

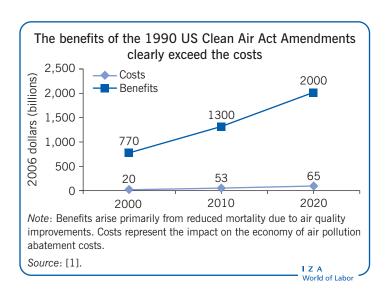
Environmental regulations and business decisions

Environmental regulations impose costs on firms, affecting productivity and location but providing significant health benefits

Keywords: regulation, productivity, plant location, pollution abatement costs

ELEVATOR PITCH

Environmental regulations raise production costs at regulated firms, though in most cases the costs are only a small fraction of a firm's total costs. Productivity tends to fall, and firms may shift new investment and production to locations with less stringent regulation. However, environmental regulations have had enormous benefits in terms of lives saved and illnesses averted, especially through reductions in airborne particulates. The potential health gains may be even greater in developing countries, where pollution levels are high. The benefits to society from environmental regulation hence appear to be much larger than the costs of compliance.



KEY FINDINGS

Pros

- Environmental regulations have greatly improved air and water quality, especially in areas that were dirtiest before regulation.
- Reducing airborne particulates is especially beneficial, saving thousands of lives and preventing millions of illnesses each year.
- The potential health benefits may be even greater in developing countries, where pollution levels are high.
- Proposed reductions in greenhouse gas emissions have potentially large benefits from slowing climate change and preventing some of its adverse impacts.

Cons

- Environmental regulations raise production costs and lower productivity by requiring firms to install pollution control equipment and change production processes.
- Regulatory costs can influence firms' decisions about locating new plants and shifting production among existing plants.
- Stricter regulations on new plants can discourage new investment and keep dirtier plants operating longer than originally expected.
- Stricter regulations in dirty locations can lead to increasing pollution in once-clean areas.

AUTHOR'S MAIN MESSAGE

Environmental regulations, intended to protect human health and the environment, generally result in higher production costs and lower productivity in firms, which can lead them to shift investment and production to less stringent locations. Research on the effects of environmental regulation has focused mainly on air pollution regulations in the US. Overall, regulatory benefits clearly outweigh the costs, but most benefits come from reductions in fine particulates; some other regulations have costs that exceed the benefits. Society gains only from environmental regulations whose benefits (e.g. reduced mortality) exceed their costs.