

Comments to the paper  
“Incentive Effects and  
Unemployment Accounts”

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# General Comments

- The paper investigates two specific questions:
  - Are there incentive effects in a UI based on individual account system?
  - Are these effects driven by a liquidity effect?
- These are relevant questions in labor economics and the literature that try to disentangle the incentives that operates inside of a UI system.

# General Comments

- The identification of incentive effects on the search effort is a complicated endeavor
- Highly depends on the quality of the data available and a creative source of exogenous variation.
- For this reason, there are not so many papers that estimate in a credible manner incentive effects of these schemes and the mechanisms that might explain these effects.

# General comments

- The paper proposal is to overcome the “typical” complications by using two different natural experiments which provide extra liquidity to the unemployed
- The comments will put emphasis to the identification strategy, their assumptions and if the authors manage to convincingly identify the effects.

# Before and after experiment

- The BA experiment exploits the variations on the share of the 1st payment produced by a reform of the UI scheme in May 2009.
- The estimated treatment effect is estimated as the difference on the probability of having a duration spell higher than XX time between individuals before and after the reform.
- The sample is restricted to unemployed applicants between January and August 2009.
- The sample is further restricted to individuals with at most 31 contributions in order to analyze the effect of the reform on individuals with only 1 or 2 payments. Why is this restriction necessary?.

# Before and after experiment

- The main assumption for identification is that in case that the reform would have not happened the outcomes for individuals in the post reform sample would have been the same than the ones observed for the individuals in the pre-reform sample.
- So, implicitly it assumes that:
  - a. Individuals before and after are similar in observable and unobservable characteristics
  - b. The estimated effect is not confounded by any policy or factor that has varied on time at the same time than the reform and that is correlated with the outcomes of interest.
  - c. Individuals could not anticipate the reform and react strategically.

# Before and after experiment

- Regarding a), the reform changed also the eligibility criteria. This is likely to create a sample selection problem:
  - Unemployed people will have different characteristics before and after the reform.
- To investigate this figure 4.3 and table 4.1 show the distribution of propensity scores and the comparison in means between observations before and after. While the distribution is balanced, there are statistically significant differences between the groups

# Before and after experiment

- The attempted solution is to construct a balanced sample using the nearest neighbor approach and use this sample for the regression and the matching estimator analysis.
- Nevertheless, this do not guarantee that there are no unobservable differences
- It is worthy to try to collect more information of personal and labor related characteristics of the individuals in the sample.
  - Heckman, Todd, Ichimura, Smith (1997) stresses the importance on having a data rich in terms of variables that are relevant to estimate program participation in order to reduce the bias due to unobservables.



# Before and after experiment

- Regarding b) little is known about the possibility that other policies or factors that coincided with the reform can be confounding the results.
- Simple factors as a recession, an economical boom, the implementation of social programs or even complementary programs such as training courses for unemployed individuals might be confounding the results. The paper will benefit from evidence that this not happening
  - Maybe some placebo analysis for the sample before the reform and for some sample after the reform.
  - Maybe using the sample of people in the fixed term contracts as a comparison group to filter the potential effects of these other policies in a diff in diff approach.

# Before and after experiment

- Regarding c) it is important to give some evidence that the reform was not anticipated by the economical agents (either the workers or the employers) and therefore that they could have reacted even before the change in the reform.
- If this is the case the pre exposure potential outcomes without the reform would be affected by the reform.

# RD experiment

- Exploits the discontinuity in the distribution of the share of the first payment conditional to the number of contributions produced by the UI scheme before the reform
- the probability of receiving 1 or 2 payments (higher or lower front payment) is a discontinuous function of the number of times that an individual has contributed
- It is not a deterministic function, the probability of receiving one payment is instrumented with an indicator of being above or below the threshold of contributions.

# RD experiment

- As the largest discontinuity occurs around the first cutoff, the analysis focuses on that region.
- The assumption for identification is that conditional on conditional on a smooth function of the forcing variable (in this case the number of contributions), receiving one or two payments is as good as random
- So, implicitly it assumes that:
  - a) There are no systematic differences between observations just above and just below the contribution threshold.
  - b) that there is no manipulation on the forcing variable. If this is the case, it might invalidate the continuity assumption of the conditional expectation of the counterfactual outcomes in the running variable.

# RD Experiment

- About a), Table 4.3 and table 4.4 shows that there are statistically significant differences in observables across groups.
- Not clear if this differences are already controlled for some function of the number of contributions.
- If once controlled by a smooth function the differences continue, this would be an indicator of the failure of the design and any estimator obtained with it will be inconsistent.

# RD experiment

- Talking about the smooth function of the running variable, the estimating equation for the first and second stage controls only for a linear specification of this variable to net out the direct relationship that the running variable has on the outcome.
- While this specification might be enough, it is also true that if wrongly specified it can result in a biased estimate.
- it is strongly recommend to try to impose a smooth function of this variable (a quadratic or cubic specification) in order to account for non linearities in the relationship of the running variable and the outcomes.

# RD experiment

- About b), to rule out the possibility of manipulation, the authors should present a graph with the density of the contributions.
- If the histogram shows some lumpiness at either side of the threshold, then this might leave the door open for doubts in the design and its credibility to identify an effect.

# Results

- The B-A experiment concludes that there is no incentive effects from the program on the probability of remaining unemployed.
  - Hypothesis is that there are not liquidity constraints
- The RD experiment concludes that the going from 1 to 2 contributions decreases de probability of remaining unemployed.
  - Results that can not be explained by the theoretical framework



# Results

- Why are the results of the RD experiment different from the results of the BA experiment?
- Authors hypothesize that the experiments estimate effects on different samples. Nevertheless, there is still the question, of which is the mechanism that might explain the positive effect on search effort.