



# Experiments on unemployment benefit sanctions and job search behavior

Jan Boone <sup>a,c,\*</sup>, Abdolkarim Sadrieh <sup>b</sup>, Jan C. van Ours <sup>a,c</sup>

<sup>a</sup> Department of Economics, CentER and Tilburg University, The Netherlands

<sup>b</sup> Department of Economics, University of Magdeburg, Germany

<sup>c</sup> CEPR, UK

## ARTICLE INFO

### Article history:

Received 25 November 2005

Accepted 24 April 2009

Available online 18 May 2009

### JEL classification:

C91

J64

J65

### Keywords:

Experiments

Unemployment benefits

Sanctions

Job search

## ABSTRACT

This paper presents the results of an experimental study on unemployment benefit sanctions. The experimental set-up allows us to distinguish between the effect of benefit sanctions once they are imposed (the ex post effect) and the threat of getting a benefit sanction imposed (the ex ante effect). We find that both effects matter. Moreover, the ex ante effect turns out to be substantial and bigger than the ex post effect. Benefits sanctions stimulate the outflow from unemployment.

© 2009 Elsevier B.V. All rights reserved.

## 1. Introduction

Despite the fact that over the past decades unemployment went down in many OECD countries it is still high in most of these countries. This is mainly caused by the long duration of unemployment. Governments face the problem of how to design policies that bring the unemployed back to work more quickly. It turns out that many of the active labor market policies that are used (training, subsidized jobs etc.) have insufficient effects on overall unemployment (Martin and Grubb, 2001). One of the problems is that in many countries for those who lose their jobs there are substantial unemployment benefits that are provided for a long period.

We show that benefit sanctions<sup>1</sup> can help to reduce unemployment even if the expected benefit (over time) remains constant. That is, the uncertainty of the level of the benefit is an effective instrument to induce unemployed to accept jobs. In particular, compare two benefit systems. First, a constant benefit system that always pays a benefit equal to 60. Second, a sanction system which pays a benefit equal to 70 in 60% of the periods and 45 in the other periods (where  $0.6 * 70 + 0.4 * 45 = 60$ ; we interpret the difference between 70 and 45 as a benefit sanction). In the sanction system, the job acceptance probability turns out to be substantially higher.

\* Corresponding author. Tel.: +31 13 4663050; fax: +31 13 4663066.

E-mail addresses: [j.boone@uvt.nl](mailto:j.boone@uvt.nl) (J. Boone), [sadrieh@ovgu.de](mailto:sadrieh@ovgu.de) (A. Sadrieh), [vanours@uvt.nl](mailto:vanours@uvt.nl) (J.C. van Ours).

<sup>1</sup> A benefit sanction is a temporary reduction of unemployment benefits that is imposed for example because the unemployed worker did not search hard enough to find a job or because a job offer was rejected. See Fredriksson and Holmlund (2006) for an overview of research on unemployment benefits including benefit sanctions and Grubb (1999) for an overview of the situation on monitoring and benefit sanctions across the OECD.

To illustrate, at a wage equal to 125 (out of a uniform distribution on [90, 200]; see below for details), the (simulated) acceptance probability under the constant benefit system equals 9.4%. Under the sanction system it equals (on average) 23.5%. Note that this increase in acceptance probability is achieved without making the unemployed financially worse off on average. Further, our design allows us to quantify the so-called *ex ante* and *ex post* effects of the sanction system compared to the constant benefit system. The *ex post effect* is the change in job acceptance probability once a benefit sanction is imposed. The *ex ante effect* refers to the increased outflow from unemployment even before a benefit sanction is imposed. The mere threat of receiving a benefit sanction affects job acceptance behavior. In the example, the *ex ante* effect of introducing the sanction system equals  $(23.5 - 9.4) = 14.1$  percentage points while the *ex post effect*—the difference between acceptance probabilities at benefit levels 70 and 45—equals 10 percentage points in this case. This suggests that evaluating a sanction system on the *ex post* effect only leads to an underestimation of the effects of such a system.

The current evidence on the effectiveness of a sanction system is partly based on empirical research in which micro data about unemployment durations and benefit sanctions are used. Abbring et al. (2005) and Van den Berg et al. (2004) provide empirical evidence for the Netherlands. Jensen et al. (1999) does the same for Denmark and Lalive et al. (2005) presents an analysis for Switzerland. These micro econometric studies typically compare unemployed with and unemployed without benefit sanctions, taking into account that the process by which sanctions are imposed may have been selective. Therefore these studies provide estimates of the *ex post* effect.<sup>2</sup>

In contrast to our paper, these studies do not provide information on the *ex ante* effect. This effect can be formalized in a number of different ways. In papers like Boone and Van Ours (2006) and Boone et al. (2007) the *ex ante* effect appears because by searching harder the unemployed can reduce the probability of being sanctioned. The idea is that government officials monitor search effort. When the effort is (perceived to be) high, they conclude that someone did not get a job, because none were available, not because he did not try to find a job. Using this set up Boone et al. (2007) shows that it is optimal from a welfare point of view to introduce a system of benefit sanctions. Boone and Van Ours (2006) shows that the strengths of the *ex ante* effect and the *ex post* effect depend on the monitoring intensity. If this intensity is low, the *ex post* effect is more important, but if the monitoring intensity is high, the *ex ante* effect is more important. In the model presented in this paper, the unemployed cannot affect the probability of being sanctioned, except by accepting the current wage offer. This leads to slightly different results as explained below.

As mentioned, this paper reports a laboratory experiment to analyze the effects of unemployment benefit sanctions. Previous experimental investigations of search models are reported in Braunstein and Schotter (1981, 1982), Hey (1982, 1987), Cox and Oaxaca (1989, 1992), and Sonnemans (1998). In general, all authors conclude that observed behavior is close to, but not fully consistent with, optimal search behavior. Braunstein and Schotter (1981, 1982) test the theoretical implications of numerous variants of an infinite horizon sequential job search model. They observe that individuals react to variations of the environment as predicted by theory, even though the duration of search often falls short of the theoretically predicted duration. Additionally, they find reservation wages to drop over time, even though theory predicts constant reservation wages in the infinite horizon models that they use as benchmarks.

Cox and Oaxaca (1989, 1992) report job search experiments in a finite horizon model. They argue that the individuals in Braunstein and Schotter's (1981, 1982) experiments had not actually believed in the infinite horizon and had rather played a finite horizon game, in which optimal reservation wages fall over time. While they find search duration and income to be very close to the theoretical predictions with risk-neutral individuals (Cox and Oaxaca, 1989), they also find the directly elicited reservation wages to be lower than predicted (Cox and Oaxaca, 1992). They conclude that a model with risk aversion explains their observations best.

Sonnemans (1998), however, shows that a fully rational model of risk-averse search is not consistent with the search strategies that participants choose in a finite search model experiment. Most individuals in his experiment use search heuristics that combine the rational marginal net benefit aspect with some satisfying rule that is applied to total income (i.e. they do not ignore the sunk cost of search). This observation is well in line with the results of Hey's (1982, 1987) research on consumer search heuristics.

Our paper contributes to the experimental literature on job search in three important ways. First, the model we use is especially suited for an experimental implementation, because it provides a constant reservation wage benchmark in a finite horizon setting.<sup>3</sup> The models implemented so far had either the one or the other advantage, but not both.<sup>4</sup> Second, we present the first experimental analysis of the effect of random benefit sanctions on job acceptance

<sup>2</sup> An exception is Lalive et al. (2005) who estimate the *ex ante* effect using cross sectional variation in the sanction rate. They compare the magnitude of the *ex ante* and *ex post* effect finding that both effects are quantitatively important. Black et al. (2003) and Rosholm and Svarer (2008) show that a threat effect also occurs when unemployed workers are assigned to training programs. To avoid entering such programs they leave unemployment more quickly than without the assignment. Meyer (1995) gives an overview of empirical evidence on compliance with UI rules in the US using data from randomized field experiments. He shows that cash bonuses, increased enforcement of work search rules, and a strengthening of the work test influence the speed by which people leave unemployment. Note, however, that the field experiments measure the overall effect and do not distinguish between an *ex ante* and an *ex post* effect.

<sup>3</sup> The optimal reservation wage in our model does decrease in the last few periods of the 100 period game. But, these last few periods can be omitted from the statistical analysis without a serious loss of information.

<sup>4</sup> The advantage of a finite horizon game in the laboratory seems self evident. The advantage of having a constant reservation wage benchmark is two-fold. First, when optimal behavior is constant, we can expect individuals to "learn" much more effectively within the duration of the experiment. Second, the estimates of the job acceptance rates from the sequences of responses are much more reliable, when optimal behavior is constant over time.

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