

# Methodological challenges in assessing the impact of universal credit

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Based on: www.ifs.org.uk/publications/7289

#### Motivation

• UC is an important policy – will we be able to tell what impact it has?

• Bring together a range of methodological issues that arise with this sort of evaluation



## Unified evaluation of the whole reform is impossible

Would like to know:

"What is the effect of having UC instead of LB on UK employment?"

Or on any other outcome of interest

But...

- Applies to whole working-age population → no 'unaffected' group
- Long phase-in period (+ time for outcomes to emerge) → 'before' vs 'after' not comparable
- Instead, look at how gradual phase-in provides particular 'treated' and 'untreated' groups to compare



#### The phase-in plan

- We analysed one detailed hypothetical phase-in plan
  - Not happened
- No specific phase-in plan currently published
  - DWP just announcing each new extension
  - Cover all new claims by end 2016; migrate most existing recipients by end 2017
- Here discuss simplified, stylized phase-in plan
  - Illustrate main features
  - Easily adapted to details of actual phase-in when decided



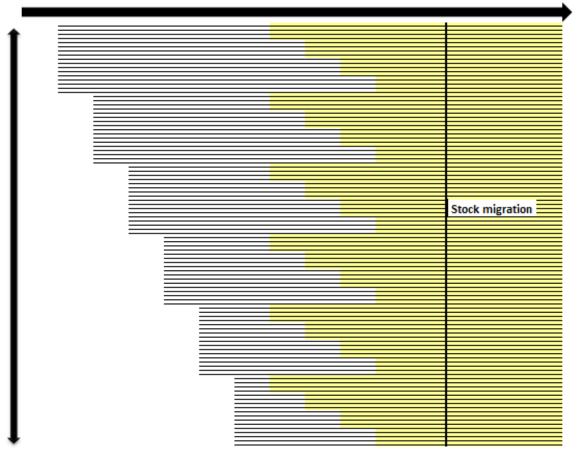
#### Stylized phase-in plan

- First, replace new claims to legacy benefits (flow)
  Phase 1: replace new JSA claims
  Phase 2: replace other new benefit & tax credit claims
  - Each phase gradual across claimant groups and areas
  - Once claimed UC, always remain fully within the UC regime
- Then gradually migrate existing claimants of legacy benefits (stock)



# The phase-in plan (stylized)

Time



UC has replaced new out-of-work benefit claims UC has replaced all new benefit claims



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Areas

#### 3 evaluation questions for roll-out to new claims

- 1. Impact of the full UC regime *versus* the full legacy benefit regime on **new claimants**
- 2. Aggregate impacts of introducing UC for some new benefit claims *versus* maintaining the full legacy benefit regime (or some hybrid regime)
- 3. Indirect impacts of introducing UC for some new benefit claims *versus* maintaining the full legacy benefit regime (or some hybrid regime) on those **not directly affected** by the reform

Challenge: construct counterfactual for what would have happened in the absence of UC



#### Methodology

- Compare outcomes of group exposed to UC with outcomes (after same period) of group observed
  - in a different area at the same time
  - at an earlier time in the same area
- Use difference-in-differences or matching
  - Subtract / match on corresponding difference a year earlier
  - As well as controlling for / matching on other observed characteristics
- Use more than one method / source of variation to test robustness
- Assume throughout that relevant data available
  - Data requirements and limitations discussed in full report



#### Criteria for assessment

Reliability (internal validity)

Does the difference between treated and comparison groups yield an unbiased estimate of the impact of UC *versus* LB on those examined?

Relevance (external validity)

How informative is the estimate about the impact of UC versus LB on the wider population of interest?



### Challenges for evaluation of UC for new claims

- 1. Separating UC from other reforms and shocks
- 2. Policy affects composition of treated & comparisons differently
- 3. Examining unrepresentative UC claimants
- 4. Early implementation not mature policy
- 5. Length of evaluation period / nature of impact estimated
- 6. Low claimant volumes



# 1. Separating UC from other reforms / shocks

- Anything that affects outcomes of treatment group and comparison group differently is a problem
  - Cannot separate effect of UC from effect of other change(s)
- If using time variation
  - Any reform/shock (affecting treated areas) at an inopportune time
- If using geographical variation
  - Reform/shock affecting treated and comparison areas differentially
  - Unless can match on relevant local characteristics (e.g. LA choice of council tax support scheme, or local rent growth)
  - Less bad if larger number of areas
- > Using geographical variation likely to be more reliable
- But use both where possible, to test robustness



# 2. UC affecting composition of groups

Only an issue for Q1, where need to construct groups of UC and LB claimants who are similar apart from which benefit they claim.

- 'Static' selection effects
  - Different entitlement rules, incentives to claim, awareness/perceptions
- Anticipation effects: accelerate/delay claim to ensure falls under LB/UC regime
  - Treatment or comparison group, around start of implementation there
  - > Avoid looking at inflows too near the introduction of a new phase
- Claim (or don't) as a way to access (avoid) the rest of the UC regime
  - Since replaced new claims to only some LB, but full UC regime applies once claimed
- 'Mechanical' composition effects at later stages
  - New UC claimants can only be those who have not already entered UC via a different route



# 2. UC affecting composition of groups: assessment

Phase 1: Compositional differences probably not serious Replacing new JSA claims with UC might not change much

- Entitlement and conditionality little changed (esp singles without kids)
- Choice set once claimed is different...
- ...but limited knowledge might aid comparability here

Phase 2: Construction of adequate comparison group not possible

UC claimants likely to differ substantially from e.g. tax credit claimants

- New groups will gain entitlement (mini-jobs, young low earners) while others will gain/lose it (runs out at different income level)
- Behaviour that affects entitlement likely to change (whether to work, for what wage rate and how many hours)
- Take-up behaviour likely to change



## 3. Examining unrepresentative UC claimants

- Impact of applying UC to e.g. unemployed single people without children gives little insight as to likely impact on working parents
- Effects of UC on composition of claimants reduces external validity
  - Anticipation effects, claiming to access rest of UC regime, etc. mean different from future claimants as well as from comparison group
- UC claimants examined limited by comparison group available
  - Excluding those for whom suitable comparisons cannot be found restricts to an unrepresentative subset of UC claimants
- Understanding and attitudes of later claimants may also be different
  - Affects both whether they claim and their subsequent outcomes



# 4. Early implementation vs mature policy

- UC soon after implementation may not reflect long-run policy
  - Change IT, solve any teething problems, reduce manual intervention,...
  - Early stages might get more attention and resources
  - Transitional protection is an inherently short-run feature
- Harder to find reliable comparison groups for longer-run policy



## 5. Length of evaluation period

- Measure impact of UC versus LB regime only on short-run outcomes
  - Only for period until comparison group exposed to UC
  - That's longer since national roll-out of UC delayed!
- After that, becomes impact of UC *versus* a hybrid regime
  - Exact impact identified varies
  - Note that can involve anticipation effects on outcomes



## 6. Volume of claimants

- Some extensions of UC generate only a small number of extra UC claims
- Aggregate (and indirect) effects might then be too small to detect
  - Few affected new claimants in a sea of unaffected people



### Challenges for evaluation of UC for new claims

- 1. Separating UC from other reforms and shocks
  - Pervasive concern; prefer geographical variation; exact timing crucial
- 2. Policy affects composition of treated & comparisons differently
  - Q1 only. Probably not serious for Phase 1; prohibitive for Phase 2
- 3. Examining unrepresentative UC claimants
  - Mostly a matter of taking care over interpretation
- 4. Early implementation not mature policy
  - Pervasive only avoid by long time comparisons which are less reliable
- 5. Length of evaluation period / nature of impact estimated
  - Keep some areas completely outside UC for as long as possible
- 6. Low claimant volumes
  - Mainly Q2 (and Q3) for extensions to few new claimants



# Most promising possibilities (1/2)

Q1: Impact of full UC regime *versus* full legacy benefit regime for new claimants of UC who would previously have claimed JSA

#### Attractions

- Relatively clean comparison
  - Selection effects, anticipation effects, etc. unlikely to be important and can check whether observed characteristics look different
- Delayed national roll-out → observe outcomes for longer period

#### Caveats

- Beware of other reforms happening at the same time
- Early version of UC (and unfamiliarity etc.) may not be representative of mature policy
- Captures only effect on claimants themselves
- Narrow claimant group and not the most interesting
- Corresponding analysis for UC replacing in-work benefit claims does not look possible – no adequate comparison group

# Most promising possibilities (2/2)

Q2: Impact of UC replacing more new LB claims *versus* full LB (or hybrid) regime, for entire working-age population or some subgroup

#### Attractions

- Captures all effects of policy cleanly
  - Including on composition of claimants and indirect effects on others
- Can look at extension of UC to groups of most interest

#### Caveats

- Beware of other reforms happening at the same time
- Early version of UC may not be representative of mature policy
- Small initial claimant numbers may make impacts undetectable
- Later comparisons may be with hybrid regime
  - Or use time variation, but less plausibly comparable



#### Conclusions

- UC is an important reform; evaluating it is important
- Evaluation looks highly problematic
  - Generally short-run outcomes of early version of UC
  - Internal and external validity issues
  - Hard to separate from other reforms happening at the same time
- But some narrow evaluation questions could be addressed





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