



## Temporary jobs and job search effort in Europe

Lawrence M. Kahn\*

Cornell University, United States  
 CESifo, Germany  
 IZA, Germany  
 NCER, Australia

### ARTICLE INFO

#### Article history:

Received 2 November 2010  
 Received in revised form 17 August 2011  
 Accepted 4 September 2011  
 Available online 10 September 2011

#### JEL classification:

J21  
 J23

#### Keywords:

Job search  
 Temporary jobs

### ABSTRACT

Using longitudinal data on individuals from the European Community Household Panel (ECHP) for eleven countries during 1995–2001, I investigate temporary job contract duration and job search effort. The countries are Austria, Belgium, Denmark, Finland, France, Greece, Ireland, Italy, the Netherlands, Portugal and Spain. I construct a search model for workers in temporary jobs which predicts that shorter duration raises search intensity. Calibration of the model to the ECHP data implies that at least 75% of the increase in search intensity over the life of a 2+ year temporary contract occurs in the last six months of the contract. I then estimate regression models for search effort that control for human capital, pay, local unemployment, and individual and time fixed effects. I find that workers on temporary jobs indeed search harder than those on permanent jobs. Moreover, search intensity increases as temporary job duration falls, and roughly 84% of this increase occurs on average in the shortest duration jobs. These results are robust to disaggregation by gender and by country. These empirical results are noteworthy, since it is not necessary to assume myopia or hyperbolic discounting in order to explain them, although the data clearly also do not rule out such explanations.

© 2011 Elsevier B.V. All rights reserved.

### 1. Introduction

A considerable volume of economic research has been devoted over the last two decades to explaining and suggesting remedies for the stubbornly high unemployment rates in a number of European countries. Among the suggested policy remedies for reducing joblessness is the relaxation of systems of employment protection by allowing firms greater freedom to create temporary jobs. These reforms presumably reflect a desire to maintain protections for workers in permanent jobs while giving firms an incentive to create new, temporary jobs, which may ultimately become permanent. And even if they don't become permanent, temporary jobs may in some cases provide employment and work experience for individuals who would otherwise have been unemployed. On the other hand, policies increasing the freedom to create temporary jobs may instead encourage firms to substitute temporary for permanent jobs (as found by Kahn 2010), and, if so, the overall exit rate from jobs may increase. The resulting higher turnover may even lead to higher equilibrium unemployment than before (Blanchard and Landier 2002; Cahuc and Postel-Vinay 2002). Moreover, temporary jobs are known to pay less, offer less training, and be less satisfying than

regular jobs (Booth et al., 2002; Boeri 2011; Kahn 2007; Stancanelli 2002). Thus, reforms that encourage the creation of temporary jobs may not lower unemployment and also may not unambiguously raise employed workers' utility (Blanchard and Landier 2002; Cahuc and Postel-Vinay 2002).

Policy evaluations of reforms that encourage temporary jobs must take into account the degree to which they become stepping stones to higher paying, permanent jobs. And evidence on this question of whether temporary jobs are stepping stones to permanent jobs is mixed (Booth et al., 2002; Autor and Houseman 2010). If workers are indeed seemingly trapped in temporary jobs, this outcome could have resulted either due to the lack of availability of permanent jobs or insufficient search effort on the part of workers. Of course, a greater supply of permanent jobs is likely to encourage greater search effort. But little is known about the search effort of those currently in temporary jobs. For example, do they anticipate the end of those jobs and begin searching in advance for future work, or do they wait until the last minute to begin their job search? A similar set of questions has been asked about unemployed workers whose unemployment insurance (UI) benefits are about to expire (Katz and Meyer 1990; Mortensen 1990; Boone and van Ours 2009), and to workers who have been given advance notice of layoffs (Addison and Portugal 1987; Swaim and Podgursky 1990; Ruhm 1992; and Jones and Kuhn 1995). The answers to these questions can have important

\* Cornell University Economics Department, 258 Ives Hall, Ithaca, New York 14853 USA. Tel.: +607 255 0510; fax: +607 255 4496.

E-mail address: [lmk12@cornell.edu](mailto:lmk12@cornell.edu).

implications for the transition from temporary to permanent jobs and therefore for evaluations of policies that allow firms to create temporary jobs. In addition, a study of search effort is potentially important in understanding aggregate matching functions, since the probability that any vacancy receives an applicant is affected by the average intensity of job search (Cahuc and Zylberberg 2004, p. 519).

In this paper, I use European Community Household Panel (ECHP) data to study the job search behavior of workers employed in temporary jobs in several European countries over the 1995–2001 period.<sup>1</sup> The countries included are Austria, Belgium, Denmark, Finland, France, Greece, Ireland, Italy, the Netherlands, Portugal and Spain. The ECHP collects information on current job search effort among employed workers (as well as of course the unemployed). In addition, the surveys include data on the duration of one's employment contract if it is temporary, allowing one to determine the impact of contract duration on search effort. I first build a simple model of employed job search that draws from search models in Burdett (1979) and Mortensen (1990) with nonstationary reservation wages.<sup>2</sup> A key theoretical result is that the less time left on a temporary contract, the greater is one's search effort, a result that is not surprising. However, calibration of the model using observed transition rates to permanent work and to temporary work implies that at least 75% of the increase in search intensity over the life a 2+ year temporary contract occurs in the last six months of the contract. It is noteworthy that this result is obtained without assuming hyperbolic discounting or myopia on the workers' part, although it is also of course consistent with such behavior (see, for example, Della Vigna and Paserman, 2005 or Paserman 2008). This result is similar to Mortensen's (1990) theoretical result that almost all of the reduction in an unemployed searcher's reservation wage occurs in the period before his/her unemployment benefits expire, a conclusion based on the formation of bounds for the rate of change of reservation wages, derived using US data on the incidence of layoff unemployment (p. 77).

The spike in exits from unemployment upon benefit exhaustion previous research has found is consistent with this model (Katz and Meyer 1990; Boone and van Ours 2009). However, Boone and van Ours (2009) suggest that this finding could be due to the endogenous timing of the start of a new job which may have been chosen to correspond with benefit exhaustion rather than a sharp reduction in reservation wages. Since the ECHP has information on actual search activity, I am able to provide a more direct test of the search model than an examination of exits from unemployment would. Similar reasoning may apply to studies of the transition from temporary jobs to permanent employment or to unemployment, which also don't examine actual search activity (D'Addio and Rosholm 2005; Gagliarducci 2005).

I then estimate an individual fixed effects model of the impact of contract duration on search effort as measured in the ECHP data base. In general, those on temporary contracts search harder than those in permanent jobs, as one would expect. And search intensity increases going from the longest to the shortest duration temporary contracts, again as one would predict. Moreover, almost all of the increase in search intensity going from longest to shortest duration jobs occurs between the second shortest (6–12 months) and the shortest (less

than 6 months) duration jobs, as predicted by the calibrated Burdett–Mortensen model. This finding occurs in data pooled across countries, separately by gender, and within countries analyzed individually in the aggregate and again by gender. The basic pattern thus is pervasive in European labour markets. Since I control for individual fixed effects, the findings cannot be explained by a possible correlation between an individual's fixed search propensity and the likelihood of landing a long duration job, although correlations between unmeasured changes in individual productivity and search intensity could of course still be a factor.

It thus appears that workers are indeed forward-looking in their job search behavior; however, the optimizing strategy is to not start searching intensively early in the term of one's temporary job, like that of unemployed workers with limited duration unemployment benefits. Some countries have reformed their regulations of temporary employment contracts by increasing their allowable duration (OECD 2004). Blanchard and Landier (2002) have shown that such reforms raise the threshold a worker must attain in order to be promoted from a temporary job to a permanent job. My findings suggest an additional reason why such reforms will reduce the transition rate to permanent jobs. Specifically, an implication of the results obtained here is that such policies will reduce the average search intensity of workers on temporary jobs, perhaps lessening the per period transition rate to a permanent job. Thus, while earlier research on firm behavior under these recent reforms suggests that they reduce the supply of permanent jobs (Blanchard and Landier 2002), my results imply that they also reduce the effective demand for such jobs by reducing search intensity. The dualistic labour market structure suggested by the co-existence of permanent and temporary jobs thus may be reinforced by these reforms, due both to firm and worker behavior. Nonetheless, policies allowing firms to offer longer temporary contracts can increase the total time workers in them are employed and may also give workers on temporary jobs additional opportunities to be promoted into permanent jobs.

## 2. A simple model of temporary jobs and search intensity

### 2.1. Model setup

In this section, I write down a simple model that sheds some light on the impact of a temporary contract's remaining duration on the employed worker's search intensity. Like earlier models of search intensity such as those of Della Vigna and Paserman (2005) and Paserman (2008), I use a discrete time framework and assume that a jobseeker will receive a wage offer with some probability in any given period. Moreover, one can raise this probability by searching harder and this increased search effort (e.g. putting in more time or money to the search effort) will be costly. I allow the new job offer to be either a permanent job or a temporary job, although the jobseeker doesn't know in advance what kind of job if any will be offered by a contacted firm. To simplify the analysis, I assume that permanent jobs never end and temporary jobs last  $T$  periods. By assuming that permanent jobs never end, I am in effect assuming that firing costs are high enough to deter all firing in permanent jobs. This is a stylized assumption that makes the analysis simpler but does not affect the overall conclusions about incentives to search in temporary vs. permanent jobs. As long as the probability of being able to continue in a job is lower in a temporary job than in a permanent job or in a temporary job with many periods left than with only one period left, then the qualitative conclusions of the model regarding search intensity will still hold. One can view conversions of temporary contracts into permanent jobs by a worker's incumbent firm as an outcome of the job search process. After presenting the formal search model and its calibration, I will discuss the implications of such conversions in more detail.

Let  $\lambda$  be the probability of receiving a permanent job offer and assume that the probability of receiving a temporary job offer is  $a\lambda$ ,

<sup>1</sup> In an earlier paper (Kahn 2010), I studied the reduced form effects of reforms of European employment protection regulations on the incidence of temporary and permanent employment. In this paper, I study the transition process connecting temporary and permanent employment by examining the impact of contract duration on workers' job search intensity.

<sup>2</sup> See van den Berg (1990) and Card and Hyslop (2005) for additional models of non-stationary reservation wages, which like Burdett (1979) and Mortensen (1990) do not consider variable search intensity. Mortensen's (1977) earlier paper on UI does build a model of search intensity and reservation wages which predicts that search intensity will increase over the duration of coverage by UI benefits. However, he does not calibrate the rate of increase of intensity.

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات