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)
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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