

# **Job Search and the Threat of Unemployment Benefit Sanctions**

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## UI sanctions in theory...

- punishment: reduction in UI for low search effort
- pro: consumption smoothing with less moral hazard  
⇒ *more generous UI for total same expenditure*
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## Policymakers tend to "toughen up" the UI regime after recessions

- "back to work" political rhetoric, budget / austerity / spending reductions
- examine UK reform in 2012 (*conditions also tightened again in 2022*)
- other examples: France, Germany 2022

### Research Questions:

- Does sanction threat **change search behaviour**?
  - search effort
  - exit rate
- To what extent does sanction threat **create worse matches**?
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### Empirical strategy uses UK Sanction Policy Reform in 2012

- exploit **differential responses** across districts in sanctioning intensity
- lends itself to **Difference-in-Differences** design
- mechanisms: triple-differences (variation across spells)

## 1. Empirics:

- **Causal estimates** of impact of sanction threat on
    - exit rate,
    - exit to employment/inactivity/retirement
    - future unemployment risk (number of cumulative spells)
    - re-employment duration
  - **mechanisms**: early-spell sanction experience correlates with medium-run income losses, higher search effort on impact
- 

## 2. Structural model (under construction)

- partial eqm. random search model.
  - jobs vary in **pay and stability**
  - endogeneous offer-arrival and offer-acceptance
- sanctions detect low search imperfectly
- characterise optimal Baily-Chetty replacement rate with (i) sanctions (ii) market insurance undershooting

Institutional Setting, Reform, Data, Design



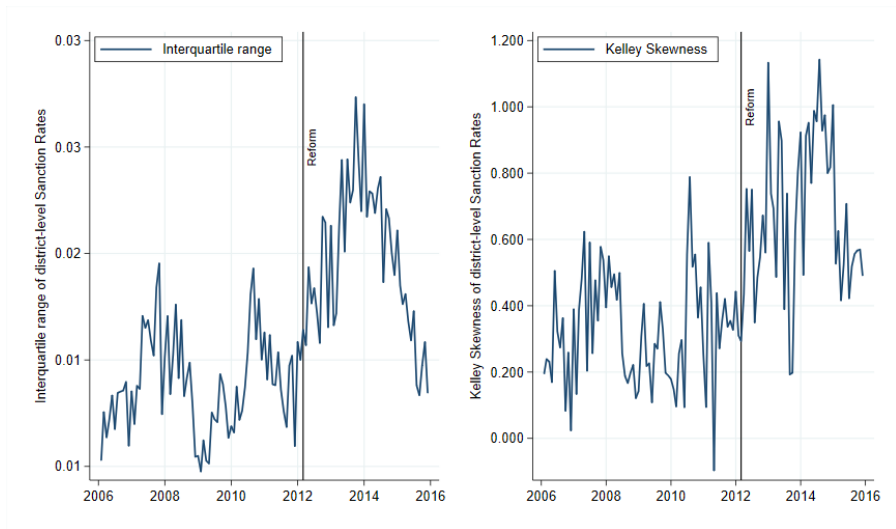
## UI Policy in UK:

- Unemployment benefits administered by around 800 Job Centres
- Caseworker meeting every two weeks
- UI transfer is search not contribution or duration contingent
- Sanction decision made by third party after referral

## 2012 Policy Reform:

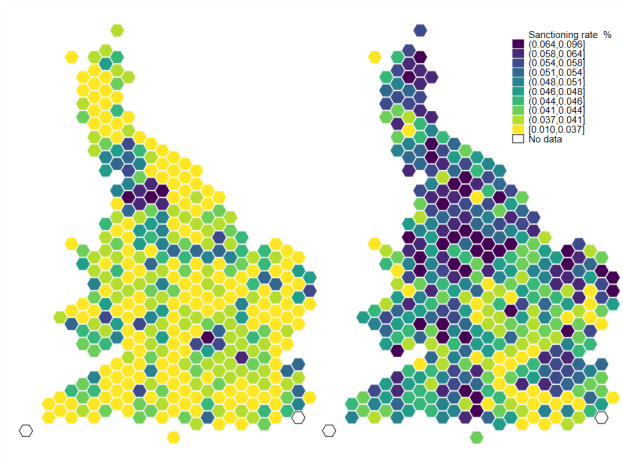
- Increased [minimum sanction duration](#) and [tighter monitoring](#) of search activity
- large increase in post-reform [heterogeneity across districts](#) in sanctions-per-claimant (second, third moments)
- focus on extensive margin only

► [Table: Reasons for Sanction](#)



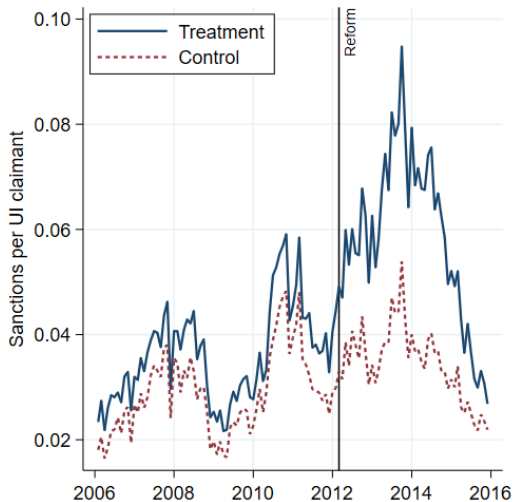
**Figure 1:** 2nd and 3rd Moments of Sanctioning Rate distribution

**Figure 2:** Sanction Rates by District



## Identifying Wedge in Sanction Intensity

**Figure 3:** sanction intensity:  $S_{gt} = \text{sanctions issued}_{gt} / \text{UI claimants}_{gt}$



## Sources of Cross-sectional Variation:

- degree of job centre **discretion/autonomy**
- management use of sanction/exit **targets**
- **partisan pressure** from politicians
  - close-elections RDD: **20% drop in sanction rate** for marginally-gov-aligned seats (Broberg, Tähtinen, Walsh 2023)

► Appendix: RDD plot

*National Audit Office:* “The NAO concludes it is likely that **management focus and local work coach discretion have had a substantial influence on whether or not people are sanctioned** (...) heterogeneity [in sanction rates across areas] not fully explained by jobseeker characteristics”

## Data

- UK Longitudinal Household Survey (UKLHS, "Understanding Society")
- [monthly working life histories](#), states: {employed, self-emp., unemployed, ...etc}
- track individuals' transitions
- 2009-2015
- 10k unemployment spells
- median duration: 9 months, mean: 12 months, 68% < 12 months

Households matched by district-month with sanction-per-claimant rates

**Treatment variable is dichotomised:**

$$D_g = \begin{cases} 1 & g \in \text{highest quartile of } \Delta \bar{S} \gg 0 \quad \text{"movers"} \\ 0 & g \in \text{lowest quartile, } \Delta \bar{S} \approx 0 \quad \text{"stayers"} \end{cases} \quad (1)$$

**Canonical 2x2 simultaneous reform Difference-in-differences:**

$$y_{igt} = \underbrace{\lambda_t + \gamma_g}_{\text{common trends}} + \theta_{T(i,t)} + \underbrace{\sum_{\ell=-4}^4 \beta_{\ell} \cdot \mathbb{1}\{t = \ell\} \cdot D_g}_{\text{ATTs}} + u_{igt} \quad (2)$$

- $\theta_{T(i,t)}$  spell duration controls
- Two-stage estimation: estimate  $(\lambda, \gamma, \theta)$  using untreated obs. Otherwise duration effects overstated.

**Parallel Trends Assumption:** no signs of divergent local labour markets

- **eqm labour market outcomes:** wages, employment
- **output:** gva, gva pc, gva growth
- **industrial structure:** local industry gva shares

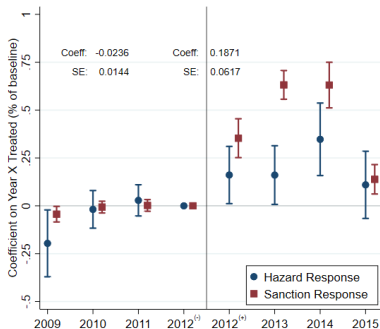
► Appendix: Parallel Trends



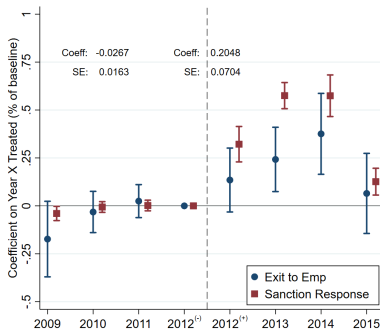
## Causal Estimates, Back-of-Envelope Magnitudes, Mechanisms

**Figure 4:** DID Estimates comparing high vs low intensity districts

(a) Exit rate, total (% of baseline)



(b) Exit rate, into employment (% of baseline)



### Simplifying assumptions:

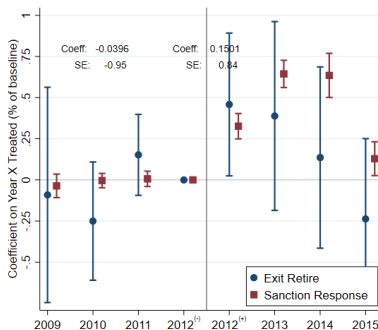
- worst-case: estimated coefficients are total effects (DE+IE)
- estimate of direct effect of sanction on exit hazard from lit (+100%)
- median duration of sanction approx 1 month
- $\Rightarrow \Delta \text{Incidence} = \Delta \text{Prevalence}$  (4ppts)

Total Effect (% of baseline)	Direct Effect (%, sanctioned only)	$\Delta$ Prevalence (ppts)	Scaled Direct Effect (%)	Indirect Effect (%)
0.200	= (1.00	$\times 0.04$ )	0.04	+0.160

**Table 1:** Decompositon of Direct Effect and Threat Effect

**Figure 5:** Exit to retirement

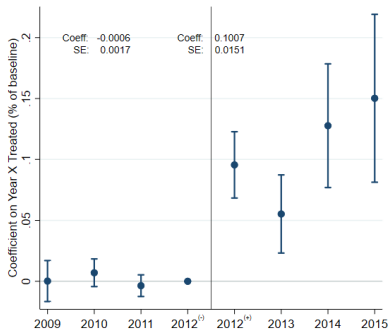
(a) Exit to retirement (% of baseline)



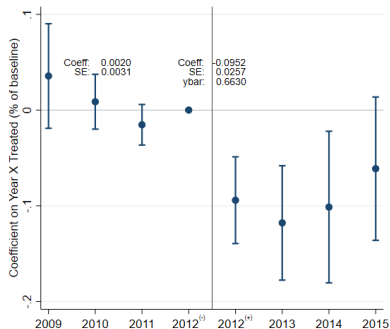
Post-reform spike one-and-done effect. Very low precision.

**Figure 6: Reemployment Stability**

(a) Cumulative Unemployment Spells



(b) Pr(reemployment tenure > 36 months)



Mechanisms:  
Triple Differences estimates

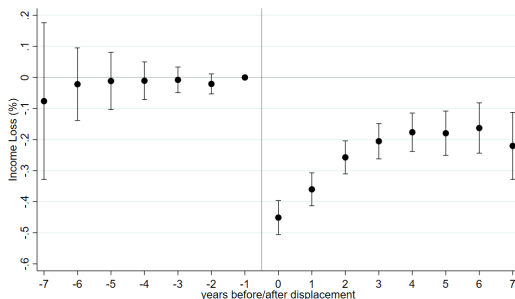
### Displacement event study regression:

- makes valid comparisons of *displaced vs not-yet-displaced* / i.e. *is stagger-robust*
- stacking estimator of Cengiz et al (QJE,2019), stacks many  $2 \times 2$  diff-in-diffs

### Triple-Differences

- interaction with *above/below mean sanctioning threat* in first 3 months of unemployment spell
- compare similar *individuals displaced in the same year, same district*, but experienced **different sanction threat levels**

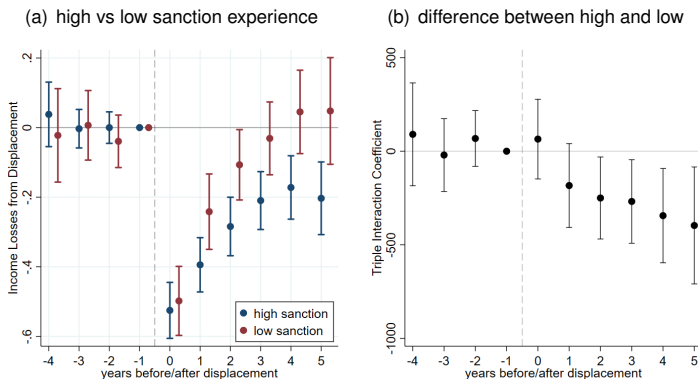
**Figure 7:** Earnings Losses from Job Displacement



Sample: Ever-displaced only. Treated: lose job in year  $t$ , control: not-yet-treated by  $t$ .  
Excludes zero earnings. Including zeroes leads to approx -40pct

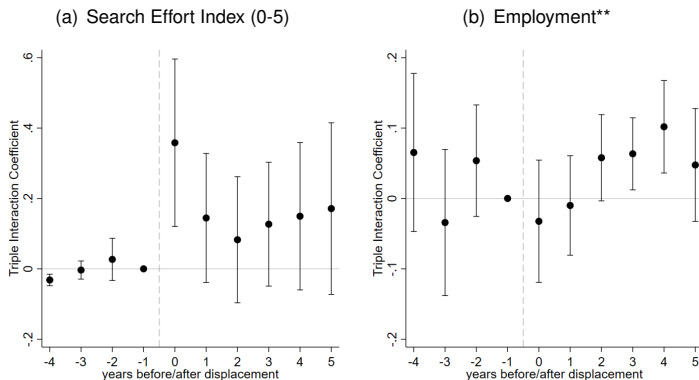


**Figure 8:** Earnings Losses by high/low sanction regimes in early unemployment



- High sanction: average sanction rate in first 3 months of spell above/below average
- sample-split potentially bundles many things together

**Figure 9:** Triple-Differences Estimates comparing displacements with high vs low sanctioning



less conservative sample restriction: employed in  $r = -1$  only. \*\*Employed at time of survey\*\*

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- **reduces possibility** to run more generous social insurance
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**Comments and feedback welcome:**

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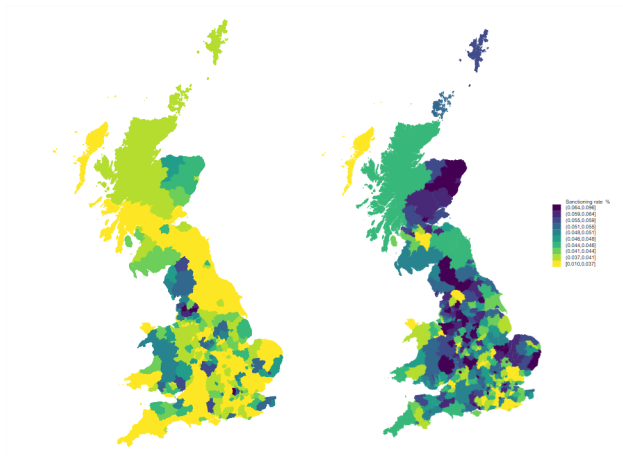
`walshthomas.com`

## Appendix

Infraction Level	Example Reasons	Sanction in weeks	
		<i>Before</i>	<i>After</i>
Lower	Failure to attend advisor meeting Failure to attend work program	1	4,13
Intermediate	Unavailable to work Ineligible search effort	0	4, 13
Higher	Refusing, voluntarily leaving work Dismissal for misconduct	1-26	4, 26, 156

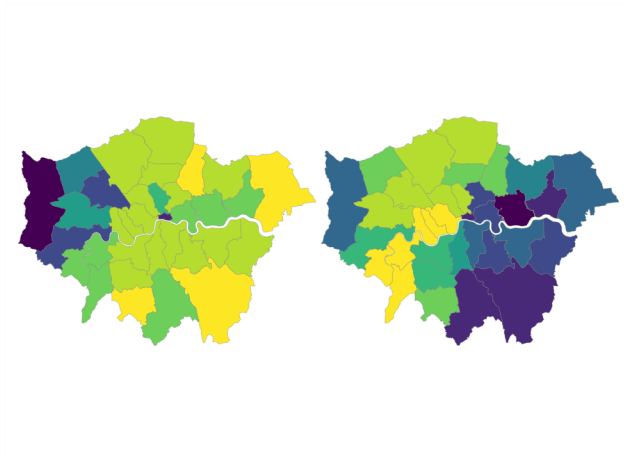
**Table 2: Intensive Margin of Sanctions within Infractions**

## Mapping Sanction Rates, 2010/12 vs. 2012/14



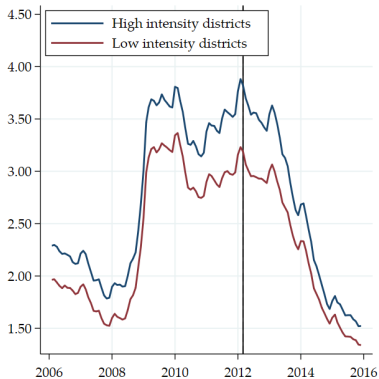


## Mapping Sanction Rates, 2010/12 vs. 2012/14; London

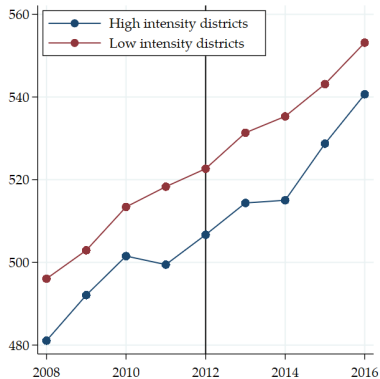


# Equilibrium Labour Market Outcomes

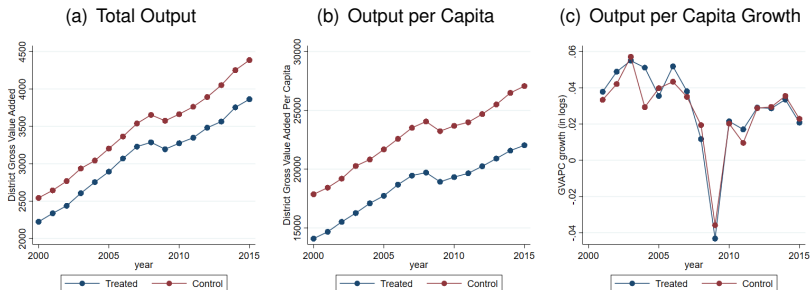
(c) Unemployment-Population Ratio



(d) Weekly Earnings

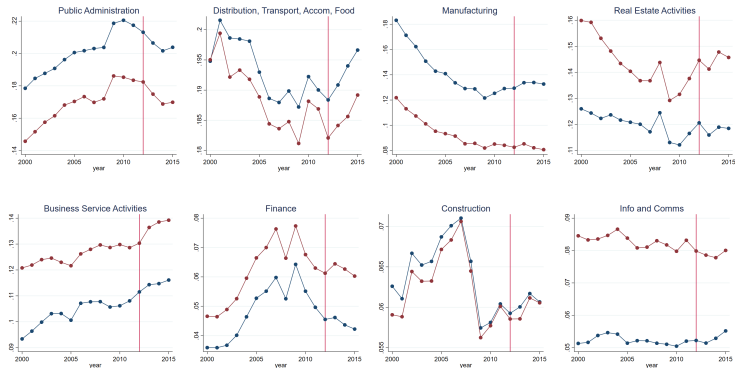


**Figure 10:** District-level Output (Real GVA)



\*excludes Westminster and City of London due to high business concentration

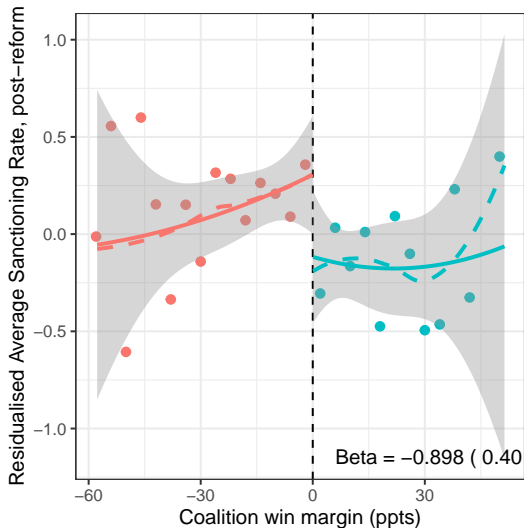
**Figure 11:** District-Industry Output Shares ( $GVA_{ind,dist,year} / GVA_{dist,year}$ )



◀ Back: Parallel Trends

Table 3: Regression Results: ATT estimates

	Exit rate			Unemployment	Re-employment duration		
	total	employed	retired	$N_U$	>12	>24	>36
$\beta$ ATT (ppts)	0.00860*** (3.03)	0.00796*** (2.91)	0.00455 (0.84)	0.112*** (6.65)	-0.0396*** (-2.85)	-0.0410** (-2.45)	-0.0631*** (-3.70)
$\beta$ ATT (percent)	0.191*** (3.03)	0.205*** (2.91)	0.150 (0.84)	0.101*** (6.65)	-0.0504*** (-2.85)	-0.0583** (-2.45)	-0.0952*** (-3.70)
NT	59070	59070	12696	59070	59070	59070	59070



Note. Dependent variable is the residuals from a regression of average sanctioning rate on socioeconomic controls: log population, share of women, share of working age, median earnings, and employment rate. Solid line is quadratic fit, dashed line is lpolynomial fit. Shaded area represents 95% CI.