

## Comment: David McKenzie

The rise and normalization of randomized controlled trials (RCTs) as an important part of the toolkit of development economists has been rapid, with much debate as to whether this is a cause for celebration or concern. Abhijit, Esther, and Michael have been the early pioneers and proponents of the use of RCTs in development economics, and their paper represents an important stocktaking exercise, documenting this rise and attempting to draw out some of the consequences of this process for both research and policy. I group my comments around three themes: putting the rise of RCTs in perspective, considering how they have affected the practice of research, and attempting to understand how they have and have not influenced policy.

### The Rise of RCTs in Perspective

Their paper documents the rapid growth in the number of RCTs published in top journals, from 0 papers in 2000 to 32 papers in 2015. In table 10.4, I extend this analysis by also considering development economics papers published in three leading general interest economics journals considered to be in the next tier below the top-five journals (*American Economic Journal*, *Applied Economics*, *Review of Economics and Statistics*, and *Economic Journal*), papers published in three leading development economics journals (*Journal of Development Economics*, *Economic Development and Cultural Change*, and *World Bank Economic Review*), and in *World Development*, the leading multidisciplinary journal of development. I consider papers published in 2015 and define development economics papers in the general interest journals as those with an “O” (development economics) *Journal of Economic Literature* classification code.

Table 10.4

RCTs as a share of development papers published in 2015, by journal type

	Number of Development Papers	Number that are RCTs	Percent RCT
Top five journals	32	10	31.3
Good general interest	32	14	43.8
<i>American Economic Journal:</i> <i>Applied Economics</i>	16	10	62.5
<i>Economic Journal</i>	8	1	12.5
<i>Review of Economics and Statistics</i>	8	3	37.5
Leading development journals	115	15	13.0
<i>Journal of Development Economics</i>	70	9	12.9
<i>Economic Development and Cultural Change</i>	24	5	20.8
<i>World Bank Economic Review</i>	21	1	4.8
<i>World Development</i>	275	5	1.8
All development papers	454	44	9.7

*Source:* Top five journals data are from Banerjee, Duflo and Kremer (2016). Data for other journals collected by author. Papers at good general interest journals classified as development if they have an “O” code in the *Journal of Economic Literature* (JEL) classification system. Counts exclude editorials, comments, rejoinders, corrigendum, the papers and proceedings issue of the *World Bank Economic Review* (WBER), and the 125th anniversary issue of the *Economic Journal* (EJ).

Several points emerge from this table that I believe are important for putting the rise of RCTs in perspective and for considering their influence on policy. First, despite the rapid growth, the majority of development economics papers published in even the top-five journals are not RCTs. Second, RCTs make up a much higher share of development papers in general interest journals than they do in development journals. Third, most published development papers are not being published in the top journals but in field journals. As a result, out of the 454 development papers published in these fourteen journals in 2015, only 44 are RCTs (9.7 percent). The consequence is that RCT studies are only a small share of all development research taking place. I believe this is evidence against the (perhaps strawman) argument that RCTs have crowded out other development research, and policy makers looking for advice on questions RCTs can’t answer are missing out as a result.

Their paper also documents how RCTs have become more common among younger researchers, showing that BREAD members who graduated more recently are more likely to have done RCTs than those who graduated longer ago. This observation has led to a second caricature or strawman argument: that the “best and brightest talent of a generation of development economists have been devoted to producing rigorous impact evaluations about topics that are easy to randomize (e.g., Pritchett 2014) and that they take a “randomize or bust” attitude, whereby they turn down many interesting research questions if they can’t randomize (e.g., Ravallion 2009).

To explore this, I examined the publication records of the sixty-five BREAD affiliates (this is the group of more junior members), restricting attention to the fifty-three researchers who had graduated in 2011 or earlier (to give them time to have published). The median researcher had published nine papers, and the median share of their papers which were RCTs was 13 percent. Focusing on the subset of those who have published at least one RCT, the mean (median) percentage of their published papers that are RCTs is 35 percent (30 percent), and the 10–90 range is 11–60 percent. So young researchers who publish RCTs also do write and publish papers that are not RCTs. Indeed, this is also true of Abhijit, Esther, and Michael—although known as the leaders of the “randomista” movement, the top-cited papers of all three researchers are not RCTs.

### **The Influence of RCTs on Development Research**

Abhijit, Esther, and Michael document several important ways that RCTs have affected the way development economics research is done. I agree with their claims that RCTs have raised the bar for nonexperimental research in terms of thinking about credible identification, and that RCTs have spurred creative new ways of measurement. I want to note two other areas of influence.

The first, extremely positive, influence has been making it commonplace for researchers to actually talk to the people and firms they are studying. This is a big change from the era when most development research consisted of researchers downloading a dataset like the Penn World Tables or Living Standards Measurement Surveys, attempting to estimate some model or test some theory, and then writing the paper without ever talking

to anyone in the country being studied. Indeed, this categorizes well my dissertation research: I was interested in understanding why people in Taiwan continued to save so much when their incomes had been rising rapidly for years. I carefully worked out new econometric theory and estimated and tested models of several competing consumption theories, but never asked directly any households in Taiwan “Why do you save so much?” I likewise have been on several World Bank missions where projects were being designed by talking to policy makers and perhaps a handpicked set of existing beneficiaries, and the idea of just walking into an average neighborhood and talking to some randomly selected small businesses was seen as a surprising thing to do. RCTs make this more commonplace, and they also make it much more likely that researchers actually talk to the implementers of the programs they are trying to study.

However, I also think that RCTs do affect to some extent which questions researchers work on. As noted above, there are many researchers, and most research done in development economics is still not done via RCTs. I think it is fair to say that probably some questions have been answered only because they could be answered cleanly by an experiment, and these questions would not have otherwise had researchers working on them. As I argue in the next section, it is unclear whether this is necessarily a bad thing, as it has resulted in researchers getting much more involved in the messy business of understanding how policies are implemented, which otherwise had not received much research attention.

### **The Influence of RCTs on Development Policy**

I think it is fair to say that RCTs have had much more influence on how development economics policy is implemented rather than on what is done. Many of the questions answered by RCTs fall into the category of helping policy makers better target, or better implement, a policy they have already decided to do. For example, should grants be given conditionally or unconditionally? How can government workers be incentivized to provide the services they are meant to provide? Should mosquito nets be given out for free or offered at a price? Will people use savings products more if offered commitments or reminders? This use of RCTs is very similar to the main use of RCTs in a lot of businesses, where A-B testing is used to fine tune products and decide how to best target customers.

When it comes to what is done, I make the distinction between efforts to try to make marginal improvements in the lives of people and firms, given the economic structure they operate in, and attempts to spur the types of changes from a stagnant, largely rural, agrarian economy to a vibrant, innovative, largely urban manufacturing and services-based economy that we associate with the process of development. Much of the early RCT research was focused on the former, and many of the DIV scale-up cases profiled by Banerjee et al. also fall into this case—how can we make traffic a little less risky, water a bit cleaner, poor households get a little more electricity, and so forth. Success here is largely in terms of making poor people a little bit less poor, or making life a little easier for them. This is an important class of policies, and one where RCTs have had some policy influence.

In contrast, until recently there have been far fewer RCTs that help policy makers attempt to test policies associated with a more structural transformation—how do we get more firms innovating and growing? How do we get people to move out of poor places with few job prospects to places with better prospects? However, this is an area where RCTs are rapidly expanding, with examples like Bryan, Chowdhury, and Mobarak (2014), Atkin, Khandewal, and Osman (2017), McKenzie (2015), Beam, McKenzie, and Yang (2016), and Cusolito, Dautovic, and McKenzie (2018) showing that RCTs can also provide useful policy advice for these questions as well.

A final point I want to make is to argue against the idea that policy makers can easily substitute for RCTs by rapid, iterative learning-by-doing processes. Such an approach may be possible in some environments, but it is very difficult to learn by doing in some situations. One reason for this is that people often find it hard to generate accurate counterfactuals for themselves, even when they have gone through a program, so McKenzie (2018) finds that both treatment and control groups overestimate the effect that winning a business plan competition would have, even after the fact. Second, so many factors influence outcomes that RCTs often need hundreds or thousands of observations to detect an effect, and it is impossible for individuals to extract signal from noise to determine whether their actions are working. As an extreme example, Lewis and Rao (2015) show that firms often cannot know whether their marketing campaigns are working, even when testing on millions of customers.

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# The State of Economics, the State of the World

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