

USING LIST EXPERIMENTS TO REVEAL THE TRUE FREQUENCY AND SCALE OF BRIBERY



Vietnam jails 50 people in mass bribery trial ([BBC News](#))

Corruption poses a significant threat to society, but it occurs in the shadows, masking its true effects. Before tackling corruption, researchers, policy analysts, and officials must first measure its frequency and scope with effective techniques or risk exacerbating its effects.

Assessing the prevalence of bribery through surveys, however, presents a formidable challenge. Those involved in corrupt practices, whether as givers or receivers of bribes, are often unwilling to openly admit to their actions. This reluctance to divulge information is a well-known issue in survey research, termed "social desirability bias." It extends beyond bribery to encompass a range of sensitive topics, including theft, adultery, racism, and other morally and socially reprehensible behaviors.

In the specific case of corruption, individuals face more than just social stigma; there are also potential legal consequences that deter them from confessing their involvement. This interplay between societal penalties and legal repercussions underscores the complexity of measuring corruption accurately. As researchers and policymakers strive to combat this pervasive issue, it becomes paramount to develop methodologies and approaches that can bypass social desirability bias and provide a more genuine

KEY TAKEAWAYS

- **Surveying** behaviors like corruption and bribery is challenging for researchers and analysts due to the influence of social desirability bias.
- **Utilizing** List experiments, specifically the Unmatched Count Technique, provides a means to protect respondents' anonymity, enabling the measurement of both bribery frequency and the average bribe size.
- **Applying** this technique to our study reveals a significant prevalence of corruption within business-to-government interactions within Vietnam's restaurant industry.

understanding of the extent and nature of corruption in our communities. In this research project, funded by the the United States Agency for International Development (USAID) through the [LASER PULSE](#) mechanism, the Duke Center for International Development (DCID) employed a specialized approach known as a **LIST experiment** (also called an **Unmatched Count Technique (UCT)**) to enhance the accuracy of our survey results and gain deeper insights into illicit behaviors. This method was used to create a safe environment for respondents to share sensitive information without fear of exposure, essentially providing them plausible deniability.



USAID
FROM THE AMERICAN PEOPLE

P **PURDUE**
UNIVERSITY.

Duke
SANFORD

CENTER for
INTERNATIONAL
DEVELOPMENT

Measuring the frequency of bribery

A sample list question from our survey is presented below. Here's how it functioned: We randomly present individuals with one of two distinct question sets, denoted as Version A and Version B. Each set initiates with three routine, non-sensitive activities associated with inspections. However, Form A introduces a sensitive query concerning the act of offering gifts (which could be monetary or in-kind) to government inspectors, a behavior often regarded as a bribe and highlighted in red. In contrast, Form B features a dissimilar question about seeking advice from lawyers or legal counsel, a non-sensitive activity. We use Form B as a benchmark, as it is improbable that people consult lawyers as frequently as they may engage in bribery. By comparing responses between both forms, we can ascertain the prevalence of bribery during inspections without requiring direct admissions from individuals.

The key lever is that we did not ask them to specify which particular activity they had performed; instead, we inquired about the total number of activities they had undertaken. This approach allowed respondents to respond truthfully without having to confess to any specific action.

Please read this list of common activities that establishments like yours normally engage in while being visited by government regulatory inspectors. Please tell us how many of these activities your business, personally, engaged in the last time such a visit took place. Do not tell us which activities; we only need to know **the total number of actions you engaged in.**

- Closed the business temporarily during the inspections
- **(Version A only)** Presented gifts (monetary or in-kind) to government inspectors
- **(Version B only)** Consulted lawyers/legal counsel
- Checked for violations before the inspectors arrived
- Retrain your employees after inspections to improve

By analyzing all the responses collectively, we could estimate the prevalence of the sensitive behavior without compromising anyone's confidentiality.

In this project, we hypothesized that restaurants in the Management and Internal Controls courses would have greater regulatory compliance and therefore would be less vulnerable to bribes than those in Marketing.

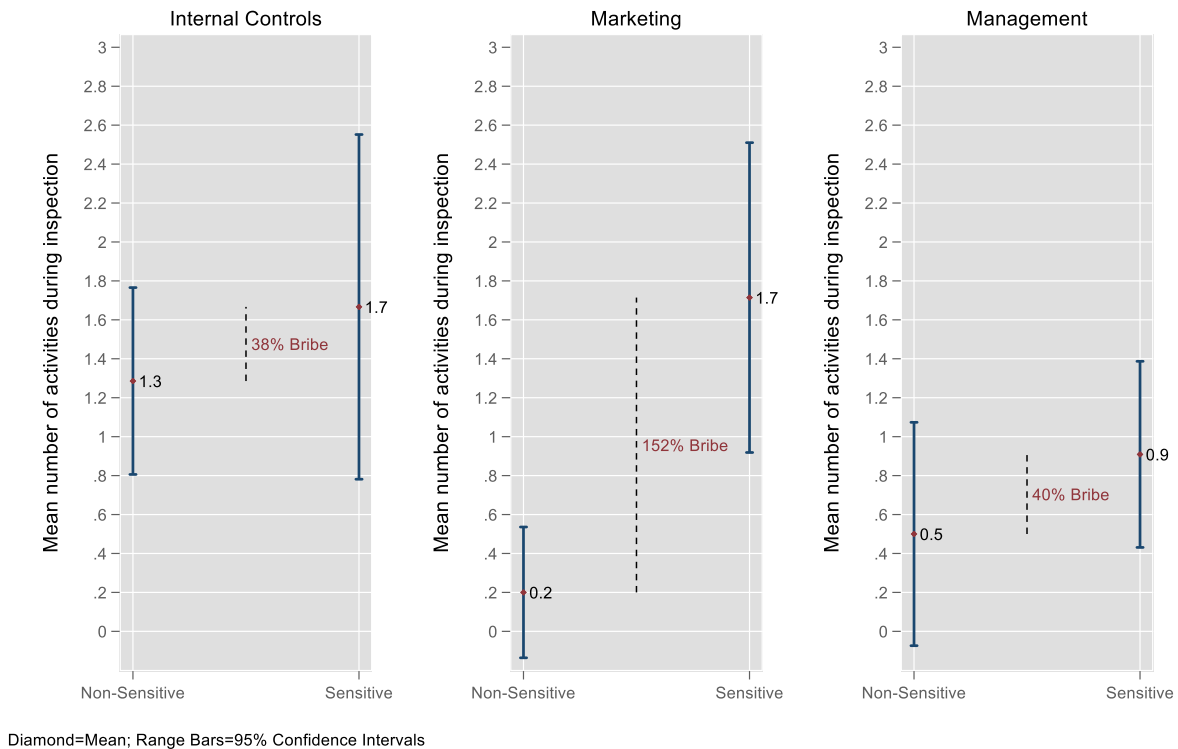


Figure 1: Management and Internal Controls Students Pay Bribes Less Frequently than Marketing Placebo

In line with our theoretical expectations, we discovered that restaurants participating in the Management and Internal Controls courses reported paying bribes less often, and these bribes were smaller compared to those in the Marketing course (the placebo group). Let's take the example of the Internal Controls group: businesses in this group reported an average of 1.29 regulatory activities when presented with non-sensitive questions. However, when they were asked the sensitive question related to bribery, they reported an average of 1.67 activities. The difference between these two numbers, 0.38, suggests that around 38 percent of businesses in the Internal

A similar pattern was found for the Management course, with an estimated 40 percent of businesses paying bribes.

This is in sharp contrast to firms in the Marketing placebo course, where restaurants assigned to the non-sensitive list reported 0.2 inspection activities and firms with the sensitive list reported 1.7 activities. This implies a difference of 1.5 or over 150 percent. The larger number than 100 percent is certainly due to the small sample size and two firms in the sensitive reporting three activities out of four. Dropping these restaurants, however, still leads to a bribery estimate of exactly 100%.

Measuring the size of bribes

Notice that the list question mentioned above is focused on determining the prevalence of bribery – in other words, what proportion of businesses engage in bribery? It does not address the issue of how much these businesses are actually paying as bribes. Both the frequency and the magnitude of bribery have distinct implications from a theoretical perspective. When numerous businesses pay relatively small bribes, it can be a nuisance but might not severely impact the economy. Conversely, if only a few businesses are making substantial bribe payments, it could signify issues like regulatory capture or the existence of artificial barriers preventing small and medium-sized enterprises (SMEs) from entering the market.

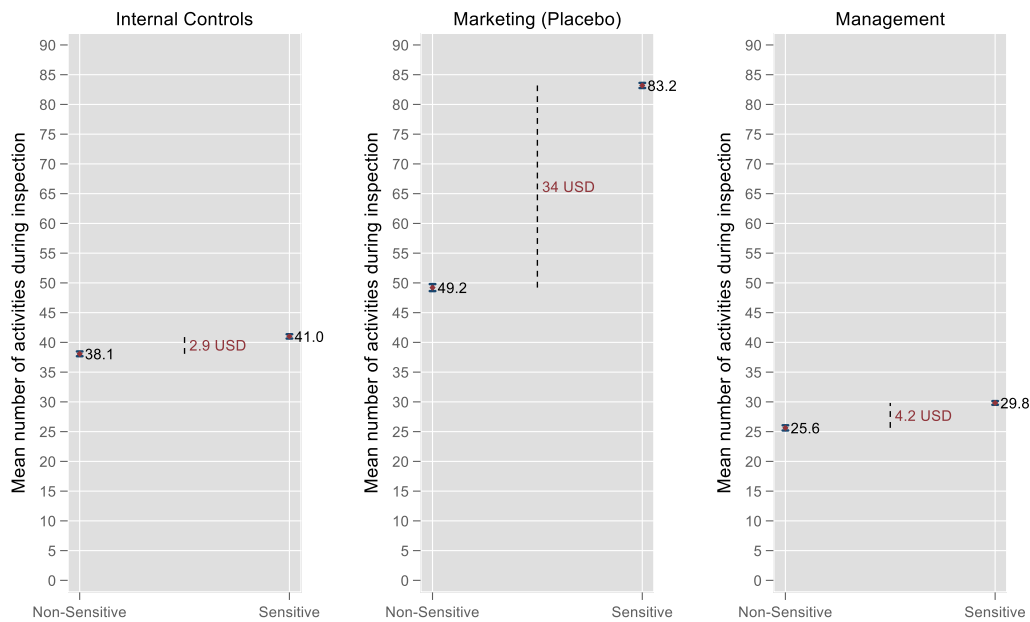
To determine the amount of bribe payments, we applied the same method used in previous analyses to the cost associated with each activity related to inspections that a firm might have been involved in. The results closely mirrored our earlier findings. To measure the scale of bribery, we employ the same UCT method. However, instead of inquiring about the number of activities, we ask businesses to estimate the monetary amount they paid for each typical item. We then calculate the difference in means for this question to determine the magnitude of bribery within each group.



*Please read this list of common activities that establishments like yours normally engage in while being visited by government regulatory inspectors. Please tell us how many of these activities your business, personally, engaged in the last time such a visit took place. Do not tell us which activities; We only need to know **the total amount** (in Millions of Vietnamese Dong) you spent on these activities.*

- Closed the business temporarily during the inspections
- **(Version A only)** Presented gifts (monetary or in-kind) to government inspectors
- **(Version B only)** Consulted lawyers/legal counsel
- Checked for violations before the inspectors arrived
- Retrain your employees after inspections to improve regulatory compliance

For businesses that participated in the Management and Internal Controls courses, the costs of bribery during inspections were remarkably low. Respondents reported paying \$3 USD and \$4.20 USD, respectively, for inspection bribes in the past month. These differences were so minimal that they were not statistically significant from zero, as indicated by the overlapping confidence intervals. In contrast, students from the marketing placebo course paid significantly higher inspection bribes, averaging \$34 USD last month. Once again, it's important to note that only the estimates in the Marketing group were substantial enough to be statistically significant.



Diamond=Mean; Range Bars=95% Confidence Intervals

Figure 2: Management and Internal Controls Students Pay Lower Bribe Costs

LIST Experiment is a powerful tool in policy analysis

The LIST experiment, also known as the Unmatched Count Technique (UCT), holds significant promise for its application in policy analysis and research. This innovative approach offers unique advantages in capturing sensitive behaviors that are often concealed due to social desirability bias. As demonstrated in our research project supported by USAID through the [LASER PULSE](#) mechanism, list experiments allowed us to uncover striking differences in the frequency and size of bribes in the control group (Marketing) as compared to the two treatment groups.

By providing respondents with a secure and confidential space to reveal their true experiences and actions, the list experiment can help researchers, analysts, and policymakers gain a more accurate understanding of various societal issues, such as corruption, discrimination, or unethical practices.

Corruption poses a significant threat to society, but it occurs in the shadows, masking its impact. To understand the effects of bribery, we must first measure its effects.

Do Better Managers Reduce Corruption?
 Contact: Edmund Malesky
 Phone: (919) 613-9215
 Email: eddy.malesky@duke.edu
 Website: <https://dcid.sanford.duke.edu/>

SUGGESTED CITATION: Malesky, Edmund J and Tuan-Ngoc Phan. 2023. Using List Experiments to Reveal the True Frequency and Scale of Bribery: Learning Brief. West Lafayette, IN: Long-term Assistance and Services for Research - Partners for University-Led Solutions Engine (LASER PULSE).

ACKNOWLEDGMENT: This Learning Brief was produced by the *Do Better Managers Engage in Less Corruption?* project. The project was supported by USAID through the [LASER PULSE](#) mechanism. The views expressed in this publication do not necessarily reflect the views of USAID and the United States Government.