

# The minimum wage: its relation to incomes and poverty

*In March 1985, one in five hourly wage workers paid at or below the Federal minimum wage of \$3.35 per hour lived in households with incomes below U.S. poverty levels*

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Federal minimum wage legislation provides a floor on the hourly wage rate that employers are allowed to pay most workers. First enacted as part of the Fair Labor Standards Act of 1938, this statute now requires a wage of at least \$3.35 per hour for the almost 90 percent of nonsupervisory civilian workers to whom the act applies. Although the minimum wage has been increased numerous times since it was established, it has remained unchanged since January 1981. Because prices and wages have risen since that time, the real value of the minimum wage has fallen.

In recent years, several proposals have been made to change the minimum wage, including increasing it for all workers, reducing it for younger workers just getting started in the labor market, and eliminating it. These alternatives are based on differing views about the effects of the minimum wage at its current level. Some people believe it is too low to provide low-wage workers with an adequate standard of living, while others maintain that the present minimum limits employment opportunities—especially for young workers—by artificially raising wage costs to employers.<sup>1</sup>

One issue relevant to debates on the minimum wage is the relation between that wage and poverty. Proponents of increasing the minimum wage argue that it should be at least high enough to provide above-poverty earnings to workers with families to support. This article investigates empirical evidence about the relationship among low wage rates, income levels, and the incidence of poverty using data from

the March 1985 Current Population Survey (CPS). Unlike wage surveys based on payroll and other business records of employers, this household survey also provides information on the demographic and social characteristics of the workers, as well as their income and poverty status in the preceding calendar year.<sup>2</sup>

## **Background of the minimum wage**

Historically, changes in the minimum wage provisions of the Fair Labor Standards Act have consisted primarily of increases in the wage rate and expansions in coverage.<sup>3</sup> The minimum wage, which was originally set at \$0.25 per hour in 1938, reached \$1 per hour in 1956, \$2 per hour in 1974, and the current level of \$3.35 in 1981. (See table 1.) Coverage originally was limited to workers directly engaged in interstate commerce, or in the production of goods for interstate commerce, but has been expanded considerably. In 1985, about 73 million nonsupervisory workers—or almost 90 percent of that work force—were subject to the minimum wage. Major groups currently not subject to the minimum wage include executive, administrative, and professional personnel; employees in some small firms; and, of course, the self-employed.

The remainder of this section analyzes the history and current status of the minimum wage by considering its relation to average prices and wages in the economy, and to Federal poverty thresholds.

*Prices, wages, and the minimum wage.* One perspective on the size of the minimum wage today can be obtained by

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Ralph E. Smith and Bruce Vavrichek are economists at the U.S. Congressional Budget Office. Roald Euler provided valuable technical assistance.

**Table 1. Minimum wage rates under the Fair Labor Standards Act of 1938, 1938-85**

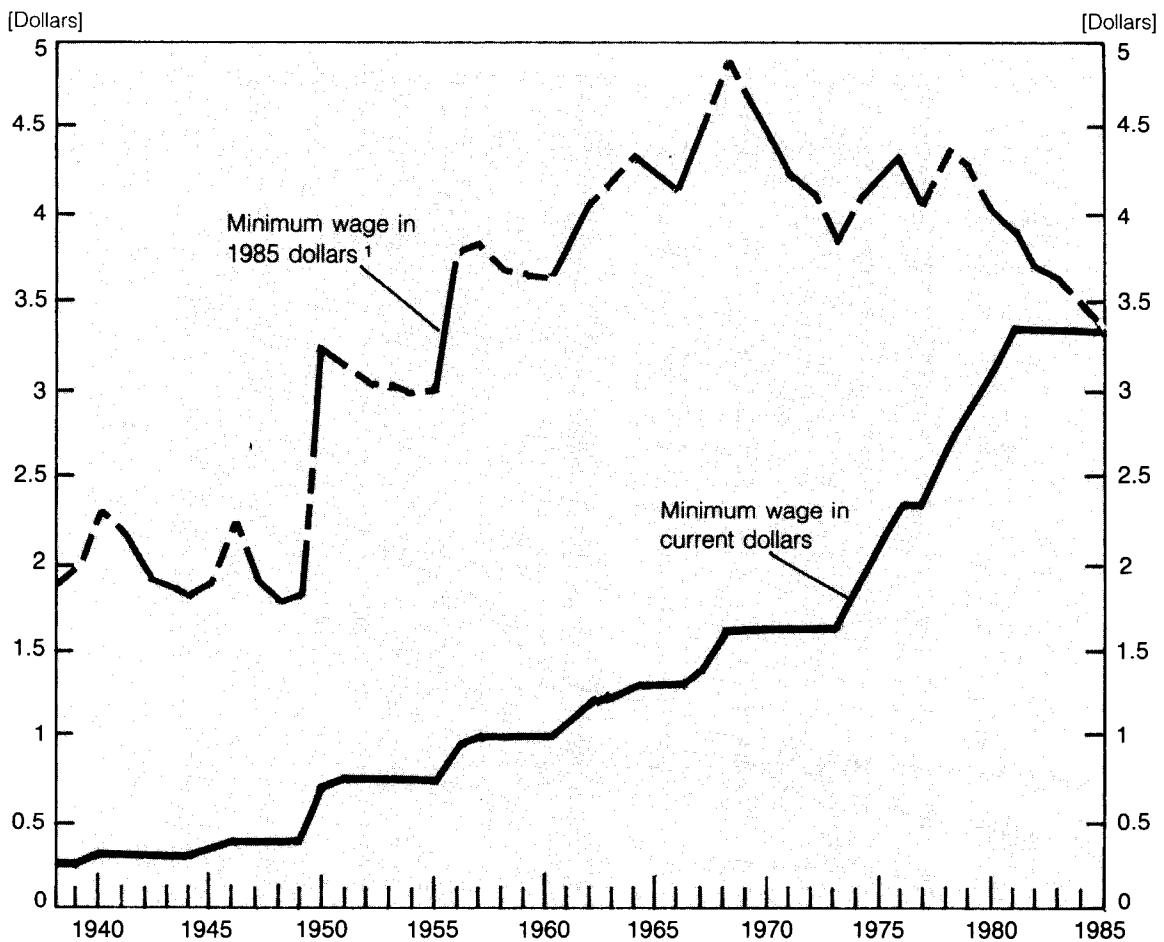
Effective date	Minimum wage	Effective date	Minimum wage
October 24, 1938 ...	\$0.25	February 1, 1968 .....	\$1.60
October 24, 1939 ...	0.30	May 1, 1974 .....	2.00
October 24, 1945 ...	0.40	January 1, 1975 .....	2.10
January 25, 1950 ...	0.75		
		January 1, 1976 .....	2.30
March 1, 1956 .....	1.00	January 1, 1978 .....	2.65
September 3, 1961 .	1.15	January 1, 1979 .....	2.90
September 3, 1963 .	1.25	January 1, 1980 .....	3.10
February 1, 1967 ...	1.40	January 1, 1981 .....	3.35

SOURCE: Social Security Administration, *Social Security Bulletin, Annual Statistical Supplement, 1984-85*, p. 68.

analyzing the real purchasing power of the wage over time, and by examining its relation to average wages.

The purchasing power of the minimum wage—that is, its value after taking account of inflation, here measured with the Consumer Price Index—has fluctuated considerably over time, but today is less than at any time since the mid-1950's. In 1985 dollars, the minimum wage was worth just under \$2 per hour when the legislation was enacted in 1938. (See chart 1.) By 1968, the real value of the wage had reached a high of nearly \$5 per hour, but by 1985, it had declined to \$3.35. In the 5-year period between January 1981—when the minimum wage was set at \$3.35—January

**Chart 1. Minimum wage rate in current and constant (1985) dollars, 1938-85**



<sup>1</sup> The minimum wage in constant 1985 dollars is equal to that wage divided by the Consumer Price Index (CPI), where the CPI is adjusted to equal 1.00 in 1985. CPI data for 1938-77 are for urban wage earners and clerical workers; beginning in 1978, CPI data are for all urban consumers.

NOTE: In years when the minimum wage changed, the wage in this chart represents the weighted average of the old and new rates.

SOURCES: Authors' calculations based on the data from Social Security Administration, *Social Security Bulletin, Annual Statistical Supplement 1984-85*, p. 68; Council of Economic Advisers, *Economic Report of the President*, February 1986, p. 315; and Department of Commerce, Bureau of the Census, *Historical Statistics of the United States, Colonial Times to 1970*, Part 1, p. 210.

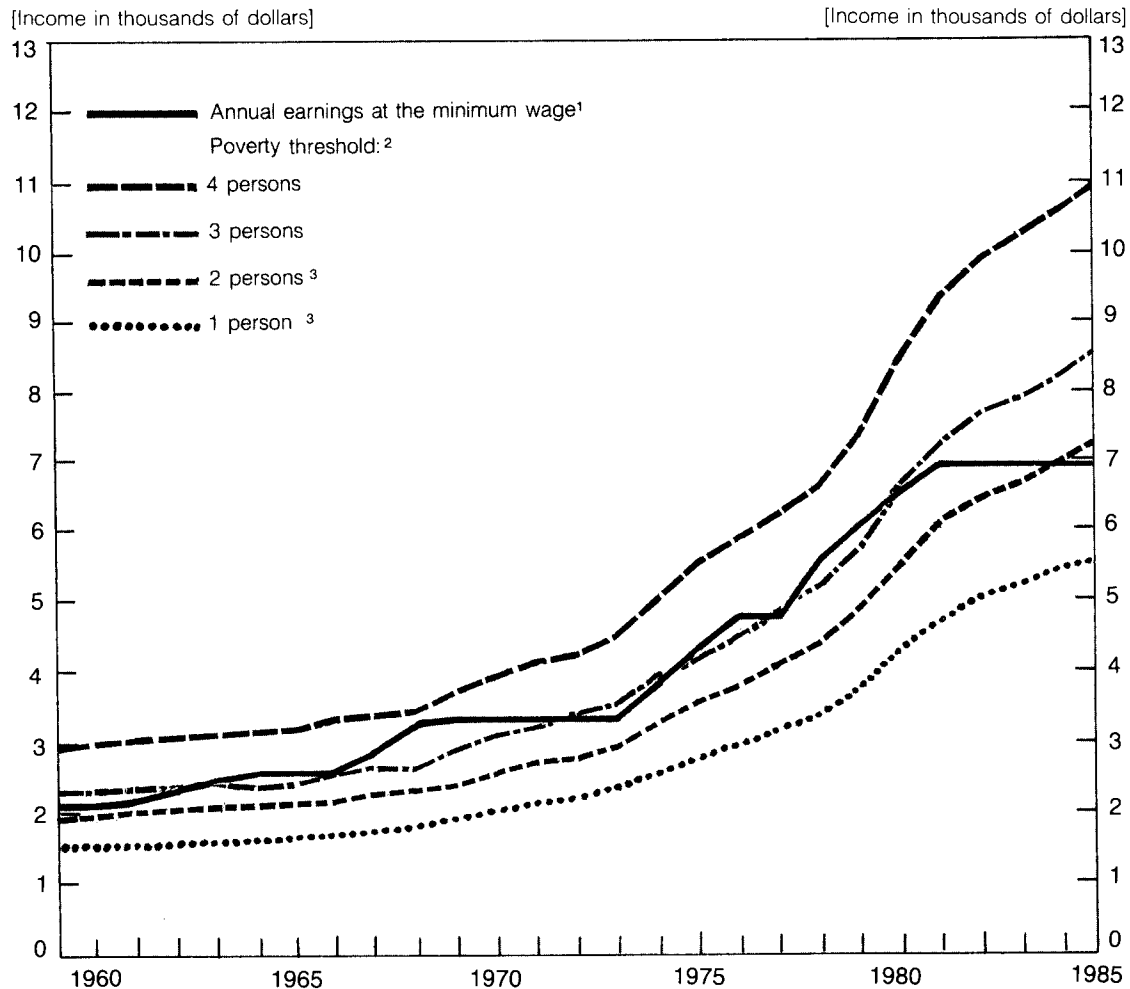
1986, average prices increased by about 26 percent. To have the same purchasing power it had had at the start of 1981, the minimum wage would have had to have been about \$4.22 per hour in January 1986.

In recent years, the minimum wage also has fallen as a share of average wages. After hovering around 50 percent of average hourly earnings in private nonagricultural industries during the 1950's and 1960's, the minimum averaged just over 45 percent in the 1970's. By 1985, it had declined to about 39 percent of average wages. Comparisons with the broad private nonfarm series are less useful in the early years, however, when minimum wage coverage was considerably more limited.

*Relationship to poverty thresholds.* Another perspective on the minimum wage comes from comparing the earnings of a minimum wage worker with the Federal poverty thresholds published by the Bureau of the Census. The thresholds—first estimated in the early 1960's, and updated annually to account for inflation—reflect the consumption requirements of families based on their size and composition. In 1985, poverty thresholds ranged from \$5,160 for a single elderly person to an average of \$22,010 for families with nine or more members.<sup>4</sup>

During most of the 1960's and 1970's, a person working full time, year round at the minimum wage would have received an income roughly equal to the poverty threshold

**Chart 2. Poverty thresholds of income and annual earnings at the minimum wage, 1959-85**



<sup>1</sup> Annual earnings are for a worker employed 40 hours per week for 52 weeks per year.  
<sup>2</sup> For families of two or more persons, reported poverty thresholds are actually weighted averages of different thresholds for families of the same size but with different numbers of children.  
<sup>3</sup> One-and-two-person poverty thresholds used here are those for the nonelderly.  
 SOURCES: Authors' calculations based on data from Social Security Administration, *Social Security Bulletin, Annual Statistical Supplement, 1984-85*, pp. 68, 70; and Department of Commerce, Bureau of the Census, unpublished data.

for a three-person family, as shown in chart 2. Full-time, year-round earnings at the minimum wage have declined relative to poverty thresholds since then, however, because these thresholds are adjusted to account for changes in prices, while the minimum wage has not increased since 1981.

A person working 40 hours per week for 52 weeks at the minimum wage would have earned about \$7,000 in 1985. This income level was well above the poverty threshold for individuals living alone and about equal to the thresholds for two-person families, but was well below the thresholds for families of three or more people.

### The minimum wage and family incomes

In March 1985, more than 5 million workers were paid at or below the Federal minimum wage.<sup>5</sup> Data from the March 1985 CPS were used to examine the total incomes of these workers, and particularly the extent to which they were poor—that is, living in families with total cash incomes below Federal poverty thresholds. This relationship between a worker's wage rate and his or her poverty status depends on a number of factors, including the number of hours worked per year, the amount of other income received by the worker and other family members, and the applicable poverty threshold for the worker's family.

This analysis is complicated by several limitations of the data on wage rates and incomes. The most important constraint is that the information on poverty pertain to 1984, while data on wage rates relate to March 1985. The CPS does not provide sufficient information about the total number of hours worked by employed people in 1984 to yield good estimates of their hourly wage rates during that year. Only in the case of workers who were employed full time, year round is it possible to estimate hourly wage rates; even then, the estimate is imprecise because the exact number of hours worked each week is not known. Because of these limitations, the relation between hourly wages and poverty can only be approximated, either by linking March 1985 wage rates with 1984 poverty status, or by relating an estimate of the worker's hourly wage rate in 1984 to his or her poverty status in that year. For the following analysis, each of these methods was applied.

An additional limitation of the analysis is that, in any month, only one-quarter of the respondents in the full CPS sample are asked the questions about their hourly earnings. Thus, the sampling errors associated with population estimates derived from the responses in a single month are larger than those that would result from asking the entire CPS sample the same questions.<sup>6</sup> To test the robustness of our findings, we repeated the entire analysis of the linkage between the March wage rates and annual poverty status, using the March 1984 CPS responses. The results, available from the authors on request, confirmed the relationships reported below, albeit with differences in the specific estimates.

**Table 2. Workers paid hourly rates, by 1984 family income, and by March 1985 hourly earnings**

Family income in 1984	Total	March 1985 wage rate			
		Below \$3.35	\$3.35	\$3.36-4.35	Over \$4.35
<b>Number of workers (in thousands)</b>					
Total .....	52,110	1,510	3,690	9,610	37,300
Below poverty line .....	3,890	310	680	1,340	1,560
100-149 percent of poverty line .....	4,250	210	430	1,130	2,490
150 percent or more of poverty line .....	43,970	990	2,580	7,150	33,250
<b>Percent distribution within 1985 wage group</b>					
Total .....	100.0	100.0	100.0	100.0	100.0
Below poverty line .....	7.5	20.8	18.5	13.9	4.2
100-149 percent of poverty line .....	8.2	13.7	11.6	11.7	6.7
150 percent or more of poverty line .....	84.4	65.6	69.8	74.4	89.2
<b>Percent distribution within 1984 income group</b>					
Total .....	100.0	2.9	7.1	18.4	71.6
Below poverty line .....	100.0	8.1	17.6	34.3	40.0
100-149 percent of poverty line .....	100.0	4.9	10.1	26.5	58.6
150 percent or more of poverty line .....	100.0	2.3	5.9	16.3	75.6

NOTE: Due to rounding, sums of percentage distributions may not equal 100.

SOURCE: Authors' tabulations of data from the March 1985 Current Population Survey.

*Minimum wage workers and poverty.* As shown in table 2, 10 percent of all workers who were paid by the hour in March 1985 reported being paid at or below the minimum wage.<sup>7</sup> Roughly 7 percent (about 3.7 million workers) reported being paid exactly \$3.35 per hour, and 3 percent (about 1.5 million) reported earning less than that amount.

Most of the workers paid at or below the minimum wage had not been poor in the previous year. Among those paid exactly \$3.35 in March 1985, 18.5 percent (680,000) were in families whose incomes in 1984 were below the relevant poverty thresholds; 11.6 percent had incomes between 100 percent and 150 percent of the poverty line; and the remaining 69.8 percent had incomes well above the poverty line. The distribution of income was similar among workers paid below the minimum wage.

Even so, the likelihood of being poor was higher for workers with low wage rates. Among the 5.2 million workers who reported being paid at or below the minimum wage in March 1985, about 1 million (19.2 percent) were in families that would have been classified as poor in 1984. Among the 9.6 million workers paid between \$3.36 and \$4.35 an hour, 1.3 million (13.9 percent) would have been so classified. The 1984 poverty rate among the 37.3 million higher-paid workers was lower yet (4.2 percent).

Examination of some of the characteristics of workers paid at or below the minimum wage—henceforth termed “minimum wage workers”—and the activities of their families in March 1985 suggests several reasons why being a minimum wage worker and being poor are not synonymous. About 70 percent (3.6 million) of the 5.2 million minimum wage workers were in families in which at least

**Table 3. Selected characteristics of poor and nonpoor workers paid hourly rates, March 1985**

Characteristics	Number of workers paid hourly rates (in thousands)					Poverty rate (in percent) <sup>1</sup>		
	Total	Paid at or below \$3.35		Paid over \$3.35		Total	Paid at or below \$3.35	Paid over \$3.35
		Poor	Total	Poor	Total			
Total .....	00,000 52,110	0,000 1,000	0,000 5,200	0,000 2,890	00,000 46,910	00.0 7.5	00.0 19.2	00.0 6.2
Age and sex:								
Teenagers .....	4,970	210	1,670	310	3,300	10.4	12.5	9.3
Adult men .....	24,080	300	1,340	1,260	22,740	6.5	22.0	5.5
Adult women .....	23,060	490	2,190	1,320	20,860	7.9	22.5	6.3
Employment status: <sup>2</sup>								
Full-time .....	37,420	360	1,610	1,920	35,810	6.1	22.4	5.4
Part-time .....	14,610	630	3,590	940	11,020	10.8	17.7	8.6
Other workers in family:								
None .....	18,350	700	1,590	2,040	16,760	14.9	44.3	12.2
One or more .....	33,760	300	3,620	850	30,140	3.4	8.2	2.8

<sup>1</sup> Percentages are calculated based on estimates prior to rounding.

SOURCE: Authors' tabulations of data from the March 1985 Current Population Survey.

<sup>2</sup> Information about the number of hours worked in March 1985 was not provided for about 70,000 workers.

**Table 4. Work experience, presence of other workers in family, and poverty thresholds of poor and nonpoor workers paid hourly rates, March 1985**

Characteristics	Number of workers paid hourly rates (in thousands)					Poverty rate (in percent) <sup>1</sup>		
	Total	Paid at or below \$3.35		Paid over \$3.35		Total	Paid at or below \$3.35	Paid over \$3.35
		Poor	Total	Poor	Total			
Total .....	52,110	1,000	5,200	2,890	46,910	7.5	19.2	6.2
Work experience in 1984:								
Full-time, year-round .....	28,760	120	940	740	27,830	3.0	12.7	2.7
Part-time, year-round .....	5,310	150	800	260	4,510	7.7	18.6	5.7
Full-time, part-year .....	9,300	250	930	970	8,360	13.2	27.1	11.6
Part-time, part-year .....	7,220	320	1,990	670	5,230	13.8	16.3	12.8
No employment .....	1,510	150	540	250	970	26.7	28.2	25.9
No other workers in family in 1984 .....	16,190	710	1,600	2,000	14,590	16.8	44.5	13.7
Poverty threshold \$10,500 or more .....	2,720	200	330	650	2,400	31.3	61.7	27.2
Other workers in family in 1984 .....	35,910	280	3,600	890	32,310	3.3	7.9	2.7
Poverty threshold \$10,500 or more .....	18,180	150	2,120	650	16,060	4.4	7.0	4.1

<sup>1</sup> Percentages are calculated based on estimates prior to rounding.

SOURCE: Authors' tabulations of data from the March 1985 Current Population Survey.

**Table 5. Selected characteristics of poor and nonpoor persons who worked full time, year round, 1984**

Characteristics	Number of year round paid employees who worked on full-time schedules (in thousands) <sup>1</sup>					Poverty rate (in percent) <sup>2</sup>		
	Total	Paid less than \$7,000		Paid at least \$7,000		Total	Paid less than \$7,000	Paid at least \$7,000
		Poor	Total	Poor	Total			
Total .....	59,620	550	2,240	510	57,380	1.8	24.3	0.9
No other workers in family:								
Total .....	20,680	400	820	350	19,860	3.6	48.7	1.8
Poverty threshold less than \$7,000 .....	13,700	230	570	0	13,140	1.7	39.7	0.0
Poverty threshold \$7,000-\$8,499 .....	3,520	90	140	70	3,380	4.4	63.8	2.0
Poverty threshold \$10,500 or more <sup>3</sup> .....	3,460	90	110	280	3,350	10.5	75.4	8.3
Other workers in family:								
Total .....	38,940	150	1,420	160	37,510	0.8	10.3	0.4
Poverty threshold less than \$7,000 .....	10,650	30	360	0	10,290	0.3	7.9	0.0
Poverty threshold \$7,000-\$8,499 .....	10,690	30	350	10	10,340	0.3	8.0	0.1
Poverty threshold \$10,500 or more <sup>3</sup> .....	17,590	90	710	150	16,880	1.4	12.7	0.9

<sup>1</sup> Workers recorded as having been employed for pay (other than self-employed) at least 50 weeks in 1984, with not more than five of these weeks on a part-time schedule.

<sup>3</sup> There were no poverty thresholds between \$8,500 and \$10,500. The average poverty threshold for a four-person family in 1984 was \$10,609.

<sup>2</sup> Percentages are calculated based on estimates prior to rounding.

SOURCE: Authors' tabulations of data from the March 1985 Current Population Survey.

one other member held a job in the survey reference month. (See table 3.) Even though 70 percent of the minimum wage employees worked only part time in March, most minimum wage earners lived in families in which there were other workers. Teenagers held almost one-third of all jobs paying at or below the minimum wage in March 1985.

Minimum wage workers in general were employed fewer hours and more intermittently than were other workers, but were just as likely to be in families in which other members worked during the year. (See table 4.) Looking at the 1984 employment experience of workers making the minimum wage or less in March 1985, only 18 percent (940,000) reported having worked full time, year round, compared with 59 percent of the workers with wage rates above the minimum. Likewise, more than 10 percent of the minimum wage workers in March 1985 had not worked for pay in 1984, compared with only 2 percent of the other hourly workers.

Among the 1 million minimum wage workers who were poor by 1984 standards, only 12 percent had worked full time, year round in that year; 73 percent had worked part time or part year or both; and the remaining 15 percent did not report any paid employment. Thus, even though the poverty rate among year-round, full-time workers employed at or below the minimum wage was almost 13 percent, there were only 120,000 poor workers in this situation.

The likelihood of a minimum wage worker being poor in 1984 also was closely linked to the employment status of other family members. As shown in table 4, minimum wage workers who were the only jobholders in their families had a poverty rate of 44.5 percent, compared with 7.9 percent for those with other employed family members. This comparison was more dramatic for those in families of four or more people (who had poverty thresholds of \$10,500 or more)—61.7 percent versus 7.0 percent.

*Low annual earnings and poverty.* Examination of the poverty status of full-time workers with low annual earnings provides further information about the relationship between low wages and poverty, and confirms the critical roles of family size and the presence of other workers in the family in determining whether a low-wage earner will be poor. For this part of the analysis, persons who reported being em-

ployed full time, year round in 1984 were counted as low-wage workers if they earned less than \$7,000. This amount would correspond to the earnings of someone who worked all year, 40 hours each week, and was paid the minimum wage.

The Bureau of the Census reported that in 1984 there were 70.4 million people who worked at least 50 weeks primarily on full-time schedules (that is, 35 hour or more per week). Nearly 2.1 million of these workers were poor.<sup>8</sup> Detailed examination of the data revealed, however, that 8 million of these people, including more than 800,000 poor workers, reported that their primary activity was self-employment, or that they had worked without pay. The incomes of these workers would not be directly affected by a change in the minimum wage. Another 2.8 million full-time employees, including almost 200,000 of the poor workers, worked on part-time schedules during at least 6 weeks of the year.<sup>9</sup>

Among the remaining 59.6 million workers who reported that they had worked primarily for others in 1984 and that they had worked year round and mostly full time, 1.1 million had total family incomes below the poverty line. (See table 5.) This number is much smaller than the 2.1 million poor workers cited above, and indicates a poverty rate of 1.8 percent among these full-time, year-round workers.

Half of the year-round, full-time workers who were poor (550,000) reported earning less than \$7,000 in 1984. These workers were probably earning average hourly wages of no more than the minimum wage rate.<sup>10</sup> Their poverty rate was 24.3 percent, compared with 0.9 percent for workers with higher earnings.

The likelihood of being poor also depended heavily on the number of other members of the worker's family who were employed and on the level of the family's poverty threshold. For example, among the 820,000 low-wage workers who had no other earners in their families, almost half were poor, whereas only one-tenth of their counterparts who were in families with other workers were poor. In each group, the poverty rate was highest among workers in families with poverty thresholds of at least \$10,500. Among the higher-paid workers, too, the greatest incidence of poverty was among those in families with these poverty thresholds. □

—FOOTNOTES—

<sup>1</sup> Raising the cost to employers of low-wage workers can reduce the number of those workers hired and the number of hours they are employed. For example, studies reviewed by staff of the Minimum Wage Study Commission typically estimated that a 10-percent increase in the minimum wage would result in a reduction in teenage employment of between 1 percent and 3 percent. Raising the minimum wage was estimated to have a smaller effect on adult employment, although this effect is even less certain. See *Report of the Minimum Wage Study Commission*, vol. 1 (Washington, May 1981), ch. 2; and Charles Brown, Curtis Gilroy, and Andrew Kohen, "The Effect of the Minimum Wage on Employment and Unemployment," *Journal of Economic Literature*, June 1982, pp. 487-528.

<sup>2</sup> For more information, see Earl F. Mellor and Steven E. Haugen, "Hourly paid workers: who they are and what they earn," *Monthly Labor Review*, February 1986, pp. 20-26. Responses to the questions about hourly wages, combined with the regular information collected monthly about members of households in the CPS sample, provide the basis for tabulations published by the Bureau of Labor Statistics on hourly wage rates of wage and salary workers by selected characteristics. The hourly wage rates reported do not include tips, premium pay for overtime, bonuses, or commissions.

<sup>3</sup> Coverage is important, not only because of the minimum wage provisions, but because of the overtime provisions that often accompany them.

Under typical overtime provisions, employers are required to pay workers at least one and one-half times the regular wage rate for work in excess of 40 hours in a workweek. (This requirement applies not only to low-wage workers, but to all workers subject to the provisions of the act.)

<sup>4</sup> In 1985, the poverty threshold for a single nonelderly person was \$5,590. For a two-person family, the threshold was \$7,230 if the householder was age 15 to 64, and \$6,510 if the householder was age 65 or older. The thresholds for three- and four-person families were \$8,570 and \$10,990, respectively, regardless of the age of the householder.

<sup>5</sup> Workers could legally be paid less than \$3.35 per hour if they were not subject to the minimum wage or if they were subject to a special lower rate. Workers also might inaccurately report their wage rates.

<sup>6</sup> One way of reducing this source of sampling error would be to use annual averages of the responses—as was done in the analysis by Mellor and Haugen cited above (footnote 2). The standard errors for the monthly estimates are about 3.5 times the size of the standard errors for the corresponding annual estimates. This was not feasible for the current study, however, because it was necessary to match the hourly earnings responses to the income questions that are asked only in March.

<sup>7</sup> Data on hourly wage rates are available only for the 52.1 million workers paid on an hourly basis. In March 1985, a total of 105.8 million

people were employed, including 96.2 million wage and salary workers.

<sup>8</sup> *Current Population Reports, Consumer Income Series*, P-60, no. 149 (Bureau of the Census, August 1985), p. 27.

<sup>9</sup> About 700,000 poor employees who worked primarily full time, year round worked part time for between 6 and 10 weeks, and 120,000 worked part time for at least 11 weeks in 1984. For those who worked less than a full year on a full-time basis, it is difficult to distinguish between low annual earnings associated with low hourly wage rates and those associated with low total hours. Therefore, these workers were excluded from the analysis.

<sup>10</sup> To be included in this group, persons must have reported working at least 50 weeks, including no more than 5 weeks on part-time schedules. Most of them (84 percent) reported that they did not work any weeks on a part-time schedule. Those who worked all 52 weeks for 40 hours per week at the minimum wage would have earned \$6,968.

The difference between the previous estimate of 120,000 poor among full-time, year-round workers who reported hourly wage rates of no more than \$3.35 and these numbers could result from errors in responses, changes in wage rates, or low earnings among workers who were not paid on an hourly basis.

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### A note on communications

The *Monthly Labor Review* welcomes communications that supplement, challenge, or expand on research published in its pages. To be considered for publication, communications should be factual and analytical, not polemical in tone. Communications should be addressed to the Editor-in-Chief, *Monthly Labor Review*, Bureau of Labor Statistics, U.S. Department of Labor, Washington, DC 20212.

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