

MISUM ACADEMIC INSIGHTS

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PUBLIC PERCEPTION OF ADDRESSING ENVIRONMENTAL JUSTICE THROUGH IN-KIND SETTLEMENTS

BACKGROUND AND RESEARCH AIM



In the US, approximately 5,000 administrative cases are brought against individuals, firms, or local governments annually for violating federal environmental statutes, such as the Clean Air Act and the Clean Water Act. In the settlement of these cases, the Environmental Protection Agency (EPA) gives defendants the opportunity to reduce the assessed cash penalty by volunteering environmentally beneficial in-kind projects (nonmonetary contributions) in the location of the violation, with the aim of addressing environmental justice (EJ) concerns in communities with low incomes and a high share of minorities (namely, oncerns that such communities are disproportionally affected by environmental degradation and are not equally involved in environmental policy making). Typically, every year around 56% of the cases result in cash settlements and around 4% of those also include an in-kind environmentally beneficial project. The remaining cases are settled without a penalty for the defendant. The implications of inkind settlements are not straightforward yet policies on their use are being made in the absence of any quantitative analysis.

This academic insight focuses on public perception of in-kind settlements, and addresses two intertwined questions: (1) does the public prefer in-kind local projects or cash paid to the US Treasury in the settlement of environmental violations, and (2) does the type of settlement change the public's views about a company? The aim is to take an in-depth look at public perception on in-kind settlements, guiding future use of them in addressing environmental justice issues.

RESEARCH METHODS

A choice experiment and a randomized survey were used to study the perception of inkind settlements following environmental violations among the public. Both were administered online through a survey firm (Prolific), and returned a sample of 2,361 respondents. Compared with estimates from the US Census Bureau, the sample was found to be largely representative of the US population on gender, employment status and ethnicity.



CHOICE EXPERIMENT

The choice experiment for public preferences was used to assess whether and under what conditions the public prefers cash penalties versus in-kind projects targeted to the violated community. A fictitious situation was presented to the respondents, resembling a typical US environmental enforcement case where a firm is caught in violation of an environmental statute. Half of the respondents were randomly selected and informed that the company's facility where the violation occurred is located in a community vulnerable to environmental justice concerns. Respondents were asked to choose their preferred settlement between a cash penalty of \$300,000 to the US Treasury and an environmental project in the community affected by the violation. Across roughly equally sized groups of respondents, the size of the cost of the in-kind project was varied randomly, with different groups being presented with costs respectively larger and smaller than the cash option.

RANDOMISED SURVEY

To determine whether the public's perception of a firm which has violated an environmental regulation is influenced by settlement type, a randomized survey was conducted. Respondents were told that the EPA had concluded a settlement for environmental violations. The group was then randomly spilt in two; one group read that the settlement consisted of a cash penalty of \$300,000, and the other read that the settlement consists of both a cash penalty of \$150,000 and a \$225,000 in-kind project. Respondents were then asked to indicate where their opinion about the company fell within five pairs of opposing statements describing overall perception of the company.

FINDINGS



The choice experiment suggests:

- (a) the public has a strong preference for in-kind settlements following an environmental violation, with an overwhelming majority of respondents (87%) preferring in-kind settlements over cash penalties, even when the size (in dollar amount) is smaller.
- (b) the public sees in-kind settlements even more favourably when the violation and the project takes place in a community subject to EJ concerns.

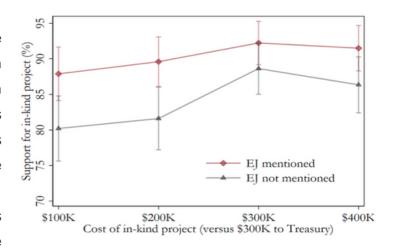
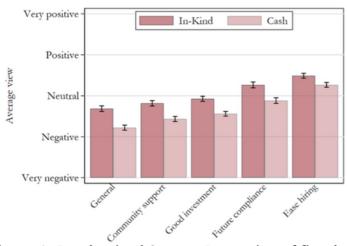


Figure 1. Choice experiment:
Support for in-kind over cash to Treasury





The online randomized survey showed that the public perceives a firm more favorably after the firm settles with an in-kind project instead of a cash penalty.

Figure 2. Randomized Survey: Perception of firm by settlement type

IMPLICATIONS FOR PRACTICE AND FUTHER RESEARCH

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These results provide the first-ever insights into the public preference for the use of inkind settlements, within the US institutional context. Against the background of changing policy on the use of in-kind settlements, the study highlights that amongst the several trade-offs that should be considered when using in-kind settlements, public perception on settlement type is of high importance. In particular the study highlighted that favorable public perceptions of in-kind settlements could suggest that they should be adopted more broadly and in other contexts. However, in-kind settlements improving the public's view of a violating firm could raise concerns of diminished deterrence of the enforcement action.

Other key findings:

- Large cash settlements were found to be associated with a drop in company stock-market price upon settlement announcement, whereas in-kind settlements were associated with a positive stock-market reaction. Diminished accountability through investors could also result in lower deterrence.
- Suggestive evidence was found that environmental quality improves only following cash settlements and in the short run. While this would point to in-kind settlements being indeed more lenient than cash settlements, a number of caveats apply to this analysis, and future research should leverage new dataset that might become available to study the relationship between settlement type and environmental quality further. Another promising avenue of future research is to study whether the level of support among the public depends on the institutional arrangements.
- The findings supported the emerging view that corporate social responsibility (CSR) might be an optimal strategy for firms, given consumers and investor preferences.

ACADEMIC REFERENCE

Campa, P. and Muehlenbachs, L. (2023) 'Addressing Environmental Justice through In-Kind Court Settlements.' Forthcoming.

