

PHD THESIS SUMMARY:

The J-PAL's experimental approach in development economics: an epistemological turn?

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PhD in economics, February 2014

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The rise of experimental economics has changed the research agenda of economic science. Today economics is undergoing an empirical turn, which entails an epistemological change in economics. The fact that contemporary economists consider empirical tools as “more reliable” than theoretical ones reflects this turn. Based on the observation that empirical works tend to take over most of the research activity of the discipline, authors like Joshua D. Angrist and Jon-Steffen Pischke have described this tendency as an “empirical revolution”. This revolution privileges questions that can be answered using an experimental approach, while relegating other questions to a secondary place. The rise of randomization in development economics offers the perfect illustration of this tendency. Abhijit Banerjee and Esther Duflo institutionalized the use of randomized experiments in development economics. Together with the Massachusetts Institute of Technology (MIT), they created in 2003 the ‘Abdul Latif Jameel Poverty Action Lab’ (J-PAL) with the aim of conducting experimental work that would give scientific insight to our understanding of poverty. These kinds of experiments, that randomly assign subjects to two groups, remove many statistical biases and produce results with a strong internal validity, which has led some economists to consider such methodology as a “gold standard” for empirical research.

The aim of my doctoral dissertation is to conduct an epistemological analysis of the J-PAL's approach within development economics from two dimensions: methodological and theoretical. The methodological dimension examines the randomization method promoted by J-PAL's researchers; two main interrogations guide this analysis: (1) the “gold-standard” character of randomization, and (2) the possible transposition of J-PAL's results in the political sphere. The theoretical dimension of the thesis investigates J-PAL's contributions to the theoretical debates

of development economics during this last decade. Focusing on these two dimensions allows me examine the J-PAL's approach as a whole and establish the extent to which it has led to "a turn" in economics. Thus, my thesis shows that the J-PAL's randomized experiments do not help producing precise (clear) policy recommendations aiming at the eradication of poverty. In fact, the focus on the internal validity of the experiments jeopardizes their external validity. Hence, I show that the two J-PAL's objectives, to produce evidence and guide decision makers, are antagonistic.

The first part of my thesis seeks to define the method of randomization by focusing on one specific aspect: that of internal validity. For that reason, I redraw the history of randomization. I show that Charles Sanders Peirce first used this method in para-psychology to thwart Fechner's law. This method was widely used, after Peirce's work, to test the existence of telepathy. The statistician Ronald Fisher was the first to define precisely the experimental protocol of randomization. At first, Fisher designed this protocol for agriculture, but the method turned out to be most successful in medicine through clinical trials. The J-PAL's randomization borrows from medicine its experimental design. Furthermore, the J-PAL borrows another key dimension from another discipline, political science, where experiments are used to evaluate large-scale public policies. It is this dimension (policy evaluation) that the J-PAL borrows from political science. These two disciplinary borrowings define the J-PAL's approach and its objectives: (1) producing evidence through well-defined experimental design in order to (2) assess development policies. This first part of my thesis expresses the twofold J-PAL's objectives through the history of randomization and around the notion of internal validity.

The second part of my thesis further analyzes the method of randomization, but focuses on the notion of external validity, which turns out to be weak with respect to the randomization method. I show that there is an important tension between internal and external validity within J-PAL's randomization. This tension makes it necessary to make a trade-off between both kinds of validity. The J-PAL, however, seems to refuse this methodological trade-off. In order to make that explicit, I focus on criticisms from development and experimental economists, as well as on Nancy Cartwright's analysis. I seek to unify these criticisms by emphasizing one of them: what I term the a-theoretical dimension of the J-PAL's approach. In order to guarantee the reliability of its results,

this approach refuses all upstream theories, but aims to define a “new development economic theory” based on its reliable results. Hence, I distinguish two theory levels: the *ex-ante theory refusal* and the *wish of ex-post theory building*. I show that the ex-ante theory refusal makes building of an ex-post theory difficult, weakening the external validity of randomization. Consequently, this prevents the approach to provide clear (precise) policy recommendations, thus weakening one of the J-PAL’s objectives.

In the last part of my thesis, I seek to question the J-PAL’s theoretical contributions to development economics. From that perspective, I focus on one specific debate to which the J-PAL aims to contribute: the development aid debate. This debate is characterized by two main positions: the advocates of massive international aid to fight poverty and their detractors. The J-PAL seeks to offer an alternative, through the results of its experiments. I analyze one of the main themes of this debate: the bed nets heavies in the fight against malaria. I redraw all the experiments that the J-PAL has implemented in order to evaluate the effectiveness of such heavies. I show that these experiments highlight a puzzle: even if the bed nets are completely free, they are not sufficiently use in order to eradicate malaria. The further experiments do not seek to understand this puzzle, but aim to test nudging devices in order to increase the bed nets used in poor countries. Recently, Esther Duflo (one of the J-PAL’s leaders) appealed to a strong paternalism to fight poverty. This proposition is in total contradiction with the initial J-PAL’s position of evidence-based policy recommendations. Duflo based her paternalism on the notion of freedom defined by Amartya Sen within the capabilities approach, intending to improve the freedom of poor people. I question the philosophical foundations of this paternalism and show that it has two main problems. Firstly, from a Senian perspective, paternalism cannot be a tool for more freedom; since freedom is both instrumental and substantial according to Sen. Secondly, Duflo suggests removing some of the poor’s choices in order to improve their capabilities. I show that, actually, Duflo confuses the notion of functioning and capability in Sen’s approach (capability is a process while functioning is a fixed element). I explain these two confusions through the idea that the J-PAL’s experimental approach cannot properly account for the processes of development or poverty. And it cannot do so, because of the strong focus on internal validity and the avoidance of ex ante

theories suggested by its proponents. Furthermore, this penalizes its external validity and impedes the providing of clear (precise) policy recommendations from experimental results. Hence, Duflo is compelled to invoke a policy recommendation independent from her method and her results. Thus, the J-PAL's experimental approach definitely produces a new way to apprehend poverty in development economics by looking to for concreteness; therefore J-PAL's results offer a very precise picture of the life of the poor. From that perspective, J-PAL's experiments surely constitute an "empirical revolution". However, it remains an open question whether they contribute to any more substantial revolution in the fight against poverty.

Judith Favereau obtained her PhD in economics under the supervision of Professor Annie L. Cot at the Université Paris 1 Pantheon-Sorbonne on February 14th 2014. Her areas of interest are development economics, experimental economics, philosophy of economics, evidence-based policy. Her research focuses on how development economics, experimental economics, and evidence-based policy interact in order to fight poverty, which implies studying the methodology of these sub-fields and their disciplinary transfers. She is currently a postdoctoral researcher at TINT, the Academy of Finland Centre of Excellence in the Philosophy of the Social Sciences at the University of Helsinki.

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