Work at home: data from the CPS

According to the May 1991 CPS, 20 million nonfarm employees worked at home in 1991—more than 18.3 percent of those at work—however, only a small proportion of them were paid specifically for that work

William G. Deming

Until the advent of the industrial revolution at the end of the 18th century, most nonagricultural workers were engaged in home-based work. Weavers labored on handlooms in their houses to produce cloth spun from raw wool. The blacksmith's forge, the baker's ovens, and the woodworker's shop were all located in their homes. In many cases, even the hired help lived where they worked, as apprentices generally were expected to live with their employers. But as mass production techniques reshaped the U.S. economy, industry moved out of the home and into centralized factories where workers were employed on increasingly efficient and ever more automated production lines.

Home-based work has become such an exception that a return to "the old ways" is news. Indeed, interest in the phenomenon has grown in recent years. Several towns in the rural west are even recruiting home-based businesses as an economic development strategy.[1] The U.S. Supreme Court addressed home work issues in a January 1993 decision with far-reaching implications for home-based professionals. The most recent data from the Bureau of Labor Statistics, based on a special supplement to the May 1991 Current Population Survey (CPS),[2] are described in this article.

According to the CPS, approximately 20 million nonfarm employees were engaged in some work at home as part of their primary job in May 1991, representing 18.3 percent of those at work.[3] (See table 1.) Men and women tended to work at home at about the same rates, although women were more likely to work entirely at home. Other highlights of the 1991 survey results include:

- more than 60 percent of those who worked at home were simply "taking some work home from the office" and were not paid specifically for that work;
- most "homeworkers"—defined in this article as those "compensated" for their work at home—were self-employed;
- of those who were paid, or were self-employed, only about half worked at home for 8 hours or more per week;
- about 23 percent of homeworkers were mothers;
- married fathers were less likely to be homeworkers than married men without children;
- most homeworkers were in "white-collar" occupations; and
- nearly one-third of those who had a second job did at least some paid work at home.

Earlier CPS data. Before the 1991 survey, data on people who worked at home were collected in a May 1985 CPS supplement. However, information at that time was not collected on whether the work was for pay, which limited the analysis that was possible from the survey. In addition, the questions identifying work at home were different in the 1985 and 1991 surveys.[4] The 1985 supplement

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Table 1. **Persons who did job-related work at home by sex, class of worker, pay status, and hours worked at home, May 1991**

[Numbers in thousands]

Characteristic	Both sexes		Men		Women	
	Number	Percent	Number	Percent	Number	Percent
Total, 16 years and older[1]	19,967	100.0	10,731	100.0	9,236	100.00
Worked at home for pay	7,432	37.2	4,210	39.2	3,222	34.9
Self-employed workers	5,553	27.8	3,439	32.0	2,115	22.9
Wage and salary workers	1,879	9.4	772	7.2	1,107	12.0
Worked 8 hours or more	3,651	18.3	1,894	17.6	1,757	19.0
Self-employed workers	3,078	15.4	1,656	15.4	1,422	15.4
Wage and salary workers	573	2.9	238	2.2	335	3.6
Worked 35 hours or more	1,070	5.4	438	4.1	632	6.8
Self-employed workers	976	4.9	408	3.8	568	6.1
Wage and salary workers	94	.5	30	.3	64	.7
Worked at home, not paid (wage and salary only)	12,165	60.9	6,392	59.6	5,773	62.5

[1]Groups may not sum to totals because totals include unpaid family workers and wage-and-salary workers who did not report their pay status.

NOTE: Self-employed includes both incorporated and unincorporated self-employed.

revealed that about 17.3 million nonfarm workers reported at least some work at home, although the majority did so for fewer than 8 hours a week. In addition to the studies by BLS and other government agencies, several private and academic researchers have written articles on various aspects of this subject.[5]

Pay status and class of worker

Complicating the analysis of the 20 million persons who reported that they did at least some of their work at home is that many different types of workers are part of this large group. First, some are paid for this work, while most others are not. Some work for themselves, while others work at home under agreements with their employers.[6] Some work exclusively or primarily at home, while to others such work is incidental (or perhaps occasional). Also, while most persons who work at home do so in their primary jobs, others moonlight at home, often in endeavors quite different from their primary work.

Because most of the interest in this topic focuses on those who use their homes as an alternative worksite rather than employees who simply "take some work home from the office," a method to separate these groups had to be determined. Pay status is the most useful determinant for the purposes of this analysis. Wage and salary workers who were paid for hours worked at home accounted for 1.9 million, or less than 10 percent of the 20 million who did any work at home. More than 12 million wage and salary workers were not paid for work they did at home.

Virtually all of the remainder of those working at home were self-employed—5.6 million persons.[7] The question about pay for work at home did not apply to these workers, and it was not asked of them. It can be assumed that most of the work done at home by self-employed individuals is paid work.

Hours worked at home are important to identify homeworkers. Of the 1.9 million wage and salary workers who were paid for working at home, only 30 percent worked at home for 8 hours or more per week. Therefore, only a few are really "home-based." Full-time work was quite rare: only 1 in 20 worked at least 35 hours a week at home. In contrast, among the 5.6 million self-employed homeworkers, 55 percent were at home for at least 8 hours of their workweek, and about 20 percent worked at home for 35 hours or more. (See table 1.) Combining the self-employed with other paid employees, about half of the 7.4 million persons who were paid for working at home spent at least 8 hours doing such work. Slightly more than 1 million worked at home on a full-time basis.

For the remainder of this article, the word "homeworkers" refers to wage and salary workers who are paid for the work done at home, and self-employed workers who reported that they work at home.[8] Among both groups, special emphasis is placed upon those who worked at least 8 hours per week at home, and, unless otherwise indicated, the numbers cited apply to these workers.

Profile of a homeworker

Gender. Women were slightly more likely than men to perform job-related work at home in 1991, although in absolute numbers, more men were

homeworkers—nearly 1.9 million, compared with more than 1.8 million women. (See table 3.) About 3.5 percent of all women at work were homeworkers, while 3.2 percent of men worked at home. Averaging 16.8 hours per week, women worked longer hours at home than did men, who averaged 12.0 hours.

Race. White workers were nearly three times as likely to work at home (3.6 percent) as were blacks (1.3 percent) and were twice as likely as Hispanics (1.7 percent). However, black homeworkers put in far more hours at home than the other groups.

Age. A worker's propensity to perform job-related work at home increases with age. Of workers aged 65 or older, 7 percent work at home, at a rate 10 times greater than that for 16- to 24-year-olds, of whom only 0.7 percent work at home. (See table 2.)

Occupation. Salesworkers—the occupational group that is most likely to work at home—represent 6.2 percent of homeworkers. (See table 2.) Managers and professionals also work at home at a relatively high rate (5.0 percent), while workers in "blue-collar" occupations are much less likely to be homeworkers (3.3 percent).

Table 2. **Persons who did job-related paid work at home by age, sex, race, Hispanic origin, and weekly hours worked at home, May 1991**

[Numbers in thousands]

Characteristic	Total at work	Worked at home for pay					Mean hours worked[2]
		Worked 8 hours or more			Worked 35 hours or more		
		Number	Percent	Rate[1]	Number	Percent	
Total	109,126	3,651	100.0	3.3	1,069	100.0	14.1
16 to 24 years	16,268	122	3.3	.7	40	3.7	12.3
25 to 34 years	31,248	839	23.0	2.7	259	24.2	13.7
35 to 44 years	29,500	1,144	31.3	3.9	297	27.8	13.0
45 to 54 years	18,842	876	24.0	4.6	264	24.7	15.4
55 to 64 years	10,291	462	12.7	4.5	161	15.1	16.8
65 years and older	2,977	207	5.7	7.0	47	4.4	13.3
Men	58,794	1,894	51.9	3.2	438	41.0	12.0
Women	50,332	1,757	48.1	3.5	632	59.1	16.8
White	94,387	3,403	93.2	3.6	966	90.4	13.8
Black	11,020	147	4.0	1.3	76	7.1	22.8
Hispanic origin	7,977	137	3.8	1.7	36	3.4	13.7
Industry[3]							
Construction	6,977	282	7.7	4.0	23	2.2	8.1
Manufacturing	19,731	275	7.5	1.4	89	8.3	12.8
Transportation and public utilities	7,726	77	2.1	1.0	—	—	9.1
Wholesale trade	4,481	234	6.4	5.2	47	4.4	12.2
Retail trade	18,054	406	11.1	2.2	77	7.2	11.1
Finance, insurance, and real estate	7,453	358	9.8	4.8	59	5.5	11.5
Services	38,335	1,973	54.0	5.1	754	70.5	17.9
Business and repair services	7,104	571	15.6	8.0	166	15.5	16.8
Professional services	25,350	861	23.6	3.4	301	28.2	15.3
Occupation							
Managerial and professional specialty	29,971	1,511	41.4	5.0	360	33.7	12.8
Executive, administrative, and managerial	14,384	749	20.5	5.2	191	17.9	12.8
Professional specialty	15,587	763	20.9	4.9	169	15.8	12.9
Technical, sales, and administrative support	34,554	1,123	30.8	3.2	201	18.8	11.2
Sales occupations	13,177	813	22.3	6.2	133	12.4	11.9
Administrative support, including clerical	17,786	253	6.9	1.4	63	5.9	10.0
Service occupations	14,955	553	15.1	3.7	381	35.6	31.7
Precision production, craft, and repair	12,608	306	8.4	2.4	68	6.4	11.6
Operators, fabricators, and laborers	16,271	139	3.8	.9	58	5.4	14.9

[1] The number of persons working at home for pay (wage and salary plus self-employed) for 8 hours or more per week as a percentage of the total at work.

[2] Includes persons working at home for fewer than 8 hours per week.

[3] Includes other industries and occupations, not shown separately.

NOTE: Detail for the above race and Hispanic-origin groups will not sum to totals because data for the other races group are not presented and Hispanics are included in both the white and black population groups. Dash indicates data are not available.

Table 3. **Persons who did job-related paid work at home by marital status, presence and age of children, sex, and weekly hours worked at home, May 1991**

[Numbers in thousands]

Marital status and presence and age of own children	Men				Women			
	Total at work	Worked at home			Total at work	Worked at home		
		8 hours or more	Rate[1]	35 hours or more		8 hours or more	Rate[1]	35 hours or more
All marital statuses	58,794	1,894	3.2	438	50,332	1,757	3.5	632
Without own children under 18	36,153	1,159	3.2	302	31,205	918	2.9	300
With own children under 18	22,641	735	3.2	136	19,126	838	4.4	332
With own children under 6	11,194	330	2.9	54	7,865	406	5.2	155
Married, spouse present	37,845	1,401	3.7	293	28,324	1,277	4.5	470
Without own children under 18	16,087	697	4.3	162	13,243	533	4.0	179
With own children under 18	21,758	704	3.2	131	15,081	745	4.9	291
With own children under 6	10,822	319	2.9	49	6,590	381	5.8	145
Other marital status	20,949	493	2.4	145	22,008	480	2.2	162
Without own children under 18	20,066	462	2.3	140	17,962	385	2.1	121
With own children under 18	883	31	3.5	—	4,045	93	2.3	41

[1] The number of persons working at home for pay (wage and salary plus self-employed) for 8 hours or more per week as a percentage of the total at work.

Note: Dash indicates data are not available.

It is perhaps more instructive to consider the proportion of all homeworkers *within* the various occupational groups, because this provides a sharper profile of these workers. Managerial and professional specialty occupations accounted for 41 percent (1.5 million) of homeworkers and 31 percent (1.1 million) were employed in technical, sales, and administrative support occupations. Not surprisingly, a large number of these (800,000) worked in sales occupations.

Those who work at least 35 hours per week at home are more likely to be in the service occupations—and specifically, personal services—accounting for 70.5 percent of all homeworkers. Most of these homeworkers are probably child-care workers and hairdressers. Another one-third work in managerial and professional specialty occupations, and about one-fifth are in technical, sales, and administrative support.

From an industry perspective, services dominated the employment picture for homeworkers who worked 8 hours or more at home. Some 2.0 million—54 percent of the total—were employed in services, and 44 percent of those were in professional services. The retail trade industry also employed a substantial number of homeworkers, as did finance, insurance, and real estate.

One type of homework that has attracted much media attention recently is "telecommuting." Various claims have been made regarding this phenomenon, but a lack of a consistent definition makes it difficult to quantify.[9] Observers may reasonably define telecommuters as workers who spend a portion or all of their workweek at home, using electronic means, such as telephones, computer modems, and fax machines, to stay in touch with their offices. The May 1991 CPS cannot be used to identify telecommuters.[10] But other evidence suggests that allowing employees to work at home as an alternative to commuting every day is a growing trend.[11] In recent years, many companies, large and small, have instituted telecommuting programs for qualified employees.

Marital and family issues

One commonly cited reason for working at home is that it allows parents to combine a paying job with household and child-care responsibilities.[12] But because only 43 percent of homeworkers have children younger than 18, this tells only part of the story. Children are not a factor for more than half of those working at home 8 hours or more per week. Parents are just slightly over-represented among persons working at home: only 38 percent of all persons at work in May 1991 had children under age 18.

Women with children under age 18 are more likely to work at home for at least 8 hours per week than are women generally. (See table 3.) About 4.4 percent of all mothers at work in May 1991 worked at home, and among parents of children under age 6, the percentage rose to 5.2 percent. Among working women with no children, only 2.9 percent were homeworkers. In contrast, the proportion of fathers who worked at home (3.2 percent) was identical to that for men with no children under age 18. Indeed, married fathers are *less* likely to perform home-

based work than are married men who have no children.

Not only were working mothers more likely than fathers to work at home for 8 hours or more per week, they worked longer hours, averaging 17.9 hours per week at home, compared with 10.5 hours per week for men with children.

Married men and women generally are more likely to be homeworkers than are single workers (including those who are widowed, divorced, or separated). A little more than 4 percent of married workers were home-based in 1991, compared with 2.3 percent of single workers.

Working entirely at home. By comparing the hours reported at home to total hours worked, one can identify those workers who worked at home exclusively. More than 1.5 million persons were in this category in 1991; more than 9 of 10 (1.4 million) worked at home for at least 8 hours per week and 58 percent of these homeworkers worked for 35 hours or more per week. (See table 4.) Women working entirely at home outnumbered men by more than 2 to 1. Industrial and occupational distributions of those working entirely at home are similar to those of the full-time homeworkers mentioned previously.

Table 4. **Persons who worked entirely at home for pay by hours worked per week and selected characteristics, May 1991**

[In thousands]

Characteristic	Total	8 hours or more		Mean hours[2]
		Total	35 hours or more	
Total[1]	1,518	1,399	874	35.8
Men	494	462	323	39.1
Women	1,024	937	551	34.2
Industry				
Manufacturing	121	116	75	35.7
Retail trade	117	100	55	35.2
Services	1,071	990	627	36.2
Business and repair services	225	205	128	35.5
Personal services	325	309	205	37.4
Professional services	469	427	266	36.0
Social services	230	217	172	45.1
Occupation				
Managerial and professional specialty	497	445	266	33.9
Executive, administrative, and managerial	210	191	146	41.1
Professional specialty	287	253	120	28.7
Technical, sales, and administrative support	341	301	160	30.9
Sales occupations	194	171	100	33.6
Administrative support, including clerical	140	127	56	27.3
Service occupations	498	474	343	40.1
Personal service	462	440	318	39.9
Precision production, craft, and repair	112	110	56	36.2

[1] Includes other industries and occupations, not shown separately.
[2] Includes data for persons working at home for fewer than 8 hours per week.

Taking work home. One aspect of the work-at-home phenomenon that has not received much attention involves work done at home for which there is no official remuneration. Of the approximately 20 million people who reported in May 1991 that they work at home, the majority—12.2 million—were wage and salary workers who were not officially paid for the hours worked at home. (See table 5.) These people were typically white-collar workers who were "taking some work home from the office," generally without formalized arrangements with their employer.

More than 3 million teachers—the largest single group of workers who took work home—reported performing unpaid work at home in May 1991. This number represents nearly two-thirds of all teachers who worked during this period, which is by far the highest rate for any occupation. Teachers also put in more hours at home than do workers in most other occupations, averaging 7.5 hours per week of unpaid home work, compared with the average of 6.0 hours for all occupations. However, the official workweek for teachers tends to be shorter than that for other full-time workers. About 12.5 percent of wage and salary workers in all occupations reported some unpaid work at home, a proportion that drops to 9.7 percent if teachers are removed from the calculation.

Sales representatives, particularly those dealing in wholesale commodities, also were likely to perform at least some of their work at home, as were executives and managers. Workers in the service occupations were not likely to do unofficial work at home, in contrast to their counterparts who worked at home for pay. However, those service workers who took work home with them tended to work more hours than the average.

Other issues

"Moonlighting" at home was one issue covered in the May 1991 survey that was not addressed in the May 1985 CPS. About 7.1 million persons worked at a second job in May 1991. The following tabulation shows persons who did job-related work at home for pay on a second job, by hours worked and sex, May 1991 (numbers in thousands):

	Total	*Men*	*Women*
Total at work	7,116	4,037	3,079
Total paid*	2,322	1,378	943
Rate	43.6	34.1	30.6
Hours worked:			
Fewer than 8	857	420	438
8 or more	1,358	885	474
Mean	13.0	14.8	10.7

*Includes persons who did not report hours worked.

Nearly 33 percent (2.3 million) performed paid work at home in connection with their second job,

Table 5. **Persons doing unpaid job-related work at home by sex and occupation, May 1991**

[Numbers in thousands]

Characteristic	Total at work	Reporting unpaid work at home				
		Total	Rate[2]	Less than 8 hours per week	8 hours or more per week	Mean hours
Total wage and salary workers[1]	97,522	12,165	12.5	8,846	3,154	6.0
Men	50,943	6,392	12.5	4,709	1,581	5.7
Women	46,579	5,773	12.4	4,137	1,573	6.4
Occupation						
Managerial and professional specialty	25,494	8,209	32.2	5,905	2,184	5.9
Executive, administrative, and managerial	11,776	3,021	25.7	2,480	508	4.5
Professional specialty	13,718	5,188	37.8	3,425	1,676	6.7
Teachers	4,788	3,136	65.5	1,893	1,194	7.5
Technical, sales, and administrative support	31,296	3,014	9.6	2,213	772	6.0
Sales occupations	10,612	1,869	17.6	1,270	581	6.8
Service occupations	13,605	380	2.8	257	116	12.3

[1] Includes other occupations, not shown separately.

[2] The rate equals the number of wage and salary workers doing unpaid work at home divided by the total at work (expressed as a percentage).

and 16 percent (1.1 million) worked entirely at home for pay.

As with primary-job homeworkers, moonlighters who worked at home were heavily concentrated in service industries, although sizable numbers worked in retail trade and in finance, insurance, and real estate. Seven of ten were white-collar workers.

The number of hours worked on a second job are not greatly influenced by whether a worker performs that job at home. Little difference in weekly hours worked exists between those who worked exclusively at home (13.1 hours per week) and all workers with a second job (13.8 hours). About 57 percent of the 1.1 million persons moonlighting entirely at home for pay worked at least 8 hours.

Another issue that merits at least a brief mention concerns those industries that in the past operated under severe home-based work restrictions placed upon them by the Fair Labor Standards Act (FLSA). The act was amended in 1949 to combat the practice of employing workers at home in the manufacture of women's apparel, jewelry, gloves, and other small items, generally under sweatshop conditions. The restrictions were relaxed to some extent in 1988, but the number of homeworkers remains very small. The number of people working entirely at home in these industries was, at most, only 42,000, and probably fewer.[13]

MOST OF THE PEOPLE who reported work at home in May 1991 were not home-based workers. For the most part, they took work home unofficially. Of the workers who used their homes as alternative worksites, most were self-employed white-collar managers and professionals or salesworkers. The presence of children appeared to have less influence on the likelihood of working at home than one might expect.

While the CPS data do not allow for the analysis of trends in home-based work, few doubt that it is on the rise. As the United States moves into the "information age" and away from the industrial economy that concentrated the work force in centralized worksites, opportunities for workers to bring the worksite back into the home will no doubt grow. □

Footnotes

[1] "Lone Eagles: The Ultimate Commuters," *American Demographics*, August 1993, pp. 10–14.

[2] The Current Population Survey is a monthly survey of approximately 60,000 households conducted by the Bureau of the Census for the Bureau of Labor Statistics.

[3] Only persons who were "at work" during the survey reference week are included in the totals. Persons "with a job but not at work" for reasons such as bad weather, vacation, illness, or involvement in a labor dispute are excluded.

[4] The data from the May 1991 CPS are not comparable with earlier studies, either by BLS or other agencies or analysts. For this reason, this article does not attempt to analyze trends in home-based work.

[5] See Joanne H. Pratt, *Myths and Realities of Working at Home: Characteristics of Home-based Business Owners and Telecommuters* (Washington, U.S. Small Business Administration, 1993) for a study of telecommuters and home-based workers based on data from the National Longitudinal Surveys.

[6] A number of companies such as AT&T, Pacific Bell, and JC Penney have instituted formal work at home programs for certain employees.

[7] A small number of unpaid family workers also reported work at home. They work at least 15 hours a week in a family business, but are not explicitly paid for this work. They are considered to be employed, although they do not meet the "pay" test usually applied when determining employment status. In addition, a small group of wage and salary workers did not report their pay status. Both groups are included in the totals listed in table 1, but are not included in the various subtotals.

[8] In some cases, a clear distinction is not evident between self-employed and paid wage and salary homeworkers. Some companies treat homeworkers (particularly those in clerical and blue-collar occupations) as independent contractors to avoid paying employee benefits. These workers are nominally self-employed but are, for all intents and purposes, wage and salary workers employed by a specific firm.

[9] In a study on telecommuting released in April 1993, the U.S. Department of Transportation estimated the number of telecommuters in the United States to be about 2 million. In most cases, these workers were found to have spent 1 or 2 days per week working at home, on average. This study projects an increase to between 6.4 and 10.9 million telecommuters by 2000.

[10] An October 1989 supplement to the CPS identified 16.8 million persons as using computers at home. Of these, 12.5 percent (2.1 million) used their home computers for work-related purposes. However, these numbers do not indicate the number of persons who use their computers for telecommuting.

[11] In response to a question in the 1990 census on the mode of transportation used to get to work, 3.4 million people (3 percent of total employment) said they worked at home. The same question in the 1980 census showed a total of 2.2 million people (2.3 percent of total employment) gave the same response. While it is not possible to compare this result directly with the May 1991 CPS data, it provides some indication of the growth of this phenomenon. In addition, a 1992 survey by LINK Resources estimates the number of telecommuters at 2.4 million, up from 1.4 million in 1991.

[12] See Kathleen Christensen, *Women and Home-based Work: The Unspoken Contract* (New York, Henry Holt and Co., 1988) for a thorough treatment of issues affecting women and families.

[13] The industrial classifications used to tabulate the May 1991 data no longer coincide with the industry classifications of the 1940's on which the FLSA restrictions are based. Estimates were made by using a list of matching industries prepared for the 1985 CPS by the Wage and Hour Division of the U.S. Department of Labor.

A note on communications

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