# Network analysis of individual and group loyalty to corruption among students

Rassadovskaya A. <u>arassadovskaya@hse.ru</u> Aistov A. <u>aaistov@hse.ru</u> National Research University Higher School of Economics- Nizhny Novgorod

The aim of this research is to explore if group loyalty to corruption has a significant impact on individual corruption perceptions. This question comes from the fact that while deviant behavior, following Gary Becker [1], is often considered to be a result of costs and benefits analysis, it is still a social phenomenon. Deviance from the norms takes into consideration the norms and their strength, therefore institutional environment has influence on the individual. We test the hypotheses using the data from the survey conducted in 2013/2014 in several Russian universities among students. We consider corruptive behavior as an example of norm violation. Preliminary results show that individuals loyal to corruption and those who are corruption-averse have different social capital.

### **Research** question

The research is based on the opinion of the scholars who claim that deviant behavior has stronger impact on the group members than up to the norms actions. The reasons for that are summarized in Wellan's paper [2]. The main cause according to his work is that deviant behavior is potentially harmful for the society, therefore it attracts attention. Moreover, people often overestimate negative or violent facts, thus occasional deviations spoil the whole group's perception of norm violation creating environment for the growth of crime.

Following Wellan, we formulate three hypotheses to test: (i) even potentially corruptive individuals (loyal to corruption) attract more attention from the group and have more links in the network; (ii) the more there are corruptive individuals in the neighborhood, the worse the individual thinks of the group in general; (iii) loyal to corruption individuals are prompt to think that the environment, not low moral standards, make somebody violate the law.

These hypotheses, if proved, lead to the statement that there is a link between deviant behavior and social capital structure not only at macro, but also at individual level.

### Data and methodology

To perform this research we use the data from the survey conducted in 2014 / 2015 in Nizhny Novgorod, St. Petersburg, Vladivostok and Voronezh among 19-22-year-old bachelor and master students. The questionnaire consists of two parts: network part and the survey considering involvement in various social processes, including corruptive actions (at least awareness of these).

We test the hypotheses based on the following proxies for corruption loyalty: if the respondent is eager to get involved into a bribery act considering road police; if the respondent is sure that not all payments should be official. The attitude towards the corruption state in the society is measured using general questions on the needs to bribe officials. There is also a pool of questions on the hypothetical state of things: for example, if one can make a business legally.

We perform two-steps analysis in this research. First, we search for correlations at macro level, comparing samples and without looking at personal traits and individual differences. Second, we estimate a special regression on the networks in order to catch the tendencies at micro level.

## Results

Preliminary results consider only macro-analysis of the samples, thus ignoring probable endogenuity on the individual level, and show the following. As for the first hypothesis, we get that if the respondent thinks that all payments should be official, she has less incoming links in the network on average. For the most of samples the correlation is between -0,14 and -0,18, therefore we see that potentially corrupt respondents get more attention. At the same time respondents who accept the possibility of bribing have on average less incoming links, therefore the results for the first hypothesis are not clear.

Taking about associating neighbors and the whole group, we get that samples where more respondents accept the possibility of bribe, show on average higher level of corruption reported by group members. But here we need micro analysis for sure. The same is for the third hypothesis, as at macro level we see that respondents in general try to find reasons for deviant behavior.

Further research involves using spatial econometrics methodology to catch the connection between network characteristics of the respondent and her loyalty to corruption. We expect to separate individual motivation from the influence of the society here in order to prove that the environment matters in economics of crime.

#### References

1. Becker G. S. Crime and punishment: An economic approach //Essays in the Economics of Crime and Punishment. – NBER, 1974. – C. 1-54.

2. Wellan J. M. From individual deviance to collective corruption: A social influence model of the spread of devi-ance in organisations. -2004.