The Impact of Environmental Policy Devolution on Environmental Quality: The Case of the Reagan Administration

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The Trump administration has already come under withering attack from environmental leftists for suggesting that it might be a good idea to restore some sanity and balance to the Environmental Protection Agency (EPA), which ran amok under the Obama administration.

His Republican predecessors were similarly attacked. Ronald Reagan was accused of “crippling” the Clean Air Act and “breaking faith with the American people on environmental protection (Lindsay, 1982).” Early in his administration, George W. Bush was charged with being “well on his way to compiling the worst environmental record in the history of our nation (League of Conservation Voters, 2003).” But apparently, the worst is yet to come. In a recent article published on the Think Progress website, the title says it all, “George W. Bush’s presidency was a worst-case scenario for environmentalists. Then came Trump (Hand, 2017).”

Is this hand-wringing well-founded or have environmentalists been crying wolf over an environmental Armageddon that has never materialized? This paper examines evidence from the literature on the devolution of environmental oversight to the states that occurred during the Reagan administration. This evidence suggests that devolving power to the states does not lead to lower environmental quality.

Environmental Federalism

It has long been argued by proponents of small government that a more federalist approach to environmental protection, that is, a strategy that would rely more on state and local protections and less on centralized, command-and-control regulations from Washington, D.C., would ultimately lead to superior environmental outcomes. This would extend as well to the oversight of energy production on public lands. States and localities are more responsive to their constituencies, have better knowledge of time and place, and are better situated to sensibly balance economic and environmental interests.

Others argue that such an approach would be disastrous, leading to a “race to the bottom.” Under such an argument, states and local jurisdictions would respond to a devolution of power by ignoring environmental interests and reducing environmental protections in a bid to attract industries that create jobs and expand the tax-base. Indeed, race-to-the-bottom concerns provided much of the impetus for the creation of federal environmental agencies, such as the EPA (Millimet, 2003).

The theoretical literature on this question is ambiguous. Depending on the assumptions employed, devolution might lead to anything from a race-to-the-bottom to a race-to-the-top. The empirical
literature, on the other hand, is much clearer. There is little evidence that devolving responsibility for environmental protection to states and localities would lead to a race-to-the-bottom.

A Natural Experiment

Upon taking office, Reagan almost immediately began reducing the federal government’s role in the environmental arena. He cut the staff of the President’s Council on Environmental Quality from 60 to six and reduced EPA staff by 22 percent. As noted by the CEQ, “By the end of 1982 state governments had been delegated enforcement responsibilities for over 95% of applicable National Emissions Standards for Hazardous Air Pollutants, and over 90% of applicable New Source Performance Standards, up from 64% at the beginning of the year (Millimet 2003).”

From 1981 to 1984, Reagan made deep budget cuts to several federal agencies with environmental responsibilities. The EPA’s overall budget was cut by 11.5 percent, with its research and development budget cut by 45 percent. Other agency cuts included 13.8 percent for the National Park Service, 18.7 percent for the Forest Service, 19.4 percent for the Soil Conservation Service, 16.2 percent for the Corps of Engineers, 2.6 percent for the National Oceanographic and Atmospheric Administration, and a whopping 64 percent for the CEQ (Millimet 2003).

If devolving substantial responsibility for environmental protection to states and localities and cutting federal environmental budgets were a prelude to a disastrous race to the bottom, then it should be evident from the environmental data. Four studies are of particular interest as they exploit the natural experiment that occurred when President Reagan rapidly devolved much of the responsibility for environmental protection to the states. The following are short summaries of each analysis.

List and Gerking (2000)

The authors of this study analyzed data on sulfur dioxide and nitrogen oxide emissions, as well as on state-level pollution abatement expenditures by manufacturing industries, to evaluate the impact of Reagan’s environmental policy devolution.

With regard to the pollution abatement expenditure data, List and Gerking found that “over the period 1982–1990 real pollution-abatement operating expenditures per $1000 of value-added rose by 30 percent in chemical and allied products, by 15 percent in food and kindred products, and by 15 percent in overall manufacturing. However, over this same period real pollution-abatement operating expenditures net of state income effects declined by 18 percent in the paper and allied products sector and first rose and then fell in primary metals.”

They concluded, “Taken together, the results are mixed; but they do not present compelling evidence that states raced to the bottom in the early to late 1980s when given the opportunity to exert greater control over design and enforcement of environmental policies.”
Analyzing emissions trends also failed to turn up evidence of a “race to the bottom.” They found that sulfur dioxide emissions tended to decline after 1982 and to level off for nitrogen oxides throughout the 1980s and 1990s. “Although these results may reflect many factors that are constant across states but change over time, they do not appear to suggest that environmental quality was sacrificed as the federal government relinquished control in designing and implementing standards.”

Millimet and List (2003)

This paper builds on the work of List and Gerking, using the same data but applying a different statistical technique. The authors compared the entire distribution of emissions and abatement expenditures across states to see if they could detect a race to the bottom as a result of President Reagan’s environmental policy devolution.

Similar to what List and Gerking found, Millimet and List detected no race to the bottom in the environmental indicators studied as a result of the Reagan administration’s devolution of environmental oversight. As they argue, “Our findings strongly reject the notion that a race to the bottom materialized for these three indicators when Reagan greatly expanded the discretionary power of states in the determination of environmental policy in the US during the 1980s.”

Millimet and List’s findings, therefore, more powerfully rejected the idea that there was a race to the bottom due to devolving power to the states.

Millimet (2003)

In this paper, Millimet uses pre-devolution emission and pollution abatement expenditure data to estimate the trajectory of each environmental indicator had there been no devolution. By doing so, they were able to compare the modeled, no-devolution estimates with the observed data, thereby revealing the impact of Reagan’s devolution on the environmental indicators studied.

Millimet states that, “The results are intriguing...whereas per capita nitrogen oxide and sulfur dioxide emissions levels deteriorated during the 1970s when decentralization began in other policy areas (as emissions levels during the 1970s exceeded projections based on data through 1971), there is mild evidence suggesting that Reagan’s environmental decentralization during the 1980s reversed this trend. Thus, the data are not consistent with Reagan’s decentralization leading to a race to the bottom.”

The same held true for pollution control expenditures [PACE]. “...relative to the projected levels of per capita PACE and PACE per dollar of manufacturing output, Reagan’s decentralization had no discernible impact before the mid-1980s when states were facing extreme financial hardships. By the mid-1980s, however, the data are consistent with decentralization leading to a race to the top in abatement expenditures.”
By applying yet another statistical technique to the same data, Millimet was able to confirm the findings of the previous analyses, that when given the opportunity, states declined to behave in the manner suggested by race to the bottom notions.

Fomby and Lin (2006)

In this paper, the authors used a statistical technique called change point analysis to determine whether a change in emissions trends could be detected as a result of Reagan’s environmental policy devolution. Specifically, the authors analyzed emissions trends for sulfur dioxides (SO2), nitrogen oxides (NOx) and volatile organic compounds to see if his “devolution of environmental policy from federal control to state and local control positively or negatively affect the trends in these series.”

The authors note that between 1955 and 1980, environmental decisions became increasingly centralized with the passage of federal laws such as the Air Quality Act of 1967, the Clean Air Act of 1970, and the 1977 amendments to the Clean Air Act. The election of Ronald Reagan reversed that trend as “environmental decision-making power was devolved from the federal level to the state and local levels under the presidential administrations of Ronald Reagan (1981–89) and George Herbert Walker Bush (1989–93).”

The authors discovered two things, first that there was at least one “change point” for each of the three pollutants studied. “Positive trends in VOC and SO2 series appear to break into subsequent negative trends after each series’ change point, whereas the subsequent trend in the NOx series appears to be flat.”

Second, “With respect to the effect of Reagan’s environmental federalism on the trends in the NOx, SO2, or VOC series, in none of them did there occur any additional change points after the initial change point occurred.” In other words, the devolution that began under Reagan and proceeded under George H.W. Bush, did not change the emissions trends -- decreasing for VOCs and SO2 and flat for NOx -- already established.

Conclusion

Many have been concerned that state and local officials, eager to attract capital, jobs and economic growth, will compete by setting environmental standards that are insufficiently strict and that such competition may ultimately lead to an environmentally destructive “race to the bottom.” These concerns have influenced national environmental policy-making. According to Millimet (2003), “fears of a race to the bottom…as indicated in a congressional House Report (1979), were a significant factor leading to the formation of the Environmental Protection Agency (EPA) in 1968,” and that, “capital competition considerations explain why the U.S. Clean Air Act is implemented at the federal level.”

However, the empirical literature on environmental federalism finds little support for a race to the bottom (Dikstra and Fredriksson, 2010; Millimet, 2013; and Oates and Portney, 2003). If a race to the bottom were a legitimate cause for concern, President Reagan’s natural experiment in environmental federalism
should have exposed it. That this expected environmental deterioration failed to materialize suggests that there may be opportunities for the Trump administration to improve environmental policymaking in this country by returning additional responsibility to state and local governments.

Bibliography


