PRODUCT SAFETY REGULATIONS AND PRODUCT LIABILITY ACTIONS:
AN EMPIRICAL ANALYSIS

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Abstract

This paper examines the relationship between product safety regulations and product liability actions. It employes regression analysis to test the hypothesis that an increase in product safety regulations has been accompanied by a corresponding increase in product liability actions. Using linear regression equations of the form y = m + bx, two regressions were run. In both sets of regression the independent variable was found to explain a major part of the variance in the dependent variable.

Introduction

Imposition of the socially desirable requirements on business through the regulatory process is thought beneficial to the consumer. However, the fact that regulation of private industry is not free, or even low-cost, has become increasingly evident. Rising prices of consumer goods and services, declines in worker productivity, and a reduction in the rate of technological innovation have made consumers, business, and government administrators aware of the mounting cost of regulation.

Increased costs of compliance with the social regulations have compelled business to determine the marginal cost and marginal benefit of compliance. Historically, regulators (including legislators) have presumed the benefits of regulation to exceed the social cost. Underlying economic (anti-trust and rate-setting) regulation has been the thesis that corporate business exercises concentrated economic power contrary to the public interest. This economic power enables business to wield disproportionate political influence, exploit consumers, and degrade the environment and quality of life.

Regulation has multiple goals. The economic objectives are to minimize social and private costs, to improve effeciency as rapidly as possible, and to maximize technological innovation. Political aims are to insure freedom and due process. Social goals involved the enhancement of the quality of life for all Americans. Achievement of these goals requires compromise and balance. The difficulty of achieving the optimum tradeoff among these regulatory aims is seen in product safety regulation and its impact on product liability actions.

Methodology

To test the hypothesis that an increase in product safety regulations has been accompanied by a corresponding increase in product liability actions, regression analysis was employed. It was assumed that, if there were a relationship, it would be linear over the relevant period because (on the basis of exploratory investigation) variance in product liability actions would be largely explained by increases in product safety regulation.

Using a prepared computer program, the authors plotted correlation matrices for several kinds of data. Product safety action data were taken from the annual reports of the Federal Trade Commission, the Consumer Product Safety Commission, and the National Highway Traffic Safety Administration. Product liability case data were from the Federal Courts, State of Connecticut courts and from eight other states as presented in the report of the Interagency Task Force on Product Liability.

The period included in the analysis was 1973 through 1980. More observations would have been desirable to determine whether the relationships were linear, but such data were not available. However, non-linear forms of the regressions were fitted (logarithmic, and square roots). They were rejected because the R squares obtained were lower than were derived in the linear form. Calculations of the Federal Trade Commission's and the Consumer Product Safety Commission's costs per action were made by deriving the number of product safety actions undertaken by each agency from 1978 through 1981 (estimated), determining a weighted mean, and computing the ratio of that mean to total program cost for each agency over the same period.

Regression 1 represented relationship between Total Agency Actions and Product Liability Cases. With an R^2 of .482 and a significance of .0017, it is clear that product safety regulations are contributing substantially to increases in product liability cases.

Regression 2 represented Total Product Liability Cases and Product Recalls. Consistent with what one would expect, the R^2 which was 0.873, was highly significant, 0.00034.

In both regressions, the independent variable explains a major part of the variance in the dependent variable. Whether the results suggest that specific agency actions are the significant variable, or whether it is the general policy impression created by them is not clear. It is conceivable that an impression of vigorous enforcement creates a climate in which potential claimants think there is a greater likelihood of winning large damage awards. Increases in liability suits may stimulate regulators to more vigorous enforcement. Some of the data imply that, as these efforts are effective, the volume of suits for specific products declines.

Conclusions

The major policy implication in this analysis is the need to move from product safety-imperative decision-making to cost-benefit decision-making at the Consumer Product Safety Commission and at the Federal Trade Commission.

The typical FTC consumer protection action costs almost $100,000 and may be expected to increase from inflation, if nothing else. It is reasonable to assume that a point of elasticity will be reached.

When regulatory costs and litigation costs are joined, their justification requires substantial benefits. As product safety costs continue to rise, the historic presumption that benefits (economic and non-economic) are worth any cost for their attainment will come under more intense scrutiny.

References will be furnished upon request.