

New England Job Changes during the Recession: The Role of Self-Employment

One of the puzzles regarding the recent recession in New England was a divergence between the two major series on employment, one based on establishments and one based on households. Both show the recession to have been much more severe in the region than in the nation. But while the establishment series shows New England to have lost one in 10 jobs as compared with U.S. recession losses of less than one in 50, the household series shows the region's losses amounting to less than one in 13. The inclusion of unincorporated self-employed individuals in the household employment count but not the establishment series explains part of the divergence. The number of unincorporated self-employed individuals—defined as those who work in their own unincorporated business, profession, or trade—grew between 1988 and 1992, while all the other major classes of workers—farm and nonfarm private, government, incorporated self-employed, and those working without pay—shrank in the region. Some of the additional self-employed were undoubtedly former payroll employees who began working on their own because they lost establishment jobs.

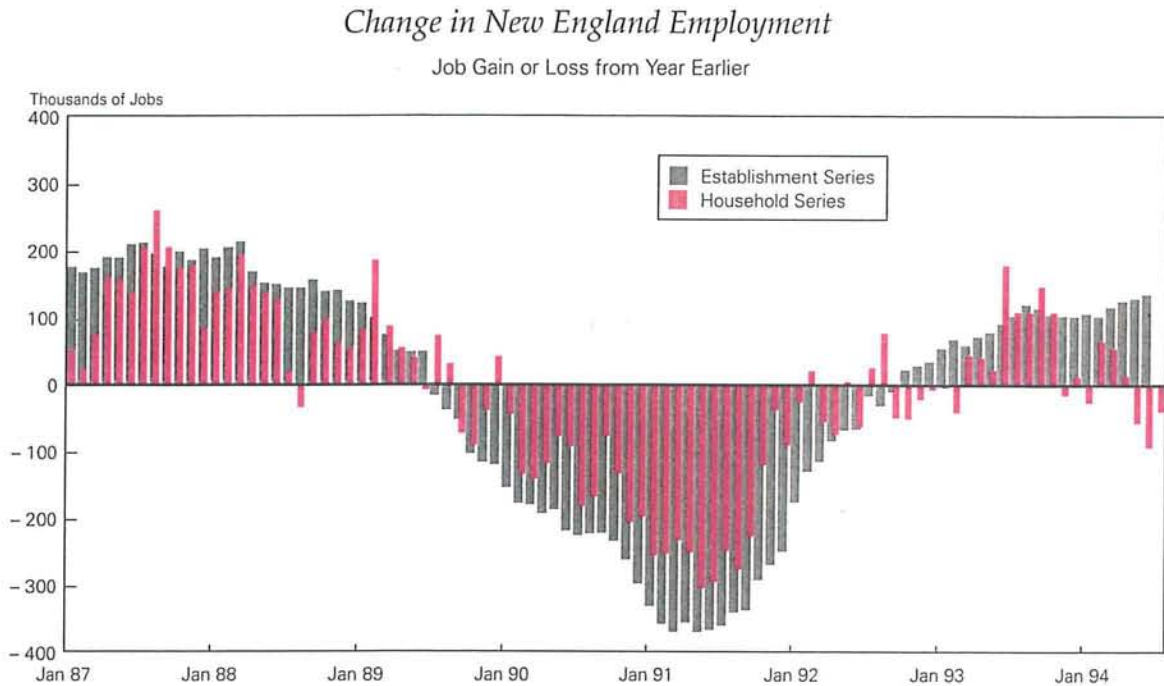
The shift into self-employment represents one part of a set of changes in the mix of workers and jobs that reflects the nature of the region's downturn and the economic adjustments it entailed. This article examines patterns of job and income change for different classes of workers in New England from the pre-recession peak year of 1988 to the recession-low year of 1992, with an emphasis on the role of the self-employed.

Income data suggest that the self-employed fared better than the unemployed during the recession, but their earnings declined more, on average, than the earnings of individuals still working for other employers in 1992. Thus, self-employment apparently represented a successful stopgap measure, for some, to keep earning after the loss of a wage and salary job, but typically at a lower level. A key question is the degree to

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Figure 1



Note: Household data have been adjusted for discontinuity introduced by Census population rebenchmarking in January 1990.
Source: U.S. Bureau of the Census and U.S. Bureau of Labor Statistics.

which these adjustments will be reversed as the New England economy recovers. Although data are not yet available to track the amount of self-employment in New England after 1992, a marked reversal since mid-1992 of the recession's divergence between the household and establishment series job counts suggests that self-employment may be shrinking in the region. Certainly those newly self-employed individuals who have low earnings and few fringe benefits would be expected to seek wage and salary employment as the number of establishment jobs expands. Nonetheless, anecdotal evidence suggests that a subset of the newly self-employed may be unlikely to resume payroll employment.

I. Overall Patterns of Employment Change in the Downturn

The count of payroll jobs at nonagricultural establishments in New England peaked in February

1989 and declined fairly steadily to a low in December 1991; it then moved very little until after June 1992 when it began growing. Losses from peak to trough amounted to 650,000 payroll jobs. When employment is measured based on a survey of households, rather than establishments, the number of employed persons in New England declined by about 500,000 from its peak in February 1989 to its trough in June 1992 (Figure 1).¹ (See Appendix A for a more detailed examination of the differences between the two series' job tallies.)

While total employment declined markedly (according to either measure), one type of employment was growing—the unincorporated self-employed.

¹ These household data are adjusted (additively) for a January 1990 discontinuity that is due to rebenchmarking by the U.S. Bureau of Labor Statistics to the 1990 Census baseline. Without this adjustment, the 1989–90 job losses according to the household series would be even smaller, and the measured discrepancy between the household and establishment peak to trough losses would be even bigger than the text indicates.

Table 1
New England Adults by Labor Force Status and Class of Worker
 Thousands

Labor Force Status, Class of Worker	1988	1992	1988-92 Change	
			Number	Percent
Employed Persons	7,616.2	7,380.7	-235.5	-3.1
Private Employees	5,904.8	5,698.8	-206.0	-3.5
Government Employees	971.1	928.7	-42.4	-4.4
Self-Employed				
Incorporated	243.4	197.7	-45.7	-18.8
Not Incorporated	478.4	547.4	69.1	14.4
Employed without Pay	18.5	8.1	-10.4	-56.3
Persons with Zero Weeks Employment	2,683.6	3,030.1	346.5	12.9
Not in Labor Force (NILF) All Year	2,635.2	2,869.6	234.4	8.9
Unemployed All Year	11.1	82.2	71.1	641.0
Mixed NILF and Unemployed	37.3	78.2	41.0	109.9
Total Persons Age 15 and Older	10,299.8	10,410.7	110.9	1.1
Memo: "Employees" ^a	7,119.3	6,825.2	-294.2	-4.1

Note: Employed persons are individuals employed at least part of the year. Class of worker (private, government, etc.) refers to longest job in year.

^aPrivate and government employees plus incorporated self-employed.

Source: Author's calculations based on data from U.S. Bureau of the Census, *Current Population Survey*, March 1989 and March 1993, machine-readable data files.

Table 1 reports data collected during the Current Population Surveys of March 1989 and March 1993, which refer to the preceding calendar years.² The number of unincorporated self-employed workers expanded noticeably in New England while all other classes of workers shrank between 1988 and 1992.³ Even the count of incorporated self-employed declined during the recession, presumably because the red tape involved in incorporating, while not onerous, makes incorporating a less fluid adjustment mechanism. The remainder of this article uses the term "self-employed" to refer to the unincorporated self-employed,⁴ and characterizes the three remaining employment classes who receive pay as "employees," since the incorporated self-employed are considered (for tax purposes as well as survey purposes) to be employees of their corporations.⁵ The relatively small class of unpaid volunteers and family workers is dropped from the analysis.

A sizable fraction of the 69,100 net additions to self-employment were probably individuals who had held a private or government job in 1988. Employment in the other classes of work (private, government, incorporated self-employed, and unpaid volunteer and family workers) fell by more than 300,000

between 1988 and 1992. Many appear to have left the labor force, while others became unemployed for at least part of the year.

² The overall employment losses according to the annual household data shown in Table 1 are noticeably smaller than those based on the monthly data cited in the preceding text paragraph. This is partly because the individual month in which employment peaked obviously showed a higher job count than the average for the year in which employment peaked and, by the same token, the monthly trough was lower than the annual trough. In addition, the annual data, as tallied here, count as employed any adult working at least one week during the year, while the monthly data refer to an individual's employment status in the current month.

³ Comparable data for the United States do not show unincorporated self-employment as the only growing class of worker. The numbers of private employees, government employees, and unincorporated self-employed expanded in the United States from 1988 to 1992 (by 1.0, 5.3, and 4.2 percent, respectively), while the numbers of incorporated self-employed and employed without pay shrank (by 0.2 and 30.7 percent, respectively).

⁴ The only exceptions to this statement are some explicit references to the incorporated self-employed which are clearly labeled as such.

⁵ Ample precedent exists for this grouping. In summary Census classifications, private and government workers are considered "wage and salary" workers, and self-employed incorporated are included with private workers. In Census income data, the earnings of the incorporated self-employed are reported as wages and salaries, not self-employment earnings. Furthermore, the incorporated self-employed are tallied as wage and salary employees in the establishment series.

While the bulk of New England's adjustment to employee cutbacks thus took the form of changes in labor force status, the increase in self-employment raises some interesting questions. Who were the self-employed in the region and how did their characteristics change during the slowdown? In which industries or occupations might those losing private and government jobs have gone into business for themselves, as evidenced by a decrease in the number of employees accompanied by gains in self-employment? What happened to the incomes of employees as compared with those of individuals in the growing pools of self-employed and unemployed? Did these additions to self-employment represent "good" jobs?

While total employment declined markedly in New England between 1988 and 1992, the number of unincorporated self-employed expanded noticeably.

An interesting study of Vermont workers laid off by General Electric from 1988 through 1990 (Kessel and Maher 1991) found a high level of self-employment (38 percent) among exempt workers when follow-up contact was made in early 1991. Their findings provide a preview, in some dimensions, of the apparent effects of New England's general economic slowdown, to be described in this article. The authors speculate that these former G.E. workers' motivations for self-employment ranged from a desire to be one's own boss to a lack of other opportunities, especially for older workers. They found the self-employed former G.E. workers in a wide range of industries and occupations, including innkeepers, artisans, real estate agents, construction, car repair, and retailing.

Nine out of 10 of the self-employed respondents felt that "their current job was 'better' than their G.E. job" (p. 43) and they wanted to remain in it. However, neither earnings, work hours, nor fringe benefits made self-employment "better." Three-fourths were earning less than at G.E., most were working longer hours, and many fewer had fringe benefits.

II. Who Were the Self-Employed in New England and How Did Their Mix of Characteristics Change during the Recession?

Table 2 reports the industry composition of New England employment changes over the 1988-92 period, based on household survey data. In the late 1980s, the self-employed in New England, as in the nation, were concentrated in farming, construction, and services; substantial numbers also worked in retail trade, although the self-employed do not comprise a large fraction of retail workers. During New England's 1988-92 downturn, all the industry categories shown in Table 2 except for retail, some categories of services, and public administration saw cutbacks in the number of employees, while self-employment increased in a broad range of industries—all but natural resources, trade, and business services.⁶

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The construction industry accounted for the largest numerical self-employment gains (the four years saw a net addition of over 30,000 self-employed construction workers). Nevertheless, total construction employment in the region shrank 20 percent (by more than 110,000 workers) over the four years. Presumably, a subset of the employees let go by construction firms set up their own small-scale con-

⁶ The Current Population Survey's March 1989 and March 1993 samples include just under 10,000 adults in New England to represent just over 10 million adult residents. While this is an ample sample for examining broad trends, when cross-tabulations are undertaken, some cells are quite small and therefore some percentages are unreliable (they have large sampling errors). For example, only six of the New England observations for 1992 were mining employees. For this reason, mining was combined with agriculture, forestry, and fisheries in Table 2. Small sample size probably also accounts for the extremely large measured growth in the self-employed handlers, etc. occupation group shown in Table 3.

Table 2
New England Employment by Industry
 Percent

Industry	Industry Mix in 1988		Percent Change in Employment, 1988-92			Self-Employment as Percent of Total Employment	
	Employees ^a	Self-Employed	Employees ^a	Self-Employed	Total	1988	1992
Natural Resource Industries ^b	1.2	7.3	-18.8	-6.3	-15.2	28.9	31.9
Construction	6.4	20.2	-31.8	35.0	-20.2	17.4	29.5
Manufacturing	22.3	3.1	-15.3	140.6	-13.8	.9	2.6
Transportation and Public Utilities	6.2	2.4	-11.0	2.9	-10.6	2.5	2.9
Wholesale Trade	3.4	3.3	-10.5	-59.3	-13.5	6.2	2.9
Retail Trade	17.0	15.4	2.6	-4.1	2.2	5.8	5.4
Finance, Insurance, & Real Estate	7.5	5.7	-.2	41.0	1.8	4.9	6.8
Business Services	4.8	15.1	-3.0	-10.0	-4.2	17.5	16.5
Personal, Entertainment & Recreation Services	4.0	6.4	7.0	79.0	14.0	9.7	15.2
Professional Services	23.2	21.0	7.6	.3	7.2	5.7	5.4
Public Administration	4.1	.0	6.8	n.a.	6.8	.0	.0
Employed Total	100.0	100.0	-4.1	14.4	-3.0	6.3	7.4
Memo: Services	31.9	42.4	6.0	8.5	6.2	8.2	8.4

Note: Data refer to respondent's longest job in calendar year preceding survey date.

^aPrivate and government employees and incorporated self-employed.

^bAgriculture, forestry and fisheries, and mining.

Source: See Table 1.

struction businesses. By contrast, the large professional services industry (which includes health, engineering, management, legal, and educational services) gained private and government employees as well as (indeed faster than) self-employed.⁷

Table 3 reports the composition of employees and the self-employed by broad occupational group. As in most recessions, the hardest-hit occupations were blue-collar jobs associated with the highly cyclical construction and manufacturing industries: precision production, craft and repair; machine operators, assemblers, and inspectors. The other occupational groups losing jobs over the four years were administrative support (including clerical) and sales occupations. The growth in self-employment was concentrated in executive, administrative, and managerial occupations, along with "other" (not private household, not protective) service occupations, and precision production, craft and repair (the mirror image of the construction industry gains in self-employment shown in Table 2). Apparently, many people who started up and ran their own (unincorporated) business classified themselves as executives or managers, unless they held credentials to offer a specific service

or construction skill.⁸ Technicians also made gains; they tend to be employees of private and government enterprises, not self-employed.

Table 4 indicates that virtually all of the self-employed in New England work in very small firms (defined here as those with fewer than 25 employees). Furthermore, all the growth in self-employment occurred in this size category.⁹

⁷ The "employee" gains in professional services are not attributable to the inclusion of incorporated self-employed with private and government employees. Indeed, the number of incorporated self-employed individuals in professional services shrank between 1988 and 1992, but gains in private and government employees more than offset these losses.

⁸ The number of executives, administrators, and managers also expanded for the incorporated self-employed, but these gains were much smaller than those for private and government employees in these occupations which, as the table makes clear, were in turn much smaller than those of the unincorporated self-employed. The number of incorporated self-employed in professional specialty occupations shrank, just as (indeed, much faster than) did the number of unincorporated self-employed with professional specialties.

⁹ Note, however, that the category of very small firms can grow for two reasons: (1) new firms start up and are small and (2) larger firms shrink and are then counted in the small category. These explanations, especially the latter, actually apply to all size

Table 3
New England Employment by Occupation
 Percent

Occupation	Occupational Mix in 1988		Percent Change in Employment, 1988-92			Self-Employment as Percent of Total Employment	
	Employees ^a	Self-Employed	Employees ^a	Self-Employed	Total	1988	1992
Executive, Administrator, Manager	12.8	10.6	5.1	96.5	10.0	5.3	9.4
Professional Specialty	14.1	22.8	1.8	-9.5	.7	9.8	8.8
Technicians & Related Support	3.3	.9	16.3	6.8	16.1	1.7	1.6
Sales Occupations	12.2	19.8	-5.0	-18.6	-6.4	9.8	8.6
Administrative Support, Including Clerical	16.2	4.0	-5.2	-55.9	-6.0	1.6	.8
Private Household & Protective Services Occupation	2.3	.2	4.1	161.7	4.9	.5	1.3
Other Service Occupations	11.3	6.9	7.1	65.5	9.4	3.9	5.9
Precision Production, Craft & Repair	11.5	24.2	-29.8	22.8	-23.3	12.4	19.8
Machine Operators, Assemblers, Inspectors	7.6	2.8	-16.4	-26.5	-16.6	2.4	2.2
Transporters, Material Movers	3.3	1.4	-1.7	88.6	.8	2.7	5.1
Handlers, Equipment Cleaners, Helpers, & Laborers	3.8	.1	-.6	1272.1	1.0	.1	1.8
Employed Total ^b	100.0	100.0	-4.1	14.4	-3.0	6.3	7.4
Memo:							
White Collar	58.5	58.1	-.0	3.8	.2	6.2	6.5
Blue Collar	26.2	28.5	-18.2	24.2	-15.3	6.8	10.0

Note: Data refer to respondent's longest job in calendar year preceding survey date. White collar includes first five occupations listed above; blue collar refers to final four occupations listed above.

^aPrivate and government employees and incorporated self-employed.

^bTotal includes farming, forestry, and fishing occupations and individuals who were in the armed forces in the previous calendar year but civilian at time of survey, not included in other occupational groups above.

Source: See Table 1.

The self-employed are also somewhat more likely to work part-time or part-year than employees (Table 5). Being one's own boss may allow some of the self-employed greater flexibility in setting a part-time work schedule; others of the self-employed may face inadequate demand to support full-time work.

As the economy deteriorated between 1988 and 1992, the fraction of the self-employed who worked less than the full year (fewer than 50 weeks of employment) rose noticeably.¹⁰ When examining descriptive data such as these, it is important to keep in mind that two factors are at work in the chang-

classes except the largest. Furthermore, a sizable part of this difference in average size of firm between the self-employed and employees must be attributable to the fact that, by definition, it is not possible to have more than one or several (if partners) self-employed persons working in any one firm, with all the remaining workers being counted as employees.

ing characteristics of the self-employed: (1) changes in the characteristics of individuals who were self-employed throughout the period and (2) differences between the characteristics of those joining the ranks of the self-employed during the period and the initial group. As a case in point, Table 5 indicates that the rise in the fraction of the self-employed working part-year or part-time was not attributable to declines in the number of self-employed individuals working full-time or full-year, but rather was

¹⁰ In 1988, the average person for whom self-employment was the longest job spent 46 weeks working, 1 week unemployed, and 5 weeks not in the labor force; by 1992, the average self-employed New Englander's weeks at work had fallen to 44.6 and weeks unemployed had risen to 2.6. About 6 percent of the self-employed in New England experienced one or more weeks of unemployment in 1988, a figure that had risen to 11 percent by 1992 (slightly below the corresponding percentages for employees).

Table 4
New England Employment by Size of Firm
 Percent

Size of Firm (Number of Employees)	Size Mix in 1988		1988-92 Percent Change in Total Employment	Self-Employment as Percent of Total Employment	
	Employees ^a	Self- Employed		1988	1992
Less than 25	25.1	97.5	-3.7	20.7	24.7
25 to 99	14.9	.5	-5.3	.2	.4
100 to 499	16.5	1.0	-.7	.4	.2
500 to 999	6.4	.4	9.6	.4	.0
1,000 or More	37.1	.6	-4.6	.1	.2
Total	100.0	100.0	-3.0	6.3	7.4

Note: Data refer to respondent's longest job in calendar year preceding survey date.

^aPrivate and government employees and incorporated self-employed.

Source: See Table 1.

entirely due to much faster growth in part-time/full-year and full-time/part-year self-employment than in the number of self-employed with other work schedules. One interpretation of the large number of part-year self-employed in 1992 is that many of them were previous employees who experienced a spell of unemployment and then became self-employed.¹¹

Indeed, as shown in the first panel of Table 6, a

sizable fraction of the net additional self-employed over the 1988-92 period were individuals who experienced a spell of unemployment more than two weeks long in 1992. In addition, for some fraction of the self-employed who were not unemployed in

¹¹ Note that "weeks worked" includes all jobs held during the calendar year, while "self-employed" and "employee" status refer to the longest job during the year.

Table 5
New England Employment by Full-Time/Part-Time Status
 Percent

Status	Status of Mix in 1988		Percent Change in Employment, 1988-92			Self-Employment as Percent of Total Employment	
	Employees ^a	Self- Employed	Employees ^a	Self- Employed	Total	1988	1992
Full Time							
Full-Year	62.5	59.8	-7.1	2.8	-6.5	6.0	6.6
Part-Year	15.5	14.9	.3	54.7	3.6	6.1	9.1
Part Time							
Full-Year	8.7	11.2	17.3	38.8	19.0	8.0	9.3
Part-Year	13.3	14.0	-9.2	1.8	-8.5	6.6	7.4
Total	100.0	100.0	-4.1	14.4	-3.0	6.3	7.4
Memo:							
Part-Time	22.0	25.3	1.3	18.2	2.5	7.2	8.3
Part-Year	28.8	29.0	-4.1	29.1	-2.0	6.3	8.3

Note: Data refer to respondent's longest job in calendar year preceding survey date, except for "part-year," which reflects all weeks of employment during the year. "Full-time" tallies individuals who usually work 35 or more hours per week; "full-year" is defined as individuals who were employed 50 or more weeks in the year.

^aPrivate and government employees and the incorporated self-employed.

Source: See Table 1.

Table 6
*New England Labor Force Status
 and Earnings*
 Adults with Earnings, by Class of Worker for Longest Job Held

	1988	1992	Percent Change
Number (Thousands):			
Adults Working 50+ Weeks:			
Employees ^a	5,068	4,857	-4.1
Self-Employed	340	369	8.5
Adults Unemployed >2 Weeks			
Employees ^a	533	895	68.1
Self-Employed	23	59	152.1
Others in the Work Force ^b			
Employees ^a	1,519	1,073	-29.4
Self-Employed	115	120	4.0
Average Annual Earnings (1993 Dollars):			
Adults Working 50+ Weeks:			
Employees ^a	32,050	31,050	-3.2
Self-Employed	30,650	28,700	-6.4
Adults Unemployed >2 Weeks	14,350	11,650	-18.7
Others in the Work Force ^b	10,300	9,600	-7.1

Note: This table excludes adults with zero earnings or with no job all year. Earnings include all earnings in calendar year; employment class refers to longest job in year. Earnings inflated to 1993 dollars using the personal consumption expenditure (PCE) deflator. Annual earnings rounded to nearest \$50.

^aPrivate and government employees and incorporated self-employed.

^bIndividuals in the labor force for at least one week who were employed for less than 50 weeks, unemployed for two or fewer weeks, and out of the labor force for the remainder of the year.

Source: See Table 1.

1992, such a transition through unemployment may have occurred in 1989, 1990, or 1991.¹²

III. Income Changes during the Regional Slowdown

The region's deep recession affected not only the employment status of New England residents, but also their incomes. Average annual earnings declined in real terms over the 1988-92 period in New England. Not surprisingly, real earnings declined the most for adults who were unemployed for part of the year (as shown in the lower panel of Table 6). But among those working all year (50-plus weeks), annual earnings declined twice as fast in real terms for the self-employed as for employees.

Real earnings declined overall in part because job losses meant that fewer adults had any earnings in

1992 than in 1988, in part because the fractions of earning adults who worked part-time and/or part-year rose, and in part because of a decline in real average hourly earnings among those with earnings (Table 7). Average annual earnings of the self-employed declined almost 14 percent in real terms between 1988 and 1992, about four times the pace of real earnings losses for employees.

Average real earnings of the self-employed declined almost 14 percent between 1988 and 1992, about four times the pace of losses for employees.

Average weeks employed declined more for the self-employed than for other workers; self-employed workers averaged more weeks of work in 1988 than employees, but by 1992 they averaged slightly less. Average weekly earnings also declined more steeply for the self-employed—over 10 percent as compared with less than 3 percent for other employees. Just as for annual earnings and weeks of work, the self-employed began with higher weekly earnings but fell below other workers by 1992. Furthermore, the usual workweek declined more for the self-employed than for other workers. Hourly earnings also declined more for the self-employed, but they still remained higher than the average hourly earnings of employees.

All the relative losses experienced by the self-employed that are shown in Tables 6 and 7 suggest that the circumstances of those who became self-employed during this period were not the same as the circumstances of either the initial pool of self-employed or those who retained their private, government, or incorporated self-employed jobs. Indeed, the workweek and earnings of the self-employed became more like those of the unemployed during this period, perhaps not surprisingly since some of the newly self-employed became so after a stint of unemployment. Even the self-employed

¹² Recall that the Current Population Survey does not follow specific individuals over the entire 1988-92 time span. Rather, the population and its characteristics are estimated on the basis of a sample that would have turned over completely between 1988 and 1992.

Table 7
Real Earnings of New England Workers
 Earnings in 1993 Dollars

	1988	1992	Percent Change
Number (000s):			
All Adults	10,300	10,411	1.1
Adults with Earnings	7,598	7,373	-3.0
Employees ^a	7,119	6,825	-4.1
Self-Employed	478	547	14.4
Average Annual Earnings:			
All Adults	\$19,200	\$17,650	-8.1
Adults with Earnings	26,050	24,950	-4.2
Employees ^a	25,950	25,050	-3.5
Self-Employed	27,350	23,550	-13.9
Average Weeks Worked in Year:			
Adults with Earnings	45.1	44.7	-.9
Employees ^a	45.1	44.7	-.9
Self-Employed	46.0	44.6	-3.0
Average Weekly Earnings:			
Adults with Earnings	\$ 547.3	\$ 528.8	-3.4
Employees ^a	545.3	529.9	-2.8
Self-Employed	576.2	515.5	-10.5
Usual Weekly Hours:			
Adults with Earnings	38.9	37.7	-.8
Employees ^a	37.9	37.6	-.8
Self-Employed	40.4	39.1	-3.2
Average Hourly Earnings:			
Adults with Earnings	\$ 14.17	\$ 14.02	-1.1
Employees ^a	14.07	13.93	-1.0
Self-Employed	15.64	15.25	-2.5
Percentage Poor: ^b			
All Adults	6.8	8.1	1.3 ^c
Adults with Earnings	3.1	4.6	1.5 ^c
Employees ^a	3.0	4.3	1.3 ^c
Self-Employed	4.9	7.8	2.9 ^c

Note: Earnings include all earnings in calendar year; employment class refers to longest job in year. Earnings inflated to 1993 dollars using the personal consumption expenditure (PCE) deflator. Annual earnings rounded to nearest \$50. Average weekly earnings calculated as annual earnings divided by weeks employed. Average hourly earnings calculated as average weekly earnings divided by usual weekly hours.

^aPrivate and government employees and the incorporated self-employed.

^b"Poor" is defined as in a family with income below the poverty line.

^cPercentage point change.

Source: See Table 1.

working 50 or more weeks resembled the unemployed more in 1992 than they had in 1988.

The relative declines in hours and weeks of work imply that the self-employed were not as successful at finding as much work as the average employee (with a job), and by inference, as much as they would have liked. These findings are thus consistent with

the stories of self-employment as a stopgap measure, aimed at maintaining some earnings after the loss of a payroll job, albeit a stopgap that was less successful for some of the self-employed than for others. For instance, the data suggest that the average hourly earnings of the *newly* self-employed in 1992 were lower than those of employees, although they were probably higher than those of all earners with a spell of unemployment in 1992.¹³ Thus, the good news is that some individuals who might otherwise have been entirely unemployed were garnering earnings through self-employment. The bad news, however, is that making ends meet was a struggle for a noticeable fraction of the self-employed.

The self-employed were considerably more likely than other employed individuals to be poor (as shown at the bottom of Table 7). Poverty rates reflect the combination of an individual's family situation (the presence of other workers and the size of their earnings and unearned income) and the individual's own earnings and unearned income. Consistent with the changes in real earnings, poverty rates also rose more for the self-employed between 1988 and 1992 than for other adults.

These changes in annual earnings are summarized in Figure 2, which displays the percentage of employees and self-employed workers falling into three annual earnings classes. All 1988 workers were ranked from lowest to highest annual earnings and then cutoffs between the classes were defined so that each class contained one-third of all 1988 workers. As the chart makes clear, in 1988 the self-employed were much more likely to fall into the bottom and top earnings classes than were employees, indicating greater earnings inequality among the self-employed.¹⁴

The same constant-dollar cutoffs between the classes, applied to 1992, indicate that the fraction of all workers in the bottom earnings class increased noticeably (but not by a large amount, rising from

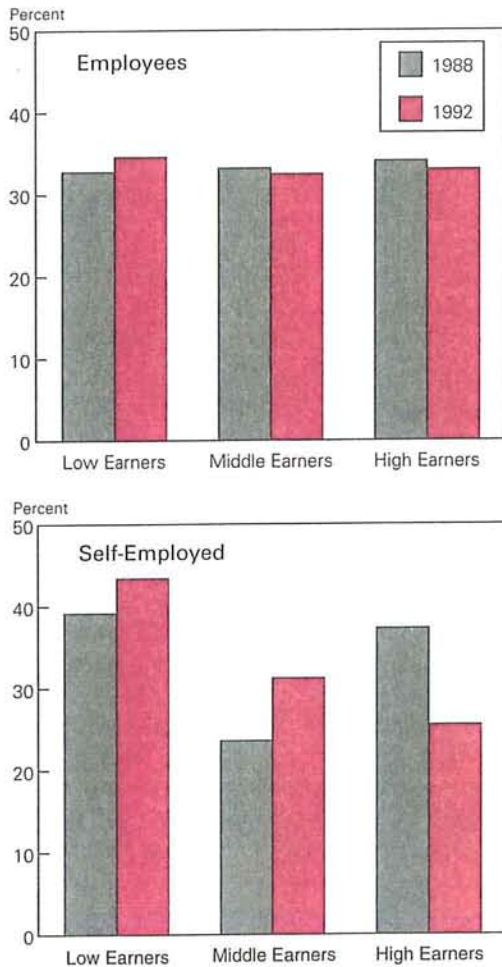
¹³ The rough estimate behind this statement assumes that 478,000 of New England's self-employed (the number in 1988) saw their hourly earnings decline at the 1988-92 pace of employees' hourly earnings, and calculates the hourly earnings implied for the 69,000 net new self-employed, given the average hourly earnings shown in Table 7 for all the 1992 self-employed. Since the changes experienced by both employees and the self-employed actually ranged across a distribution, this "average" calculation is only illustrative.

¹⁴ These data confirm the hints of a more unequal distribution of earnings provided by the fact that the self-employed had higher average earnings but also a higher poverty rate than private and government employees in 1988 (Table 7).

Figure 2

Changes in the Distribution of Annual Earnings in New England

Percentage of Workers with Low, Middle, and High Earnings



Note: Low, middle, and high earnings classes are defined to contain one-third of all workers in 1988; the same constant-dollar cutoffs apply to 1992. The low earners are workers with earnings below \$13,477 in 1993 dollars; high earners are those with earnings above \$30,518. 'Employees' include private and government employees and the incorporated self-employed; 'Self-employed' are unincorporated.

Source: Author's calculations based on data from U.S. Bureau of the Census, Current Population Survey, March 1989 and March 1993.

33.2 percent in 1988 to 35.2 percent in 1992), with offsetting declines in the middle and top classes, as the weakening economy caused the entire earnings distribution to shift down in real terms. This decline in the number of workers with high earnings was much more pronounced for the self-employed: 37 percent of the self-employed were in the top class in 1988, but only 25 percent were in 1992, with some of the loss taken up by the middle earnings class and some by the bottom class.¹⁵

Although real earnings declined as the economy weakened between 1988 and 1992, job-related fringe benefit coverage changed very little. In 1988, the self-employed enjoyed much less health coverage than other workers, and they were much less likely than other employees to be included in their employer's or union's pension or other retirement plan (Table 8). The large number of self-employed with health coverage not offered by their own employer or union include those purchasing health insurance individually and those with coverage through other employed family members. Since the self-employed are their own employers, and most are in very small firms, these facts may be unsurprising.

While the fraction of adults covered by private health insurance actually rose slightly in New England over this period, the fraction with health insurance offered by their own employer or union declined noticeably overall and especially for the self-employed. Access to pension or other retirement plans, by contrast, expanded over the period for both the self-employed and employees. Even after these gains, however, the self-employed were much less likely than employees to be included in a retirement plan.

Such changes in available benefits as well as income and employment status of self-employed individuals in New England obviously reflect recession-induced shifts in the demand side of the labor market, as well as supply. Many firms cut back employment as demand for their products declined, and some former employees responded to these cutbacks by employing themselves. A second-round effect was that some firms explicitly opted for shifting some production to non-employees. Observers have noted increased "outsourcing" of a variety of economic adjustments (during both slack and boom

¹⁵ In fact, the actual number of self-employed individuals with high earnings declined by one-fifth between 1988 and 1992 even as total self-employment increased.

Table 8
Fringe Benefits of New England Workers
 Percent or Percentage Points

	1988	1992	Percentage Point Change
Percentage with Government Health Coverage: ^a			
All Adults	21.5	22.9	1.4
Adults with Earnings	7.9	7.4	-.5
Employees ^b	7.5	7.5	.0
Self-Employed	13.7	6.0	-7.7
Percentage with Private Health Insurance:			
All Adults	75.3	75.9	.6
Adults with Earnings	82.0	83.1	1.1
Employees ^b	82.9	84.1	1.2
Self-Employed	70.1	71.1	1.0
Percentage with Health Insurance Offered by Own Employer or Union:			
All Adults	46.0	42.7	-3.3
Adults with Earnings	57.5	54.4	-3.1
Employees ^b	59.9	57.2	-2.7
Self-Employed	22.6	19.1	-3.5
Percentage Whose Employer or Union Had a Pension Plan:			
All Adults	37.8	38.1	.3
Adults with Earnings	51.1	53.9	2.8
Employees ^b	54.0	57.3	3.3
Self-Employed	8.5	11.3	2.8

^aGovernment coverage includes Medicare, Medicaid, CHAMPUS, VA, or military health care coverage.

^bPrivate and government employees and incorporated self-employed.
 Source: See Table 1.

periods) in the United States, and establishments' increased reliance on the self-employed, from executive consultants to cleaning staff, may be a case in point, at least in New England. A related phenomenon is many industries' increased use of temporary workers.¹⁶ (See the Box for a description of temporary workers in New England.)

The *supply* response of some workers who lost establishment jobs—dropping out of the labor force or offering self-employed labor—thus met an altered mix of employer *demand* for employees, altered both by recession shrinkages and by structural changes such as the move toward outsourcing. For players on both sides of the market, these changes have advantages and disadvantages. Some of the self-employed

might like to go back to being employees, while others may value more highly the independence of self-employment. Similarly, hiring consultants or temporary workers looks to be a long-term money-saver for some employers but others plan to sign on additional permanent employees as soon as product demand picks up enough to justify it.

IV. Will Self-Employment Shrink as New England Recovers?

Given these pluses and minuses for both employers and workers, a key question, looking forward, is the degree to which the recession's growth in self-employment will be reversed as the New England economy expands. Current Population Survey data comparable to those used here are not yet

A key question is the degree to which the recession's growth in self-employment will be reversed as the New England economy expands.

available for 1993 or 1994. Thus, it is impossible to directly estimate changes in the number of self-employed individuals in New England in recent years. Nonetheless, changes in the monthly payroll and household employment totals in the last two years may provide some clues regarding possible changes.

Since the recession low point in mid-1992, measured job growth has been much faster according to the establishment series than according to the household series. The former shows a net gain of 215,000 jobs from June 1992 to June 1994 and the latter less than 90,000. Just as a gain in self-employment was (correctly) inferred from the divergence of the two measures during the recession (Bradbury 1993), it seems reasonable to conclude from their recent convergence that some shrinkage in self-employment

¹⁶ Other documented examples of such outsourcing include auto manufacturers' requirements that their suppliers absorb price cuts and the costs of "just-in-time" inventory practices.

Temporary Workers

Another phenomenon often seen as closely related to growing self-employment is the increasing use of temporary workers. Nationally, a sizable fraction of recent employment growth has been attributed to expanded employment in the "personnel supply services" category of the business services industry; firms in this industry employ workers in a variety of occupations, whom they then supply on an hourly, weekly, or longer-term basis to firms in a variety of industries. In New England as of 1992, about 50,000 employees of personnel supply services comprised about two-thirds of 1 percent of all workers; the industry was comparable in size to the apparel, aircraft, or security brokerage and investment industries in the region.

Temporary workers in New England were considerably more likely than workers in other industries to have experienced a mixture of employment and unemployment in 1992 or a mixture of employment and "not in labor force" status;¹⁷ employees in other industries were much more likely to have been employed for 50 or more weeks in the year. About 40 percent of temporary workers looked for work in one or more stretches, while this was true of only 13 percent of other industry workers.¹⁸ By the same token, one-third of temporary workers had more than one employer (at separate times) during the year, while only one-eighth of other industry workers moved among employers. Temporary workers, unlike the self-employed, were more likely than workers in other industries to be female and nonwhite; like the self-employed, an above-average fraction of employ-

ees in the personnel service industry worked part-time, defined as usually working fewer than 35 work hours per week.

Workers supplied by personnel agencies represented a wide range of occupations but were considerably more concentrated than workers in other industries in administrative support occupations, which include the clerical workers many people associate most strongly with temporary help. Temporary help workers in New England were also over-represented in two of the blue-collar groups: machine operators, assemblers, and inspectors; and handlers, equipment cleaners, and helpers. Interestingly, a slightly above-average fraction of those in the personnel service industry were in executive, administrative, and managerial occupations.

Employees in the personnel supply service industry earned less per year, on average, and were less likely to have fringe benefits associated with their jobs than workers in other industries. Total annual earnings averaged \$18,500 for temporary workers and \$25,000 for workers in other industries in New England in 1992 (earnings in 1993 dollars). Most of this difference in annual earnings was attributable to shorter hours and fewer weeks of work, however; average weekly and hourly earnings of temporary workers were much closer to those of workers in other industries. Only one-fifth of temporary help workers in New England had health insurance offered through (and partly or fully paid for by) their employer or union, as compared with over half the workers in other industries. And only 16 percent of personnel supply service workers were included in a company or union pension plan, as compared with 41 percent of workers in other industries.

has occurred over the two years of recovery in the region.¹⁹

Many of the newly self-employed whose self-employment earnings (and fringe benefits) fell short of their previous wages or salaries (and fringes) can be expected to seek establishment jobs as they become available. Nonetheless, two groups seem less likely to resume payroll employment: Some self-employed individuals may have been "scarred," becoming less attractive to employers because of their stints of unemployment or self-employment; others,

¹⁷ Data on industry (and hence temporary worker status) are not available for individuals who were unemployed all year or not in the labor force all year. Such individuals report no "longest job" for which industry can be ascertained.

¹⁸ New England workers for whom personnel supply services was the industry of longest job averaged 33 weeks of work in 1992, 12 weeks of unemployment, and 7 weeks out of the labor force. Over 40 percent of temporary workers experienced one or more weeks of unemployment in 1992, as compared with fewer than 14 percent of workers in other industries.

¹⁹ Since the region's unemployment rate has fallen to about the national average but not significantly below, it is unlikely that a marked increase in dual job-holding explains the convergence.

like many of the self-employed former Vermont G.E. workers (Kessel and Maher 1991), may have realized that they strongly prefer being on their own. In addition, some establishments will continue to find it advantageous to "outsource" selected operations or functions to self-employed individuals.

V. Conclusions

The economic adjustments engendered by the severe 1989-92 downturn in New England fell heavily on those who lost their jobs. All classes of employees—private, government, the incorporated self-employed—shrank in size from 1988 to 1992; the only net growth occurred in unincorporated self-employment. These shifts imply that some individuals began working for themselves as a way to maintain at least some earnings after losing their establishment jobs.

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Anecdotal evidence suggests that the recession's effects on New England labor markets will not unravel totally even when the region's severe employment losses have been reversed.²⁰ Changes in the way establishments view their operations, including relationships with outside suppliers, wariness about adding to "permanent" payrolls after so recently facing the pain of large-scale separations, and changes in individual attitudes towards self-employment are likely to constrain the amount of establishment hiring that is associated with increases in output. Thus, the regional economy may well continue to have a somewhat larger class of independent workers than would have occurred in the absence of the recession and the adjustments it engendered.

²⁰ This will not happen soon, in any case. According to New England Economic Project forecasts, total employment in New England will not exceed its 1989 peak until almost 10 years later, in the final quarter of 1998 (Kodrzycki 1994).

Table A-1
Employment by Industry in New England
 Thousands of Jobs

Industry	Establishment Data			Household Data			Household Data on "Employees"		
	1988	1992	Change	1988	1992	Change	1988	1992	Change
Total Nonfarm	6,576.5	5,995.1	-581.4	7,484.1	7,275.4	-208.7	7,040.0	6,758.7	-281.3
Manufacturing	1,345.8	1,094.3	-251.5	1,593.8	1,373.4	-220.4	1,578.7	1,337.2	-241.5
Construction	331.2	181.9	-149.3	525.2	411.2	-114.0	428.4	280.5	-147.9
Transportation and Public Utilities	272.5	253.3	-19.2	362.2	337.7	-24.5	350.7	325.8	-24.8
Trade	1,550.5	1,372.2	-178.3	1,536.3	1,528.2	-8.1	1,446.6	1,451.0	4.4
Finance, Insurance, and Real Estate	470.7	430.0	-40.7	534.7	556.7	21.9	507.3	518.0	10.7
Services	1,723.2	1,799.8	76.6	1,958.4	2,135.8	177.4	1,755.6	1,915.9	160.2
Government	877.7	860.3	-17.4	965.7	926.7	-39.0	965.7	926.7	-39.0
Mining	4.9	3.3	-1.6	7.8	5.7	-2.1	7.0	3.6	-3.4

Note: Establishment figures are averages of monthly data; household data refer to individuals employed for pay at least part of the year by industry of longest job. To increase comparability with the establishment data, household data in this table exclude all individuals in the agriculture, forestry, and fisheries industry and reclassify all individuals reporting the "government" class of worker, regardless of industry, as government. Text Table 2, by contrast, includes agriculture and adopts the Current Population Survey convention of "public administration" as the government-related industry category. All workers in the public administration industry are in the government class of worker, but the converse is not true. "Employees" include private and government employees and the incorporated self-employed.

Sources: U.S. Bureau of Labor Statistics and U.S. Bureau of the Census.

Appendix A Discrepancies between Household Series and Establishment Series Job Counts, 1988 to 1992

During the severe 1989-92 downturn in New England, the two basic measures of employment, based on surveys of establishments and households, gave very different readings on the magnitude of the region's employment losses.²¹ From the pre-recession peak year 1988 to the recession-trough year of 1992, the establishment series reported the loss of 581,400 nonfarm jobs while the household series data, after excluding jobs in agriculture, forestry, and fisheries, indicated that "only" 208,700 jobs were lost (Table A-1).²²

Just as for total employment, recession losses by industry were generally greater according to the establishment series than according to the household series.²³ The biggest differences occurred in two of the three biggest industries—trade and services. According to the establishment tally, almost 180,000 payroll jobs were lost in wholesale and retail trade between 1988 and 1992, but the household survey found only 8,000 fewer people reported employed in this industry in 1992 than in 1988. The number of jobs in services actually expanded over this period²⁴—by 177,000 according to the household series but only 77,000 according to the establishment count. Manufacturing, the second largest industry group, showed the biggest job losses according to either source; construction, a relatively small industry, also showed large losses according to both series. Employment in finance, insurance, and real estate declined almost 9 percent according to the establishment series but grew about 4 percent according to the household-based estimates.

One important difference between the two job counts is that the household data are more inclusive: The establishment data include only individuals on the payrolls of nonfarm establishments, while the household measure includes, in addition, the unincorporated self-employed, unpaid volunteers and family workers, and agricultural workers.²⁵ Table A-2 reports 1988-92 changes in these

²¹ This is not the case for the nation; both the establishment and household counts show U.S. job losses of 1.8 million from peak to trough.

²² This discrepancy is quite large, but at the time it appeared to be even larger. Each spring the U.S. Bureau of Labor Statistics revises the establishment employment estimates for the preceding two calendar years on the basis of more complete data that are available only with a lag. In March of 1994, these revisions to the 1992 and 1993 data were very sizable and positive. Thus, before those revisions, the total recession job losses were even bigger, according to the establishment series, than those reported in the text. Note also that the loss figures in Table A-1 do not match the figures cited in the text at the beginning of the article, because of the difference between monthly and annual data discussed in footnote 2.

²³ The Current Population Survey (household series) for the month of March includes data for the longest job each individual held in the calendar year prior to the March survey date. These data, by industry, are compared with the corresponding annual averages of establishment data in Table A-1.

²⁴ Service jobs declined only briefly during the recession even in hard-hit New England, peaking in March 1990 and bottoming out in February 1991.

²⁵ A second important difference between the two sources is that dual job holders are counted as two jobs in the establishment

Table A-2
New England Employment by Class of Worker and Farm/Nonfarm Status
 Thousands

	1988	1992	1988-1992 Change
Household Measure of Total Employed ^a	7,616.2	7,380.7	-235.5
Employed Without Pay	18.5	8.1	-10.4
Agriculture, Forestry, and Fisheries			
Self-Employed, Not Incorporated	34.3	30.8	-3.5
Self-Employed, Incorporated	11.2	.0	-11.2
Private and Government	68.1	66.4	-1.7
Household Measure of Nonfarm Paid Employed	7,484.1	7,275.4	-208.7
Nonfarm Self-Employed			
Not Incorporated	444.1	516.6	72.5
Incorporated	232.2	197.7	-34.5
Nonfarm Private Employees	5,842.1	5,634.3	-207.8
Nonfarm Government Employees	965.7	926.7	-39.0
Household Measure of Total Nonfarm Employees: Nonfarm Private and Government Employees Plus Incorporated Nonfarm Self-Employed ^b	7,040.0	6,758.7	-281.3
Establishment Measure of Total Nonfarm Employment (Annual Average)	6,576.5	5,995.1	-581.4
Differences between Household and Establishment Totals:			
Household Total Employed Minus Establishment Total	1,039.7	1,385.6	345.9
—As % of Establishment Total	15.8	23.1	n.r.
Nonfarm Paid Employment Minus Establishment Total	907.6	1,280.3	372.7
—As % of Establishment Total	13.8	21.4	n.r.
Nonfarm Paid Employees Minus Establishment Total	463.5	763.6	300.1
—As % of Establishment Total	7.0	12.7	n.r.

^aEmployed at least part of the year, as reported in the Current Population Survey of the subsequent March (household series).

^bThe establishment series (U.S. Bureau of Labor Statistics) includes the incorporated self-employed as employees of establishments. Hence this measure is the closest, definitionally, to the establishment data.

n.r. = not relevant.

Source: U.S. Bureau of the Census and U.S. Bureau of Labor Statistics.

components of the household-based measure of employment, comparing several subsets with the establishment series totals. With no adjustments, the household measure of all employed individuals was 16 percent larger than the (and fisheries) from the household measure reduces the discrepancies to 14 and 21 percent. The gaps are reduced

survey but one employed individual in the household survey. A further source of difference is that both series are based on samples, one of households and one of establishments. The establishment survey includes nearly all the large establishments in the region; of necessity, a smaller fraction of small firms is used to represent that universe.

even further, to 7 and 13 percent, by dropping the unincorporated self-employed from the household total.

While the differences in employment counts in the two years are thus about half explained by these known differences in definition, the measured employment losses remain much smaller according to the household series (even the most comparable measure) than the establishment series. Thus, the different treatment of self-employed individuals, farm workers, and those working without pay contributes to the discrepancy between the two employment measures, but these factors do not explain it. The bulk of the difference between the two measures of loss must be attributable to inconsistencies between the two series, including sampling techniques and misreporting by employers or individuals.

Table B-1

New England Employment by Gender, Race, Age, and Educational Attainment

Percent

	Demographic Mix in 1988		Demographic Mix in 1992		Self-Employment as Percent of Total Employment	
	Employees ^a	Self- Employed	Employees ^a	Self- Employed	1988	1992
Male	51.5	70.5	51.9	72.1	8.4	10.0
Female	48.5	29.5	48.1	27.9	3.9	4.4
White	94.4	96.0	94.7	97.4	6.4	7.6
Black	3.8	2.1	3.5	1.3	3.5	3.0
Other Minority ^b	1.8	1.9	1.9	1.3	6.9	5.2
Age 15 to 24	20.0	5.0	16.9	3.9	1.7	1.8
Age 25 to 44	51.0	52.1	53.3	53.5	6.4	7.5
Age 45 to 64	25.2	32.4	26.5	37.4	7.9	10.2
Age 65 and Up	3.7	10.5	3.3	5.3	16.0	11.2
Less than 12th Grade ^c	14.5	12.0	10.9	8.9	5.3	6.2
12th Grade or H.S. Graduate ^c	36.5	36.5	33.7	34.1	6.3	7.5
At Least Some College ^c	49.0	51.5	55.4	57.0	6.6	7.6
Total	100.0	100.0	100.0	100.0	6.3	7.4

Note: Data refer to respondent's longest job in calendar year preceding survey date.

^aPrivate and government employees and incorporated self-employed.

^bAmerican Indians, Alaskan Eskimos, Asians, Pacific Islanders, and other (nonblack) minorities.

^cEducational attainment definitions changed for the March 1993 survey, so 1988 and 1992 data are not strictly comparable.

Source: See text Table 1.

Appendix B The Demographic Characteristics of the Self-Employed

Table B-1 takes another cut at describing the self-nonfarm establishment measure in 1988 and 23 percent larger in 1992. Dropping individuals working without pay and workers associated with farming (agriculture, forestry, employed, summarizing their personal characteristics rather than the characteristics of their jobs (as was done in text Tables 2 through 5). In general, the self-employed in New England were more likely to be male and white than were employees; and the self-employed were also typically somewhat older and more educated than employees. The self-employed in the United States also show a higher fraction male, white, age 25 and older, and with at least some college than U.S. employees (data not shown).

In New England, these four compositional differences between the self-employed and other employees became more pronounced between 1988 and 1992. U.S. self-employment data also show a 1988-92 shift toward men and toward greater age and education, but away from whites.²⁶

²⁶ Other researchers (Devine 1993, 1994; Aronson 1991) have found a long-term shift in the composition of U.S. self-employment toward women and some minorities. That research, however, does not specifically track the recession period. As the text notes, the male percentage of the self-employed in the United States rose between 1988 and 1992 (as in New England, but counter to the long-term U.S. trend), while the white percentage fell slightly (unlike what occurred in New England, but in line with the long-term U.S. trend).