during the period analyzed. The limited observations do not allow for an appropriate assessment of different economic conditions, such as recession and growth; these differing conditions have an impact on the two indexes and the Social Security revenues. A greater number of years of data ensures a better basis for analysis. In our opinion, 15 to 20 years is more appropriate.

Table 2

Comparison of Annual Social Security Tax Contributions and Taxable Earnings
to SSA Average Wage Index and ECI
 (Percent increase over previous year)
 1977-84

Benefit/tax year	Tax contributions	Taxable earnings ^a	SSA average wage index with 2-year lag	ECI with 1-1/4-year lag	Difference between tax contributions		Difference between taxable earnings	
					SSA average wage index with 2-year lag	ECI with 1-1/4- year lag	SSA average wage index with 2-year lag	ECI with 1-1/4- year lag
1977	9.94	10.60	7.47	7.19	2.47	2.75	3.13	3.41
1978	12.92	12.73	6.90	7.14	6.02	5.78	5.83	5.59
1979	15.92	11.11	5.99	7.89	9.93	8.03	5.12	3.22
1980	13.27	8.40	7.94	7.82	5.33	5.45	0.46	0.58
1981	19.41	8.92	8.75	9.36	10.66	10.05	0.17	(0.44)
1982	4.52	5.80	9.01	9.09	(4.49)	(4.57)	(3.21)	(3.29)
1983	7.32	6.70	10.07	6.86	(2.75)	0.46	(3.37)	(0.16)
1984	15.19	10.56	5.51	5.04	9.68	10.15	5.05	5.52
ABSOLUTE AVERAGE					6.42	5.91	3.29	2.78

^aTheoretical estimates measuring changes in taxable earnings disregarding the ad hoc contribution base increases of 1979-84. The estimates were adjusted to reflect automatic increases to the contribution base for 1977-84.

OUR COMMENTS ON THE NATIONAL COMMISSION ON
SOCIAL SECURITY REFORM'S RATIONALE FOR
RECOMMENDING THE SSA AVERAGE WAGE INDEX

The National Commission on Social Security Reform, as stated in chapter 1, recommended the SSA average wage index for the stabilizer provision because it felt that the SSA index best reflects the flow of revenues into Social Security. Our analyses showed that increases in both the SSA index and the ECI will help to keep Social Security benefit payment increases in line with revenue increases. Although our analysis of 8 years of data showed that the ECI would have provided a slightly better alignment, the difference between the two was relatively small.

The commission recognized the lag time as a disadvantage but believed that any differences caused by this lag would balance out in the long run. We generally agree, especially if the wage measure were used over a prolonged period. The reason is that over a longer period, such as the 14 years beginning with 1970, the cumulative effect of using the SSA index would have been about the same if the SSA index was available on a current basis. This is because the SSA index that was not available for the current year would have likely been used the following year, especially during times of persistent inflation. However, the objective of the stabilizer provision is to help keep benefit payment increases in line with revenue increases in the short run when economic fluctuation occurs. Our analyses showed that both the SSA index and the ECI will meet the objective.

The commission rejected the ECI because it did not reflect unemployment, therefore defeating the purpose of helping align benefit payments with revenue increases. We agree that the ECI does not directly reflect unemployment; however, our analyses did not show this lack as a direct hindrance. The ECI measures unemployment indirectly, that is, to the extent that unemployment affects wage-rate changes.

THE SSA WAGE INDEX AND THE ECI ARE COMPATIBLE
WITH OTHER SOCIAL SECURITY ADJUSTMENTS

The Chairman of the Senate's Special Committee on Aging asked us to evaluate which wage index would be most compatible with existing wage adjustments in Social Security. He was concerned that because the SSA index is currently used to make other program adjustments, the use of another wage index for the stabilizer provision would not be compatible.

The question is whether using another wage index for the stabilizer provision would lead to a misalignment--incompatibility--between benefit payments and the other program amounts already adjusted by the SSA index.

As our analysis showed in chapter 2, the SSA index and the ECI have the most desirable characteristics for achieving alignment.

Because the SSA index is already used to make adjustments to the other program amounts, it would, of course, be a compatible wage measure to use for the COLAs if the stabilizer became activated. However, the small differences between using the SSA index and the ECI, as shown in our analysis, indicate that using the ECI would have little or no effect on compatibility.

CONCLUSIONS

The congressional intent expressed in the Social Security Amendments of 1983 was to install an automatic mechanism to help align benefit payment increases with revenue increases when reserves fall below a specified level. Since wages are associated with Social Security revenues and prices with benefit payments, using a wage measure to adjust benefit payments should help to stabilize reserves if the need arises. However, using the SSA average wage index or any other wage index will not guarantee financial stability. The stabilizer provision, using the best available wage measure, will still leave Social Security's financial condition unpredictable, but somewhat less unpredictable.

We reviewed eight wage measures and compared them against the characteristics that best serve in the stabilizer provision. Our comparison showed the SSA average wage index and the ECI to be the most desirable wage measures. Both had limitations, however, that necessitate further analysis. A significant drawback to the SSA average wage index was its lag time--its measurement period is 9 months behind the CPI and one year before the effective date of the COLA increases. The significant shortcoming of the ECI was that it does not directly reflect earnings on which Social Security revenues are based.

We compared the two wage measures to Social Security revenues in the years that benefits would be paid. Analyses of past movements of the SSA average wage index and the ECI show that both will meet the intent of the legislation, but the ECI is slightly better for the years we analyzed. The relatively small difference between using the SSA index or the ECI, coupled with the limited years of data we could observe, does not provide conclusive evidence that the ECI would be the better wage measure to use.

Because the SSA index is already used for wage-indexing other program amount increases, it would be a compatible wage measure for the stabilizer provision. However, the similarities between the SSA index and the ECI, as our analysis of the 8-year period showed, indicate to us that use of the ECI would also be compatible.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Office of Inspector General

Washington, D.C. 20201

MAY 15 1985

Mr. Richard L. Fogel
Director, Human Resources
Division
United States General
Accounting Office
Washington, D.C. 20548

Dear Mr. Fogel:

Thank you for the opportunity to comment on your draft report, "Stabilizing Social Security -- Which Wage Measure Would Best Align Benefit Increases With Revenue Increases?" The enclosed comments represent the tentative position of the Department and are subject to reevaluation when the final version of this report is received.

We appreciate the opportunity to comment on this draft report before its publication.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "R. Kusserow".

Richard P. Kusserow
Inspector General

Enclosure

GAO Note: The page references in this appendix have been changed to correspond to the page numbers in the final report.

THE DEPARTMENT OF HEALTH AND HUMAN SERVICES' COMMENTS ON THE
GENERAL ACCOUNTING OFFICE'S DRAFT REPORT, "STABILIZING SOCIAL
SECURITY--WHICH WAGE MEASURE WOULD BEST ALIGN BENEFIT INCREASES
WITH REVENUE INCREASES?"

General

A request from the Chairman of the Senate Special Committee on Aging prompted this General Accounting Office (GAO) analysis of federally available wage measures. We are in general agreement with the overall findings and conclusions reached in the report.

Presentation

There are, however, important shortcomings in the way the various wage measures are described. Some of the explanations contain inaccuracies, while others are open to misinterpretation or misunderstanding. Both the Consumer Price Index (CPI) and the Social Security Administration (SSA) average wage series consist of lists of numbers issued on a regular (monthly or yearly) basis. These raw numbers are not used for purposes of computing the amount of the Cost of Living Adjustment (COLA) increase under the stabilizer provision. What is used is the percentage change in these numbers over a given measurement period. The report consistently refers to the amount of the CPI or the SSA index, when it actually should refer to the percent change in these measures over a period of time. Also, references to the lagtimes associated with these measures are not clear since there are no explanations of the points used to measure the lag periods.

GAO Response:

We have made revisions, where appropriate, to clarify that references to the CPI, SSA index, and ECI refer to percentage changes in the measures over a period of time. We have also clarified the reference points associated with the CPI, SSA index, and ECI measurement periods and their lag times, where appropriate.

Miscellaneous

Other specific comments are as follows:

1. On page ii, the first complete paragraph implies that no estimates beyond 1988 were shown in the 1984 Trustees Report. Actually, there are many tables in the 1984 Trustees Report which show estimates through the year 2060 on the basis of four alternative sets of assumptions. Table 33, in particular, shows that the trust fund ratio was estimated to be above the 20.0 percent trigger level for the stabilizer provision in all years after 1988, based on alternatives I and II-A; in all years

except 2060, based on alternative II-B; and in all years from 1990 through 2020, based on alternative III. The table shows the estimated ratio to be less than 20.0 percent in 1989, and in 2025 through 2060, based on alternative III. (However, the assumed increase in average wages used for comparison with the CPI increase, in determining the December 1989 benefit increase, was higher than the assumed increase in the CPI, based on alternative III. Thus, the benefit increase for December 1989 was assumed to be unaffected by the stabilizer provision.)

GAO Response:

We recognize that there are many differing tables in the 1984 trustees' report; included are both short-range (1984-88) and long-range projections (1984-2060) based on differing assumptions. Projections shown in the report have four sets of assumptions because precise forecasting of the various economic and demographic factors that affect future income and disbursements is impossible.

Although table 33 shows trust-fund ratios under all assumptions through the year 2060, it uses the usual definition of the ratio ("contingency reserve trust fund ratio"). According to the 1984 trustees' report, the Social Security Amendments of 1983 contained several provisions requiring automatic actions if certain "trust fund ratios" are shown above or below specified levels. Each provision has a unique definition of the ratio to be used; none coincides with the one (the contingency reserve trust-fund ratio) generally used to evaluate the overall status of the Social Security program.

Table 15 presents the trust-fund ratio uniquely defined and projected for the stabilizer provision. This table covers 1984-88 and is the only table reflecting the stabilizer ratio. We updated the report to include the likelihood of the stabilizer's being used; we based our change on the 1985 trustees' report, which became available to us after the draft report was submitted to the Department of Health and Human Services (HHS) for comment. Table 15 in the 1985 report, like its counterpart in the 1984 report, is the only one using the trust-fund ratio as defined for the stabilizer provision. Table 16 in the 1985 report shows the SSA index and CPI increases to be used in computing the COLAs from 1985 to 1989 under the four sets of assumptions if the stabilizer provision becomes activated. Under the pessimistic economic assumptions (alternative III), the COLA would be based on the SSA index increase in 1989.

2. On page 13, one of the most important considerations in selecting SSA's average-wage indexing series, for implementing the Social Security Amendments of 1977, is not included with the three considerations that are listed; namely, that it be consistent with the average-wage figures which had already been used to index the contribution and benefit base for each year 1974 through 1978. (The fact that SSA did adopt a consistent series is noted subsequently, but it is not described as a "main consideration.")

GAO Response:

HHS is correct. We have made the appropriate revision.

3. On page 13, the draft report states that "...the result of higher unemployment would be a smaller COLA increase." Higher unemployment does not necessarily result in a lower CPI increase (witness the economic experience in the 1970's). It may well result in a lower average-wage increase, but this would affect the benefit increase only if the trust fund level falls below the stabilizer trigger level and, in addition, the average-wage increase is less than the CPI increase.

GAO Response:

We have clarified our statement pertaining to the impact on Social Security COLA increases using the SSA index, which does not hold constant changes in the work force (such as unemployment). We agree that higher unemployment does not necessarily result in a lower CPI increase. However, our point, as HHS agrees, is that if the stabilizer becomes activated and the increase in the SSA index is less than the CPI, the SSA index increase would provide a smaller COLA increase than a wage measure, such as the ECI, that holds constant changes in unemployment.

4. Although the characteristics of the Employment Cost Index (ECI) are described in the report, no explicit connection is made between its characteristics and the statement made on page 20, in the "Conclusions," that "[t]he significant shortcoming of the ECI was that it does not reflect earnings on which Social Security revenues are based." Perhaps the statement in the "Conclusions" section should go on to say:

"...because changes in the ECI do not reflect changes in the mix of labor services, industries, and occupations, nor does it reflect changes in unemployment, all of which affect Social Security contributions."

GAO Response:

We believe that the connection between the ECI's characteristics mentioned in the report and our statement regarding its significant shortcoming in the conclusion section is clear, just as we believe the SSA's significant shortcoming, its lag time, is clearly expressed. However, in the draft report, the word "directly" was omitted before the word "reflect" in the aforementioned statement on the ECI's shortcoming. We have made the revision, which is consistent with the facts presented in the report. Regarding HHS' suggested additional wording referring to the ECI's not reflecting changes in unemployment, the correct wording should be that the ECI does not directly reflect changes in unemployment. The ECI will reflect changes in the economy, such as unemployment, to the extent that they affect wage-rate changes.

5. The footnote references at the bottom of Table 2 appear to be reversed. The text shown in footnote "a" seems to belong in footnote "b", and vice versa.

GAO Response:

HHS is correct. However, since submitting the draft report to HHS for comment, we obtained finalized data on tax contributions for 1984, which canceled the need for a footnote indicating preliminary data in table 2. The remaining footnote reference has been corrected.

An annotated copy of the report containing technical suggestions has been provided to GAO staff. (See GAO note.)

GAO Note: HHS' technical suggestions were considered in finalizing the report.

U. S. Department of Labor

Commissioner for
Bureau of Labor Statistics
Washington, D.C. 20212



APR 29 1985

Mr. Richard L. Fogel
Director
Human Resources Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Fogel:

I am responding to your April 9 letter to Under Secretary of Labor, Ford B. Ford, concerning the GAO draft report: "Stabilizing Social Security--Which Wage Measure Would Best Align Benefit Increases with Revenue Increases?"

The draft does not include policy concerns of the Department of Labor. It does, however, evaluate and comment on several wage measures developed by the Bureau of Labor Statistics, particularly the Employment Cost Index (ECI).

My comments (enclosed) are limited to technical concerns related to BLS wage measures. Thank you for the opportunity to comment on the draft.

Sincerely yours,

A handwritten signature in cursive script that reads "Janet L. Norwood".

JANET L. NORWOOD
Commissioner

Enclosure

GAO Note: The page references in this appendix have been changed to correspond to the page numbers in the final report.

BUREAU OF LABOR STATISTICS COMMENTS ON GAO DRAFT REPORT**"Stabilizing Social Security--Which Wage Measure Would Best Align Benefit Increases With Revenue Increases?"**

The Bureau's comments, organized along the lines of the draft report, follow:

1. Executive Summary, page iii. The marginal note "Neither Wage Measure Is Superior" should be expanded to, "Neither Wage Measure Is Superior in Predicting Changes in Social Security Tax Contributions or Taxable Earnings." The abbreviated note gives a misleading impression of the worth of the Employment Cost Index (ECI) compared with the SSA average wage index, as wage change measures. In fact, GAO analysis focuses entirely on how well (or poorly) the two measures predict future changes in Social Security tax contributions or taxable earnings.

GAO Response:

We believe this subcaption does not give a misleading impression of the worth of the ECI compared to the SSA index as a measure of wage change. The applicable section of the report's executive summary, as BLS points out, discusses how well the two wage measures indicate changes in both Social Security taxable earnings and tax contributions. The report evaluates available wage measures, including the ECI and the SSA index, for the sole purpose of the Social Security stabilizer provision--to help align benefit payment and revenue increases. The report does not, nor does it purport to, evaluate the wage measures for any other use.

2. Page 7. The report states, "In addition to measuring wage change, the measure should reflect other factors that affect earnings" (emphasis add). The statement gives the impression that a measure of wage change should reflect influences other than wage change, and that simply is not the case. A great deal of effort was spent in developing the ECI to insure that it would measure wage change, unclouded by the influence of exogenous factors.

GAO Response:

We did not intend to give the impression that a measure of wage change, such as the ECI, should reflect influences other than wage change. In this section we are describing only those characteristics desirable in a wage measure for stabilizing Social Security. In selecting a wage measure for this purpose, consideration should be given to what it measures compared to its intended use. Later, in chapter 2, we delineate what the ECI measures.

3. Page 17. The report states that the 8 years of ECI data are "... insufficient to determine whether the small difference between the SSA average wage index and the ECI is truly a statistical difference or is due to systematic bias (recurring errors)." Systematic bias is not an issue. Rather, the two measures differ because of conceptual and time differences. The ECI, a quarterly series, measures changes in wage rates, free from the influence of employment shifts among jobs and industries with different pay levels. The SSA measure, on the other hand, deals with year-to-year changes in average annual wages as reported for Federal income tax purposes. It does not control for changes in the occupational or industrial composition of the work force, and in that sense is not a wage index.

GAO Response:

We have modified our statement by deleting the reference to systematic bias. The report recognizes the conceptual (what is measured) and timing differences in chapter 2; we agree that differences in wage changes will occur, as our historical analyses have shown in chapter 3. However, we cannot attribute the differences to the conceptual or timing differences, or both, or whether one cancels out the other. Our analyses of the data showed the two wage measures, on average, are very close, and the difference could be greater or less depending on a variety of factors, including errors associated with the data. In chapter 2, we note the two wage measures have possible reliability problems.

4. General. The ECI continued development during the time required to prepare the draft report. Therefore, some information in the report should be updated to reflect these developments:

- Updated fixed employment weights, based on the 1980 Census of Population, will be introduced in the ECI in the March-June 1986 quarter.
- Estimates of variance for ECI estimates of wage change are available for major components of the ECI. They will be available for the entire index in 2 years.
- The ECI sample size will be expanded by about 700 establishments over the next 5 years. The expansion is part of a government-wide effort to improve statistical data for the fast growing service-producing sector of the U.S. economy.

GAO Response:

See our reply to BLS' comment on page 12.

COMMISSIONER OF INTERNAL REVENUE

Washington, DC 20224

MAY 08 1985

Mr. William J. Anderson
Director, General Government Division
United States General Accounting Office
Washington, DC 20548

Dear Mr. Anderson:

Thank you for the opportunity to review your draft report entitled "Stabilizing Social Security--Which Wage Measure Would Best Align Benefit Increases with Revenue Increases?"

The following information is provided for clarification of specific statements in the draft report:

Page 14, Paragraph 4

The report states that a possible problem from use of IRS data could arise from the "limited quality-control checks for wage-earner counts". The report goes on to state that, "IRS has no need to correct its wage data as long as it collects the correct amount of taxes". These comments understate IRS practices with respect to accurate computation of wage data.

IRS uses wage amount data in order to permit the proper computation and determination of the earned income credit, self-employment tax liability, the deduction for a married couple when both work, the deduction for IRA payments, the child care credit, and the liability for social security tax on tip income. In addition, the computations for taxable unemployment compensation, adjusted gross income, medical deductions, excess zero bracket amount, and statutory credits depend on the correct reporting of wages, among other items. We have specific Internal Revenue Manual instructions for perfecting the wage and salary lines of the Form 1040. In both returns analysis and transcription activities, the correction of this wage information is subject to our quality review system.

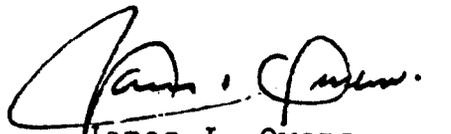
Mr. William J. Anderson

Subsequent to employers furnishing SSA with Form W-2 information, SSA furnishes the Service with a tape containing the Form W-2 wage data. IRS matches the SSA data to its master file of Form 1040's and verifies the wages reported through its Information Returns Program (IRP). Discrepancies are then adjusted through the IRP underreporter programs.

We hope these comments are useful in preparing the final report.

With kind regards,

Sincerely,



James I. Owens
Acting Commissioner

GAO Response:

We agree with IRS that our statement regarding limited quality-control checks for wage-earner counts understated IRS practices with respect to accurate wage-data computations as reported by taxpayers. We have deleted that statement in the report. IRS' wage-earner counts are subject to the same quality control checks on a sample basis as are other line items on the tax returns. Those returns sampled and found in error are corrected during the processing of the returns. However, IRS does not maintain estimates of error associated with the wage-earner counts.

We have clarified our statement pertaining to the IRS having no need to correct its wage data. IRS wage data are also subjected to quality-control review. The wage data as reported by taxpayers are reviewed on a sample basis and those returns are corrected, if needed, during tax return processing. However, IRS does not compile revised aggregate wage data derived from subsequently available data resulting from taxpayer reporting errors, such as annual audits, amended returns, and the annual IRS/SSA match of wage data.

32092

AN EQUAL OPPORTUNITY EMPLOYER

UNITED STATES
GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300

**BULK RATE
POSTAGE & FEES PAID
GAO
PERMIT No. G100**