# **Chapter 8**

# Impediments to Growth Regulation and Government Ownership

There is a great deal of ruin in a nation.

Adam Smith\*

It is a serious mistake to compare imperfect markets with perfect legislative systems. The dangers of excess have to be taken into account in both cases, and these are always far greater with legislation than with markets, for the state is a <u>single</u> entity that wields monopoly power, for ill as well as good.

Richard A. Epstein

I suspect that both public regulation and public monopoly are likely to be less responsive ... to be less readily capable ... than private monopoly.

Milton Friedman

A private firm that makes a serious blunder may go out of business. A government agency is likely to get a bigger budget.

Milton and Rose Friedman

Few would argue that economic growth is the sole aim of society or, as conventionally measured, it is always an unmitigated blessing. Development can brings with it a degradation of the environment and the narrowing of ecological diversity. Certain industries, although not many, are natural monopolies or at best unstable oligopolies feared by the public as taking advantage of their privileged position. People often want the government to banish risks from new products and dangers in the workplace. All of these desires and the political pressures they create lie behind the humongous extension of governmental regulatory programs.

# **Regulation or State Ownership**

In response, governments have nationalized or founded industries with perceived market failures. Railroads, for example, are regulated in the United States and government owned in much of the rest of the world. The various states in America as well as the federal government have regulated telephone service since early in this century while in the rest of the world the government provides the service — often very badly. For many purposes,

<sup>\*</sup> Correspondence of Sir John Sinclair (1831), i.390-91.

states have viewed public ownership and regulation as alternative strategies to control specific industries. The economic results, however, are rarely the same.

Pressures to control transportation and communication enterprises as well as public utilities existed in much of the rest of the world but, probably because of stronger central governments than that of the United States at the time, public ownership displaced regulation. The French and German governments, for example, built most of the railroads in those nations. In the United States of the nineteenth century, one of the obstacles to the government's owning and operating a railroad, or almost any major business, was the absence of any provision in the Constitution that would explicitly permit it. That basic document does specifically authorize the government to provide for mail service and for a sound currency, provisions that clearly make government ownership of the post office or a central bank constitutional. On the other hand, the Constitution does provide for the federal government to regulate interstate commerce, hence the commission by that name.

Modern societies have treated government ownership and regulation as substitutes, with the more common approach being public enterprises. Given the constitutional limitations — not nearly as binding under current Supreme Court interpretations as they were in the 19th century — regulation has been the preferred device in the U.S. for controlling industry. It is far from coincidental that America has regulated those industries typically government owned abroad — railroads, airlines, power companies, and water companies.

Under the less stringent interpretations of the Constitution common in the second half of the twentieth century, the federal government has acquired ownership of a freight railroad (Conrail) and railroad passenger transportation (Amtrak). In both cases, the government took possession of money losing activities to prevent their being abandoned or significantly curtailed. The Reagan Administration successfully privatized Conrail; but Amtrak, which few believe can operate without subsidies, remains in Washington's hands. With the recent exception of Japan, the bureaucrats of virtually every major country run and the taxpayers pay most of the cost of rail passenger transportation. The almost universal rationale for the public to subsidize passenger transportation is that the substitution of rail for auto or air travel alleviates congestion and pollution. In other words, it is argued, externalities warrant taxpayers funds to preserve a form of transportation that cannot survive in the free market.

Other recent examples of U.S. Government owned commercial activities are typically related to facilities built for the nation's defense, mainly during World War II. During the 1940s, the federal government constructed and operated aluminum plants which it sold successfully shortly after the war. Uranium enrichment plants and a helium plant,

however, remain in Washington's hands, notwithstanding efforts by several administrations to privatize them. Resistance to selling those operations stems mainly from a Congressional desire to maintain the *status quo* and to preserve the jobs involved. Privatization might mean the abandonment of some plants in key Congressional districts.

#### **Government Involvement in the Market**

The government interferes or involves itself in the market in a variety of ways. The type of intervention may or may not diminish innovation, invention and improvements in productivity. The previous chapter stressed the difference between policies that affect the level of income and policies that affect the rate of change of income. Regulatory measures can produce both effects; that is increased controls can shave the earnings available to a country or they can undermine the ability of the market to spawn innovations and new technology. For example, if officials mandate that all firms must provide free dental care, pay time-and-a-half for working more than 30 hours per week, or offer every employee six weeks of paid vacation, costs of doing business will rise and workers' cash incomes will fall — they may, of course, prefer or not prefer the new benefits to the loss of pay. If employees actually value these fringe benefits over cash income, it would be surprising that firms would not have offered them voluntarily. In any case, these regulations may depress income but have little impact on the rate of economic growth.

On the other hand, government intervention that undermines research and development, innovation or the invention of new products would curb economic growth and progress. For example, FDA rules that require extensive testing for both safety and effectiveness of new pharmaceutical substances lead to long regulatory reviews and pare the profitability and economic feasibility of the development of new drugs. Limits on the price of pharmaceutical products may also depress the returns from innovation. These rules would not only diminish current earnings but, by making research more expensive, would curtail investment in finding new ways to cure old diseases. In other words, these regulations would depress the rate of innovation, growth, and ultimately progress.

One of the ways the state intervenes in the market is through the creation of a publicly owned enterprise. In this case the operation is likely to be inefficient and costly to the economy but not destructive of a market system *per se*. Nor are government enterprises likely, in themselves, to shave incentives for innovation, unless the state grants monopoly status to its creation. Unfortunately, state officials usually bestow on the public company exclusive rights, thus undermining economic efficiency and progress.

The second and the most damaging interference stems from government controls over rates, prices, entry, and other limits to the free market. These steps frequently lead to non-market clearing situations, often with state mandated monopolies — sometimes

governmental, sometimes private — or result in losses that require the taxpayer to provide subsidies. Bureaucratic fixing of prices and control of entry is probably much more damaging to the function of a market than simply setting up a public enterprise, provided that any taxpayer-owned firm must compete in a free market with those that are private. Controls on what entrepreneurs can charge may limit investment and thereby diminish the introduction of new technologies necessary to generate growth.

A third form of intervention, not inherently bad, may simply raise costs: the regulation of what is produced or how it is produced. For example, a rule limiting the pounds of sulfur dioxide that can be emitted in production or setting certain safety or environmental standards for automobiles is not innately destructive of the market. It may raise prices; it may or may not yield benefits in excess of costs — that must be independently determined. Given the rules on how a product is to be manufactured or what its characteristics must include, however, the market can still flourish and competition can take place. These rules, however, may restrict the possibilities for innovation in either production or the product, thus slowing the rate of change and ultimately progress.

If governments regulate extensively, imposing controls that diminish innovation or abridge the ability of the market to function, they will curtail growth rates. The experience of African socialist countries, of Burma, and of all the communist and ex-communist countries demonstrates that excessive regulation, government ownership, and government programs to control major portions of the economy have significant detrimental affects on economic progress and human well-being.

Even intervention far short of major socialistic programs can have significant negative effects on economic growth. Latin American policies with their emphasis on protectionism, government fostered businesses and monopolies, heavy regulation, state ownership of many enterprises — typically as monopolies — and redistributive programs designed to benefit the urban poor have resulted in slow growth and unstable governments. In *The Other Path*, Hernando de Soto describes the federal government in Peru, which has granted monopolies to certain favored groups. Establishing a new business lawfully is virtually hopeless. Entering the transportation industries is impossible; opening a new market *legally* would take 17 years (144). What is called private enterprise resembles more the mercantilism of the 18th century, providing few of the benefits of the marketplace.

#### **Benefits from Regulation**

Defenders of regulation usually assert that government intervention is necessary to correct a market failure. The industry may be a natural monopoly; firms may be spawning externalities, such as toxic wastes, air pollution, or contaminated water; unregulated activities may be endangering innocent third parties; companies may be failing to provide

information or may be misleading the public about their products or activities. Supporters of government control have justified regulation on the basis of all of these externalities.

Market failure as well as government failure does exist. The most obvious form of unwanted externalities pertains to environmental degradation. Businesses, individuals, and government entities have little incentive to care for resources which they neither own nor control. Thus, in a classic example, factories allow smoke and toxic emissions to be released into the atmosphere since the harm from any single factory's emissions is likely to be very small. Farmers, cities, and individuals dump wastes into rivers, streams, and lakes. The environment can process a certain amount of such material, but overloading the atmosphere or a body of water can degrade the habitat severely.

Free market environmentalists, such as Fred Smith of the Competitive Enterprise Institute, like to stress that property rights could solve most if not all pollution problems. They are certainly correct in that property rights in the environment or in various endangered species would solve many of the difficulties. Private possession of the African elephant, for example, would provide incentives to protect and breed the species. Public ownership amounts to no ownership with the consequences that those large mammals are endangered.

Unfortunately establishing property rights in the air over Los Angeles, for example, appears to be difficult if not impossible. There are too many sources of pollutants and too many affected by the smog to settle the issue either through private law suits or through a formal system of property rights. Economists, such as Robert Hahn (1989a, 1989b), have proposed a system of marketable pollution entitlements which authorize firms to emit a specified maximum pounds of pollutants or to sell the authorization to others. His scheme would establish a quasi–market in specified effluents.

Tradable rights are inapplicable to auto—exhaust, which in many cities contributes the major portion of the contaminants leading to smog. Government regulations, perhaps coupled with appropriate taxes as discussed below, appear to be the only way to limit auto emissions. The erosion of the ozone layer, assuming that cloroflorocarbons are dissolving it, cannot be dealt with simply by establishing property rights in the stratosphere. Should global warming turn out to be a real phenomenon caused by mankind's production of greenhouse gases, then international efforts will be needed to limit climate change.

Environmental regulation while sometimes necessary has been unduly costly and inefficient. In the previous chapter, I discussed the 1970 amendments to the Clean Air Act that prompted power companies to burn high sulfur coal from the Middle West instead of utilizing the much cleaner fuel from Wyoming. In effect, the law levied a large tax on the American public with little if any gain in terms of cleaner air.

Congress continues to impose severe and costly restrictions in the name of cleaning the atmosphere. The 1990 amendments to the Clean Air Act require further stringent controls on tail-pipe emissions. Already 95 percent of the pollutants must be removed in new cars. Robert Crandall of The Brookings Institution estimates (1990: 58) that the cost of these new regulations on automobiles will be in the order of \$1,500 to \$2,000 per vehicle but "will have only a small effect on urban smog in the dirtiest cities, such as Los Angeles or Houston."

A much cheaper method of reducing pollution in urban areas would be to tax cars according to their exhaust. With modern technology it is possible for meters on the street to measure the emissions from passing vehicles or to require periodic testing of vehicles. In either case, fees could be levied according to the wastes released into the atmosphere. Most auto pollution comes from only a small number of older and dirtier clunkers. This proposal would force the rapid scrapping of such vehicles and would clean the air more effectively than simply requiring new cars to emit less noxious exhaust. The current policy of forcing expensive tail-pipe controls on new autos makes such vehicles much more expensive and results in people's preserving longer their older, more polluting, and less safe gas guzzlers.

Current environmental policy is often absolutist — costs and economic feasibility are ignored. The Delaney amendment, for example, forbids any traces in food, no matter how small, of any substance found to cause cancer in animals. Rigidly enforced this provision would effectively ban most insecticides, fungicides, and herbicides, increasing sharply the cost of produce. As an editorial in *Science* stressed (Abelson 1993b): "Increased costs of vegetables and fruit would deleteriously affect the health of low-income people. Benefits to public health would be negligible." In the 1950s when Congress enacted this rule, technology possessed only a limited ability to measure trace amounts. Now with vastly improved detection techniques, the courts and environmentalists are interpreting the law as prohibiting parts per billion. The costs of removing these minute trace elements is huge and the benefits, if any, questionable. Professor of Biology Bruce Ames of the University of California at Berkeley and L.S. Gold (1990) have calculated that people absorb 10,000 times as much natural pesticide — produced by plants themselves as synthetic. Two British researchers have estimated (Richman 1992: 95) that fewer than 9 percent of all cancers can be attributed to pollution in the environment, workplace or food chain.

Nevertheless, environmental regulation is necessary; but, like most other government interventions, narrow economic interest groups typically "capture" the process. Benefits to the general public from the controls may be small or non-existent. Excessive environmental zeal can significantly diminish public well-being. The process of reducing

pollution often levies a large tax on consumers, making them poorer, so the benefits of these government restrictions must be weighed against the lowering of real income. Poorer means less healthy, shorter life spans, and also a less clean habitat. Poorer also means less progress.

Regulation of monopoly can conceivably produce gains to consumers that exceed losses to producers and perhaps other consumers. The local power company, which monopolizes the sale of electricity, can charge far above competitive prices without fear of competition. Regulation conceivably could force rates to be more in line with costs. In practice, however, utilities are often able to manipulate the system to secure higher than normal profits at the cost of higher than normal expenses. Whether there is a social gain from such controls is still an unanswered question. The public and politicians, however, are unwilling to tolerate a totally unregulated monopoly even if there were no loss to consumers or the public from doing so.

Safety regulations may also produce gains, albeit with a cost that frequently exceeds the gain. According to Louis Richman of *Fortune* (1992: 96), the cost of saving a life with mandatory seat belts is under \$400,000 — obviously the regulation is worthwhile; the Environmental Protection Agency's (EPA) disposal standards for uranium mine wastes require spending \$69 million for each death prevented — taxpayers or consumers could no doubt find preferable uses for these resources. The Occupational Safety and Health Administration (OSHA) rules restricting worker exposure to asbestos saves lives at an outlay per head of \$117 million; while OSHA's requirements aimed at preventing worker exposure to formaldehyde cost \$94 *billion* per life saved. These last two regulatory programs are extraordinarily wasteful. The public could better use these vast sums to provide other benefits, such as improved roads, which could save many more lives.

# **Rationale for Regulation**

As mentioned above, regulation is typically justified by claims of market failures. Although, few politicians will admit to the existence of government failures, they often contend that private enterprise is actually hurting the public in order to justify intervention in the economy. Responding to the pressure of narrow interest groups, politicians assert that offending industries are failing to satisfy tolerably public needs by not providing the proper services at the appropriate prices. Consequently the administration needs to involve itself in the operation of the industry. In fact these policies are often dictated, at least in part, by the regulated companies themselves, which have found that state oversight brings protection from competitors. Government control can bring a combination of the easy life, assured profits, and a freedom from competition.

## **Industry Support for State Control**

Many state supervised industries show the same patterns. The electrical utility industry is usually considered an example, *par excellence*, of a natural monopoly. Early in its history, however, competition among generating companies operating in the same city was common. To this day, there are example of utilities offering alternative service with the benefit of lower rates for consumers (Primeaux 1975 & 1986). What is most revealing, however, is that Samuel Insull, the first head of Commonwealth Edison, the major electric utility supplying Chicago, supported strongly state oversight of electrical utilities. Regulation eliminated the possibility of new firms' competing with existing utilities.

The history of regulatory oversight of the transport industries mirrors that of state regulation of utilities. Governments around the world have supervised railroads, trucks, buses, and air travel; where these sectors remain unregulated, the public sector has nationalized them and run them as state monopolies. These controls have been of the most pernicious type — regulation of rates and entry. In the United States, which is probably typical, the railroads were initially brought under public control partially because the roads themselves found that excess capacity in the industry — a product of government subsidies — resulted in falling rates and profits.

As a consequence of federal aid for railroad construction, the system became over built, which magnified competitive pressures and often resulted in rates being bid down to levels that the industry professed barely covered operating costs without including overhead. Thus railroad owners were sympathetic to any approach that would stabilize rates at profitable levels. In addition, grain shippers, businesses in small communities served only by a single railroad, and various port authorities wanted controls over rates. A consensus emerged: railroads supported regulation in order to stabilize and raise charges on competitive routes; grain shippers and small communities demanded state intervention in order to obtain protection against monopoly pricing; port authorities lobbied for controls to reduce competition among ports for export grain. Given the public unease with the size of the railroads, this coalition secured legislation in 1887 establishing the Interstate Commerce Commission.

Other factors motivated passage of the Interstate Commerce Act. Compared to tariffs for longer and more competitive hauls, many roads did charge significantly higher rates for movements of goods when there was no effective competition, even though the traffic often moved for shorter distances on the same tracks. Nevertheless, the history of the Commission — the first national regulator of a private industry — suggests that protection of the railroads was a major factor. Several railroad barons supported federal legislation; and the president appointed an experienced rail arbiter, a man who had spent his

life attempting to facilitate price collusion among competing lines, as the first chairman of the ICC.

# **Ideological Considerations**

Prevailing views of the ability of the free market to provide adequate goods and services at reasonable prices appear to have had a major impact on the scope of government ownership/regulation. Prior to the dawning of the first truly large scale business, railroads, the public in the United States presumed that the market offered satisfactory performance. The construction of mammoth railroads, however, raised new concerns about the ability of the market to discipline those behemoths. Not only did the size of railroad corporations engender doubts about relying on competition, but railroading itself does not appear to be very competitive. The cost of entering or leaving the fixed-rail transportation market is so high that even if a railroad had a monopoly in one segment, it is improbable that the threat of a new competitor could discipline rates. The ability of the railroads to charge more for short hauls, when the carrier was the only firm, than for long hauls, which passed through the same town, demonstrated to most that competition was incapable of protecting shippers.

Few Europeans were as committed to private enterprise as Americans. The French, for example, have never trusted the virtues of competition. This may explain why so often continental governments themselves constructed and operated public utilities and transport systems that were solely the province of the private sector in the United States.

The advent of the motor truck, which provided much needed competition in the short haul market, offered an opportunity in the United States for abolishing the ICC. Instead of moving to liberalize transportation, however, railroads and their regulators agitated for state control over the new competitors. In many jurisdictions, courts interpreted public utility statutes to require that regulators oversee the motor carrier industry. In other regions, legislators wrote new laws to bring trucks and buses under public supervision. Opposition by motor carriers and shippers delayed federal controls, even though both existing railroads and the Interstate Commerce Commission lobbied hard for national oversight. Only in the mid-1930s, when the U.S. Supreme Court struck down the National Industrial Recovery Act — a law which had helped to cartelize the motor carrier industry — did large truckers support being brought under ICC control. Their support and the Depression, which induced disillusionment with the free market, led Congress to subject motor carriers and, later, water carriers to federal regulation.

Elsewhere regulation of motor transport developed for reasons similar to those in the United States. In countries where the state owned the railroad system, governments extended regulation to trucking in order to protect their investment and the earnings of the existing publicly-owned transport system. Later, with the development of air passenger service, many countries established monopoly national airlines, at least partially to limit the competition with their railroads for passengers. To this day, the government of the Federal Republic of Germany explicitly uses regulation of highway transport to shift traffic to their money losing railways.

State governments in much of the United States, being less constitutionally restrained than the federal government, treated regulation of utilities or public ownership of power companies as substitutes. Most observers believed that utilities were natural monopolies for which the unregulated market could not be relied on to maintain reasonable rates. Although most states and communities elected to regulate the privately-owned companies, quite a number did establish state- or municipally-owned power or water plants. In Europe, which was and is less committed to private enterprise, governments generally established public monopolies rather than relying on regulation of private utilities, but the motivation to control the market was similar: market forces were deemed inadequate to discipline electric and gas utilities, water suppliers, and telephone companies.

During the 1930s, when unemployment rose to about one-quarter of the labor force, the American public suffered a significant loss of faith in the market system. A major consequence of this changed attitude was an explosive growth in federal regulation. Until the Supreme Court struck it down, the government attempted to regulate all of American industry under the National Recovery Act. A belief that "cut throat" competition was prolonging the Depression led Congress to inflict federal oversight on motor carriers, water carriers, and airlines; to tighten regulation of foods and drugs; and to saddle banking, financial institutions and securities markets with additional restrictions; as well as to build the first and largest government-owned power and water facility in the world — The Tennessee Valley Authority. Other major federal water projects, such as Bonneville Power and Hoover Dam, date from this period. In other words, as support for the private market declined, the government sector increased in scope and importance.

In a nutshell, during the 1920s and 1930s the common people in the Western world lost faith in the ability of capitalism to provide goods, services, and economic justice. The Great Depression fostered the concepts of socialism and communism. Although private enterprise was permitted to continue to operate, government regulation was extended to ensure that the public was protected from the "ravages" of "greedy" capitalists.

Many intellectuals went even further and rejected totally the free enterprise system, opting for collectivism. Fabian socialists argued that public companies would be able to operate at lower costs than private firms that must earn profits. In addition, left-wing

supporters claimed that state-owned companies would be run in the interests of both consumers and workers, resulting in less labor strife and better products.

# **Regulatory Failure**

State controls often fail to bring the benefits claimed by advocates. These rules also drive up costs, and, more serious, slow innovations and obstruct progress. In addition, regulation brings with it unanticipated consequences that can burden others. Given the history of regulation, policy makers should be wary about instituting it. To support government controls is to allow hope to triumph over experience.

# **Deficiencies of Regulation**

Traditional public utility regulation attempts to force a monopoly into mimicing the free market. A competitive market drives prices down to costs; technically the competitive price is the charge that is just equal to the cost of producing the marginal unit. Rates that exceed this level create economic inefficiencies. Ideally regulators and government owned enterprises would set charges equal to the expense of producing the last piece. Unfortunately, bureaucrats inevitably blunder.

Regulation and state ownership both produce inefficiencies although of different types. For various reasons, state control of private industry usually fails to protect the public. First, the government must decide on the appropriate price the regulated firm can charge. If the bureaucrats are too generous, they are not doing their job — preventing monopoly pricing. On the other hand, if they keeps rates too low, the regulated entity may be unable to attract capital and will eventually be forced out of the industry, stranding the consumers that the regulations were designed to protect. Consequently regulators, typically government functionaries, must estimate the costs of service, including capital costs and an "appropriate" rate of return to ensure that their ward can survive. To estimate the right prices — that is competitive prices — is impossible and what is correct at one point in time will almost instantaneously be wrong as conditions change.

For most regulated utilities a government commission attempts to value the company's investment and then calculate a "fair return" on its capital. To do this, state functionaries must quantify two financial variables — a very difficult if not impossible task. The bureaucrats must estimate the value of the capital base — just what to include is a long running dispute in utility literature — and they must provide for a "fair" return on the capital. If the rate is too high, the firm can increase its profits by over-investing; that is investing more in their facilities than an unregulated firm would find optimum.\* Since there

<sup>\*</sup> In the economic literature this is known as the Averch & Johnson effect after their seminal article (1962) describing this difficulty with rate of return regulation.

is no known rate of return that is correct and since too low a figure will ultimately lead to bankruptcy, government officials will almost inevitably sanction a rate of return on invested capital above the cost of capital, thus leading to excess investment.

Moreover, regulators secure all their information from the regulated. To calculate the rate base, the bureaucrats ask the *utility* to provide them with the data. In case of dispute —which may involve many hundreds of millions or even billions of dollars — the regulated entity employs the best accountants and lawyers that money can buy. On the other hand, the regulatory commission pays government wages for its lawyers and accountants. As a result, even a commission motivated to do the best possible job has neither the information nor the personnel. In addition, state regulatory commissions typically have a large number of industries under their supervision but enjoy only limited budgets, which must be spread over a large number of firms operating in quite diverse sectors. To expect these functionaries to oversee their charges successfully is to believe in miracles.

Regulatory miracles appear to be less common than miraculous comings. Governments have extensively regulated what they view as "natural monopolies" or, outside of the United States, have created government enterprises to operate and provide these monopoly services. The results have almost always been poor. Studies of government regulation of electric power rates by George Stigler (1962) and the author (1970) show that such controls often reduce the prices utilities charge their most vulnerable customers — the homeowner — little if any.

#### **Regulatory Capture**

Partly as a consequence of the biases and partly because the most active intervenors in oversight proceedings are the regulated themselves, many observers have described public utility supervision as "regulatory capture." In many states, compliant commissioners, at the end of their terms in office, can expect offers of lucrative jobs with the industries they oversee. Although this may appear to be bribery, the ex-regulators do bring expertise to the controlled firms and would be valuable to their new employers even if the industry had not "captured" them. During their terms in office, the regulators learn a great deal about the industries they oversee. If the law prohibited them from employing this knowledge upon leaving the commission, their expertise would be wasted. Moreover, if they cannot capitalize on their know-how at the end of their tours of duty, becoming a regulator will be a less attractive opportunity and fewer and less able people will accept the appointment. This of course will lead to less able regulatory commissions. In other words, it is difficult if not impossible to prevent even the appearance of "regulatory capture" without diminishing the usefulness and ability of commissions to operate. Even strict conflict of interest standards to prevent post-commission employment in affected industries

cannot overcome the inherent biases in the process, which make regulation largely ineffectual and inefficient. Appointing commissioners who are ignorant of the issues and who will retire from the job to aloofness will produce a regulatory body that is ill informed, casual in its decision-making (unless the commissioner hopes to be reappointed), and concerned more with the perquisites of the job than with the outcomes.

Regulators not only look after the interests of those industries that are under their supervision, but political considerations inevitably motivate them as well. If they hope to be reappointed, they must please their political allies in government. Politicians, who oversee the regulators, are concerned that those who might affect their chances of re-election be given the best treatment. Moreover, government officials must be concerned with any powerful interest groups affected by their decisions. Thus if homogenous consumer groups are politically influential, they may easily find favor.

Regulations can benefit a selected few, although the public as a whole usually loses more than those special interests gain. The objective of agricultural programs, for example. is to transfer income from consumers and taxpayers to farmers. In "bad" years, that is, when crops are plentiful and prices low, the cost to the non-farm public has been as much as \$40 billion. This aid is extraordinarily wasteful, consumers and taxpayers sacrificing much more than farmers gain. The *Economic Report of the President* for 1986 disclosed (156) that the levy on American consumers from the sugar program alone was \$2.5 to \$2.9 billion annually while farmers profited by only \$1.6 to \$1.8 billion. The federal milk program imposed even greater losses: it cost consumers between \$1.7 and \$3.7 billion in higher milk prices; taxpayers paid \$1.9 billion to stockpile excess dairy products; while dairy farmers benefited by \$1.8 to \$3.9 billion for a net loss to the economy of \$1.7 to \$1.8 billion.

#### The Effects on Growth and Progress

In addition to these static inefficiencies created by state control, government oversight generally reduces flexibility and slows invention thus depressing economic growth and retarding progress. Public monopolies have little incentive to innovate. A regulatory program intended, for example, to ensure that new drugs are both safe and effective will make them more costly to develop and bring to market. Not only will costs be inflated but the time between research and availability will be lengthened. In the case of drugs this emphasis on safety and effectiveness adversely affects the health and well-being of those who could have benefited from the advances had they been discovered earlier. In evaluating the benefits and costs of these rules, the loss due to the delay in introducing new medicines has to be traded off against the possible harm from exposure to a few drugs that turn out to be ineffectual or harmful.

In other areas as well, regulation can slow or prevent the introduction of new technologies that could provide significant benefits. Prime Fiber Corporation of Appleton, Wisconsin, for example, has developed a new technology that would recover useful fibers from the sludge of pulp and paper mills — this sludge is currently either incinerated or dumped into landfills (Richman 1992: 96). Existing environmental legislation, however, prohibits the company from using *a manufactured product* — the sludge — in reprocessing. This type of regulation slows growth and holds up progress; no one gains from preventing the economical use of those wastes.

The public's demand for protections against risk can also slow innovation. The regulation of food and drugs in the United States dates back to the earliest years of the twentieth century. The FDA reviews new food products — often retarding their marketing, has slowed biotechnological developments, and made it more difficult for entrepreneurs to compete with existing firms. This attempt to reduce risk has spread from health to financial matters, on which the government now requires that banks, savings and loans, and lending institutions divulge significant amounts of information on risks and potential returns. Although more information is almost always desirable, it comes at a cost. A new stock offering, for example, must first be approved by the Securities and Exchange Commission (SEC). The process can take months, a delay that may seriously hamper financing of some projects requiring quick action.

Starting around 1970, the U.S. government imposed an increasingly elaborate set of restrictions on American industry. In particular the congress legislated strict standards to achieve clean air and water and new stringent controls on workplace safety. Just three years later, about the time these new rules were beginning to bite, the economy suffered a sharp drop in the growth of productivity. In many ways, American industry has stagnated since 1973. Real wages for workers in manufacturing peaked in that year and have slowly eroded in the subsequent two decades.

Although not all of the downturn in productivity can be attributed to regulation, economists have concluded that federal rules contributed to a substantial portion of the slump. Professor Wayne B. Gray of the Department of Economics at Clark University, for example, estimated (1987: 1005) that 30 percent of the decline, or the fall of 0.44 percentage points in manufacturing productivity growth, is attributable to occupational safety and environmental regulation. Since productivity growth is the engine of economic expansion, these rules have retarded progress significantly. We have no data on the non-manufacturing sector of the economy nor on the impact of other regulations, so these numbers must be treated as the minimum drag imposed by regulation on the economy.

### **Unintended Consequences of Regulation**

All too often government controls have unintended consequences, sometimes severe. Since the mid 1970s, the U.S. Department of Transportation has required that the average car produced by any manufacturer meet a specified miles—per—gallon standard. As a consequence, Detroit must induce enough buyers to purchase more gas efficient vehicles to offset those consumers buying commodious, heavy automobiles —in other words, safer and more comfortable transportation — with relatively poor mileage in order to meet the average standard or pay a large fine. This rule has indeed improved the gas mileage of new autos, perhaps saving a little energy; but to meet the mandated levels, manufacturers have built smaller and lighter new cars. Unfortunately smaller, lighter cars are more dangerous. Economists have estimated that this regulation kills about 2,000 to 3,900 drivers and their occupants each year (Moore 1990: 80; Crandall and Graham 1989).

Chicago economist Sam Peltzman has shown (1975) that safety regulation produces little if any additional safety, at least for automobiles. Drivers offset much if not all of the additional safety mandated by the government by driving less carefully. Since seat belts and other safety devices make drivers feel less at risk, they drive with greater abandon, killing more pedestrians and generating more accidents.

Regulation of an industry often leads to controls being extended to other competitive sectors. The extension of ICC supervision of railroads to motor carriers has already been discussed. Federal control of cable television represents another example of regulation begetting regulation. The federal government oversaw broadcasting on the grounds that the amount of spectrum was limited. Cable television, originally developed to provide service to communities with poor reception, eliminated the technological constraint on spectrum, since companies offering wired service (CATV) can expand capacity to carry as many channels of information and programming as desired. Yet despite the elimination of the rationale for regulating broadcasting, the government initially extended federal control to cover these wire operations. Only after several court decisions and congressional action did the Federal Communications Commission abandon controls over CATV. In 1992, Congress acted to reimpose rate controls on cable on the grounds that they were providing a monopoly service in most markets and had inflated their prices greatly since they were decontrolled a few years earlier.

Not only does government regulation of monopolies fail to save consumers money, but the controls perpetuate the very monopolies that the controls are designed to curb. Since the state finds it easier to oversee a single firm than a large number of competitive companies, it implicitly exchanges regulation of rates and service for protection from competition. The utility gains the easy life. As the extension of regulation to trucks and

cable television demonstrates, government regulation slows change and inhibits new forms of competition. To nineteenth century observers, competition with railroads was clearly impossible for the industry enjoyed a natural monopoly. It took only a few decades before technology proved these pundits wrong.

#### The Cost of Regulation

No one knows exactly the total burden of all regulations but it is certainly onerous. Philip Abelson in *Science* (1993a) reports that in 1991 the toll on the United States' economy from all controls amounted to \$542 billion. He also asserts that outlays for environmental cleanup and prevention, which cost \$115 billion in 1991, would balloon under current laws more than 50 percent in real dollars by the end of the century. In 1990 the Republican members of the Joint Economic Committee put the tax from government regulation (1992) at a minimum of \$461 billion. Economist Thomas D. Hopkins of the University of Rochester estimates (1992: 5) that due to federal regulations American consumers spend roughly \$400 billion extra on higher priced items "over and above those costs of government that show in the budget." He calculates that this sets back the average household about \$4,000 per year. Louis Richman quotes (1992) Paul Portney of Resources for the Future in *Fortune* as predicting that environmental regulation by itself will absorb 2.8 percent of the GDP by the year 2000. Germany, he judges (95), despite its strong commitment to a clean world will be spending only 1.6 to 1.8 percent of its national income.

These expenditures do bring benefits but they are often much less than the costs. Even when the gains eclipse the burden, tighter controls generally lead to much higher expenses which eventually exceed, often vastly, any improvements in welfare. For virtually all pollution abatement programs, attempting to eliminate more and more of an offending substances grows progressively more expensive. Totally purity is typically unachievable and endeavoring to approach perfection quickly becomes exorbitant.

As mentioned above, government controls impose a tax on the economy, and decontrol is equivalent to lifting a levy. After the United States began to deregulate its transportation and communications systems in the late 1970s and early 1980s, economic growth picked up and productivity improved. Logistician Robert Delaney (1988) has found huge savings — in the tens of billions of dollars — in inventory and distribution costs, that is, logistics expenses, stemming from this deregulation. Virtually all studies have shown that consumers have gained greatly from deregulation (Moore *et al* 1986b; Winston *et al* 1990).

Regulation produces a constraint that firms must factor into their decisions. Sometimes the rule prevents them from charging more than a certain amount or less than a

minimum; sometimes, it requires them to offer specific services or provide certain groups with special benefits. In other cases, the state mandates safety standards, labor rules, work conditions, or environmental controls. A rule obliging the installation of certain safety equipment or bestowing specific rights on workers imposes only an additional constraint on the requirements of the market. Thus if the marketplace dictates that employees be paid more than \$6.00 per hour but the government adds a new requirement that the employer give the worker parental leave, sick leave, or any one of a potentially unlimited number of entitlements, the company will continue to seek the highest possible profits consistent with that rule. Such legislation will give rise to a number of distributional effects — some unfavorable to certain employees, some favorable but not necessarily to those ostensibly aided. If, for example, the employees who are covered by the new rules become, as a consequence, more costly to their company, the firm will likely reduce its hiring of such workers and perhaps subsidize others less effected. For example, congress recently enacted legislation mandating leave for parents with newborn children. Since women are more likely to request time-off to care for infants, employers will prefer to hire males, especially if they find financing such leaves burdensome. Thus those specifically favored by the regulation may suffer more unemployment or be forced into occupations which pay less.

In any case, the burden of new regulations will be borne in part by the employees covered and in part by consumers of goods and services of companies affected by the legislation. Ultimately, as mentioned above, government rules represent a tax on the covered industries. As such, state controls will lower incomes of the general public, who will ultimately pay the tax through higher prices, while *perhaps* providing some benefits to certain employees or employers. There may be cases in which the rules do bring benefits to the population as a whole or to certain groups greater than the costs imposed, but few studies have found such positive gains.

To summarize, regulation normally reduces real incomes. Once real earnings have fallen to a new, lower level reflecting the government mandate, there may be no appreciable further effect on economic growth. Unless government rules limit improvements in technology or innovations that increase efficiency, the rate of advancement in technology should be unaffected. Many forms of state control, therefore, effect the level of income not its rate of increase. On the other hand, as discussed above, the bureaucracy, with the tacit support of existing firms, frequently employs regulation to discourage new competition and technologies that threaten established companies and industries. If the government attempts to protect its wards in this manner, it can retard economic growth.

Economists frequently distinguish between economic regulation — the control over prices, profits and entry — and social regulation — the supervision of safety, working

conditions, and environmental contamination. Economic regulation, that is oversight of rates and economic performance, can curtail growth by deterring new competitors. Social regulation may or may not be a impediment to economic progress. Those rules that constrain innovation, prevent experimentation, or raise the cost of research and development diminish growth. Social legislation that confers new rights on workers, as discussed above, may trim the wages of these same employees but, after the period of adjustment, may not handicap development.

Economic and social regulation, state-ownership of major industries, and large government programs to redistribute income have apparently had limited effects on growth. Sweden, Holland, Belgium, and West Germany have all flourished despite extensive government involvement in the economy. Sweden, however, has seen growth slow in the last decade or two. On the other hand, Switzerland with limited government intervention has also suffered from slow growth.

A study by Alwyn Young (1992) demonstrates that although Singapore has grown as fast as Hong Kong, Singapore's more interventionist policies have reduced the living standard of its people and yielded less efficient investment. The importation of new technology has generated virtually all of Hong Kong's advancement, while none of the growth of Singapore can be attributed to improvements in technology. The rapid advancement of the latter city—state stems from a government-fostered extraordinarily large investment boom. In 1984, the amount being plowed into new plant and equipment reached 43 percent of GDP (14). By subsidizing investment, the city administration reduced the return on new capital spending to zero. In other words even among some of the most successful economies in the world, government intervention has weakened business.

To sum up, regulation saves the consumer little but thwarts innovation and hinders new modes of serving the economy, thus hobbling progress. For example, ICC oversight of the surface transportation industries probably retarded intermodal technologies, which have flourished since these industries were partly freed in the late 1970s. Rather than regulation, the public might have been better off suffering temporarily from a private monopoly — any excess profits garnered by a natural monopoly would stimulate others to find ways to compete. Alcoa and U.S. Steel were both at one time unregulated monopolies; over time they faced increasing competition and now have no real market power. On the other hand, AT&T, a regulated firm, maintained a monopoly position in long distance service from almost the beginning of telephone communications until the early 1980s when, as the result of an antitrust case, Ma Bell agreed to be divided into regional operating companies and a separate long distance corporation, subject to competition for the first

time. The result was a sharp fall in long distance rates and a proliferation of new communications technologies.

Environmental regulation, which is relatively new, may bring benefits greater than its costs or so its supporters argue; but in light of the poor performance of regulation in other areas, the public has reason to be skeptical. In a number of cases, government efforts to protect the environment or to safeguard people from toxics have resulted in little good and much harm. In 1982, for example, the federal government forced the entire population of Times Beach, Missouri to sell their homes and businesses to the government and move out. The Reagan Administration imposed this wholesale condemnation because several years earlier a contractor had mixed dioxin with asphalt in paving the roads; officials believed that dioxin in any amount was highly toxic. Later the federal bureaucrat who had recommended abandoning Times Beach admitted that, in the absence of any evidence that dioxin in low doses is harmful, he would not now recommend that any similar town be abandoned. The damage to the men, women and children of that small town had been done.

#### The Failure of Government Ownership

Instead of regulating, many governments have opted for government ownership of important industries, not only those considered to be natural monopolies. In all too many countries, the state has owned oil companies, airlines, steel mills, and coal companies on the grounds that these activities are essential to the well-being of the nation. In most cases the results have been poor. Government enterprises are rarely run to make a profit. Typically the managers attempt to please their administrative superiors by looking to what is politically popular. In virtually all cases, since politicians normally espouse increasing employment rather than decreasing it, they oppose laying off workers. Moreover, highly paid workers are more supportive of the officials than those earning low wages. As a result, public enterprises almost always employ more workers than those that are private and they pay better wages — all at the taxpayers' or rate payers' expense. Politicians scarcely ever consider benefiting consumers as a major goal of the enterprise. In addition, since elected officials appoint managers for political reasons rather than for their competence, these nationalized firms frequently provide a dreadful level of service. In many countries, acquiring a telephone, without resorting to bribery, from the state monopoly necessitates years of waiting. Once the phone is installed service is much more expensive and less reliable than in the United States where telephone companies are all privately owned. In many Third World countries with inadequate state phone service, private cellular telephone companies have luxuriated in a landslide business. This growing

evidence of poor performance by publicly—owned firms explains why in recent years so many countries have been attempting to privatize their economies.

Although regulators normally use their powers to protect or benefit special interests, the desire and need of their wards for profit at least limits the mischief they can perpetuate. Government-owned firms, however, are free from profitability constraints. The absence of market discipline enables public enterprises to employ more workers than needed and to be generous with wages and benefits, while accumulating management perquisites. Since the state treasury will simply confiscate any profits without benefit to the company or its workers, it is senseless for a government enterprise to do more than break-even. Managers of public firms can always find costly ways to improve working conditions or to further "worthwhile" objectives, thus precluding realization of positive returns.

State-owned firms have performed best when forced to vie with private firms for business in the world market. Too often, however, nationalized companies have failed to compete adequately and governments have resorted to subsidies. Even when state-run firms are in the red, politicians resist laying off workers or eliminating money losing operations. Moreover, governments have generally compounded the inefficiencies of state operations by prohibiting private competition, thus leading to even less discipline and more waste. Monopoly in general breeds inefficiency, a lack of attention to the public, high prices, and poor service. When the government owns and manages the operation, which it typically does with little regard for consumers, it exacerbates the ill effects of monopoly. A few favored groups may benefit greatly from this setup, although virtually all could profit were the operation privatized and competition allowed.

To generate the pertinent incentives for solid economic performance, the means of production must be in private hands. As discussed above, the directors of taxpayer-owned firms attempt to please their political overseers. A number of nations have experimented with employee-owned enterprise with unfortunate outcomes. Typically workers cannot sell their ownership rights nor keep them if they leave the firm. Executives of these workermanaged enterprises endeavor to indulge their employees, which signifies generous salaries and no layoffs. Workers prefer high pay to investments, especially if new equipment mean a substitution of capital for labor, with the result that the physical plant becomes rundown and obsolete. Both government- and worker-owned enterprises are unlikely to seek either to minimize costs or to maximize profits through catering to the consumers of their products. Worst still, if the company has access to government subsidies, they will boost worker compensation almost without limit.

The discipline of the market dictates that privately owned firms must proffer products as useful as or better than those of their competitors; they must satisfy consumers;

and they must keep expenses below prices. In fact, private managers must maximize profits to avoid being driven out of business or removed from control. As a consequence, private competition is the only guarantee of efficient enterprises that can make a country productive and rich.

A number of other factors contribute to the poor performance of public companies. When the government owns an enterprise, the regulators and the regulated are the same. While academics often alleged, with good reason, that regulated enterprises captured the regulators, if the state owns the operation, no semblance of an independent check on the company exists. In addition, government officials have little incentive to resist labor union pressures, since the taxpayer can be called on to pay for generous settlements. It is ironic, therefore, that there appears to have been more labor strife in the state-owned coal mines in the United Kingdom than in the privately-owned pits in the United States.

Those countries that have indulged most massively in state ownership of businesses have suffered the most in terms of poor service and slow growth. Marxist states had and have made a religion out of public ownership of the means of production, enduring as a consequence inadequate growth and inefficient economies. Most of the states of the former Soviet empire have been wrestling with the tremendous problems of privatizing their industries. In many cases, large state-owned enterprises are so inefficient that they should probably be bulldozed, but they employ too many people for the governments to close them cavalierly.

Not only Marxist governments but virtually all states have established publicly-owned enterprises or have nationalized private companies. In many cases, the government has taken over private corporations that were losing money, such as the Penn–Central railroad that became Conrail. In other public takeovers politicians have claimed that industries should be in official hands for national defense or social reasons — even though government management typically results in less efficient service. The state runs postal services in almost every country — probably to be in a better position to monitor communications among its citizens.

Governments have generally tried to control communications and transportation, thus strengthening the regime. As mentioned in an earlier chapter, public ownership of the media almost always leads to a pro-government slant for radio and television. Even in the United States, where communications have long been in private hands, the Federal Bureau of Investigation has requested that congress require telecommunications companies to provide the technology to facilitate wiretapping — at a cost to the telephone user. In other words, the FBI wants the telephone consumer to pay to make it easier for that agency to

eavesdrop! It would be so much simpler if the government simply owned the phone system!

# **Deregulation and Privatization**

Since the mid 1970s, the world has enjoyed a major movement towards deregulation and privatization. Just as regulation and nationalization are substitute policies, so deregulation and privatization both constitute procedures to introduce market forces. Prior to the decade of the seventies a few isolated examples exist of deregulation, such as the British decontrol of motor carrier freight transportation in the late 1960s and Australia's elimination by a court decision of all controls of interstate trucking in the 1950s; but beginning around 1976, the United States congress enacted a series of laws removing federal controls from important industries. These legislative steps have been highly successful and increasingly copied elsewhere. In the 1970s, the Chileans pioneered privatization by slashing the number of state-owned and state-managed enterprises from 596 in 1973 to 48 a decade later (Hachette and Lüders 1993: 3). The better known British program, however, in the 1980s under Margaret Thatcher paved the way for a worldwide sell-off of government assets.

At the end of the Second World War, much of the intellectual community and the educated public presumed that socialism was the wave of the future. Slowly over the next three decades the views of opinion-makers and educators began to shift, becoming more sympathetic to capitalism. Several reasons account for this conversion in economic viewpoint. Academics and then the public learned that other factors besides the public good exerted more influence on politicians and government officials. The nation came to understand that the ambition to be elected or reelected afforded the main motivation for politicians in democratic societies. The public choice literature and various studies of regulation contributed strongly to this shift in view.

Theories of regulation espoused by George Stigler (1962 & 1971) and Sam Peltzman (1976) led economists and other students of government to question the performance of regulation. By the 1970s, voters understood that government was more often the servant of powerful interest groups than of the general public. The media reported on evidence that regulation and government ownership rarely served the public interest but more commonly fostered the goals of a favored few. Many in the intellectual community and much of the educated public concluded that the unregulated market performed better than did state enterprises or firms under government control.

The consistent failure of the non-market economies to produce an adequate standard of living, vigorous economic growth, freedom, or even equality increased the disillusionment with socialism. Many Western countries had experimented with

nationalization of major industries, often with calamitous results. State-owned enterprises did not ameliorate the lot of workers but did contribute to sizable budget drains. Labor strife was as common under government ownership as it had been when the companies were private. Under state control the quality of service or products failed to improve and often deteriorated. Government-owned firms were often inefficient and slow to innovate. The public's perception grew that the officials running these enterprises were primarily influenced by powerful interests. Good service, high quality and low costs came in a weak second!

#### The Evidence

The record from deregulation and privatization, which started in the 1970s when U.S. politicians were looking for ways to reduce inflation, produces additional evidence that a free market offers superior performance to a state-managed or owned industry. The history of deregulation in the United States goes back at least to President Ford who, shortly after taking office from Richard Nixon, held an economic summit with twenty-eight of the leading economists in the country. At that meeting, I proposed a list of 22 deregulatory moves that would either bring down prices or improve the allocation of resources. Twenty-one of the economists present endorsed all or most of the list. Over the next ten years, congress and the administration eliminated nearly half of these government controls.

Ownership makes a considerable difference in economic performance. A large body of literature has compared the effectiveness of privately owned firms with that of firms in government hands (De Alessi 1980). In almost all cases, private firms outdo their government peers. A recent study (Boardman & Vining 1989) analyzed the largest 500 non-U.S. industrial firms, all of which were operating in competitive environments but of which a substantial minority were either mixed ownership enterprises or government-owned. The authors found (26) that "…large industrial MEs [Mixed Enterprises] and SOEs [State Owned Enterprises] perform substantially worse than similar PCs [Privately Owned Corporations]."

Mounting evidence has demonstrated the superiority of unregulated service over regulated. In the United States, regulation of the railroad industry never worked well. It failed to protect the shipper from high rates while being unable to maintain the profits of the railroads. Regulation stifled the ability of the railroads to respond quickly to market conditions. The Interstate Commerce Commission required the filing of changes in rates well in advance of their effective date, giving competitors adequate notice to respond — thus facilitating price fixing. Only with great difficulty could railroads abandon service on a line between two points that had cease to be profitable.

While the trucking industry profited under regulation, controls generated both massive inefficiencies and high charges. The Interstate Commerce Commission strictly curbed price cutting and competition. Federal restrictions on entry and limitations on what trucking firms could haul and where motor carriers could operate led over time to a significant premium on operating rights. The hundreds of thousands of dollars or even millions of dollars for which these rights often sold reflected the monopoly profits that truckers could earn on the routes and traffic authorized. Studies by myself (1972) showed that trucking regulation led to higher rates and poorer services.

Probably the most telling evidence on the effects of government control and ownership emanates from the actual experience of regulated or nationalized firms in comparison with that of unregulated private-sector companies operating in the same field. In the United States, Michael Levine (1965) and William Jordan (1970) contrasted unregulated intrastate airline service within California and Texas with regulated service elsewhere and found that unregulated air carriers charged much lower fares. In the road transport industry, besides the experience of the unregulated agricultural sector, I compared (1976) the regulated West German industry with the unregulated motor transport in Great Britain and found significantly lower prices in the latter country.

John Hopkins economist Steven H. Hanke has summarized (1985) a good bit of the data on the superior performance of private firms in contrast to government enterprises. For example, Australia has two airlines, operating under almost identical conditions, but the privately-owned carrier has significantly higher productivity than the one publicly owned (Davies 1971). A comprehensive study of privatization in Florida (Clarham 1987) revealed that, for some 18 public service categories, the savings resulting from privatization ranged from 8 percent for waste water treatment to 77 percent for emergency medical services.

Professor of Economics Kenneth Clarkson established (1972) that private, for—profit, hospitals have a large advantage over non-proprietary hospitals. Non-profit institutions use less market information than those that are private. Public hospitals prefer managers who have degrees in administration, while private institutions are satisfied with those who can supervise the operation efficiently even if they have not earned formal credentials. Municipal and county health care facilities rely on polls rather than market response to judge performance. They also tend to give more across-the-board pay increases rather than judging individual performance. For the same illness, patients are kept in public institutions for longer periods without any measurable improvement in health care.

Scottsdale, Arizona, has contracted with a private firm for fire protection. One analysis (Ahlbrandt 1973) demonstrated that costs of fire protection in Scottsdale were half

the costs of a city-owned service. Studies of refuse collection have shown that private contractors charge significantly less than municipally-owned collectors. According to research by James Bennett and M. H. Johnson (1979) private firms that sell trash collection to homeowners deliver less expensive, more efficient, and superior services. The Department of Housing and Urban Development found (Stevens 1984) savings of 37 to 73 percent from employing private contractors for tree cutting, trash collection, asphalting, and public transit. The Department reported that privately operated bus lines were 40 percent cheaper than those publicly-owned. In another paper, economists James Bennett and Thomas Di Lorenzo determined (1983) that government-owned hydroelectric plants were 20 percent more costly than those privately owned. They were also slower to innovate.

For the deregulation movement, the abolition of the Civil Aeronautics Board manifested the most visible triumph. Decontrol of the airlines led air fares to fall quickly, while service in terms of frequency of flights improved. New start-up airlines rushed to offer service. After considerable consolidation and realignment, the American airline industry is still highly competitive and much less expensive than air travel outside of the United States. Few question the success of deregulation. For business people, however, service undoubtedly declined since planes became more crowded and airport more crowded. This "deterioration" simply reflected the success of deregulation in making it possible for many people to fly who had never been in the air before. For the first time, it was often cheaper to fly than to take a bus. Two economists from the Brookings Institution, Stephen Morrison and Clifford Winston, estimated (1986: 1-2) that consumers gained \$6 billion and industry profits climbed \$2.5 billion in 1977 dollars from airline decontrol — equivalent to a total benefit of \$20 billion in 1993.

The obvious benefits stemming from airline decontrol fostered other deregulatory steps. In the United States, motor carriers and railroads followed quickly in 1980. Two years later in 1982, the Reagan Administration deregulated buses. In this period, the government also freed energy and financial markets. The courts broke up AT&T's monopoly of long distance telephone service, thus allowing competition to offer new, cheaper services. The results have been generally excellent. Clifford Winston, Thomas Corsi, Curtis Grimm, and Carol Evans in a Brookings Institution study found (1990: 5), for example, that freight deregulation "has been extremely beneficial to shippers and to their customers. Total annual benefits from rate and service changes amount to \$20 billion [1988 dollars]." In summary, the evidence on deregulation that has been accumulating since the 1970s when the U.S. began to decontrol major industries has convinced many of the wisdom of removing the government from the market whenever possible.

Abroad, the collapse of communism proved to almost everyone that collectivism was unworkable. Former communist states in Africa as well as eastern and central Europe moved to oust Marxist regimes. Even in non-communist countries, governments attempted to privatize existing public enterprises, recognizing that they could no longer afford to support inefficient and wasteful state corporations.

Great Britain has led the world in privatizing significant industries. The government offered stock in the telephone system to the public; it sold public housing to its occupants, converted Rolls-Royce to private ownership, and disposed of many other state enterprises. As of 1988, Margaret Thatcher's government had transferred about 3 percent of the gross domestic product of Britain to the private sector. (This is the equivalent of the United States' transferring assets to the private sector that would earn about \$135 billion annually.) Those sales constituted about one-third of the assets of the British government. The program shifted some 600,000 jobs, over 2 percent of total employment, from the state sector to the private market. As a result of privatization, the proportion of the population that owns stock has tripled to almost 20 percent.

Although it may be impossible to prove, I believe that a major causes of the strong economic performance of the United Kingdom in the 1980s was the privatization program. In the 1980s, the U.K. transformed itself from the "sick man of Europe" to the European country that during the decade had the best economic performance. In effect, removing government regulations and moving public enterprises into the private sector produced higher incomes for the British. This gain was spread over the decade and lead to much higher growth during the 1980s. I do not know whether these changes will also raise the long run rate of growth for the United Kingdom, but they did make its citizens better off.

The movement to privatize has been gaining steam around the world. In the United States, during the second half of the 1980s, the federal government sold Conrail, the state owned railroad taken over in the 1970s after the failed merger of the New York Central and Pennsylvania Railroads. In the 90s, the French, Italian, Mexican, and Argentinean governments have all instituted major programs of privatization. Public officials have peddled airlines, telephone companies, railroads, and banks to eager investors. The Argentine State also has disposed of \$5.3 billion worth of assets; and, as I write, is offering to sell a zoo, gas and water utilities, two steel makers, railroads and subways, a television station, a hotel, and the national mint. Most of the former communist countries in central and eastern Europe as well as Russia and parts of the old Soviet Union have launched major privatization programs.

#### Conclusion

As Adam Smith asserted there is a great deal of ruin in a nation. To rephrase his dictum, the economy can withstand a fair amount of regulation and government ownership. Those government activities lower people's incomes; in addition the evidence shows that regulation does retard the overall rate of income growth. A few studies also find a weak positive relationship between economic freedom and the rate at which incomes build. The more a government intervenes in the economy the more likely it will sharply curtail income growth and if the state goes too far, it can bring expansion to a halt. All communists countries exceeded the limit, severely eroding economic performance. Most countries that have emphasized socialism have also fallen into the trap of excessive government involvement. India, much of Latin America and Africa, Burma, and the Philippines have all stagnated over the last few decades under the burden of excessive government.

Unfortunately, in the West the intrusiveness of the state has continued to grow. So far, however, only Sweden seems to have reached the point at which government has become a major problem, although since the 1970s growth has declined in virtually all Western countries. Other European countries sharply increased government involvement in their economies until around 1980, but have since stabilized government spending and, perhaps, regulation, although environmental controls are multiplying everywhere. Most Western European states exert stringent controls on their labor markets — making it very difficult to fire workers and mandating many fringe benefits. These rules may explain the persistent high rate of unemployment in these countries.

Since growth and progress require change, any policy that slows change probably reduces progress. How much government intervention is possible without strangling business is still an open question. There can be a "lot of ruin in a nation," but too much will do in its performance. Government regulation always favors the status quo and never facilitates shifts in resources or new ideas. Government owned firms are typically slow to adopt new technologies or new products. Thus, the more regulation, the less progress. A libertarian state may not be necessary to achieve progress, but heavy handed government intervention will surely stop or slow it.