FREUDENBURG STUDY:

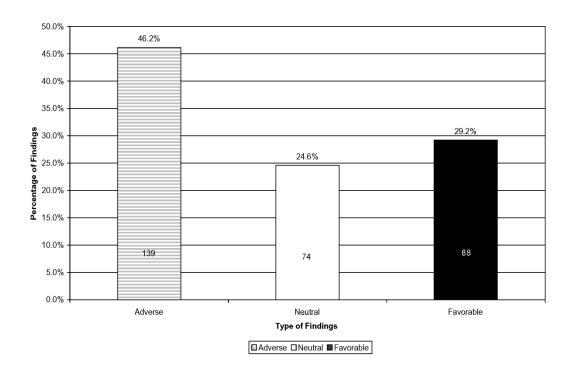
For rural communities, metal mining far more likely to lead to negative economic outcomes

Mining the Data: Analyzing the Economic Implications of Mining for Nonmetropolitan Regions

William R. Freudenburg, University of Wisconsin-Madison and University of California-Santa Barbara

Lisa J. Wilson, Watershed Research and Training Center

Extractive industries such as logging and mining are generally expected to bring significant economic benefits to rural regions, but a growing number of findings have now challenged that common expectation. Still, it is not clear whether the findings of less-thandesirable economic outcomes are isolated or representative. In this article, we assemble literally all of the relevant quantitative findings on mining that we have been able to identify in published and/or technical literature from the United States. In the interest of rigor, we limit the assessment to cases in which strictly nonmetropolitan mining regions are compared against other nonmetropolitan regions and/or against those regions' own experiences over time. Overall, 301 findings meet the criteria for inclusion. Contrary to the long-established assumptions, but consistent with more recent critiques, roughly half of all published findings indicate negative economic outcomes in mining communities, with the remaining findings being split roughly evenly between favorable and neutral/indeterminate ones. Positive findings are more likely to be associated with incomes than with poverty or (especially) unemployment rates, and they are more likely to come from the western United States, where much of the mining involves relatively large, new coal strip mines. Over half of all positive findings come from the years prior to 1982. In virtually all other categories, the plurality or majority of findings have been negative. When the patterns of findings are subjected to one-sample means tests, the only way to produce a significantly positive outcome is by combining all neutral/indeterminate findings with the positive ones, while focusing exclusively on incomes; by contrast, in the case of poverty or unemployment rates—as well as for the overall body of findings—the results are consistently and significantly negative, whether the neutral/indeterminate findings are combined with negative ones or omitted from the equations altogether. Until or unless future studies produce dramatically different findings, there appears to be no scientific basis for accepting the widespread, "obvious" assumption that mining will lead to economic improvement.



relevant quotes:

- The areas of the United States that have the highest levels of long-term poverty tend to be those very places that were once the site of thriving extractive industries.
- Mining communities' economic problems tend to become increasingly pronounced over time, exacerbated by the volatility of commodity prices, the potential for a cost-price squeeze, and the problem of *flickering* (i.e. the periodic shutting down of extractive operations as prices fluctuate above and below the costs of operation).
- The Rural Sociological Society's Task Force on Rural Poverty ultimately identified resource extraction not as an antidote to poverty, but as a cause or correlate. They found resource extraction to have a "systematic relationship" with "the impoverishment of rural people."

concluding sentence:

"To the extent to which past experience is to be our guide, there is surprisingly little evidence that mining will bring about economic good times, while there is a good deal of evidence for expecting just the opposite."