

**IGEES Conference 2016**

# **Financial Incentives and Welfare Rate Reductions**

**A behavioural evaluation of  
the impact of 2010 Jobseeker  
Assistance rate changes on  
outcomes for young  
unemployed in Ireland.**

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# Outline

1. Introduction
2. Context and Background
3. Theory
4. Model
5. Preliminary Results
6. Interpretation
7. Policy Implications

# 1. Introduction

- Much public policy is implicitly underpinned by behavioural assumptions concerning economic rationality
- Behavioural findings can challenge orthodox economic theories of behaviour
- Recent changes to Jobseeker rates for U25s offers a chance to test these assumptions

## 2. Context and Background

- JA peaked in the 2009 Budget at €204.30 p.w.
- Supplementary Budget 2009 reduced JA rates for 18 and 19 year olds to €100 p.w.
- In 2010, further JA rate changes for young jobseekers:
  - €196 p.w. 25 year olds and older (core rate)
  - €150 p.w. 22 to 24 year olds
  - €100 p.w. 21 year olds and younger

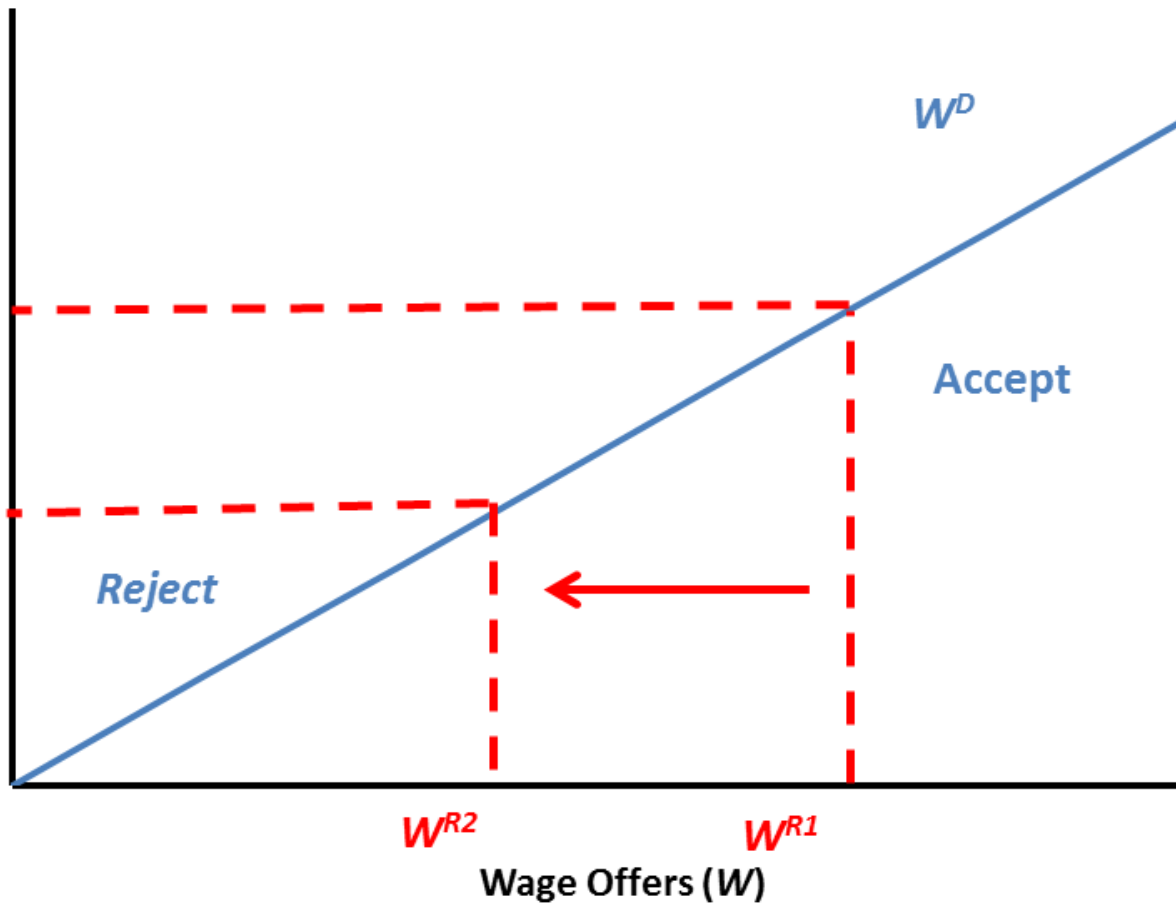
## 3. Theory

### Rational Choice:

Reservation Wage - Assumes Jobseeker will optimise job search behaviour in response to change in income:

- if JA Rate is reduced, the reservation wage will be adjusted downwards to compensate – leading to increased range of acceptable wage offers which translates into increased probability of exit from welfare support

Figure 1: Reservation Wage under Rational Choice



# 3. Theory

## Prospect Theory:

Humans have 2 cognitive systems:

- System 1: Critical thinking – Intensive and rational, can manage complex cognitive challenges but cannot be sustained for long
- System 2: Heuristic decision making – experience based rules of thumb, quick decision-making but subject to bias and error

## 3. Theory

Do previous experiences affect responses to financial incentives?

Previous Earnings as source of cognitive biases:

- Endowment Effect

Previous earnings will anchor decision making - Jobseekers with previous earnings will be less sensitive to rate changes

- Loss Aversion

Losses are felt more than gains - Jobseekers with higher previous earnings will be more sensitive to rate changes



# 3.Theory

Theory	Research Proposition	Effect Y/N
Rational Choice	<b>Optimisation:</b> The probability of the treated being in Activation/Education will increase relative to the control	-
Prospect Theory	<b>Endowment Effect:</b> The probability of being in Activation/Education of the treated <b><u>without earnings</u></b> will increase relative to the treated <b><u>with earnings</u></b>	-
	<b>Loss Aversion:</b> The probability of being in Activation/Education of the treated with <b><u>higher earnings</u></b> will increase relative to the treated with <b><u>low or no earnings</u></b>	-

## 4. Method

- Exploits 'natural experimental' conditions, focusing on the change in rates between 2009 and 2010
- New JA entrants in 2009 and 2010:
  - Control Group = 25 year olds
  - Treatment Group = 23 year olds
- Sample of 8,400 approx.
- Sourced from DSP's Jobseekers Longitudinal Database

## 4. Method

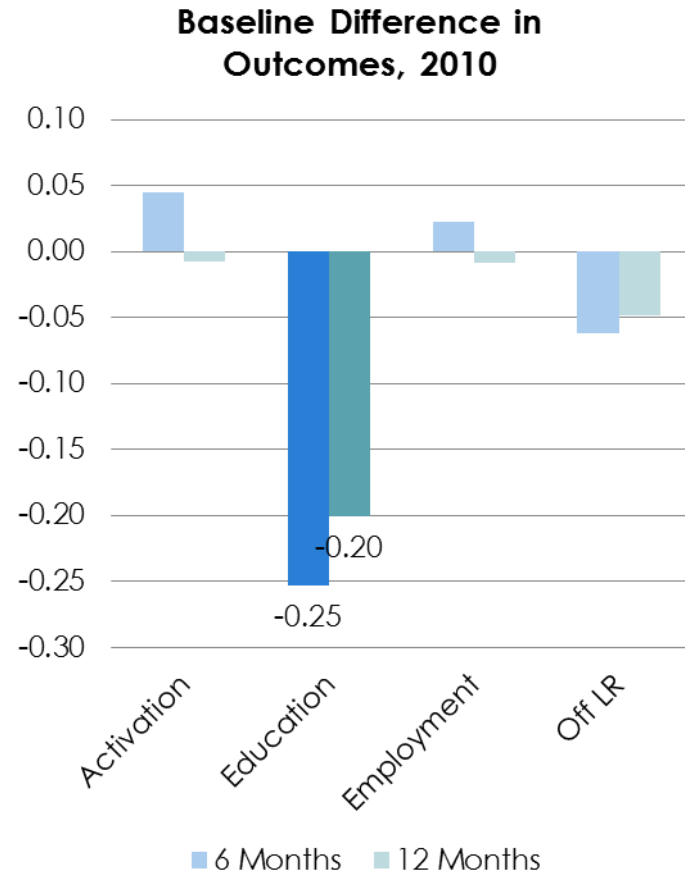
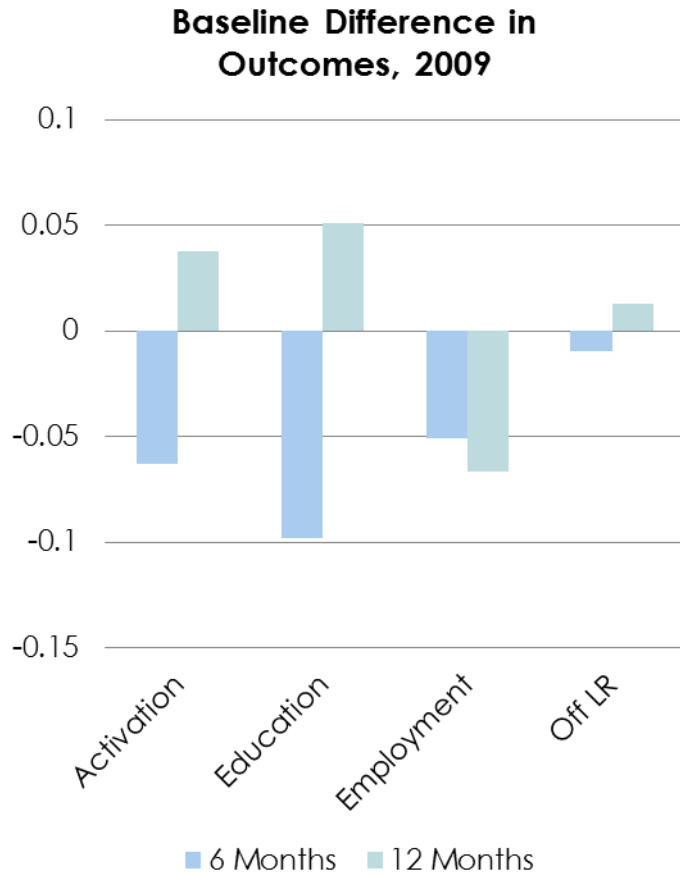
- Before and after analysis, using a Diff-in-Diff MNL design:
  - Multi-nomial Logistic Regression is useful for estimating the probability associated with nominal dependent variables that have multiple levels.
  - Diff-in-Diff is useful for identifying the impact of a clean discontinuity, but where unobserved confounders may distort estimation of impact:
    - ‘Common trends assumption’ assumes control and treatment will follow same trend in each period in the absence of treatment.

$$\rho = E(Y_{it_3}|D_i = 1) - E(Y_{it_2}|D_i = 1) - \{E(Y_{it_3}|D_i = 0) - E(Y_{it_2}|D_i = 0)\}$$

## 4. Method

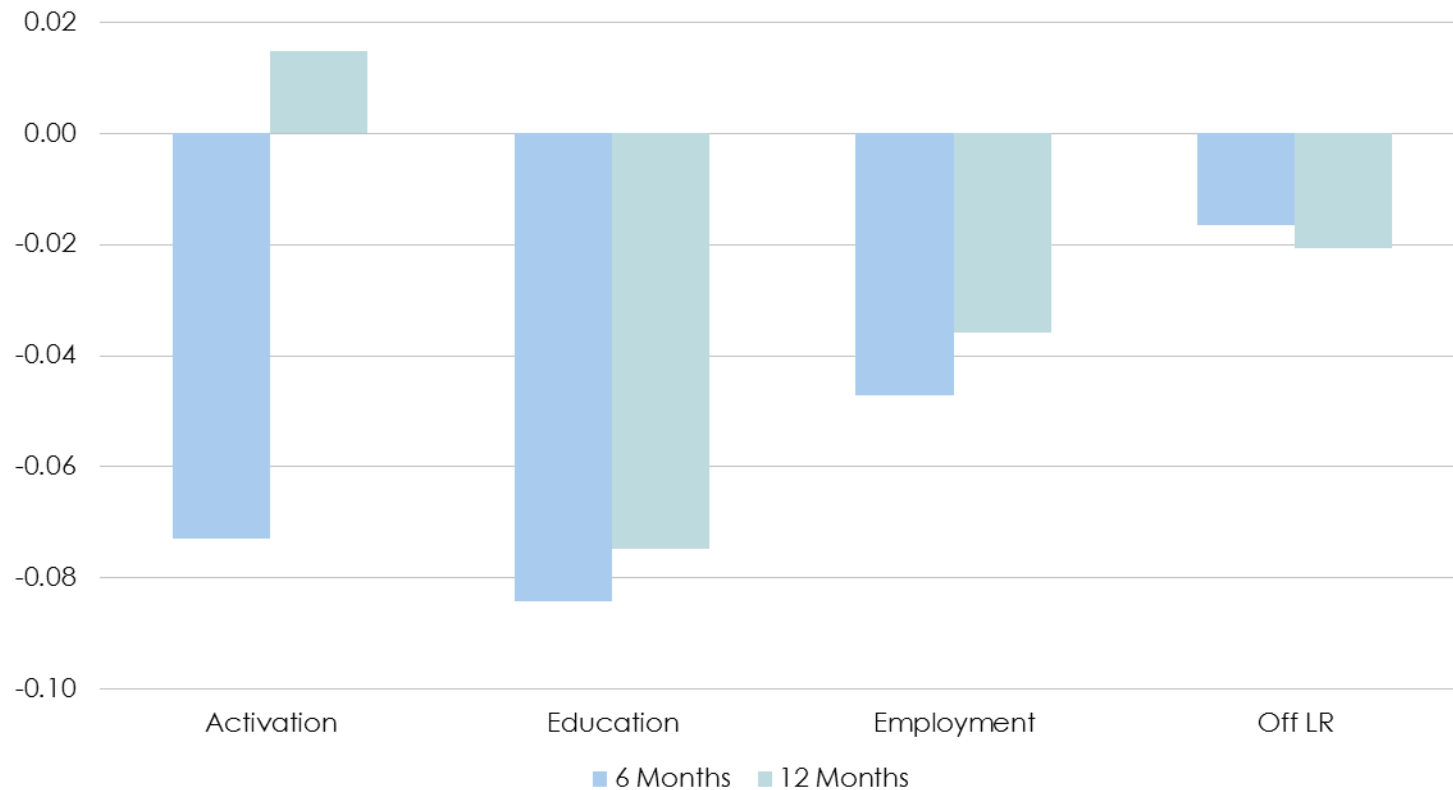
- **Dependent Variable – Change in the difference in probability of each Outcome Type between 23 and 25 year olds between 2009 and 2010**
- Outcome Type at 6 and 12 months from date of entry to LR:
  - Activation - exited into a activation programme
  - Education – exited into an education or training course
  - Employment – exited into employment/self-employment
  - Off LR – no longer on but not recorded in the other categories
  - On LR – still in receipt of specified working-age payments

# 5. Results: Baseline Analysis



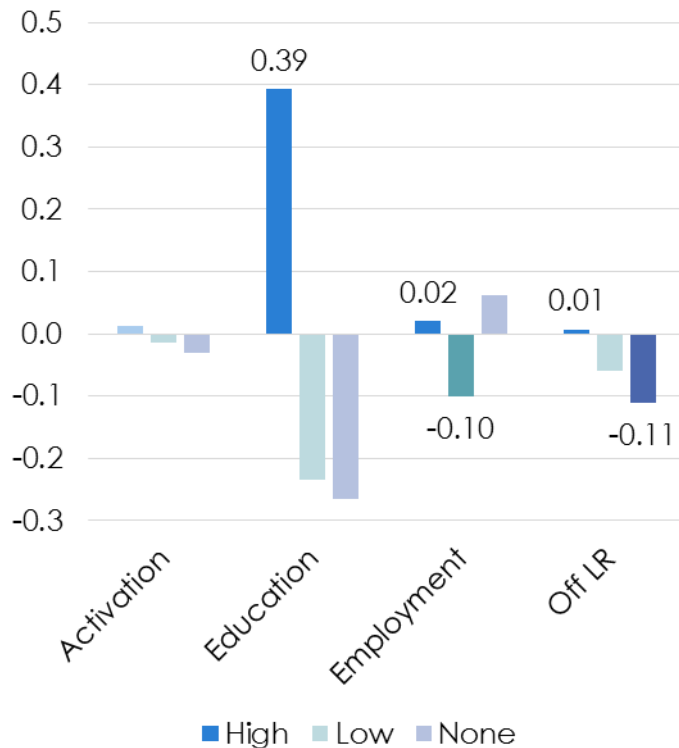
## 5. Results: Diff-in-Diff

### Diff-in-Diff Impact of Rate Reductions at 6 and 12 Months

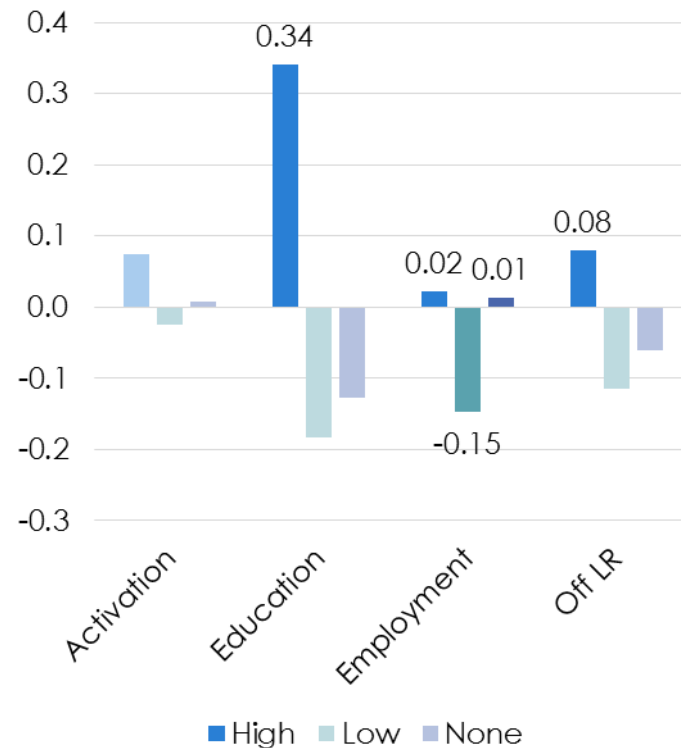


## 5. Results: Diff-in-Diff by Earnings

Impact on Outcome Probability at 6 Months, by Earnings Group



Impact on Outcome Probability at 12 Months, by Earnings Group



## 6. Interpretation

Theory	Proposition	Effect Y/N
Rational Choice	<p><b>Optimisation:</b> The probability of the treated being in Activation/Education will increase relative to the control</p>	N
Prospect Theory	<p><b>Endowment Effect:</b> The probability of being in Activation/Education of the treated <b><u>without earnings</u></b> will increase relative to the treated <b><u>with earnings</u></b></p>	N
	<p><b>Loss Aversion:</b> The probability of being in Activation/Education of the treated with <b><u>higher earnings</u></b> will increase relative to the treated with <b><u>low or no earnings</u></b></p>	Y



## 6. Interpretation

- The rate reduction does not seem to have been significant factor in labour market behaviour overall.
- However, evidence suggests the level of previous earnings was a significant factor and **did** act as a reference point.
- Responses conditional on the level of earnings – those with higher earnings were more sensitive to the change.
- Limits of ‘one-size-fits-all ‘approach of orthodox model – pre-existing context can influence how financial incentives are interpreted.

## 7. Policy Implications

- The greater take-up of Education relative to Activation may be linked to greater availability of Education places at the time.
- Link between earnings and behaviour, case for social insurance based system
- Policy makers need to interrogate their reliance on rational choice theory and its assumptions about how people behave.
- Behaviour shaped by environment and psychology – ‘bounded rationality’ - rational within a given context.

# Thank You

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