

A Study on Rent-seeking Behavior for Chinese Government Occupational Safety and Health Regulator Based on the Rent-seeking Theory

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Abstract: Rent-seeking is one of the inevitable topic in the process of government occupational safety and health(OSH) regulation, The behavior of regulator rent-seeking will let the regulatory failures which may lead to a huge accident at last. According to the influence of rent-seeking theory, use "will get the benefits" and "the possibility of being found" as the research variables, investigate the SY administration of work safety regulator which is in charge of the SY OSH with a questionnaire. Use the data analysis to make clear that how the variables influence the government OSH regulation behavior. Give the improvement suggestions for the government OSH regulation.

Introduction

Rent-seeking is the activity that people are engaged in for the pursuit of direct and unproductive profits. As for civil servants, rent-seeking is the alienation of behaviors in the course of exercising public authority, which will give rise to the deficiency and target deviation of the established governmental functions in the implementation process. In the course of OSH regulation, rent-seeking on the part of regulators will lead to the failure of regulation, which will threaten to people's life and properties as well as bring considerable additional costs to the regulated enterprises. What are the factors that affect the behavior of the regulator? what circumstances lead the rent seeking behavior is more likely to occur? Is there a certain relationship between the rent seeking behavior of regulators and the bribe giver? The study will discuss the above issues.

Data Collection

Questionnaire one: To investigate rent-seeking behavior in OSH regulation from the perspective of regulator. The total number reaches 216. Through random sampling, this study chooses 50 people for conducting the questionnaire survey, among which 48 are validated questionnaires.

Table 1: The summary sheet of the number of regulators accepting the interest-oriented rent-seeking

	must be found	probably be found	sometimes be found	Basically not be found	cannot be found
a huge benefits	2	2	11	19	11
a great number of benefits	0	1	5	14	24
a lots of benefits	0	0	3	13	28
some benefits	0	0	1	7	32
a little benefits	0	0	0	2	35

Questionnaire two: To investigate the impacts of bribery on regulation from the perspective of the regulated. Observe object: the staff of the chemical plant, a fireworks manufacturing enterprise and a safety production management department of SY City. This survey involves 50 people through random sampling. The results are as follows:

Table 2: The number of the regulation objects who bribe under certain conditions

	must be found	probably be found	sometimes be found	Basically not be found	cannot be found
a huge benefits	30	10	3	2	4
a great number of benefits	28	8	5	4	4
a lots of benefits	21	9	10	2	6
some benefits	18	4	8	5	8
a little benefits	15	1	9	7	13

Data Analysis

This study carries out the chi square test to the data, and analyzes the differences between res

ult and the theoretical value. The results are as follows:

Table 3: The chi-square test on the circumstances under which the regulators accept interest-oriented rent-seeking

	number
chi-square	25.960 ^a
df	13
Asymp.Sig.	.017
Exact Sig.	.020
Point probability	.005

a. 14 cells (100.0%) have expected count less than 5. The minimum expected count is 1.8

The precise significance level is $0.02 < 0.05$, which shows an obvious significance. Hence, the data collected through the questionnaire is typical, and the capture of the regulators is established under certain fixed conditions, which means the possibilities of accepting the interest-oriented rent-seeking on the part of regulators will be influenced by the two indexes mentioned above: the amount of obtained profits and the chances of detection.

Table 4: The chi-square test on the number of the regulation objects bribe under certain conditions

	number
chi-square	7.640 ^a
df	15
Asymp.Sig.	.937
Exact Sig.	.967
Point probability	.041

a. 16 cells (100.0%) have expected count less than 5. The minimum expected count is 1.6

The precise significance level is $0.967 > 0.05$, which shows an unobvious significance. We will not investigate the distribution of the number of the regulation objects further.

To investigate into the impacts of the two indexes on the percentage of people accepting rent-seeking by exploring the correlation analysis on the data collected.

Table 5: The summary sheet of the layered percentage of conditions under which the regulators accept interest-oriented rent-seeking

	must be found	probably be found	sometimes be found	Basically not be found	cannot be found
a huge benefits	4%	8%	30%	68%	90%
a great number of benefits	0%	2%	12%	40%	88%
a lots of benefits	0%	0%	6%	32%	88%
some benefits	0%	0%	2%	16%	80%
a little benefits	0%	0%	0%	4%	74%

When “the amount profits” is set as the control variable.

Table 6: The results of the partial correlation test between the chances of detection and the percentage of people accepting rent-seeking

controlled variable		percentage	the possibility of being found
benefits	percentage	interdependency	1.000
		Sig.(2-sided)	.
		df	0
the possibility of being found	interdependency	.851	1.000
	Sig.(2-sided)	.000	.
	df	22	0

The obvious partial correlation between the chances of detection and the number of people is 0.851, and the significance level is 0.000, which is representative. The chances of detection has an impact on the possibilities of accepting rent-seeking on the part of regulators, and the higher the chances of detection are, the less likely the regulators choose rent-seeking behaviors, and vice versa. When “the chances of detection” is set as the control variable, the results of the partial correlation test between the amount of profits and the percentage are as follows:

Table 7: The results of the partial correlation test and the percentage of people

controlled variable			percentage	benefits
the possibility of being found	percentage	interdependency	1.000	-.548
		Sig.(2-sided)	.	.006
		df	0	22
benefits	percentage	interdependency	-.548	1.000
		Sig.(2-sided)	.006	.
		df	22	0

When the chances of detection are set as the control variable, the relatively obvious partial correlation between the amount of profits and the number of people is negative 0.548, and the significance level is 0.006, which is representative. The absolute value of the above two sets of data are $|0.851| > |-0.548|$ respectively, which means the “chances of detection” has a greater influence on the regulators than those of “the amount of profits”.

We calculate and count the layered percentage of the regulated choosing to bribe under different situations with different amount of profits and different chances of detection according to the survey results of the regulation objects. The results are as follows:

Table 8: The summary sheet of the layered percentage of the regulated choosing to bribe under certain conditions

	must be found	probably be found	sometimes be found	Basically not be found	cannot be found
a huge benefits	60%	80%	86%	90%	98%
a great number of benefits	56%	72%	82%	90%	98%
a lots of benefits	42%	60%	80%	84%	96%
some benefits	36%	44%	60%	70%	94%
a little benefits	30%	32%	50%	64%	90%

Conducting partial correlation test to Table 3 When “the amount profits” is set as the control variable, the results of the partial correlation test between the chances of detection and the percentage of people accepting rent-seeking are as follows:

Table 9: The results of the partial correlation test and the percentage of people

controlled variable			the possibility of being found	percentage
benefits	the possibility of being found	interdependency	1.000	.949
		Sig.(2-sided)	.	.000
		df	0	22
percentage	percentage	interdependency	.949	1.000
		Sig.(2-sided)	.000	.
		df	22	0

The obvious partial correlation between the chances of detection and the number of people is 0.949, and the significance level is 0.000, which is representative. The chances of detection has an impact on the possibilities of choosing to bribe on the part of the regulated, and the higher the chances of detection are, the less likely the regulation objects choose to bribe, and vice versa. When “the chances of detection” is set as the control variable, the results of the partial correlation test between the amount of profits and the percentage of people accepting rent-seeking are as follows:

Table 10: The results of the partial correlation test between the amounts of profits gained through bribery and the percentage of people accepting rent-seeking

controlled variable			benefits	percentage
the possibility of being found	benefits	interdependency	1.000	-.887
		Sig.(2-sided)	.	.000
	percentage	interdependency	-.887	1.000
		Sig.(2-sided)	.000	.
		df	22	0

When the chances of detection are set as the control variable, the relatively obvious partial correlation between the amount of profits and the number of people is negative 0.887, and the significance level is 0.000, which is representative. What's more, the control variable of "the chances of detection", which means the amount of profits gained through bribery has an impact on the possibilities of choosing to bribe, and the more lucrative the profits are, the higher the possibilities of choosing to bribe, and vice versa. The absolute value of the above two sets of data are $|0.949| > |-0.887|$ respectively.

Summary

The amount of expected profits is one of the important factors that influences whether the regulators choose rent-seeking behaviors or not. Other things being equal, the more profits will be gained, the more likely the regulators choose rent-seeking behaviors, and vice versa. The chance of detection is one of the important factors that influences whether the regulators choose rent-seeking behaviors or not. Other things being equal, the higher the chances of detection are, the less likely the regulators choose rent-seeking behaviors, and vice versa. The amount of expected profits that the regulated will obtain through bribing is one of the important factors that influences whether the regulated choose to bribe or not. Other things being equal, the more profits will be obtained, the more likely the regulated choose to bribe, and vice versa. The chance of detection is one of the important factors that influences whether the regulated choose to bribe or not. Other things being equal, the higher the chances of detection are, the less likely the regulated choose to bribe, and vice versa. From the regulators' point of view, the impacts of the chances of detection on rent-seeking behavior are greater than those of the amount of profits, which means the regulators are more concerned about the chances of detection as regard to the rent-seeking issue. From the point of view of the regulated, the impacts of the amount of profits on rent-seeking behavior are greater than those of chances of detection, which means the regulated are concerned more about the amount of profits as regard to the rent-seeking issue.

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