

# Deals with Friends and Strangers

## Trust in a Cairo Slum

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Economic activities require trust. For example, bilateral trade flourishes when trust is high among participating countries or more people are active on financial markets when trust prevails. Trust facilitates transactions when it is otherwise difficult to enforce rights through formal routes or when certain participants possess less information than others.

In developing countries, formal institutions are often weakly established, if they exist at all. In their place, social ties and networks appear which minimize insecurities, provide access to services and goods, and facilitate transactions. Social networks provide better opportunities to control each other, and members are more apt to adhere to agreements in order to not lose access to it. However, there is one critical disadvantage: Transactions are limited to the members of a network. To carry out transactions beyond the respective network, trust in strangers plays an important role.

In order to better understand the differences and determinants of trust within a social network and toward strangers, we conducted a controlled experiment in Manshiet Nasser, an informal housing area in Cairo. Like many other large cities in developing countries, Cairo is currently undergoing a process of urbanization, which can also be seen in the enormous growth of slums. Manshiet Nasser is one of the oldest and most densely populated areas of this type. It is difficult to estimate the population but it is believed to hover between 400,000 and one million people. Slum dwellers are typically dependent on social networks and rely on mutual solidarity to ensure their daily existence and survival, but the urbanization process is becoming more of a challenge to these systems. On the one hand this process creates new opportunities, which reduce the dependence of individual network members, but a larger network also means less opportunity to control each other.

Residents of various neighborhoods in Manshiet Nasser were recruited for the experiment and asked to bring an acquaintance or friend along who would also participate. With the help of actual social relationships we wanted to vary the social distance between participants in order to more closely observe the effects it had on trust. The participants were not representative of the residents of Manshiet Nasser but did demonstrate how heterogeneous the informal housing area is. The illiteracy rate among participants, for example, was circa 30 percent, while approximately ten percent had received a college education. Only 40 percent claimed to have a regular average income of 12 Egyptian pounds per day (1.40 Euro at the time of the study).

To measure trust in our experiment, we employed a trust game in which we assigned the participants the roles of a principal and an agent. In this game the principal can invest a sum of money with the expectation that the agent reinvests it; however, the principal does not have complete control over the agent's actions, even when he is a friend. The principal can also decide not to invest his starting capital, which would immediately end the game. If he chooses to invest his capital, however, the agent can react in two different ways: If the agent chooses to be cooperative, he returns the bulk of the money to the principal and thus both are better off than without the principal's investment. But he can also decline to reward the principal for his investment and repay only a minimal amount in which case the principal is worse off than when he would have chosen to not invest. The game also involves a twist: If the agent rewards the principal's trust there is a small probability that the principal only receives the

**Summary:** While strong social ties help individuals cope with the absence of formal institutions, trade is essentially limited to those who are part of the social network. Trust is, however, important to overcome such limitations. This experiment in a Cairo slum compares the determinants of trust toward strangers and people who are close socially. Indeed, trust is higher among people who have a social relationship, explained mainly by expectations and not other factors like other-regarding preferences. However, individuals poorly predict their friends' trustworthiness, leading to a loss in social welfare.

minimal amount back. This means that in such cases, the principal does not know if he was cheated or if he was simply unlucky and the agent had actually intended to reciprocate his trust. Since it is impossible for the principal to enforce repayment, his investment is based on his trust in the agent. On average, trust should be higher among friends, because a principal may rely on shared experience and better information about the agent.

Participants played the game either as a principal or as an agent. In order to measure the effect of social distance on trust, each participant had to make two decisions in his role as principal or agent. That is, a participant played the game once with his friend and once with a stranger whose identity was revealed only at the end of the game. At the end, one of the two decisions was randomly implemented and the participants were paid according to the outcome of their decisions. (They earned an average of 34 pounds, approximately two to three times more than the average daily wage). In addition, expectations and other potential factors which could have an effect on trust were surveyed in a questionnaire.

As a supplement, we measured social preferences in a simple distribution game with a decision maker and a recipient. Each participant received a certain amount of money and had to decide how much he would give to the recipient. Again, the recipient was once the friend and once a stranger. There were also two different set-ups in which the decision maker either remained anonymous or in which his identity was revealed afterwards to the recipient. The results of the distribution experiment showed a high willingness to share money and to help others. On average, participants were willing to give 36 percent of their capital to a stranger and 44 percent of their capital to a friend, even when they were unable to find out where the money had come from. This result indicates a high degree of solidarity. Motives of reciprocity also play a role when the decision makers are non-anonymous and can rely on future transactions. In this constellation, transfers slightly increased again by four percentage points

**Who can be trusted?** A young man observes garbage collectors (zabbaleen) in Manshiet Nasser, an informal housing area in Cairo, Egypt.  
*[Photo: Katharina Eglau]*

(strangers) and, respectively two percentage points (friend) in the hope that the recipient would act in the same way. This can be regarded as a type of informal insurance, commonly seen in developing countries.

In the first part of the experiment, the trust game, we observed that a decrease in social distance led to more trust. While only 24 percent of the players trusted a stranger, the willingness to trust an acquaintance increased 16 percentage points to 40 percent. The agents showed a high degree of cooperativeness. 55 percent of the agents repaid the investment to a stranger and therefore acted in a cooperative manner. Here, the percentage was also higher when the principal was also a friend (72 percent). Efficiency gains can be only achieved when a principal trusts and invests his money and the agent cooperates, since only then the entire capital is divided. This result was more often achieved when the game was played among friends (28 percent).

Surprisingly, this extent of cooperativeness was not recognized or expected by the principals. They even expected a slightly higher degree of cooperativeness from agents they did not know. However, the difference is not statistically significant and can perhaps be attributed to the fact that the principals did not exactly know what kind of reliability they could expect from a stranger. Trust in unfamiliar agents is more likely explained by social preferences than by expectations.

In comparison, principals more likely followed their expectations when the agent was a friend; i.e. when they believed their friends were cooperating, they were more willing to place trust in them. Other factors such as risk aversion, social preferences or social network characteristics did not appear to have any influence. It seems that principals with precise expectations were more likely to follow their expectations. Overall, however, principals underestimated the cooperativeness of their friends; only 40 percent expected their friends to cooperate, although 72 percent of them were actually willing to do so. If starting from the premise that expectations are more easily influenced than preferences, then there would be a considerable potential to influence expectations in such a way that principals place more trust in the agents so that an efficient result, namely trust and cooperation, could be achieved.

The experiment shows which factors play a role for trust within and beyond a social network if one is unable to perfectly anticipate the decision of the other. A majority of the agents would have cooperated if the principals had trusted them, but the principals do not seem to have realized this. They did not expect their friends to cooperate often enough. The overall result shows that even social relationships do not necessarily transcend information asymmetries. To what extent this result is valid in other contexts remains open.

### References

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*(Photo: David Ausserhofer)*

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