Viewpoint

Paul Johnson

The Perils of Risk Avoidance

THE CENTRAL WEAKNESS of the present-day British economy is the huge range of legal immunities enjoyed by trade unions. The central weakness of the U.S. economy is the vast and growing power of the regulatory agency and the recklessness with which that power is being employed in the pursuit of a risk-free society. At first glance these two weaknesses seem very different, but in economic terms they have the same consequences: Both raise the unit cost of production. Both reduce or eliminate growth in productivity. Both discourage or penalize innovation and make investment unrewarding. And, not least important, both consume increasing amounts of time and energy, diverting management from its real business. In short, both are Old Men of the Sea, clinging with vise-like grip around the neck of Sinbad the Capitalist. And these are not static relationships. In both cases the Old Man is getting heavier and Sinbad weaker.

These weaknesses are difficult to attack, because they spring from social impulses that are themselves beneficent and necessary. No one wants to destroy trade unions. No one denies that government must play a certain role in regulating industry. It is all a matter of balance, and the art of politics is knowing when and how to adjust the balance. In Britain, there is now a consensus that the legal privileges of the unions are too great, and the Thatcher government is attempting to reduce them. In the United States, I suggest, there is growing evidence that the regulation of industry, especially in the health, safety, and environment fields, is excessive and dangerous (while often ineffective) and that the need to redress the balance is urgent.

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First, let me make it clear that I am a strong supporter of government safety and anti-pollution programs. I yield to none in my admiration of Rachel Carson, whose splendid articles in the *New Yorker* first drew public attention to the way in which we were poisoning our planet. Anti-pollution measures can be cheap and astonishingly successful over a period. In Britain, at comparatively small cost and without inflicting any damage on the economy, we have virtually eliminated the Dickens-style London pea-soup fog; and the Thames is now cleaner than it was in the time of Shakespeare. But it is a fact of life that in the field of safety and pollution, the law of diminishing returns operates with peculiar ferocity. It is an area where absolute standards are often impossible and where the attempt to achieve them quickly becomes intolerably expensive.

Dangers of Absolutism

Unfortunately, absolutism has become the hallmark of the U.S. approach toward pollution and risk control. Nor is this surprising. One of the keys to understanding the twentieth century is to identify the beneficiaries of the decline in formal religion. The religious impulse—with all the excesses of zealotry and intolerance it can produce—remains powerful, but expresses itself in secular substitutes. None is more attractive, especially in the advanced Western countries and above all in the United States, than the creed of Safety First. Uniting as it does a wide range of health and consumer pressure groups, animated as it is by a quasi-

mystical vision of total purity, it provides an unrivaled emotional outlet for educated, middle-class opinion. It has become the leading progressive good cause of our day, combining fear of technology, hatred of capitalism (especially the giant corporation), the itch to interfere, and the eternal nanny-principle. Inevitably, it has focused most sharply on two subjects where the maximum of public apprehension coincides with the minimum of public understanding—nuclear power and carcinogens. Nuclear power is the new Sin against the Holy Ghost—radiating evil, as it were, over the whole planet and, like Original Sin, even infecting future generations. The carcinogen is the universal, ubiquitous, omnipresent spirit of Satan, threatening to poison all with its corruption. There can be no compromise with these sins: they must be rooted out, once and forever.

The safety-first lobby has succeeded in converting a large segment of congressional and governmental opinion to its absolutist approach. The outstanding example is the Federal Water Pollution Control Amendments of 1972 which, in a *fiat* unmatched since Genesis, ordered that there be "zero discharge" of pollutants into streams and lakes by 1985. This strikingly illustrates the law of diminishing returns. As Martin J. Bailey points out (*Reducing Risks to Life*), the cost of meeting just the "interim standards" laid down for 1983 has been estimated at $468 billion, along with operating costs of some $150 billion a year. And the capital costs of even approaching the full statutory goal would be in excess of the nation's entire gross national product. Absolutism in the carcinogen field leads to the same astronomical outlays. The Occupational Safety and Health Administration (OSHA), which so far has proposed regulations on only a few carcinogens, recently speculated that it would issue new standards on 571 of the 2,400 suspect carcinogens it has identified. According to James C. Miller III, the total annual cost of the seven OSHA carcinogen regulations for which estimates are available is $96 million each. Covering an additional 571 suspected carcinogens at a similar annual cost would consume $55 billion a year.

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Hence, if we total up the cost of absolutist schemes for just two areas of risk control, water pollution and carcinogens in the workplace, we come up with a price tag of $205 billion a year. To pay for this huge increase in expenditure, equivalent to roughly 10 percent of a gross national product of $2 trillion, American living standards would have to be reduced significantly. Yet the increase in life expectancy over the past 150 years reflects, and in general is explained by, the increase in living standards. If living standards are substantially reduced over a period, life expectancy must decline. Thus the quest for absolute safety from pollution and carcinogens is self-defeating.

The Custer Syndrome

This simple calculation points to the irrational basis on which much regulatory legislation is enacted and enforced. The danger is that the Gadarene swine, in fleeing the devils, will hurl themselves over the cliff. There are two particular forms of irrationality we should guard against. The first is what I call the General Custer Syndrome: take action at any cost, do it as quickly as possible, and leave the thinking till afterwards. Most anti-risk measures passed by Congress in the 1970s fall into this category, since they make no allowance for the cost of enforcement and arouse correspondingly unrealistic expectations among those who expect to benefit from them. The syndrome is summed up in a statement by a representative of the oil and chemical workers union, Anthony Mazzocchi: "Congress mandated very specifically that the workplace should be free of hazards. It didn't say the workplace should be free from hazards only if the employer could afford it, or only if it wouldn't cost him too much money" (*Washington Post*, May 12, 1977). But of course the only workplace totally free of hazards is one without workers—and if compliance with

absolutist regulations leads to bankruptcy, that will indeed be the end result. Unemployed workers are, in terms of the congressional enactment, 100 percent hazard-free.

The General Custer Syndrome takes its most common form in the disparaging of cost-benefit analysis. A leading safety-firster, Mark Green of Congress Watch, argues that "given the state of the economic art, mathematical cost-benefit analyses are about as neutral as voter literacy tests in the old South" (*Washington Post*, January 21, 1979). This hostility is shared by some politicians prominent in safety legislation. Thus a 1976 report of the Subcommittee on Oversight and Investigation of the House Committee on Interstate and Foreign Commerce argued that, in risk control, cost-benefit analysis creates "a bias against the public interest" and causes delay in the implementation of regulatory policies. But surely such analysis cannot be against the public interest if it shows that the taxpayer is getting poor value for his money; and if it delays badly formulated and ill-considered regulations, so much the better.

The value of cost-benefit analysis—as well as of its cousin, cost-effectiveness analysis—is that it injects rational calculation into a highly emotional subject. Properly conducted, it can give you the net cost or net benefit of what you are proposing to do, and tell you approximately how many lives (if any) it will save. Equally important, it offers you a range of alternatives. Without stringent analysis, nobody knows whether the costs imposed by regulatory programs are money well spent. Calculations of the cost per-life-saved by such activities vary enormously. Estimates included in a recent compilation by Bailey ranged from $37,500 per life saved for the low-cost program of traffic safety and $240,000–$1.9 million for lawn-mower safety standards (as proposed) on up to $4.5 million–158 million for the coke-oven emission standards and $2 million–625 million for limiting occupational exposure to acrylonitrile. Given these ranges of magnitude, the opportunities for devising more efficient approaches—and thus of saving more lives—are enormous. Bailey takes the hypothetical example of a $20 billion expenditure on health and safety programs and shows that, by cutting down inefficient programs and reinforcing successful ones, as many as 190,000 additional lives could be saved for the same total cost. Given that resources are limited and that safety programs are rapidly hitting budgetary ceilings, rigorous analysis of costs and benefits is essential. Yet it is ignored by most existing legislation and by the practice of the enforcement agencies.

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The Howard Hughes Syndrome

I call the second form of irrationality the Howard Hughes Syndrome. The late Mr. Hughes had some scientific knowledge and used it—or misused it—in an attempt to insulate himself completely from all contagious infection. As a result, he spent the last years of his life almost completely isolated, much of the time stark naked. All this took place at enormous cost, and Mr. Hughes ended up dead just like anybody else—indeed, it is even possible that he died of self-inflicted malnutrition.

The approach of Congress, and still more of the regulatory agencies, to the problem of risk often exhibits the Howard Hughes Syndrome. Carcinogen regulation is a case in point. Statutes for controlling carcinogen exposure are typically animated by the ideal of absolute safety at any cost. And agency enforcement, though theoretically based on the results of scientific experiments, generally reflects an emotional and selective use of science—the purpose being to impose upon laboratory research a degree of certitude and a tempo of certification wholly alien to scientific method. OSHA, in its generic carcinogen policy issued on January 22, 1980, has streamlined its process for regulating carcinogens by the simple device of arbitrarily excluding from future rulemakings debate on many of the basic scientific issues involved.

In an important article in *Science* (April 18, 1980), Dr. Gio Batta Gori, then deputy direc-

tor of the Division of Cancer Cause and Prevention, National Cancer Institute, shows that the exigencies of regulatory agencies have often forced scientists "to produce clear-cut statements that, however convenient for the regulator, may not have scientific justification." As a result, tests have been loaded to produce a positive finding of carcinogenicity. He writes: "Current guidelines for the testing of carcinogens frequently introduce deliberate bias in order to enhance the probability of a positive response" and "ignore a number of sources of variability that cannot be controlled or are difficult to control with available technology." A laboratory scientist—asked to swear, his hand on his heart, that a substance is absolutely harmless—is bound to answer no; and if he devises a series of tests to determine whether there is risk, however minimal, he is virtually certain to find it. Does that mean the substance should be banned? The regulator says yes. The scientist says not necessarily—for we may be protected by no-effect thresholds. As Dr. Gori points out, "the probable occurrence of thresholds has usually been ignored, and some regulatory guidelines specifically prevent considering them." The regulator, in his absolutist enthusiasm, is thus jostling the scientist into a nonscientific posture. Dr. Gori asks for official recognition "that risk is an unavoidable element of life and the common welfare, that all human lives cannot be preserved at all costs, and that carcinogenicity tests in animals cannot be reliable quantitative models of human risks."

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By ignoring the true principles on which scientific research is conducted, which always involve a careful balance of probabilities, the regulators may be saddling us all with hideously expensive and fundamentally unnecessary policies. Worse: they may be costing lives instead of saving them. The approach of the Food and Drug Administration (FDA) to the marketing of new drugs looks like a case of the Howard Hughes Syndrome. As a result of the 1962 drug amendments and implementing regulations, the number of new chemical entities reaching the U.S. market has been reduced by more than half. It is probably true that the efficacy requirements imposed by the 1962 law have prevented the marketing of some questionably effective drugs; it is at least as likely that doctors have been forced to prescribe relatively ineffective drugs that would have been replaced by new and more effective drugs but for the 1962 law. William Wardell of the University of Rochester Medical Center reports that the unavailability of the beta-blocker alprenolol in the U.S. market, a result of regulatory stringencies, is costing Americans 10,000 coronary deaths a year (*Regulation*, September/October 1979). Here again, the absolutism of the regulator, to whom all things are strident black or white, sinful or virtuous, is in conflict with the scientific approach of balancing probabilities and calculating the varieties of risk.

Zeal versus Reason

It is perhaps natural that America, whose public life has always sought to express absolute moral ideals, should bring to the regulation of risk a quasi-religious zeal and intransigence. This has considerable value in the first phase of a reforming program, the value of impressing on all concerned the importance and urgency of the issue. But there comes a time when rational computation must replace primitive zealotry. In risk control, the best is the enemy of the good. Given that resources are limited, control must be selective. As my old political mentor Pierre Mendès-France used to say, *Gouverner, c'est choisir.* The wisdom of government usually lies not in insisting on the ideal but in choosing the lesser evil. As citizens we have different evaluations of the hazards that threaten us, and government ought to be an act of arbitration between these conflicting claims. It is significant that those who are most vociferous in recommending to us an absolutist control of carcinogens and nuclear risk are silent on the matter of fallout shelters and posi-

tively hostile toward the provision of an adequate military deterrent, another form of risk control. In risk evaluation, one man's prudence is another man's paranoia.

The truth is that the human race maintains and improves its position by a sensible calculation of risks. There is no such thing as a no-risk society. The very act of seeking to eliminate risk often produces new and unsuspected hazards, which may be far greater than those sought to be avoided. America's obsession with health and safety problems—and the translation of that obsession into absolutist legislation and inflexible enforcement—could create risks of an altogether greater magnitude if it places unacceptable burdens on the U.S. productive system. It is already arguable that government regulation is the main factor in the virtually nil growth of productivity which is by far the most worrisome feature of the U.S. economy. The risk posed by a collapse of Sinbad the Capitalist is infinitely more serious than any conceivable volume of pollution.

Safety Lies in Risk

Indeed, we must get into our heads that the maintenance of a growth economy is far and away the best general insurance against risks of all kinds. After all, the rise in real incomes that made possible the extension of life expectancy during the nineteenth and twentieth centuries was the direct result of the creation of industrial capitalism, a productive system based, and essentially based, on risk-taking. You could say that the Industrial Revolution itself was one gigantic risk. It took place on very narrow profit margins which would have been eliminated by even a fraction of the health and safety regulations now imposed by law. If we had had Naderism in the eighteenth century, the Industrial Revolution could not possibly have happened. A demographic catastrophe would then have followed, and we would still be living—if we were lucky—at eighteenth century rates of real wages and enjoying eighteenth century standards of health care and, not least, eighteenth century levels of pollution. (If you want to see what those were like, visit the slums of Calcutta or Djakarta.)

Although it is common to describe man as a tool-making animal, I think a broader and more satisfactory description would be a risk-taking animal. Accepting risks is part of his propensity to calculate and his willingness to gamble on long-term results. He has constantly enlarged the horizons of his experience—and so ensured the survival and growth of his species—by taking risks with nature. It makes me smile that some of the most ardent members of the safety-first brigade call themselves Friends of the Earth, as though the earth were

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an innocent and defenseless living personality, to be protected from rape and despoilation by humans. I imagine such people lead sheltered, stay-at-home lives, for anyone who has traveled the globe and seen nature in all its implacable, though inanimate, hostility, comes to see man's slow but sure conquest of his environment as the most enduring triumph of the human spirit.

I am reminded of some of the earliest hieroglyphic inscriptions of ancient Egypt, which tell us that the stones on which they were carved, being very rare and beautiful, were obtained by long and arduous journeys across the pitiless desert, in which many died. The Egyptians were not reckless: they did their best to reduce losses by establishing water deposits on the route or by digging wells, often to an extraordinary depth. But the casualties they nonetheless suffered did not deter them from the pursuit of the beauty that for them made life worth living.

The whole of our civilization in its spiritual as well as its material aspects rests upon an endless accumulation of risks courageously taken by successive generations. We enjoy today—in our high standard of living, in our unthinking acceptance of mechanical marvels—the advantages paid for by the risks taken by our forebears. We repay our debt to the species by taking risks on behalf of our progeny. Calculating risks is common sense. But seeking to eliminate them altogether is impossible—and the attempt to do so is ignoble. Ironically, it is also very dangerous. Not to take risks is the biggest risk of all. ■