Viewpoint

Murray L. Weidenbaum

On Estimating Regulatory Costs

OVERNMENT REGULATION of business is one of the growth areas of the U.S. economy. While this activity produces both benefits and costs and while they are of equal importance in judging the worth of regulatory activity, only the growth in costs is examined here.

One component of the cost of federal regulation—the cost of operating federal regulatory agencies—is expected to more than double in the fiscal years 1974-79, rising more rapidly than the federal budget as a whole, the population of the country, or the gross national product. But this "administrative cost," large as it has become, only hints at the full cost of regulation. Far larger, and far more difficult to determine, is the less recognized component of regulatory costs—the "compliance costs." These include not only the direct costs that businesses incur in complying with federal mandates but also the indirect costs that arise when these mandates intrude on the efficiency of markets. For fiscal year 1979, the sum of the administrative costs of federal regulation (paid by the taxpayer) and the compliance costs (generally passed on to the consumer in the form of higher prices) may top \$100 billion.

Administrative Costs of Regulation

In this discussion, administrative costs are federal expenditures to cover salaries, supplies, and so on of the forty-one regulatory agencies for which data are available in the U.S. budget. These costs have risen each year in the 1974–79 period—from \$2.2 billion in 1974 to the \$4.8

Murray L. Weidenbaum is director of the Center for the Study of American Business at Washington University, St. Louis, and an adjunct scholar of the American Enterprise Institute. This article was prepared with the assistance of Robert DeFina.

billion estimated for 1979 (see Table 1). The largest increases occurred in 1977 and 1978. In each of these years federal regulatory outlays rose by 22 percent, a rate far beyond what would have been necessary to match inflation and population growth together. The administration's estimates for 1979 (contained in the budget submitted to Congress in January 1978) indicate that a much smaller rise, only 6 percent, is expected for the year ahead.

This smaller rise should be viewed in context. In the budget submitted in January 1978, the Carter administration revised upward from \$3.8 billion to \$4.5 billion—the estimates of regulatory expenditures for 1978 contained in the January 1977 budget prepared by the outgoing Ford administration. The major change was an increase in requested funding for consumer safety and health regulation which more than offset small reductions for the industry-specific regulatory commissions. Given that the figures for 1979 are not appropriations by the Congress but only projections of outlays expected to be made, they—like the 1978 figures—may be revised upward later (as they have been in the past).

Table 1 shows that the bulk of the overall regulatory budget is devoted to social regulation—consumer safety and health, job safety, and energy and environment. Broadly speaking, agencies involved in these areas of regulation—for example, the Food and Drug Administration, the Environmental Protection Agency, the Occupational Safety and Health Administration, and the Department of Energy—address a functional problem that cuts across broad sectors of the economy. This, among other things, differentiates them from the socalled traditional regulatory commissions,

¹ Hereafter, year refers to the federal government's fiscal year.

which generally have jurisdiction over individual industries.

The rise in spending is far steeper for the broader functional agencies than for the old-line commissions. Over the five-year period 1974–79, the nine industry-specific regulatory commissions (Interstate Commerce Commission and Civil Aeronautics Board, for example) show an aggregate budget increase of 39 percent. In comparison, the same period shows an increase of 222 percent for regulation of energy and the environment, 105 percent for consumer safety and health, and 102 percent for job safety and other working conditions. Except for the smallest category (financial reporting), each area of regulation shows a

rise in every year since 1974. However, the periods in which the most rapid growth occurs vary. The energy and environment area, for example, experienced its greatest expansion in the years 1974-77, whereas by far the largest rise in the consumer safety and health area is taking place in the current period, 1978.

One of the sources of increased administrative costs for regulation is, of course, an increase in the regulatory labor force. Recent calculations for thirty selected regulatory agencies (see the March/April issue of *Regulation*) show a 5.1 percent increase in employment from 1977 to 1979 (from 204,570 to 215,024), as against a 1.2 percent increase in all federal employment (from 1,908,988 to 1,931,600). Of course, neither increases in the budget in general nor increases in personnel in particular are necessarily converted into more regulation. They just make it more likely.

Compliance Costs: Direct and Indirect

As I have noted, expenditures incurred by the federal government to operate regulatory agencies do not capture all the costs that regulation imposes upon society. There are, in addition, the direct and indirect costs incurred mostly by the private sector (but also by local, state, and federal governments) in response to or as a result of regulation. These costs can only be

Table 1

ADMINISTRATIVE COSTS OF FORTY-ONE FEDERAL REGULATORY AGENCIES (fiscal years, dollars in millions)

	Consumer Safety and	Job Safety and Other Working	Energy and Environ-	•	Financial Reporting,	
Year	Health	Conditions	ment	Specific	etc.	Total
1974	1,302	310	347	245	36	2,240
1975	1,463	379	527	269	45	2,683
1976	1,613	446	682	270	53	3,064
1977 1978	1,985	492	870	309	58	3,714
(revised)	2,582	562	989	340	70	4,543
1979 (proposed) 2,671	626	1,116	341	69	4,823
Increase, 1974-79	105%	102%	222%	39%	92%	115%

Source: Compiled from details in the Rudget of the United States Government, Fiscal Year 1979 (Washington, D.C.: U.S. Government Printing Office, 1978), and earlier budget docu-

> roughly estimated—and that with considerable difficulty. What is clear, despite the uncertain nature of the estimates and the difficulty in making them at all, is that the direct and indirect compliance costs of regulation are far greater than the administrative costs. The Occupational Safety and Health Administration. for example, operates with a yearly budget of \$150 million, but it takes about \$3 billion a year in new capital outlays for companies to comply with OSHA's standards. And even this \$3 billion is only the direct cost of compliance. The indirect cost resulting from OSHA-induced inefficiencies in the production process remains to be calculated.

> Some relatively good data are available for estimating direct compliance costs. For example, each year the U.S. Council on Environmental Quality reports its estimates of the incremental costs incurred in the private sector as a result of regulatory dictates relating to the environment. In 1976, those costs totalled \$7.8 billion, essentially for the reduction in air and water pollution. In addition to such (relatively rare) government estimates of direct compliance costs, private scholars have provided estimates for a number of areas—transportation in particular-and some of these estimates include indirect costs. Such costs range from reductions in the rate of technological innovation to shifts in traffic from low- to high-cost means of transportation.

Recognizing the need for a comprehensive estimate of both kinds of compliance costs. Robert DeFina and I have tried in a longer work to develop a consistent method for measuring those costs.2 What we did there (and the figures from that study are generally the figures used here) was to select the best of the available studies and then (1) to express their results in terms of 1976 prices and (2) to try to place them on a comparable basis—that is, make sure they included and excluded the same categories of data throughout. A major constraint of our method is that the underlying estimates are taken from published studies and reflect the state of the present body of knowledge in this field of economics. For many areas, the information was insufficient for the purposes of our analysis. In these cases, we assumed (contrary to fact) that no compliance costs were involved.

The complexity of the problems involved in determining compliance costs deserves emphasis. A particularly difficult question is what to do about improvements in a product supplied by a regulated industry if the improvement results from regulation. An example may clarify the problem. When regulation takes the form of controls on prices or fares, competition may shift from a product's price to its quality. With the resulting increase in quality, average costs may rise, and prices may then rise to cover costs—if what we have is a new product. The question then is whether to regard all of the increased price as a cost of regulation to the private sector. Our answer was no. Since a new product is being offered, presumably one of higher quality, a pure comparison of prices before and after regulation would not be valid. The difference in prices must be adjusted for quality increases.

The distinction between stocks and flows also needs to be recognized. Regulation frequently requires businesses to make outlays for plant and equipment—to reduce pollutant discharges, for example—and, by definition, the useful life of capital exceeds one year. Never-

Additional insight into the economic effects of regulation is provided by Edward F. Denison of the Brookings Institution. For a summary of his recent article on this matter, see page 47, this issue.

theless, we viewed the required additional expenditure as representing a one-time use of resources in a particular year. In addition, we included the operating and maintenance costs of previously acquired capital as current outlays. This method is consistent with the treatment given these expenditures in the national income accounts and in the federal budget.

The definition of regulation used is important since the consistency of our estimates depends upon it. We defined regulation to mean legislative or administrative controls affecting prices, costs, entry and exit, production and distribution patterns, and other aspects of economic activity. Taxes and subsidies were excluded. A distinction was drawn between direct market interventions in the economy and more general social controls over personal action (such as traffic laws). The former were included and the latter, although they may also affect business activities, were excluded. The definition we used was formulated by observing the types of activities that are considered regulatory in the existing literature.

An illustration of the method employed may be helpful. In the transportation industry, economists have identified five major indirect costs arising from regulation: (1) increased cost of a particular means of transport, as when "full-crew" laws raise the price of rail freight service; (2) inefficient shifts of traffic from lowto high-cost means of transport, as when rates are set above marginal costs in the cheaper means; (3) "deadweight" losses from decreased use of a particular means of transport, as when railroads run operating losses because of low usage; (4) economic distortions from geographical or product price discrimination, as when rates are overly cheap for one section of the country or one product and overly dear for another so that some consumers are subsidizing others: and (5) dynamic losses from reduced incentives to innovate, as when the ICC is slow in approving a new technology.

Studies by Merton Peck, Robert Harbeson, and Ann Friedlander indicate that, for land transportation regulation in 1969, these indirect costs were between \$4 billion and \$9 billion—this figure including regulation of rails, pipelines, common-carrier trucks, and private trucks. And for airline regulation, Theodore Keeler, who studied fares for thirty major domestic air travel markets, concluded that reg-

² Murray L. Weidenbaum and Robert DeFina, *The Cost of Federal Regulation of Economic Activity*, Report of the Center for the Study of American Business at Washington University, St. Louis; also available as Reprint No. 88, American Enterprise Institute, 1978.

ulated fares were 20 to 95 percent higher than estimated unregulated fares as of 1968, and that there was a distinct tendency for markups to rise with distance. Translated into current dollars, this would represent an additional \$933 million paid out by consumers in 1976.

These studies are not without their critics. Kenneth Boyer, for example, disagreeing with Harbeson's comparative cost methods, argued that the loss of rail traffic to highway transportation in the 1950s and 1960s was due in large part to a shift to superior service. Bover's main conclusion is that "the size of the service differential has been underestimated in previous studies by at least an order of magnitude, causing an overstatement of economic loss due to traffic misallocation"—subject to various qualifications given in his study. In addition, George W. Douglas and James C. Miller III have issued a caveat on Keeler's estimation of the technical inefficiency of regulated airlines, pointing out that his study lacked an adjustment for frequency of flights. Thus, to a degree, some existing studies may overestimate the costs imposed on the American economy by government regulation of business.

Being cognizant of these problems, we took steps to offset whatever upward bias might be present in the figures. Where a range of costs was available for a given regulatory program, we used the lower end of the range. In addition, as we noted earlier, where reliable estimates were not available, we decided that, rather than guessing, we would carry the costs for complying with such regulations (other than the paperwork costs) at zero.

Examples of cases where we carried compliance costs at zero (except of course for the costs of paperwork) include the Animal and Plant Health Inspection Service and the Packers and Stockyards Administration of the Department of Agriculture, the Antitrust Division and the Drug Enforcement Administration of the Department of Justice, the Bureau of Alcohol, Tobacco, and Firearms and the Customs Service of the Department of the Treasury, the Commodity Futures Trading Commission, the Consumer Product Safety Commission, the Department of Energy, the Federal Maritime Commission, the Federal Railroad Administration of the Department of Transportation, the Mine Safety and Health Administration of the Department of Labor, the National

Table 2
ESTIMATED TOTAL COST OF
FEDERAL REGULATION IN 1976
(calendar years, millions of dollars)

	Administrativ		
Area	Cost	Cost	Total
Consumer Safety and Health	1,516	5,094	6,610
Job Safety and Working Conditions	s 483	4,015	4,498
Energy and the Environment	612	7,760	8,372
Financial Regulation	104	1,118	1,222
Industry Specific	474	26,322	26,796
Paperwork	(a)	18,000	18,000
Total	3,189	62,309	65,498

(a) Included in other categories.

Source: Weidenbaum and DeFina, The Cost of Federal Regulation of Economic Activity.

Transportation Safety Board, and the Nuclear Regulatory Commission.

Adding Up the Costs

DeFina's and my method of estimating the direct and indirect compliance costs of federal regulation produces a figure of \$62 billion for 1976—which is about twenty times the administrative costs of \$3 billion for regulatory agencies that year (see Table 2). The total cost of federal regulation in 1976 was thus roughly \$65 billion. This is equivalent to \$307 for every man, woman, and child in the United States or to 18 percent of the federal budget. While these estimates of regulatory costs must be regarded as tentative, I submit that any error is in the direction of understatement.

To repeat my earlier caveat, note that our study examined only the costs of regulation and that it is impossible to determine from cost figures alone whether the amounts being spent are too large or too little. But surely the magnitude of the figures outlined here highlights the need for increased attention to the problem from scholars, regulators, and policy makers. If the 1976 ratio of administrative costs to compliance costs should hold for 1979—and there may be reasons why it would not—compliance costs would be \$97.9 billion in that year. With administrative costs estimated at \$4.8 billion, the estimated total costs of federal regulation would exceed \$100 billion.



"Crippling local, state, and federal rules and regulations have made criminals out of many a small businessman, Ma'am."