A profile of contingent workers

*Contingent workers were more likely to be female,
black, young, enrolled in school,
and employed in services and construction industries
than were noncontingent workers;
more than 10 percent were teachers*

Anne E. Polivka

To some, the terms "contingent work" and "bad jobs" are synonymous, although that was not necessarily what was intended when the phrase was originally coined. To examine how closely these two notions may be linked, it is necessary to analyze specific attributes of contingent jobs, along with the personal characteristics of those who fill them. This article profiles contingent workers using data collected through a special supplement to the February 1995 Current Population Survey (CPS). This supplement provides the first comprehensive measurement of contingent workers using carefully constructed definitions.

The underlying concept that was operationalized in the supplement defines contingent workers as individuals who do not have an explicit or implicit contract for ongoing employment. The introductory article in this issue (pages 3–9) discusses three estimates of the number of contingent workers constructed from the February 1995 CPS supplement data. The first estimate was restricted to wage and salary workers who expected their jobs to last for an additional year or less and who had worked at their jobs for 1 year or less. Individuals who did not expect to continue in their jobs for personal reasons, such as retirement or returning to school, were not considered contingent if they would have had the option

of continuing in their jobs. Under this definition, there were approximately 2.7 million contingent workers in February 1995.

The second estimate of contingent workers added self-employed workers and independent contractors who expected their employment to last for an additional year or less and who had been self-employed or an independent contractor for 1 year or less. It also changed the measure of actual and expected job tenure for contract workers and temporary help workers from tenure with these employment intermediaries to tenure in their current assignment. Under these criteria, 3.4 million workers were classified as contingent in February 1995.

The third estimate of contingency expanded the second estimate by removing the 1-year requirement on actual and expected tenure for wage and salary workers. (The tenure constraint could not be removed for self-employed workers and independent contractors because they were asked a different set of questions.) Essentially, under estimate 3, contingent workers were defined as workers who did not expect their jobs to last, except those who, for personal reasons, expected to leave jobs that they would otherwise be able to retain. Under this broadest estimate, 6 million workers were classified as contingent.

In this article, the characteristics of contin-

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gent workers under each of these three definitions are examined. The characteristics of noncontingent workers, defined as those who were not contingent even under the broadest estimate of contingency (estimate 3), are provided as a point of reference.

Demographic characteristics

Sex and race. Given concerns about discrimination and equality of job opportunities,[1] two of the most important characteristics of contingent workers are their gender and race. Examination of the figures in table 1 indicates that contingent workers were slightly more likely to be women or blacks than were noncontingent workers. Specifically, more than 50 percent of contingent workers across all three estimates of contingency were women. In comparison, only 46 percent of noncontingent workers were women. Similarly, the data in table 1 indicate that about 14 percent of contingent workers were black, compared with a little more than 10 percent of noncontingent workers. In exploring the gender and racial composition of contingent workers, it is important to examine the gender and racial composition of contingent workers within specific industries and occupations. It could be that women and blacks were more likely to be contingent simply because they were more likely to be employed in industries and occupations that had a higher proportion of contingent workers.

Age. One of the most startling differences between contingent and noncontingent workers was in the age distributions of the two groups. Although the age distribution of contingent workers varied to some degree across the estimates of contingency, under all three estimates, contingent workers were more than twice as likely as noncontingent workers to be between the ages of 16 and 24. Under the first estimate, 41.6 percent of contingent workers were under age 25, while only 13.9 percent of noncontingent workers were in this age group. Further, depending on the definition chosen, contingent workers were 2-1/2 to 4 times more likely to be 16 to 19 years old than were noncontingent workers, with estimates 1 and 2 having proportionately more young workers than estimate 3. (See table 1.)

Under the two estimates that require workers to have been with their current employer or in their arrangements for no more than a year

Table 1. Employed contingent and noncontingent workers, by sex, race , Hispanic origin, age, and educational attainment, February 1995 [Percent distribution]				
	Contingent workers			Non-contingent workers[1]
Characteristic	Estimate 1	Estimate 2	Estimate 3	
Total, 16 years and older	100.0	100.0	100.0	100.0
Sex				
Men	49.3	49.4	49.6	54.0
Women	50.7	50.7	50.4	46.0
Race and Hispanic origin				
White	80.1	80.1	80.9	85.7
Black	14.0	13.6	13.3	10.5
Hispanic origin	13.6	12.9	11.3	8.3
Age (in years)				
Total	100.0	100.0	100.0	100.0
16 to 19	16.7	15.2	10.7	4.3
20 to 24	25.0	22.1	19.8	9.6
25 to 34	26.0	27.5	26.3	26.1
35 to 44	18.5	19.8	21.0	28.0
45 to 54	8.2	9.5	12.6	19.8
55 to 64	3.8	3.7	5.9	9.4
65 and older	1.8	2.1	3.7	2.8
Men	100.0	100.0	100.0	100.0
16 to 19	14.6	13.9	9.7	4.0
20 to 24	24.4	21.7	19.6	9.6
25 to 34	26.2	27.5	27.8	26.4
35 to 44	20.3	20.9	20.5	28.0
45 to 54	6.7	8.6	11.4	19.5
55 to 64	5.3	4.9	7.2	9.4
65 and older	2.4	2.6	3.9	3.1
Women	100.0	100.0	100.0	100.0
16 to 19	18.7	16.6	11.7	4.6
20 to 24	25.7	22.6	20.1	9.6
25 to 34	25.8	27.4	24.8	25.7
35 to 44	16.8	18.8	21.4	28.1
45 to 54	9.6	10.5	13.8	20.2
55 to 64	2.3	2.6	4.6	9.4
65 and older	1.2	1.7	3.6	2.5
Educational attainment (those not enrolled in school)				
Total	100.0	100.0	100.0	100.0
Less than a high school diploma	17.2	16.9	14.6	10.5
High school graduate, no college	28.7	28.4	29.4	33.6
Less than a bachelor's degree ..	28.7	28.8	25.8	28.7
College graduates	17.8	17.8	17.5	18.2
Advanced degree	7.6	8.2	12.7	9.1

[1] Noncontingent workers are those who do not fall into any estimate of "contingent" workers.

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. Detail for other characteristics may not sum to totals due to rounding.

(estimates 1 and 2), contingent workers also were less likely to be age 65 and older. When the restrictions on job tenure were removed (estimate 3), however, the proportion of workers in this age group was slightly larger for contingent than noncontingent workers (3.7 percent versus 2.8 percent). Noncontingent workers were more likely than contingent workers to be 45 to 64 years of age under every estimate, but the gap narrowed as contingent workers were more broadly defined. The slight shift of the age distribution to older workers under estimate 3 is consistent with the correlation between age and tenure. Removal of the maximum tenure restrictions seems to capture some workers who had been with their employers a fair amount of time and who either always had an uncertain employment relationship or who had been switched from a stable to an unstable relationship.

When comparing contingent and noncontingent workers, both men and women displayed similar age distributions. However, it is interesting to note that female contingent workers were somewhat more likely to be teenagers and less likely to be over the age of 55 than were male contingent workers.

School enrollment, educational attainment

Two other personal characteristics of contingent workers to examine are the proportion of contingent workers enrolled in school and their educational attainment. The data indicate that contingent workers were three to four times more likely to be enrolled in school than were noncontingent workers. School enrollment rates ranged from 17.7 percent of contingent workers under estimate 3 to 23.0 percent under estimate 1, compared with only 5.3 percent for noncontingent workers. Even among those ages 16 to 24, an age when people are more likely to be enrolled in school, a higher proportion of contingent workers were enrolled in school, compared with noncontingent workers—58.1 percent and 38.4 percent, respectively.[2] Apparently, a lack of long-term commitment between workers and employers accords well with school attendance. This seems to be especially true for full-time college students. Of those contingent workers who were students, 74.0 percent under contingent estimate 3 were attending college, of whom 85.1 percent were full-time students.

Among those not enrolled in school, a larger proportion of contingent than noncontingent workers did not have a high school diploma. Under contingent estimate 1, 17.2 percent of those not enrolled in school were classified as having only some high school. This proportion edged down to 16.9 percent under estimate 2 and 14.6 percent under estimate 3. By comparison, only 10.5 percent of noncontingent workers were classified as having only some high school. (See table 1.)

In contrast, the proportions of contingent and noncontingent workers who had some college or a college degree were fairly equal across estimates. With respect to advanced degrees, contingent workers under estimates 1 and 2 were less likely than noncontingent workers to have a masters degree, a doctorate, or a professional degree (such as a law degree). This relationship was reversed, however, when the tenure requirements were removed. Almost 13 percent of contingent workers under estimate 3 had an advanced degree, compared with 9.1 percent of noncontingent workers. To the extent that education and job skills are correlated, these figures indicate that under estimates 1 and 2, contingent workers were less likely to be skilled workers than were noncontingent workers, while under estimate 3, contingent workers appeared to be both less skilled and more skilled than their noncontingent counterparts. An examination of the occupational distributions of contingent and noncontingent workers will shed more light on the skill levels embodied in the jobs these workers are occupying.

Occupations

Contingent workers were more likely to be in professional, service, administrative support, and labor occupations, and were less likely to be in managerial or sales occupations. Contingent and noncontingent workers were about equally likely to be in precision production and farming occupations. (See table 2.)

At first glance, it might seem surprising that contingent workers were over represented in professional specialty occupations. This finding was driven by the fact that the professional specialty occupations include teachers, who had above-average rates of contingency.   In fact, teachers accounted for more than 10 percent of all contingent workers under estimate 3. It is interesting to note that teachers at institutions of higher education had higher rates of contingency than did their counterparts at the grade school level. Teachers at the college and university level had rates ranging from 10.0 percent under the narrowest estimate to 25.9 percent under the broadest estimate. In comparison, elementary and secondary teachers' rates of contingency, while still considerably above average, ranged from 3.1 percent under estimate 1 to 7.8 percent under estimate 3. Apparently, colleges and universities use more adjunct or temporary teachers with short-term contracts. It also could be, however, that the inherent uncertainties of the tenure process play an important role for college and university teachers.

The other group within the professional ranks that constituted a fairly large proportion of all contingent workers was "other professional specialty." This category alone contained 5.1 percent of all contingent workers under estimate 1. Detailed occupations within the "other professional specialty" group that had above-average rates of contingency across all three estimates included editors and reporters, photographers, actors and directors, and athletes. The relatively large proportion of contingent workers in

Occupation, sex, and race	Contingent workers			Non-contingent workers[1]
	Estimate 1	Estimate 2	Estimate 3	
Total, 16 years and older (thousands)	2,739	3,422	6,034	117,174
Percent distribution	100.0	100.0	100.0	100.0
Executive, administrative, and managerial	4.9	5.5	7.6	14.0
Professional specialty	17.2	16.6	20.6	14.6
Technicians and related support	1.8	2.2	2.7	3.2
Sales occupations	6.2	6.9	6.4	12.2
Administrative support, including clerical	20.9	18.7	17.7	15.0
Service occupations	17.9	19.8	16.0	13.4
Precision production, craft, and repair	11.0	11.3	10.0	10.8
Operators, fabricators, and laborers	17.4	16.1	15.8	14.2
Farming, forestry and fishing	2.6	3.0	3.0	2.6
Contingency rates[2]				
Total	2.2	2.8	4.9	....
Executive, administrative, and managerial	.8	1.1	2.7	....
Professional specialty	2.6	3.1	6.8	....
Technicians and related support	1.3	1.9	4.2	....
Sales occupations	1.2	1.6	2.6	....
Administrative support, including clerical	3.1	3.4	5.8	....
Service occupations	3.0	4.1	5.8	....
Precision production, craft, and repair	2.3	2.9	4.6	....
Operators, fabricators, and laborers	2.7	3.1	5.4	....
Farming, forestry and fishing	2.2	3.2	5.6	....
Men:				
Executive, administrative, and managerial	.6	.9	2.3	....
Professional specialty	2.3	3.1	6.6	....
Technicians and related support	1.7	2.4	4.8	....
Sales occupations	.8	1.3	2.0	....
Administrative support, including clerical	2.9	3.3	6.0	....
Service occupations	2.9	3.2	4.7	....
Precision production, craft, and repair	2.3	2.9	4.5	....
Operators, fabricators, and laborers	2.7	3.1	5.4	....
Farming, forestry and fishing	2.4	3.4	5.9	....
Women:				
Executive, administrative, and managerial	1.1	1.3	3.2	....
Professional specialty	2.8	3.1	7.0	....
Technicians and related support	.9	1.5	3.6	....
Sales occupations	1.5	1.9	3.4	....
Administrative support, including clerical	3.1	3.5	5.7	....
Service occupations	3.0	4.6	6.5	....
Precision production, craft, and repair	1.6	3.3	4.9	....
Operators, fabricators, and laborers	2.8	3.2	5.7	....
Farming, forestry and fishing	1.4	2.4	4.3	....
White:				
Executive, administrative, and managerial	.7	1.0	2.6	....
Professional specialty	2.6	3.1	6.8	....
Technicians and related support	1.3	2.0	3.9	....
Sales occupations	1.0	1.4	2.4	....
Administrative support, including clerical	2.8	3.2	5.5	....
Service occupations	2.9	4.1	5.7	....
Precision production, craft, and repair	2.1	2.7	4.1	....
Operators, fabricators, and laborers	2.6	2.9	5.0	....
Farming, forestry and fishing	1.9	2.8	4.9	....
Black:				
Executive, administrative, and managerial	1.0	1.0	3.6	....
Professional specialty	1.8	2.6	5.2	....
Technicians and related support	.7	1.6	4.2	....
Sales occupations	1.4	2.1	4.2	....
Administrative support, including clerical	4.9	4.9	7.0	....
Service occupations	3.1	4.0	6.1	....
Precision production, craft, and repair	3.7	4.6	8.3	....
Operators, fabricators, and laborers	3.2	3.8	7.3	....
Farming, forestry and fishing	2.5	5.5	5.5	....

[1] Noncontingent workers wre those who do not fall into any estimate of "contingent" workers.
[2] A contingency rate is the proportion of all employed who are contingent.
NOTE: Distribution may not sum to 100 percent due to rounding.

these occupations in combination with those in teaching occupations seems to belie the image of all contingent jobs as being low-skilled jobs.

On the other hand, the higher proportion of contingent workers in the administrative support occupations—20.9 percent to 17.7 percent of contingent workers versus 15.0 percent of noncontingent workers—comes closer to the stereotypical notion that contingent workers hold jobs that require relatively little formal training. Within the administrative support category, detailed occupations with above-average rates of contingency across all three estimates included secretaries, stenographers, typists, and other clerical occupations. In the latter subcategory, file clerks had a particularly high rate of contingency, ranging from 18.4 percent to 25.3 percent. In addition to these typical office support occupations, computer equipment operators under all three estimates, and mail and message distributors under the first estimate, also had higher rates of contingency. In fact, among nonsupervisory workers, the only administrative support occupation that did not have an above-average rate of contingency, at least under the first estimate, was financial records processing.

Contingent workers also were disproportionately represented in service occupations, with 17.9 percent of contingent workers under estimate 1, 19.8 percent under estimate 2, and 16.0 percent under estimate 3 in service occupations, compared with only 13.4 percent of noncontingent workers. The subcategory within service occupations with the highest rate of contingency was food service occupations, which include waitresses and waiters, cooks, and bartenders. Within other subcategories of services occupations, three detailed categories with above-average rates

of contingency were attendants at amusement and recreational facilities, child care workers in private households, and janitors and cleaners. It is important to note, however, that athough janitors and cleaners had above-average rates of contingency, even under the broadest estimate, only 5.5 percent of all janitors and cleaners were contingent.

The only other major occupation group with above-average rates of contingency and a disproportionately large number of contingent workers was operators, fabricators, and laborers. The detailed occupations within this category that contained a disproportionate number of contingent workers were welders and cutters, assemblers, production testers, miscellaneous machine operators, and construction laborers.

A major occupation group in which there was no overall statistical difference between the proportion of contingent and noncontingent workers was precision production, craft, and repair. The lack of an overall difference, however, concealed large differences at the detailed level. For example, rates of contingency in construction trades ranged from 4.8 percent under estimate 1 to 8.5 percent under estimate 3. These were roughly double the comparable estimates for all workers. In contrast, the rate of contingency for mechanics and repairers ranged from 1.0 percent to 2.4 percent and the rates of contingency for those in the other precision production, craft, and repair occupations ranged from 0.7 percent to 2.3 percent, about half the averages for all workers.

Overall, the occupational distribution of contingent workers indicates that they are employed in a wide variety of jobs. Some jobs, such as janitors, cleaners, waitresses, and waiters are at the lower end of the skill ladder. However, the high proportions of contingent workers in teaching and the construction trades indicate that at least some contingent workers possess high levels of skill. The wide variety of occupations in which contingent workers are employed makes it impossible to classify contingent jobs as just low-skilled jobs.

Sex and race. Rates of contingency within occupations, split by gender and race, are presented in table 2. For the most part, women's higher rates of contingency compared with men's can be accounted for by their higher concentration in occupations with higher contingency rates, rather than a higher rate of contingency within any occupation. The only exceptions were the sales and services occupations, where women's rates of contingency were generally higher than men's. Blacks, in contrast, tended to have higher rates of contingency within the occupations that employed the majority of contingent workers. Blacks actually had a lower rate of contingency than whites in the professional specialty occupations. However, blacks had markedly higher rates of contingency in the administrative support; precision production, craft, and repair; and operators, fabricators, and laborers occupations. These occupations together employed 49.3 percent of those who were contingent under definition 1.

Table 3.	Distribution by industry of employed contingent and noncontingent workers, and contingency rates by industry, sex, and race, February 1995			
Industry, sex, and race	Contingent workers			Non-contingent workers[1]
	Estimate 1	Estimate 2	Estimate 3	
Total, 16 years and older (thousands)	2,739	3,422	6,034	117,174
Percent distribution	100.0	100.0	100.0	100.0
Agriculture	2.8	3.0	2.6	2.6
Mining	.2	.2	.3	.6
Construction	11.5	11.8	9.8	5.5
Manufacturing	10.0	9.5	10.8	17.1
Transportation and public utilities	3.8	3.2	4.3	7.2
Wholesale trade	1.3	1.4	1.8	3.9
Retail trade	12.1	11.9	10.3	17.0
Finance, insurance, and real estate	2.0	1.9	2.6	6.7
Services	53.5	54.8	54.0	34.5
Public administration	2.7	2.2	3.6	5.0
Contingency rates[2]				
Total, 16 years and older	2.2	2.8	4.9	....
Agriculture	2.5	3.3	5.0	....
Mining	1.0	1.0	2.7	....
Construction	4.5	5.8	8.4	....
Manufacturing	1.3	1.6	3.1	....
Transportation and public utilities	1.2	1.3	3.0	....
Wholesale trade	.7	1.0	2.3	....
Retail trade	1.6	2.0	3.0	....
Finance, insurance, and real estate	.7	.8	2.0	....
Services	3.4	4.3	7.5	....
Public administration	1.2	1.2	3.6	....
Men:				
Agriculture	2.7	3.5	5.7	....
Mining	.6	.6	2.6	....
Construction	4.7	5.8	8.5	....
Manufacturing	1.2	1.4	3.0	....
Transportation and public utilities	1.1	1.2	2.7	....
Wholesale trade	.5	.8	1.6	....
Retail trade	1.5	1.9	2.6	....
Finance, insurance, and real estate	.4	.5	1.8	....
Services	3.4	4.3	7.5	....
Public administration	.6	.6	3.0	....
Women:				
Agriculture	1.8	2.5	3.2	....
Mining	3.5	3.5	3.5	....
Construction	2.5	5.3	7.5	....
Manufacturing	1.7	1.9	3.4	....
Transportation and public utilities	1.5	1.5	3.7	....
Wholesale trade	1.4	1.8	4.0	....
Retail trade	1.7	2.1	3.4	....
Finance, insurance, and real estate	.9	1.0	2.1	....
Services	3.3	4.3	7.4	....
Public administration	2.0	2.0	4.4	....

See footnotes at end of table.

Industry, sex, and race	Contingent workers			Non-contingent workers [1]
	Estimate 1	Estimate 2	Estimate 3	

Table 3. Continued—Distribution by industry of employed contingent and noncontingent workers, and contingency rates by industry, sex, and race, February 1995

Contingency rates[2]—Continued

	Estimate 1	Estimate 2	Estimate 3	
White:				
Agriculture	2.2	3.0	4.6	....
Mining	1.0	1.0	2.6	....
Construction	3.8	4.8	7.4	....
Manufacturing	1.3	1.5	3.0	....
Transportation and public utilities	1.0	1.0	2.7	....
Wholesale trade	.8	.9	2.1	....
Retail trade	1.4	1.8	2.7	....
Finance, insurance, and real estate	.6	.7	1.9	....
Services	3.3	4.2	7.3	....
Public administration	1.0	1.0	3.6	....
Black:				
Agriculture	1.1	1.1	1.1	....
Mining	([3])	([3])	([3])	....
Construction	12.1	14.3	17.4	....
Manufacturing	1.4	2.0	4.9	....
Transportation and public utilities	2.1	2.0	3.8	....
Wholesale trade	.9	3.2	5.4	....
Retail trade	3.0	3.5	5.1	....
Finance, insurance, and real estate	1.8	1.5	2.5	....
Services	3.4	4.3	7.9	....
Public administration	1.8	1.8	2.8	....

[1] Noncontingent workers are those who do not fall into any estimate of "contingent" workers.
[2] A contingency rate is the proportion of all employed who are contingent.
[3] Less than 0.05 percent.
NOTE: Distribution may not sum to 100.0 percent due to rounding.

Industries

Although some contingent workers were found in every industry, contingent workers were much more likely to be concentrated in the services industry than were noncontingent workers. (See table 3.) More than 53 percent of contingent workers were employed in the services industry, compared with only 34.5 percent of noncontingent workers. Within the services industry, sectors that accounted for a large proportion of the contingent work force were business services, which under estimate 3 employed 10.7 percent of contingent workers, and educational services, which employed 21.5 percent of contingent workers. However, it is important to recognize that, although those in the services industry in general, and business services and educational services in particular, constitute a large proportion of contingent workers, the majority of workers in these services industries *were not* contingent. In fact, although considerably above average, only 12.8 percent of those employed in business services were contingent under estimate 3, and 12.3 percent of those in educational services were contingent.

The other industry in which contingent workers were disproportionately concentrated was construction. Almost 12 percent of contingent workers under estimates 1 and 2 and 9.8 percent of contingent workers under estimate 3 were in the construction industry. In comparison, only about 5.5 percent of noncontingent workers were in the construction industry. Again, however, despite the fact that construction

workers were disproportionately represented among contingent workers, only about 4 percent to 8 percent of construction workers were contingent.

It is interesting to note that, despite being an industry with historically high turnover rates, the rates of contingency in the retail trade industry, ranging from 1.6 percent to 3.0 percent, were below the overall average rates of contingency, which ranged from 2.2 percent to 4.9 percent.[3] Other industries which had below-average rates of contingency were manufacturing (1.3 to 3.1 percent); finance, insurance, and real estate (0.7 to 2.0 percent); transportation and public utilities (1.2 to 3.0 percent); wholesale trade (0.7 to 2.3 percent); and public administration (1.2 to 3.6 percent). Despite the fact that the manufacturing sector as a whole did not have an above-average rate of contingency, there were certain industries within manufacturing whose rates were above average. For example, the proportion of workers who were contingent in furniture and fixtures and transportation equipment (other than motor vehicle and aircraft) manufacturing were both above average under contingent estimate 3, at 7.5 percent and 6.9 percent, respectively. This suggests that although the majority of employees in manufacturing industries have relatively stable, long-term employment relationships, a few manufacturing industries may be structured to use more contingent workers, perhaps due to seasonality or lumpiness in demand.[4] In summary, the industry distributions indicate that overall, although contingent workers were found in each of the major industrial sectors, the services industry accounted for more than half of their total and construction firms hired a disproportionate share as well.

Sex and race. As was alluded to earlier, part of the explanation of why contingent workers were slightly more likely to be female and black may not be due to a bias in the employment of women and blacks as contingent workers within any industry, but because women and blacks were disproportionately employed in industries that use more contingent workers. To address this question, table 3 contains rates of contingency for men, women, whites, and blacks within each industry.

These estimates indicate that the slightly larger proportion of contingent workers who were female can be largely accounted for by the greater concentration of women in industries that used more contingent workers. Specifically, 48.0 percent of all women working in February 1995 were employed in the services industry, while only 24.8 percent

of all men were so employed. Men's and women's rates of contingency in the services industry were virtually identical, at 7.5 percent and 7.4 percent, respectively, under estimate 3. Further, women were more than 2-1/2 times as likely as men to be employed in educational services (12.9 percent versus 4.9 percent) and that industry employed more than one-fifth of all contingent workers. Both of these factors

| Table 4. | Percent distribution of employed contingent and noncontingent workers by full- and part-time status, multiple jobholding rate, and hours of work, February 1995 |

Characteristics	Contingent workers			Non-contingent workers[1]
	Estimate 1	Estimate 2	Estimate 3	
Percent distribution				
Total, 16 years and older	100.0	100.0	100.0	100.0
Full- or part-time status:[2]				
Full-time workers	52.9	53.6	57.1	81.8
Part-time workers	47.1	46.4	42.9	18.2
At work part time for:				
Economic reasons	77.5	77.7	80.3	85.5
Noneconomic reasons	22.5	22.4	19.7	14.5
Multiple jobholders				
Multiple job holding rate	10.4	9.3	8.8	6.5
Percent distribution [3]	100.0	100.0	100.0	100.0
Primary job full time, secondary job part time .	41.0	42.0	40.2	59.4
Primary and secondary jobs both part time	43.4	42.0	40.5	20.0
Primary and secondary jobs both full time	2.8	2.5	2.2	3.3
Hours vary on primary or secondary jobs	11.4	12.3	16.2	16.7
Proportion of full-time workers who combined part-time jobs	3.2	2.7	2.7	1.0
Usual hours of work (on all jobs)				
1 to 4 hours	1.5	2.5	1.8	.4
5 to 14 hours	11.9	11.1	10.0	2.5
15 to 29 hours	19.7	18.4	17.6	8.9
30 to 34 hours	6.2	6.2	5.5	4.1
35 to 39 hours	5.9	5.8	5.8	6.2
40 hours	30.8	30.1	31.2	44.8
41 to 48 hours	3.6	4.0	4.5	8.2
49 to 59 hours	4.7	4.8	5.6	10.2
60 hours or more	3.3	3.9	4.8	7.0
Usual hours on primary job vary	12.0	12.0	12.1	7.6
Usual hours on primary job not reported	.5	1.2	1.0	.1

[1] Noncontingent workers are those who do not fall into any estimate of "contingent" workers.
[2] Part-time is defined as 1 to 34 hours per week; full time is 35 hours or more. The classification of full- and part-time workers is based on the number of hours usually worked. The sum of the at-work part time categories would not equal the estimate for part-time workers as the latter includes those who had a job but were not at work in the reference week. Persons who are at work part time for an economic or noneconomic reason are limited to those who usually work part time.
[3] A small number of individuals who work part time on their primary jobs and full time on their secondary jobs are not shown separately.

NOTE: Detail may not sum to total due to rounding.

undoubtedly contributed to women's greater overall contingency rate, even though within educational services, men actually had slightly higher rates of contingency.

The only major industry groups in which women had a higher rate of contingency than men were retail trade and finance, insurance, and real estate, both of which had relatively low overall rates of contingency and, with respect to the distribution of men's and women's employment, employed proportionately fewer women. Overall, these estimates indicate that a slightly larger proportion of women were contingent not because of differences in employment within specific industries, but rather because women were employed in industries which used more contingent workers.

The picture for blacks is dramatically different. Blacks were slightly more likely to be employed in the services sector than were whites. Given that blacks and whites had virtually identical rates of contingency within the services industry, this could account for some of the differences in the racial composition of contingent and noncontingent workers. But, perhaps more importantly, blacks had higher rates of contingency than whites within the other industries that employed close to the majority of contingent workers. For example, in the construction industry, 12.1 percent to 17.4 percent of blacks were contingent, compared with only 3.8 percent to 7.4 percent of whites. Similarly, in retail trade, blacks' rates of contingency ranged from 3.0 percent to 5.1 percent, about double the rates for whites. The proportion of blacks employed in each of these industries was slightly smaller than the proportion of whites; however, the differences in the rates of contingency more than compensated. Even in the one major industry—transportation and public utilities—where blacks were disproportionately employed, their rates of contingency were higher. Specifically, in the transportation and public utilities industry, blacks' rates of contingency ranged from 2.1 percent to 3.8 percent, with the proportion of all blacks employed in this industry equaling 9.7 percent. By comparison, whites' contingency rates in this industry ranged from 1.0 percent to 2.7 percent and the proportion of all whites employed in this industry equaled 6.8 percent. Overall, these industry estimates suggest that blacks' higher rates of contingency were not simply a function of their employment distribution among various industries. Rather, blacks' higher rates of contingency also were a function of labor market factors within industries.

Hours of work

Another area of concern with respect to contingent workers is whether they are working as many hours as they wish or whether they are forced to accept jobs that are both insecure and offer them fewer hours of work than they need or desire.

The estimates in table 4 indicate that contingent workers were more likely to work part time than were noncontingent workers (where working part time was defined as *usually* working fewer than 35 hours a week). Specifically, the proportion of contingent workers who worked part time ranged from 47.1 percent under the narrowest estimate to 42.9 percent under the broadest estimate. In comparison, only about 18.2 percent of noncontingent workers worked part time. It is important to note, however, that although contingent workers were disproportionately part time in comparison with noncon-tingent workers, only 11 percent of all part-time workers were contingent even under the broadest definition.

Some of the higher rate of part-time work among those who were contingent is due to their greater concentration in industries, such as services, that utilize more part-time workers. However, the higher rate of part-time work among the contingent is mostly accounted for by their higher rate of part-time work within each industry. The proportion of contingent workers who worked part time was larger than that for noncontingent workers in every major industry group, ranging from 1.3 times larger in the agriculture industry under contingent estimate 3, to 4.6 times larger in manufacturing, and 5.6 times larger in public administration. Even within the services industry, the proportion of contingent workers who were working part time was about twice as large as the proportion of noncontingent workers who worked part time.

A similar pattern exists with respect to the occupational distribution of contingent and noncontingent workers who worked part time. Contingent workers were overrepresented in administrative support and sales occupations, which had proportionately more part-time workers than other occupations. However, within every occupational group, contingent workers were more likely to work part time than were their noncontingent counterparts.

Data in table 4 on the distribution of usual hours of work provide additional evidence of differences in work schedules. For example, the proportion of contingent workers who usually worked from 1 to 14 hours a week ranged from 11.8 percent under estimate 3 to 13.4 percent under estimate 1, while only 2.9 percent of noncontingent workers usually worked less than 15 hours per week. Conversely, contingent workers were much less likely to usually work more than 40 hours a week. More than 18 percent of the noncontingent usually worked 41 to 59 hours a week, and 7 percent worked 60 hours or more a week, about double the proportions of contingent workers.

Despite the larger proportion of contingent workers who were part time and usually worked a small number of hours a week, it is important to note that under all estimates, about 80 percent of contingent workers who worked part time did so for personal, noneconomic reasons.[5] Further, contingent workers working the smallest number of hours per week were much more likely to be voluntarily working part time than were contingent workers who usually worked 15 to 34 hours per week. Specifically, under contingent estimate 3, only 10.6 percent of those who usually worked from 1 to 14 hours a week were part time for economic reasons, compared with 23.2 percent of contingent workers who usually worked from 15 to 34 hours per week. However, the proportion of part-time contingent workers who were at work part time for economic reasons (19.7 to 22.5 percent) was larger than the comparable proportion of noncontingent workers (14.5 percent).[6] But it should be pointed out that only 15.2 percent of those who were part time for economic reasons were contingent. Consequently, although workers who were part time for economic reasons wanted a job in which they could work more hours, the vast majority could keep the job they had for as long as they wished.

Multiple jobholding

One way to obtain additional hours of work is to work at more than one job. The estimates in table 4 indicate that contingent workers were more likely than noncontingent workers to have two or more jobs. The proportion of contingent workers who were multiple jobholders ranged from about 8.8 percent to 10.6 percent, with the narrowest estimate having the highest multiple jobholding rate. Only 6.5 percent of noncontingent workers held more than one job. The estimates in table 4 also indicate that, unlike noncontingent workers, the largest proportion of contingent workers who were multiple jobholders had two or more part-time jobs. In contrast, noncontingent workers who were multiple jobholders were more likely to have one full-time and one part- time job. Besides being more likely to have two or more part-time jobs, contingent workers were also more likely to combine part-time jobs to obtain a full-time status than were noncontingent workers. Although relatively small as a proportion of full-time workers, be they contingent or noncon-tingent, approximately 3 percent of full-time contingent workers under any definition obtained this status by combining part-time jobs, compared with about 1.0 percent of noncontingent workers who usually worked more than 34 hours a week.

Of course, part of the reason contingent workers were more likely to be multiple jobholders could be related to the occupations and industries in which contingent workers were concentrated. For example, contingent workers were disproportionately represented in professional specialty occupations, which had above-average multiple jobholding rates even among noncontingent workers. Nearly one in ten noncontingent workers in a professional specialty occupation was a multiple jobholder, compared with 6.5 percent of all noncontingent workers. However, within every occupation, the proportion of contingent workers who were multiple jobholders was higher than the proportion of noncon-tingent workers who

	Table 5.	Union affiliation of wage and salary contingent and noncontingent workers by industy, February 1955

[Percent distribution]

Industry	Contingent workers						Noncontingent workers[1]	
	Estimate 1		Estimate 2		Estimate 3			
	Members of unions	Represented by unions	Members of unions	Represented by unions	Members of unions	Represented by unions	Members of unions	Represented by unions
Total, 16 years and older	8.4	8.9	8.0	8.6	9.8	11.4	15.7	17.5
Agriculture	(2)	(2)	(2)	(2)	(2)	2.4	1.2	2.8
Mining	39.6	39.6	39.6	39.6	14.2	14.2	8.3	9.1
Construction	37.4	37.7	36.4	36.8	39.4	40.2	17.0	19.1
Manufacturing	5.0	5.0	4.5	4.5	8.6	10.5	19.2	20.4
Transportation and public utilities	12.3	13.6	15.4	16.7	22.1	26.8	35.4	37.5
Wholesale trade	18.2	18.2	12.7	12.7	15.3	15.3	4.7	5.6
Retail trade	1.0	1.3	.8	1.2	1.1	1.4	5.7	6.4
Finance, insurance, and real estate	7.5	7.5	8.3	8.3	7.4	7.4	3.5	3.9
Services	4.3	4.9	3.8	4.6	5.8	7.4	15.4	17.8
Public administration	10.0	10.0	10.0	10.0	8.6	14.3	37.0	42.3

[1] Noncontingent workers are those who do not fall into any estimate of "contingent" workers.
[2] Less than 0.05 percent.

NOTE: Data refer to members of a labor union or an employee association similar to a union as well as workers who report no union affiliation but whose jobs are covered by a union or employee association contract.

professional specialty occupations, contingent workers under estimate 3 had a higher multiple jobholding rate than did noncontingent workers (12.4 percent versus 9.7 percent).

A similar pattern exists within industries. Contingent workers were concentrated in the services industry, which had a higher multiple jobholding rate, but within every industry group, the multiple jobholding rate for contingent workers was greater than the multiple jobholding rate for noncontingent workers. Although it is impossible to say for certain, some proportion of contingent workers may be holding more than one job to hedge against the loss of their contingent job.[7]

Contingent work and families

Beyond the issues surrounding contingent work and its effects on individuals, there also is concern that contingent work and the lack of job security it embodies can threaten the economic security of an entire family.[8] The first thing to note when examining contingency in the context of families is that, as a group, contingent workers were much less likely to be married than were noncontingent workers:

	Contingent workers			Non-contingent workers
	Estimate 1	Estimate 2	Estimate 3	
Percent married:				
16 years and older	36.0	39.6	44.7	61.9
25 years and older ..	55.2	57.9	60.3	68.9

This is at least partially attributable to the younger age of contingent workers. However, even for individuals who were over the age of 24, contingent workers were less likely to be married than were their noncontingent counterparts, although the difference was reduced.

Even among contingent workers who were married, the tabulation presented below indicates that the vast majority had spouses in noncontingent jobs:

	Contingent workers, estimate 3	
	Total	With children under 18
Married men (in percent):		
Wife employed, noncontingent	59.6	58.3
Wife employed, contingent	7.0	7.7
Wife unemployed	3.0	4.0
Wife not in labor force	30.4	30.1
Married women (in percent):		
Husband employed, noncontingent	79.4	84.8
Husband employed, contingent	6.7	6.6
Husband unemployed	2.7	3.0
Husband not in labor force	9.8	4.5

When examining the possible effect of contingent work on children, it is necessary to examine the proportion of all women with children under age 18 who were contingent, along with the employment status of the husbands of married women in contingent jobs who had children under age 18. Overall, only about 3 percent of all women with children under age 18 were contingent even under the broadest estimate. Further, more than four-fifths of married women with children under age 18 who were in contingent jobs had husbands who were in noncontingent jobs. Taken together, the data shown above suggest that relatively few families are at risk of losing their sole means of support through the loss of a contingent job.

Demand factors

The previous sections have dealt with various attributes of contingent workers. There also is interest in factors that might be contributing to the demand for contingent workers. Some have

argued that, among many possible reasons, the use of contingent workers has arisen because of the decline in unionism, which permits firms to take advantage of the cost savings embodied in more flexible staffing arrangements.[9] Others have argued that firms might use contingent workers to buffer against fluctuations in demand caused by either seasonality or changes in the business cycle. According to this argument, for firms facing an increase in demand, the alternative to using contingent workers may not be using noncontingent workers, but using methods of meeting demand with a given level of workers, such as increasing overtime or drawing down inventory. Consequently, without contingent employment, the choice for some individuals may not be a noncontingent job, but rather unemployment. As a preliminary examination of issues related to the use of contingent workers, this section explores the unionization rates of contingent and noncontingent workers and compares rates of contingency within specific industries in February 1995 with these industries' variation in employment.

Unionization.   Without historical data, one cannot establish a correlation between contingency and the decline in unionization. However, if such a correlation were to exist, one might also expect industries with low unionization rates to have relatively few contingent workers. Following are unionization rates for wage and salary workers and contingency rates by industry in February 1995:

	Unionization rate		Contingency rate (estimate 3)
	Member of unions	Represented by unions	
Total employed, 16 years and older (in percent)	15.3	17.0	4.9
Agriculture	2.8	4.9	5.0
Mining	8.6	9.3	2.7
Construction	18.5	20.2	8.4
Manufacturing	19.1	20.1	3.1
Transportation and public utilities	34.7	36.8	3.0
Wholesale trade	5.1	5.9	2.3
Retail trade	5.7	6.3	3.0
Finance, insurance, and real estate	3.2	3.6	2.0
Services	14.5	16.7	7.5
Public administration	36.9	42.0	3.6

Industrywide unionization rates indicate that the two industries with the highest unionization rates—public administration and transportation and public utilities—also had below-average rates of contingency.

At the same time, however, the finance, insurance, and real estate industry had both the lowest rate of contingency and one of the lowest rates of unionization. In addition, the two industries with the highest rates of contingency—construction and services—had about average rates of unionization. The lack of an obvious relationship between industrywide

unionization rates and contingency suggests that, at least in the aggregate, the use of contingent workers may be more related to the characteristics of specific industries rather than the overall trend in unionization.

In addition to comparing rates of unionization and the rates of contingency within industries, it also is interesting to compare the proportion of contingent and noncontingent workers who are unionized. Given that a major goal of unions is to obtain job security for their members, it is not surprising that noncontingent workers were much more likely to be members of a union than were contingent workers. (See table 5.) Contingent workers also were less likely to work at a job covered by a union contract, a broader measure of unionization which includes individuals in jobs covered by a union or employee association contract regardless of whether the individuals actually were union members. From 8.6 percent to 11.4 percent of wage and salary contingent workers, depending on the definition chosen, were covered by a union or employee association contract, compared with 17.5 percent of noncontingent workers.

Despite the overall lower rates of union membership and union coverage of contingent workers, there was a great deal of heterogeneity among the various industries. In fact, there were several industries in which the proportion of contingent workers who were members of a union or covered by a union contract was actually higher than the proportion of noncontingent workers. For instance, in the construction industry, 39.4 percent of contingent workers under estimate 3 were members of a union, compared with only 17.0 percent of noncontingent workers. In contrast, in several industries, the proportion of contingent workers who were union members or covered by a union contract was substantially lower than for noncontingent workers. In manufacturing and services, union membership rates for contingent workers under estimate 1 were only about a third as high as they were for noncontingent workers. The large degree of heterogeneity among the various industries in the unionization rates of contingent and noncontingent workers suggests that the effect of unionization on contingent employment and workers' job security is industry specific. The rate of unionization of contingent workers and unionization's effect on the level of contingent employment within an industry such as construction may have more to do with the specific industry and historical employment relationships than with the presence or absence of a union. Consequently, making a blanket statement about the relationship between unionization and contingent workers would be inappropriate.

Variation over time.   Several authors have suggested that employers use contingent and similar workers to address variability in demand for their products or to deal with increased foreign competition.[10] A measure that indicates that industry-wide variation in demand is at least partially met through changes in employment, as opposed to some other means

such as stockpiling or overtime, is the relative variation of employment within industries. One would expect that industries with higher relative variation in employment over time would also employ more contingent workers. The tabulation below contain a measure of the relative variation in employment along with rates of contingency by industry. The measure of relative variation in employment is the standard deviation of employment divided by the mean level of employment, where employment is measured quarterly and the time period covered is the second quarter of 1994 to the second quarter of 1995:[11]

	Relative variation in employment (II 1994 to II 1995)	Contingency rate (estimate 3)
Agriculture	0.098	5.0
Mining	.022	2.7
Construction	.042	8.4
Manufacturing	.005	3.1
Transportation and public utilities	.010	3.0
Wholesale trade	.013	2.3
Retail trade	.015	3.0
Finance, insurance, and real estate	.011	2.0
Services	.015	7.5

Comparisons of the relative variation in employment and the rates of contingency do indicate that two of the industries with the highest relative variation in employment also had two of the higher rates of contingency—construction and agriculture. Further, the three industries with the lowest relative variation in employment—manufacturing, wholesale trade, and finance, insurance, and real estate—had below-average rates of contingency. However, the services industry, which had a high rate of contingency, only had a moderate rate of variation in employment. Overall, the comparisons within industries of the relative variation in employment and rates of contingency tentatively suggest that, by and large, industries with more relative variation in employment over time also had higher rates of contingency. Whether this correspondence is due to seasonality or uncertainty in demand and whether it would be true at more dissaggregate industry levels are areas for additional research. In addition, to further explore the relation between variation in demand and the use of contingent workers, it would be desirable to have both firm level data and data on contingent workers over a longer time span under different economic circumstances.

Summary

This article presented a profile of contingent workers as measured by the February 1995 supplement to the CPS, and briefly touched on some of the factors that might be influencing the demand for contingent workers. In summary, contingent workers were more likely to be female, black, under the age of 25, and enrolled in school than were noncontingent workers. Contingent workers were also more likely to be in the services and construction industries. This higher concentration of contingent workers in the services industry at least partially accounted for the disproportionate number of workers who were female. Blacks, however, had a higher rate of contingency within every major industry group.

Contrary to their stereotypical image as low-skilled workers, contingent workers were found in a wide variety of occupations. More than 10 percent of contingent workers under the broadest estimate were teachers or professors. Contingent workers were more likely to be multiple jobholders and work part time but it is important to point out that the majority of contingent workers who worked part time did so voluntarily. Further, while contingent workers were more likely to be employed part time than were noncontingent workers, only 11 percent of part-time workers were contingent even under the broadest estimate. Finally, the relationship between rates of contingency and unionization rates varied considerably by industry, with some industries, such as construction, having higher rates of unionization among contingent workers than noncontingent workers. The relationship between the variation in the level of industry employment and the rate of contingency in these industries seem to indicate that industries with more variable employment also had higher rates of contingency.

Overall, examination of the characteristics of contingent workers reveals that they are quite a diverse group of individuals. Some types of contingent workers, such as construction workers and substitute teachers, have been a part of the American economy almost since the country's inception. Other types of contingent workers, such as computer operators who obtain their assignments through temporary help agencies, are a relatively recent phenomenon. As the U.S. economy continues to evolve into the next century, the analysis of contingent workers will be of continued interest and the profile of contingent workers may change. At the moment, however, the diversity in the characteristics of contingent workers belies attempts to classify all contingent jobs as bad jobs. □

Footnotes

[1] See, for example, Heidi Hartmann and June Lapidus, "Temporary Work," in *Investing in People* (Washington, DC, Commission on Workforce Quality and Labor Market Efficiency, U.S. Department of Labor, September 1989), pp. 1559–1608; and Polly Callaghan and Heidi Hartmann, *Contingent Work:*

A Chart Book on Part Time and Temporary Employment (Washington, DC, Economic Policy Institute, 1991).

[2] Individuals aged 16 to 24 are the only ones actually asked the school enrollment questions in the CPS. For the estimates presented in table 2, indi-

viduals aged 25 and older were assumed not to be enrolled in school.

[3] High rates of turnover can be inferred from the historically low median and mean years of tenure of workers in the retail trade industry. (See *Report on the American Workforce*, U.S. Department of Labor, 1995). Malcolm Cohen in "Study on the Feasibility of Using Labor Market Information for Alien Labor Certification Determination" calculated "replacement demand" from 1986 to 1987 which directly measured the extent of turnover within occupations. This study found cashiers and salesworkers (other commodities) had extremely high turnover rates. Given that these occupations are disproportionately represented in the retail trade industry, these occupational turnover rates also can be used to infer that the turnover rate within the retail industry is high.

[4] The other transportation equipment industrial sector includes ship and boat building and repairing; railroad locomotives and equipment; and guided missiles, space vehicles, and parts. Another industry which might have a large amount of seasonality in demand, toys, amusement goods, and sporting goods, had above-average rates of contingency, but the sample size was to small to measure the number of contingent workers within this industry with any precision.

[5] In the CPS, individuals who work part time are asked both if they would like to work full time, and what their main reason for working part time is. Reasons for voluntarily working part time include family or personal obligations, health or medical limitations, child care problems, or being in school or training.

[6] Some critics (for example, the Employment Policy Institute in its Job Fax "New survey provides snapshot of contingent workforce," Aug. 17, 1995) would like to include both individuals who are contingent and those who usually work part time for economic reasons into a single category. Using contingent estimate 3, if these two groups are combined and double counting is eliminated, 7.3 percent of the employed in February would have been included.

[7] It also could be that contingent workers are more likely to be multiple jobholders because of the professions they are in or the need and desire for additional income regardless of their contingent status. The earnings of contingent workers are analyzed in Steven Hipple and Jay Stewart, "Earnings and benefits of contingent and noncontingent workers," this issue, pp. 22–30."

[8] Jackie Chu, Sonya Smallets, and Jill Braunstein, *The Economic Impact of Contingent Work on Women and Their Families*, Research-in-Brief (Washington, DC, Institute for Women's Policy Research, September 1995).

[9] For example, Lonnie Golden and Eileen Appelbaum in "What Was Driving the 1982–88 Boom in Temporary Employment?" (*American Journal of Economics and Sociology*, October 1992, p. 473) note, "The diminishing bargaining power of labor unions allows employers to exploit the labor cost savings of temporary hires. . . ."

[10] For example, see Katharine G. Abraham, "The Role of Flexible Staffing Arrangements in Employers' Short-term Adjustment Strategies" (London, George Allen and Unwin, 1988),

[11] The relative variation in employment for each industry was calculated using levels of employment reported in administrative records on employees covered by unemployment insurance tax laws (ES 202). Information on individuals in public administration is not available from these records.