National Audit Office

Estimating the impact of benefit sanctions on the employment outcomes of sanctioned individuals

Evidence from countries outside the UK suggests that benefit sanctions increase movement from benefits into employment, but this effect can be short-lived and lead to lower wages. The Department for Work & Pensions (DWP) has not used its own data to evaluate how sanctions in Great Britain affect people's chances of finding work.

In this paper, we describe how we used instrumental variables to estimate the impact of benefit sanctions on the employment outcomes of sanctioned individuals in the Work Programme – a large welfare-to-work programme for the long-term unemployed.

Background

In November 2016, our report Benefit sanctions (HC 628, Session 2016-17) considered whether the Department for Work & Pensions (the Department) is achieving value for money in its administration of benefit sanctions. A benefit sanction is a penalty imposed on a benefit claimant by the Department. It is a decrease or loss of a benefit imposed on claimants who do not meet conditions without good reason.

The Department has not undertaken research to understand the employment impact of benefit sanctions but cites international evidence on the topic. To demonstrate that such analysis is possible using the Department's data, and to provide evidence about the impact of sanctions in Great Britain, we conducted econometric analysis using administrative data from the Department. We focused on claimants participating in the Work Programme. The Department introduced the Work Programme in 2011 to help long-term benefit claimants find work. The Work Programme accounts for a large number of sanctions.[1]

Method

A simple comparison of people who did and did not receive sanctions would not tell us how claimants' job prospects are affected by receiving a sanction. People who receive sanctions may have different unobserved characteristics that make them both more likely to receive sanctions and less likely to find work. A comparison using ordinary least squares (OLS) would reflect differences in these characteristics, rather than show how sanctions affect employment outcomes. Instead we estimated an instrumental variables model, which allowed us to identify the causal impact of sanctions on employment and benefit uptake. Instrumental variables are commonly used by social scientists as a way of controlling for unobserved characteristics which may be correlated with both the variable of interest and the outcome.

Our instrumental variable was the average rate at which people were referred for a sanction in each contract between February and May 2014. The instrument allowed us to exploit three features of the Work Programme: claimants are allocated randomly to different providers within the same area; providers put different emphasis on sanctions; and consequently, despite the random assignment, providers' sanction referral rates vary considerably within the same area. This variation allowed us to analyse whether people with similar skills and opportunities achieve different employment outcomes, simply because they have different likelihoods of receiving sanctions.

We looked at how a sanction affected the following outcomes in the months after receiving it: the probability of employment; the number of days spent claiming, working, both, or neither; and total earnings.

We compared people who received sanctions (the treatment group) with people who did not (the control group). Our control group was made up of people who met the same conditions as the treatment group, except that they did not receive a sanction during the period of observation.

We estimated the instrumental variables model in two stages. In the first stage we estimated the probability that an individual receives a sanction as a function of the instrumental variable and a number of control variables at area, provider and individual levels (such as gender and age).

In the second stage we regressed the outcome variable on the same control variables included in the first stage, and on the fitted probability of receiving a sanction we calculated in the first stage.

1 Between June 2011 and March 2016, the Work Programme accounted for 23% of the sanctions imposed on Jobseeker's Allowance claimants and 80% of sanctions imposed on Employment and Support Allowance claimants.

Data

To understand how sanctions affect people's job prospects, we needed individual-level data, which allowed us to construct individuals' histories of claiming, employment, sanctions and participation in the Work Programme.

Our data came from the Department's Work and Pensions Longitudinal Study which draws on several sources of personal data, matched using encrypted National Insurance numbers. We used:

- the Decision Making and Appeals System (DMAS) and Decision Making and Appeals Case Recorder (DMACR) to construct sanction histories;
- the National Benefits Database (NBD) to construct benefit claim histories;
- real–time information (RTI) data on earnings to construct employment histories; and
- the Work Programme Analytical Dataset (WPAD) to construct variables including days on the Work Programme, sex, age, ethnic group, and disability status.

We analysed the data at the Department for Work & Pensions headquarters using SAS v 5.1 software. We had to clean the data. For example, we reset negative employment earnings to zero.

To select our sample we followed the approach taken with German data in Boockmann et al. (2014) (**Figure 1**).[2]

Figure 1
Data: selection

	Conditions for selecting data
Population	Work Programme participants continuously enrolled between 1 February 2014 and 31 May 2014
Benefits claimed	Jobseeker's Allowance or Employment and Support Allowance
Sanction history	No sanctions between joining the Work Programme and 1 February 2014
	No more than one sanction between 1 February 2014 and 31 May 2014
	No limit on number of sanctions after 1 June 2014
Employment history	No earned income between 1 April 2013 and 1 February 2014
	No pension income
	No employment spells paid irregularly or less often than monthly
	Not employed on the day the sanction was imposed
Exclusions	Exclude if no National Insurance number recorded, to ensure matching to real-time information data on earnings
	Exclude if claim not active on the day of the sanction
Assumptions	End dates estimated where missing

Source: National Audit Office

Results

We examined separately how sanctions affected outcomes for Jobseeker's Allowance claimants and Employment and Support Allowance claimants.

For Jobseeker's Allowance claimants, we found that a benefit sanction had a large effect that:

- increased the probability of being in employment in later months;
- reduced the number of days claiming benefits;
- increased days in employment (accounting for about half the fall in days claiming);
- increased days neither in employment nor claiming benefits (accounting for the remaining half of the fall in days claiming); and
- increased earnings in the first 6 months after a sanction but had no statistically significant effect in the first 3 or 12 months despite people spending more days employed.

For Employment and Support Allowance claimants, we found that a benefit sanction had a smaller effect, that:

- reduced the probability of employment in later months;
- increased the number of days claiming benefits and not working;
- increased days neither in employment nor claiming benefits;
- reduced the number of days both claiming and employed; and
- reduced earnings.

2 B. Boockmann, S.L. Thomsen and T. Walter. 'Intensifying the use of benefit sanctions – an effective tool to shorten welfare receipt and speed up transitions to employment?', *IZA Journal of Labor Policy* 3:21, 2014.

Limitations

It is important to take care in interpreting the results.

First, our findings cannot necessarily be extrapolated to say what the impact would be of sanction rates that are higher or lower than the ones we observed in our sample. For example, very large increases in sanction rates may not lead to equally large changes in employment as the additional people who are sanctioned may not be very responsive to sanctions. Neither should our results be used to estimate the impact of not using sanctions at all.

Second, our work measured direct effects on people who are sanctioned and does not measure indirect effects such as deterrence. Studies of other countries suggest that the indirect effect also increases employment among claimants who do not receive sanctions. So, the total effect of Jobseeker's Allowance sanctions on the likelihood of employment should be positive.

We found that the direct effect of receiving a sanction reduced time spent in employment for Employment and Support Allowance claimants. It is natural to assume that claimants respond in similar ways to the possibility of a sanction and the experience of a sanction. However, there is limited evidence and more work needs to be done in this area.

Third, we do not have complete data on the outcomes that people experience after a sanction: income from self-employment is not included in the earnings data. Around 15% of the jobs found by Work Programme participants were in self-employment. It is not clear what the effect of the missing information is on our results. The effect will depend on whether sanctioned claimants are more or less likely to become self-employed compared to non-sanctioned individuals.

Suggestions for future work

Our findings are preliminary and not extensively peer reviewed. We recommend that they are used to inform further investigation of the impact of sanctions on claimants. Future work can make use of the Department's administrative data to expand the scope of our analysis. In our detailed methodology, we suggest specific issues that future work should consider.

Other resources

A more detailed methodology is available on our website:

www.nao.org.uk/wp-content/uploads/2016/11/Benefit-sanctions-detailed-methodology.pdf

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