OFFICE OF ECONOMIC STABILIZATION

WASHINGTON, D. C.

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FRED M. VINSON
DIRECTOR

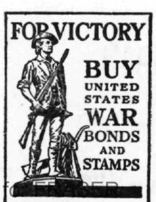
Honorable Marriner S. Eccles
Chairman, Federal Reserve Board
Washington 25, D. C.

Dear Mr. Chairman:

Recently, because of the interest expressed therein by various members of the Board, I requested the Bureau of Labor Statistics, Department of Labor, to submit a statement explaining the various methods of measuring workers' earnings. The attached statement is in response to this request, and I am transmitting it to you for your information.

Sincerely yours,

Fred M. Vinson
Director



Measures of Wages and Worker Income

There are five ways of measuring what workers earn:

Wage rates measure the prices paid for specific jobs.

Average hourly earnings measure the gross amount received per hour of actual work, including premium pay for overtime and work on extra shifts.

Straight-time hourly earnings eliminate the effect of extra pay for overtime, but otherwise are the same as average hourly earnings.

Straight-time hourly earnings with constant weighting provide the closest available measure of changes in wage rates. Eliminated from this measure is the rise in average earnings due to the movement of workers from "low-wage" to "high-wage" industries.

Average weekly earnings measure the "take-home" wage, before tax and bond deductions. These figures will rise, not only because of any wage-rate increases, but also as a result of overtime pay, shift pay, upgrading and shifts of workers toward "high-wage" industries.

The following table shows, for manufacturing industries, the changes in each of these measures of wages since January 1941, wage rate changes being most closely reflected by column 3:

	Date	Average Hourly Earnings (gross)	Average Straight-Time Hourly Earnings: Currently	Average Straight-Time Hourly Earnings: For Industries as of Jan. 1941	Average Weekly Earnings	Cost of Living
		(1)	(2)	(3)	(4)	(5)
1941	January	100	100	100	100	100
1942	July	125	122	118	137	116
	October	131	126	122	146	118
1943	June	140	135	127*	163	124

The movement of the cost of living is shown above for comparison with the various measures of wages. The cost of living index of the Bureau of Labor Statistics measures average changes in prices of the items which enter into the family budgets of American industrial wage earners and lower-salaried workers. The index includes representative costs of food, clothing, rent, fuel, house furnishings and miscellaneous family expenditure.

The following pages of this memorandum contain a more detailed explanation of each of the measures of wages, as listed above.

*Preliminary.

1. Labor leaders almost invariably discuss wage rates. It is around these--and these alone--that their most vital experience in bargaining centers.

The wage rate is the price paid for a specific job. The rate is usually expressed in cents per hour, or per day or week of a specified length. For some occupations the wage rate is expressed as a price per unit of output, determined ordinarily by considering how much an average worker will be able to earn per hour. In some cases there are bonus systems that provide a guaranteed minimum wage rate per hour, but provide for further compensation if production exceeds a minimum standard.

The wage rate corresponds to the price of a ton of steel. Like the price of steel, it may be surrounded with a series of "extras": for example, a premium for work on the night shift, Sundays or holidays; or for work of more than a specified number of hours per day or week.

2. Average hourly earnings are derived by dividing the total amount of the payroll by the number of hours worked.

They correspond to mill figures for the average realization per ton of steel, including all extras. Thus an increase in night work or in overtime will affect the average. So also a change in the proportion of skilled or semi-skilled labor hired affects the average. For example, when an airplane company suddenly hires 1,000 new workers at 60 cents an hour, the average of hourly earnings in the plant is likely to drop. When the company ceases to expand, normal reclassifications and upgrading will cause the average to rise, quite apart from any increases in wage rates.

In periods of stable employment and little overtime, average hourly earnings correspond closely to an average of wage rates; when overtime is increasing, average hourly earnings rise even though wage rates are unchanged.

3. Average straight-time hourly earnings for all manufacturing industries are estimated by the Bureau of Labor Statistics by reducing average hourly earnings by an appropriate amount to allow for the influence of overtime payments. This measure continues to reflect the influence of shift bonuses and the changing proportions of skilled and unskilled workers.

4. Over recent years average straight-time earnings have increased more rapidly than wage rates because employment in high-wage industries (like shipbuilding) has increased more rapidly than in low-wage industries (like cotton textiles).

This effect has been eliminated by the Bureau of Labor Statistics by developing an unpublished series of average straight-time earnings with constant weighting of employment by industries.

This measure does not eliminate the influence of promotions on earnings. For example, when workers move from a lower-paid textile industry to the higher-paid munitions industry, average earnings advance, even though no wage increases have occurred.

5. Average weekly earnings are secured by dividing the total payroll by the total number of workers on the payroll. This measure averages together the "take-home" of the man with 1 day of work and that of the man who worked seven days. Changes in the average "take-home" are caused primarily by changes in hours worked and in rates of pay.

Included in average weekly earnings are the amounts that may be deducted to pay for bonds or taxes before the worker receives his pay-check. Strictly speaking, therefore, it is not a "take-home" wage.

U. S. Department of Labor
Bureau of Labor Statistics
August 16, 1943