

What We Did

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THE BUSINESS ROUNDTABLE study is unique among studies of regulatory costs. It covered a significant number of regulatory programs. It applied uniform, verifiable principles for measuring costs to a substantial number of large companies. And it drew upon the accounting data and personnel of the companies in question. Thus, in my opinion it is useful not only for its conclusions about specific costs, but also because it demonstrated a methodology that can be extended to even more comprehensive efforts of its kind.

The study was carried out by Arthur Andersen and Co. for the year 1977 and enlisted the participation of 48 of the Business Roundtable's 192 member companies. Our first task was to narrow the study's scope—which we did by balancing the aims of completeness and practicality according to three criteria: the agencies and programs selected should involve a significant portion of federal regulatory costs, the regulations should affect a wide range of industries, and finding the relevant data should not require unreasonable amounts of manpower from companies participating in the project. The six regulatory areas chosen included four agencies—the Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), the Department of Energy (DOE), and the Federal Trade Commission (FTC)—and two programs—the Employment Retirement Income Security Act (ERISA), and equal employment opportunity (EEO).

After choosing these, we developed procedures for data collection, established principles for analyzing the data, and trained the company project teams in the approach.

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The forty-eight companies that participated in the study operate in more than twenty industries and comprise an important segment of the U.S. economy. In 1977, they accounted for about 8 percent of the sales of U.S. industry, 5 percent of civilian employment (excluding agriculture and government), and 19 percent of private sector capital expenditures for plant and equipment. However, since no small businesses participated, and since the industry representation was very uneven, we did not attempt to extrapolate our results to all businesses in the economy.

Incremental Costs. The most important principle underlying our methodology is that of incremental costs. Rather than ask the companies to include all actions taken to comply with the regulations in the six areas—whether or not those actions would have been taken without the regulations—we decided instead to ask them only for the costs of actions they would *not*, in their judgment, have taken in the absence of regulation. Accordingly, project teams were told to assume a 1977 environment in which federal regulation had never existed, but in which all other factors (such as social, interest group, and marketplace pressures) were present; and company chief executive officers were requested to review the judgments made. This incremental cost approach reflects the fact that managements would indeed make different judgments about the use of resources in the absence of regulation. By requiring participating companies to make those judgments, we came up with measurements of the costs directly attributable to the regulations in question. Table 1 illustrates one calculation of incremental costs.

In addition to the incremental costs of regulation, there are, of course, indirect or secondary costs—which many companies believe to be larger. These include lost productivity, delays in construction of new plant and equipment, misallocation of resources, and lost opportunities. Though our report describes some of these costs, they were excluded from our calculations because of the difficulty of identifying and measuring them from the records of business firms.

Results of the Study. In the six regulatory areas covered, the forty-eight participating companies incurred \$2.6 billion in regulation-induced incremental costs in 1977 (see Table 2)—considering much of it to be wasteful. The significance of the amount may be measured by the fact that, in

1977, these companies had total capital expenditures of \$25.8 billion, R&D of \$6.0 billion, and profits after taxes of \$16.6 billion. The manufacturing sector was more strongly affected than services, transportation, and communications. Its share of the incremental costs was \$2.3 billion, which compares with capital expenditures for this sector of \$13.4 billion, R&D of \$5.4 billion, and profits after taxes of \$10.2 billion.

Adding to the significance of the \$2.6 billion figure is the fact that two-thirds of it consists of operating-and-administrative and product costs. These types of costs recur each year.

Two points about incremental capital costs merit emphasis. First, illustrating the differing effects of regulation from industry to industry, these amounted to 3.3 percent of capital expenditures for all participating companies but 19 percent of those expenditures for the primary metals companies.

Second, many of the capital projects active in 1977 were, of course, begun before 1977 or ended after 1977. For those projects active in 1977, \$1.6 billion in incremental capital costs was incurred prior to 1977 and an estimated \$1.4 billion was to be incurred after 1977. Thus, for each \$1 spent for incremental capital costs in 1977, \$3.50 was spent in prior years or would be spent in later years to start or complete *the same* capital projects. This \$3.50 is *not* included in our totals. Also not reflected is the estimate that capital projects active in 1977 will *increase* recurring annual incremental operating costs by \$305 million (not including depreciation).

Incremental costs of regulation are ultimately passed on to the consumer in the form of increased prices or to the shareholder in the form of diminished equity. The full \$2.6 billion passed on to the consumer would, on average, raise prices of the products of the participating companies by 1.1 percent. Thus, these costs add to inflation and adversely affect the ability of U.S. industry to compete at home and abroad.

Conclusions. While the Business Roundtable study has limitations—the key one being that it does not measure indirect regulatory costs—it makes three major contributions. First, its findings, both the general observations and the detailed statistics in the 500-page appendix, can help identify those regulations that need further scrutiny and possible reform.

Second, the study identifies some of the attributes of regulations that impose high costs.

Table 1
CALCULATION OF INCREMENTAL COST

Steps	Example
Company identifies an action taken to comply with a specific regulation.	Installation of waste-water pretreatment system to remove 99% of pollutants in compliance with Title 40 CFR, Chapter 1, Part 128.
Would action have been taken otherwise?	Pretreatment system without Title 40 would have been designed to remove 95% of pollutants.
What was the cost of the action?	\$1,200,000 (from fixed-asset ledger data).
How much would the action that would have been taken in the absence of regulation have cost?	\$800,000 (the cost of installing a 95% system, updated from earlier fixed-asset data).
What was the incremental cost?	\$1,200,000-\$800,000=\$400,000.

Table 2
INCREMENTAL COSTS
(in Millions)

Area	Operating & Admin.	Capital	Product	R&D	Total
EPA	623	765	555	75	2,018
EEO	209	8	—	—	217
OSHA	103	68	2	11	184
DOE	70	28	10	8	116
ERISA	61	—	—	—	61
FTC	23	1	—	2	26
Total	1,089	870	567	96	2,622

These attributes include requiring new equipment or retrofitting, specifying standards that cannot be met with existing technology, prescribing predetermined compliance methods or engineering solutions that leave no flexibility for other ways of reaching the same goal, forcing recurring operating, maintenance, or monitoring costs, and setting unclear rules or changing rules in midstream.

Third, and perhaps most important, the study demonstrates that it is possible to apply a uniform and credible method for determining incremental regulatory costs to a large number of companies in a wide variety of industries. The challenge now is to extend the use of this methodology in order to improve our understanding of a significant part of the regulatory burden. ■