



# **Anti-corruption Policies: Lessons from the Lab**

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# Why are experiments useful?

- They make it possible to measure behaviors/phenomena that can hardly be observed “outside the lab”
- If the data don't exist, then we can design an experiment to generate the data we need...
- They allow us to investigate how individuals respond to specific policies/ incentives / types of regulatory mechanisms that are difficult or too expensive to test in the real world

# How can behavioural experiments contribute to the study of corruption?

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- We can directly measure individuals' propensity to engage in corruption;
- They can provide insights into the effects of factors that we cannot vary in the real world on purpose
- They can be designed to 'simulate' planned policy interventions
- They represent the most "micro" approach to the study of individuals' decisions

# Examples of relevant questions

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- To what extent increasing the probability of detection or a sanction deter corrupt behaviour?
- Role of monitoring and transparency?
- Can staff rotation of public officials reduce corruption?
- To what extent increasing the wages of public officials deter corruption?
- Do non-monetary costs play any role in corruption?
- Are cultural factors important?

# Introduction

- Lot of theoretical and empirical research on corruption, but if a “corruption expert” is asked “What can be done in Country X to reduce corruption?”, finding an answer is usually very difficult...
- What should be done?
- What can be done?
- Two Different Approaches:
  - ▣ Changes in the incentive system
  - ▣ Changes in the value system

Studying the effectiveness of both kinds of anti-corruption interventions is crucial, but *difficult to do in the field*

*Experiments could help....*



# Economic Incentives vs. Intrinsic Motivations

## Economic Incentives

- Probabilistic punishment (changing  $p$  or  $f$ )
- Monitoring and transparency
- Wages
- Institutional changes
  - ▣ Staff rotation
  - ▣ Competition (IO of corruption)
  - ▣ Whistleblowing
  - ▣ Intermediaries

## Intrinsic Motivations

Feelings of guilt and shame possibly caused by:

- Knowledge that acting corruptly is illegal and/or immoral
- Knowledge that acting corruptly generates costs on others
- Knowledge that acting corruptly is socially disapproved



# EXPERIMENTAL EVIDENCE ON THE EFFECTIVENESS OF ACTING ON ECONOMIC INCENTIVES

# Probabilistic Punishment



# “An Experimental bribery game” by Abbink, Irlenbush and Renner (2002)

## RESEARCH QUESTIONS

1. Are severe sanctions effective in preventing corruption, even if the probability of detection is very small?
2. Do people (i.e. firm and official in the game) take into account the harm that corruption does to others when engaging in bribery?
3. What is the role of **trust** and **reciprocation** in REPEATED corrupt exchanges?

# AIR (2002)

## The game

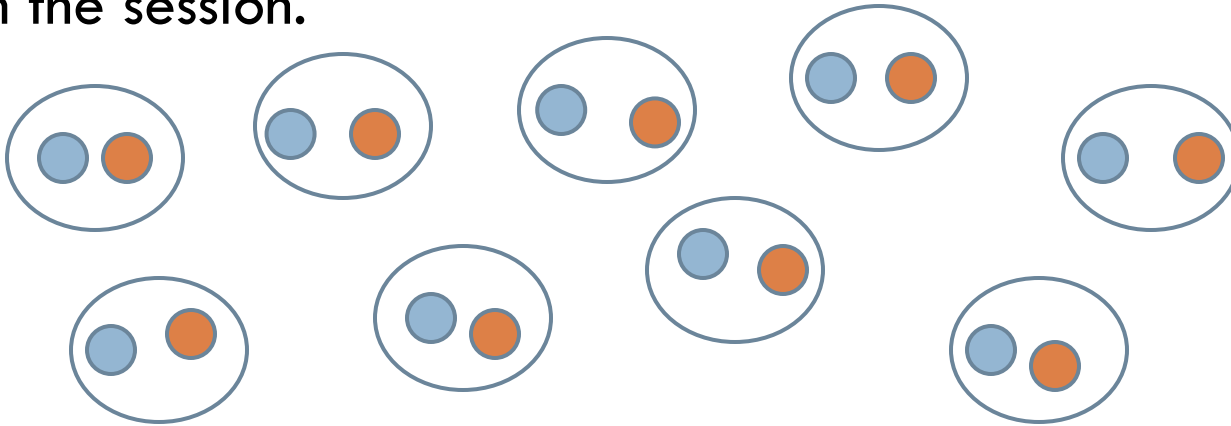
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- **REPEATED** bribery exchanges between a “**firm**” and an official;
- The official can take the bribe and not deliver the corrupt service the firm paid the bribe for => Issues of **TRUST**
- Everybody suffers the cost of other pairs' corruption
- Everybody can engage in bribery...there are no “passive” other members of society

# AIR (2002)

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- 18 individuals participate in an experimental session
- Subjects play in pairs as a briber or a bribee; **9 pairs in total**. Roles are assigned at the beginning of the experiment and kept through the session.



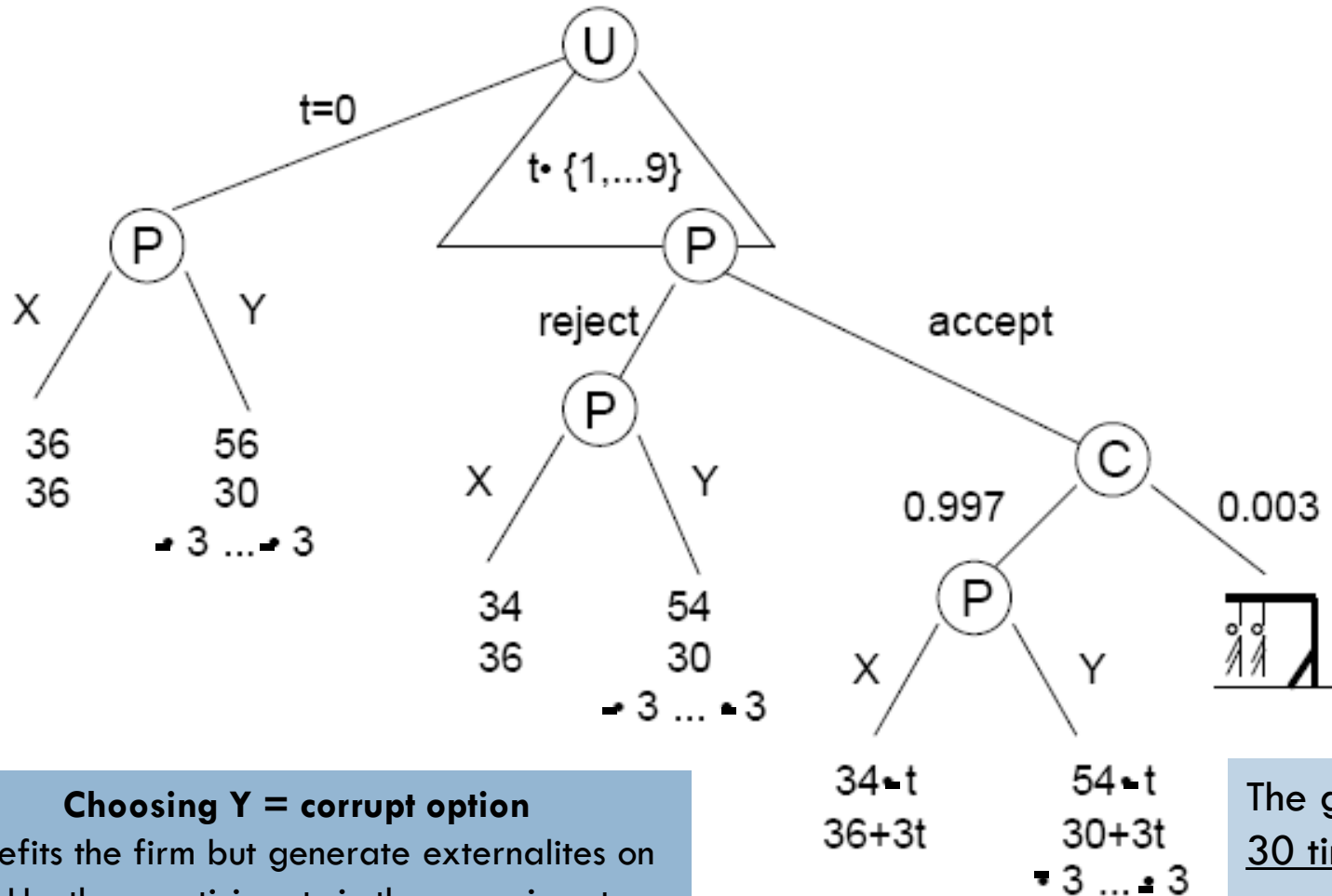
# AIR (2002)

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- Each “firm” can offer some money (between 0 and 9) to the matched “official”;
- Offering a bribe costs the firm 2 ECU
- The official has two decisions to make:
  1. Accept or reject the offer;
  2. No matter whether he accepts or rejects, the official also has to decide whether to grant the permit (**action Y** in the game) or not (**action X** in the game). **Granting the permit (action Y) benefits the firm but harms other firm-official pairs**

# Treatment with “sudden death”

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**Choosing Y = corrupt option**  
 benefits the firm but generate externalites on  
 ALL other participants in the experiment

The game is played  
30 times by the  
 same pairs of firms  
 and officials

# AIR (2002)

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## PREDICTIONS

- By backward induction, the official always prefers X to Y
- However, if the firm and the official interact more than once:
  - If the official takes the bribe and chooses **X today**, the firm will never pay him/her a bribe again!
  - The official has an incentive to choose **Y** today, so that the firm will offer him/her a bribe also in the future

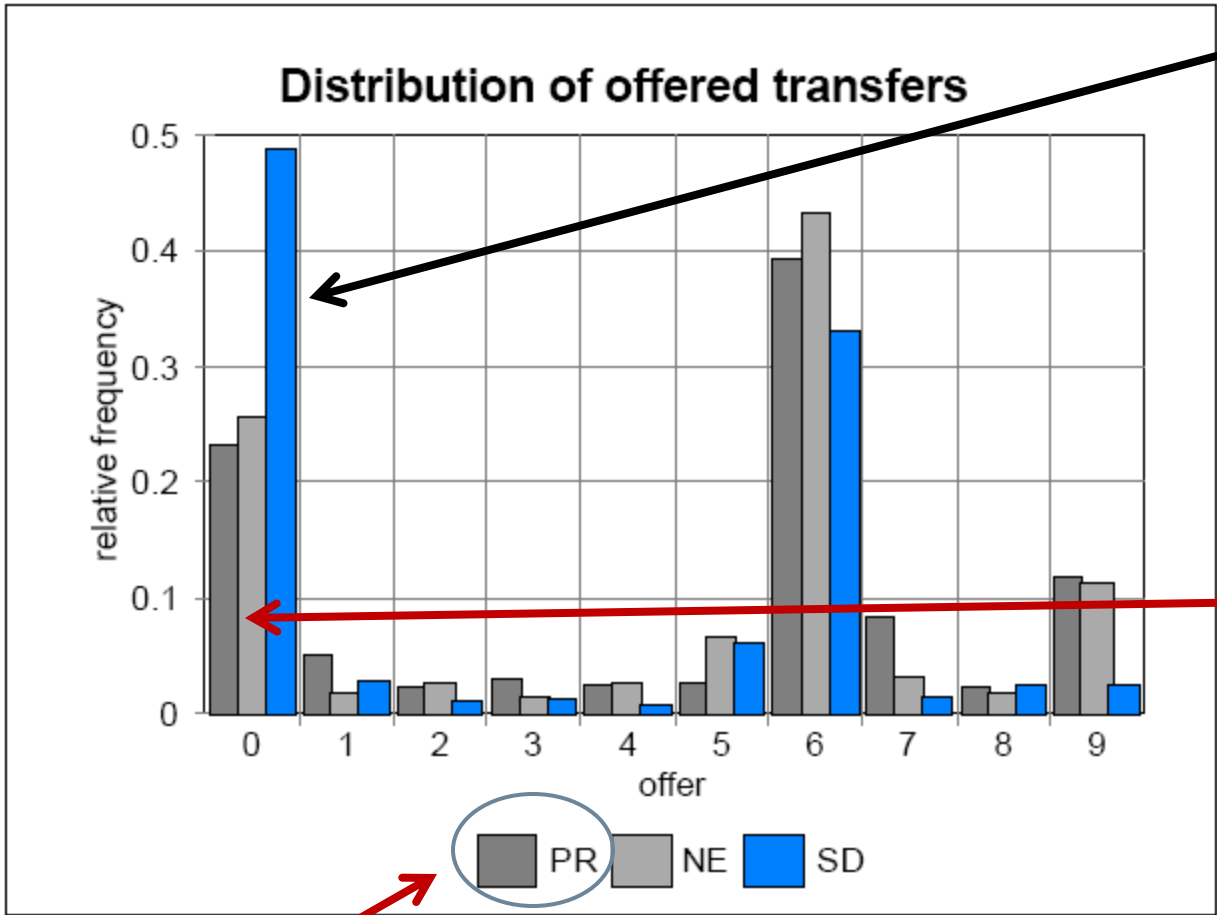
# Treatments

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- In order to answer the two research questions (about externalities and severe punishment) they designed and run three different versions (or treatments) of the game:
  - **Basic version (the “baseline”)**  $\Rightarrow$  no negative externalities and no punishment
  - **Version with negative externalities**  $\Rightarrow$  if the official chooses Y, all other “firms” and “officials” in the session loose 3
  - **Version with punishment**  $\Rightarrow$  if the bribe is accepted and Y is chosen with **probability = 0.3 %**, the firm and the official are disqualified from all rounds of the games  $\Rightarrow$  “ sudden death”
- **NOTE:** The game is presented in **abstract terms**, i.e. no reference to bribery



# Results



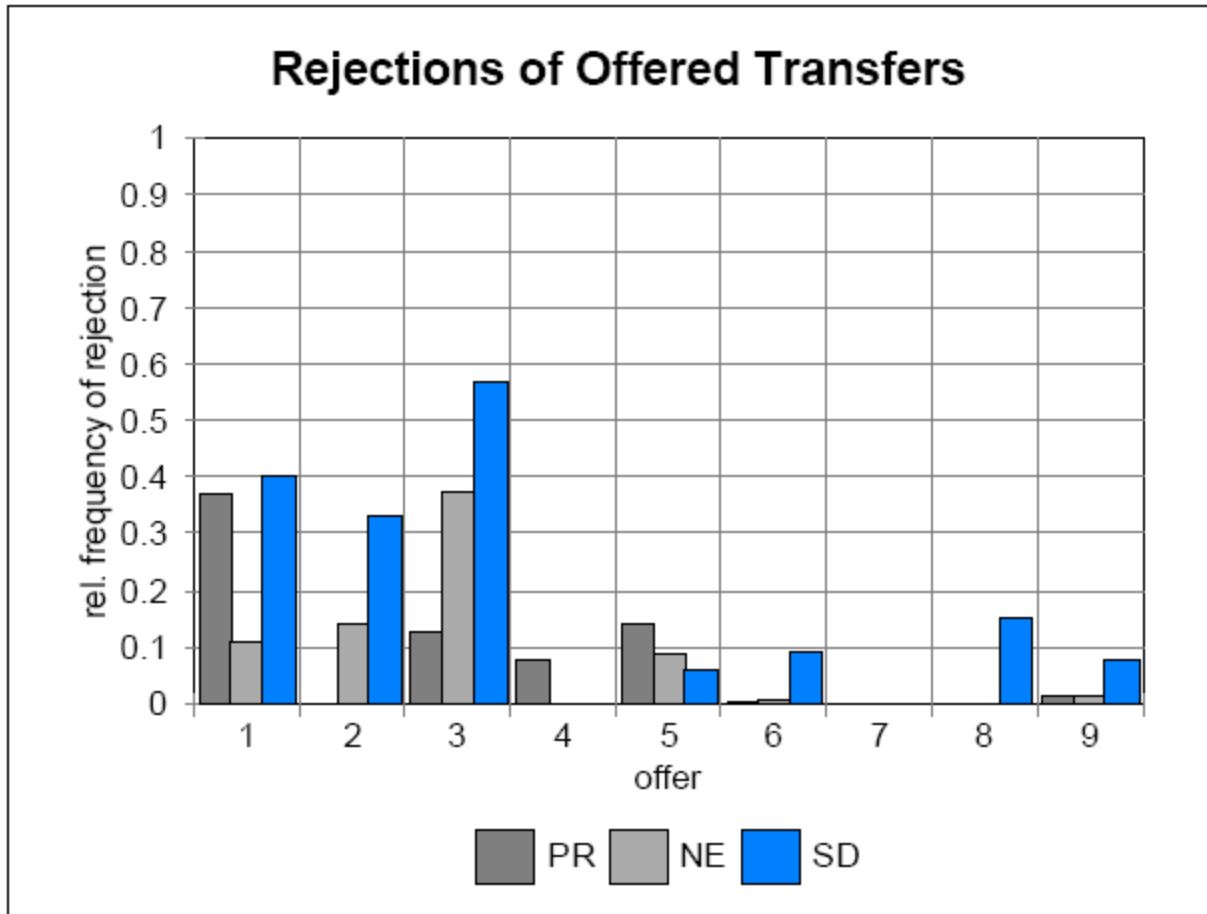
**“Sudden death” (SD) significantly reduced the proportion of firms paying a bribe**

**Causing harm to others (the NE treatment) did not reduce the proportion of firms paying a bribe**

**No externalities and no punishment**

**Figure 2**

# Results



**“Sudden death” (SD) induced more officials to reject the bribes**

**Figure 6**

# Results

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**Figure 3**

**No matter the treatment, the higher the bribe the more willing the official is to choose Y => evidence of reciprocation**

**Negative externalities (i.e. moral costs) do not seem to play a role**

# AIR (2002)

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## Results:

- ▣ Severe punishment is highly effective, reducing the average bribe and the frequency of the Y-choice by 1/3;
- ▣ No difference in behaviour in the presence/absence of negative externalities imposed on others.

## Conclusions from these results:

- ▣ Individual decisions about whether to behave corruptly or honourably seem to be determined solely by the **material costs and benefits** associated with corruption
- ▣ Educational/ethical campaigns are going to be ineffective

# Human Monitoring and Transparency

# Monitoring and Transparency

**What if punishment is not exogenous,  
but determined by human subjects?**

- ❑ “Transparency, wages, and the separation of powers: An experimental analysis of corruption” by Azfar and Nelson (2007)
- ❑ **“Corruption in public service delivery: An experimental analysis”** by Barr et al. (2009) JEBO

# Barr et al. (2009)

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- **Designed to ‘simulate’ planned policy interventions in Ethiopia:**
  - Increasing monitoring?
  - Changes in who is charged with the duty of and given the resources to monitor health worker performance?
  - Wage increase for health workers?
  
- The game was designed to simulate the decision-making environment faced by health workers in rural posts;
  
- It is an EMBEZZLEMENT GAME
  
- Ethiopian nursing students played the game



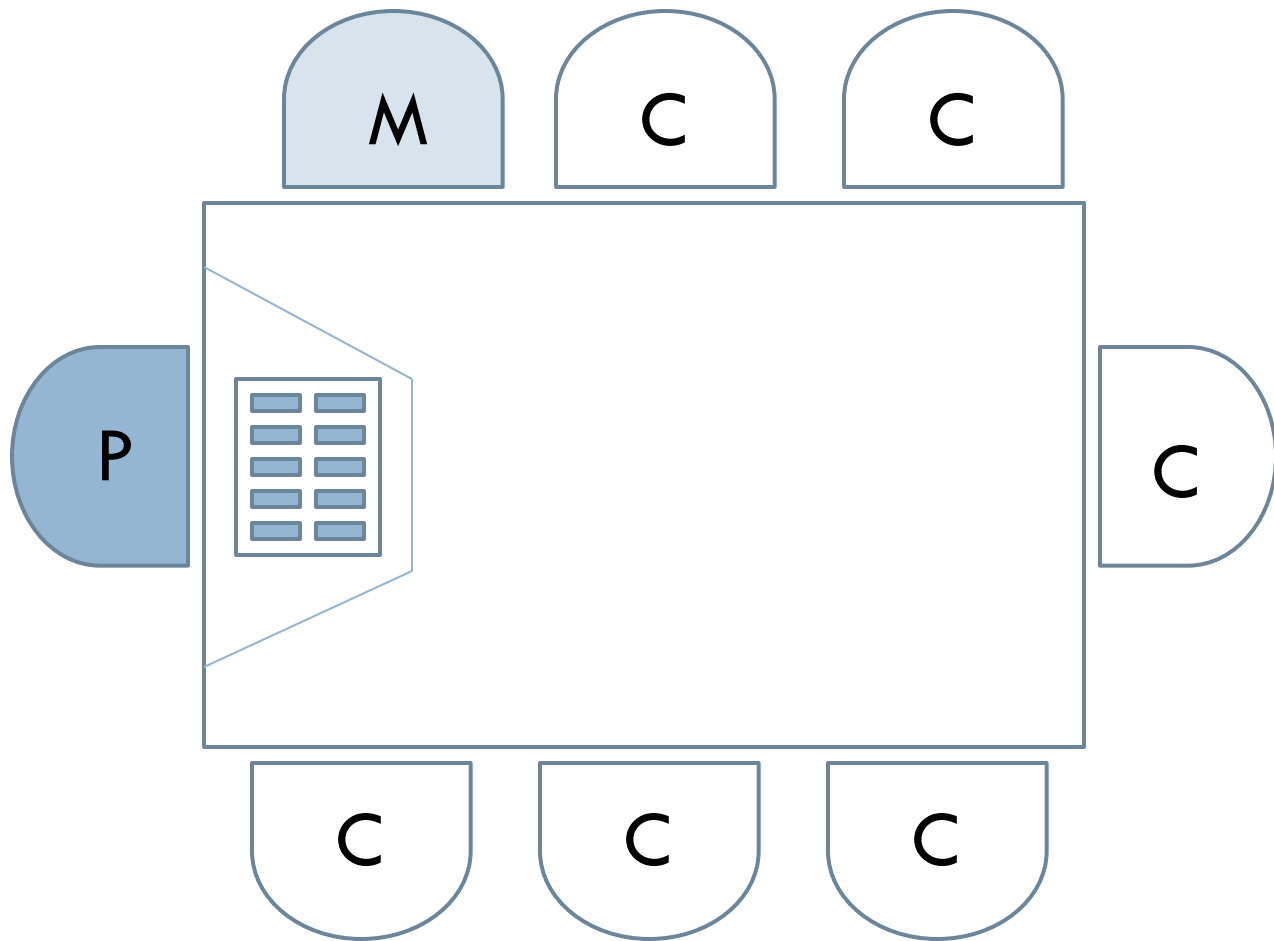
# Barr et al. (2009)

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- **8 players** who in different rounds of the game (a game has 12 rounds) were:
  - 6 “community members”;
  - 1 “public official”;
  - 1 “monitor”.
- A public official is randomly selected (among the 8 players) to serve the community. He receives a wage.
- The public official is allocated some resources (in the forms of some tiles) and he needs to decide in private how much to redistribute to the community. He might have few or many valuable resources available.

# Barr et al. (2009)

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# Barr et al. (2009)

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## □ RESOURCES AND TRANSPARENCY

- The public official rolls a 6-sided die in private to determine the valuable resources he gets to distribute to the community.
- He receive a number of valuable tiles (i.e. resources) equal to the number that came up, plus an addition of worthless tiles, for a total of either 10 (in half sessions) or 18 (in the other half).

# Barr et al. (2009)

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## □ **POSSIBILITY OF EMBEZZLEMENT**

- The official then chooses how many tiles to distribute and, therefore, how many valuable resources to keep for himself;
- The community members do not know how many valuable resources the public official was allocated, but only the total amount of resources (10 or 18).
- Therefore, if they receive a worthless tile it could be either because the official kept some valuable tiles for himself, or because he had few valuable resources to start with

=> **LACK OF TRANSPARENCY**

# Barr et al. (2009)

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## □ MONITORING

- A monitor is also either **randomly selected** (in half of the experimental sessions) or **elected** by the remaining players (in the other half of the sessions). He receives a sum of money to start with.
- He can use some of this money to try and expose the resources kept by the public servant....but **MONITORING IS COSTLY!**
- If, through the efforts of the monitor, the public servant is found to have kept public resources, he loses them all and is excluded from being the public servant in the next round of the game.
- Then another round begins.

# Barr et al. (2009)

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## □ PUNISHMENT

- ▣ If the public servant has been found to have kept resources, he is excluded from being the public servant in this new round.
- ▣ If the public servant is not exposed as keeping resources, he has a  $1/2$  chance of retaining his role.
- ▣ In the sessions in which the monitors are elected, the monitor who played in the previous round stands for reelection against another randomly selected candidate. And then they play again...until 12 rounds have been played

# Barr et al. (2009)

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## Important detail:-

- On average, community members earn far less than public officials and monitors
  - ▣ **So, public servants don't want to get caught!**
  - ▣ **And monitors want to be re-elected!**



# Barr et al. (2009)

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- Experimental Treatments:
  - **Selection** of the monitor: random or election
  - **Transparency:** high or low (10 or 18 total tiles)
  - **Wage** of the public official: high or low

# Barr et al. (2009)

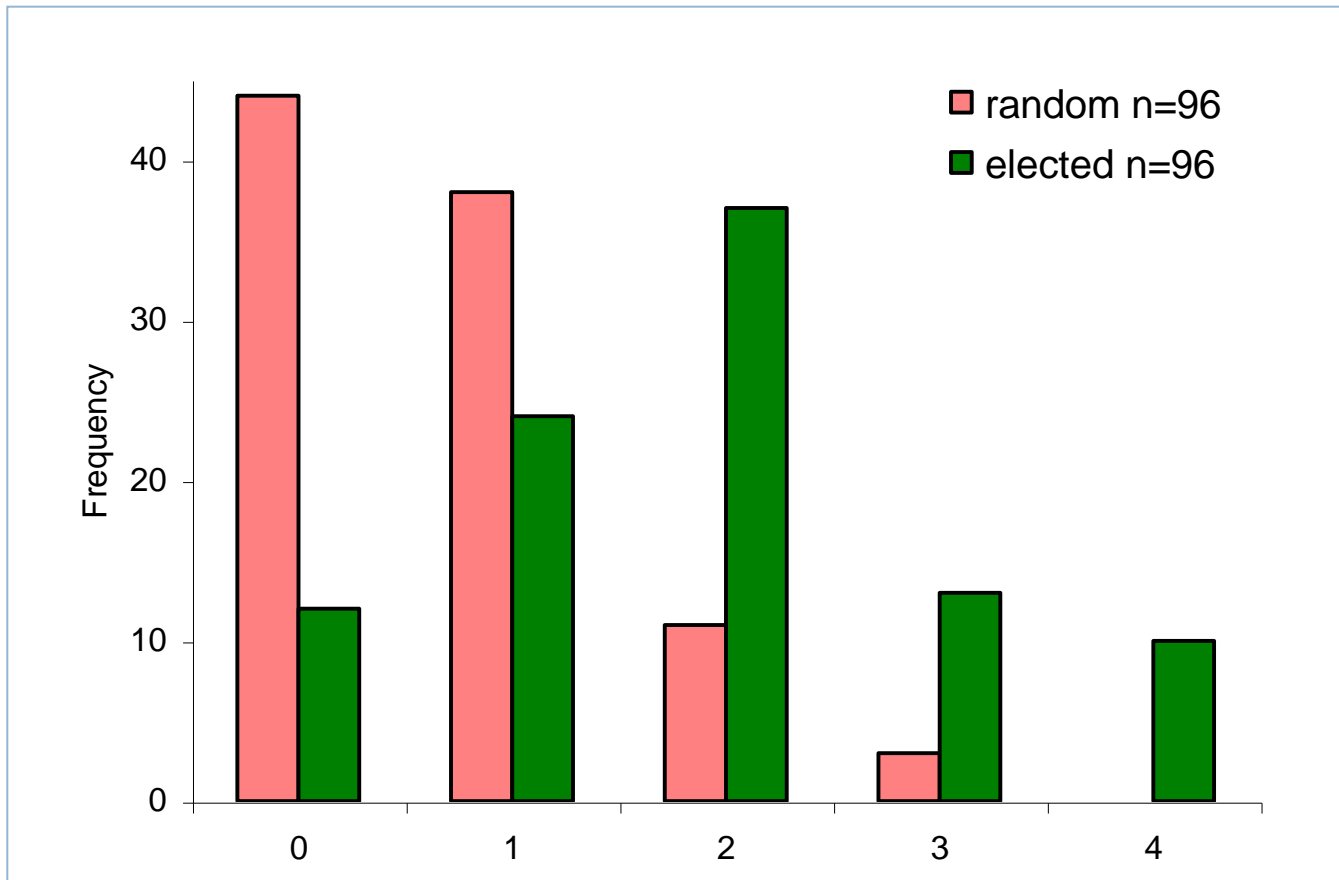
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## □ RESULTS

- Public officials' embezzle less when they are paid higher wages, but the effect is very small
- The most relevant result concerns **monitoring** of public officials

# Comparing randomly selected and elected monitors' behaviour

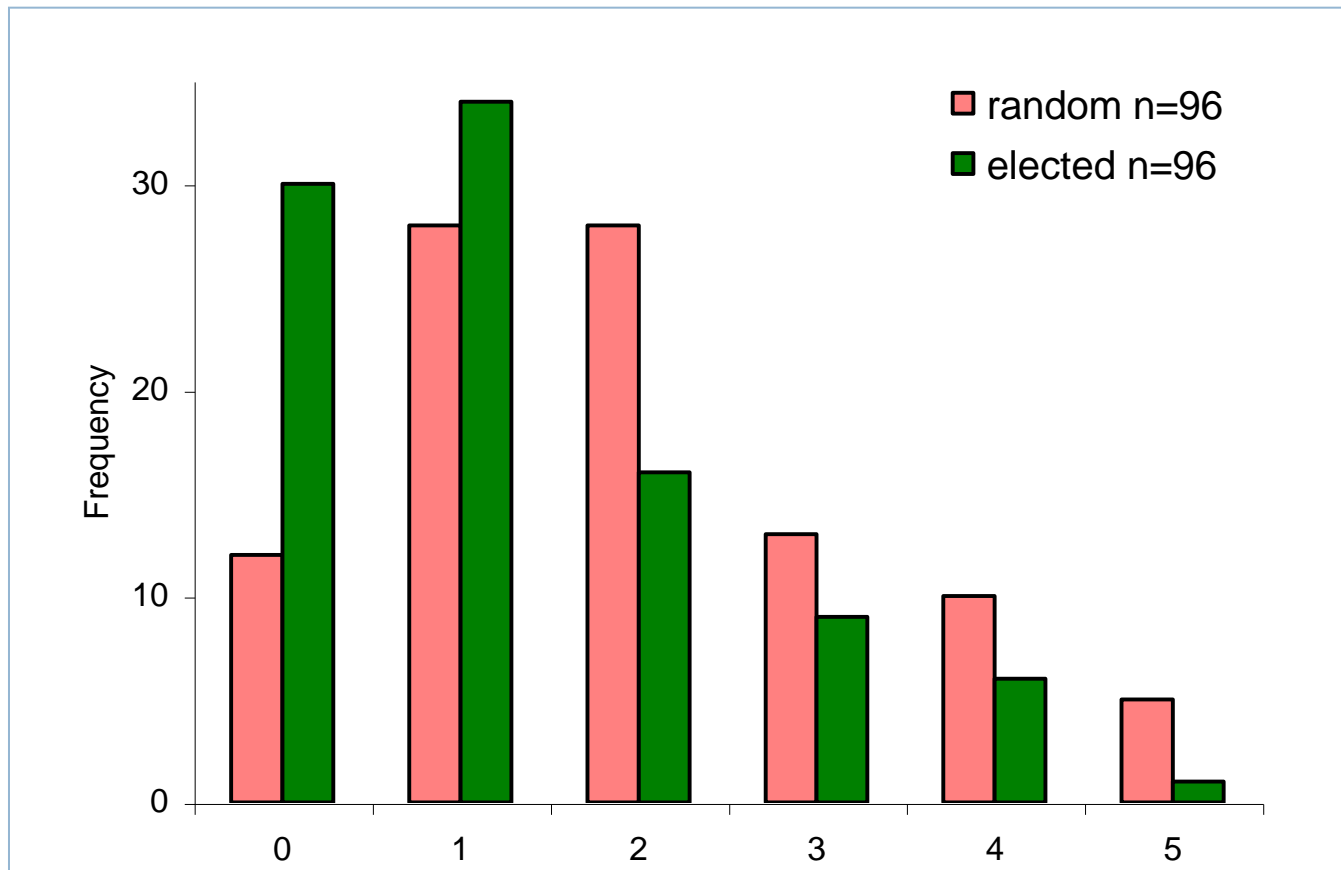
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**Money spent on trying to expose public servants who are keeping resources**

# Embezzlement when monitors are either randomly selected or elected

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**Resources that the public servant tried to keep instead of distributing to the community => EMBEZZLEMENT**

# Barr et al. (2009)

## Summary of results

- ▣ Public officials expropriate less when they face monitors who are elected by the community;
- ▣ Monitors who are elected by the community put more effort into monitoring, and community members are more likely to re-elect monitors who put more effort into exposing public officials.

# Serra (2012)

## “Combining top-down and bottom-up accountability: Evidence from a bribery experiment”, JLEO (August 2012)

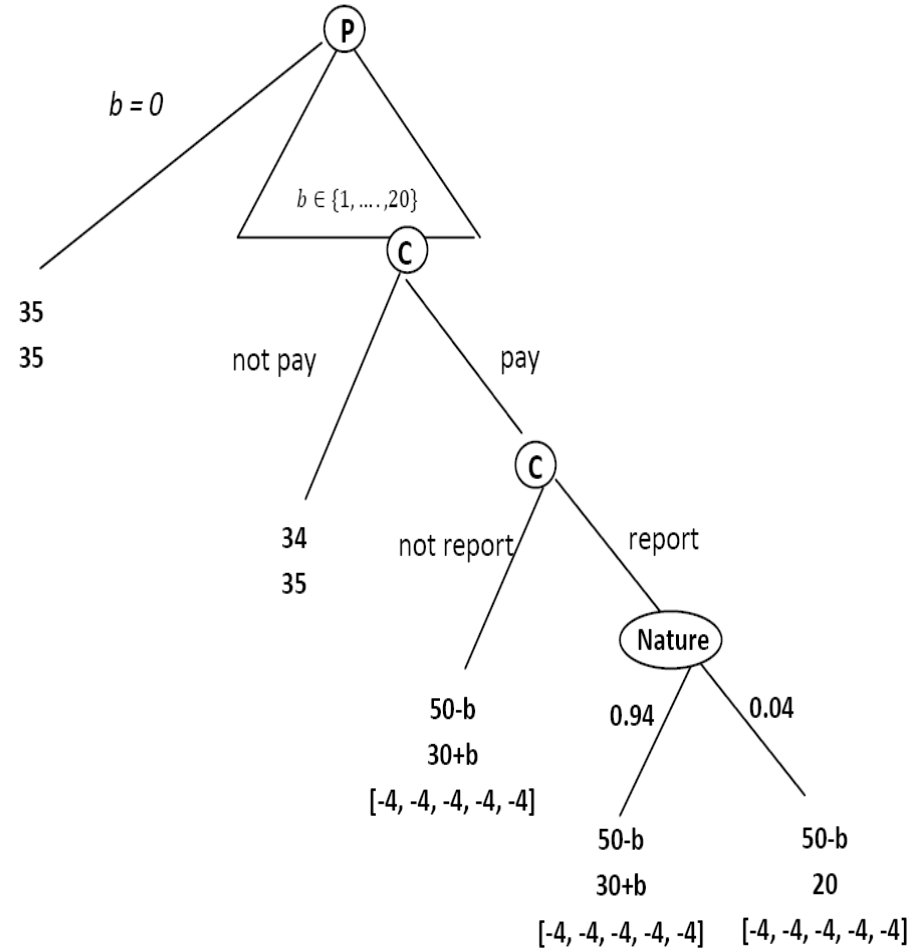
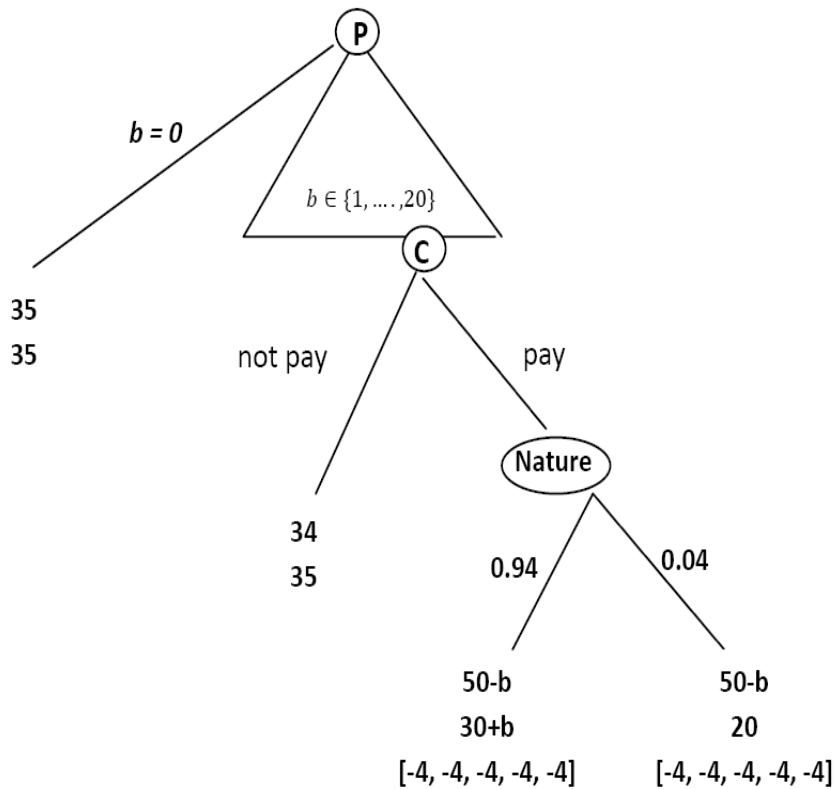
- Focus on PETTY COLLUSIVE BRIBERY

### RESEARCH QUESTION

Assume that the institutional environment is bad, i.e. the exogenous, top-down probability of punishment is low (4%) and the fine is not large...

- *Could a system that combines the existing (weak) top-down enforcement mechanism with bottom-up monitoring be effective in reducing bribe-demands?*

# Treatments





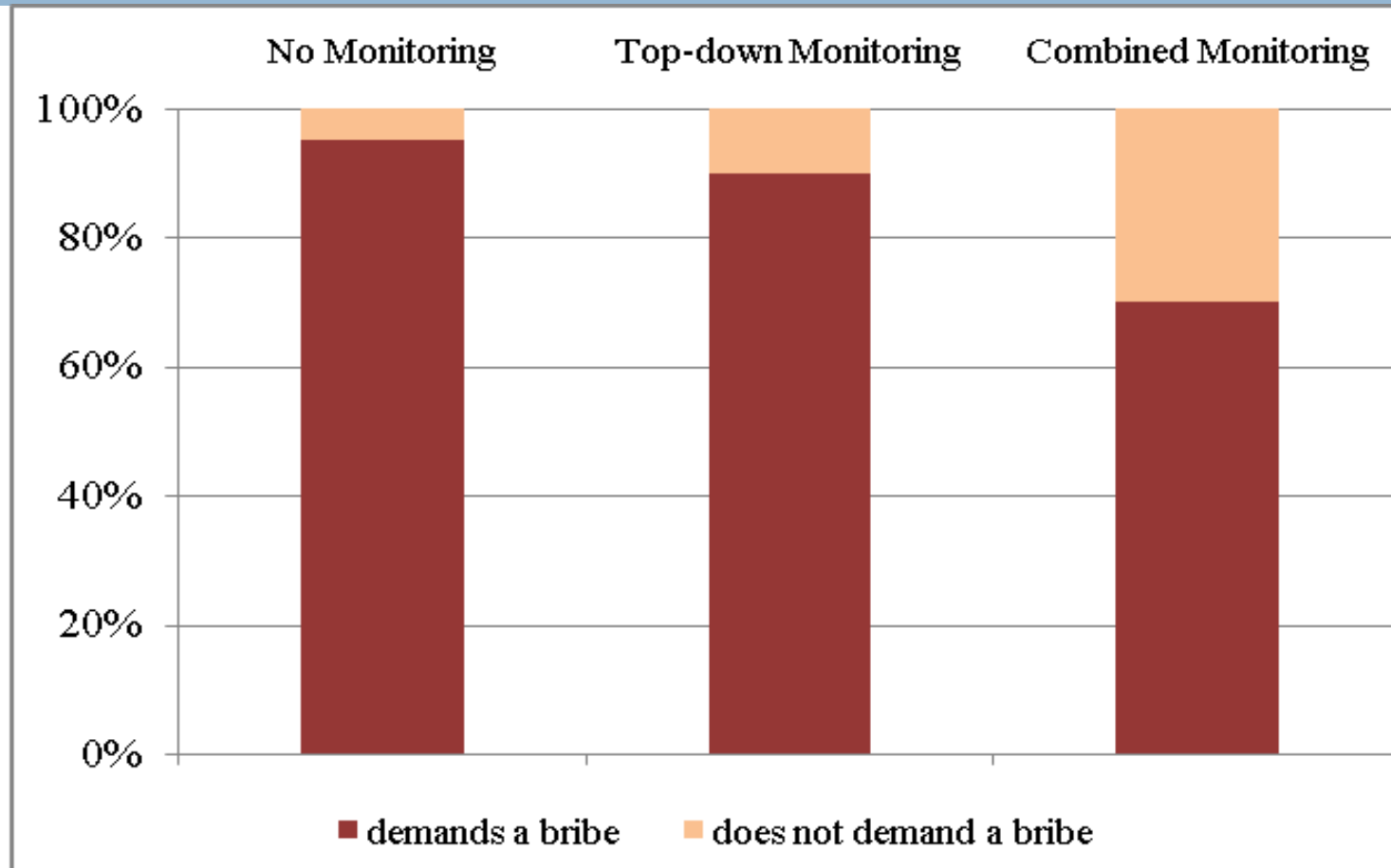
# Serra (2012)

## Predictions

- If only monetary costs matter, since  $0 \leq p_c \leq 1$ , we expect top-down auditing to be more effective in reducing corruption than combined monitoring:
  - If  $p_c = 0$ , same incentives as under no monitoring
  - If  $p_c = 1$ , same incentives as under top-down auditing
  
- We expect to observe no differences in the bribe demanded by corrupt officials under no monitoring, top-down auditing and combined accountability.

# Public officials' decision to demand a bribe

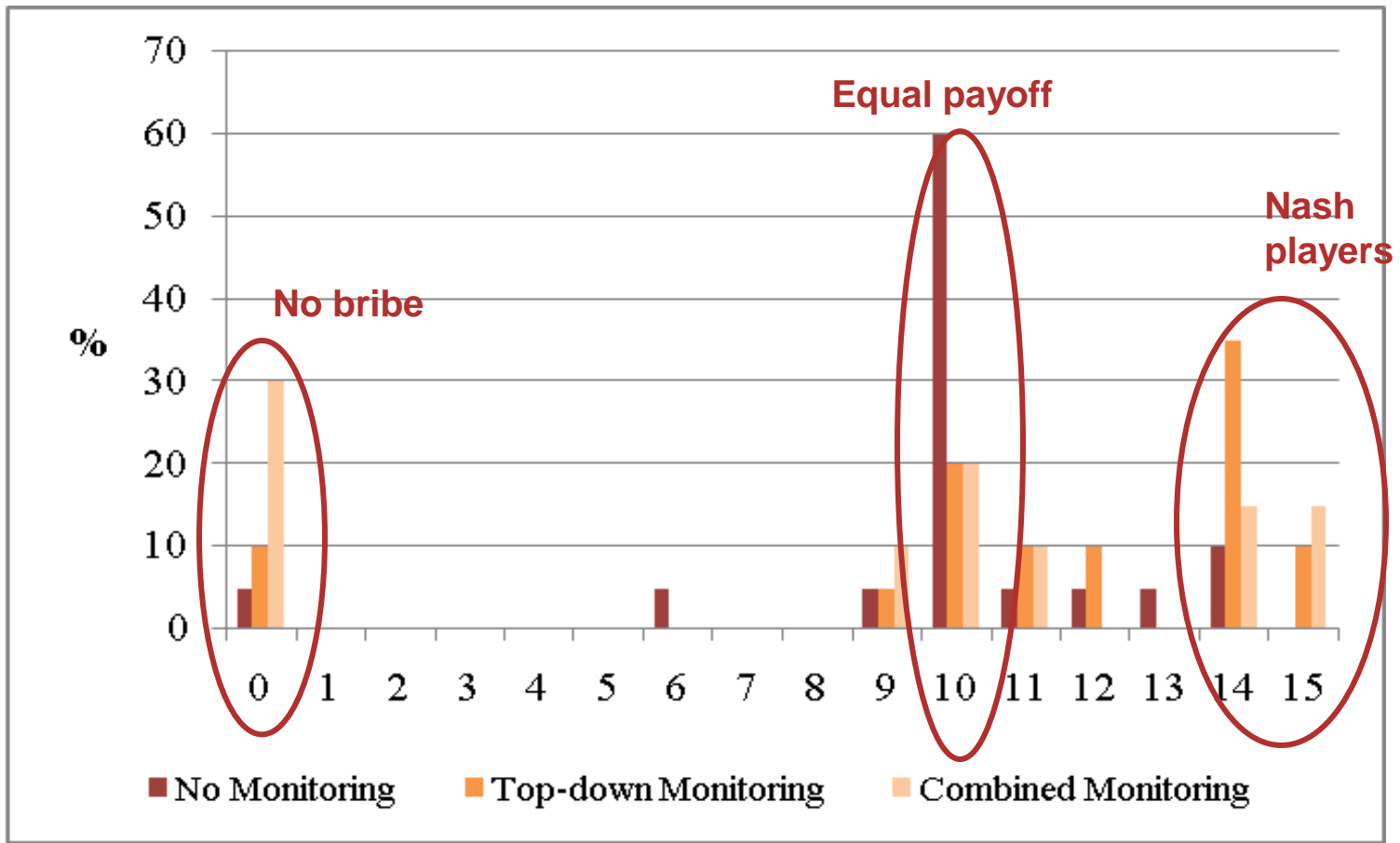
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Serra, D. "Combining top-down and bottom-up accountability"

# The size of the bribe

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# The decision to demand a bribe

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|                           | Dependent variable:<br>Dummy variable equal to 1 if the official demanded a<br>bribe |                                  |
|---------------------------|--|----------------------------------|
|                           | (1)  | (2)                              |
| <b>Top-down</b>           | -0.08<br>[0.493]   | -0.13<br>[0.279]                 |
| <b>“Combined”</b>         | <b>-0.28</b><br><b>[0.028]**</b>   | <b>-0.32</b><br><b>[0.032]**</b> |
| <b>Female</b>             |  | 0.05<br>[0.535]                  |
| <b>Age</b>                |  | -0.01<br>[0.192]                 |
| <b>“Religious person”</b> |  | 0.11<br>[0.064]*                 |
| <b>Economist</b>          |  | 0.12<br>[0.080]*                 |
| Observations              | 60   | 60                               |
| Pseudo R-squared          | 0.105  | 0.179                            |

Note: the p values (in brackets) correspond to robust standard errors, which have been adjusted to account for clustering within sessions. We report marginal effects of continuous variables and the effect of a change from 0 to 1 for dichotomous variables. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

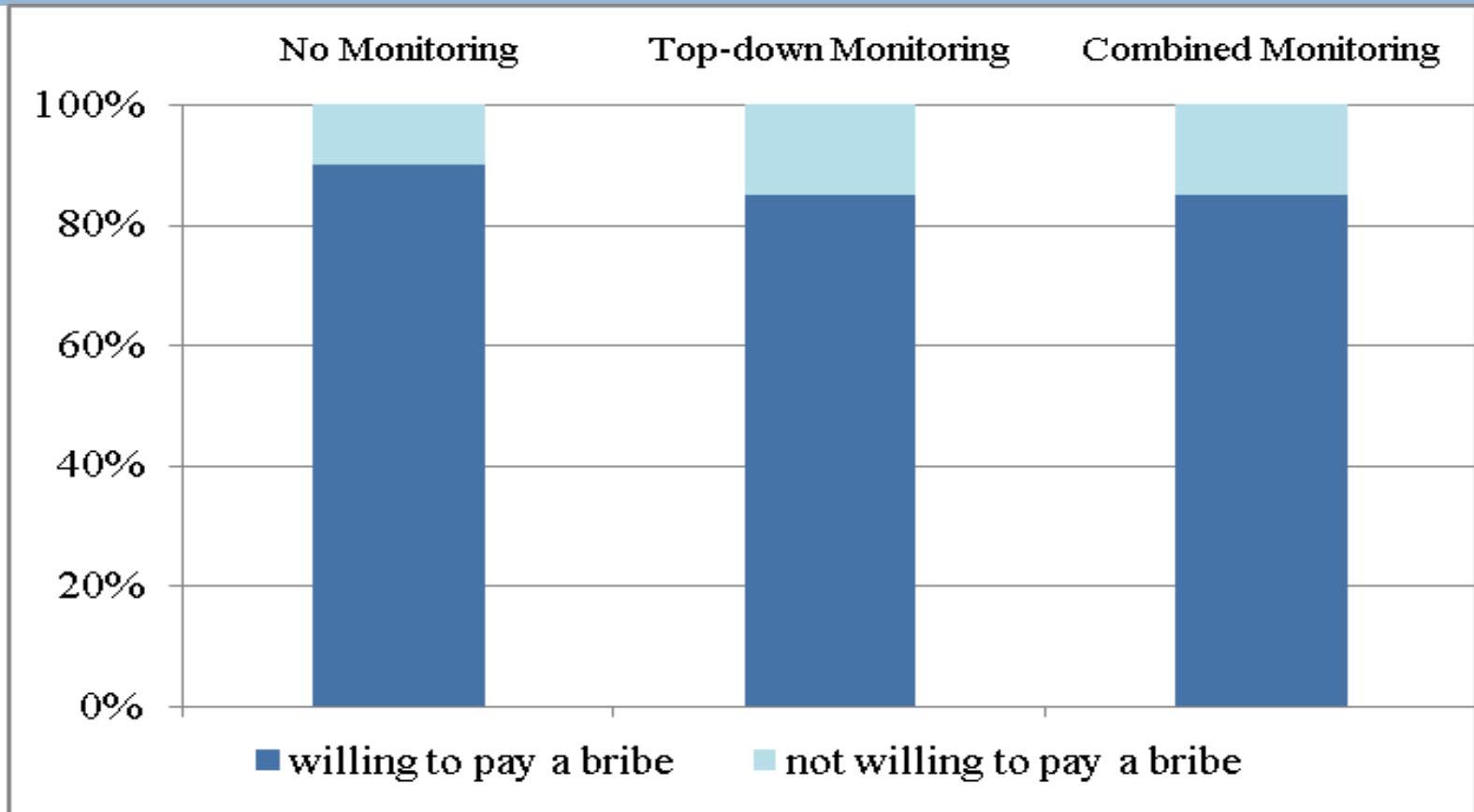
# The size of the bribe

|                           | <b>Dependent variable:<br/>Amount of the bribe demanded</b> |                     |                    |                     |                      |                     |
|---------------------------|---|---------------------|--------------------|---------------------|----------------------|---------------------|
|                           | OLS on selected sample                                      |                     | OLS on full sample |                     | Tobit on full sample |                     |
|                           | (1)   | (2)                 | (3)                | (4)                 | (5)                  | (6)                 |
| <b>Top-down</b>           | 1.92<br>[0.003]***  | 1.74<br>[0.018]**   | 1.20<br>[0.195]    | 0.64<br>[0.631]     | 1.11<br>[0.260]      | 0.42<br>[0.770]     |
| <b>Combined</b>           | 1.45<br>[0.227]   | 1.23<br>[0.324]     | -1.60<br>[0.086]*  | -2.01<br>[0.093]*   | -2.18**<br>(0.049)   | -2.64**<br>[0.050]  |
| <b>Female</b>             |   | -1.25<br>[0.047]**  |                    | -0.89<br>[0.519]    |                      | -0.88<br>[0.557]    |
| <b>Age</b>                |   | -0.08<br>[0.210]    |                    | -0.23<br>[0.235]    |                      | -0.26<br>[0.227]    |
| <b>“Religious person”</b> |   | 0.14<br>[0.843]     |                    | 1.35<br>[0.317]     |                      | 1.63<br>[0.264]     |
| <b>Economist</b>          |   | -0.44<br>[0.587]    |                    | 0.77<br>[0.542]     |                      | 0.98<br>[0.471]     |
| <b>Constant</b>           | 10.47<br>[0.000]***   | 12.98<br>[0.000]*** | 9.95<br>[0.000]*** | 14.94<br>[0.005]*** | 9.85***<br>[0.000]   | 15.50***<br>[0.003] |
| Observations              | 51  | 51                  | 60                 | 60                  | 60                   | 60                  |
| R-squared                 | 0.152   | 0.252               | 0.063              | 0.124               | 0.012                | 0.023               |

Note: the p values (in brackets) correspond to robust standard errors, which have been adjusted to account for clustering within sessions. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

# Citizen's willingness to pay a bribe

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# Serra (2012)

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## Main Findings

- Top-down auditing in a weak institutional environment is likely to be **ineffective**
- Anti-corruption mechanisms based on top-down auditing triggered by bottom-up monitoring can be **effective** in curbing corruption, even in a weak institutional environment....

**WHY?**

Wages



# Wages

- Azfar and Nelson (2007) and Barr et al (2009) find evidence that increasing wages reduces embezzlement – but the effect is small in magnitude
- Amadou and Boly (2012) find evidence of lower “corruption” in grading papers when graders are paid higher wages
- Van Veldhuizen (2011): **“Bribery and the Fair Salary Hypothesis in the Lab”**
  - Specifically aimed at testing the effectiveness of wage increases on corruption

# van Veldhuizen (2011)

- **Aim:** to investigate the effect of high vs. low wages on the behavior of the “official” in the setting simulated by AIR (2002)
  
- Important variation:
  - The negative externalities are not inflicted on other subjects, but they are deducted from a donation the experimenter makes to a charity of the subject’s choice
    - Five charities that are well-known in the Netherlands: UNICEF, the Dutch Red Cross, the World Wildlife Foundation, Cliniclowns and the Prins Bernhard Cultuurfonds

# van Veldhuizen (2011)

Played  
for 25  
rounds

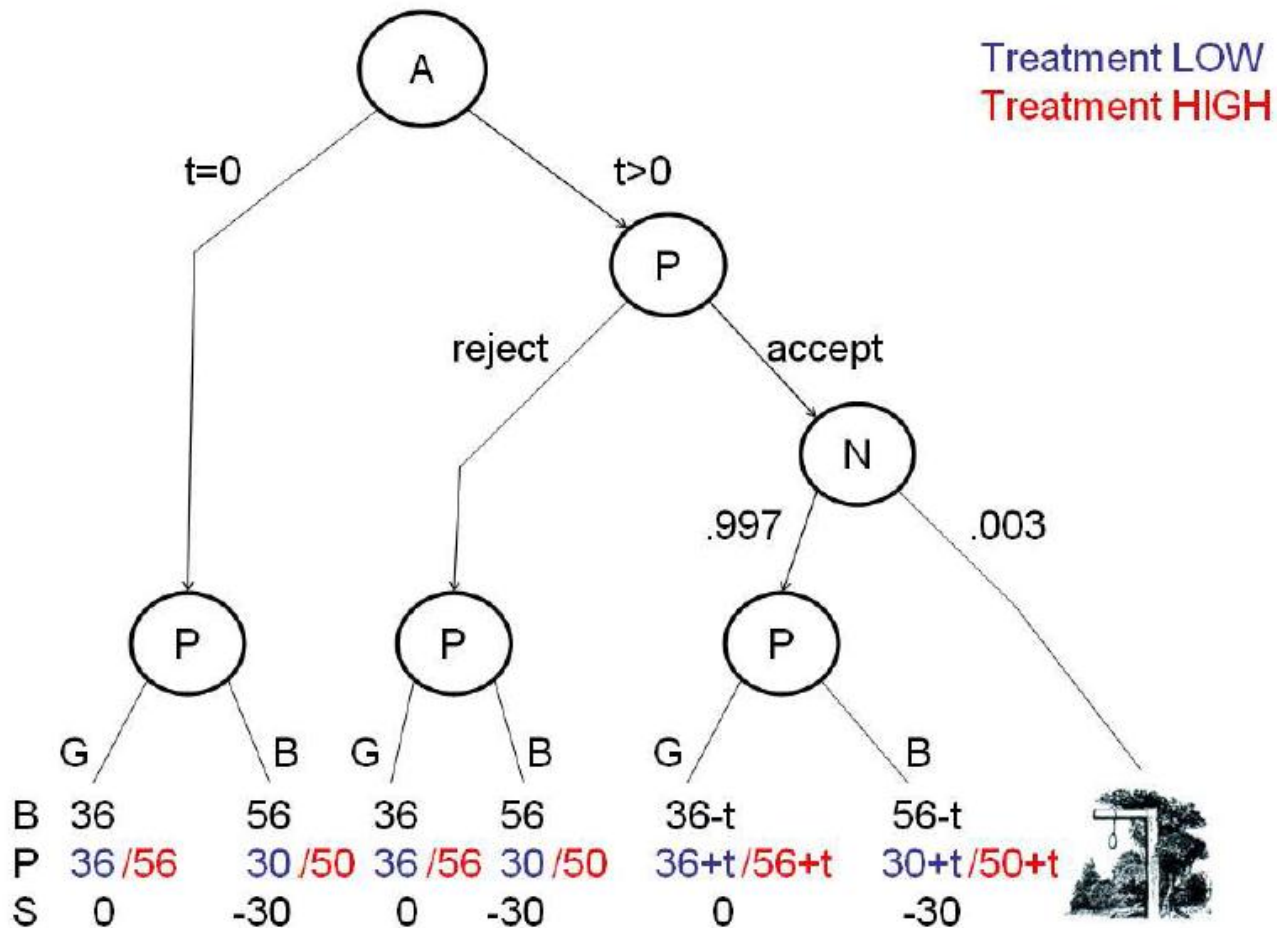
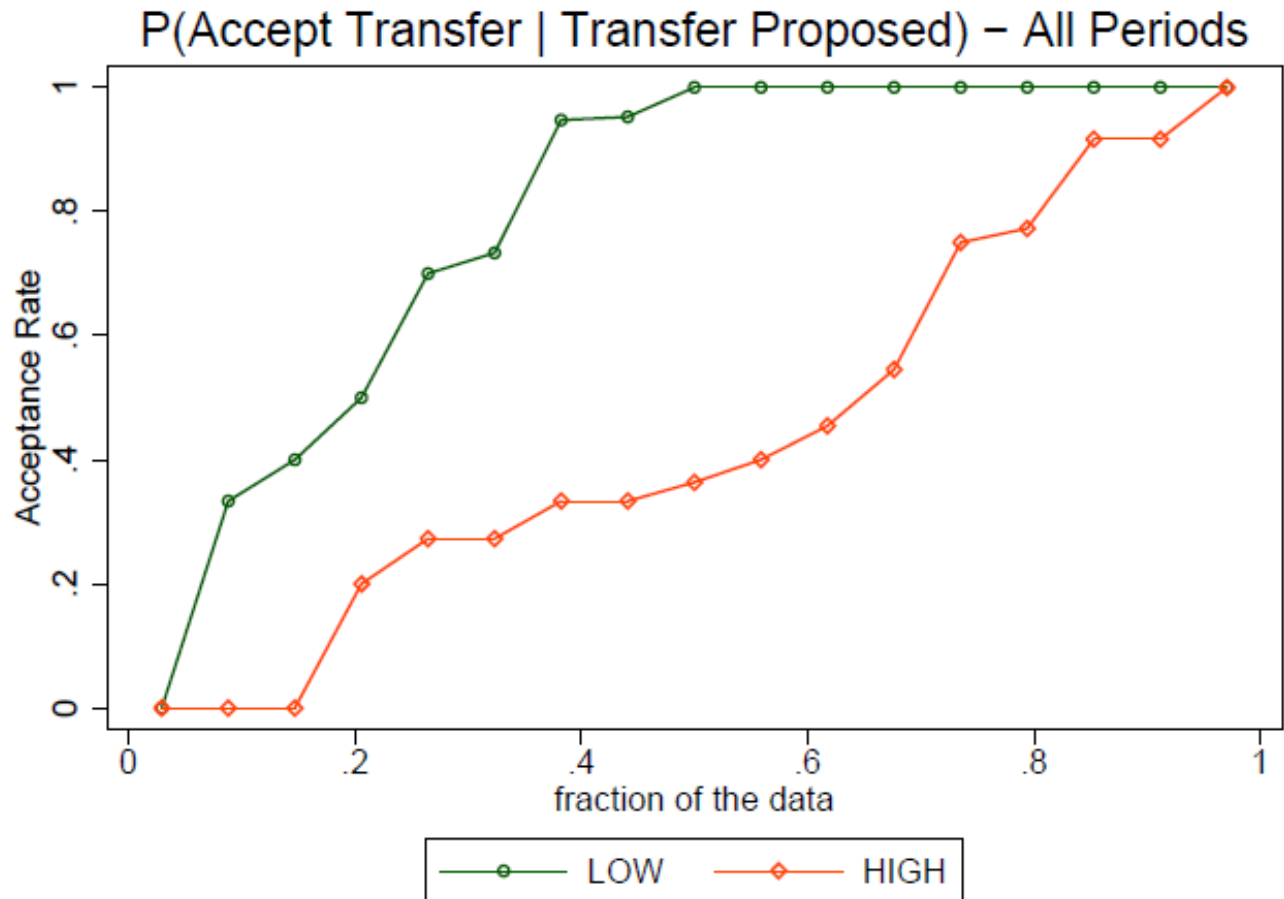


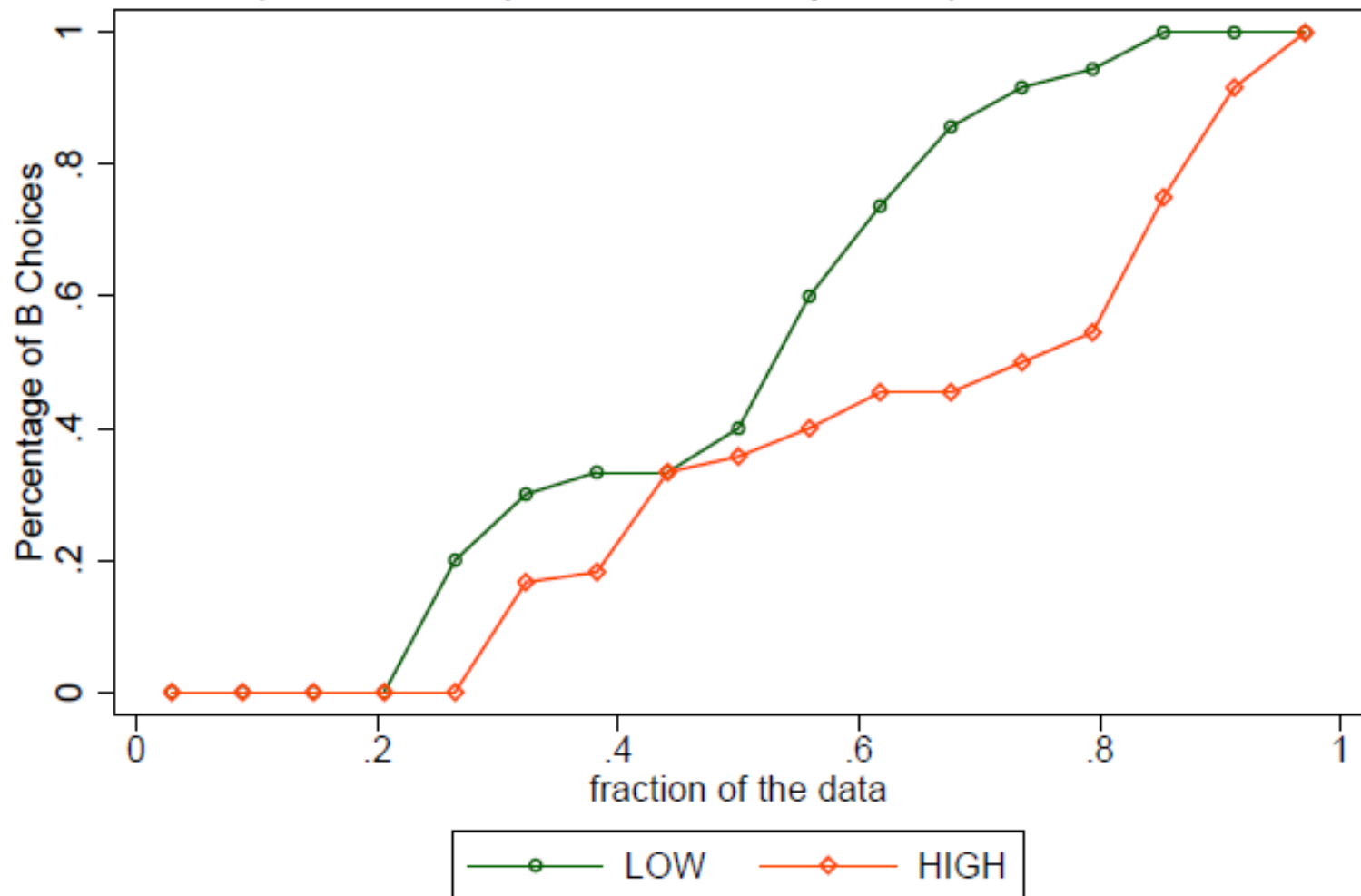
Figure 1: The Experimental Game Tree

# van Veldhuizen (2011)



# van Veldhuizen (2011)

P(Choose B | Transfer Proposed) – All Periods

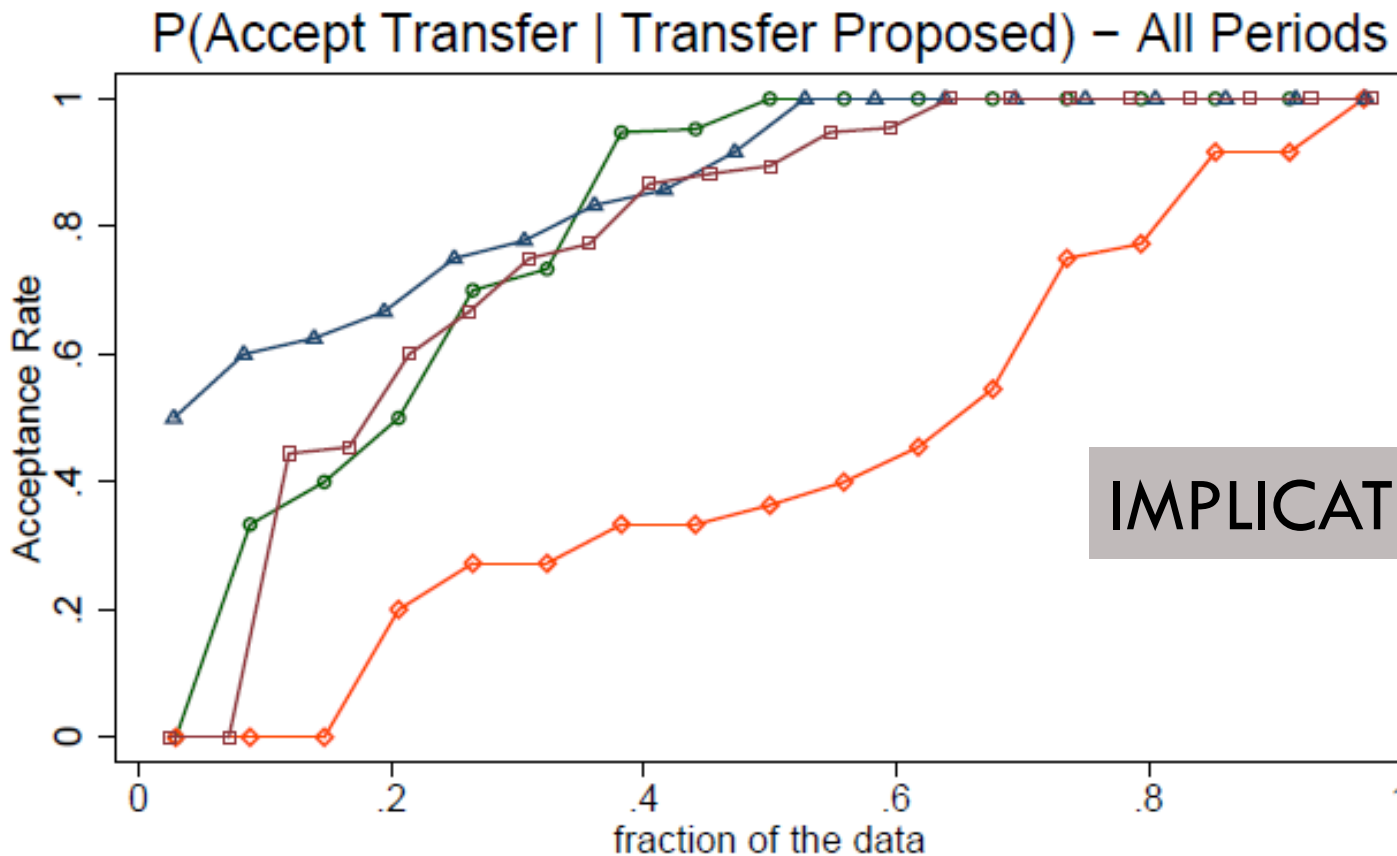


# van Veldhuizen (2011)

## RESULTS:

- Increasing public officials' wages...
  - ▣ ...decreases the percentage of transfers they accept
  - ▣ ...slightly decreases the number of corrupt (B) choices they make
  
- BUT, this was tested under the “Sudden Death” condition
  
- What if there is no monitoring and no sudden death?

# van Veldhuizen (2011)



IMPLICATIONS?

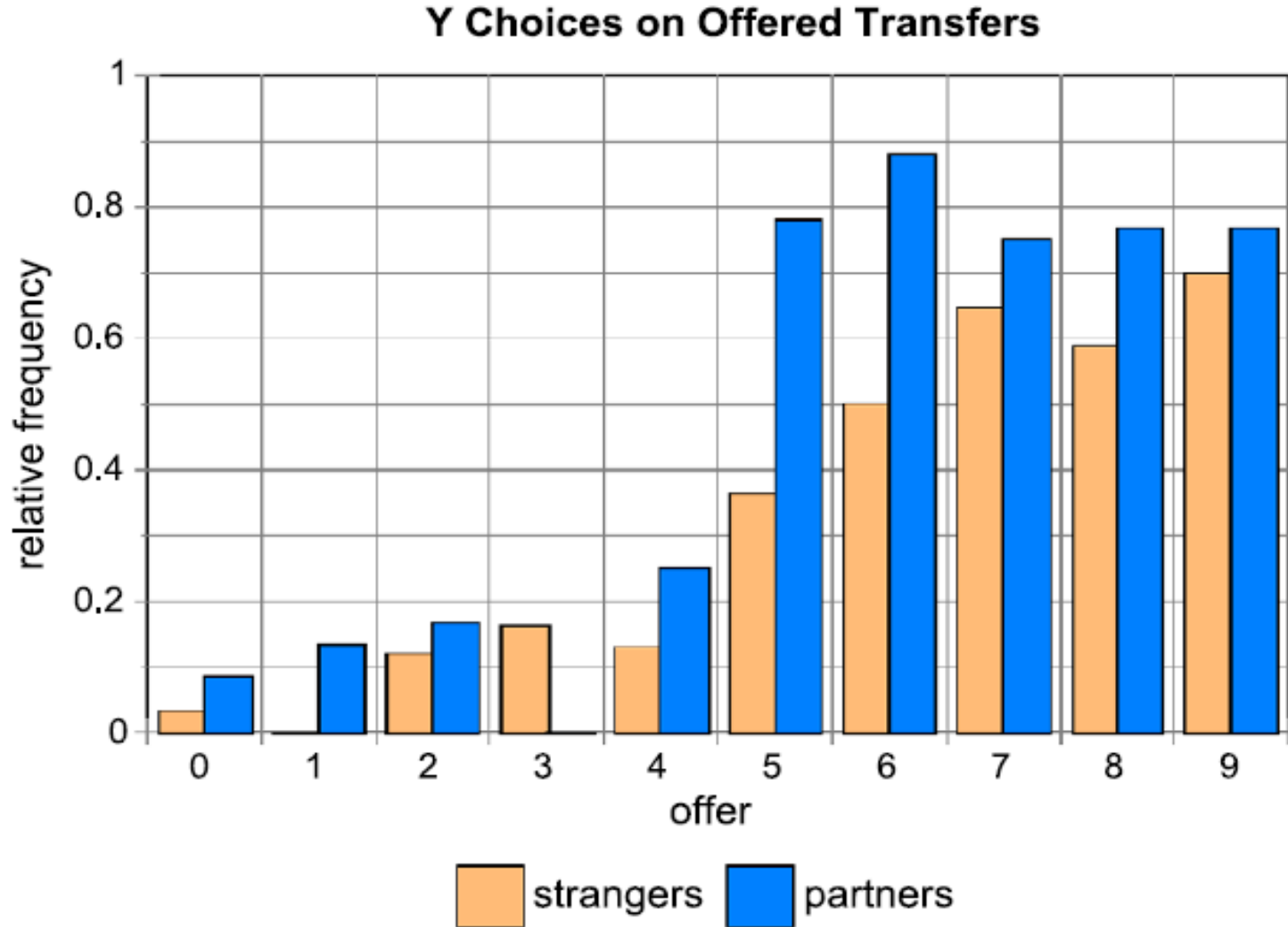
# Institutional Changes



# Institutional Changes (1): Staff Rotation

- Study by Abbink (2006): **“Staff rotation as an anti-corruption policy: an experimental study”**
- **Question:** Is staff-rotation an effective anti-corruption policy?
- Same game as before...
  - ▣ But now there is random matching after each round => STRANGER TREATMENT
  - ▣ Now briber and bribee cannot establish a relationship based on trust and reciprocity

# Abbink (2006)



# Abbink (2006)

- On average, in the strangers treatment:
  - ▣ Bribes are reduced by almost one half;
  - ▣ The average frequency of “corrupt” decisions caused by bribery decreases even stronger.
- This is due to a lower tendency of firms to pay bribes as well as to a lower propensity of public officials to be influenced by them in favour of the briber.

# Institutional Changes (2): Competition among public officials

- How corruption is “organized” seems important
- Shleifer and Vishny (1993) distinguished between:
  1. The case where an agency acts as a “monopolist” in the provision of complementary services or goods (or two agencies act as a “joint monopolist”)
  2. The case where different agencies act as independent monopolist for the provision of one of the two inputs
  3. The case where different agencies compete for the provision of each input

**Main idea:** Corruption is lowest when there are many officials competing for the provision of a good or service (think of Bertrand competition) => **POLICY IMPLICATIONS?**

# Ryvkin and Serra (in progress)

This is a new project – *very much in progress*

## □ Motivation:

- Shleifer and Vishny (1993) ignore the existence of SEARCH COSTS....
  - There are important studies from IO theory showing that increasing the number of firms in the presence of search costs does not necessarily reduce prices (Diamond, 1971; Rothschild, 1974; Stahl, 1989 etc.)
- **OUR RESEARCH QUESTION:** *Does competition among public offices reduce corruption?* In other words, would increasing the number of offices providing a service/good reduce corruption?
- We focus on EXTORTIONARY CORRUPTION

# Ryvkin and Serra (in progress)

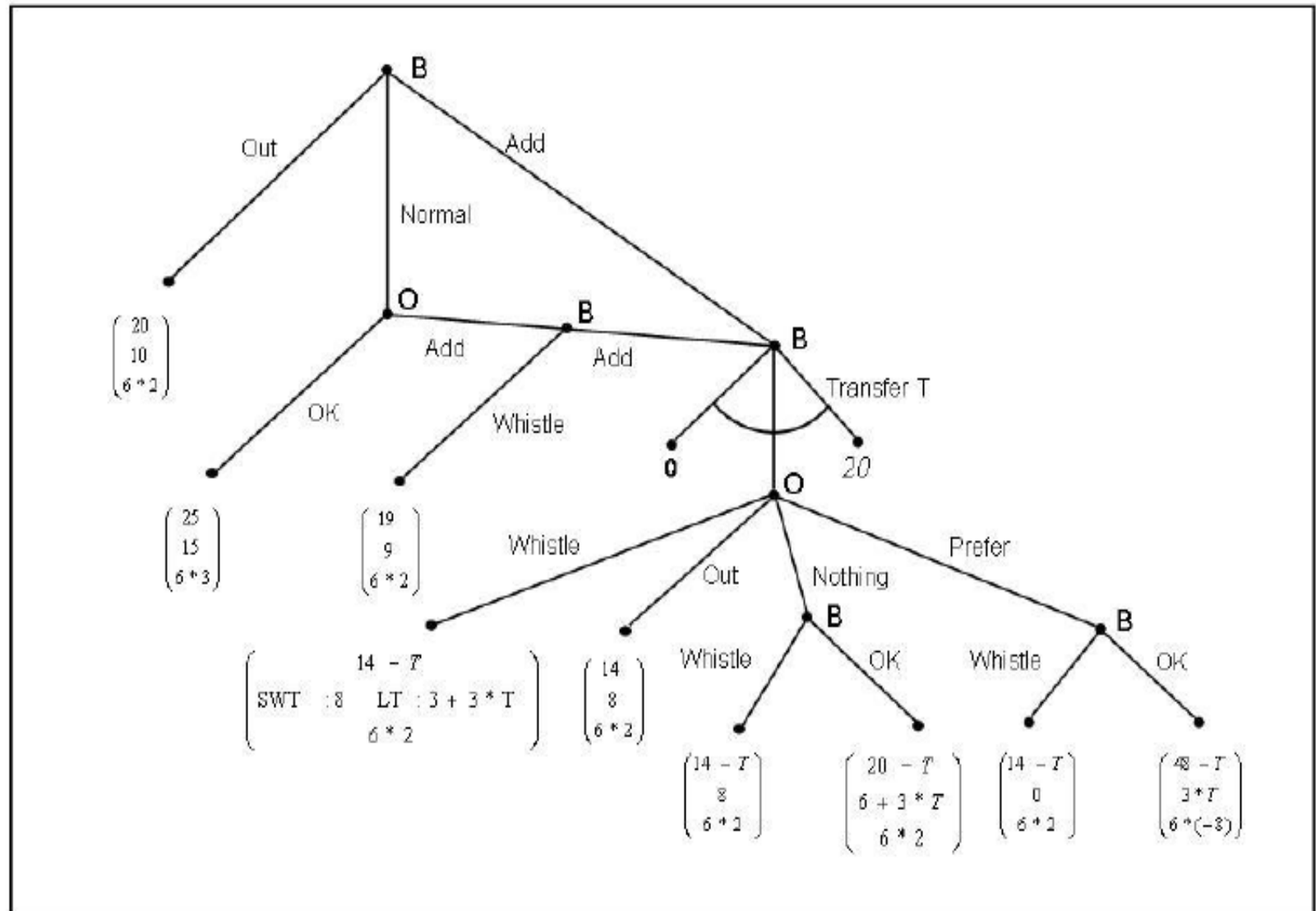
## Overview of main results

- *Lowering the search cost significantly reduces the bribes demanded by public officials*
- Increasing the number of office providing a license (without reducing search costs) has either no effect or a positive effect on the bribe demanded
- POLICY IMPLICATIONS?

# Institutional Changes (3): Whistleblowing and Asymmetric penalties

- A few theoretical studies have suggested that imposing asymmetric penalties to briber and bribee, or different leniency policies to encourage whistle-blowing might reduce corruption
  - ▣ Buccirosi and Spagnolo (2006) and Spagnolo (2004)
  - ▣ Lambsdorff and Nell (2007)
  - ▣ Dufwenberg and Spagnolo (2012)
  
- A few experimental investigations:
  - ▣ Schickora (2011)
  - ▣ Engel, Goerg and Yu (2012)
  - ▣ Abbink et al. (2012)

# Be careful when designing an experiment







# EXPERIMENTAL EVIDENCE ON THE EFFECTIVENESS OF INTRINSIC MOTIVATIONS

# Do non-monetary costs matter?

- Are individual decisions about whether to behave corruptly or honourably determined solely by the **material costs and benefits** associated with corruption?

Or

- Do **non-monetary costs and benefits**, or “intrinsic motivations”, such as feeling of guilt and shame, also play a role?

# AIR (2002)

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## □ AIR's answer:

***“Our results cast doubts on the effectiveness of campaigns appealing to the consciousness of officials of the negative welfare effects of bribery. On the other hand, our data suggest emphasizing the threat of getting caught”***

# The petty bribery game

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The game simulates petty corruption exchanges:

- **Small amount** of money involved
- **Collusive bribery**: the citizen benefits from corruption, i.e. He/she may end up with higher payoff than if he/she acts honestly
- Corruption generates negative externalities on **passive others** => think of the poor who cannot bribe themselves
- **No punishment**
- **No trust/reciprocity issues**: played only once, and the service is provided when the bribe is paid => no uncertainty

# Barr and Serra (2009)

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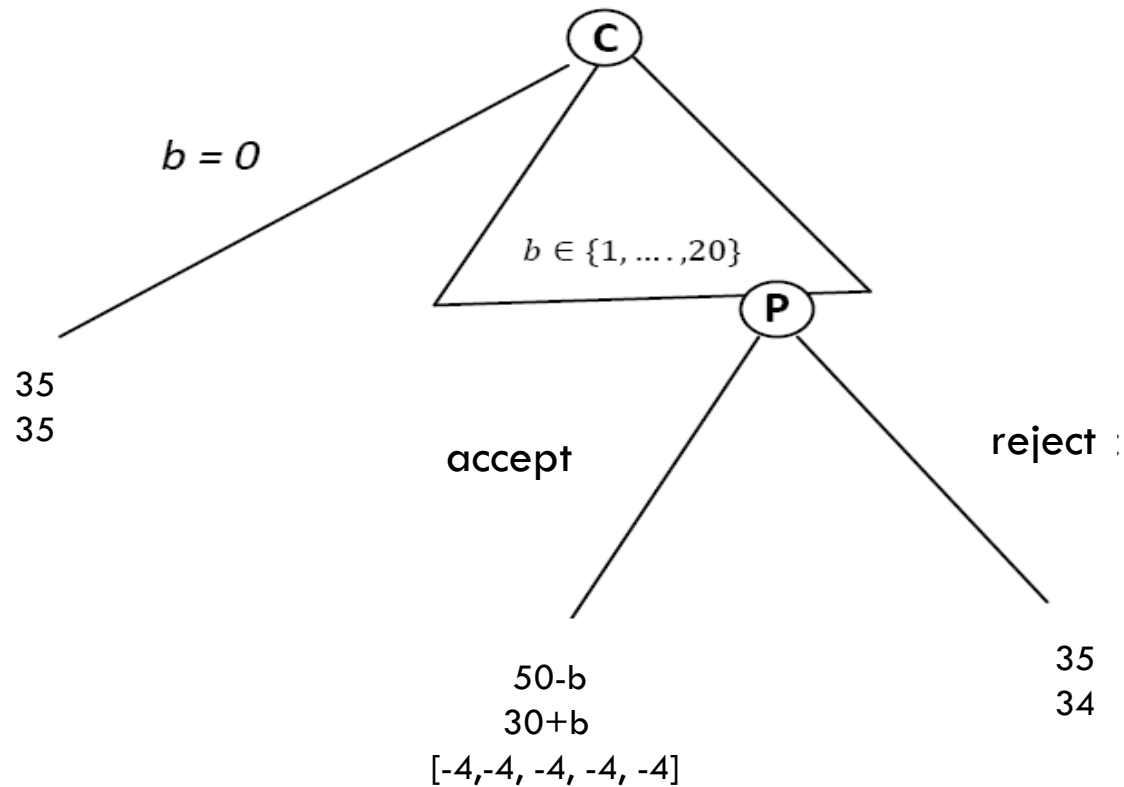
- The game involves **15 players**: 5 'private citizens', 5 'public officials', 5 'other members of society'.
- Private citizens and public officials engage for the provision of a public service or good (playing in pairs). They have an initial endowments of 35 each.
- Each **private citizen** can offer the official a bribe  **$b$**  in exchange for a better or quicker provision of the service. The bribe can be between 1 and 20.

# Barr and Serra (2009)

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- If the official accepts the bribe (which means he provides the corrupt service), the citizen goes home with  $(51 - 1 - b)$ , and the official goes home with  $30 + \text{bribe}$ ;
- Note that the official needs to sustain a cost equal to 5 to provide the service (that's why the payoff is not  $35 + \text{bribe}$ );
- The **public official** has to decide whether and how much he or she would be willing to accept as a bribe.

# Barr and Serra (2009)



# Barr and Serra (2009)

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- Each “member of society” has an initial endowment of 25 (*different from the game you played*): they start off with a disadvantage...WHY?
- Every time that a bribe is offered and accepted, **each** OMS suffers a monetary loss
- Now **all 5 OMS** lose some amount of money every time a citizen and an official agree on a corrupt exchange;
  - ▣ => different from the design of Abbink et al...**WHY?**
- Play is anonymous and one-shot.



# Barr and Serra (2009)

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## Standard Subgame Perfect Nash equilibrium:

- Public Officials accept any bribe  $b > 5$
- Private citizens offer  $b = 6$
- All public servants accept
- Other members of society suffer maximum possible harm =  $5 \times h$ , where  $h$  is the monetary loss for each bribe exchanged

# Barr and Serra (2009)

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**Therefore:**

**If only economic incentives matter,  
then everybody should engage in corruption**

**But what if individuals suffer a moral/psychological cost for harming the “other members of society” or for acting illegally?**

# What if non-monetary costs matter?

- A ‘public official’ who causes harm to others or engages in an act that she perceives as immoral might suffer a psychological cost:

$$M_p = M_p(h, s)$$

- with  $dM_p/dh > 0$
  - $s$  captures the degree to which the act is perceived as immoral:  
 $dM_p/ds > 0$
- A ‘private citizen’ who causes harm to others or engages in an act that she perceives as immoral might suffer a cost:

$$M_c = M_c(h, s)$$

- with  $M_c > 0$  if  $h > 0$ ,  $dM_c/dh > 0$ ,  $dM_c/ds > 0$ .

# What if non-monetary costs matter?

## □ Prediction 1:

'Public officials' will now only accept  $b > K + M_p(h,s)$ .

*So, an increase in either  $h$  or  $s$  will lead to an increase in 'public officials' minimum acceptable bribes.*

## □ Prediction 2:

Any 'public official' for whom  $M_p(h,s) > b_{\max} - K$ , where  $b_{\max}$  is the maximum possible bribe in the game, will always reject.

*So, the proportion of 'public officials' who reject all possible bribes will increase following an increase in either  $h$  or  $s$ , or both.*

# What if non-monetary costs matter?

## □ Prediction 3:

An increase in either  $h$  or  $s$ , or both, would lead to an increase in the proportion of 'private citizens' choosing not to bribe.

## □ Prediction 4:

An increase in  $h$  or  $s$ , or both, will lead to an increase in the bribes offered by 'private citizens'.

# TREATMENTS

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- In order to test those research hypotheses, we designed and conducted 4 different versions of the game:
  1. With **small harm** (or low externalities) done to the OMS: each OMS loses 1 for each corrupt agreement made by a citizen and a public official  $\Rightarrow$  maximum possible loss for the OMS = 5
  2. With **large harm** (or high externalities): each OMS loses 4 for each corrupt agreement made by a citizen and a public official  $\Rightarrow$  maximum possible loss for the OMS = 20

# Barr and Serra (2009)

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3. In a version of the game we explicitly refer to briber => this is the **FRAMED** version of the game.
4. In a different version we use abstract wordings:  
Player A, Player B, Player C. No mention of bribery. Player A could send some money to Player B....

**Note:** *The saliency  $s$  is greater when the game is framed as corruption*

# Barr and Serra (2009)

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## Predictions

- What should we expect, assuming that non-monetary motivations matter?

If we observe differences in behavior across the 4 versions of the game, we could conclude that **moral costs** generated by guilt and shame for harming others and doing something illegally, **do matter** at least for some individuals



# Experimental participants and treatments

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□ Participants: 195 Oxford University students

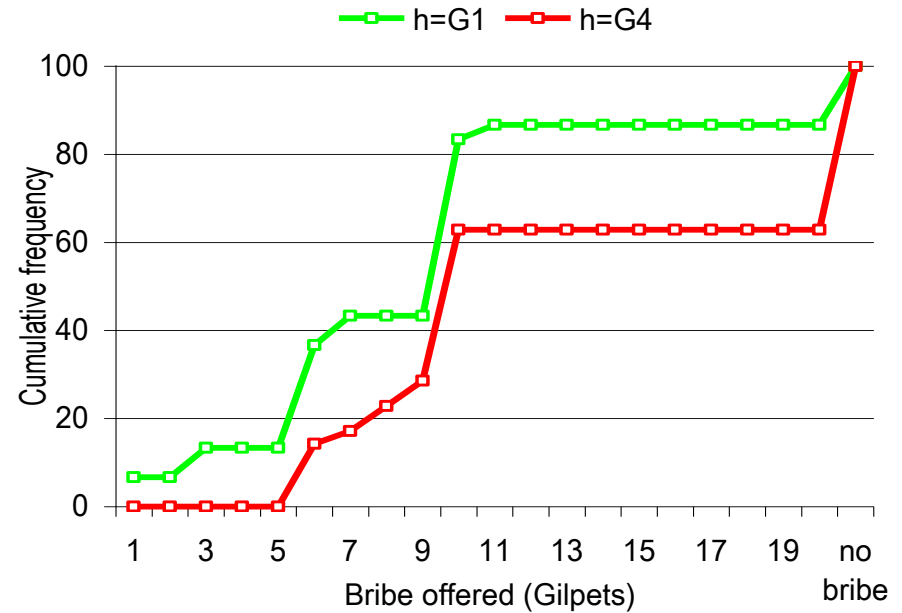
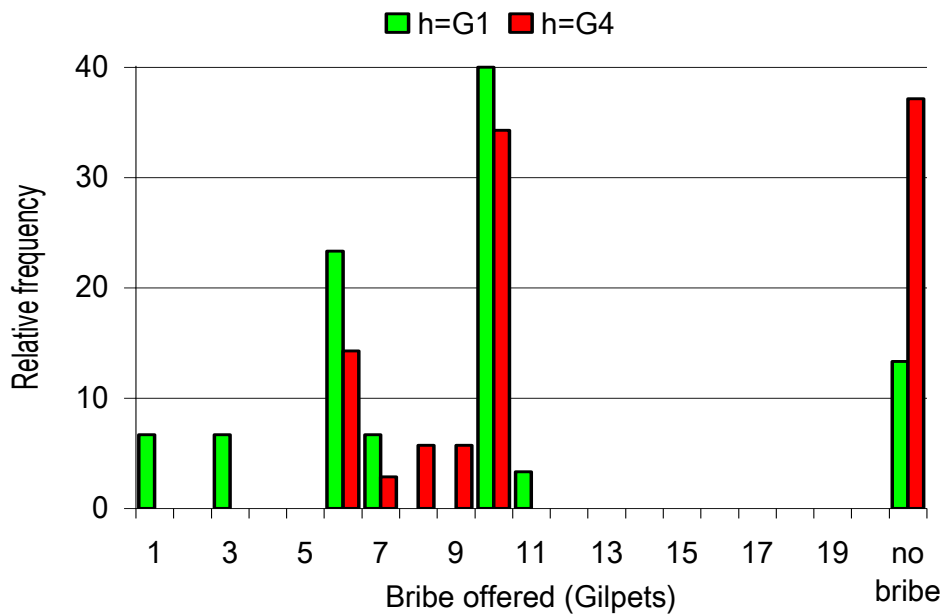
|  | $s=sL$<br>(abstract frame)                   | $s=sH$<br>(corruption frame)                 |
|--|--|--|
| $h=hL=G1$<br>(negative externalities low)  | 3 sessions<br>(45 subjects, 15 in each role) | 3 sessions<br>(45 subjects, 15 in each role) |
| $h=hH=G4$<br>(negative externalities high) | 3 sessions<br>(45 subjects, 15 in each role) | 4 sessions<br>(60 subjects, 20 in each role) |

□ Different students played different versions of the game, i.e. between- subject design

# RESULTS

## Private Citizens' decision to offer a bribe

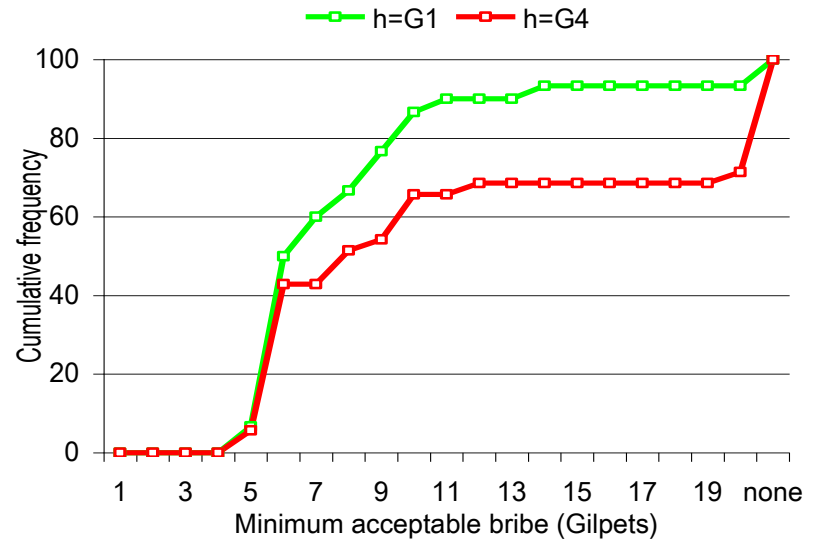
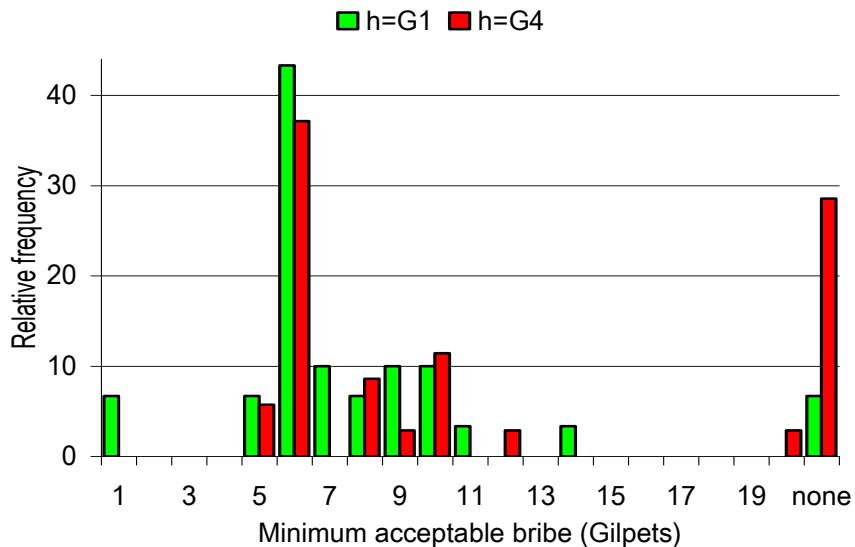
### High vs. Low negative externalities



# RESULTS

## Public officials' decision to accept a bribe

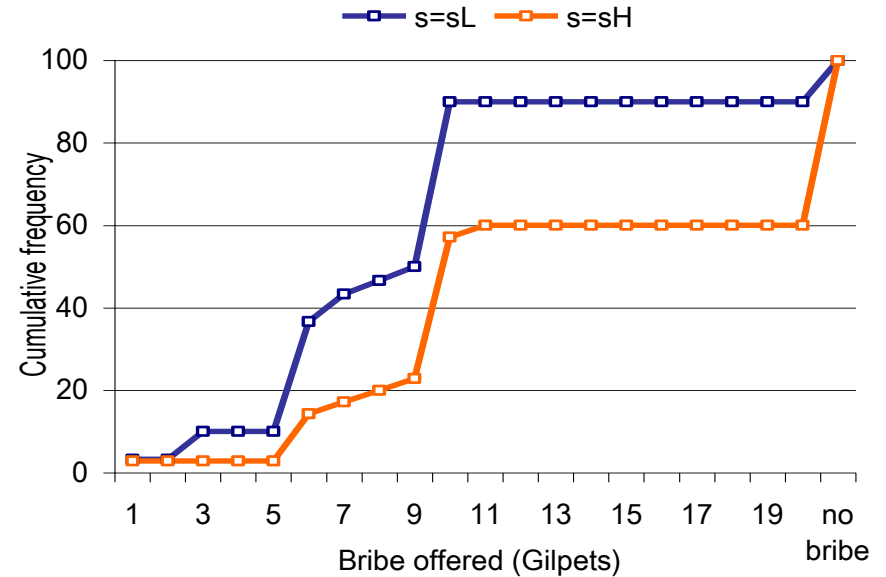
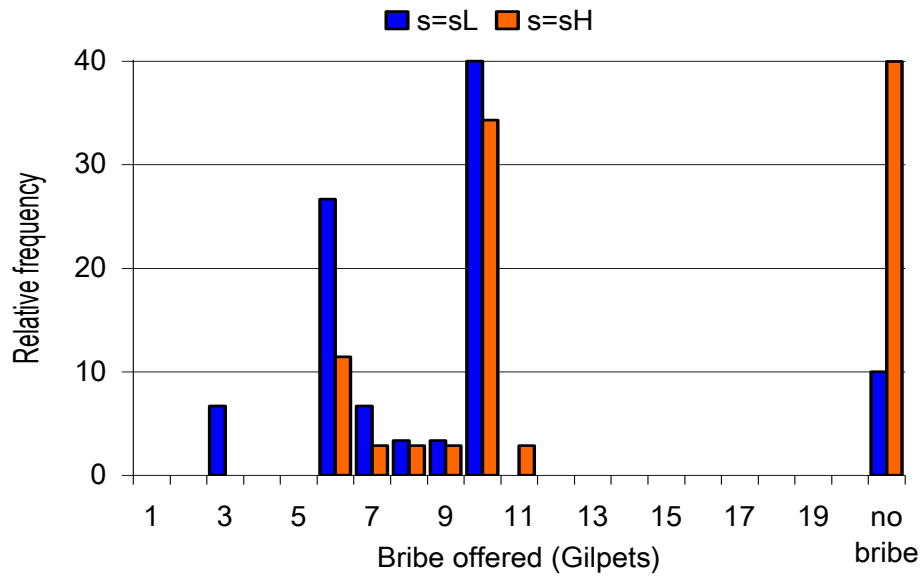
### High vs. Low negative externalities



# RESULTS

## Private Citizens' decision to offer a bribe

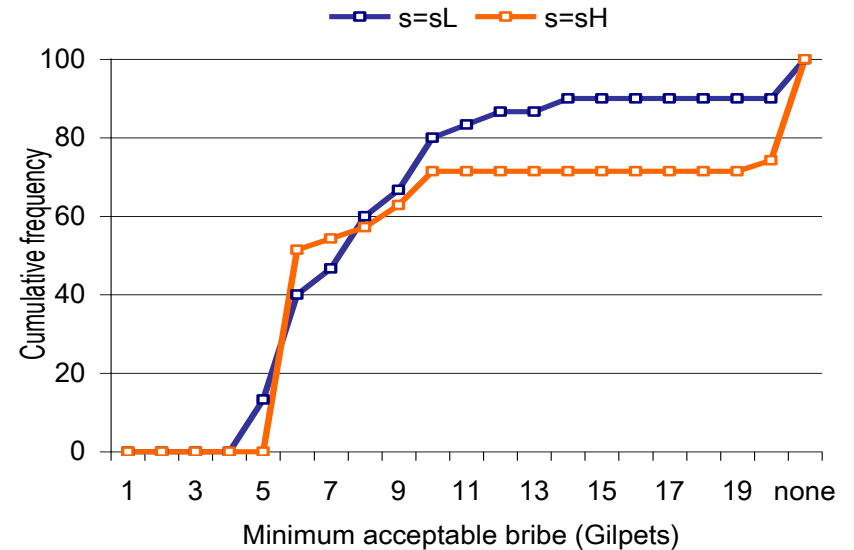
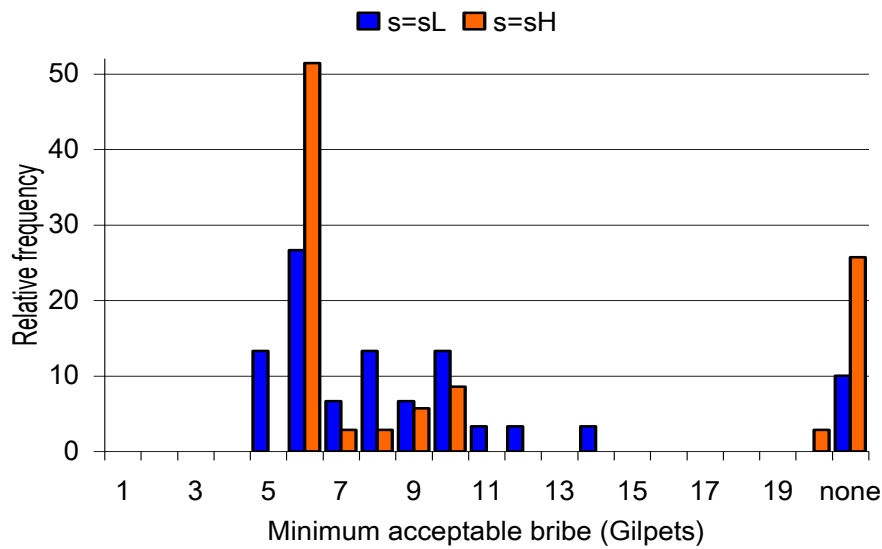
### Abstract vs. Framed instructions



# RESULTS

## Public Officials' decision to accept a bribe

### Abstract vs. Framed instructions



# Barr and Serra (2009)

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## MAIN FINDINGS

- Evidence of **externality effects** among both “citizens” and “officials”:
  - ▣ What does this mean?
  
- Evidence of **framing effects** among “citizens”:
  - ▣ What does this mean?

**In summary**, we found evidence of “intrinsic motivations among our student participants, especially if in the role of “private citizens”

# Barr and Serra (2009)

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## Policy Implications?

- At least for petty corruption exchanges, it seems important to have policies aimed at increasing individuals' non-monetary costs:
  - Make people aware that what they are doing is actually **illegal/immoral** (usually ethical codes, educational campaigns)
  - Make people aware of the **harm** that their corrupt actions cause to others

# What about AIR (2002)?

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***“Our results cast doubts on the effectiveness of campaigns appealing to the consciousness of officials of the negative welfare effects of bribery. On the other hand, our data suggest emphasizing the threat of getting caught” (AIR, 2002)***

***But Barr and Serra (2009) reached a different conclusion in their one-shot petty bribery game***

**WHY?**

**WHO IS RIGHT?**



# WHY THESE DIFFERENT RESULTS?

**What is different about the two experiments used?**

**What caused the different results?**

?

?

# Which design is better?

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- It depends on the kind of corruption you want to study!
- If you are interested in repeated bribery exchanges between firms and officials.....
- If you are interested in low-level petty corruption exchanges between citizens and officials.....

# AIR (2002) and Barr and Serra (2009)

## In general:

- It seems that moral costs generated by guilt and shame for harming others do not play a huge role in repeated interactions between firms and officials
  - ▣ Why?
  - ▣ It might be due to the fact that firms face **competition** from other potentially corrupt firm, and don't want to lose money by acting honestly while other firms are corrupt
  
- Moral costs generated by guilt and shame for harming others seem to play a bigger role in low-level bribery, where there are people who are not able to bribe themselves and they are therefore “passive victims” of corruption

# Social Pressure

- “Experiments on Rule Breaking” by T. Salmon and D. Serra (*work in progress*)
- We are interested to investigate whether the possibility of receiving social disapproval might induce (at least some) individuals to abstain from rule-breaking behavior, in the form of:
  - Stealing
  - Bribery
  - Embezzlement

# What have we learned?

- ***The experimental evidence on changes in the incentive system***
  1. Severe punishment even if with very low probability  
Increasing Transparency
  2. Making the monitor accountable to the public
  3. Wages, but conditional on monitoring
  4. Staff-rotation
  5. Increasing competition by lowering search costs
  6. Whistleblowing with asymmetric punishment
  7. Increasing competition by lowering search costs

# What have we learned?

- ***The experimental evidence on changes in value systems***
  1. Activating/increasing intrinsic costs (petty corruption)
    - Awareness about social costs of corruption
    - Awareness about immorality of corruption
  2. Combining top-down and bottom-up mechanisms
  3. Encouraging people/victims to express social disapproval

THE END  
*(for now)*

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