# Does upward mobility destroy trust ? An experimental study

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In this paper, we design an economic experiment aiming at capturing the main traits of upward social mobility and measure its impact on behaviors in a trust game (Berg et al., 1995).

Upward mobility is a form of social mobility according to which an individual from a low status group is promoted to a high status group. In some developed societies, this upward mobility is still relatively rare and inherited group membership strongly predicts one's final position in the social hierarchy. An example of upward mobility is a child from a blue-collars family who ends up surgeon. While this situation is *possible*, it remains *rare*.

Upward social mobility has long been considered a cornerstone of modern democracies because preserving some opportunities for every members of the society is pivotal in preserving social stability (de Tocqueville, 1835; Acemoglu et al., 2016), and because it's a fundamental component of a widespread notion of justice (Sen, 1980). In this paper, we focus on the effects of upward mobility on a specific expression of social preferences : interpersonal trust. Trust is a very important dimension of social capital, because in most economic interactions, agents have to trust each others (Arrow, 1972).

Interestingly, while trust and social mobility seem both desirable, there is some evidence outside economics that upward mobility disrupts social preferences. For instance, some papers in social psychology suggest based on survey data and qualitative analysis that mobile individuals are often disapproved by left-behinds and not considered as equal by the members of the achieved group (Derks et al., 2015; Kulich et al., 2015). Then, the aim of our paper is to assess whether there is a tension between upward social mobility and trust.

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### Experimental design

We design an economic experiment in which we generate upward mobility, and measure its impact on interpersonal trust. We build on social psychology conceptualization of upward mobility, which can be thought of as the discrepancy between one's original and one's achieved group membership. We use a natural group affiliation to generate original group affiliation and we induce the achieved group membership within our experiment. There are two original groups and two achieved groups. Every participant is affiliated with one original and with one achieved group. Being affiliated to one of the two achieved group provides a greater status than being affiliated to the other. Consistently with the definition of upward mobility, the original group affiliation is a good predictor of the achieved group affiliation.

In practice, the experiment is divided in two parts :

In the first part, we generate social mobility. The original group affiliation is done by recruiting participants from the local business school  $(EM \ Lyon)$ and engineer school  $(EC \ Lyon)$ . While being similar in prestige and in educational requirements, those two schools differ in their curriculum : selection and education in the engineer school is more math-oriented.

We generate achieved group affiliation by assigning participants to one of two roles : *experts* or *agents*. This labeling generates a difference in status, reinforced by a task in which experts have to evaluate the quality of agents' work. We assign participants to one of the two achieved groups depending on their performances in a math quiz. Participants from the engineer school are expected to, and do perform better, so that they represent the majority of experts. By design, we insure that *some* participants from the business school who performed well in the math quiz are affiliated to the expert group. In our experiment, participants can have one out of four possible identities defined as two-dimensional group affiliation. Those identities are summed-up in figure  $1^1$ .

Achieved group affiliation			
		AGENT	EXPERT
Original group affiliation	Business School	Left-behind	Upwardly mobile
	Engineer school	Downwardly mobile	Expected expert

#### Figure 1: Identities in the experiment

<sup>&</sup>lt;sup>1</sup>The label given to the four possible identities in the table are for expositional purpose only and are not used in the experiment.

In the second part, every participant takes part in four consecutive trust games as truster and as trustee. Each trust game corresponds to a different match. For each match, both players know both the original and the achieved group affiliation of his counterpart. We use the strategy method for the decision of the trustee and give no feedback between matches in order to minimize learning. For each trust decision, we elicitate the truster's beliefs about how much the trustee will reciprocate in an incentive-compatible manner. Our main variable of interest are trust and reciprocity for matches that include an upward mobile individual.

### Preview of the results

Data show that upward social mobility does have an impact on trust and reciprocity. First, the upwardly mobile individuals trust left-behinds less than other left-behinds do. Surprisingly, we also show that upwardly mobile individuals are more reciprocal toward left-behinds than other left-behinds. This means that the decrease in trust is not due to a decrease in unconditional kindness. Moreover, our data suggest that the channel of beliefs does not explain this pattern<sup>2</sup>. Our interpretation is that mobile individuals are intrinsically more reluctant to let their fate in the hands of left-behinds. They anticipate a greater disutility in case left-behinds don't reciprocate their trust. In the wording of Bohnet et al. (2008) or Aimone and Houser (2012), mobile individuals are more *averse to betrayal* than non mobile individuals. Second, while left-behinds show in-group favoritism and clearly discriminate against participants from the engineer school in terms of trustworthiness, we cannot reject the null hypothesis that mobile individuals are equally reciprocal toward engineers and left behinds. Then, upward mobility seems to decrease one's in-group favoritism.

On the other hand, our data shows that the left-behinds do not behave toward upwardly mobile individuals differently than they do toward other leftbehinds. Nevertheless, engineers tend to trust upwardly mobile individuals less than they trust left behinds. The channel of beliefs doesn't explain this pattern, so that we argue that unconditional trust is affected : for a given level of expected reciprocity, engineers want to transfer less to upwardly mobile individuals than to left behinds. This is surprising because one could expect that expert engineers would feel closer to mobile individuals than to left behinds and then trust them more. This pattern can be understood in the framework of social identity theory (Akerlof and Kranton, 2000) : it

 $<sup>^2({\</sup>rm Ashraf}$  et al., 2006) show that trust is in large part explained by expectation of reciprocity and unconditional kindness

predicts that people who depict traits that are untypical from their group expose themselves to sanctions.

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