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ABSTRACT

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Atypical employment, such as temporary, on-call, and contract work, has been found disproportionately to attract the jobless. But there is no consensus in the literature as to the labour market consequences of such job choice by unemployed individuals. Using data from the Current Population Survey, we investigate the implications of the initial job-finding strategies pursued by the jobless for their short- and medium-term employment stability. At first sight, it appears that taking an offer of regular employment provides the greatest degree of employment continuity for the jobless. However, closer inspection indicates that the jobless who take up atypical employment are not only more likely to be employed one month and one year later than those who continue to search, but also to enjoy employment continuity that is no less favorable than that offered by regular, open-ended employment.

JEL Classification: J40, J64, J20

Keywords: atypical/contingent work, open-ended employment, employment continuity, unemployment, inactivity

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I. Introduction

Both jobless and disadvantaged individuals have been found disproportionately to select employment in an atypical work arrangement such as temporary, on-call, consulting, and contracting work (Golden, 1996; Farber, 1999; Booth et al., 2002; Zijl et al., 2004; Addison and Surfield, 2006). These alternative work arrangements may be attractive for a number of reasons. At a very basic level, they offer the jobless a means of escaping unemployment. Atypical employment may also provide those new to the labour market with valuable skills and training, and thereby improve their future labour market prospects. Further, one particular work form – agency temporary employment – may offer firms economies of scale in the matching, screening, and training of potential hires (Autor, 2001). And the lower search and dismissal costs thought to be implied by agency temporary employment may provide high-risk individuals, such as former welfare recipients, a chance to reveal their true match quality to the firm (Heinrich et al., 2005; Autor and Houseman, 2005a, 2005b).

Although the literature is in agreement in reporting that atypical work offers short-run relief from unemployment, there is no consensus on the medium- and longer-term labour market implications of atypical work for the jobless. One primary criticism is that atypical work provides only insecure and unstable employment vis-à-vis regular employment (Houseman and Polivka, 2000). If this is the case, the use of these alternative work arrangements by the unemployed is but a temporary palliative, a poor substitute for continued search unemployment. The most recent expression of this concern that the jobless will cycle between atypical employment and unemployment is to be found in Autor and Houseman (2005a, 2005b). That said, the balance of the U.S. evidence is more positive (e.g. Heinrich et al., 2005). Equally,

recent *European* research indicates that atypical work can lead either immediately (after some induction period) to open-ended employment or otherwise help secure a more stable labour market future (e.g. Zijl et al., 2004). The complication here of course is the rigidity of labour markets to begin with.

In the present paper, we seek to provide more U.S. evidence. Apart from providing updated information, our main contribution is that we consider a wider array of atypical work forms, using a large and nationally representative dataset more likely to reflect the outcomes experienced by the average unemployed worker. Our treatment begins with a parsimonious literature review, highlighting two studies that are representative of each position taken in the debate over atypical work. We then discuss our dataset – the Contingent and Alternative Employment Arrangement Supplement (CAEAS) to the Current Population Survey (CPS) – and present some descriptive statistics of labour market status and work arrangement in the wake of unemployment. Next, we offer a detailed cet. par. analysis. A brief summary concludes.

II. Existing Work

The extant literature reports that the jobless are disproportionately reemployed in atypical work arrangements. At issue is the efficacy of these alternative work arrangements. We briefly review two state-of-the-art studies to demonstrate the division in the literature. Representative of the majority view that alternative work arrangements provide unemployed workers with the stepping stones to regular work and more stable employment is the study by Zijl et al. (2004) using Dutch data. The authors' structural duration model indicates that atypical work increases the likelihood that an unemployed worker will transition into open-ended employment. The focus then is upon

the length of time between entering unemployment and obtaining regular employment in a framework that controls for unobserved individual heterogeneity by including up to three spells of unemployment per individual. Repeated spells permit the estimation of a worker-specific effect, and hence control for the possibility that some workers find it easier to attract an offer of regular employment for reasons (e.g. ability) that are not observed in the data. For those jobless workers who, for whatever reason, cannot attract an offer of open-ended employment, this Dutch analysis supports the use of temporary work as a means to transition into regular work. Those jobless who initially take a temporary job experience much higher subsequent transition rates into regular employment when compared to those jobless who eschewed temporary work.

Autor and Houseman (2005b) provide a quite different set of results in their analysis of quasi-experimental data from the Michigan Work First job placement program. That is, entering into temporary employment may actually be harmful to the jobless. Autor and Houseman find that those workers who were randomly assigned to temporary jobs face both a substantial wage penalty relative to those given direct-hire placements *and* stay employed for fewer quarters relative to their counterparts in regular employment. The authors' explanation is that being assigned to a temporary job crowds out productive job searching. Any short-run benefits of temporary work do not offset the long-run benefits in the form of higher earnings and more stable employment that accrue to those initially receiving a direct-hire placement. Alternatively put, the jobless should remain unemployed and continue searching for a permanent position rather than take a temporary job.

We can address the issue of whether the jobless should continue their job search as opposed to taking atypical employment in the present study. Although data limitations mean that

we cannot track transitions into and out of temporary and regular work, we are able to determine whether an unemployed worker holds employment of some kind one month and one year after the point at which he/she is observed to be unemployed. By examining the strategies adopted by a cohort of jobless workers as a response to unemployment, we can estimate the effect that taking an atypical job has on employment continuity.

As noted earlier, we also expand the definition of atypical employment to include on-call and contracting/consulting work. This 'broadening' is nontrivial because of all the types of atypical employment most commonly investigated in the literature – agency temporary work – is the second smallest (after contract jobs, see below). Thus, contractors/consultants and direct-hire temporary workers (as well as on-call workers) are far more prevalent in the U.S. workforce than are agency temporaries. We also address a second concern with the U.S. literature in particular, namely, its focus on relatively narrow subgroups such as single-parent welfare recipients (Heinrich et al., 2005) or single states (Segal and Sullivan, 1997; Autor and Houseman, 2005a, 2005b). To repeat, we use nationally representative data and thus seek to derive inferences that can be generalized across the jobless population as a whole.

III. Data

Our dataset is the Contingent and Alternative Employment Arrangement Supplement (CAEAS) which was added to the Current Population Survey in February 1995 to facilitate the study of alternative work arrangements. Like its better-known counterpart, the Displaced Worker Survey (DWS), the CAEAS is administered biennially. As with other supplements, the data on work

arrangements in the CAEAS can be combined with detailed demographic and human capital information on the respondent contained in the parent CPS.

While the CPS was not designed to be a longitudinal dataset, it is possible to uniquely identify the respondents contained across its surveys for up to a maximum of sixteen months (Madrian and Lefgren, 1999; Addison and Surfield, 2006). Workers are actively interviewed for four months, rotated out for another eight, and then re-interviewed for a further four months prior to being permanently rotated out of the CPS. We identify the jobless and their source of unemployment from the January CPS surveys conducted in odd years.[1] This restriction is imposed because we can identify the selection of atypical work by the jobless only in the Februaries of odd years, namely, 1997, 1999, 2001, and 2005.[2,3] As a result, the best we can do is examine the role that atypical work plays in a worker's labour market history for up to a year by matching individuals across the following three surveys: the January CPS surveys of odd years, the February CAEAS, and the February CPS conducted one year after the CAEAS. Using these surveys, we create four cohorts: one for each year the CAEAS was administered.[4] Since there is no overlap of individuals across the cohorts, we pool the data.

We can (initially) identify eight possible strategies of the jobless in the wake of the unemployment event. Apart from remaining unemployed (*took no job*) or moving out of the

[1] Identifying the jobless in January, rather than earlier months, was undertaken to preserve sample sizes. Given the rotational pattern of the CPS, we lose one-quarter of our sample in each of the months that precede the CAEAS.

[2] Although the CAEAS was first administered in 1995, we cannot use this wave in the current treatment since a redesign of the CPS prevents us from matching workers found in the February 1995 CAEAS to CPS surveys conducted after September 1995.

[3] The CAEAS was not administered in 2003 due to budgetary considerations.

[4] For additional discussion on the design of the CPS and the matching of individuals across the surveys, see Addison and Surfield (2006). One caveat concerning the use of the 2001 CAEAS needs to be made. Due to a BLS

labour force (*left the labour market*), workers can either transition into open-ended employment (*took a regular job*) or one of the five following types of atypical employment:

(i) *agency temporary job*, where workers rely on a temporary help service to secure their job tasks, or receive their paycheck from a temporary help service. The latter condition inevitably entails the inclusion of some individuals who have regular, open-ended employment with the agency, although Houseman and Polivka (2000) point out that such employees constitute only 3.2 percent of an agency's total employment;

(ii) *direct-hire temporary job*, where (temporary) workers provide their services directly to the paycheck-issuing entity. This category also includes workers who indicate that they are hired directly by the client firm to fill a temporary position, complete a specific project, or substitute for an absent or vacationing employee. Direct-hires are those hired by a firm for only a fixed period of time, or into seasonal jobs;

(iii) *on-call job*, where workers are employed by a firm on a per-diem or as-needed basis, including day labourers;

(iv) *contract job*, where workers rely on a third party to provide clients or projects on a contractual basis;

(v) *contracting/consulting job*, where workers are self-employed contractors and consultants and directly responsible for acquiring clients or projects.

We grouped agency temporary employment and direct-hire temporary work into the single category *temporary job*, as initial likelihood-ratio tests revealed that the two work forms had similar labour market implications for the jobless. Also, as a practical matter, sample size

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programming error, the outgoing rotations of the CPS were not administered the supplement. Necessarily, these individuals are omitted from our analysis.

considerations meant that we folded contract and contracting/consulting jobs into the category *contracting job*.

There are three possible outcomes that the jobless can experience. These outcomes are being *employed*, remaining *unemployed*, and transitioning *out of the labour force*. We observe these outcomes at two points: first at one month and second at one year following the February CAEAS, from which we infer the short-term and medium-term effects of atypical work on employment continuity. We note parenthetically that if the individual is employed at either or both dates we cannot identify the type of employment as the CPS only collects information on atypical employment via the CAEAS.

The data contained in the CPS do allow us to identify the source of a worker's unemployment. We control for cause of unemployment since it likely affects the probability of reemployment. For example, those workers who voluntarily left their previous job may have already secured a (better) offer of employment, while new entrants presumably face higher search costs. Following Bureau of Labor Statistics conventions, we classify the jobless (in Januaries of odd years) into one of five exclusive unemployment categories: *job losers*, those whose *temporary job ended*, *job leavers*, *new entrants*, and *re-entrants*.

The CPS data also provides the number of weeks that a worker has spent searching for a job prior to his or her January interview. We include this reported *elapsed duration*, expressed in months, as an inverse proxy for a worker's attractiveness to a firm. This variable serves as an indirect control for worker motivation and ability. Such characteristics likely influence the probability of a worker being re-employed and they are presumably observable to potential employers if not in our CPS data. It may also be the case that longer spells of unemployment

lead individuals disproportionately to enter into atypical work as employment of last resort. In such cases, it would not be surprising to observe workers subsequently re-entering unemployment. Note that data limitations prevent us from updating the length of unemployment past the January interview (particularly for those who chose to continue the search past the February CAEAS).

Finally, in constructing our four cohorts we excluded those individuals for whom we lack the requisite information on type of alternative work arrangement or demographic and human capital characteristics (age, education, ethnicity, gender, marital status, region, and urban residence). On grounds of their likely very different attachment to the labour force, we also excluded those individuals aged above sixty-five years and below twenty-two years.

(Table 1 near here)

Tabulations of the labour market outcomes experienced by the jobless one month and one year after the February CAEAS are given in Table 1. We report these outcomes by the strategies adopted by the jobless (in February) as a response to their unemployment (in January). As can be seen, taking a job of any kind, be it atypical or regular work, serves to significantly increase the probability of being employed in March when compared to those who had continued their job search. About twenty-three percent of those who did not take a job in February had secured a position of some kind in March. Compare this figure with the eighty-two percent of those who took a regular job in February and who remained employed one month later. Also, compare it with the high proportion (never less than 75 percent) of those who took an atypical job and remained employed in March.

Turning to the labour market outcomes one year later, we see that atypical workers have a similar likelihood of being employed as their counterparts who took an offer of regular employment. Seventy-two to seventy-eight percent of the jobless who took up an offer of atypical employment held a job one year later, while seventy-eight percent of those who were observed to have initially taken an offer of regular employment held a job one year after the administration of the CAEAS. Interestingly, the specific finding for temporary work contrasts with the results of Autor and Houseman (2005b). More generally, the 'advantage' from initially taking an offer of employment diminishes somewhat over time – since about fifty-five percent of those who opted to continue their job search and took no job in February were observed as holding employment of some kind one year later – but it nonetheless remains sizeable. That is to say, the differential in employment rates between those who took an atypical job and those who had continued their job search is still about seventeen to twenty-four percentage points.

(Table 2 near here)

Table 2 provides cross tabulations of the strategies pursued by individuals in February by their source of joblessness one month earlier. Evidently, the large majority of those unemployed continue to search for employment. With the exception of re-entrants, we see that more than fifty percent of those who were jobless in January remained so in the following February. For those returning to the labour market, we see that about forty-nine percent continued their job search, with approximately one-third leaving the labour force altogether. This exit rate is significantly higher than those observed for the other four sources of joblessness.

Consistent with the findings of Zijl et al. (2004) of those who did accept an offer of employment in February, we see that taking a regular job was the most common transition made

by the jobless. Taking a temporary job emerges as a distant second choice made by those jobless transitioning into employment. Finally, when we examine the number of months that the jobless had spent searching for employment prior to January, we observe the familiar result that new and returning entrants to the labour market experience relatively longer search durations. These longer elapsed durations will be shown to have some explanatory power in examining the probability that such workers will be employed at later points in time.

IV. Multinomial Logit Results

Although these tabulations of labour market outcomes are suggestive, we need to take (observed) differences in the characteristics of individuals into account. To this end, we estimate a multinomial choice model. Ceteris paribus, the multinomial logit provides estimates of the probability of observing an individual possessing a particular characteristic in an outcome *relative* to the probability of a reference characteristic being observed in the outcome. For example, we can examine how much more (or less) likely the jobless who select temporary employment are to be employed than are those who opted to continue their job search in February.

We treat those who took no job in February as the reference category. The goal is to determine whether or not taking an offer of atypical employment results in improved employment stability relative to continuing the job search. For each time period analyzed (e.g. one month and one year later), we provide two specifications. The first includes only the demographic characteristics, source of joblessness, and the strategy adopted by the jobless in February. The second includes the average annual state unemployment rate and the elapsed

duration of a worker's spell of unemployment. To control for the effect that local labour market conditions have on the probability of observing a worker being employed at the end of each interval analyzed in this study, we use the average annual state unemployment rate for the prior year. For example, we use the unemployment rate for 1996 (1997) when evaluating the probability of a worker being employed in March 1997 (February 1998). We use the prior year's unemployment rate as it most closely reflects the labour market conditions over the course of the interval examined. For its part, the elapsed duration of a worker's spell of unemployment serves as an inverse proxy for worker quality and, as further noted above, is measured as the number of months spent in unemployment prior to the January interview.

(Table 3 near here)

Table 3 provides the results obtained from our analysis of the labour market outcomes observed for the jobless one month after the administration of the CAEAS. Statistically significant and positively-signed coefficient estimates attach to taking an offer of some kind of employment across both specifications. Again, these coefficient estimates represent the impact that taking a job of some kind will have on the probability of an individual being employed one month later rather than being unemployed when compared to his/her counterpart who had continued searching. Accordingly, these positive coefficient estimates imply that the jobless who adopt atypical work as a job-finding strategy are more likely to be employed than to be unemployed one month later when compared to those who initially took no job.

Before turning to a more detailed discussion of the results obtained for the employed outcome, let us briefly comment on the probability that a worker will move *out of the labour force* one month after the administration of the CAEAS. Information on these exits is provided in

the last three columns of Table 3. Not surprisingly, we find that those who chose to leave the labour market in February are significantly more likely to be observed out of the labour force one month later when compared to those who had continued their job search. One result that deserves closer examination is the finding that taking an offer of open-ended employment appears to statistically increase the probability that a worker will exit the labour force one month later. Given that (continued) unemployment is a dominant outcome for those who opted to continue searching for employment, we should not take the coefficient estimate to imply that those who took an offer of regular employment have lower labour market attachment**.** Rather, the coefficient is indicating that workers who take offers of regular employment are more likely to be observed as moving out of the labour force relative to being unemployed *when compared* to the relative probability attached to those who took no job initially. To obtain the impact that each characteristic has on the independent probability of being observed in that outcome, we must look to the marginal effect shown in brackets. As expected, we find that taking a regular job reduces, by about four percentage points, the *absolute* probability of a worker leaving the labour force one month after the CAEAS.

Returning to the probability that a worker will be observed in the employed outcome, the results highlighted in Table 3 provide broad support for the use of atypical employment as a means to obtain at least some degree of employment stability. For those who took a temporary job, there is a forty-nine percentage point increase in the probability that the individual will be employed one month later. This increase in the probability that the individual will be employed in March is seemingly higher for those who took a contracting position; engaging in this atypical arrangement increases by eighty percentage points the probability of holding employment one

month later. The increase in the probability that a worker who took an on-call job will be employed one month after the CAEAS is about fifty-four percentage points.

As a practical matter, however, the surprising result is that the estimated effects on the probability of observing a worker being employed one month later are fairly uniform across not only the three forms of atypical employment but also between atypical and open-ended employment. Only when we fail to control for the elapsed duration and unemployment rate do we find weak evidence that the various types of employment have differing implications for the jobless and their labour market outcomes. We provide the relevant likelihood ratio tests below, but for the moment simply present in the third column of Table 3 the results from collapsing regular and atypical work into a single category – the other coefficient estimates reported in the second column of the table stand, and are not repeated. As is apparent, taking a job, be it atypical or otherwise, serves to increase the probability that a worker will be employed one month after the CAEAS by approximately sixty percentage points.

As far as the other regressors are concerned, the effect of the local unemployment rate on relative reemployment probability is negative as expected, but the point estimate is poorly determined. The negative coefficient estimate for elapsed duration of unemployment is significant, however, and implies that longer spells of unemployment decrease the probability of being employed one month later. Specifically, each month previously spent searching for a position reduces the likelihood that a worker will be observed holding employment by about two percentage points.

Interestingly, with the exception of job losers, the sources of unemployment appear not to have any material impact on the labour market outcomes experienced by the jobless. Those who

lost their jobs involuntarily, perhaps due to layoff or plant shutdown, exhibit strong labour market attachment when compared to those who voluntarily left their prior job-match. Involuntary unemployment reduces the likelihood that a worker will move out of the labour force one month later in the range of eight to nine percentage points.

(Table 4 near here)

Next consider the labour market outcomes experienced by the jobless *one year after* the administration of the CAEAS. The results are provided in Table 4.[5] As would be expected, taking a regular job significantly increases the likelihood that the individual will be employed one year later relative to those who had earlier continued their job search. From the first two columns of the table, we see that receiving and accepting an offer of open-ended employment increases the probability that the individual will be observed holding employment of some kind one year after the CAEAS by about eighteen percentage points.

Our results still support the use of atypical employment by the jobless as a means of increasing their employment stability over the course of a year. We obtain robust coefficient estimates for two out of three types of atypical employment, with the third being marginally significant. Taking a temporary job raises the probability that a worker will be employed one year later by between twenty-one and twenty-two percentage points, with those who took a contracting job having a twenty-seven percentage point increase in the likelihood that they will hold a job of some type after one year. The third type of atypical employment – on-call work – increases the likelihood that a worker will be observed holding employment after one year by about seventeen percentage points.

Likelihood ratio tests given below indicate that the implications for an individual's employment continuity are fairly uniform across the different job types. This result is a rather important one as it fails to support the notion that atypical work is a short-term palliative. Over the course of one year, the jobless who take up an offer of atypical work are just as likely to remain employed as are those who accepted an offer of regular employment, and are significantly more likely to be employed than are those who elected to continue with job search. From the third column of the table, we observe that taking a job of any kind increases the probability that a worker will be employed one year later by about nineteen percentage points.

Before turning to note the (generally statistically insignificant) effects of the other regressors on employment probabilities, we briefly address exits from the labour force. We again find that the coefficient estimate for (initially taking) open-ended employment is positive, although on this occasion it lacks significance. The general lack of significance would suggest that those who took up an offer of employment one year before are just as likely to economically active as are those who opted to continue the search. As expected, those whose response to joblessness was to leave the labour force are significantly more likely to be observed out of labour market one year after the CAEAS was administered.

When we aggregate the various forms employment (into the composite 'took any type of job'), we obtain a positive and statistically significant coefficient estimate. This result can be attributed to two factors. First, the composite category contains a larger number of the jobless than the individual work forms, which serves to reduce the size of the standard error. Second, as was previously the case, the positive sign attaching to the estimated coefficient can be explained

[5] We present the full findings obtained for the analysis of labour market outcomes one year after the administration of the CAEAS in Appendix Table 1. The results for the labour market outcomes after one month can be obtained

by the greater propensity of the reference category (i.e. those who initially took no job) to be still unemployed rather than to have left the labour force than is the case among those who took any type of employment**.** From the marginal effect reported in brackets, we see that taking a job decreases the probability of a worker exiting the labour force by about four percentage points.

Unlike our prior analysis of the labour market outcomes experienced by the jobless one month after the CAEAS, it would appear that the source of joblessness now influences the probability that a worker will be observed as holding a job one year later. Two sources of joblessness in particular, involuntary job loss and being a labour market re-entrant, significantly decrease the likelihood that a worker will be re-employed over the course of a year. Those who lost their jobs involuntarily in the prior year are five to six percentage points less likely to have secured a job, with those returning to the labour market being fourteen to fifteen percentage points less likely to hold employment of some kind. With respect to labour market exits, we again find that job losers evince stronger labour market attachment than those who voluntarily separated from their employer.

As far as the remaining regressors are concerned, first observe that whatever influence elapsed duration has in the short term does not seemingly carry over to the medium term, although note that we cannot cumulate joblessness subsequent to that observed in January. Second, we also find that the average annual unemployment rate over the year does not materially influence labour market outcomes one year after the administration of the CAEAS.

(Insert Table 5 near here)

As alluded to earlier, we now present the results obtained from likelihood ratio tests. The first hypothesis examined is that the different types of atypical work hold similar implications for

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from the authors upon request.

labour market outcomes. The second is that taking an atypical job is in this regard no different from taking an offer of regular employment. Table 5 presents four sets of results, testing the two hypotheses across each of the time intervals and specifications considered here. As can be seen, we cannot reject the possibility that the various forms of atypical work lead to similar outcomes for the jobless. Only one result, that for labour market outcomes one month after the CAEAS and for a specification omitting elapsed jobless duration, favours regular employment over atypical work.

Taken together our cet. par. results fail to endorse the concerns of Autor and Houseman (2005a, b), at least from the perspective of employment security. Over the window of a year, the jobless who take up an offer of atypical work are more likely to remain employed than are those who may have shunned such employment in search of a better offer. Indeed, our additional tests suggest that atypical employment may not differ materially from open-ended employment in generating employment stability. In short, we do not find evidence that taking an atypical job, rather than continuing to search, only results in a short-term reemployment gain that is subsequently undone by elevated transitions into unemployment over the course of a year.

VI. Concluding Remarks

Taking an atypical job appears to be a viable means of transitioning into more stable employment. Our analysis suggests that these alternative work forms do not harm the jobless in the medium run. Rather, workers who elect to take such positions are more likely to be employed one year later than are those who continue their job search. Indeed, atypical work seems to offer no less employment continuity than does regular employment. That said, data limitations prevented us from examining the potential for atypical employment to serve as a stepping stone to open-ended employment, so the quality of the two sets of job remains an issue. But for those workers who may initially have failed to attract an offer of open-ended employment, our results show that taking an offer of atypical employment may be preferable to further job search.

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Table 1: Subsequent Labour Market Outcomes by Initial Response to Joblessness, Pooled CAEAS/CPS Data (in percent)

	One Month After Administration of CAEAS (March of odd years)			One Year After Administration of CAEAS (February of even years)		
	Employed	Unemployed	Out of Labour Force	Employed	Unemployed	Out of Labour Force
Took a regular job	82.2	11.7	6.2	77.6	11.3	11.1
Took a temporary job	76.0	22.0	2.0	75.9	14.4	9.6
Took an on-call job	76.0	22.8	1.2	71.6	18.7	9.7
Took a contracting job	90.2	9.8	0.0	78.4	3.8	17.9
Took no job	23.1	63.0	13.9	54.5	27.4	18.1
Left the labour market	20.0	29.7	50.3	40.6	14.4	45.0
n = 1,262						

Note: Rows may not sum to 100% due to rounding errors.

Table 2: Initial Response to Joblessness by Source of Unemployment, Pooled CAEAS/CPS Data (in percent)

	Job Losers	Temporary Job Ended	Job Leavers	New Entrants	Re-Entrants
Took a regular job	19.8	17.7	17.0	19.6	10.9
Took a temporary job	2.8	2.8	3.8	0.0	3.3
Took an on-call job	3.5	2.5	2.3	0.0	1.5
Took a contracting job	1.7	3.6	1.8	0.0	2.7
Took no job	61.0	59.7	52.2	61.0	48.8
Left the labour market	11.2	13.7	22.9	19.4	32.7
Elapsed duration (in months)	3.27 (4.41)	3.70 (4.14)	4.35 (6.64)	7.46 (8.98)	5.61 (7.17)
n	684	144	112	25	297

Notes: Columns may not sum to 100% due to rounding errors. Elapsed duration reported as mean (standard deviation).

Table 3: Multinomial Logit Analysis of Labour Market Outcomes One Month After Administration of CAEAS
(Reference category is taking no job in February; reference outcome is being unemployed in March)

	Employed			Out of Labour Force		
Took a regular job	2.903*** (0.231) [0.631]	2.868*** (0.233) [0.622]		0.936*** (0.357) [-0.044]	0.946*** (0.357) [-0.040]	
Took a temporary job	2.079*** (0.404) [0.492]	2.080*** (0.407) [0.489]		-0.055 (0.800) [-0.123]	-0.002 (0.801) [-0.116]	
Took an on-call job	2.140*** (0.402) [0.538]	2.157*** (0.404) [0.541]		-0.623 (1.068) [-0.198]	-0.623 (1.069) [-0.198]	
Took a contracting job	3.415*** (0.622) [0.803]	3.442*** (0.634) [0.809]		[1]	[1]	
Took any type of job			2.678*** (0.187) [0.603]			0.542* (0.311) [-0.084]
Left the labour market	0.410* (0.228) [-0.004]	0.400* (0.229) [-0.007]		1.809*** (0.199) [0.205]	1.820*** (0.200) [0.206]	
Job losers	-0.086 (0.268) [0.020]	-0.102 (0.270) [0.013]		-0.719** (0.309) [-0.086]	-0.674** (0.311) [-0.079]	
Temporary job ended	-0.372 (0.336) [-0.075]	-0.367 (0.337) [-0.077]		-0.233 (0.377) [-0.009]	-0.171 (0.380) [-0.001]	
New entrants	-0.299 (0.689) [-0.127]	-0.247 (0.696) [-0.110]		1.010* (0.572) [0.144]	0.940 (0.580) [0.131]	
Re-entrants	-0.458 (0.301) [-0.108]	-0.408 (0.302) [-0.097]		0.011 (0.316) [0.027]	0.027 (0.318) [0.026]	
Elapsed duration (in months)		-0.096** (0.040) [-0.021]			-0.037 (0.043) [0.001]	
Elapsed duration^2		0.003* (0.002) [0.001]			0.002 (0.002) [0.000]	
Average annual state unemployment rate		-0.042 (0.040) [-0.007]			-0.045 (0.068) [-0.003]	
log L	-1,022.73	-1,016.02	-1,020.53			

n = 1,262

Standard errors in parentheses.

Notes: [1]Omitted due to collinearity concerns. All analyses include year dummies. Marginal effects are given in brackets. Additional controls are age (and age^2), gender and ethnicity controls, a dummy variable equal to one if married (zero otherwise), an interaction term between gender (being female) and marital status, five educational dummies (omitted category is no high school diploma), a dummy variable equal to one if residing in an urban area (zero otherwise), and a dummy variable equal to one if residing in the South (zero otherwise).

*** ,**, * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

Table 4: Multinomial Logit Analysis of Labour Market Outcomes One Year After Administration of CAEAS
(Reference category is taking no job in February; reference outcome is being unemployed in February)

	Employed			Out of Labour Force		
Took a regular job	0.997***	0.977***		0.451	0.475	
	(0.227)	(0.228)		(0.305)	(0.306)	
	[0.185]	[0.177]		[-0.045]	[-0.039]	
Took a temporary job	1.171**	1.123**		0.472	0.477	
	(0.549)	(0.550)		(0.733)	(0.733)	
	[0.223]	[0.211]		[-0.062]	[-0.056]	
Took an on-call job	0.879*	0.882*		0.336	0.329	
	(0.476)	(0.477)		(0.639)	(0.640)	
	[0.170]	[0.171]		[-0.049]	[-0.050]	
Took a contracting job	1.801**	1.809**		1.359	1.428	
	(0.750)	(0.753)		(0.893)	(0.896)	
	[0.272]	[0.266]		[-0.000]	[0.009]	
Took any type of job			1.040***			0.526**
			(0.198)			(0.263)
			[0.187]			[-0.039]
Left the labour market	0.144	0.134		1.364***	1.376***	
	(0.237)	(0.239)		(0.250)	(0.251)	
	[-0.120]	[-0.124]		[0.188]	[0.191]	
Job losers	-0.639**	-0.704**		-0.891**	-0.906**	
	(0.317)	(0.320)		(0.374)	(0.377)	
	[-0.050]	[-0.064]		[-0.061]	[-0.056]	
Temporary job ended	-0.606	-0.691*		-0.740	-0.772*	
	(0.373)	(0.377)		(0.450)	(0.454)	
	[-0.060]	[-0.076]		[-0.042]	[-0.038]	
New entrants	-0.501	-0.429		0.409	0.361	
	(0.675)	(0.681)		(0.729)	(0.733)	
	[-0.165]	[-0.142]		[0.118]	[0.103]	
Re-entrants	-0.740**	-0.726**		-0.226	-0.242	
	(0.345)	(0.349)		(0.395)	(0.397)	
	[-0.150]	[-0.144]		[0.050]	[0.046]	
Elapsed duration (in months)		-0.033			-0.001	
		(0.039)			(0.046)	
		[-0.008]			[0.004]	
Elapsed duration^2		0.000			0.000	
		(0.002)			(0.002)	
		[-0.000]			[0.000]	
Average annual state unemployment rate		0.090			0.141	
		(0.084)			(0.103)	
		[0.005]			[0.011]	
log L	-1,091.78	-1,086.31	-1.087.18			

n=1,262

Notes: See notes to Table 3.

Table 5: Likelihood Ratio Test Results

a. Analysis of labour market outcomes *one month* after CAEAS		
$\beta_{\text{Took Temp}} = \beta_{\text{Took On-call}} = \beta_{\text{Took Contracting}}$	$\rho = 4.31$ ($p = 0.230$)	$\rho = 4.48$ ($p = 0.214$)
$\beta_{\text{Took Regular}} = \beta_{\text{Took Temp}} = \beta_{\text{Took On-call}} = \beta_{\text{Took Contracting}}$	$\rho = 9.25$ ($p = 0.099$)	$\rho = 9.03$ ($p = 0.108$)
b. Analysis of labour market outcomes *one year* after CAEAS		
$\beta_{\text{Took Temp}} = \beta_{\text{Took On-call}} = \beta_{\text{Took Contracting}}$	$\rho = 1.38$ ($p = 0.847$)	$\rho = 1.44$ ($p = 0.837$)
$\beta_{\text{Took Regular}} = \beta_{\text{Took Temp}} = \beta_{\text{Took On-call}} = \beta_{\text{Took Contracting}}$	$\rho = 1.66$ ($p = 0.948$)	$\rho = 1.74$ ($p = 0.942$)

Appendix Table 1: Full Results of the Multinomial Logit Analysis of Labour Market Outcomes One Year After Administration of CAEAS
(Reference category is taking no job in February; reference outcome is being unemployed in February)

	Employed	Out of Labour Force
Took a regular job	0.997***	0.451
	(0.227)	(0.305)
	[0.185]	[-0.045]
Took a temporary job	1.171**	0.472
	(0.549)	(0.733)
	[0.223]	[-0.062]
Took an on-call job	0.879*	0.336
	(0.476)	(0.639)
	[0.170]	[-0.049]
Took a contracting job	1.801**	1.359
	(0.750)	(0.893)
	[0.272]	[-0.000]
Left the labour market	0.144	1.364***
	(0.237)	(0.250)
	[-0.120]	[0.188]
Job losers	-0.639**	-0.891**
	(0.317)	(0.374)
	[-0.050]	[-0.061]
Temporary jobs ended	-0.606	-0.740
	(0.373)	(0.450)
	[-0.060]	[-0.042]
New entrants	-0.501	0.409
	(0.675)	(0.729)
	[-0.165]	[0.118]
Re-entrants	-0.740**	-0.226
	(0.345)	(0.395)
	[-0.150]	[0.050]
Age	0.015	0.035
	(0.051)	(0.063)
	[-0.000]	[0.004]
Age^2	-0.000	-0.000
	(0.001)	(0.001)
	[-0.000]	[0.000]
High school diploma	0.143	-0.559**
	(0.208)	(0.246)
	[0.097]	[-0.100]
Some college	0.848***	0.209
	(0.263)	(0.302)
	[0.177]	[-0.065]

Associates degree	0.303 (0.326) [0.107]	-0.314 (0.388) [-0.081]
Bachelors degree	0.491* (0.274) [0.226]	-0.966*** (0.367) [-0.200]
Graduate degree	0.663 (0.474) [0.231]	-0.658 (0.574) [-0.174]
Females	0.434** (0.220) [0.042]	0.534** (0.268) [0.031]
Married	0.157 (0.200) [0.080]	-0.376 (0.275) [-0.074]
Married females	0.097 (0.313) [-0.062]	0.754** (0.384) [0.102]
Urban	0.150 (0.179) [0.026]	0.080 (0.220) [-0.005]
South	0.482*** (0.179) [0.064]	0.442** (0.214) [0.012]
1999	0.102 (0.222) [-0.016]	0.354 (0.271) [0.041]
2001	-0.569*** (0.216) [-0.092]	-0.377 (0.279) [0.008]
2005	-0.231 (0.204) [-0.069]	0.127 (0.256) [0.045]
log L	-1,091.78	
n = 1,262		