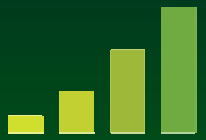

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Evaluating a time-limited in-work benefit for lone parents: did In Work Credit work?

Mike Brewer, James Browne, Haroon Chowdry and Claire Crawford

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Introduction and outline

- Know a lot about conventional in-work benefits/credits and labour supply (February 2009 *EJ* symposium, IFS Briefing Note 69)
- New trend in UK for time-limited, targeted in-work benefits. Clearly cheaper than conventional credits, but how much less effective?
- In Work Credit is a time-limited, targeted in-work benefit for lone parents who stop receiving benefits and start work
  - Piloted in some areas from April 2004, nationwide in April 2008. This work covers data up to March 2007
- Outline
  1. Background, motivation, policy detail
  2. Data and descriptives
  3. Econometrics and results

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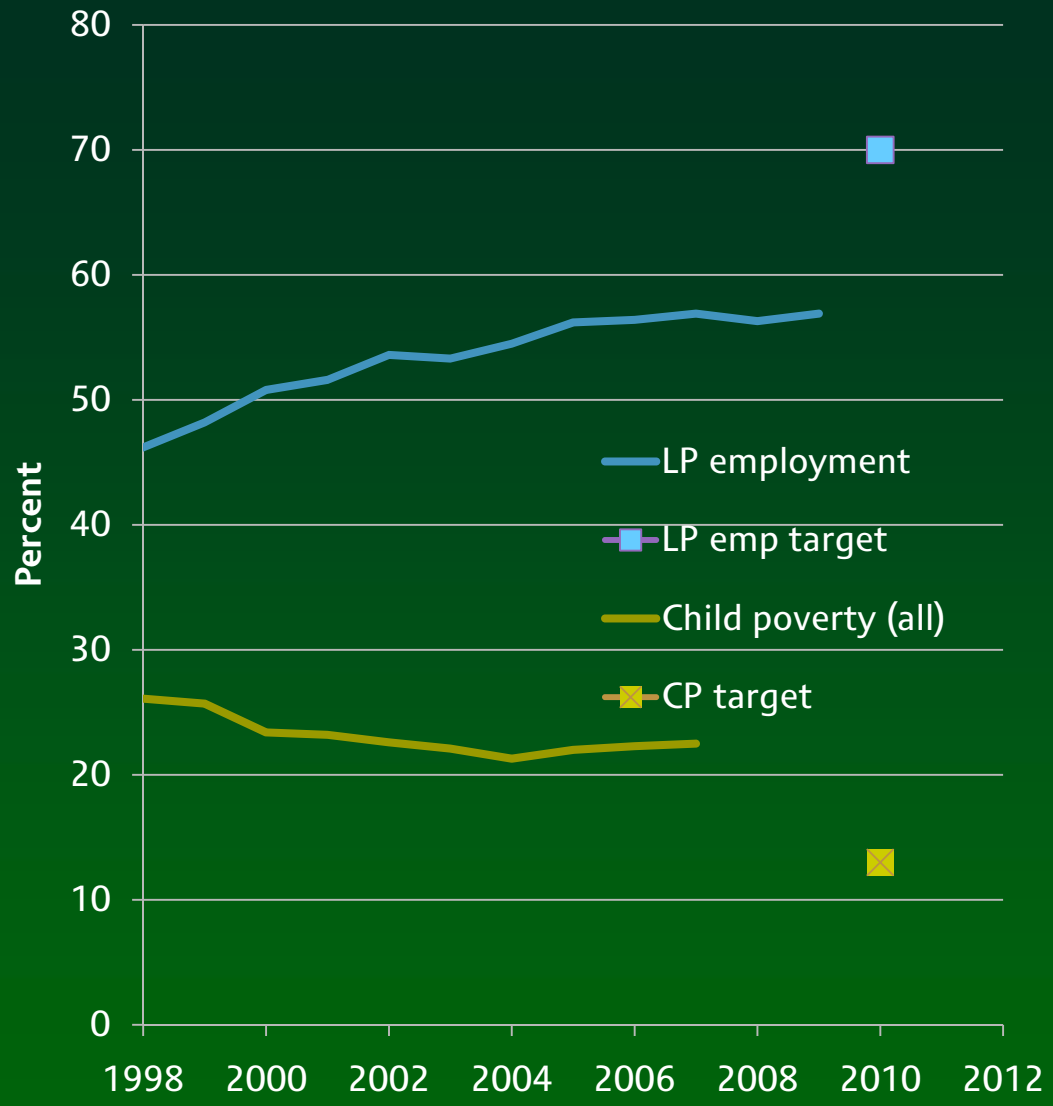
Background

High rate of child poverty and low rate of lone parent employment

- In 2004/5, poverty rate amongst workless LPs was 57%.

Policy response:

- Make work pay
- Childcare
- Flexible working
- More carrots (NDLP) and sticks (WFIs) in welfare system



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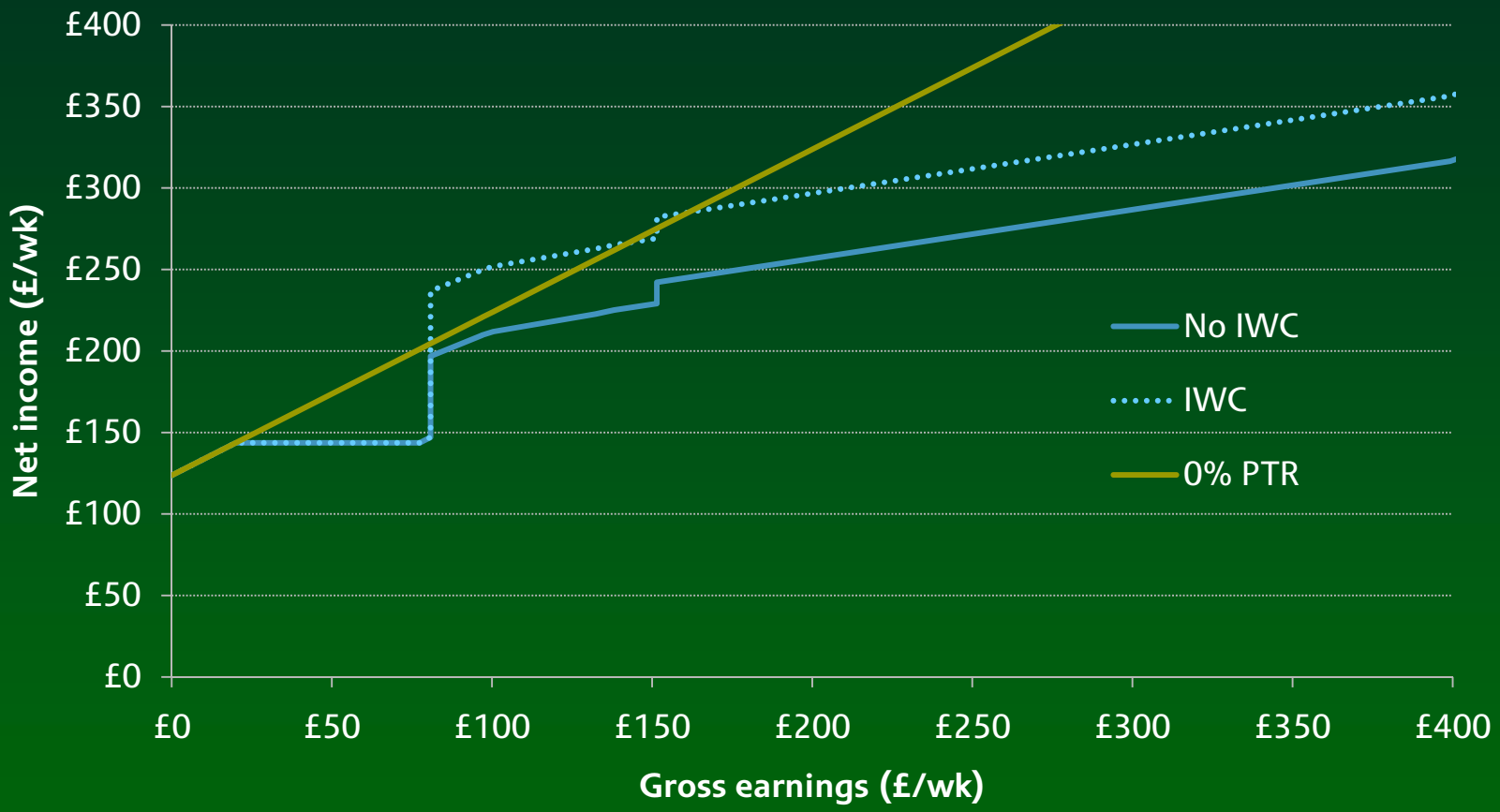
In Work Credit: policy detail

- A payment of £40 a week if
  - Stop receiving out-of-work benefits and start job of 16+ hours
  - Were a lone parent when stopped receiving out-of-work benefits
  - Have received out-of-work benefits for at least 12 months
- Receive IWC while in work for maximum of 52 weeks
  - Send payslips to JC+ to maintain eligibility
  - Can receive IWC multiple times if cycle from work to out-of-work benefits for 12+ months
- Not taxable, and does not reduce tax credits or HB/CTB

- NB now worth £60/wk in London, and available to "partners" with children

£40 makes a big difference to the gain to work for a low-wage lone parent…



2006/7 tax and benefit system, assuming NMW. 1 child.
No childcare, CT = £15.86/wk

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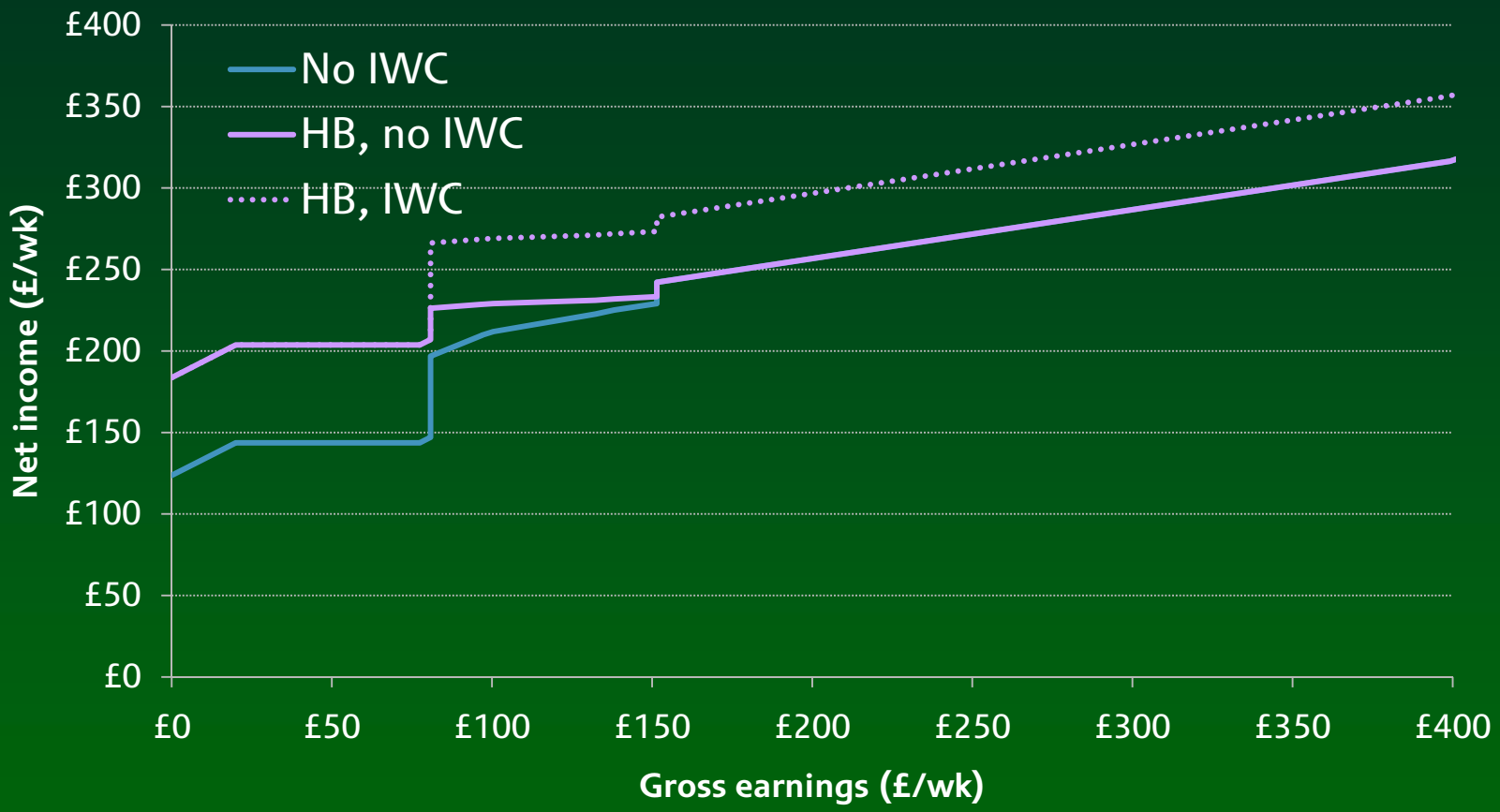
...especially for the majority who are also receiving Housing Benefit



2006/7 tax and benefit system, assuming NMW. 1 child.
No childcare, CT = £15.86/wk

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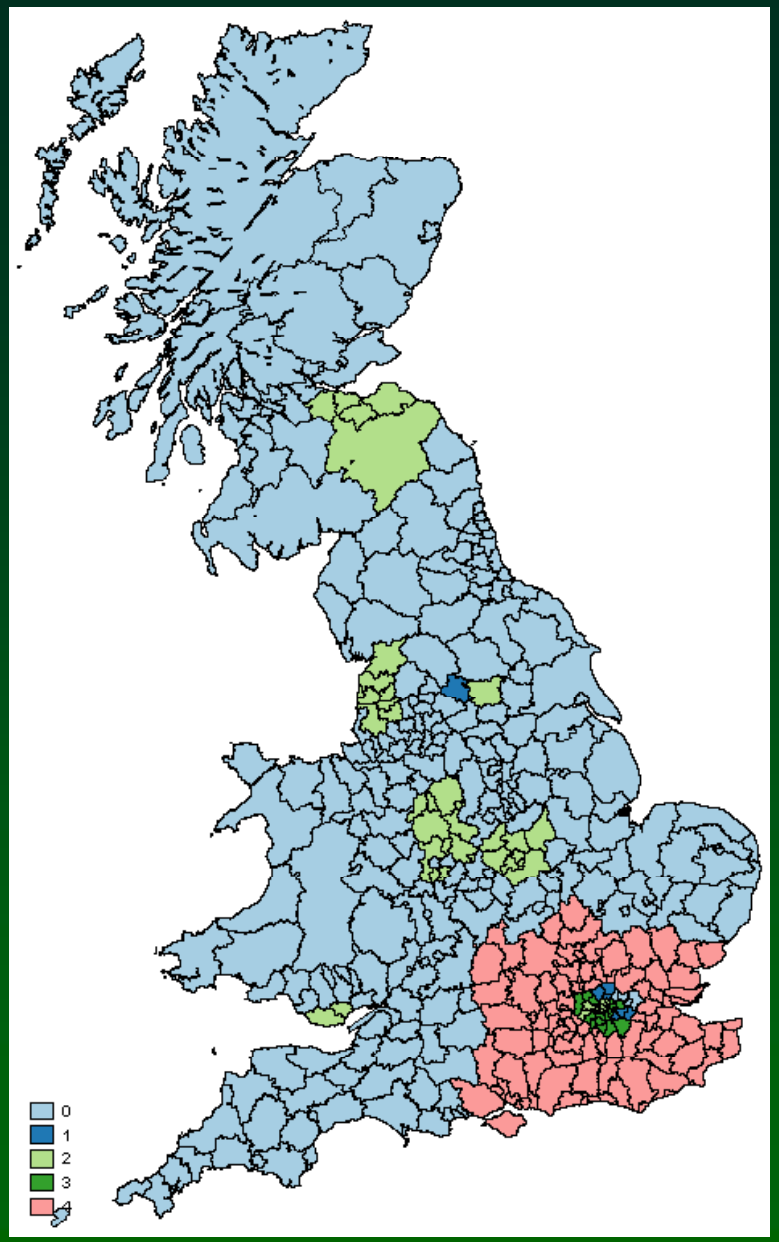
Details of pilots

Four phases, with different start dates:

- Bradford, SE London, N London
- Cardiff, Dudley, Edinburgh, Lancashire W, Leicester, Leeds, Staffordshire, C London, W London
- Brent, City of London, Lambeth, S London
- Surrey, Sussex, Essex, Kent, Berkshire, Buckinghamshire, Bedfordshire, Hertfordshire, Hampshire

In some districts, IWC piloted alongside other policies

- Work Search Premium (a flop)
- "Extended Schools Childcare" pilots, and Quarterly WFIs for YC12+
- New Deal plus for Lone Parents



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Why limit IWC to 52 weeks?

- Policy is mostly about up-front cash-flow problem?
- Time-limit can be alternative to means-test if wage growth rapid
- Habit formation? Time-inconsistent preferences??

Related work

- Conventional in-work benefits and lone parents' labour supply
  - *Economic Journal*, February 2009; IFS Briefing Note 69, Eissa and Hoynes (2005), Cai et al (2008)
  - lone parents are relatively responsive on the extensive margin. Some argue that participation tax rates should be set at levels close to zero, or even negative (Saez, 2001; Brewer, Saez, Shephard, 2008)
- Self-Sufficiency Project (SSP)
  - Card & Hyslop (2005), Ford et al (2003)
- US welfare reforms with time-limits usually have *all* welfare disappearing

- NB also qualitative evaluations of LPPs (Ray et al (2007), Hosain and Breen (2007) (DWP RRs 423, 426))

What impact do we expect IWC to have? (draws on Card and Hyslop, 2005)

Groups	Impact
On benefit for <12 mnths	Reduce off-flow rates
On benefit for 12+ mnths	Increase off-flow rates
IWC recipients	Increase job retention
	Reduce earnings
Former IWC recipients	????
Other people	Could be substitution or displacement effects

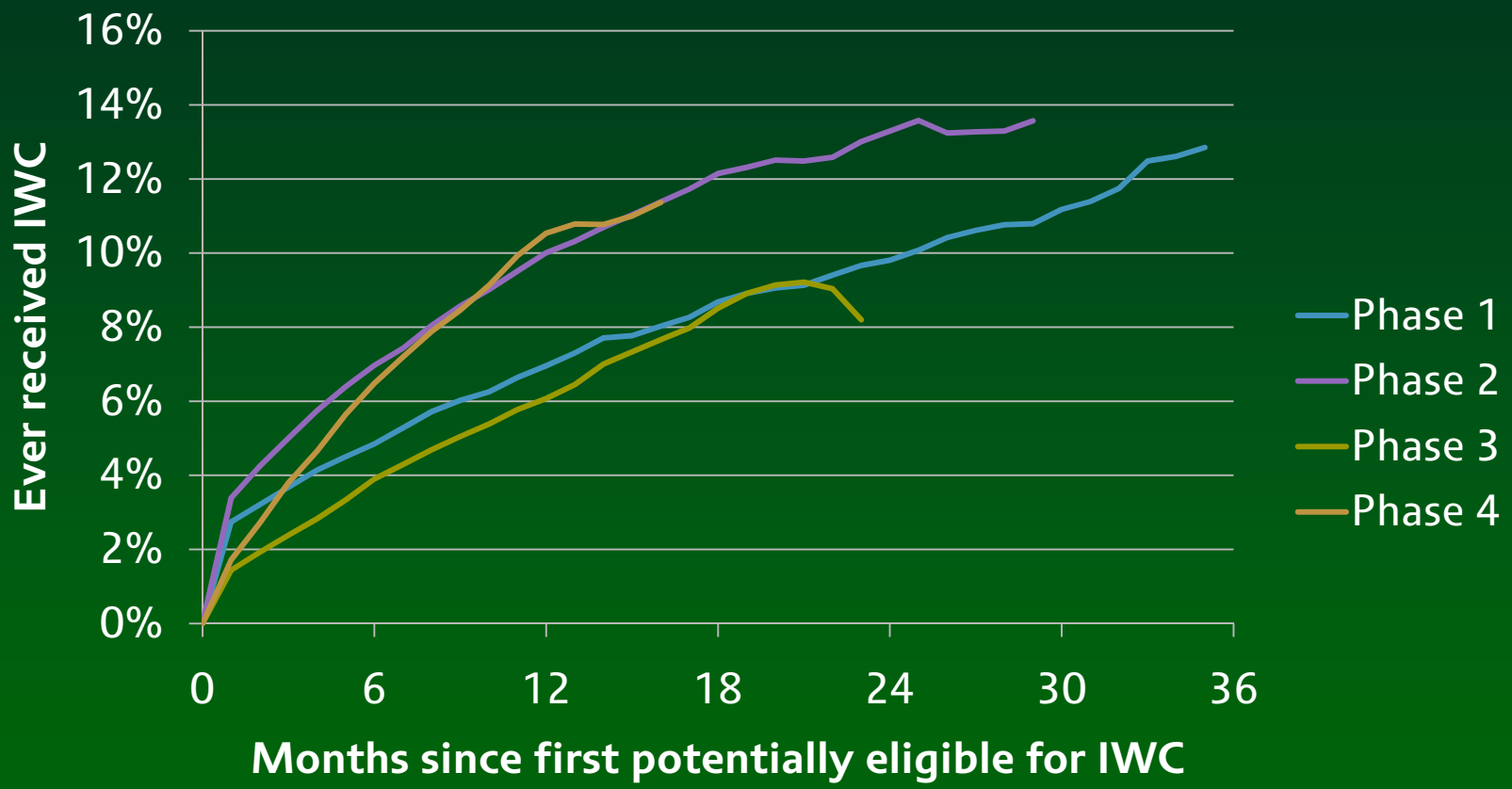
Data

- Adminstrative data (Work and Pensions Longitudinal Study, WPLS). Matched data on
  - All DWP benefit claims from summer 1999 to March 2007
  - HMRC employment spells since 1999 to March 2007
  - HMRC annual earnings for 2004/5 to 2006/7; not used
- Benefit and IWC data is “good”, work data “less good”
  - By design, HMRC database excludes jobs below tax threshold, self-employment and informal work
  - Includes spells on taxable benefits
  - “Noise” in start & (especially) end dates
- Local-area data, matched on postcode
  - Census, decile of IMD, English childcare availability in 2003/4 (SOA or ward level) (constant)
  - Unemployment & vacancies (TTWA-level) (varying)

What outcomes did we look at? And for whom?

- Did IWC get more people off benefits and into work?
  - Impact of being potentially eligible for IWC ("intention to treat")
  - "Stock": potentially eligible for IWC on day 1 (N=311,610)
  - "Flow": become potentially eligible later (N=102,433 to 4,509)
- Did IWC recipients stay off benefits/in work for longer?
  - What happened when they reached the time-limit?
  - Have data on c40,000 IWC claims, although some are right-censored

Take-up of IWC amongst potentially eligible (flow sample)



On average, a third of those leaving IS/JSA started an IWC claim

IWC recipients have fewer and older children, more likely to have been on NDLP, and less likely to be on a disability benefit

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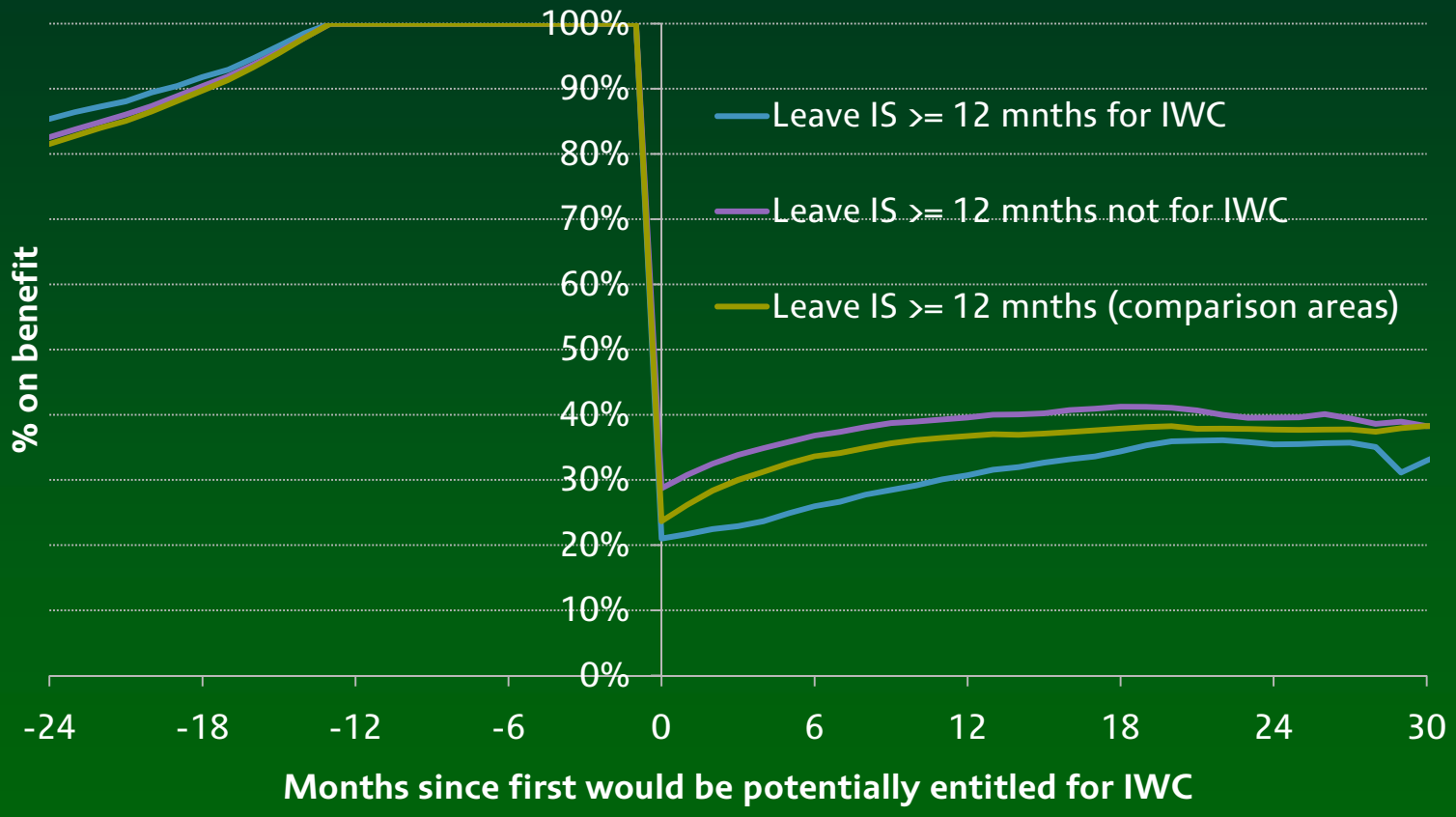
IWC recipients vs other IS leavers (benefit)



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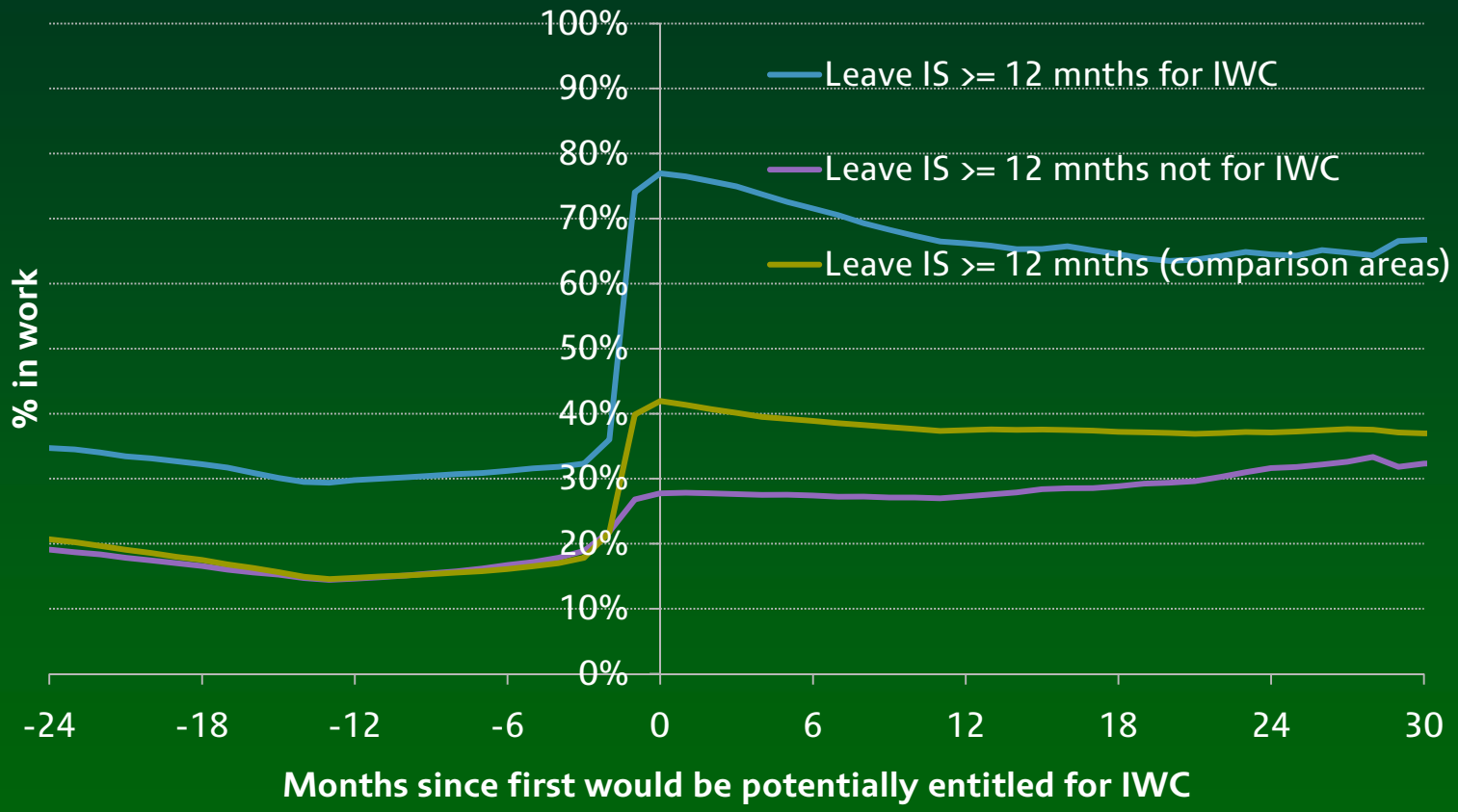
IWC recipients vs other IS leavers (work)



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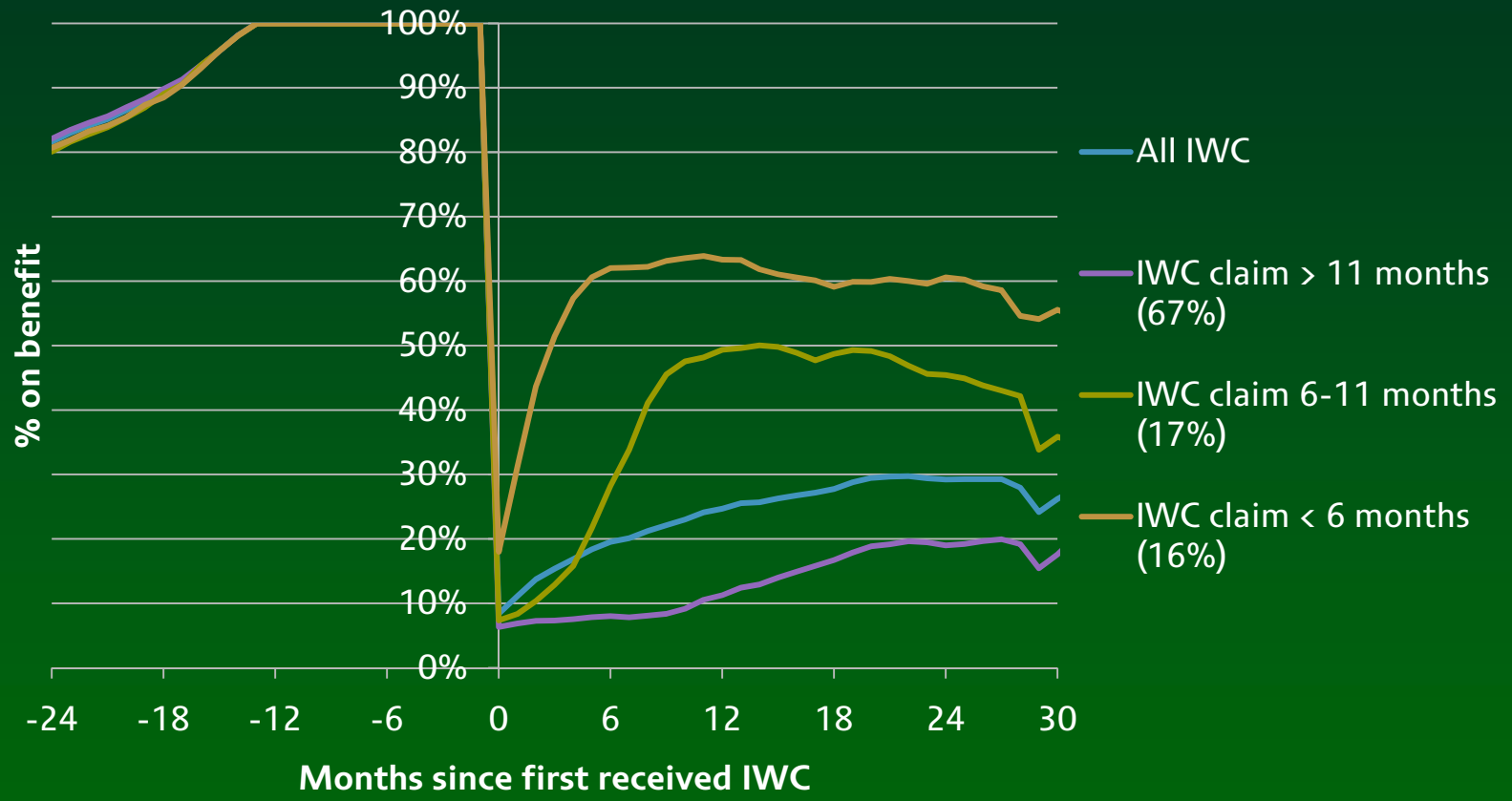
IWC recipients by length of claim (benefit)



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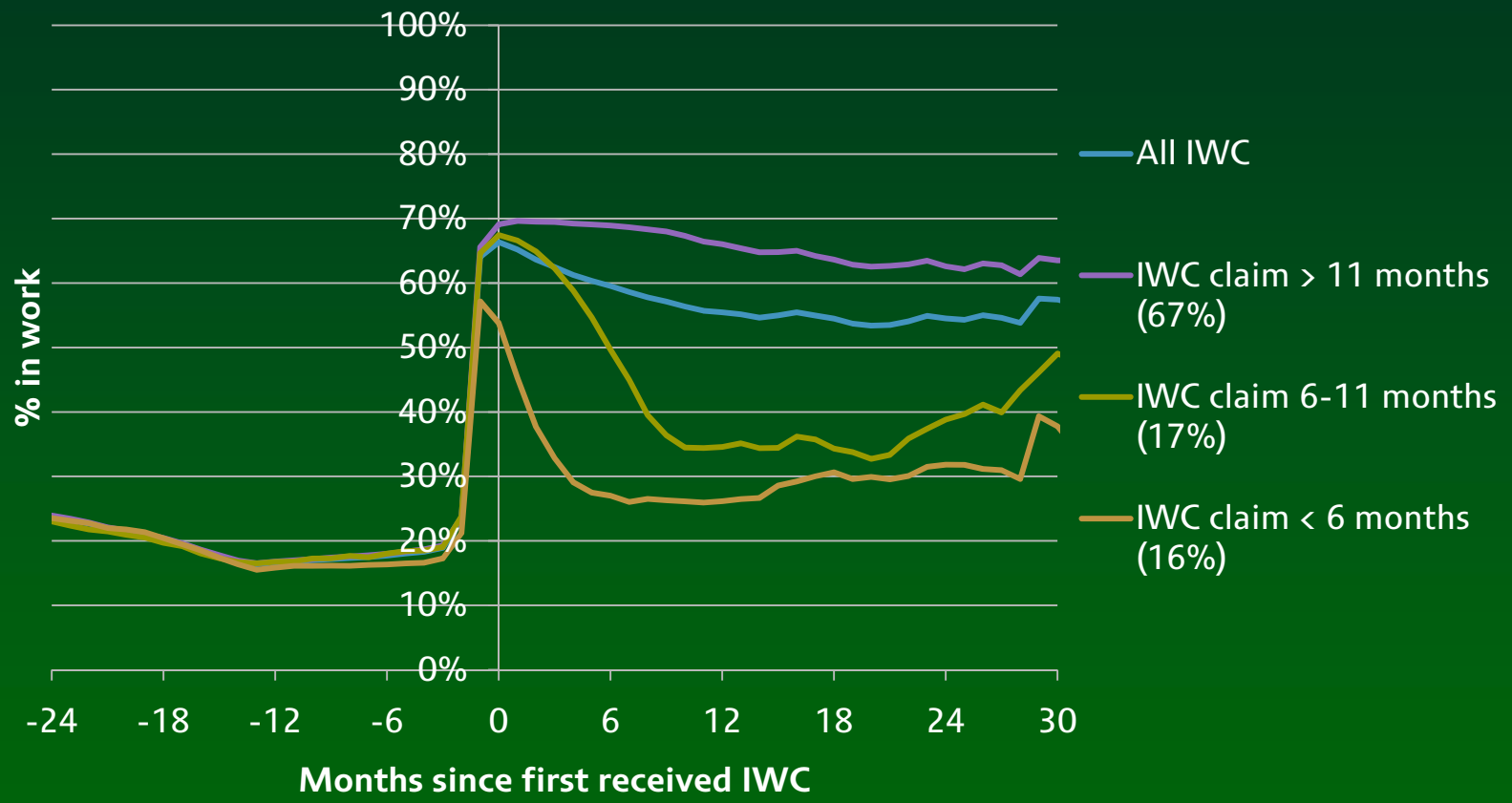
IWC recipients by length of claim (work)



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DiD specification

- 4 pilot areas, 4 different start times, lots of time periods, so generalised DiD:

$$y_{ijt} = \alpha_j + \lambda_t + \chi IWC_{jt} + X_{ijt}'\beta + \varepsilon_{ijt}$$

y is some outcome (labour market state or transition rate)

i indexes people, *j* indexes JC+ district, *t* indexes calendar time

IWC_{tj} is "is IWC available in district *j* at time *t* ?", χ is impact of IWC

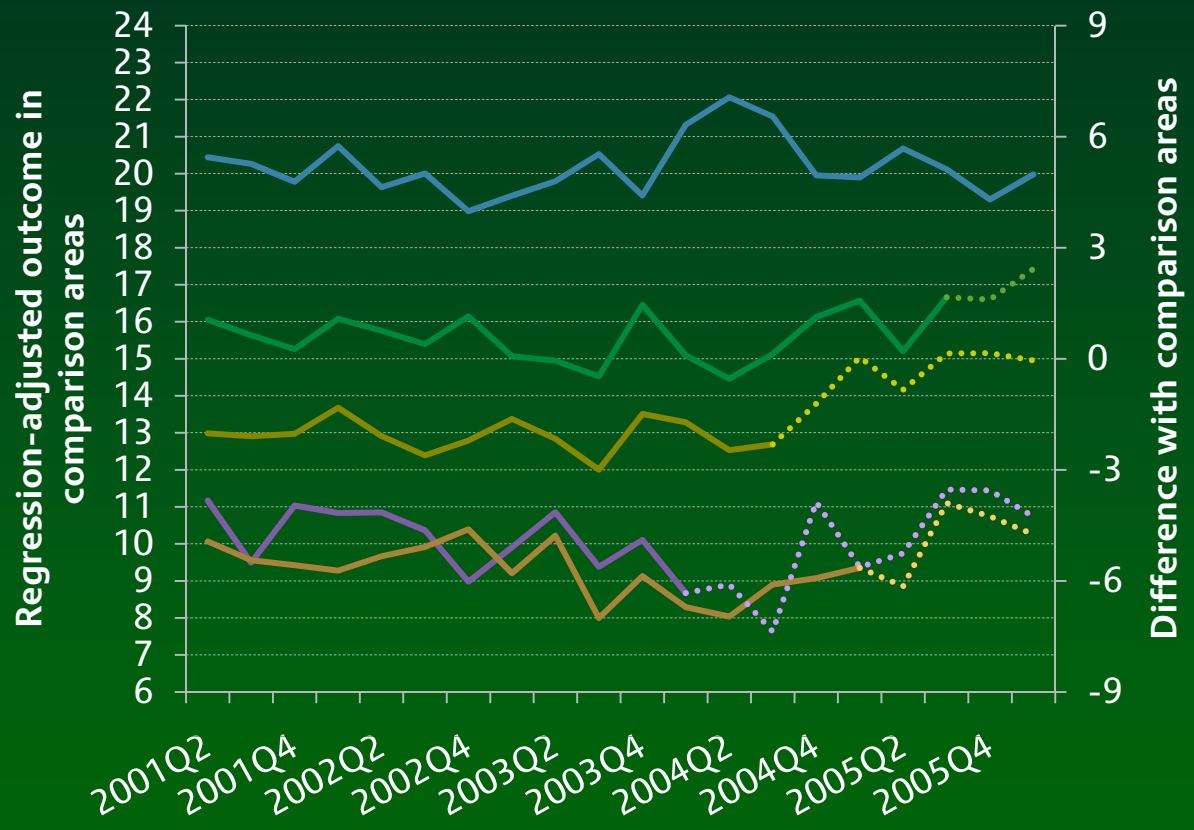
α_j are JC+ district dummies, λ_t are quarterly dummies

X_{ijt} age, gender, age and # of kids, ethnicity, past receipt of other benefits, work & IS/JSA history (1-3 years), local-area variables, time

Linear probability

- "Common trends" is key assumption: will discuss later

Descriptive analysis: no sign that "common trends" fails before IWC starts



Note: outcomes are adjusted for covariates.

- Comparison (LH axis)
- Phase 1 (RH axis)
- Phase 2 (RH axis)
- Phase 3 (RH axis)
- Phase 4 (RH axis)

Pre-IWC differences between pilots & comparison areas constant
"Placebo test" gives small, almost-always insignificant, impacts
Variant of differential quadratic trends has minimal impact on results

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Results: impact (ppt) on those potentially eligible for IWC, flow sample, all phases & cohorts

Months since first pot elig for IWC	Benefit impact	Work impact	Benefit outcome	Work outcome
6	**1.0** (0.154)	**0.7** (0.151)	11.8	12.0
12	**1.6** (0.220)	**1.0** (0.199)	18.2	14.3
18	**1.7** (0.301)	**1.3** (0.265)	22.5	15.6
24	**2.0** (0.419)	**1.4** (0.366)	25.9	16.7
30	1.2 (0.758)	0.4 (0.650)	27.3	16.6

Standard errors in brackets. From Table 4.1 of DWP RR.

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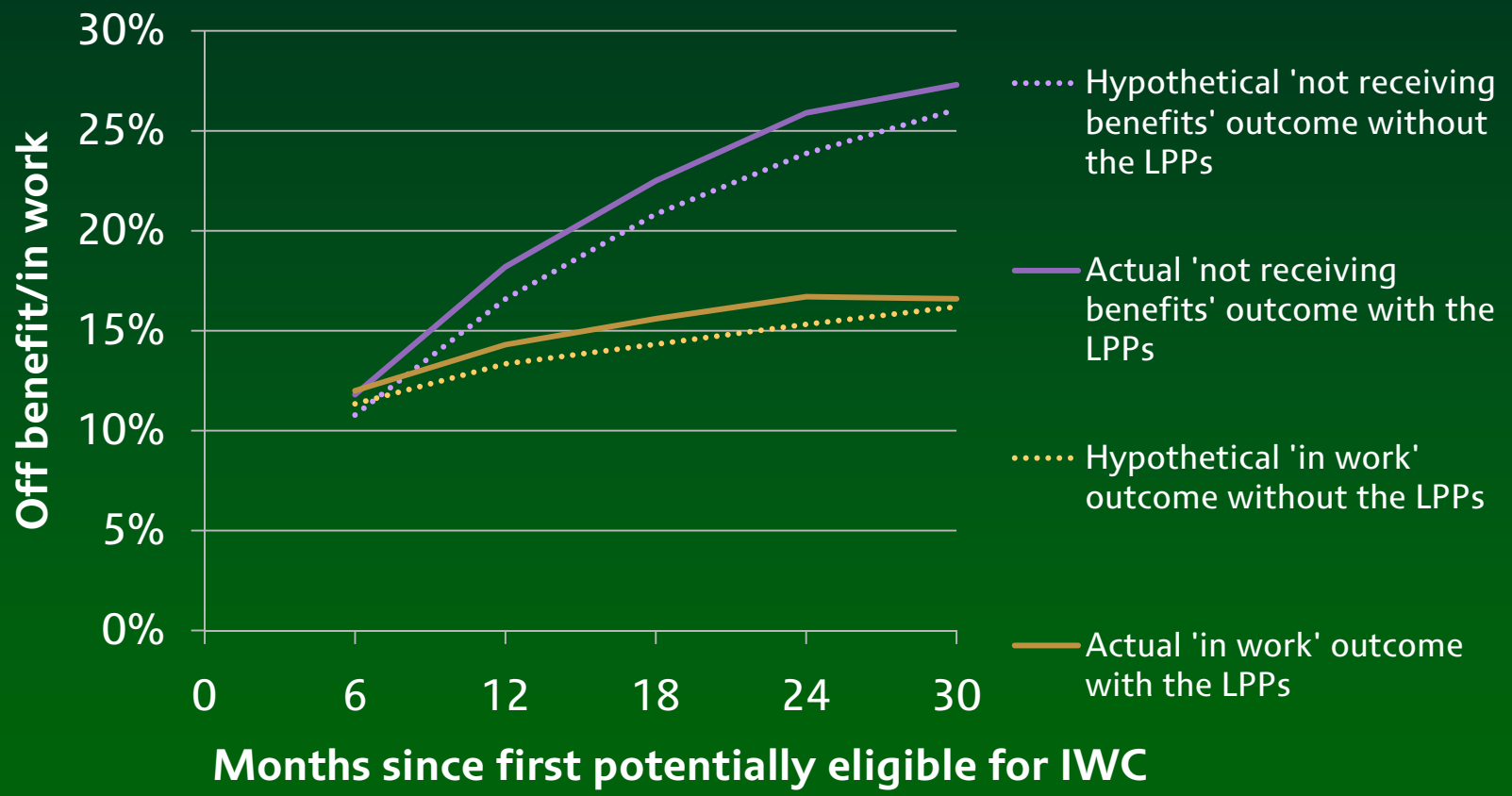
Results: outcomes & impact for those potentially eligible for IWC, flow sample



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Results: variants

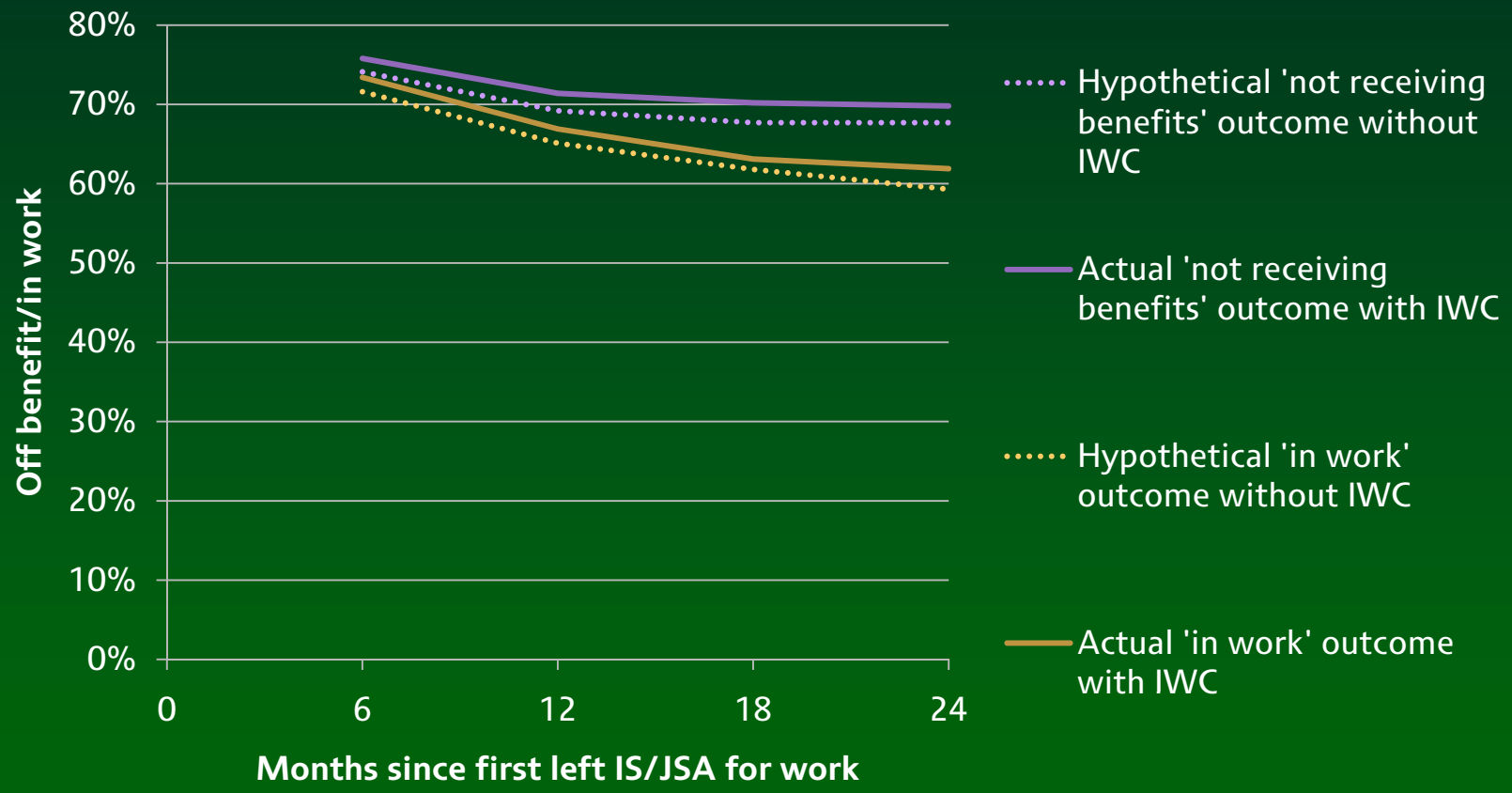
- Impacts do not vary significantly between Phases
- Impacts appear greater for more recent cohorts, but not always statistically significant
- Impact greater in flow than stock
- Impact sometimes significantly greater if lone parent had previously joined NDLP, especially in stock sample.
  - Could be selection effects? Information?? Some other interaction ???
- Other policies in LPPs
  - QWFIs (YC 12+): no significant difference in impact
  - ND+fLP: no significant difference for flow sample, some significantly LOWER impacts in stock sample

Results: variation by policy package and previous NDLP experience

Months since first pot elig for IWC	Base	ESQWFI	ND+fLP district	Previously on NDLP
12 (benefit)	**1.5** (0.247)	0.2 (1.028)	**1.4** (0.337)	**4.2** (1.010)
12 (work)	**0.8** (0.203)	**0.2** (0.895)	**1.3** (0.284)	**1.9** (0.852)
24 (benefit)	**1.8** (0.662)	3.2 (1.844)	**1.9** (0.500)	2.8 (1.872)
24 (work)	**1.3** (0.571)	1.7 (1.690)	**1.2** (0.439)	0.9 (1.623)

Standard errors in brackets.

Impact of IWC on job retention: DiD results



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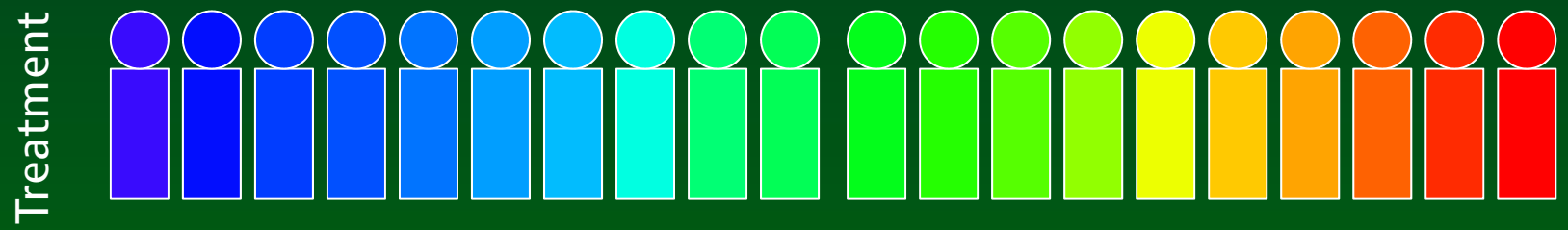
Estimating impact on in-work outcomes

- Estimating impact on in-work outcomes can be problematic (Ham and Lalonde, 1996; Eberwein, Ham and Lalonde, 1997)
- Assume lone parents have variety of characteristics



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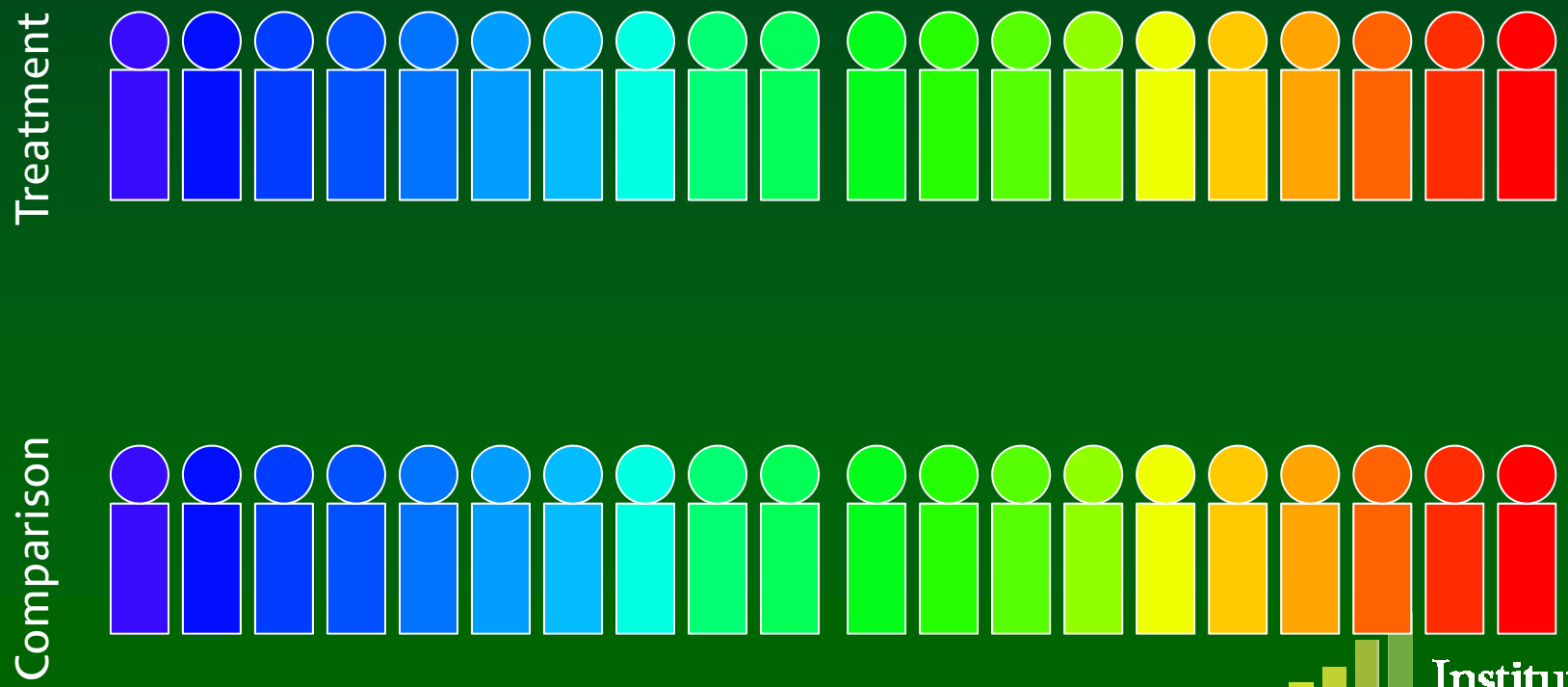
Aside: estimating impact on in-work outcomes

- Assume lone parents on IS have variety of characteristics (colour)
- There is a perfect comparison group



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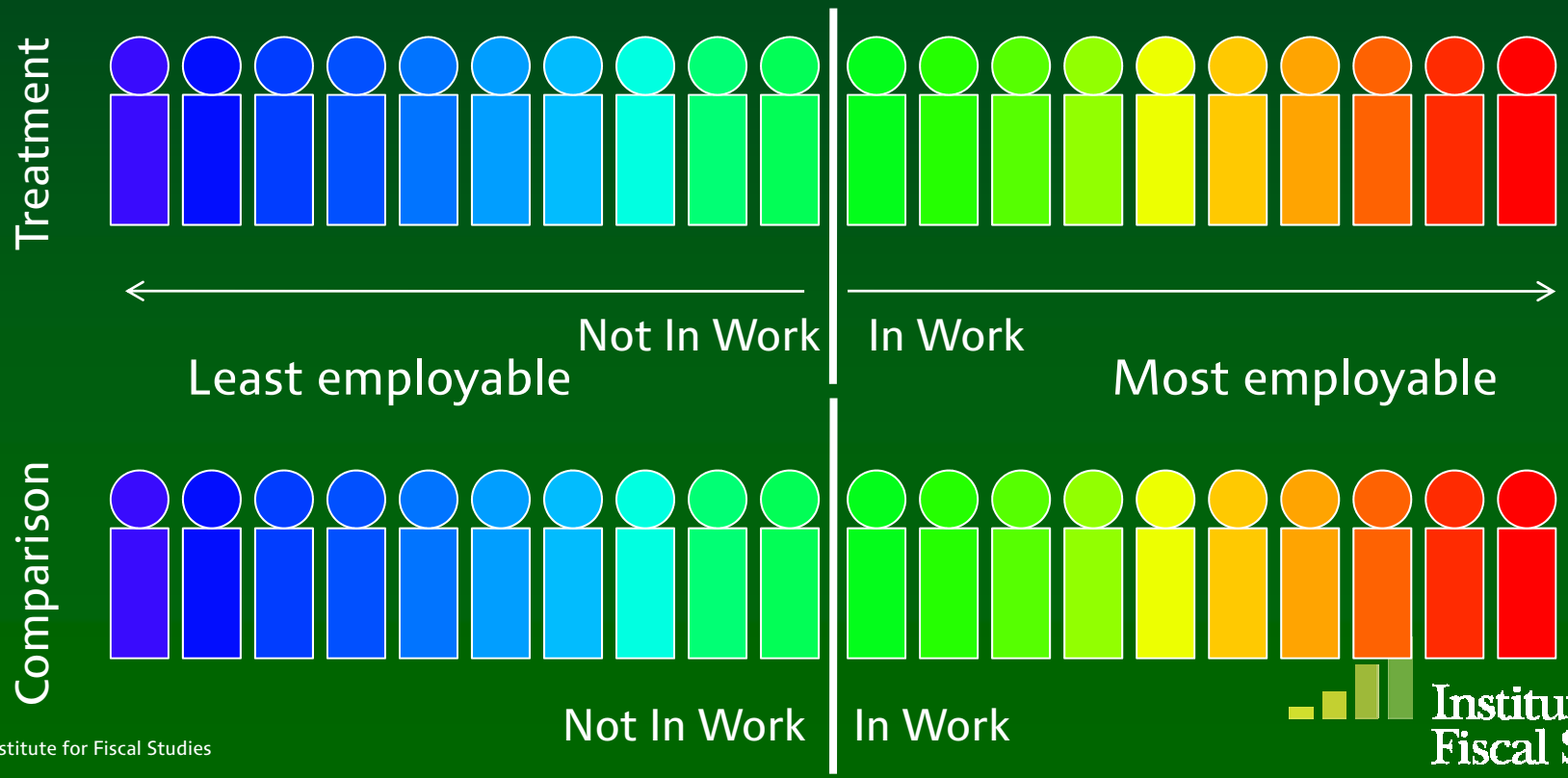
Aside: estimating impact on in-work outcomes

- Assume lone parents on IS have variety of characteristics (colour)
- There is a perfect comparison group
- Half of each group (the most employable) get a job



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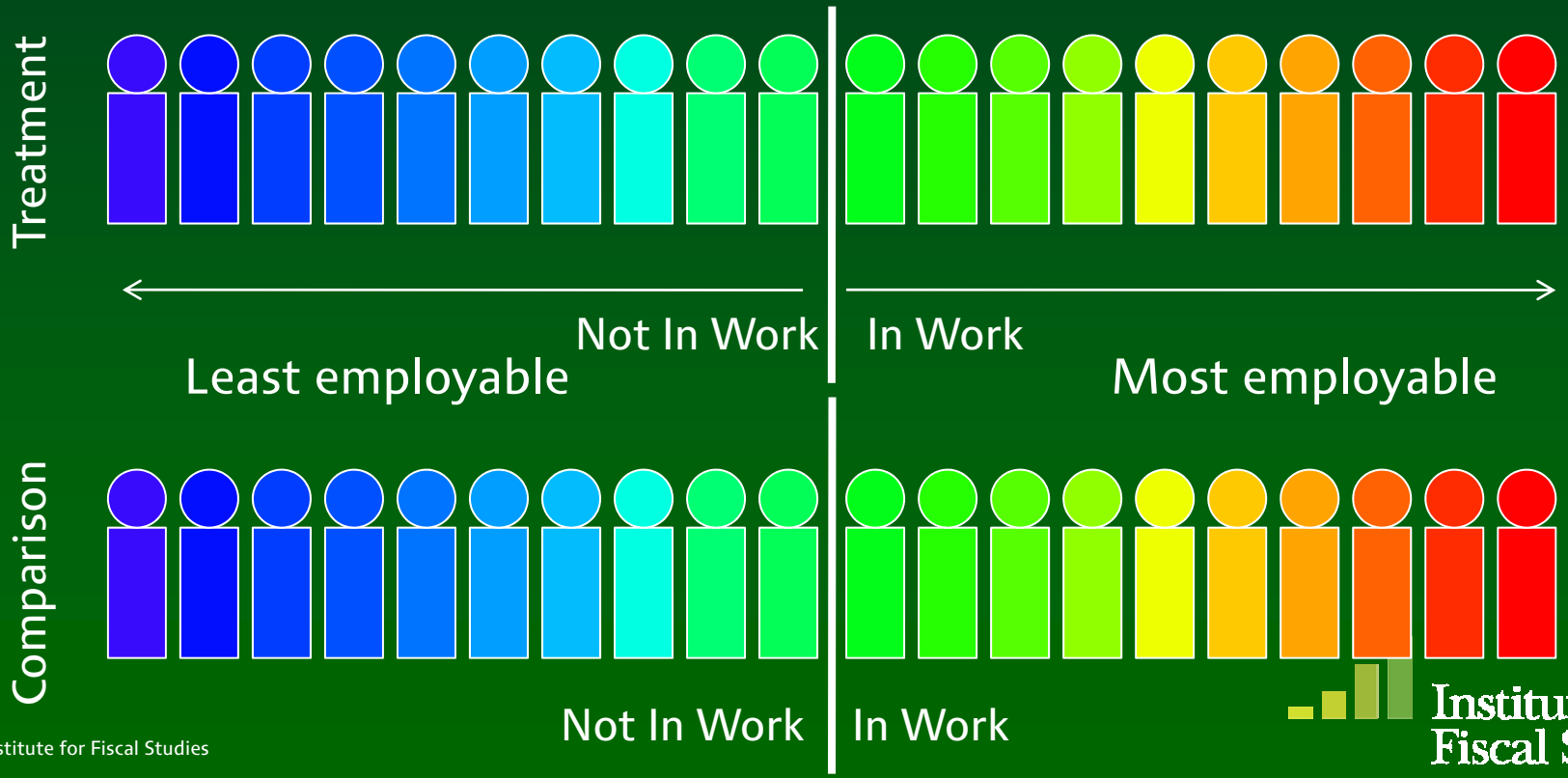
Aside: estimating impact on in-work outcomes

- Assume IWC means that 60% of the treatment group find a job



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Aside: estimating impact on in-work outcomes

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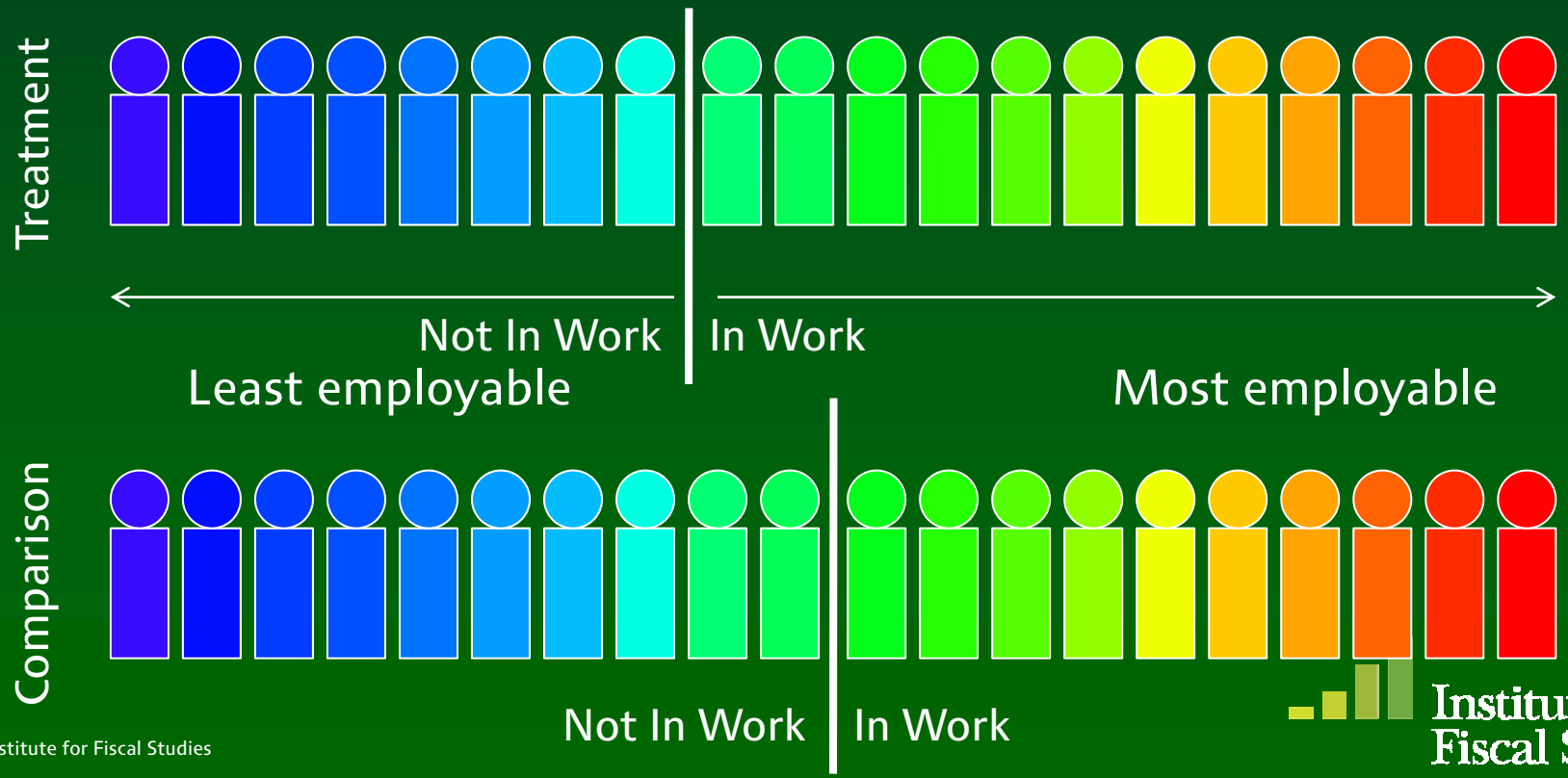

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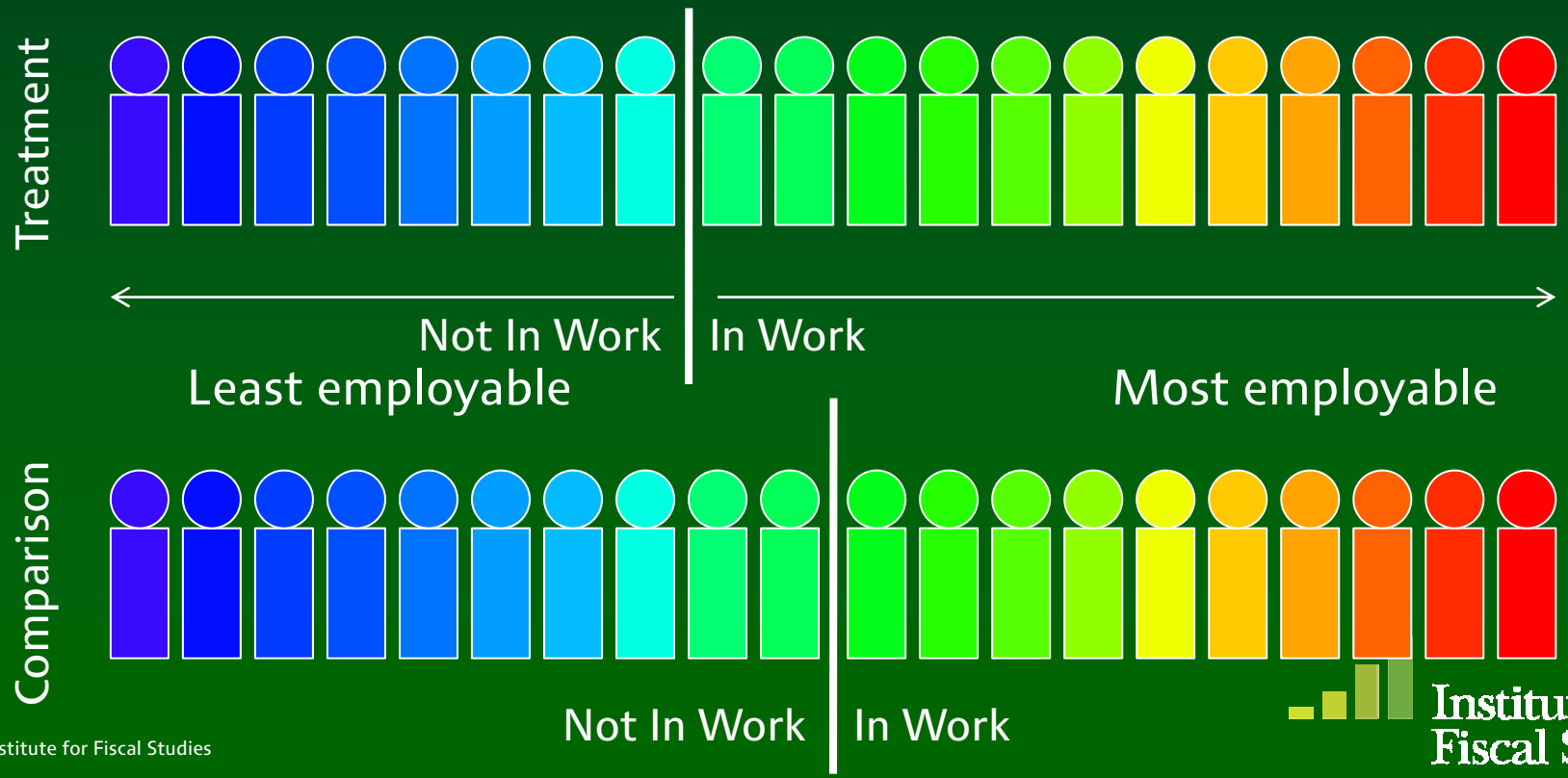
Aside: estimating impact on in-work outcomes

- Assume IWC means that 60% of the treatment group find a job
- The new workers are less employable than others who find a job



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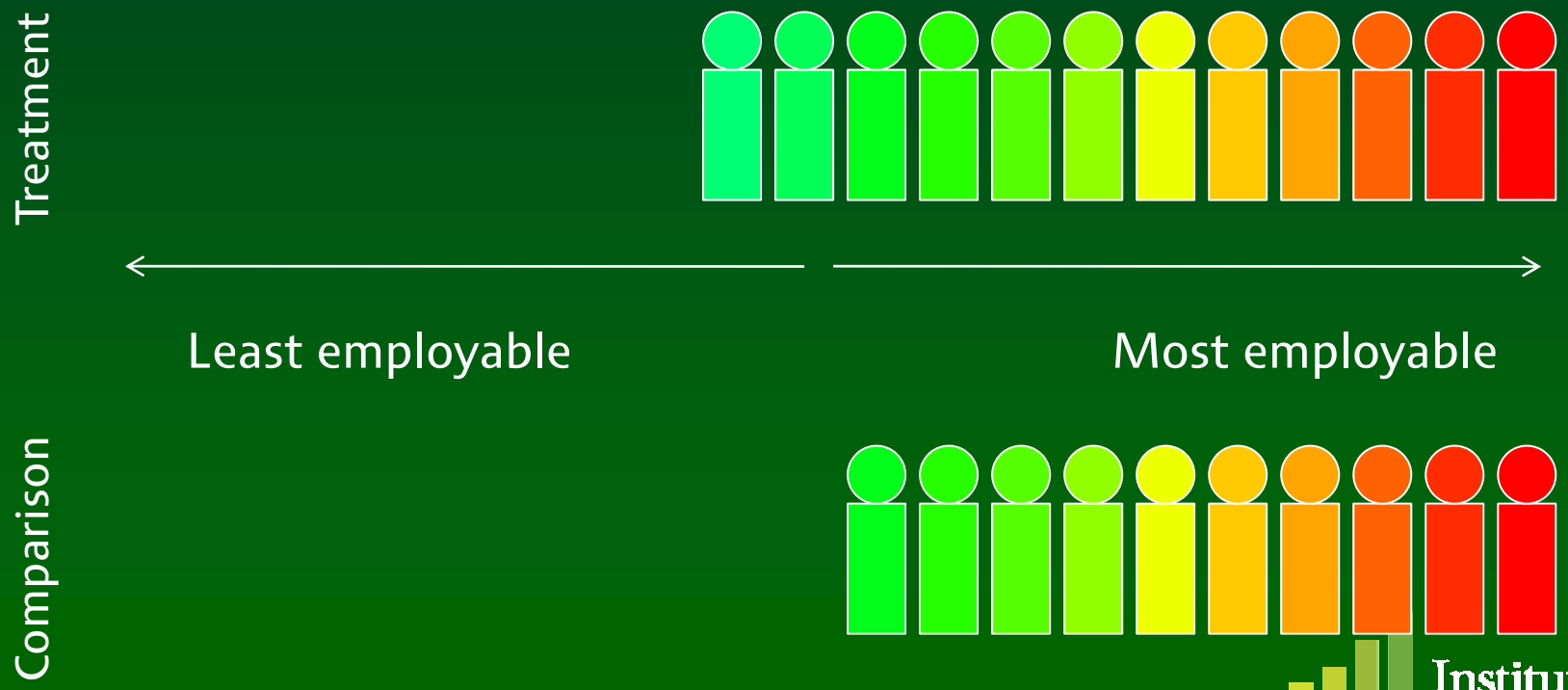
Aside: estimating impact on in-work outcomes

- Comparing outcomes of those in work after IWC is introduced picks up differences resulting from different characteristics as well as those caused by IWC
- If colour (employability) unobserved, then dynamic selection bias



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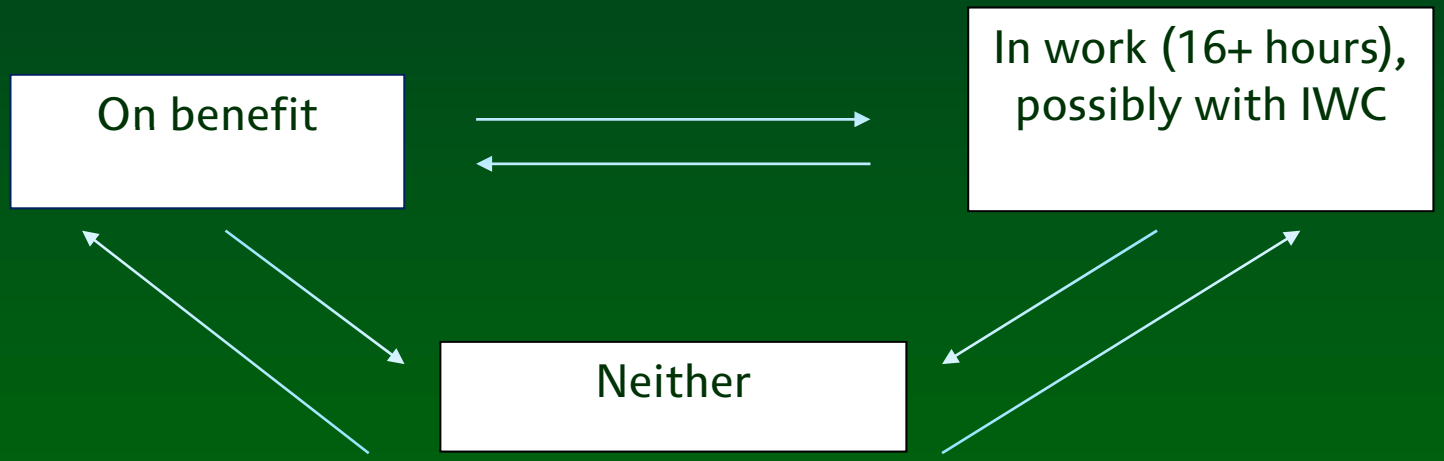
Transitions model: ideal specification

Duration/transition models can deal with dynamic selection bias by specifying and modelling the unobserved heterogeneity.

Builds on Ham and Lalonde (1996) & Eberwein, Ham and Lalonde (1997). Also Zabel et al (2004, 2006)



Problem: "work" data in WPLS not perfect record of who is working 16+ hours

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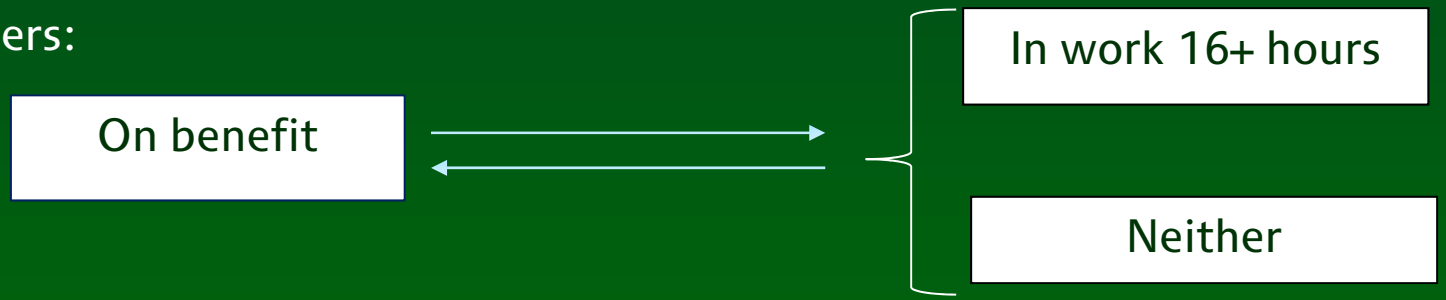
Transitions model as estimated

For those potentially entitled to or receiving IWC:

For others:



Make spell data quarterly, and estimate each transition as logit.

Transition rates depend on # and age of children, duration in current state, time, pilot phase, entitlement to/receipt of IWC

Allow for unobserved heterogeneity, correlated across spells

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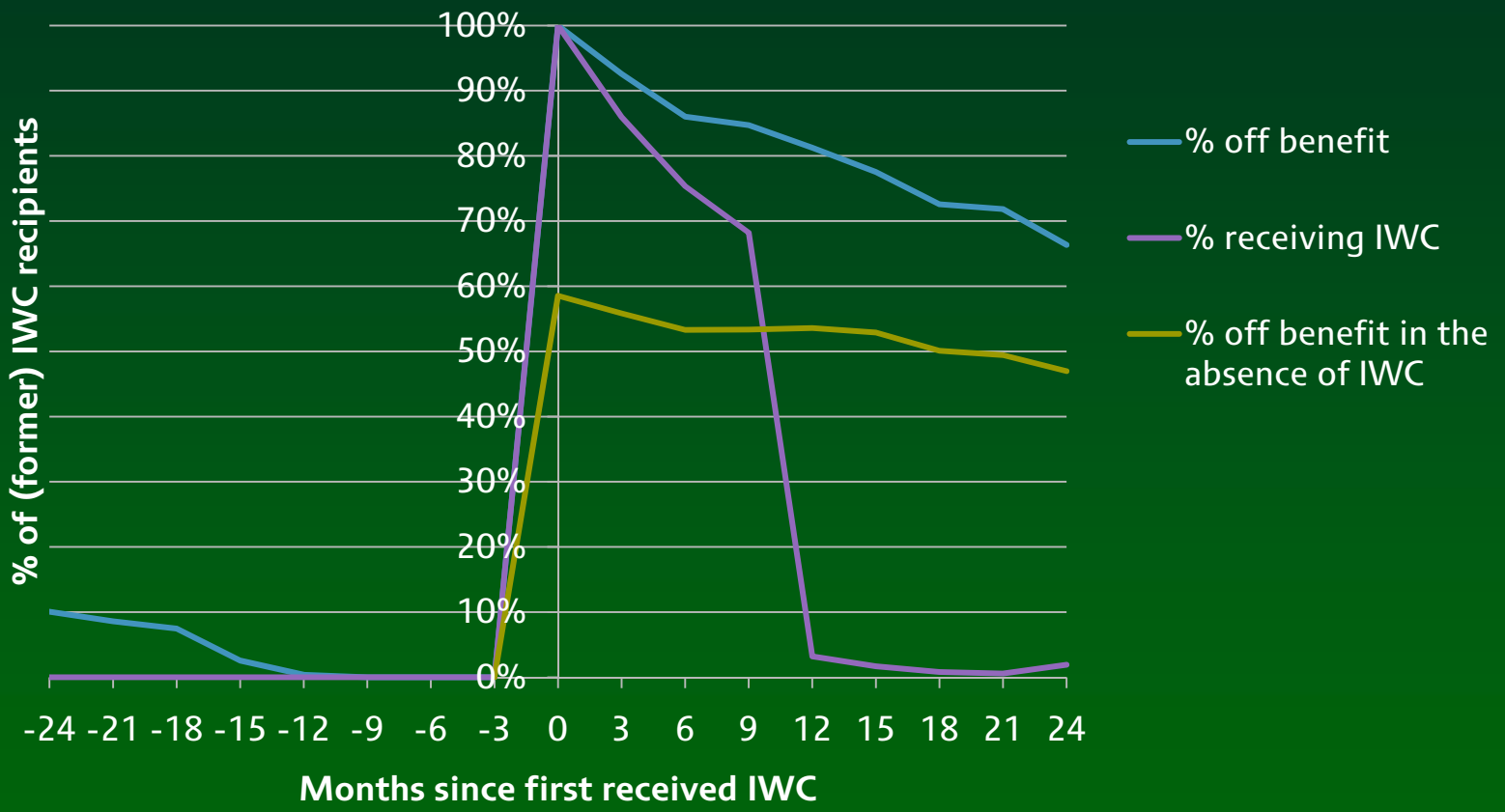
Results: transitions model

- Coefficients on covariates have sensible signs:
  - Moves into work more likely if have fewer children and older children
  - "Potentially eligible to IWC" increases flows off benefit
  - "Receipt of IWC" reduces flows back onto benefit
  - Seasonal, time and duration patterns

- Coefficients little use themselves, but use to simulate behaviour of IWC recipients if IWC had not existed
  - Amongst potentially eligible, gives impact of IWC which is larger than DiD
  - But also can look just at IWC recipients…

Results: impact of IWC from transitions model



Can simulate without "retention effect": overall estimated impact of IWC hardly changed. So high retention amongst IWC recipients not really due to IWC

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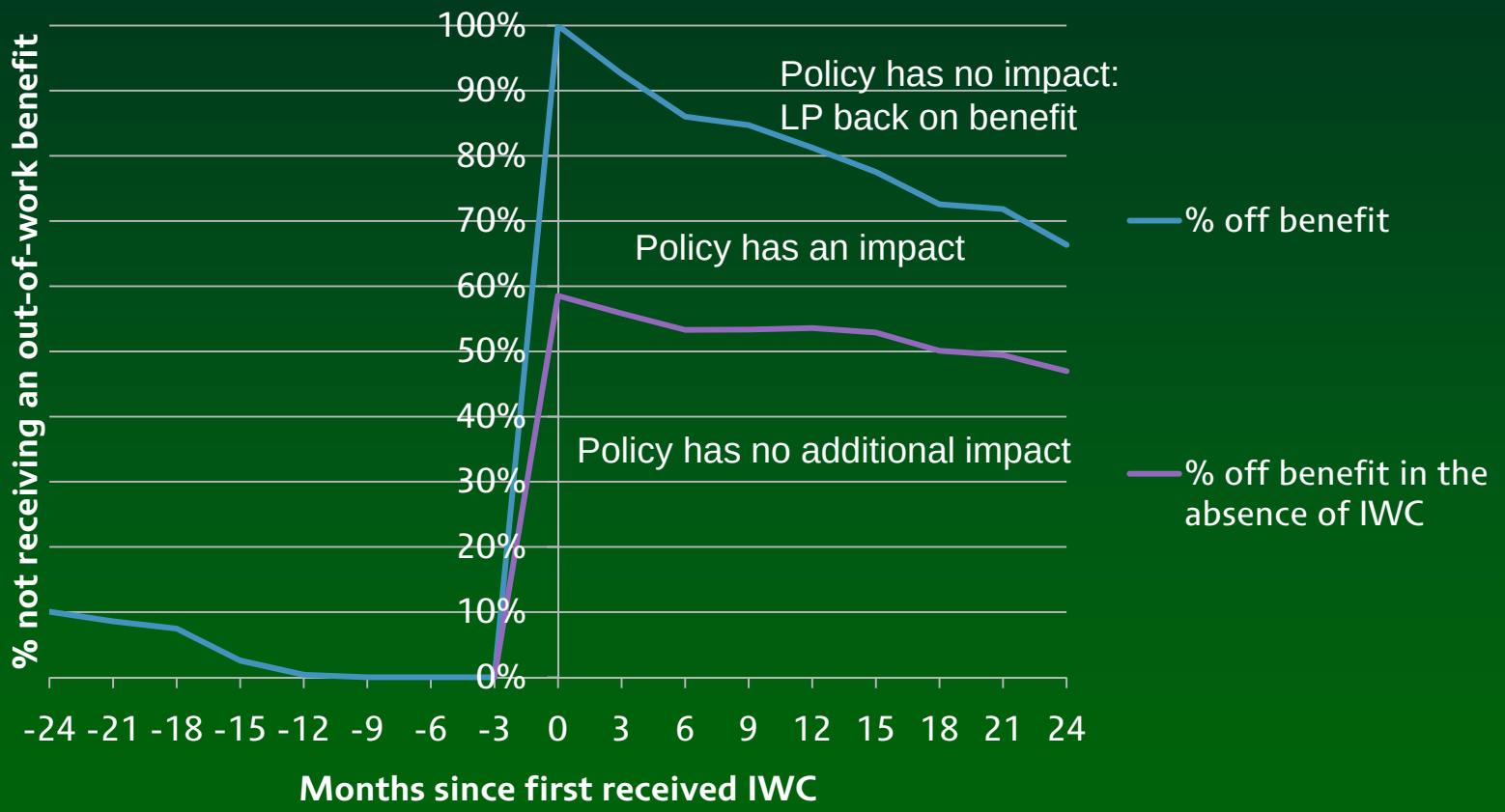
Results: impact of IWC from transitions model



Note: average impact is 29% over first 24 months

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What about “anticipation” effects?

- In theory, existence of IWC will encourage LPs to stay on IS for at least 12 months
  - Similar policy in Canada did just this (Card and Hyslop NBER WP)
  - If LPs did anticipate IWC, our earlier results will OVERSTATE impact
- Variant which assumed lone parents are eligible for IWC from first day of IS claim reduces impact slightly
- Variant of duration model has insignificant anticipation effects, and simulated impact of IWC unchanged

- NB: impossible to distinguish empirically between anticipation effects, displacement/substitution, and failure of common trends

How do the impacts compare with other policies and evaluations?

- Amongst participants/recipients
  - NDLP: 14 ppts (Dolton et al, 2006), although later paper revised this down to 8-9 ppts, or 4-5 ppts
  - IWC : 29 ppts over 24 months (duration model)

- Amongst those potentially eligible
  - IWC: 1.6 ppts after 12 months, 2.0 ppts after 24 months
  - NDLP: 1.7 ppts after 9 months, and 1.4 ppts after two years, although later paper revised this down
  - WFIs: 0.8 ppts after 12 months if YC 13+, and 2.0 ppts for YC 9–12

- But impact of IWC larger than cheaper welfare-to-work interventions, but much smaller than of (say) WFTC

4. Summary of results

- IWC had an impact
  - Benefit off-flows up by 1.6 ppts after 12 months exposure, 2.0 ppts after 24 months exposure
  - Amongst recipients, impact persists beyond 12 months of receipt
  - No evidence of extra impact in ND+fLP areas, or for QWFIs
  - Impact may be greater amongst those previously on NDLP
- Job retention was good in absence of IWC
  - 67% of IWC claims lasted for full 12 months, and no evidence of behaviour change in this group when awards end
  - Only 9% of impact attributable to "retention effect"
- Quali research on LPPs (DWP RR 423, 426)
  - DWP staff thought IWC would be great incentive but IWC recipients didn't think it had altered behaviour
  - Issue: when do LPs hear about IWC?

End

See full report at:

http://research.dwp.gov.uk/asd/asd5/rports2009-2010/rrep606.pdf

and

http://research.dwp.gov.uk/asd/asd5/summ2009-2010/606summ.pdf

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