Long Tenure and Punishment Effect on Corrupt Behaviour

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Abstract. This study implements behavioural economics and fraud auditing approach. This study looks at several factors that have been cited in previous studies as determinants of bribery. The result shows that long tenure increases the probability of corruption between civilian and public servant and penalty can be a good disincentive for corrupt behaviour but it is more effective towards the recipient instead of briber.

1 Introduction

Corruption is a serious problem that has been huge concern for the government since the impact hurts many parties. One type of corruption which regulated in Law No. 20 of 2001 is bribery. Bribery is defined as giving something to the officials in order to influence the decision making of the officials. Bribery is closely related to the bureaucracy. The longer the bureaucracy officer in charge of a position, the more likely bribery occurs. According to research by Transparency International Indonesia in 2013, four out of ten people of Indonesia pay bribes and approximately 71% of it paid as bakhshes to speed up the service. According to the same research, people pay bribes to obtain public services in the police department, courts, civil registration, and licensing. Hence bribery is a manifestation of corruption that should be eradicated.

2 Literature Review

2.1 Corruption and Bribery

The term corruption is a general term that can lead to various definitions. Corruption can be defined as financial crime; there is also a call fraud. Definition of corruption itself can vary. Law No. 20 of 2001 defines corruption as 'act of enriching oneself or another person or a corporation that can be detrimental to state finance or economy of the country'.

According to [5], they include the corruption as one of the three financial crime and fraud in addition to misappropriation of assets in the financial statements. Then, Law No. 20 of 2001 lays out seven corruption-related corruptions among other state assets, bribery, embezzlement in office, extortion, cheating, conflict of interest in procurement, and

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gratuities. Of the seven types of corruption, bribery the most widely dealt corruption form by KPK during the year 2004-2015 [4]. There are a total of 192 cases of bribery handled by KPK. Beside that bribery is also the corruption form that is easily found in Indonesia and tends to be easily implemented. Due to this reasons, bribery could quickly become a culture and increasingly difficult to combat and make it more dangerous among other types of corruption. To understand the bribe then we observed a few things. First, a bribe will happen if there are two parties involved i.e. those who give bribes and those who receive bribes. Second, bribery can occur in two directions. Bribes can be started from the giver who gives bribes own initiative or at the request initiated from the recipient of bribes. Third, bribes are selling influence like buying and selling. Fourth, there are expectations for the return of the bribe giver and the bribe recipients benefit from the optimization.

2.2 Power

Power according to this study is defined as the ability to determine the size of bribes. Power is not restricted as structural position or positions in the organization. A person considered to be in power if he had bargaining power in determining how much should be paid for by the bribe giver. Previous research [14] also argues that a person may have power without status or status without power, but only when there is a clear distinction between formal and informal authority. According to [19] [20] the power plays a role in social relationships and focus on the person's intentions or actions to carry out for example the dominance and influence, [14]. Research [14] defined power as an individual person's capacity to modify others to give or withhold resources or punishment. Example of resources and punishment in the context of bribery is economic opportunity or material. Power is considered as one of the factors driving the emergence of an act unethically. The more powerful a person the stronger the urge to ask for bribes. Although not directly related to bribery however, power has an influence on personal decision-making. Examples [11] found under generally when the individual power increases, the assessment of performance against others decline and self-assessment tends to rise. There are allegations under the authority also will affect the bribe.

2.3 Punishment

One deterrent factor of corruption is the fear of punishment. Punishment becomes a disincentive for corrupt behaviour [13]. Another theory supports that the penalty would reduce bribery behavioural intention is Theory of Planned Behaviour (TPB). TPB proposed by [2] predicts that the positive consequences of an action, the person will tend to want to do. Conversely, if one considers the consequence of an action is negative (i.e. penalties) then the person will decrease his intentions. Research by [24] stated that the main driver of an action is the reward not a punishment. Kind of punishment also has a different effect on the behaviour of bribes. If placed in a continuum that there is a relationship with the deterrent effect of the low to the high. In this study we believe that penalty will be variable moderation of three independent factors namely power, motivation, and culture.

2.4 Bribery Game

Bribery game is of plenty manifestation of laboratory experimental economics. Laboratory experiments enable us to test ideas and theories that may be impossible to test naturally in real world. It also allows us to simulate what can possibly happen in real world into a human-made laboratory environment, it nearly impossible to be done in real world due to ethical value. Numbers of researches have done research on corruption, however using

laboratory experiment to determine the behavior of briber and bribe receiver is not yet very common. Research [8] categorize experiments on corruption corruptibility as those involving bilateral settings and unilateral settings. In one of the first investigations, [10] focused on individual tendencies to engage in corruption in procurement and whether economists are more likely to accept bribes. Later on, [10] extended their analysis to state how intrinsic motivations are affected by threats of penalties. [17] conducted a laboratory experiment on free riding: individuals were asked to allocate a given financial endowment to private use and contributions to a public good. Research [6] used an ultimatum bargaining game, where the 'proposer' offers a division of a given amount of \$10 between him and the 'responder'. [10] conducted a prisoner's dilemma experiment and found that economics majors defect significantly more often (60 percent) than non-majors (39 percent). This paper mostly inspired by previous researches that were conducted specifically to analyze corrupt behavior like [1] [10], 16[] and [12].

3 Methodology and Experimental Design

According to [1] there are three main characteristics of bribery the first is reciprocal relationship between the briber and the bribed, secondly the existence of negative effects for the social welfare of society, and the third is punishment when action is known by law enforcement agencies. Referring to research carried out by [1], we replicate the conditions of treatments in lab experiments to see whether the three main characteristics have impact on bribery. The experimental design by [1], contained two actors, people who are bribed (in this case are government employees) can accept or reject the bribe. Bribers have the option to transfer some money to influence the decisions of government employees. The game is done in sequence, where the first player is the briber and the second player is the recipient of the bribe (denotes as government officials). Following the design of experiments by [1], this study will conduct three types of treatment situations. The number of subjects in our experiment is 32 people who play in pairs, which means we have 16 pairing in the experiment. The whole experimental situation is more easily understood through this Game Tree.



Figure 1. Game Tree

The game tree shows all possible outcomes for this experiment. The general rule of the experiment is the first player must pay mandatory public service fee and optional bribe then player two, whether accept or reject the bribe, must provide player one with the mandatory public service. The mandatory public service fee is 2\$ and public service value is 3\$. Besides that, everything the second player receives will be tripled.

In stage 1, the first player (briber) must decide whether to transfer a sum of money amounting to 2\$ as administration fee and value of bribes (between 0 and 8\$) to the second player. After that, the second player (government officer) must decide whether to accept or reject the transfer. If refused, the transfer did not take place and the multiplier simply tripled the value of 2 to 6. Value 6 will be divided equally, 3 points back to the first player, and 3 points remain stored second player. Stage 2 is similar to Stage 1, the only different is we induce random pairing for the subjects. Meaning the subjects will exchange partner in every round of this stage. The different pairing system denotes power. Fixed pairing is metaphor for long tenure where public officer is in charge in his position for so long hence obtains certain power in bribery matter. The random pairing denotes the absent of power where public officer is constantly rotated therefore has no ability to obtain power. In real world we often witness that bribery is most likely to happen when public officer has been around for so long and his presence is well known by potential bribers. The goal of this stage is to see how potential bribers react if the public officer is changed a lot. The random pairing is called "Random" in the analysis. Stage 3 is similar to Stage 1, the only different is we introduce instrument of penalty. All subjects will be audited randomly, if they get caught engaged in corruption they will lose all of the payoff in the current round as punishment.

We built these following hypotheses for our research:

H1: The power will positively influence the behaviour of bribery

H2: The penalties will reduce the impact of variable power, motivation, and behavioural culture of bribery against bribery

4 Analysis

We conducted t-test on the different value of average bribe and giveback from all subjects to see if there is difference among the treatments. The amount of bribe indicates the willingness to bribe from first player. Meanwhile the amount of giveback indicates the willingness to cooperate with briber from second player. Result of the t-test is showed in the table 1. below.

Average Difference Test for Bribe					Average Difference Test for Giveback				
Treatment	Mean	Std. Dev	Diff	Significant	Treatment	Mean	Std. Dev	Diff	Significant
Paired Reg	2.625	2.94	0.975	YES	Paired Reg	4.150	4.789	1.350	NO
Random Reg	1.65	2.359			Random Reg	2.800	3.156		
Paired Reg	2.625	2.94	1.138	YES	Paired Reg	4.150	4.789	2.350	YES
Paired SD	1.488	0.263			Paired SD	1.800	2.839		
Paired Reg	2.625	2.94	0.775	NO	Paired Reg	4.150	4.789	1.700	YES
Random SD	1.85	2.537			Random SD	2.450	1.28		
Paired SD	1.488	2.349	-0.16	NO	Paired SD	1.800	2.839	-1.000	YES
Random Reg	1.65	2.359			Random Reg	1.650	2.359		
Random Reg	1.65	2.359	-0.2	NO	Random Reg	1.650	2.359	0.350	YES
Random SD	1.85	2.537			Random SD	2.450	1.28		
Paired SD	1.488	2.349	-0.36	NO	Paired SD	1.800	2.839	-0.650	NO
Random SD	1.85	2.537			Random SD	2.450	1.28		

Table 1. T-test Result for Average Bribe and Giveback

According to the Table 1. above we can see that not all of the t-test showed significant result. In terms of the bribe value, only treatment "Paired Reg and Random Reg" and "Paired Reg and Paired SD" have significant difference. Significant difference between "Paired Reg and Random Reg" shows that instrument randomized pairing does affect behaviour of briber. This fact might indicate the importance of rotation among public officers. Significant difference between "Paired Reg and Paired SD" shows that instrument

penalty does affect behaviour of briber. This fact might indicate the importance of penalty and regulation in bribery. Meanwhile in Table 1 we can also see that not all of t-test showed significant result. In terms of the giveback value, only treatment "Paired Reg and Paired SD", "Paired Reg and Random SD", "Paired SD and Random Reg", and "Random Reg and Random SD" have significant difference, when it comes to giveback, any treatment including SD or penalty shoes significant different. This might indicate that second players are more reluctant to bribery when introduced to penalty.





Fig. 3. The Amount of Average Giveback

In Figure 2. and Figure 3., we can see the average value of bribes and giveback that are chosen by the participants. Based on these data, we can see for the case of bribery, on average, the highest is Paired NonSD treatment. It is not surprising, because in the treatment Paired NonSD there is no risk of punishment. Beside that in the treatment Paired NonSD subjects did not change partners. By having fix partner, there might be trust between them. The same thing applies in the case giveback. On the other hand, the average bribe and giveback is lowest for the treatment of Paired SD. This suggests that the risk of punishment makes someone reluctant to commit bribery.

5 Conclusion

According to the analysis above we can draw several conclusions. Bribery is more likely to occur in treatment fixed pairing (Pairing), this indicates that long tenure in public service might attract bribery. Hence periodic rotation among public officials is important. The implementation of punishment or penalty that impoverish can reduce the amount of bribe that occurs from the side of the bribe giver and the bribe receiver (which do giveback). This is shown in the average value of treatment with sudden death (SD) which has an average Bribe and giveback lower than the treatment without SD. But based on the results of this research, procurement punishment is more effective if applied at the receiving end of bribery. This may be due, the public officials "have more to lose" than those who give bribes.

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