

# Part-time Workers' Earnings: Some Comparisons

For the first time, national data on employment, average hours worked, and average hourly earnings for part-time workers are available from the National Compensation Survey. This presents an opportunity to make comparisons with full-time workers. This article makes those comparisons. In addition, it estimates the effects of the concentration and density of part-time workers on their earnings, and highlights occupations in which part-time workers earn higher average hourly wage rates than do their full-time counterparts.

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Full-time workers generally earn higher average hourly pay than part-time workers. New data from the 1997 National Compensation Survey (NCS) show that economy-wide earnings for full-time workers averaged \$15.77 versus \$8.89 per hour for part-time workers.<sup>1</sup> This pattern held for law teachers, where average hourly earnings for full-time workers (\$58.67) exceeded those of their part-time counterparts (\$20.65); for physicians, however, the inequality was reversed, with part timers averaging \$56.57, compared with \$37.49 for full timers. The variation by occupation in the relationship between full- and part-time average hourly earnings presents a challenge for researchers. What factors account for this variation? Is this relationship somewhat constant by occupational group, industry, or area?

Since its inception, the NCS has provided data on part-time workers'

average hourly earnings for selected localities.<sup>2</sup> These data are reported for selected occupations and occupational levels, and for occupational groups and group levels.<sup>3</sup> As part of the NCS phased implementation, the first data covering part-time workers in the entire United States were published in September 1999.<sup>4</sup> These data provide an opportunity to examine the characteristics of average earnings and average hours worked by part-time workers on a national basis. They provide a snapshot of the contrasts between full- and part-time average earnings. Future NCS data will present the opportunity for descriptive trend analysis of part-time average earnings.

## Sector and area

The NCS divides surveyed workers into two sectors: (1) Private industry; and, (2) State and local government. Table 1 shows the percent of part-time workers by sector and area.<sup>5</sup> In addi-

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tion, part-time average hourly earnings and average weekly hours worked are presented as percentages of their full-time counterparts.

Notice the contrasts between the two sectors. Part-time workers made up 14 percent of State and local government employment, compared with 19 percent of private industry workers. The average hourly earnings for part-time State and local government workers, at 67 percent of full-time State and local government workers' average earnings, were higher than those of their private industry counterparts (55 percent). The ratio of average weekly hours worked for part-time private industry workers exceeded those of their State and local counterparts, 54 to 49 percent, respectively. However, one should use caution with comparisons because of dissimilarities in the occupational composition of the two sectors. For example, professional specialty and technical workers, who tend to have higher average earnings, made up a larger percentage (39 percent) of State and local government workers than of private industry workers (15 percent). (Table 2 contains additional information on occupational composition.)

Table 1 also breaks out workers by metropolitan and nonmetropolitan area.<sup>6</sup> One of the similarities between metropolitan and nonmetropolitan areas is in the ratio of part-time workers' average weekly hours to those of their full-time counterparts. The percentages were virtually identical, 53 percent and 52 percent. In contrast, part-time nonmetropolitan workers earned more, as a percentage of their full-time counterparts' average hourly earnings, than did part-time metropolitan workers.<sup>7</sup> The conventional perception is that metropolitan workers fare better than nonmetropolitan workers due to better job opportunities and greater bargaining power. The fact that this does not hold true for metropolitan part-time workers is a finding that invites further research. Finally, the percent of nonmetropolitan workers who were part time was 4 percentage points less than that of their

metropolitan counterparts. Coincidentally, the sector and area ratios of part-time to full-time average hourly earnings were identical, 67 percent and 55 percent. Again, due to dissimilarities in occupational composition, caution must be used when making comparisons.

#### **Part-time worker concentration**

Table 2 shows the distribution of part-time workers across occupational groups. More than 4 out of 5 part-time workers were in private industry. This closely reflects the distribution of all workers between these two sectors. (See table 1.) The four occupational groups that accounted for more than half (57 percent) of all part-time workers were sales; administrative support, including clerical; food service; and handlers, equipment cleaners, helpers, and laborers. These occupational groups typically have jobs with relatively low skill requirements and earnings. By contrast, most professional specialty; executive, administrative, and managerial; and blue-collar occupations (which typically have jobs with relatively high skill requirements and earnings) have low estimated counts of part-time workers.

There also were noteworthy contrasts in occupational composition between the sectors. Teachers, except college and university, comprised 15.5 percent of the part-time workforce for State and local government compared with 1 percent in private industry. In private industry, 19 percent of part-time workers were sales workers, an occupation rarely found in State and local governments.

#### **Part-time worker density**

Whereas table 2 shows the distribution of part-time workers across occupational groups, table 3 shows the prevalence of part-time jobs within occupational groups. For example, almost half of the workers within the food service and personal service occupations worked part time. For sales workers, the ratio was nearly 4 out of 10; for health related workers, nearly 3 out of 10; and for college and univer-

sity teachers, 1 out of 4.<sup>8</sup>

There are many occupational groups that exhibit a strong contrast in part-time densities between private industry and State and local government. The results are mixed rather than consistent. In general, however, private industry occupations exhibited higher densities of part-time workers than did State and local government occupations. The following are occupational groups in which private industry had the higher density of part-time workers:

- Health related
- Teachers, except college and university
- Social scientists and urban planners
- Handlers, equipment cleaners, helpers, and laborers
- Protective service
- Health service
- Cleaning and building service

The following are occupational groups in which State and local government exhibited a greater density of part-time workers:

- Writers, authors, entertainers, athletes, and professionals, n.e.c.<sup>9</sup>
- Transportation and material moving
- Personal service

#### **Rating part-time jobs**

Chris Tilly, a professor of economics at the University of Massachusetts, places part-time jobs into three categories.<sup>10</sup> "Short time" part-time jobs are demand driven and most prevalent in goods-producing industries, such as manufacturing, construction, and mining. "Secondary" part-time jobs are those with the characteristics of low pay and skill requirements, undesirable schedules, and high turnover. "Retention" part-time jobs are those with high pay and skills requirements, and greater advancement opportunities. Do NCS data support Tilly's claim of contrasting earnings' char-

acteristics between secondary and retention part-time jobs?

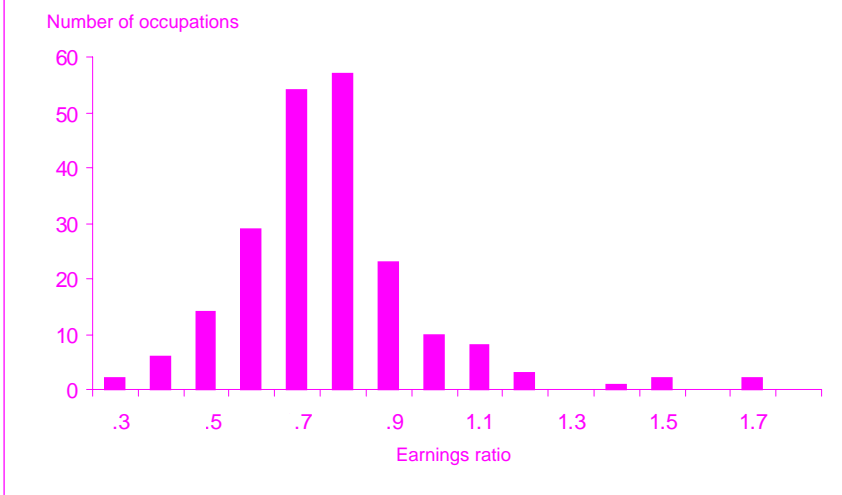
Because a high wage is one of the basic characteristics of retention part-time jobs, retention part-time jobs are more likely to be found as average occupational earnings increase. As wages increase, it is reasonable to expect the earnings differential between part- and full-time workers to decrease because of the worker's additional bargaining power due to increased skills and training. In a simple compensating wage differential model, wages and benefits substitute for each other.<sup>11</sup> If this substitution effect is operative, retention part-time wages could even exceed full-time wages within the same occupation.

To examine these possibilities, NCS national wage and employment data were used to create three variables for analysis. The first is a simple ratio of part-time average hourly earnings to full-time average hourly earnings (hereafter referred to as the earnings ratio) for a given NCS occupation.<sup>12</sup> For each occupation, density and concentration variables also were created.<sup>13</sup> The density variable reflects the percent of workers in an occupation who are part-time. The concentration variable reflects the percent of all part-time workers who are within a given occupation.

Out of the initial 446 survey occupations, some did not have data or had data that did not meet publication criteria for both full- and part-time average hourly earnings. Because an earnings ratio could not be calculated, these occupations were dropped from the data set. The final data set consisted of 211 occupations.

For the earnings ratio, the mean (0.81) and the median (0.80) were virtually identical. The maximum was 1.73 (legislators) and the minimum was 0.34 (athletes). The standard deviation was 0.21. These simple statistics reflect unweighted data because each occupation represents widely varying percentages of total employment. Sorting by band widths of one-tenth, chart 1 displays the frequency of these earnings ratios in a pattern

CHART 1. Histogram of the ratio of part-time average hourly earnings to full-time average hourly earnings by occupation, National Compensation Survey, 1997



that closely resembles a normal distribution.

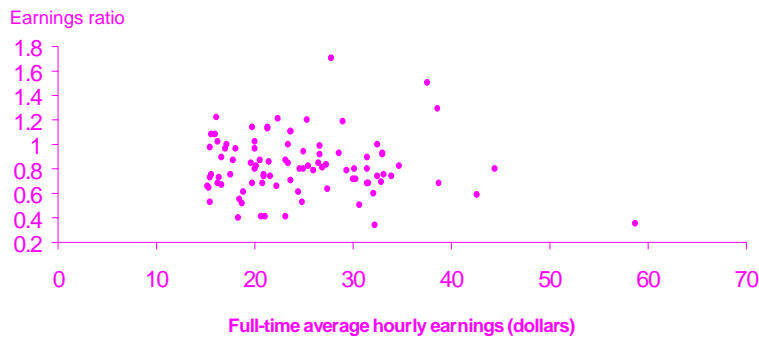
It would be useful to know if there is a relationship between the pattern of earnings ratios and full-time average hourly earnings. Do higher-wage jobs have higher earnings ratios? Do lower-wage jobs have lower earnings ratios? A correlation measure was taken between full-time average hourly earnings and earnings ratios.<sup>14</sup> A correlation coefficient of -0.016 was calculated, providing no evidence of a relationship between the level of full-time average hourly earnings and the earnings ratio. To determine if such a relationship exists only for higher-wage jobs, all occupations with a full-time average wage below \$15 per hour were removed from the data set.<sup>15</sup> The resulting scatterplot of the full-time average hourly earnings and the earnings ratio for occupations with a full-time wage above \$15 per hour visually reinforces the lack of evidence for the existence of retention part-time jobs. This assumes that high earnings ratios are an indicator of retention part-time jobs. (See chart 2.)

In contrast, with a correlation coefficient of 0.82, part- and full-time average hourly earnings were found to have a strong relationship by occupation. In a simple least squares regres-

sion<sup>16</sup> of part-time average hourly earnings on full-time average hourly earnings, the estimated coefficient for full-time earnings was 0.78, with a standard error of 0.03724 at a 99+ percent level of confidence. When the data set was restricted to full-time average hourly earnings greater than or equal to \$15 per hour, the estimated coefficient changed to 0.61 and the standard error increased to 0.09378, with the level of confidence remaining at a 99+ percent level. Chart 3 displays another scatterplot of the relationship between these two variables. Note the deterioration of a linear relationship when the full-time wage exceeds \$15 per hour.

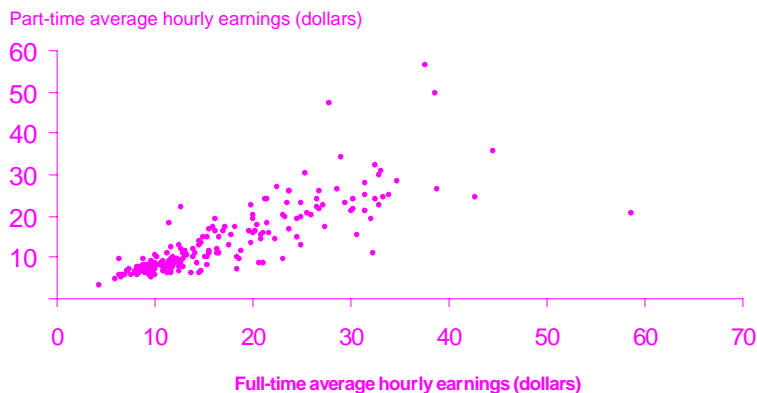
Another model regresses, by least squares, part-time average hourly earnings on full-time average hourly earnings, density, and concentration, by occupation. While acknowledging that such a model is underspecified, it is still interesting to see its results.<sup>17</sup> Table 4 shows the estimated coefficients for all jobs and for higher-wage jobs, and confirms the significance of full-time average hourly earnings on part-time average hourly earnings. Density was significant only for higher-wage jobs and concentration was insignificant for both job sets. Charts 4 and 5 are scatterplots of part-

**CHART 2. Ratio of part-time to full-time average earnings and average full-time earnings greater than or equal to \$15 per hour by occupation, National Compensation Survey, 1997**



NOTE: Each point represents an occupation.

**CHART 3. Average full-time hourly earnings as a predictor of average part-time hourly earnings by occupation, National Compensation Survey, 1997**



NOTE: Each point represents an occupation.

time wages to density and concentration, respectively. They visually complement the information in table 4.

There is a marked difference in correlation between the earnings ratio and the part- and full-time average hourly earnings. (See table 5.) While the full-time wage has negligible correlation for both sets of occupations, the part-time wage has a strong positive correlation for both all jobs and higher-wage jobs. At 0.82 and 0.61, the strength of the relationship between the part- and full-time average hourly wage is confirmed.

When comparing all jobs to higher-wage jobs, of the nine correlation coefficients calculated, three weak, negative correlations became negligible;

two negligible and two positive correlations stayed the same. The relationship between density and the earnings ratio changed from negligible to weakly negative; and the density and full-time average earnings relationship shifted from weakly negative to weakly positive. Because most of the correlation coefficients are weak, it is difficult to make any conclusive comparisons. What can be stated is that, as the full-time average wage increased, the part-time average wage and the earnings ratio became less predictable.

#### **Part-time earnings and health field occupations**

Estimated part-time employee counts were summed for all occupations in

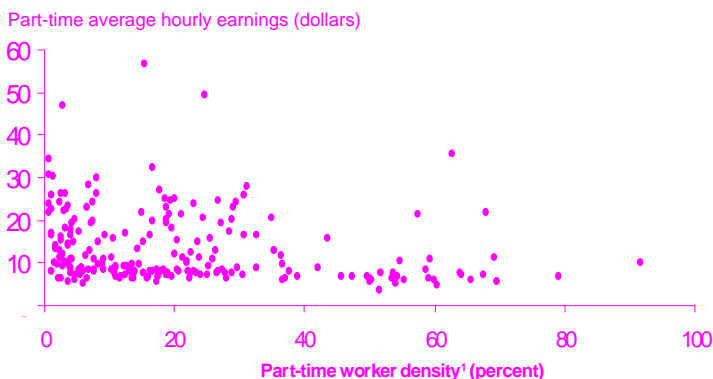
which average part-time earnings exceeded average full-time earnings.<sup>18</sup> This total was computed as a percentage of the total number of part-time workers. An estimated 18 percent of the total sampled workforce was part time; 10 percent of these part-time workers (approximately 2 percent of the total sampled workforce) were in occupations in which the part-time average hourly earnings exceeded those of their full-time counterparts.

There were 26 occupations for which the ratio of average part-time to average full-time earnings was greater than 1. White-collar occupations dominated, with 24 of the 26, and service occupations had the remaining 2. Interestingly, no blue-collar occupation had an earnings ratio greater than 1.

Of the 26 occupations with an earnings ratio greater than 1, 14 were white-collar occupations related to the health field.<sup>19</sup> Table 6 shows selected characteristics of these 14 occupations. Twenty-nine percent of all health related workers were part-time and, of these part-time workers, only 7 percent had lower average hourly earnings than their full-time counterparts. Among technical workers, 4 of the 5 occupations with earnings ratios greater than 1 also were in the health field, reinforcing the association between health field part-time jobs and higher earnings.

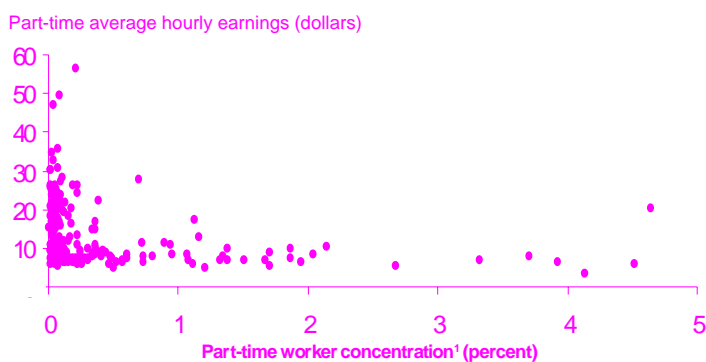
The highest earnings ratio was for physicians (1.51), followed by medical science teachers (1.29), dietitians (1.22), and speech therapists (1.21). It appears that the skill requirements and training associated with a particular job determined the degree to which part-time average hourly earnings exceeded full-time average hourly earnings. For example, the technical and service occupations tended to have lower earnings ratios. Does greater labor market power explain the ability of part-time health field workers to command higher earnings relative to their full-time counterparts? Or is it the special demands of healthcare work schedules?<sup>20</sup> This is another

CHART 4. Average part-time hourly earnings as a function of part-time worker density<sup>1</sup> by occupation, National Compensation Survey, 1997



<sup>1</sup> Density is the percent of workers within a given occupation that are part-time.  
NOTE: Each point represents an occupation.

CHART 5. Average part-time hourly earnings as a function of part-time worker concentration by occupation, National Compensation Survey, 1997



<sup>1</sup> Concentration is the percent of all part-time workers within a given occupation.  
NOTE: Each point represents an occupation.

area that deserves further research.

### Compensation costs

It is widely recognized in the literature that part-time workers have lower access to, and participation in, benefits.<sup>21</sup> The Bureau's 1997 Employee Benefits Survey data reveal that 76 percent of full-time employees participated in medical care programs, as opposed to 21 percent of part-time employees.<sup>22</sup> For retirement programs, this same survey shows another strong contrast: 79 percent of full-time

employees participated in a retirement program, compared with 34 percent of part-time employees. Employer Costs for Employee Compensation (ECEC) data show how employer costs for benefits vary by occupational and industry groups, and by part- and full-time status.<sup>23</sup> For private industry workers, table 7 shows the ratios of part- to full-time workers for total compensation, wages and salaries, total benefits, and selected individual benefit costs per hour worked. Many of these values confirm the findings of an earlier

study at the Bureau of Labor Statistics that used data from the ECEC to look at how compensation costs per hour worked varied for part-time workers when compared to those of full-time workers.<sup>24</sup>

In private industry, part-time workers received 47 percent of the total compensation of full-time workers. Wages and salaries of part-time workers were 54 percent of their full-time counterparts' earnings. Benefits, therefore, made up a smaller proportion of part-time workers' compensation—19 percent, as compared to 28 percent. Sales workers had the lowest ratios in total compensation, wages and salaries, total benefits, supplemental pay, and legally required benefits. Administrative support, including clerical workers fared better than other occupational groups, with the highest ratios in total compensation, wages and salaries, paid leave, supplemental pay, legally required benefits, and total benefits. Blue-collar workers had the highest ratio for insurance, while workers in retail trade had the highest ratio for retirement and savings. Workers in goods-producing industries had the lowest ratios in paid leave and retirement and savings, while workers in service occupations had the lowest insurance ratio. Overall, for all categories, the ratios for costs of legally required benefits were closest to one. The lack of employer discretion in granting access to these benefits to these benefits helps explain these ratios. In addition, higher-paid full-time workers are more likely to reach the earnings ceilings that are placed on several of these benefits: this tends to increase these cost ratios. Table 8 shows the differences in employer costs per hour worked for part- and full-time workers.

### Summary

There are marked compositional differences by occupation between private industry and State and local government. These differences must be weighed when comparing aggregate average hourly earnings. Part-time density and concentration character-

istics by occupation appeared to have no effect on the ratio of part-time to full-time average hourly earnings. Full-time average hourly earnings also seem to have had no effect on the part-time to full-time average hourly earnings ratio. Higher-wage jobs can be expected in many cases to have low earnings ratios. Lower-wage jobs, by the same token, in many cases can

have high earnings ratios.

There is a strong correlation between full-time and part-time average hourly earnings. Part-time earnings are derived from their counterpart, full-time earnings. Although this seems self-evident, it is useful to see it quantified.

Analysis of Employee Benefits Survey data show that part-time workers received a higher percentage of their

total compensation in wages and salaries than did full-time workers.

Part-time jobs in the health field typically paid higher average hourly earnings than did their full-time counterparts. This may be due to characteristics peculiar to the health industry. This pattern presents an interesting opportunity for further research. ■

<sup>1</sup> The National Compensation Survey defines a part-time worker to be any employee that the employer considers to be part time. The NCS sample consists of 16,046 establishments that employed 50 employees or more. The survey represents nearly 67 million workers and covers the 48 contiguous States. Agriculture, private households, and the Federal government are excluded from the scope of the survey.

<sup>2</sup> For a detailed explanation of the National Compensation Survey, see William J. Wiatrowski, "A FORMIDABLE NEW COMPENSATION TOOL: Bureau of Labor Statistics' New National Compensation Survey," *Compensation & Benefits Review*, September/October 1998, pp. 29-41. The first National Compensation Survey Bulletin (3090-01) was published in December 1996 for the Huntsville, AL, locality.

<sup>3</sup> Each occupation for which wage data are collected in an establishment is evaluated based on 10 factors, including, for example, knowledge, complexity, and work environment. Points are assigned based on the occupation's ranking within each factor. The points are summed to determine the overall "level" of the occupation. These ratings for occupational levels are aggregated to calculate ratings for occupational group levels.

<sup>4</sup> For additional information, see *National Compensation Survey: Occupational Wages in the United States, 1997*, Bulletin 2519 (Bureau of Labor Statistics, September 1999).

<sup>5</sup> Figures in table 1 are based on unpublished NCS estimates of employee counts. The NCS is designed to support estimates of occupational earnings. Estimates of the number of workers provide a description of the size and composition of the labor force included in the survey. However the employment estimates are not intended for comparison with other statistical series to measure employment trends or levels.

<sup>6</sup> Metropolitan areas include Metropolitan Statistical Areas (MSAs) or Consolidated Metropolitan Statistical Areas (CMSAs), as defined by the U.S. Office of Management and Budget. Nonmetropolitan areas are counties not included

in MSAs or CMSAs.

<sup>7</sup> The average hourly earnings for metropolitan workers were \$15.73; the nonmetropolitan equivalent was \$11.84. See *National Compensation Survey*, table 1-1.

<sup>8</sup> For additional information on temporary and contingent workers and income inequality within higher education, see Kathleen Barker, "Toiling for Piece-Rates and Accumulating Deficits: Contingent Work in Higher Education," in Kathleen Barker and Kathleen Christensen, eds., *Contingent Work—American Employment Relations in Transition* (Ithaca, NY, and London, Cornell University Press, 1998).

<sup>9</sup> n.e.c. means "not elsewhere classified."

<sup>10</sup> For additional information see Chris Tilly, "Reasons for the continuing growth of part-time employment," *Monthly Labor Review*, March 1991, pp. 14-16.

<sup>11</sup> For a discussion of this topic, see Rebecca M. Blank, "Are Part-Time Jobs Bad Jobs?" in Gary Burtless, ed., *A Future of Lousy Jobs?* (Washington, The Brookings Institution, 1990), p. 134.

<sup>12</sup> Currently, the NCS uses the Occupation Classification System (OCS), comprised of about 480 individual occupations, to cover all workers in the civilian economy.

<sup>13</sup> These variables were created using NCS estimates of employee counts. See endnote 5.

<sup>14</sup> Correlation is a data analysis tool that determines the degree to which two ranges of data move together—that is, whether large values of one set are associated with large values of the other (positive correlation), whether small values of one set are associated with large values of the other (negative correlation), or whether values in both sets are unrelated (correlation near zero).

<sup>15</sup> The choice of \$15 per hour as a cutoff point between high-wage and low-wage jobs is arbitrary.

<sup>16</sup> This tool performs linear regression analysis by using the least squares method to fit a line through a set of observations. This method estimates how a single variable is affected by the values of one or more independent variables.

<sup>17</sup> A fully specified model requires extensive data on workers and firms. The National Compensation Survey does not include demographic data or firm characteristics by occupation.

<sup>18</sup> The word "exceeded" is used in the sense that the ratio of average part-time earnings to average full-time earnings was greater than 1, by occupation.

<sup>19</sup> The remaining 12 occupations, which do not appear in table 6, are: Science technicians, n.e.c.; biological science teachers; supervisors, general office; management analysts; teachers' aides; accountants and auditors; engineers, n.e.c.; mechanical engineers; baggage porters and bellhops; clergy; operations and systems researchers and analysts; and legislators.

<sup>20</sup> Typically, health field work schedules must provide 24-hour, around the clock, coverage. To fill the more undesirable time slots, employers often recruit part-time workers and pay them a wage premium.

<sup>21</sup> Blank, "Are Part-Time Jobs Bad Jobs?," p. 151.

<sup>22</sup> *Employee Benefits in Medium and Large Private Establishments, 1997*, Bulletin 2517 (Bureau of Labor Statistics, September 1999), tables 1 and 192.

<sup>23</sup> "Employer Costs for Employee Compensation - March 1999," USDL 99-173 (Bureau of Labor Statistics, June 24, 1999).

<sup>24</sup> Mark A. Brinkley, "Employer Costs for Employee Compensation to Include Information on Part-time and Full-time Workers," *Compensation and Working Conditions*, June 1994, pp. 1-11. Brinkley found that total employer compensation costs per hour worked for part-time workers were less than half those for full-time workers. Table 7 confirms this with a value of 0.47. Brinkley also found that the wages and salaries of part-time workers were slightly more than half those of full-time workers. A value of 0.54 from table 7 confirms this as well. He also found that the benefit costs of part-time employees were about one-third those of full-time employees. Table 7 also confirms this with a value of 0.31.

TABLE 1. Ratios of average hourly earnings and average weekly hours worked by sector and area, National Compensation Survey, 1997

| Sector and area                  | Percent of—   |                           | Average hourly earnings ratio <sup>1</sup> | Average weekly hours worked ratio <sup>1</sup> |
|----------------------------------|---------------|---------------------------|--|--|
|                                  | Total workers | Workers who are part time |  |  |
| Total .....                      | 100           | 18                        | 0.56                                       | 0.53   |
| Sector                           |               |                           |  |  |
| Private industry .....           | 78            | 19                        | .55  | .54  |
| State and local government ..... | 22            | 14                        | .67  | .49  |
| Area                             |               |                           |  |  |
| Metropolitan .....               | 84            | 18                        | .55  | .53  |
| Nonmetropolitan .....            | 16            | 14                        | .67  | .52  |

<sup>1</sup> Ratios are those of part-time workers to full-time workers.

TABLE 2. Distribution of private industry and State and local government part-time workers by occupation, National Compensation Survey, 1997

| Occupation   | Total  | Private industry part-time workers as a percent of— |                       | State and local government part-time workers as a percent of— |                       |
|--|--------|---|-----------------------|---|-----------------------|
|  |        | Private industry                                    | All part-time workers | State and local government                                    | All part-time workers |
| All part-time workers .....  | 100.00 | 100.00  | 82.44                 | 100.00  | 17.56                 |
| White collar .....   | 47.14  | 44.87   | 36.99                 | 57.81   | 10.15                 |
| Professional specialty and technical .....   | 16.11  | 12.49   | 10.29                 | 33.14   | 5.82                  |
| Professional specialty .....   | 12.86  | 9.21  | 7.59                  | 29.99   | 5.27                  |
| Engineers, architects and surveyors .....  | .07    | .08   | .06                   | -   | -                     |
| Mathematical and computer scientists .....   | .08    | .07   | .06                   | -   | -                     |
| Natural scientists .....   | .08    | .06   | .05                   | .18   | .03                   |
| Health related .....   | 5.78   | 6.14  | 5.06                  | 4.62  | .72                   |
| Teachers, college and university .....   | 1.59   | .52   | .43                   | 6.61  | 1.16                  |
| Teachers, except college and university .....  | 3.50   | .94   | .78                   | 15.50   | 2.72                  |
| Librarians, archivists, and curators .....   | .11    | .05   | .04                   | .38   | .07                   |
| Social scientists and urban planners .....   | .19    | .21   | .17                   | .11   | .02                   |
| Social, recreation, and religious workers .....  | .52    | .38   | .31                   | 1.21  | .21                   |
| Lawyers and judges .....   | .12    | -   | -                     | .65   | .11                   |
| Writers, authors, entertainers, athletes, and professionals, n.e.c. <sup>1</sup> ..... | .82    | .76   | .62                   | 1.12  | .20                   |
| Technical .....  | 3.25   | 3.28  | 2.70                  | 3.15  | .55                   |
| Executive, administrative, and managerial .....  | .82    | .50   | .41                   | 2.36  | .41                   |
| Executives, administrators, and managers .....   | .49    | .24   | .20                   | 1.66  | .29                   |
| Management related .....   | .33    | .26   | .21                   | .71   | .12                   |
| Sales .....  | 15.71  | 18.87   | 15.55                 | .89   | .16                   |
| Administrative support, including clerical .....                                       | 14.49  | 13.02   | 10.73                 | 21.41   | 3.76                  |
| Blue collar .....  | 16.43  | 17.73   | 14.61                 | 10.35   | 1.82                  |
| Precision production, craft, and repair .....  | .74    | .85   | .70                   | .24   | .04                   |
| Machine operators, assemblers, and inspectors .....                                    | 1.27   | 1.52  | 1.25                  | .11   | .02                   |
| Transportation and material moving .....   | 4.13   | 3.33  | 2.75                  | 7.86  | 1.38                  |
| Handlers, equipment cleaners, helpers, and laborers .....                              | 10.28  | 12.02   | 9.91                  | 2.13  | .37                   |
| Service .....  | 36.43  | 37.41   | 30.84                 | 31.85   | 5.59                  |
| Protective service .....   | 3.09   | 2.53  | 2.09                  | 5.70  | 1.00                  |
| Food service .....   | 16.61  | 18.16   | 14.97                 | 9.35  | 1.64                  |
| Health service .....   | 4.67   | 5.19  | 4.28                  | 2.22  | .39                   |
| Cleaning and building service .....  | 4.74   | 5.22  | 4.30                  | 2.53  | .44                   |
| Personal service .....   | 7.32   | 6.31  | 5.20                  | 12.04   | 2.12                  |

<sup>1</sup> n.e.c. means "not elsewhere classified."

NOTE: Dash indicates that no data were reported or that data did

not meet publication criteria. Overall occupational groups may include data for categories not shown separately. Because of rounding, sums of individual items may not equal totals.

TABLE 3. Percent of private industry and State and local government workers who are part time by occupational group, National Compensation Survey, 1997

| Occupation   | Total | Private industry | State and local government |
|--|-------|------------------|----------------------------|
| All part-time workers .....  | 18    | 19               | 14                         |
| White collar .....   | 16    | 17               | 12                         |
| Professional specialty and technical .....   | 14    | 16               | 12                         |
| Professional specialty .....   | 14    | 16               | 12                         |
| Engineers, architects and surveyors .....  | 1     | 1                | -                          |
| Mathematical and computer scientists .....   | 1     | 1                | -                          |
| Natural scientists .....   | 3     | 3                | 4                          |
| Health related .....   | 29    | 33               | 17                         |
| Teachers, college and university .....   | 24    | 23               | 25                         |
| Teachers, except college and university .....  | 11    | 30               | 10                         |
| Librarians, archivists, and curators .....   | 11    | 13               | 10                         |
| Social scientists and urban planners .....   | 11    | 20               | 2                          |
| Social, recreation, and religious workers .....  | 11    | 16               | 7                          |
| Lawyers and judges .....   | 7     | -                | 14                         |
| Writers, authors, entertainers, athletes, and professionals, n.e.c. <sup>1</sup> ..... | 15    | 13               | 31                         |
| Technical .....  | 14    | 14               | 13                         |
| Executive, administrative, and managerial .....  | 2     | 1                | 4                          |
| Executives, administrators, and managers .....   | 2     | 1                | 4                          |
| Management related .....   | 2     | 1                | 3                          |
| Sales .....  | 39    | 39               | 32                         |
| Administrative support, including clerical .....                                       | 15    | 15               | 16                         |
| Blue collar .....  | 10    | 10               | 14                         |
| Precision production, craft, and repair .....  | 2     | 2                | 1                          |
| Machine operators, assemblers, and inspectors .....                                    | 2     | 2                | 6                          |
| Transportation and material moving .....   | 19    | 15               | 31                         |
| Handlers, equipment cleaners, helpers, and laborers ...                                | 25    | 26               | 12                         |
| Service .....  | 34    | 39               | 20                         |
| Protective service .....   | 16    | 29               | 8                          |
| Food service .....   | 48    | 49               | 45                         |
| Health service .....   | 28    | 31               | 14                         |
| Cleaning and building service .....  | 25    | 30               | 9                          |
| Personal service .....   | 45    | 42               | 54                         |

<sup>1</sup> n.e.c. means "not elsewhere classified."

NOTE: Dash indicates that no data were reported or that data did not meet publication criteria.

TABLE 4. Estimates of effects of selected independent variables on part-time average hourly earnings, National Compensation Survey, 1997

| Independent variable                    | All jobs              |                | High-wage jobs <sup>1</sup> |                |
|---|-----------------------|----------------|-----------------------------|----------------|
|   | Estimated coefficient | Standard error | Estimated coefficient       | Standard error |
| Full-time average hourly earnings ..... | <sup>2</sup> 0.769    | 0.0390         | <sup>2</sup> 0.701          | 0.0931         |
| Density .....                           | -0.032                | 0.0178         | <sup>2</sup> -0.083         | 0.0381         |
| Concentration .....                     | 0.169                 | 0.3737         | 0.624                       | 1.4315         |

<sup>1</sup> High-wage jobs are defined as occupations with a full-time wage greater than or equal to \$15 per hour. The

selection of \$15 an hour as a cutoff point is arbitrary.  
<sup>2</sup> Significant at the 5-percent level or better.



TABLE 5. Correlation coefficients for selected variables, National Compensation Survey, 1997

| Variable                          | Density <sup>1</sup> |                             | Concentration <sup>2</sup> |                             | Part-time wage |                             | Earnings ratio <sup>3</sup> |                             |
|-----------------------------------|----------------------|-----------------------------|----------------------------|-----------------------------|----------------|-----------------------------|-----------------------------|-----------------------------|
|                                   | All jobs             | High-wage jobs <sup>4</sup> | All jobs                   | High-wage jobs <sup>4</sup> | All jobs       | High-wage jobs <sup>4</sup> | All jobs                    | High-wage jobs <sup>4</sup> |
| Average wage                      |                      |                             |                            |                             |                |                             |                             |                             |
| Full time .....                   | -0.18712             | 0.23354                     | -0.29684                   | -0.06947                    | 0.82187        | 0.60694                     | -0.01643                    | -0.06579                    |
| Part time .....                   | -0.22014             | -0.04363                    | -0.25012                   | -0.00619                    | 1              | 1                           | 0.49017                     | 0.71076                     |
| Earnings ratio <sup>3</sup> ..... | -0.04663             | -0.26766                    | 0.00692                    | 0.07304                     | 0.49017        | 0.71076                     | 1                           | 1                           |

<sup>1</sup> Density is the percent of workers within a given occupation who are part time.

<sup>2</sup> Concentration is the percent of all part-time workers who are in a given occupation.

<sup>3</sup> Ratios are those of part-time workers to full-time workers.

<sup>4</sup> High-wage jobs are defined as occupations with a full-time wage greater than or equal to \$15 per hour. The selection of \$15 an hour as a cutoff point is arbitrary.

TABLE 6. Occupations in the health field for which part-time average hourly earnings exceeded full-time average hourly earnings, selected characteristics, National Compensation Survey, 1997

| Occupation  | Number of part-time workers | Percent of workers who are part-time | Average hourly earnings ratio <sup>1</sup> |
|---|-----------------------------|--------------------------------------|--|
| All health field related part-time workers .....        | 877,004                     |                                      |  |
| Health related .....                                    | 632,125                     |                                      |  |
| Physicians .....  | 24,036                      | 15                                   | 1.51                                       |
| Registered nurses .....                                 | 548,536                     | 32                                   | 1.02                                       |
| Dietitians .....  | 7,068                       | 19                                   | 1.22                                       |
| Occupational therapists .....                           | 10,630                      | 23                                   | 1.12                                       |
| Physical therapists .....                               | 21,896                      | 31                                   | 1.11                                       |
| Speech therapists .....                                 | 10,539                      | 18                                   | 1.21                                       |
| Therapists, n.e.c. ....                                 | 9,420                       | 16                                   | 1.08                                       |
| Teachers, college and university                        |                             |                                      |  |
| Medical science teachers .....                          | 10,041                      | 25                                   | 1.29                                       |
| Technical .....   | 228,674                     |                                      |  |
| Clinical laboratory technologists and technicians ..... | 40,050                      | 15                                   | 1.01                                       |
| Health record technologists and technicians .....       | 8,866                       | 23                                   | 1.08                                       |
| Radiological technicians .....                          | 43,044                      | 32                                   | 1.03                                       |
| Licensed practical nurses .....                         | 136,714                     | 26                                   | 1.04                                       |
| Service   |                             |                                      |  |
| Dental assistants .....                                 | 2,286                       | 22                                   | 1.06                                       |
| Natural scientists                                      |                             |                                      |  |
| Medical scientists .....                                | 3,878                       | 7                                    | 1.14                                       |

<sup>1</sup> Earnings ratio refers to the ratio of part-time to full-time average hourly earnings.

<sup>2</sup> n.e.c. means "not elsewhere classified."

TABLE 7. Part-time to full-time ratios of compensation and benefit costs per hour worked in private industry, by occupation and industry, Employer Costs for Employee Compensation, March 1999

| Occupation and industry                             | Total compensation | Wages and salaries | Benefits |            |                  |           |                        |                           |
|---|--------------------|--------------------|----------|------------|------------------|-----------|------------------------|---------------------------|
|   |                    |                    | Total    | Paid leave | Supplemental pay | Insurance | Retirement and savings | Legally required benefits |
| All workers .....                                   | 0.47               | 0.54               | 0.31     | 0.19       | 0.22             | 0.18      | 0.22                   | 0.59                      |
| Occupation .....                                    |                    |                    |          |            |                  |           |                        |                           |
| White collar .....                                  | .51                | .56                | .35      | .24        | .28              | .22       | .23                    | .64                       |
| Sales .....   | .40                | .43                | .31      | .18        | .19              | .20       | .22                    | .53                       |
| Administrative support,<br>including clerical ..... | .68                | .77                | .45      | .34        | .45              | .25       | .34                    | .82                       |
| Blue collar .....                                   | .53                | .59                | .39      | .21        | .31              | .27       | .42                    | .63                       |
| Service .....                                       | .63                | .71                | .40      | .20        | .28              | .14       | .25                    | .73                       |
| Industry .....                                      |                    |                    |          |            |                  |           |                        |                           |
| Goods producing .....                               | .51                | .59                | .33      | .15        | .28              | .18       | .13                    | .71                       |
| Service producing .....                             | .49                | .54                | .34      | .20        | .25              | .19       | .24                    | .63                       |
| Retail trade .....                                  | .54                | .58                | .43      | .19        | .33              | .25       | .45                    | .64                       |
| Services .....                                      | .60                | .67                | .42      | .28        | .42              | .23       | .30                    | .74                       |

TABLE 8. Differences in employer compensation costs per hour worked between full-time and part-time workers in private industry, by occupational and industry group, Employer Costs for Employee Compensation, March 1999

| Occupation and industry                             | Total compensation | Wages and salaries | Benefits |            |                  |           |                        |                           |
|---|--------------------|--------------------|----------|------------|------------------|-----------|------------------------|---------------------------|
|   |                    |                    | Total    | Paid leave | Supplemental pay | Insurance | Retirement and savings | Legally required benefits |
| All workers .....                                   | \$11.35            | \$7.19             | \$4.16   | \$1.18     | \$0.52           | \$1.14    | \$0.54                 | \$0.74                    |
| Occupation .....                                    |                    |                    |          |            |                  |           |                        |                           |
| White collar .....                                  | 12.53              | 8.08               | 4.45     | 1.44       | .51              | 1.18      | .62                    | .67                       |
| Sales .....   | 12.55              | 9.28               | 3.27     | .83        | .51              | .76       | .39                    | .76                       |
| Administrative support,<br>including clerical ..... | 5.54               | 2.85               | 2.70     | .83        | .21              | 1.06      | .35                    | .23                       |
| Blue collar .....                                   | 8.98               | 5.42               | 3.56     | .85        | .51              | 1.04      | .40                    | .72                       |
| Service .....                                       | 4.31               | 2.48               | 1.83     | .51        | .18              | .65       | .15                    | .33                       |
| Industry .....                                      |                    |                    |          |            |                  |           |                        |                           |
| Goods producing .....                               | 11.42              | 6.65               | 4.77     | 1.31       | .62              | 1.40      | .75                    | .62                       |
| Service producing .....                             | 10.72              | 6.99               | 3.72     | 1.14       | .44              | 1.02      | .47                    | .63                       |
| Retail trade .....                                  | 6.32               | 4.53               | 1.79     | .54        | .18              | .47       | .11                    | .48                       |
| Services .....                                      | 8.28               | 5.18               | 3.10     | 1.09       | .26              | .92       | .39                    | .44                       |