



## Moonlighting: a key to differences in measuring employment growth

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Each month, the Bureau of Labor Statistics analyzes and publishes two independently derived estimates of employment. One is based on data from the Current Population Survey (or household survey), and the other from the Current Employment Statistics program (payroll or establishment survey). Data from the household survey are obtained from a sample of about 59,500 households. They measure the work status of individuals and yield estimates of total employment for the Nation. The data from the establishment survey are derived from the payroll records of over 250,000 establishments and are essentially a count of occupied payroll jobs in the nonfarm sector of the economy.

Both series are important in appraising labor market trends and in assessing the overall performance of the economy. However, they are not always in agreement in gauging the trends in employment growth. For example, over the 4-year period between November 1982, when the current economic expansion began, and November 1986, the count of total civilian employment obtained through the household survey showed an increase of 11.3 million.<sup>1</sup> Over the same period, the estimates of payroll employment derived from the establishment survey rose by a significantly greater amount—12.4 million. If the household employment data are adjusted for the readily measurable differences between the two series—such as the inclusion in the household survey, but not the establishment survey, of agricultural, self-employed, and private household workers—the growth in employment for that series during the expansion is reduced even further, to 10.7 million.<sup>2</sup> (See table 1.) This suggests a discrepancy of about 1.6 million in employment growth as measured by the two series.

Thus, while both series have registered substantial employment gains during the recovery, the difference in their growth inevitably raises questions about the accuracy of one or both of the series and creates confusion in determining just how much employment has grown during the recovery. It is, therefore, important to look further for an explanation.

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One important factor is the treatment of multiple jobholders within each of the series. In the household survey, employed persons who hold more than one job are counted only once, at the job at which they worked the greatest number of hours during the reference week. In the payroll survey, however, they are counted as many times as they appear on a payroll record. Indeed, they may be counted more than once even if they do not hold two jobs simultaneously but merely left one job and started on another one during the same reference week. An increase in both types of "multiple jobholding" over a given period of time, other things being equal, would therefore cause the employment estimate from the payroll survey to show a faster rate of growth than that from the household survey.

Although not measured in the establishment survey, multiple jobholding is measured periodically in the household survey through special supplements. The May 1985 data on multiple jobholding are of particular importance in examining the recent discrepancy in employment growth because they constitute the first information on moonlighting since May 1980.<sup>3</sup>

During this period, the number of multiple jobholders increased sharply—by about 880,000, or 18 percent.<sup>4</sup> The moonlighters who are of primary interest for the purposes of reconciling the household and payroll employment estimates are those who held second jobs as nonagricultural wage and salary workers. Their number increased by about

**Table 1. Changes in payroll and household survey employment, November 1982–86, seasonally adjusted**

[In thousands]

Employment series	November 1982	November 1986	Change <sup>1</sup>
Nonagricultural payroll employment . . . . .	88,682	101,068	12,386
Total civilian employment (household survey) . . . . .	99,112	110,432	11,320
Less: Agriculture . . . . .	3,510	3,215	-295
Nonagricultural self-employed . . . . .	7,320	8,179	859
Nonagricultural unpaid family workers . . . . .	363	252	-111
Private household workers . . . . .	1,245	1,183	-62
Unpaid absences . . . . .	2,003	2,256	253
Total deductions . . . . .	14,441	15,085	644
Plus: Agricultural services . . . . .	445	504	59
Adjusted household survey employment . . . . .	85,116	95,851	10,735

<sup>1</sup> Changes in the household survey series do not reflect the population adjustments introduced into the survey in January 1986.

**Table 2. Change in employment at secondary jobs by industry, May 1980–85**

[In thousands]

Industry of secondary job	May 1980	May 1985	Change
Total nonagricultural wage and salary workers	3,001	3,825	824
Mining .....	14	11	-3
Construction .....	115	68	-47
Manufacturing .....	203	290	87
Transportation and public utilities .....	162	213	51
Wholesale and retail trade .....	806	745	-61
Finance, insurance, and real estate .....	213	529	316
Services, except private households .....	1,255	1,721	466
Public administration .....	234	248	14

NOTE: Data for 1980 have been adjusted to reflect the 1980 census population adjustments introduced in January 1982.

820,000 over the May 1980–May 1985 period.<sup>5</sup>

There is no direct way to ascertain exactly how much of the growth in moonlighting occurred between the end of 1982, when the economic recovery began, and May 1985. Some indirect evidence, however, suggests that the 1980–85 growth in multiple jobholding is likely to have occurred during the recovery and that it contributed significantly to the greater employment growth shown by the payroll survey during this period.<sup>6</sup>

First, an examination of the number of multiple jobholders over the course of business cycles since 1959 indicates little or no growth during recessions and typically large increases during recovery periods. If this pattern repeated itself in the 1980's, as is quite likely, there would have been little or no growth in moonlighting from 1980 to the end of 1982, when the U.S. economy went through two recessions. The growth would have occurred from 1983 to 1985, during the economic recovery.

Secondly, additional insight is gained by examining the 1980–85 growth in the number of multiple jobholders by industry. The observed growth was heavily concentrated among those workers whose second jobs were in the finance, insurance, and real estate and services industries. These industries had some of the highest rates of overall employment growth during the recovery. (See table 2.)

Based on this evidence, it can be concluded with some confidence that the 1980–85 growth in multiple jobholding occurred largely during the period of economic recovery, which began in late 1982. Put another way, these data suggest that there is only a limited inconsistency in the finding that the number of jobs has increased by 12 million, while the number of employed persons increased by about 11 million. □

—FOOTNOTES—

<sup>1</sup> This figure has not been adjusted to reflect the introduction of population adjustments introduced into the household survey in January 1986. If an explicit account of these adjustments is taken, then the growth in em-

ployment would probably be reduced by about 200,000, to 11.1 million. The population adjustments are described as "Changes in the Estimation Procedure in the Current Population Survey Beginning in January 1986," *Employment and Earnings*, February 1986, pp. 7–10.

<sup>2</sup> The growth in the household survey employment series would be reduced to around 10.5 million after making the adjustment described in footnote 1.

<sup>3</sup> For an analysis of the May 1985 data on multiple jobholders, see John F. Stinson, Jr., "Moonlighting by women jumped to record highs," *Monthly Labor Review*, November 1986, pp. 22–25.

<sup>4</sup> After adjustment of the May 1980 data to 1980 census population controls.

<sup>5</sup> Persons who worked on second jobs in agriculture or as nonagricultural self-employed workers would not be counted at those jobs in the payroll survey and so are not of interest here.

<sup>6</sup> Between November 1982 and May 1985, when the bulk of the 820,000 1980–85 growth in moonlighters most likely occurred, employment as measured by the payroll survey increased by about 900,000 more than in the household survey. Since May 1985, the employment gap has increased to about 1.6 million, but presumably the multiple jobholding total has also increased and can account for some of the widening in the gap between the two series.

## Employment and wage changes of families from CE Survey data

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Recent data indicate an increase in real per capita income and a decrease in the average weekly hours worked by nonsupervisory employees.<sup>1</sup> These trends would seem to imply an increase in household welfare, gross of taxes. However, labor force participation of wives has increased, implying a corresponding increase in average weekly hours worked per household.

A recent study of these issues compared market employment and wage and price changes experienced by households in the 1972 and 1980 Consumer Expenditure Interview Surveys.<sup>2</sup> Renter households, comprising a husband, wife, and children, if any, were grouped by race (white, nonwhite) and household type (by age of children). The study was limited to renter households because of problems in constructing commodity price indexes at the disaggregate (household) level. Specifically, data on owner estimates of the rental value of their residences are lacking for the 1980 sample.<sup>3</sup> The Consumer Expenditure (CE) Survey provided data on market employment status, occupation, and earned income of each household member. Current Population Survey data on median weekly earnings of full-time workers by occupation were used to construct an index of wage changes from 1972 to 1980.

Table 1 shows the market employment rates of the households in each demographic group.<sup>4</sup> Data are shown sepa-

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