

Environmental Justice

Is Environmental Policy Fair?

Does it Matter?

Environmental Policy

- Is government effectively addressing the most serious & risky environmental problems?
 - Are efficiency & effectiveness the only important considerations in environmental policy?
 - CBA → maximizing *net benefits*
 - Economic Tools → most efficient distribution of environmental protection costs
- Do the distributional effects of environmental policies matter?
 - Does “how” the government solves public problems matter?

Environmental Justice Argument

- Bullard et al.
 - 1980s environmental programs bypassed poor & minority communities
 - Poor & Minority communities face greater environmental hazards than white communities
 - Siting of environmentally undesirable facilities
 - Low priority in clean up
- Is there a racial/class bias in LULU siting?
- Is there a racial/class bias in environmental protection efforts?
 - E.g., Superfund

Evan Ringuist (1997) "Equity & the Distribution of Environmental Risk," *Social Science Quarterly*, 78(4).

■ Research Design

- Scope: all resident US zip codes (n=29,000)
- Dependent variable
 - Likelihood of a TRI facility in the community
 - Likelihood of more than one TRI facility in the community
 - Concentration of TRI pollutants emitted in the community

Evan Ringuist (1997) "Equity & the Distribution of Environmental Risk"

- Research Design (cont.)
 - Independent Variables
 - Race
 - Economic Class
 - Urbanization
 - Manufacturing Employment
 - Private Wells & Older Residences

Evan Ringuist (1997) "Equity & the Distribution of Environmental Risk"

■ Conclusions

- TRI facilities are most likely to be found in urban working class neighborhoods, even more so if minority
- Minority urban working class neighborhoods have higher concentrations of pollutants
- Race is least important independent variable

Evan Ringuist (1997) "Equity & the Distribution of Environmental Risk"

■ Critique

- Zip code as unit of analysis
 - Racial resolution too coarse
- TRI facilities as indicator of *local* environmental burden & environmental hazard
 - Bias in burden measure toward large facilities
 - Bias toward specific types of environmental hazards
- Which came first: the racial composition of the neighborhood or the TRI facility

John Hird & Michael Reese (1998) "The Distribution of Environmental Quality," *Social Science Quarterly*, 79(4).

■ Research Design

- Scope: all US counties (n=3111)
- Dependent Variables:
 - # smoke stacks
 - Hazardous chemical emissions (air)
 - # HW incinerators
 - # permit violators (air)
 - (a)-(d) equivalents for water discharges
 - # HW generators (Land)
 - HW production (land)
 - # Treatment, storage, disposals (TSD) facilities
 - Landfill capacity
 - # superfund sites
 - others

John Hird & Michael Reese (1998) "The Distribution of Environmental Quality," *Social Science Quarterly*, 79(4).

■ Research Design

■ Independent Variables

- Poverty - -
- Race + +
- Population density (~ urban) + +

■ Conclusions

- Race matters even after taking other things into account

■ Critique

- County as unit of analysis
 - Racial resolution too coarse

J. Tom Boer, et al. (1997) "Is there Environmental Racism?" *Social Science Quarterly*, Vol. 78, No. 4.

■ Research Design

- Scope: all census tracts in LA County [n=1600]
 - TSDF: Hazardous waste treatment, storage, disposal facility
- Dependent variable
 - Probability of TSDF in community (logit analysis)
- Independent variables
 - Income
 - Employment manufacturing
 - % land in industrial use
 - % minority

J. Tom Boer, et al. (1997) "Is there Environmental Racism?" *Social Science Quarterly*, Vol. 78, No. 4.

■ Findings

- ∩ -shaped with income [explains previous studies' findings viz poverty, unemployment, income]
- Employment manufacturing + +
- % land in industrial use ++
 - (or, population density surrogate)

■ Conclusion:

- industrial areas with large concentrations of working class people of color are more likely to have TSDFs

Conclusion

- There is an association between race and the location of hazardous waste facilities
 - Even after taking into account income and other nuisance variables
- Why does this association exist?

3 Models of Environmental Injustice

■ Intentional Bias Model

- Deliberate racial/social policy in LULU siting

■ Institutional Bias Model

- Rules, procedures, policy-making processes biased against poor and minorities

■ Neighborhood Transition Model

- Poor & minorities arrive after environmental hazard
 - Cannot afford more desirable locations

EPA Policy Statement – 199X

- "Fair treatment of people of all races, cultures, and incomes with respect to the development, implementation, and enforcement of environmental laws, regulations, programs, and policies."
- "Fair treatment means no racial, socioeconomic, or ethnic group should bear a disproportionate share of the negative environmental consequences resulting from the operation of industrial, municipal, and commercial enterprises and from the execution of federal, state, and local programs and policies."

Forms of “Equity”

- Procedural Equity
- Geographical Equity
- Social Equity

Brownfields

- Reusing old industrial sites with less than high priority NPL contamination
 - ~500,000 sites
 - Where are they likely to be?
- Environmental cleanup standards
 - “undeveloped” standards? → **greenfields** development
 - Who is harmed?
 - geared to reuse, not pristine pre-industrial condition
 - Who is harmed?

Issues

- Do market mechanisms in environmental policy create problems for environmental equity?
- Does a brownfield strategy create problems for environmental equity?