

## **Reviewer Comments for “Essays in Experimental Economics: Discrimination and Education” by Nikoloz Kudashvili**

As suggested by the title, this dissertation investigates the role of discrimination and information frictions using experimental methods.

- The first chapter uses a field experiment to investigate discrimination towards foreign renters in the Georgian land market. Specifically, a representative (who is local) calls landlords, asking for price quotes for leasing their plot. The experimental variation here is whether the representative is calling on behalf of a Georgian or Indian investor. In the baseline treatment, the author finds that price offers are higher for Indian investors. However, in treatments where foreign investors say they will pay upfront (and hence reliability is not an issue) or where they signal that they have also gotten quotes from other landlords (and so search frictions are mitigated), the gap in price offers is much smaller. The author concludes that statistical discrimination is responsible for the vast majority of the observed gaps in price offers.
- The second chapter studies inter-ethnic discrimination, where high school students are matched with someone from the same group (Georgians matched with Georgians), or with minorities (Georgians matched with Armenians), and play trust games. The authors find that Georgian trustors discriminate against ethnic Armenian trustees. This is based, on part, because the trustors expect Armenian trustees to send back less, and in fact that is the case (that is, expectations are correct). In treatments where the trustees can send (truthful or untruthful) signals about their ethnicity, the authors find that a sizable proportion of Armenian trustees signal that they have a Georgian name. This does increase the transfers they receive from the trustors. Interestingly, when matched with Armenian trustors, Armenian trustees do not indulge in such untruthful reporting.
- The third chapter is quite distinct from the first two, and reports results from a randomized information experiment where 10<sup>th</sup> and 11<sup>th</sup> graders in Georgia were provided with information about earnings and employment opportunities in different majors. The authors find an impact on both intended and actual major choices, with the impact primarily due to information about employment rates. Interestingly, changes in intended choices are not linked to final major choices. The authors also find evidence of spillovers (since, in their design, they have pure control schools, but also control students in schools where some students were treated).

### **OVERALL ASSESSMENT**

I quite enjoyed reading the dissertation. The writing is very clear. I personally thought the first chapter was the most novel. The second chapter is pretty neat too, but uses methods that are fairly well established. I do agree that the treatments where trustees can signal their ethnicity were novel. The third chapter, perhaps, is the least novel, and the results are also quite perplexing. Overall, this is a solid dissertation, and I would like to congratulate Nikoloz for submitting a very interesting research thesis.

I will next outline my comments by chapter, which I hope are constructive. I believe most are addressable.

In general, for each of the studies, I would have liked to see more discussion of sampling (for example, how were schools chosen and selection of students into the studies for the last 2 chapters).

## CHAPTER 1

1. I have a clarifying question. It seems you conducted one bundled treatment (which provided a joint signal on search effort and reliability). Was this the only joint-signal treatment conducted? Why did you not consider other joint treatments?
2. I was wondering what information you have about landlords. I was interested in learning more about heterogeneity of the treatments by landlord characteristics. For example, landlords who have in the past leased to foreigners may respond quite differently to the various treatments. A more systematic investigation by landlord heterogeneity along different dimensions would be useful, and enrich the analysis, and take-aways.

## CHAPTER 2

1. It wasn't clear to me why you didn't explicitly communicate to the trustors that trustees could send incorrect signals. I know you mentioned that the signal was sent by the trustee. But, if you were to tell me that, I would never have thought that the signal could be a lie. Equilibrium outcomes are likely to be quite different if trustors know that signals could be incorrect. I am not asking you to run another treatment where you make this explicit to trustors, but can you explain why you decided to do it this way? The chapter should include discussion of this as well, and the implications of how you implemented this.
2. I was surprised that Armenian trustees do not send a Georgian name signal when the trustor is also Armenian. Since Armenian trustees do send back less generally, wouldn't it be profitable for them to signal they are Georgian? Or is it that the in-group bias is so strong that it pays off to report the same identity as that of the trustor? I couldn't find this info in the chapter. Some discussion of this would be useful. I know you don't have an Armenian-Armenian treatment which may make it harder to get at this, but this is worth exploring.
3. I am not sure I agree with the policy take-aways in the conclusion. In general equilibrium, if minorities lied or selectively sent signals, the other group would also update their beliefs accordingly. So it's not clear that such mechanisms will mitigate discrimination.

## CHAPTER 3

1. What do you make of the fact that treatment effects are driven by 11<sup>th</sup> graders? Is it because the choice of major is more salient for them? Ex ante, one reason to think that 10<sup>th</sup> graders may respond more is because they have more time to change investments in high school. For some 11<sup>th</sup> graders, some majors might not be feasible to switch to at all, since they haven't taken the prerequisites. It doesn't seem this channel matters for you, but please provide some discussion of this.
2. I was confused by the nature of the information. It seems students overestimate earnings. But the biases regarding unemployment risk seem to be very large. Why is it that the perceived unemployment "for individuals with no university education is 4.5 times higher than the actual unemployment rate"? How is such a large bias sustainable? What really confused me is that the actual unemployment rate is higher for individuals with tertiary education than for those with secondary education only. It wasn't clear to me that students' biases regarding unemployment rate were larger for tertiary education than for secondary education- is that the case? If not, then aren't both pieces of information negative?
3. I don't know what to make of "82 percent of the changes in the actual major choices were made by students whose baseline intended and revised intended choices were identical".

- Then what explains the change in actual major choices- what other info are students getting after the study that could cause that? Why is it not reflected in changes in intended choices?
4. Section 3.3.3. is a little confusing. You seem to think that it is the change in the level of unemployment rates (actual versus perceived, for different fields of study) that could affect choice of major. It could be that it's the percent deviations (of the perceived unemployment rate versus actual) that matters. In principle, you should write down a model where earnings and employment levels affect the utility from a field of study. Right now, it seems you think that the effect of earnings and employment rate on choice is separable. It's not clear to me that should be the case. In general, I believe this chapter needs some work, and the analysis/exposition could be improved.

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I was asked to comment whether the thesis satisfies the requirements for a PhD thesis in economics. My answer is an emphatic yes.

And, yes, I recommend the dissertation for a defense. Most of my comments for the first two chapters should be easy to address, and should be addressed. Some comments for the third chapter may require more work, and so some of those changes can be made later (before submitting to a journal).

Best,  
Basit Zafar