Reader report on

Essays in Behavioral and Development Economics

Ph. D. Thesis submitted by Vojtěch Bartoš

Comments

The dissertation makes important contributions to both behavioral economics and development economics. The work is creative and addresses fundamental social issues in new ways. It is very impressive in its scope and ability to provide novel insights to very old problems, including households' difficulties coping with risk, the nature of informal contracts, and the persistence of discrimination. The work satisfies intellectual and content standards and is ready to defend.

Chapter 1

Chapter 1 on "Seasonal scarcity and sharing norms" draws on literatures on experiments (altruism and reciprocity), development (risk-sharing and financial mechanisms) and culture. While much experimental economics research takes place in labs, the study takes experiments into the mountains of northern Afghanistan. This is far from the first to run experiments in the field, but it is one of the few to run lab-in-the-field experiments with the same subjects at different points in the year – and to do so in an environment with substantial seasonal variation. The study takes advantage of the fact that during some of the year, northern Afghanistan suffers food shortages; this allows a test of the implications for risk-sharing under scarcity and under plenty.

The study reports on a series of dictator games, with and without a 3rd party punishment option, that were repeated during the lean agricultural season and the harvest season in northern Afghanistan. The main result counters intuition; the study finds that sharing (as seen in the dictator game) remains relatively stable, even under the stresses of the lean season. While that is so, the willingness to enforce contracts falls during the lean season. Moreover, it is plausible, as the study suggests, that sharing will diminish in the lean season.

The chapter is nicely situated in the literature on experimental economics, and it can also speak to an older development economics literature. Theory on informal risk sharing focuses on the robustness of self-enforcing contracts. Unhappily, informal risk-sharing arrangements tend to be most vulnerable to falling apart when risk-sharing is needed most, i.e., times when income is particularly low or when some people have suffered particularly severe income shocks. (The chapter is not fully aligned with that prediction, which is interesting.)

Specifically, the study reminded me of some connections to an early literature in development economics, which Bartoš may want to consult before submitting the paper for publication after the dissertation has been finalized. One could look, for example, at the 1993 article by Stephen

Coate and Martin Ravallion on self-enforcing informal insurance contracts in rural settings. [Stephen Coate and Martin Ravallion. 1993. “Reciprocity without Commitment: Characterization and performance of informal insurance arrangements.” *Journal of Development Economics* 40 (1): 1-24.] Coate and Ravallion examine a setting in which contract enforcement is impossible, so any contract must be self-enforcing in the sense that a rational, forward-looking individual would choose to continue abiding by the contract rather than reneging on the agreement. In a very simple setting, they derive theoretical results that align with the empirical results in this chapter. Their basic idea is that some insurance can be obtained given the repeated nature of relationships and relatively small problems of asymmetric information. It is assumed everyone in a village knows everyone quite well, or can fairly cheaply obtain information. The focus then is on contract enforcement. Even in a non-cooperative setting, it is possible to achieve much more sharing than under autarky – although much less than would be possible under the first-best contract (with perfect enforcement). The interest part has to do with what the contracts look like – and how much insurance is possible under which situations. One of the key Coate-Ravallion findings is that self-enforcing contracts do worst (though they don’t completely break down) in times of scarcity – a finding that relates closely to this chapter.

As a small note, while the Coate-Ravallion paper is clear and provides helpful intuition, it does not in fact describe optimal second-best contracts. In these settings, better (more efficient) contracts would involve some form of lending as a way to relax the self-enforcement constraint. (Also called quasi-credit or lending with state-contingent repayment.) That line of work is pursued by a variety of scholars including Marcel Fafchamps and, independently, Ligon, Thomas, and Worrall [Ligon, Ethan, Jonathan Thomas, Timothy Worrall. 2002. “Informal Insurance Arrangements with Limited Commitment: Theory and Evidence from Village Economies.” *Review of Economic Studies* 69: 209-244.]

A quite different set of connections on the role of scarcity on decision-making is found in the empirical literature based on intrahousehold choice. For example, Jere Behrman in a 1988 study investigates whether seasonality affects parents’ investment in their children in South Indian villages – specifically looking at how sons are treated versus daughters. The key finding is that in the lean season, there is greater inequality in treatment (and greater equality in times of surplus). Like the dissertation chapter, Behrman’s paper investigates the same people over time and shows that decision-making is affected by the seasonal context. [Jere Behrman. 1988. “Intrahousehold Allocation of Nutrients in Rural India: Are Boys Favored? Do Parents Exhibit Inequality Aversion?” *Oxford Economic Papers* 40, No. 1: 32-54.]

Chapter 2

Chapter 2 on “Contract Enforcement and Trustworthiness Across Ethnic Groups” (with Ian Levely) also draws on experiments in Afghanistan. Here, the question is whether behavior differs when members of the same ethnic group engage vs. when participants are from different groups. The chapter finds that formal contracts are more efficient when participants are not from the same group. When participants share an ethnicity, in contrast, the introduction of formal contracts crowds out intrinsic motivations to cooperate, dampening the impact of the contracts. The chapter takes apart foundational questions at the heart of development, modernization, and efforts to extend property rights in order to strengthen contract-based exchange.

The results are both intuitive and surprising, and, before submission to an academic journal, it would be valuable to relate the findings more closely to theoretical frameworks. I am not suggesting that formal theory be added but that theoretical intuitions should be highlighted. For instance, the theory of contract enforcement in Coate and Ravallion, cited above, could be one framework to relate this to. Other literatures to connect to include the theoretical and empirical literature on property rights – for example evidence from randomized controlled trials by Erica Fields and collaborators that evaluate the impacts of creating formalized property rights. Another stream is literature on saving and sharing. For example, work by Pascaline Dupas and Jonathan Robinson in the *American Economic Review* on the introduction of "health saving accounts" in Kenya. They find that introducing these formalized institutions crowds out giving through social networks. It is not the same context as the one in the dissertation chapter, but it points to a broader literature on formal institutions/mechanisms crowding out informal ones.

Chapter 3

The final chapter, Chapter 3 on "Attention Discrimination," turns to a different topic and location. The chapter examines labor and housing markets in Germany and the Czech Republic. The chapter builds on a well-known study by Marianne Bertrand and Sendhil Mullainathan showing that job applicants with names that signal a minority identity are less likely to be invited to interviews.

The chapter turns to information acquisition, in a new and important twist. The study investigates the circumstances in which employers or landlords engage in costly information acquisition, again in a context where the names of applicants signals membership in a minority group. The result is striking. Information acquisition is endogenous but in interesting ways. In the labor market, discrimination leads employers to not both looking more closely at applicants' CVs. But in the housing market, applicants with minority names instead get a more careful look. The results conform to a model of selection processes, and in both cases, information acquisition reinforces the initial bias.

The chapter introduces a new and important idea ("attention discrimination") and shows how small biases can be magnificd. I expect that this study will draw much interest and will be replicated and extended by others in different settings. The study is important in taking the framework beyond the simple distinction between outright prejudice and statistical discrimination. In a sense, the chapter puts the two ideas together to show an intensity of effects.

Summary

To conclude, I am very impressed by this dissertation. The dissertation clearly satisfies formal and content requirements for a PhD thesis in economics, and I recommend the dissertation for a defense. It has been a pleasure to contribute to this process.