

The impact of risk perception and risk attitudes on corrupt behavior: Evidence from a petty corruption experiment



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Motivation

Petty corruption

Def: behavior where the public is required to bribe (low level) bureaucrats to make them do what they have to do anyway or speed up the bureaucratic process on a regular basis. (Jain 2001)

Characteristics

- ▶ Almost anonymous interaction between briber and bribee
- ▶ Typically occurs at a high frequency
- ▶ Small amounts of bribes are involved
- ▶ Detection rate is rather small
- ▶ Particular problem in developing and transition countries (e.g. in South Africa third most prevalent crime after housebreaking and theft in 2007)

Petty corruption and the role of risk perception

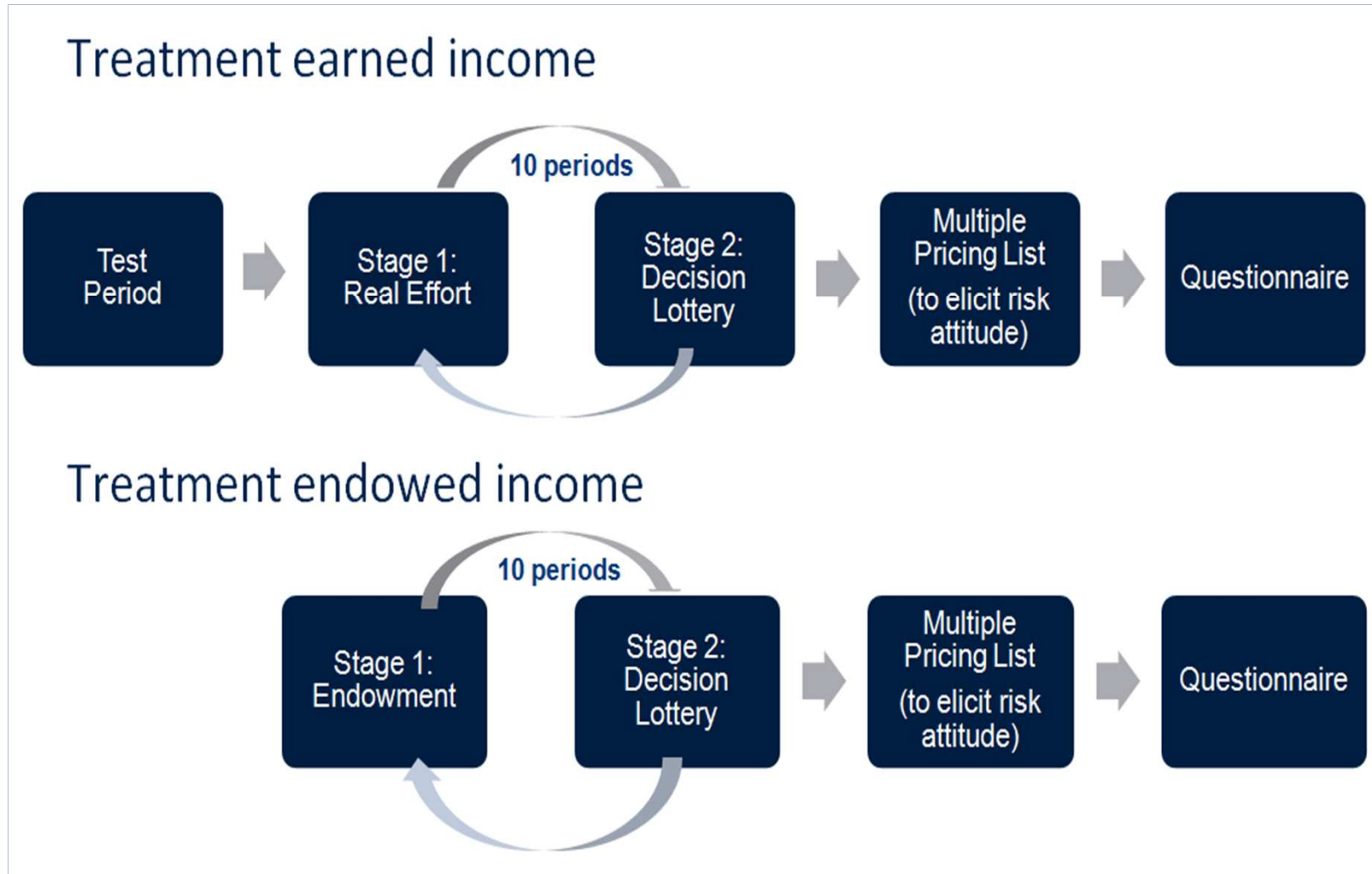
- Top-down monitoring is found to have an important role in combating corruption → does this extend to the case of regular bribes as in the case of petty corruption.
- What do we learn about individual risk perception in the case of compound lotteries:
- Read/Loewenstein/Rabin (1999) argue with the concept of „choice bracketing“ that misperceptions of risk occur because the choices that are available for the decision maker are mostly seen independent
- Systematic underestimation of the total risk involved in engaging in corrupt behaviour might nullify measures to fight petty corruption by increased governmental auditing

Design/ Experimental Model

An experimental petty corruption set-up

- Consider a situation where a bureaucrat decides upon accepting small amounts of bribes from the public when being confronted with government agency charged with uncovering corrupt public officials.
- bureaucrat takes his decision under partial equilibrium assumptions → detection prob. taken as given
- Decision resembles a decision in a repeated binary lottery.
- income of 80 units which will increase by 25% if he accepts a bribe.
- detection probability of 20%
- Income in remaining periods reduced to 20 units once detected (sudden death)
- 10 Periods

Experimental Design



Hypothesen

Hypotheses

H1: The first bribe is accepted in earlier periods than predicted by expected utility theory.

H2: A higher degree of risk aversion leads subjects to accept the bribe in later periods.

H3: The first bribe in the earned income treatment is accepted in later periods than in the endowed income treatment.

H4: Female participants accept the first bribe in later periods than male participants.

Results

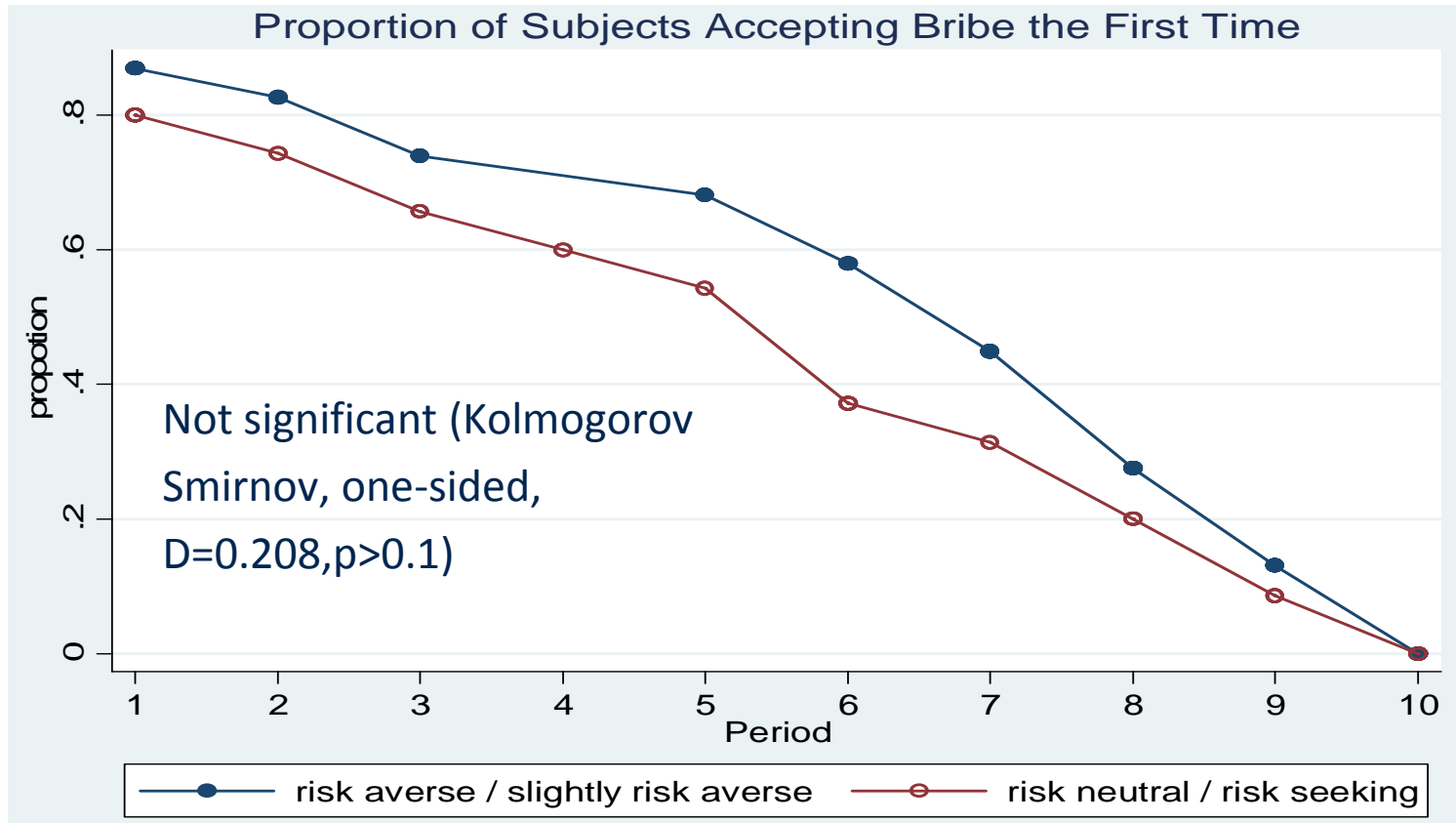
Taking the bribe...is it a pattern or could they just not resist the temptation once?

Did NOT accept bribe in first period			Accept bribe already in first period		
number of switches	frequency (%)	Cumulative %	number of switches	frequency (%)	Cumulative %
0	3 (3.23)	3.23	0	12 (75)	75
1	70 (75.27)	78.49	2	3 (18.75)	93.75
3	15 (16.13)	94.62	8	1 (6.25)	100
4	1 (1.08)	95.7	total	16	
5	4 (4.30)	100			
total	93				

Note: 85 participants (78%) show a clear pattern.

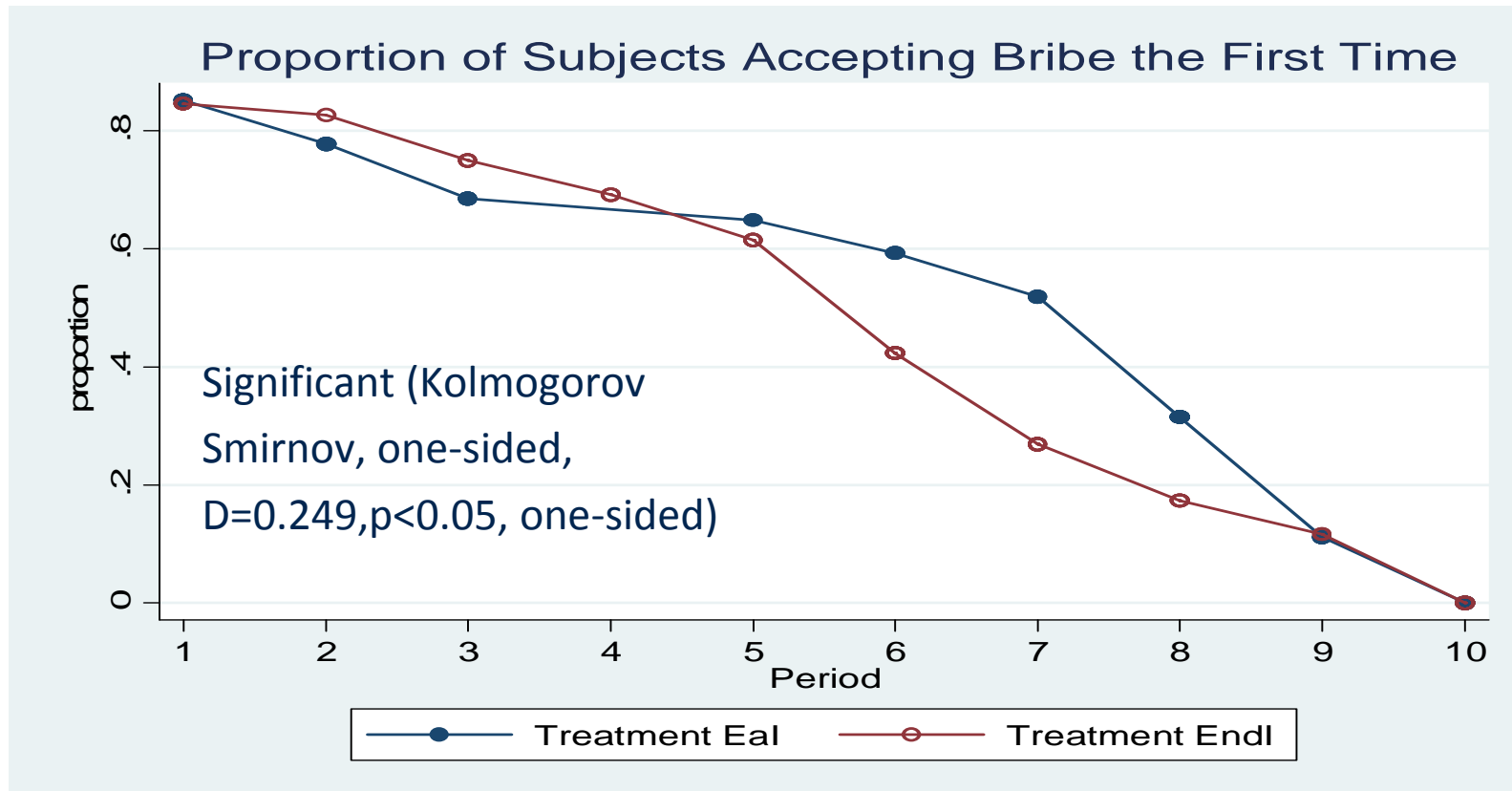
→ H1: We reject the null hypothesis that the total number of accepted first bribes are distributed equally in period 9 and in the periods before (Binomial test with an event probability of 0.5, $p < 0.0001$, two-sided)

Results for H2 (Risk attitude) : H2 cannot be supported



In total: 69 of 104 risk averse/slightly risk averse; 35 of 104 are risk neutral/ risk seeking

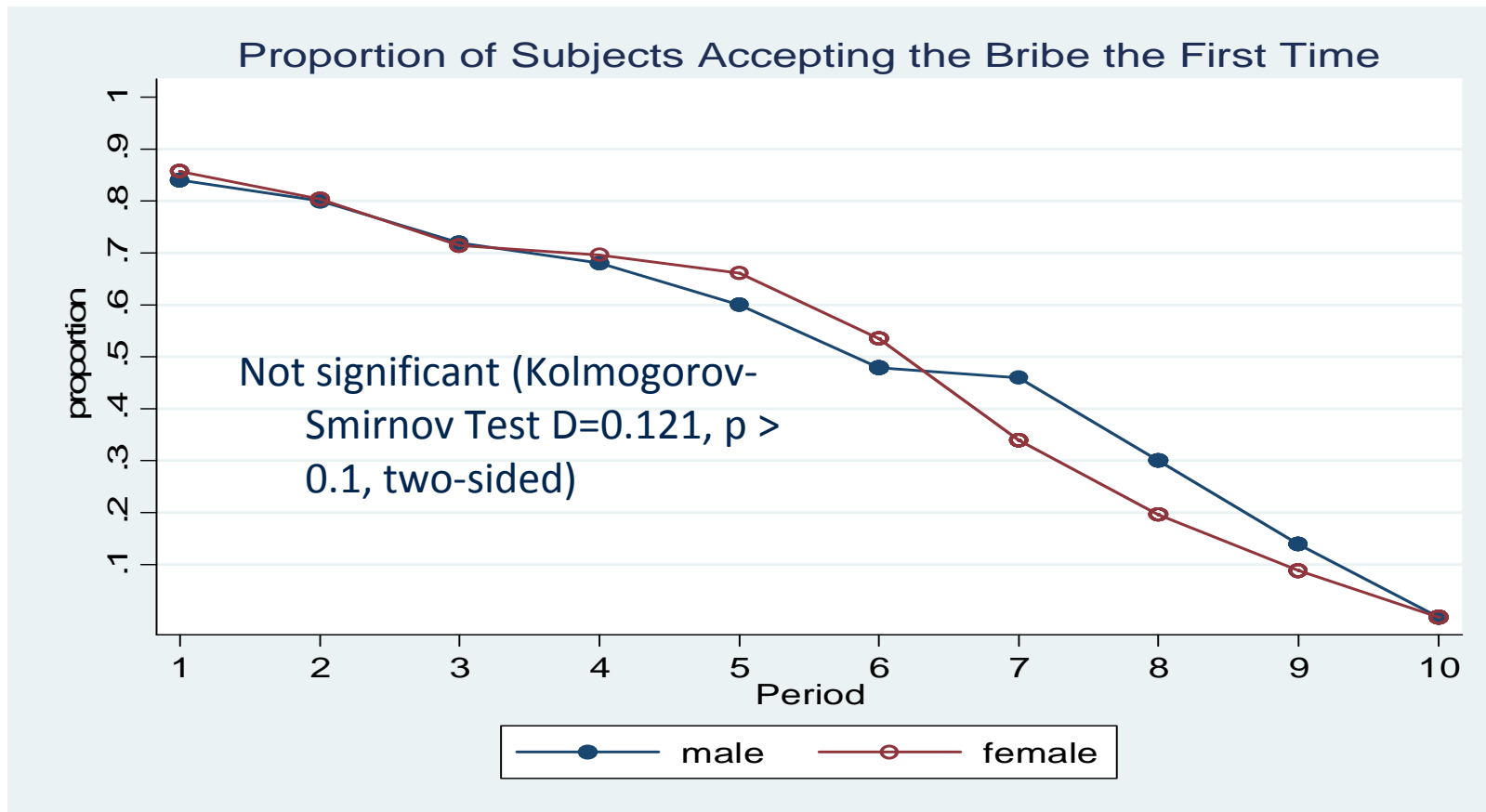
Results for H3 (Source of income):



- A significantly higher proportion of subjects in Eal accept the first bribe in later periods compared to Endl

Results for H4 (Gender): H4 cannot be supported

50 male, 56 female participants



Conclusion

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- We find compelling clues that the high rates petty corruption reported for many countries are driven by an incorrect risk assessment by individuals
- Behavior in our experiment cannot be explained by risk attitudes of participants (in line with Berninghaus et al. 2010)
- Decisions in the experiment might be explained by „Narrow bracketing“ (Read/Loewenstein/Rabin 1999) which should be investigated in further research
- Methodological contribution to experimental corruption literature by implementing earned income treatment that lead to less corruption in our experiment

Thank you for your
attention