

Issues in Labor Statistics

U.S. Department of Labor U.S. Bureau of Labor Statistics



Seasonally adjusted hours series from the Current Population Survey

The number of hours that Americans work each week is an important measure of economic activity. During periods of labor market contraction, the number of hours worked usually falls as businesses cut overtime or put some full-time workers on part-time schedules. As economic conditions improve, businesses typically increase hours among workers to meet expected demand. Changes in hours, then, can be a useful gauge of the state of the labor market, particularly at turning points in the business cycle.

Estimates of the number of hours worked are available from the Current Population Survey (CPS), a

monthly sample survey of households that provides the official measure of national unemployment and a variety of other labor market data.¹ The CPS measure of the workweek refers to actual hours at work during the survey reference week for all persons who worked, including the self-employed. These data are based on responses by individuals and are tabulated on a person basis. For workers with more than one job, the measure represents hours worked at all jobs combined.

Trends in hours are influenced by seasonal variations. However, hours estimates have not been available from the CPS on a seasonally adjusted basis in the past. Thus, over-the-month comparisons were not advisable. Recently, several CPS hours data series have been adjusted for seasonality. (See box.)

Seasonally adjusted CPS hours series

The seasonally adjusted hours series can be accessed by clicking on the links below or by using the codes provided on the BLS Web site at <http://data.bls.gov/cgi-bin/srgate>.

LNS12005054	Average hours, total at work, all industries
LNS12505054	Average hours, persons who usually work full time, all industries
LNS12033107	Average hours, total at work, agriculture and related industries
LNS12533107	Average hours, persons who usually work full time, agriculture and related industries
LNS12033120	Average hours, total at work, nonagricultural industries
LNS12533120	Average hours, persons who usually work full time, nonagricultural industries
LNS12033251	Average hours, at work in nonagricultural industries, wage and salary workers
LNS12533251	Average hours, at work in nonagricultural industries, wage and salary workers, persons who usually work full time

NOTE: Historical seasonally adjusted series are available from 1976 forward with the exception of average hours for persons who usually work full time. Due to a major redesign of the CPS in 1994, those series are available only from 1994 forward.

Seasonal adjustment attempts to eliminate the influence of periodic fluctuations brought on by recurring calendar-related events and makes it easier for data users to observe cyclical movements in the series.² To seasonally adjust the series history, it was first necessary to account for occurrences when the length of the workweek deviated from *normal* seasonal patterns because of some unusual event, such as extremely severe weather. If these events had not been identified, they could have distorted the normal seasonal pattern for hours, having unintended consequences on the data. Some examples of these abnormal events were major winter storms that hit parts of the country in January 1977, January 1978, January 1982, February 1994, January 1996, and February 2007. In addition, one-time shocks were identified and accounted for, such as the terrorist attacks of September 11, 2001. (These attacks occurred during the household survey's reference week.) After accounting for these abnormal events, various hours series were seasonally adjusted. (*See chart 1.*)

At the end of each calendar year, seasonal adjustment factors for the household survey are updated. Seasonally adjusted estimates for the previous 5-year period are subject to revision. First-time revisions for the most re-

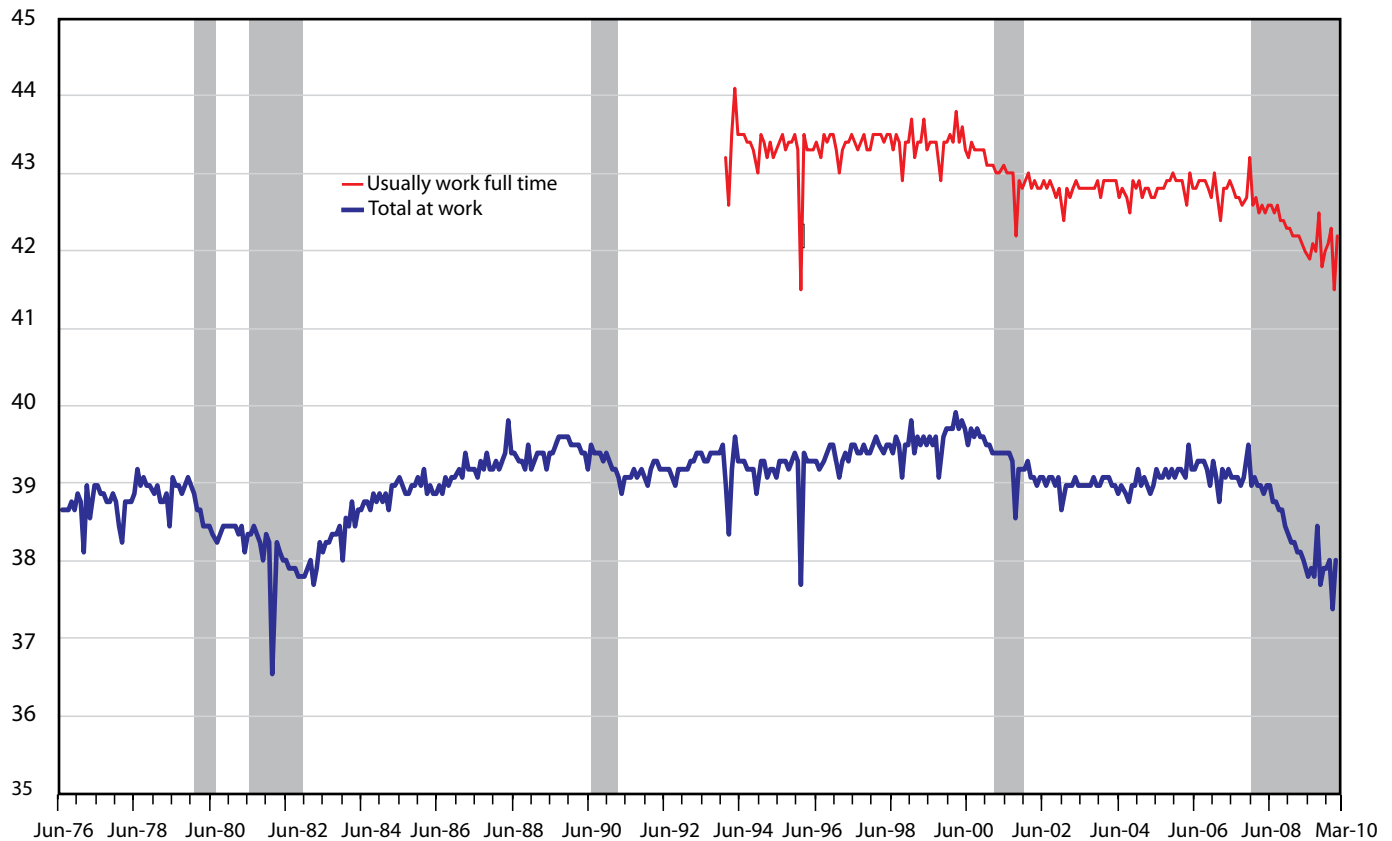
cent data can be quite large but rarely alter the trend observed in the initial estimates.

The seasonally adjusted hours series can provide useful information for analyzing movements over short timeframes. Seasonally adjusted hours had been on a downward trend for roughly a year prior to the onset of several recessions of the past 30 years. With respect to the 1981–82 and 1990–91 recessions, average hours began increasing within months of the respective official ending dates. In the aftermath of the 2001 recession, however, hours remained relatively flat for nearly 3 years, and then expanded only modestly from 2005–06. Unlike in previous expansionary periods, hours never attained prerecession levels.

During the current economic contraction, average weekly hours have fallen sharply, from 39.0 hours at the beginning of the recession in December 2007 to 38.1 hours in March 2010. The hours series for persons who usually work full time also declined, although by a smaller magnitude.

In sum, the recently developed seasonally adjusted hours series from the CPS provide data users with a timely measure of hours for all persons at work and for those who usually work full time. Changes in these estimates over the course of the business cycle provide an important gauge of labor market activity.

Chart 1. Average hours at work, persons at work in all industries, seasonally adjusted, June 1976– March 2010



NOTE: Shaded areas represent recessions as determined by the National Bureau of Economic Research (NBER). NBER has not yet determined an endpoint for the recession that began in December 2007.

This *Issues* paper was prepared by Randy Ilg, an economist in the Division of Labor Force Statistics, Office of Employment and Unemployment Statistics. Email: CPSinfo@bls.gov; Telephone: (202) 691-6378.

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Notes

¹ The Bureau of Labor Statistics provides estimates of hours from two distinct surveys—the Current Population Survey (CPS), or household survey, and the Current Employment Statistics (CES) survey, or establishment survey. Data on hours from the CES are usually regarded as the primary source for hours paid in the private sector and are tabulated on a per-job basis. The CES recently developed hours measures to cover all employees in private, nonfarm establishments. For more information, see Angie Clinton, John Coughlan, and Brian Dahlin, “New all-employee hours and earnings from the CES survey,” *Monthly*

Labor Review, March 2010, pp. 34–40, on the Internet at <http://stats.bls.gov/opub/mlr/2010/03/art3full.pdf>.

² For more information on seasonal adjustment and associated issues, see Richard B. Tiller and Thomas D. Evans, “Methodology for seasonally adjusting national household labor force series with revisions for 2010,” Current Population Survey (CPS), Technical Documentation, January 2010, on the Internet at <http://stats.bls.gov/cps/cpsrs2010.pdf>.