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Bureau of Labor Statistics
Office of Productivity and Technology
1995 HOURS AT WORK SURVEY

Based on the 1995 hours at work survey (HWS) of establishments, the sectoral ratios of hours at work to hours paid and their changes from the previous year (with standard errors in parentheses) were:

| | 1995 Ratios of hours at work to hours paid | Changes in Ratios from 1994 to 1995 |
|-------------------------------|---|--|
| Nonfarm Establishments | 0.938 (.002) | 0.005 (.003) |
| Manufacturing(Mfg.) | 0.918 (.001) | 0.000 (.001) |
| Durable Mfg. | 0.914 (.001) | -0.002 (.002) |
| Nondurable Mfg. | 0.923 (.002) | 0.002 (.003) |
| Nonmanufacturing | 0.944 (.002) | 0.006 (.003) |

The hours at work survey is used to construct ratios of hours at work to hours paid for production and nonsupervisory workers for each of the major industrial sectors of the nonagricultural economy on a yearly basis. The Bureau of Labor Statistics (BLS) of the U.S. Department of Labor has been conducting this survey since 1981 for use in measuring productivity.

Background

Data on average weekly hours collected by the BLS Current Employment Statistics Program (CES) represent hours paid. Hours paid include paid leave for holidays, vacations, sick and personal or administrative leave (e.g. personal business, funeral leave, and jury duty). These forms of paid leave represent time not devoted to production. Hours at work exclude paid leave while hours paid do not. Productivity should be measured as the ratio of output to hours spent in production.

The HWS survey is used to develop *ratios for hours at work to hours paid* for 30 industries. These ratios are then used to convert measures from the CES of hours paid for nonagricultural production and nonsupervisory employees to measures of hours at work. Prior to 1989, labor productivity was measured as output per hour paid. Since August 1989, all historical data for labor productivity have been measured as the ratio of output to hours at work.

Results

For nonfarm establishments, the overall ratio of hours at work to hours paid increased by 0.005 to 0.938, with the largest gains in nonmanufacturing industries (see table 1). This ratio is equal to the 1989 ratio, the highest ratio previously recorded.

The increase was confined to the nonmanufacturing sector. The manufacturing sector ratio was unchanged while the ratio for nonmanufacturing increased by .006. The level of the ratio for nonmanufacturing industries remained substantially higher than the level for manufacturing (.944 vs. .918) (see chart 1). Within the manufacturing sector, the ratio for durable manufacturing declined while the ratio for nondurable manufacturing increased.

Of the 30 detailed industries, the ratios declined for twelve industries (10 manufacturing and 2 nonmanufacturing), while the ratios increased for sixteen industries (9 manufacturing and 7 nonmanufacturing). The ratios were unchanged for two industries (1 manufacturing and 1 nonmanufacturing) (see table 2).

The ratios for eight industries changed significantly between 1994 and 1995. There were significant increases for tobacco manufactures; mining; finance; communications; and electric, gas, and sanitary services. There were significant decreases for fabricated metals, transportation services, and textiles. In addition, paper and allied products; chemicals; mining;

communications; electric, gas, and sanitary services; finance, and tobacco manufactures exhibited their highest ratios since the survey began in 1981. In contrast, fabricated metals, textile mill products, and insurance and real estate exhibited their lowest ratios since the survey began.

For most industries, the ratios of hours at work to hours paid exhibit a cyclical pattern: they increase during economic expansions and decrease during economic contractions. The tendency of the ratios to increase during expansions reflects the fact that newly hired workers typically earn less paid leave than workers with more seniority. The tendency of the ratios to decrease during contractions reflects the fact that these new workers are often the ones laid off first.

Because the hours at work (HWS) survey is based on a sample of establishments, changes in reported ratios are subject to sampling errors. The hours at work survey usually has a response rate of about 75 percent. The 1995 survey, however, had a response rate of only 62 percent. As a result, the variances of the estimates, particularly at the detailed industry level, were higher than in previous years. The increased variances made it slightly more difficult to determine that changes in the ratios were significant. For more information about the hours at work survey (HWS), please contact Aklilu A. Zegeye, U.S. Department of Labor, Bureau of Labor Statistics, Division of Productivity Research at (202)606-5611.