

Environmental violations, optimal deterrence, and reputational costs

How do we optimally deter environmental harms like oil spills, chemical leaks, and the like? Research has shown that the bark of the environmental sentencing guidelines is considerably worse than their bite. Judges have “departed” below the applicable guidelines range in an unusually high percentage of environmental cases. This research will examine environmental violations by public corporations, the legal penalties associated with these violations, and importantly, also investigate whether environmental violations by firms carry a meaningful reputational penalty. Reputational penalties are market sanctions that impose significant costs on firms that violate environmental regulations; they are market value losses beyond the expected legal penalties. That is, these costs are separate from any fines or remediation costs ultimately levied on the firm by courts or regulators.

The existence and size of any reputational penalty is important for public policy. Optimal penalty theory requires that the expected total penalty for an illegal activity equals the activity's total social cost. The total penalty consists of explicit legal sanctions imposed through regulatory, civil, and criminal proceedings, plus reputational penalties. If reputational penalties are small, there exists a more important role for legal penalties in an optimal framework.

This research will inform policy decisions by providing evidence concerning reputational penalties, legal penalties, and criminal and civil judgments against firms that pollute the environment or otherwise violate environmental laws. It will also provide large-sample estimates of the share valuation impact on firms that violate environmental regulations. Lastly, it will examine the sizes of the legal penalties imposed on violating firms, and their relation to the type of environmental harm. The results should be useful for regulators, educators, and others with a stake in optimal environmental protection.