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COMMENT

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Debate: "Toward a Basic Income Experiment?" Guest editor: Loek Groot, University of Utrecht

# A Plea for the Use of Laboratory Experiments in Basic Income Research<sup>\*</sup>

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We agree with the other participants in this debate that an experimental approach makes a significant contribution to our understanding of universal basic income (UBI) schemes, as there is a limit to what we can learn from surveys, simulations or studying existing welfare policies that only marginally resemble a UBI. However, we differ from others advocating the use of experiments in terms of the specific *design* of a UBI experiment. In particular, we want to urge a note of caution against conducting large-scale social or field experiments (along the lines of the famous negative income tax (NIT) experiments carried out in the US and Canada in the 1970s) advanced in recent years by Loek Groot (2004; 2006), Rafael Pinilla (2006), and many others.

We think there are two distinct, if related, reasons why one might take a sceptical attitude towards field experiments in this particular context. First, field

<sup>\*</sup> We are grateful to Xavier Fontcuberta, Loek Groot, Germán Loewe, Ilkka Virjo, and in particular Els Compernolle for stimulating comments.

experiments are more susceptible to "political manipulation," defined as "external interference with the research process or its outcomes for political reasons," and its advocates are overly optimistic in thinking they can avoid political interference and manipulation of research into a controversial policy proposal such as UBI. Second, a field experiment design entails scientific limitations that impede a genuine understanding of the behavioural effects of UBI in a modern welfare state. While field experiments can teach us a lot about some of the central questions to be considered when implementing a UBI (Widerquist, 2006), they nevertheless face considerable constraints that affect both the scope of the research – the range of questions we can study in a single experiment – and the validity and robustness of the findings.

Both concerns suggest we should investigate other possible experimental designs. We suggest that UBI researchers should embrace the methodology and design of rigorously controlled laboratory experiments, advanced in the past decades in cognitive psychology and behavioural economics and increasingly applied to political science, sociology and even social justice. In our view, laboratory experiments would help researchers obtain valuable empirical evidence about UBI that may be hard to attain in social experiments, without rendering research findings susceptible to the sort of adverse political manipulation that dealt a blow to the 1970s NIT experiments (Widerquist, 2005a).<sup>1</sup>

#### **1.** Political Manipulation of Experimental Research

UBI experiments are typically modelled along the lines of the famous NIT experiments conducted from 1968 to 1980 (Groot, 2004). The way these experiments were conducted teach us a lot about promises and pitfalls of this sort of research. One crucial insight is that "experimental results seem to be a political Rorschach test in which an observer's conclusions reveal more about the observer than about the observed" (Widerquist, 2005a, p. 50). Social historian Alice O'Connor recently argued in a similar vein, claiming that "the NIT experiments were not just fundamentally scientific undertakings, but fundamentally political undertakings as well" (O'Connor, 2005, p. 103). Whatever the real outcome of the US (and Canadian) experiments, recent

<sup>&</sup>lt;sup>1</sup> We also hold a weaker claim: even in the unlikely event that social experiments could be run under optimal conditions, we maintain that laboratory experiments would generate invaluable insights to complement social, and even natural, experiments. This shows the relevance of our arguments for the sort of natural experiments advanced by Peeters and Marx (2006).

scholarship suggests that political judgement both predated and largely preempted any considered debate or deliberation about the research. "Even as social scientists were sorting through and debating the meaning of experimental findings, political opponents were using those findings to tell a simple story of lazy poor people and family decline" (O'Connor, 2005, p. 105).

None of this should surprise the politically astute researcher: welfare reform is a highly charged political issue, and any scientific evidence will be judged in a political environment that is already divided into advocates and opponents.<sup>2</sup> Similarly, we surmise that UBI experiments will be assessed in a highly politicised environment, one that is hostile to universal welfare schemes; and this in turn might render the science hostage to outright political manipulation. Several familiar mechanisms are at play in this process, including the misrepresentation or burying of scientific evidence for political purposes, but the one we describe in the following seems particularly relevant to the choice between field or laboratory experiments.

Policy-relevant experimental research features four stages: 1. experimental design; 2. production of scientific evidence; 3. translation of evidence into policy recommendations; and 4. assessment of policy recommendations by the wider policy community. The challenge for researchers is to prevent political contamination of the first three stages; external assessment of policy recommendations is to be welcomed provided this occurs after scientifically informed policy recommendations have been formulated (stage 4.). But here social or field experiments face a number of problems. First, the likelihood that there will be political contamination of the research design stage increases because large-scale field experiments require substantial political and bureaucratic goodwill. Second, because feasible field experiments often operate under suboptimal conditions (having to compromise methodological requirements because of budget constraints), the findings are often of a qualified rather than a self-evident or conclusive nature, which increases the scope for misinterpretation. Third, translating evidence political into policy recommendations can be compromised by political entrepreneurs using partial or incomplete evidence to draw political conclusions, thus obtaining a decisive first-mover advantage in setting the policy agenda. In the context of the NIT experiments, "the administration pressed experimenters to release their findings

<sup>&</sup>lt;sup>2</sup> In this sense, we think Widerquist's otherwise excellent article has a puzzling title: the problems besetting the early NIT experiments, and indeed any future UBI experiment, in our view has little to do with a failure to *communicate* but rather a failure to *anticipate political manipulation*.

long before they were ready to do so" (Widerquist, 2005b, p. 96), with disastrous political consequences.

In contrast to large-scale field experiments, a laboratory experiment setting offers a comparatively closed environment in which the scientific integrity of the design, evidence production and policy recommendation stages can be ensured. The smaller scale of this research design requires less funding, less political or bureaucratic support, and (in part for that reason) is less likely to attract political attention (until policy recommendations are properly formulated and put to the wider policy community). This in turn facilitates following a purely scientific logic in designing and running the experiment, and in particular when deciding on the format or the timing of disseminating the findings. Under such conditions the risk of experimental research fueling political statements that may have little or no bearing to the actual findings – as was the case in the 1970s NIT experiments (Widerquist, 2005a, 2005b; O'Connor, 2005) – should significantly decrease. Consequently, the risk of a UBI experiment becoming a mere pawn in the games of political players at either side of the welfare reform debate should also decrease.

## 2. Scope, Validity and Robustness of Experimental Research

Politics aside, we can also discern a number of scientific or methodological advantages of using laboratory experiments in UBI research. By and large, these advantages result from such experiments having one unique feature: the extraordinary level of control they allow researchers at every stage (Camerer and Loewenstein, 2004, pp. 7–8). The purpose of laboratory experiments is to design a highly controlled experimental environment that simulates individual relevant features of the policy environment in order to study behavioural responses in relation to specific aspects of the labour market, social security or welfare systems, the political process, and so on.

First, as suggested, laboratory experiments would be both cheaper and easier to administer than a comprehensive field experiment. In the previous section, we allude to the political advantages of such a research design. In addition, there may be cost-effectiveness considerations of the scientific evidence produced by either type of research design. Most importantly, significant funding or administrative requirements will always increase the likelihood of having to compromise one's research design to accommodate them, which in turn might impact the scope, validity or robustness of the findings. Second, laboratory experiments have the capacity to uncover key behavioural insights that are notoriously difficult (and only indirectly) to obtain from field experiments. In particular, laboratory experiments show real potential in furthering the understanding of two basic behavioural categories, "judgement" and "choice" (Camerer and Loewenstein, 2004). Understanding the judgements that individuals make is of crucial importance when assessing the political feasibility of UBI schemes before they are introduced, while insight into their choices directly relates to predicting economic and social behaviour after UBI's institutionalisation. The first category shows under what conditions citizens might be expected to support the introduction of UBI; the second shows what to expect once UBI is fully operational.

Third, laboratory design encourages conducting series of experiments, which stands in marked contrast to the one-shot research carried out in field experiments. In laboratory experiments, one can replicate, confirm or reject hypotheses; refine research results; and modify key experimental design features as and when required. This would be much more difficult, if not impossible, in social experiments because the latter require significant investment of resources (effort, time and funding). In many cases the outcome of social experimentation also depends on specific background circumstances, which makes them hard to replicate even if cost were not an issue. Why does it matter that we conduct a series of experiments? First, if outcomes are difficult to replicate by other researchers this impacts the scientific validity of the research. Second, a one-shot approach implies that we face hard choices about which parameters we focus on since it is inconceivable, given the complexity of policy research, that all relevant parameters can be examined at the same time. Third, we may need to modify our design when a first round of experiments uncovers important insights that require further testing under modified conditions. These are crucial research design requirements, and in each case laboratory experiments outperform field experiments.

Let us briefly illustrate how laboratory experiments could contribute to our understanding of UBI. Many experiments suggest that the judgments and choices of individuals depend on a particular "reference point," and do not reflect the mere rational calculation of objective advantage (Kahneman and Frederick, 1990). Reference points are typically grounded in one's current situation and, through a variety of psychological mechanisms, generate a "status quo bias." This insight may have important implications for UBI research because a lack of endorsement for UBI could equally well be explained by *either* a general reluctance to change current policy *or* a substantive aversion to UBI itself. Similarly, research has shown the impact of *biases* on decision making under risk and uncertainty (Kahneman and Tversky, 2000). Experiments using gambles or lotteries could be redesigned to provide information about specific welfare policies. For instance, research into people's preferences over lucid as opposed to ambiguous gambles ("ambiguity aversion") could be extended to welfare policy to examine whether individuals prefer a simple, nonambivalent UBI over a complex bureaucratic welfare system (De Wispelaere, 2006). Further, experiments about the role of fairness in individual choice or preferences over distributive patterns offer crucial evidence about the social perception of the welfare effects of UBI (Kahnemann, Knetsch and Thaler, 1986; Frohlich and Oppenheimer, 1992). Finally, the political marketing of UBI may be influenced by certain "framing effects" (Kahneman and Tversky, 2000). How a UBI scheme is presented and framed in the political agenda, and how its implementation is phased in, may well decide people's attitude toward the proposal. These two final findings might significantly support the political feasibility of UBI schemes.

In short, by testing a wide range of variables under controlled circumstances, laboratory experiments generally better isolate and identify the causal relations pertaining to observed behaviour (Camerer and Loewenstein, 2004). While field experiments as well as natural experiments offer important insight into empirical regularities, their design does not always allow a confident determination of causality; particularly where complex behaviour, such as individual-level decision-making processes, is concerned. Precisely because social and economic behaviour is often associated with complex sets of beliefs and motivations, social experiments allow us to make only conditional inferences from observed regularities. Laboratory experiments, however, try to differentiate between various behavioural mechanisms that might impact the way individuals make decisions in a UBI scenario. In short, laboratory experiments may provide some microfoundations for an applied theory of policy design and welfare reform.

We are of course aware that our preferred design has its limitations. One concern often noted is that the artificial environment of the laboratory cannot really capture the wealth of context that marks real-world behaviour (Hogarth, 2005). However, we maintain that a laboratory design can turn this constraint into a virtue by building on its capacity to analytically test separate hypotheses. While such a research design can only approximate the full implementation of a UBI scheme, we believe it constitutes a sufficiently sound starting point for predicting judgement and choice, and many other relevant behavioural issues. Note that social experiments, too, remain artificial because only part of the

environment will be modified in the experiment; here too, outcomes will only approximate the real world. The question of artificiality therefore cannot be used as a reason to not engage in experimental research; it can be used only to safeguard against inappropriate conclusions.

### 3. Conclusion

The purpose of this comment is to make a modest case for using laboratory experiments in empirical UBI research. We argue that laboratory experiments have several advantages over social experiments, potentially increasing both the scientific and political relevance of experimental research into UBI. While much work remains to be done in developing a specific research design, we hope to have made at least a plausible case for including laboratory experiments in the UBI researcher's toolkit.

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