course of a year rather than at the end, it would be easy to make the corresponding changes for the relevant months according to the procedure outlined above for estimating *TRSS*.

<sup>11</sup>Roughly a year before publishing the final annual volume. *Statistics of Income: Individual Tax Returns*, the Internal Revenue Service issues preliminary estimates of adjusted gross income, income tax paid, and so forth, in its quarterly publication, the *sot Bulletin*. But these preliminary estimates are for all returns, not taxable returns only. The latter are clearly preferable for the purpose at hand; if tax rates are to be estimated from the former, they must therefore be adjusted to control for the slight differential that is observable between estimates based on all returns and on taxable returns only. On the basis of such preliminary tax rate estimates, the 1982 figure for the basic new hourly spendable earnings series is approximately \$3.96 (in 1977 dollars).

<sup>12</sup>Workers receiving the average wage who are in two-earner households filing jointly will have returns appearing in a higher income class bracket, but they will pay taxes at roughly the same rate as workers who are sole wage-earners in the lower income size class.

<sup>13</sup>The recent change of the homeownership component of the BLS index to a rental-equivalence measure surely represents a step in the right direction.

## Proposed spendable earnings series retains basic faults of earlier one

## PAUL O. FLAIM

On the surface, the new spendable earnings series proposed by Professor Weisskopf appears to be a considerable improvement over the series published by the Bureau of Labor Statistics until 1981. Upon close scrutiny, however, the proposed series is found to share some of the basic deficiencies that led to the discontinuation of the old one.

Because the proposed series uses gross *hourly earnings* as its principal ingredient, it is certainly free of much of the downward pressure on earnings levels that the secular decline in the length of the workweek had applied to gross *weekly earnings* averages, the backbone of the old spendable earnings series. The fact that Professor Weisskopf attempts to account for average deductions for State and local income taxes—in addition to those for Federal income taxes and social security contributions—marks another departure from the old series.

Because of these changes—and, I suspect, primarily because of the first one—Professor Weisskopf's series does show a somewhat steeper upward trend in spendable earnings over the 1950's and 1960's than did the discontinued BLS series. To this extent, the new series would appear to yield a more accurate picture of the actual trend in earnings for the average full-time worker than was given by the old series, which was being held down by the expansion of the part-time work force.

Of more interest, however, is what the two series tell us about the changes in spendable earnings after both turned downward from their 1972 peaks. Specifically, while the old BLS series showed a decline of 16.6 percent in real spendable earnings during the 1972–81 period, Professor Weiss-kopf's new series shows a somewhat comparable decline of 13.5 percent over the same period. (See chart 1, p. 41.)The fairly parallel movement of the two series over this period can lead to only one conclusion. If the old series was biased downward in portraying the trend in spendable earnings for the average worker during the 1970's—and there was ample evidence indicating a large bias—then the new one, al-though constructed differently, must also be seriously biased downward for the period in question.

It must be remembered that the 1970's were a period during which the age-sex composition of the work force was changing significantly, with the proportions accounted for by women and youth growing very rapidly. The fact that many of these newcomers to the job market took only part-time jobs had an obvious dampening effect on the weekly earnings average for all workers. But the hourly earnings average was also affected—in similar direction, if not in similar magnitude—by the changing mix of workers and by the growing proportion receiving lower, entry-level wages.

The extent to which the changing mix of workers affected the overall earnings average is difficult to quantify. However, some notion of its impact can be obtained merely by comparing the earnings trends for all workers with the separate trends for men and women. The tabulation below shows the percent changes—in constant dollar terms—over the 1972–81 period both for the payroll-derived series on gross weekly and hourly earnings<sup>1</sup> (which do not provide any information by sex) and for the household survey-derived series on weekly earnings,<sup>2</sup> which are available with some age-sex detail:

	Percent change, 1972–81
Payroll series:	
Mean gross weekly earnings Mean gross hourly earnings	$\dots -14.3$ $\dots -9.9$
Household series: Median usual weekly earnings of full-time workers:	
Total	8.6
Men, age 25 and over	···· -2.8 ···· -1.4
Men, age 16 to 24 Women, age 16 to 24	···· - 11.6 ···· - 12.6

While all of these earnings trends point downward for the period in question, the gross weekly earnings series, which was the cornerstone of the BLS spendable earnings series, shows a drop that far exceeded the decline in weekly earnings among most full-time workers as measured in the household survey. And the decline in gross hourly earnings, although somewhat smaller, also appears to overestimate by a considerable amount the true decrease in real earnings among most workers.

While the household series on median weekly earnings for *all full-time workers* did show a decline almost as large

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as that found in the payroll series on gross hourly earnings, such was not the case for the medians for *workers age 25* and over. For these workers—who still make up the bulk of the U.S. work force, and who are still visualized as the "typical" or "average" workers—real median weekly earnings showed only minimal declines over the 1972–81 period. Only for persons 16 to 24 years of age, who are but a small portion of the full-time work force, was the drop in weekly earnings of the same magnitude as the changes shown by the two payroll series.

The above comparisons raise serious questions as to whether an earnings average for all worker groups combined is a good indicator of the long-term trend in the earnings of most workers, particularly over periods when the composition of the labor force is changing rapidly. The problem is that *the changes in the earnings averages for a given group of workers* are not always representative of *the changes in the earnings of the "average worker" in the group*.

To illustrate, take the following example of a group of workers, consisting initially of five persons and expanding subsequently to six, with their individual earnings behaving as follows:

	Earnings in—		
Individual workers	Initial period	Subsequent period	Percent change
No. 1	\$5.00	\$5.50	10.0
No. 2	4.00	4.40	10.0
No. 3	4.00	4.40	10.0
No. 4	4.00	4.40	10.0
No. 5	3.00	3.30	10.0
No. 6		2.00	
Average	\$4.00	\$4.00	_

In this case, the earnings average for this group of workers has not changed at all between the two periods. But could we say the same with regard to the earnings of the average worker in this group? Would we not have to conclude that the average worker enjoyed a 10-percent increase in earnings regardless of what is shown by the average for the group?<sup>3</sup> (Incidentally, an analogous situation could well develop in those industries where, on the basis of recently concluded contracts, newly hired workers are brought on at wages much lower than those received by workers already on board. In other words, the institution of a two-tier wage system may bring down the earnings average for the industry without a decline in the earnings of any of the individual workers.)

SUMMING UP, in examining earnings trends it is important to go beyond the overall averages and to disaggregate the data as far as possible. While we cannot actually track the earnings of individual workers (except in isolated experiments), disaggregation of the data by sex, age, or other characteristics becomes vital when we are dealing with longterm trends spanning decades. (Where such disaggregations are not possible, we should be careful not to automatically equate the changes in earnings averages with the changes in the earnings of the average worker.)

The use of aggregate numbers is the basic problem with Professor Weisskopf's analysis, but it is not the only issue complicating the analysis of earnings trends and the computation of a "spendable earnings" series. The fact that more and more of a worker's remuneration-or an employer's labor cost<sup>4</sup>—is in the form of fringe benefits which are not captured in most earnings data renders the meaning of any "spendable earnings" series ever more difficult to conceptualize and explain. And the anchoring of such series to the earnings information from the establishment surveywhich is the case for the proposed series as it was for the old one-handicaps them with yet other limitations. For example, the computation of the tax burden is seriously hindered by the lack of any information on family composition and total family income. And coverage would be limited to production and nonsupervisory workers in the private sector-a still large but gradually declining proportion of the work force.

A better alternative to such series is now available in the form of the studies of "after-tax money income" initiated recently by the Bureau of the Census. These studies, based on microdata from the Current Population Survey, provide very detailed estimates of the year-to-year changes in the purchasing power of U.S. workers and of the differences in purchasing power among the principal population groups.<sup>5</sup> While these studies do not yet provide us the historical perspective on spendable earnings that Professor Weisskopf's series attempts to give us, they are built on much more solid foundations.

-FOOTNOTES-

<sup>1</sup>The "payroll" data on earnings are derived from a monthly BLS survey of about 200,000 establishments. They relate to earnings on jobs held by "production and nonsupervisory workers in the private nonfarm sector." These jobs make up about two-thirds of all nonfarm payroll jobs in the United States.

<sup>2</sup>The "household" data on weekly earnings are obtained through questions currently asked monthly in one-fourth of the 60,000 households which make up the sample for the Current Population Survey (CPS). These data which relate to wage and salary workers in all sectors of the economy are then accumulated into quarterly averages for publication and analysis. Prior to 1979, these data were obtained only once a year, each May, but from the entire CPS sample. With regard to this series, the numbers in the text tabulation relate to the changes between the medians for May 1972 and those for the second quarter of 1981.

<sup>3</sup>This illustration could be made even more dramatic by assuming, in addition, that one of the original workers—say, number 4—was replaced through normal attrition by a new worker who was also brought on board at \$2 an hour. In this case, the group's average hourly earnings would actually decline by 10 percent, to \$3.60, although all the survivors of the original group of five would have obtained a 10-percent increase.

<sup>4</sup>The Bureau of Labor Statistics is now publishing a quarterly report on the trends in the total costs per hour worked for employing labor. This report on the "Employment Cost Index" (ECI) traces percent changes not only in wages and salaries but also in total compensation, which includes the employer costs for employee benefits in addition to the wage and salary expenses. And, to the extent that the ECI is a fixed-weight index, it is not affected as much as other earnings series by changes in the industrial or occupational mix of the work force.

<sup>5</sup>See, for example, After-Tax Money Income Estimates of Households: 1981, Series P-23, No. 132 (Bureau of the Census, February 1984).