[5] Blau and Kahn, "Causes and Consequences."

[6] Norman Bowers, "Have employment patterns in recessions changed?" *Monthly Labor Review*, February 1981, pp. 15–28.

[7] Blau and Kahn, "Causes and Consequences."

[8] *Ibid.*

[9] See Carol Boyd Leon, "The employment population ratio: its value in labor force analysis," *Monthly Labor Review*, February 1981, pp. 36–45.

[10] Donald R. Williams, "Racial Differences in Male Teenage Labor Force Participation Rates," Ph.D. Diss., Northwestern University, August 1984.

[11] See Stephen Marston, "Employment Instability and High Unemployment Rates," *Brookings Papers on Economic Activity*, vol. 1, 1976, pp. 169–203; and Williams, "Racial Differences."

[12] Williams, "Racial Differences."

[13] For further evidence of age differences in discouragement, see T. Aldrich Finegan, "Discouraged Workers and Economic Fluctuations," *Industrial and Labor Relations Review*, October 1981, pp. 88–102.

[14] See Ralph E. Smith, Jean E. Vanski, and Charles C. Holt, "Recession and the Employment of Demographic Groups," *Brookings Papers on Economic Activity*, vol. 3, 1974, pp. 737–58; Marston, "Employment Instability"; Kim B. Clark and Lawrence H. Summers, "Demographic Differences in Cyclical Employment Variations," *Journal of Human Resources*, Winter 1981, pp. 61–79; and Bowers, "Have employment patterns in recessions changed?"

[15] Robert W. Bednarzik, "Short workweeks during economic downturns," *Monthly Labor Review*, June 1983, pp. 3–11.

New data series on involuntary part-time work

HARVEY R. HAMEL

The number of nonagricultural workers "on part-time schedules for economic reasons," shows a strong relationship to business cycle trends, according to seasonally adjusted data from the Current Population Survey.[1] The number and proportion of persons involuntarily working part time—sometimes referred to as the "partially unemployed"—generally rise during a recession and decline during a recovery period. In a comprehensive examination and analysis of these data which appeared in the June 1983 *Monthly Labor Review*,[2] Robert W. Bednarzik demonstrated that during cyclical periods, the incidence of economic part-time work moves in the same direction as, but leads, movements in the civilian unemployment rate. Bednarzik explained that such part-time employment typically rises before unemployment begins to increase during a recession, mainly because employers tend to reduce hours of work when possible before laying off employees. During recovery periods, employers usually restore the hours of those on shortened workweeks before rehiring laid-off workers. The main focus of Bednarzik's analysis, however, was the relationship and variation in cyclical behavior of the two main causes of involuntary part-time work, cutbacks in weekly hours due to slack work and failure to find full-time work,[3] both of which were seasonally adjusted specifically for his study.

Following up on Bednarzik's analysis, BLS tested the cyclical sensitivity and accuracy of the new series and confirmed that these data captured more clearly the distinctions between the concepts of persons working part time involuntarily than did the existing published series, which divided the total number into those who "usually work full time" and those who "usually work part time."[4] Thus, to provide data users with more relevant series that can isolate the main causes of part-time work, BLS has replaced the existing usual full- and part-time series with the new series. Effective with data for January 1985, the new series are published in monthly issues of "The Employment Situation" news release and *Employment and Earnings*,[5] and, beginning with this issue, are also published in table 4 in the Current Labor Statistics section of the *Monthly Labor Review*. Data are published for all persons (in agriculture and nonagricultural industries combined) as well as for persons in nonagricultural industries only. (The former series were limited to workers in nonagricultural industries.) Time series based on the new definitions are available back to 1955 and can be obtained from BLS.

The new series clearly show different cyclical behavior, which, in turn, illustrates different underlying labor market problems. The more cyclical "slack work" series reflects short-run adjustments made by firms to minimize layoffs and subsequent recalls or hirings. Thus, slack work rises sharply during economic downturns, but shows rapid improvement during the early stages of recovery. The "failure to find full-time work" series reflect the experience, skills, and training of workers; the match of available workers to work schedules; and the types and locations of job openings, as well as the general state of the economy. The "failure to find" series is clearly less cyclical. Indeed, in contrast to the "slack work" component, it typically rises during the early stages of a recovery, probably because many unemployed workers find and accept part-time jobs (perhaps after exhausting unemployment insurance benefits) as a better alternative to remaining fully unemployed without compensation.

Recent data illustrate this point. The following tabulation shows the number of persons (seasonally adjusted) and the percent of total civilian employment on part-time schedules for economic reasons during September of 1982 and 1983 and January 1985:

	Slack work		*Could only find part-time work*	
	Number (thousands)	*Percent of civilian employment*	*Number (thousands)*	*Percent of civilian employment*
September 1982	3,718	3.7	2,731	2.7
September 1983	2,696	2.6	3,182	3.1
January 1985	2,431	2.3	2,848	2.7

Harvey R. Hamel is a senior economist in the Division of Employment and Unemployment Analysis, Bureau of Labor Statistics.

The number of persons involuntarily working part time due to slack work dropped by 1 million in the first 12 months of recovery from the series high in September 1982 and by only 265,000 in the subsequent 16 months (through January 1985). During the first 12 months of recovery, the proportion of the total employed comprised by persons on short workweeks due to slack work fell from 3.7 to 2.6 percent. In January 1985, the group accounted for 2.3 percent of the employed. This pattern of decline was similar to that following the recovery from the 1973–75 recession. Thus, it seems clear that this component shows rapid improvement early in the recovery, as employers restore hours of those workers retained but with reduced workweeks before adding new workers, and then improves more slowly as the recovery matures. In contrast, the other major component—persons who can only find part-time jobs—showed no improvement early in the recovery period; indeed, it rose slightly. It did moderate later, but not by the magnitude of the decline in the slack-work component. □

FOOTNOTES

[1]The Current Population Survey, conducted for the Bureau of Labor Statistics by the Bureau of the Census, is a monthly sample survey of some 59,500 households in the United States. Information is obtained on the employment status of all persons 16 years and older in the civilian noninstitutional population. For the employed, questions are asked about how many hours they worked (in the prior week); those working less than 35 hours are asked the reason for their "short" workweeks.

[2]See Robert W. Bednarzik, "Short workweeks during economic downturns," *Monthly Labor Review*, June 1983, pp. 3–11.

[3]Other economic (involuntary) reasons for working less than 35 hours include material shortages or repairs to plant and equipment, new job started during week, and job terminated during week. About 6 percent of the total number of persons working part time for economic reasons in 1984 indicated that these other factors caused their short workweeks.

[4]The "full-time" component was meant to reflect persons on short workweeks due to slack work, while the "part-time" component was intended to mirror those workers who could only find part-time work. However, there has been a substantial amount of ambiguity in these series because, although they were intended to represent the reason for working less than 35 hours, they more likely represented the survey respondent's perception of usual full-time status. For example, of the 2.4 million persons who were involuntarily employed part time due to "slack work" in 1984, only about 55 percent still considered themselves to "usually work full time." The remainder may have been working part time for so long that they no longer looked upon themselves as "usual full-time" workers who were waiting for their hours to be restored (but continued to report themselves in the "slack work" vein nonetheless). Because of these and related ambiguities, we believed these series did not capture what they were intended to represent. BLS has also discontinued publication of two other seasonally adjusted series—persons at work in nonagricultural industries on full-time schedules and the total at work in nonagricultural industries—because of their erratic seasonal movements (especially in the spring months), their inconsistency with related data on full-time and total civilian employment, and the seemingly limited uses of the series. However, BLS continues to maintain all of the former series and will make them available to data users upon request.

[5]See "The Employment Situation: January 1985," *USDL NEWS*, Feb. 1, 1985, and *Employment and Earnings*, February 1985.

Revisions in Hispanic population and labor force data

PHILIP L. RONES

In January 1985, procedures designed to improve the estimates of the Hispanic population were introduced into the Current Population Survey (CPS). As shown in table 1, these procedural changes have had a substantial impact on the estimates of Hispanic labor force, employment, and unemployment levels.

Based on information from the 1980 census, independent population estimates for Hispanics were developed for January 1980 up through the present. This, in turn, permitted a revision of the historical data for major Hispanic labor force series for this period. (Data prior to 1980 are not comparable to the revised series.) Monthly seasonally adjusted data for the two independently adjusted Hispanic series—employment and unemployment levels for all Hispanics age 16 and over—have also been revised back to 1980. From these, adjusted labor force, participation rate, employment-population ratio, and unemployment rate series are derived.

In the past, the CPS did not use independent population estimates for Hispanics—the only major population group for which this was the case. Instead, the population estimates were derived from the CPS itself. This yielded estimates that were too low relative to those from the decennial census (because of problems with CPS coverage) and quite unstable over time. Under the revised procedure, CPS sample estimates are "inflated" to the independent estimate of the Hispanic population rather than being determined by the proportion of Hispanics found in the sample each month.

The independent population estimates were developed using a cohort-component methodology, in which the 1980 census count is updated by adding estimates of Hispanic births and immigrants and subtracting estimates of deaths and emigrants. These procedures integrate data on changes in the Hispanic population from a number of sources. Data on births come from the annual CPS fertility questionnaire and from the National Center for Health Statistics. Death rates are derived from mortality statistics in California and Texas, States with more than half of the Hispanic population in 1980. Data on immigration and emigration are from the Immigration and Naturalization Service, the Puerto Rican Planning Board, and the Office of Refugee Resettlement.

The new methodology results in sharply higher population estimates and, hence, higher labor force counts, although overall national estimates are not affected. For example, table 1 shows that, on an annual average basis for 1984, the revised Hispanic civilian noninstitutional population lev-

Philip L. Rones is an economist in the Division of Employment and Unemployment Analysis, Bureau of Labor Statistics.