

SCIENCE

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EDITORIAL

Economic Impact Report

The Environmental Impact Report is now an accepted mechanism of government, and it needs a companion requirement, which we shall call, for simplicity, the "Economic Impact Report." Today, universities, hospitals, libraries, and local governments frequently go through long and costly procedures to prove that the construction of a new hospital wing or a new university building will not have a deleterious environmental impact. However, federal and state legislators put no such restraint on themselves to avoid passing laws whose intent sounds benign but whose economic impact is severe. One of these impacts has been on basic research, because laws relating to disposal of radioactive waste, animal care, toxic waste disposal, and so forth, have imposed enormous indirect costs on researchers. The Congress of the United States frequently imposes such regulatory procedures, many of them valuable but others involving ineffective paperwork and expense, and blandly looks the other way while universities and researchers are expected to pick up the costs. Basic research budgets, both in the United States and abroad, have failed to keep up with the cost of living, or the cost of increased taxation, and now they are being further reduced because regulations are imposed without concomitant compensation.

What needs to be done? The ideal solution is for legislatures to calculate and provide funds for the economic impact of any new regulations at the time of the legislation. That would have two beneficial effects. First, a regulatory law would not be a de facto cut in other services, whether basic research, the cost of transportation, the cost of hospital care, or a university education. Second, such calculations would cause legislators to take a closer look at the efficiency of current procedures, such as animal care and waste disposal, to see how they could be improved and to provide incentives for cost-effective services. Bureaucrats abhor the absence of red tape the way nature abhors a vacuum. The vagueness of the current waste disposal laws to university and city administrations is usually carried out by newly created bureaucracies, frequently manned by lawyers and accountants who cannot tell the difference between ozone and chloroform, who then promulgate procedures whose costs come out of the basic research budget or the price of your medical bill or of your new car.

An economic impact report will be opposed by those who hate to plan ahead or love to act in the absence of knowledge. Far easier is it to treat rats in research as an endangered and lovable species (when animal rights groups clamor) than to weigh the needs of research and the difficulties rats pose to farmers and in city ghettos. Far easier is it to treat benzene in a test tube as a dangerous carcinogen (when environmentalists clamor) than to face the fact that a laboratory is not an oil refinery. An economic impact report will require the kind of careful thought that legislation rarely gets and desperately needs in the present political world.

Since congressional reform is glacially slow, Congress should at least allow the administrative agencies to make an administrative adjustment in overhead rates to allow for new regulatory rules. In the case of research, universities should be allowed to raise their overhead rates based on appropriate calculations, and some reasonable but small fraction could come from direct costs. That would give both investigators and the institution appropriate incentives to keep costs at a minimum. It would be understood that bureaucratic decisions would be modified, on the basis of actual experience. Once such an objective assignment of costs became the custom, the benefits of university or institute directors working directly with scientists might have many other beneficial effects. Scientists are frequently too busy to bother to sit down with administrators and discuss a problem before new rules are activated but then complain loudly about the ineptitude of administrators when the costs are transferred to them. Administrators, on their parts, who must deal with a broad picture, are sometimes impatient with scientists who are involved in "little details." But those little details frequently involve scientific expertise and scientific attitudes that may determine the success or failure of the program. The new approach would be valuable in hospitals, schools, and analogous institutions. The approach of an economic impact factor might mean that we have fewer laws, but the ones enacted would be more thoroughly thought out. It would also allow the legislators to appear as leaders in practicing what they preach.

Daniel E. Koshland, Jr.