

CHAPTER 5

Government Regulation

UNTIL AFTER THE END OF THE CIVIL WAR, the Federal Government's policy toward the economy involved little or no direct regulation. Although some States experimented with railroad regulation as early as the 1840's, only toward the end of the century did the Federal Government undertake any significant economic regulation. The first steps toward regulation were designed to deal with problems of monopoly. In 1887 the Act to Regulate Commerce set up an Interstate Commerce Commission (ICC) to regulate the railroads, which eventually led to reduced competition throughout the surface transportation sector. In 1890 the Sherman Act outlawed contracts and activities designed to create monopolies in restraint of interstate trade, intending thereby to promote competition. In succeeding years the transportation and antitrust statutes were amended and complemented, and direct economic regulation spread to other industries. There has been a marked trend toward more rather than less governmental regulation, and this trend has been particularly evident in recent years. More requirements have been placed on the private sector, often to achieve objectives such as safety, health, and pollution control which are not included in conventional measures of economic output. The continuation of long-standing regulation as well as the recent proliferation of regulation have raised questions about the efficacy of regulation: in particular, what costs and benefits the various forms of regulation impose in the light of today's economic difficulties.

THE RATIONALE FOR REGULATION

Government regulation of business has been established for a number of reasons, all of which merit continued reexamination. At one extreme is the case of "natural monopoly"—a situation in which economies of scale (that is, falling unit costs with increasing output) are so pervasive that free competition might lead to a single firm in the market, able to exercise monopoly power. An unregulated monopolist may be in a position to charge excessive prices, restrict output, and discriminate among buyers. The cases of such natural monopolies are probably quite limited in the American economy, with certain utility services appearing to be the major exception.

In contrast to monopoly and inadequate competition, regulation is often considered justifiable to prevent excessive or "destructive" competition. One form of the argument is that in markets where there may be a tendency

toward natural monopoly a preferable course would be to avoid the costs of monopoly pricing or of monopoly regulation by maintaining several competitors, even though a perfectly regulated monopolist could provide services at lower cost. Another consideration is that even though competition may be viable it might result in swings in output and prices which some would judge too severe and too costly to consumers and producers. Regulation is thus said to be necessary to maintain stability and protect the equity of firms in the industry.

Another rationale often raised on behalf of regulation is that ill-defined property rights make it necessary for the Government to allocate certain "public" resources in order to prevent their overuse. The airwaves are one example of a scarce resource that would be rendered much less useful without some controls over its use. The environment is another example of a resource where there are conflicting claims on its use and where governments have intervened to allocate resources.

It is also asserted that in some markets the government should intervene between the seller and the consumer in order to protect either, or both, from certain conditions that might emerge in the absence of regulation. Since information is expensive to collect and once collected is "free" but costly to disseminate, the ideal government serves as a surrogate for the well-informed market participant by prohibiting certain transactions. For example, those selling their labor, according to this argument, must be protected from unsafe working conditions by the government's requiring employers to maintain certain safety standards. To protect consumers, it has been made unlawful for a firm in the United States to market certain drugs until they have been approved by the Federal Drug Administration (FDA). Likewise, the Consumer Product Safety Commission is authorized to establish mandatory standards and require the labeling of products which are found to be unsafe.

Government regulation may also serve as a convenient avenue for redistributing income. In regulated "competitive" markets less efficient producers are protected, and in effect are subsidized, by lower-cost producers who would expand their output in the absence of regulation and by consumers who end up paying higher prices and buying less. Rate regulation often leads to rate structures that "cross-subsidize" markets by requiring firms to charge prices that are above their costs in some markets and to use the extra profits to offset losses in more "deserving" markets. For example, telephone rates in any given region often do not differentiate between residential users in urban areas and those in sparsely populated localities where unit costs are usually higher. In transportation, "common-carrier obligations" are often enforced to assure below-cost service to some users, financed by higher prices to other users.

Whatever the rationale for regulation, once established it has a tendency not only to be maintained but to become more rigid with time, even if its economic costs become great and its effects differ from those originally

intended. The uncertainty associated with significant regulatory change can deter needed reform. Also, those who would be adversely affected by regulatory reform often are relatively few and have strong incentives to resist change. On the other hand, those who stand to gain from regulatory reform tend to be numerous (and thus the potential gain per person is relatively small) and seldom well organized; they may be unaware of the potential gains and thus less effective in obtaining reform. For these reasons, it is particularly important to view critically any proposals for increased regulation. It is equally important to look for ways of lessening regulation when the benefits of improved economic performance outweigh any sacrifice of other objectives.

THE FEDERAL ANTITRUST LAWS

Under the antitrust laws the Government is concerned with industry conduct, such as price fixing, and with industry structure which might foster monopoly power. With respect to price fixing, the most difficult problem is detection, and for this purpose antitrust authorities have relied primarily on informants. While industrial concentration is relatively easy to discover, it does not follow that monopoly power exists whenever concentration exceeds some arbitrary level. Each case must be judged on its own merits, and exclusive adherence to a "market share" approach may lead to unnecessary interference with ordinary business activities and to less efficient markets.

In encouraging economic efficiency, the enforcement of the antitrust laws raises obvious problems of balance. On the one hand, it would be possible for a misguided antitrust activity to inhibit innovation and cost-cutting action in the private sector; in this respect antitrust activity could constrain economic efficiency. On the other hand, antitrust activity that promotes competition will encourage resources to be used more efficiently. To further the second result, the Antitrust Division's Economic Policy Office was recently expanded, and the Division's funding for antitrust enforcement was increased.

Until lately the penalties for antitrust violation appear to have been too low. In weighing the costs and benefits of engaging in illegal activities, potential violators take into account the punishment if they are caught as well as the probability of successful prosecution. Increasing the penalty or the probability of apprehension, or both of these, raises the expected cost of illegal activity and should reduce its extent. Recent legislation (Public Law 93-528) substantially raised the penalties for violation and made certain activities felonies rather than misdemeanors. The additional deterrent may have a marked effect. This makes it even more important to allocate enforcement resources efficiently, since ill-defined and badly administered antitrust policies, backed by forceful penalties, might stifle business initiative and otherwise reduce economic efficiency.

The ability of the antitrust laws to improve market efficiency is limited by numerous exemptions. For example, the Miller-Tydings Act (1937) and

the McGuire Act (1952) allow States to establish "fair trade laws," which prevent retail establishments from selling merchandise at lower than manufacturers' suggested retail prices. In those situations, retailers are not allowed to engage in price competition, and consumers must frequently pay higher prices. At present such laws are in effect in States that comprise approximately half the U.S. population. Another example is the Capper-Volstead Act (1922) which exempts agricultural cooperatives from certain provisions of the Federal antitrust laws; among other things, this exemption has given producers greater control over marketing agricultural products. Some of the larger cooperatives may have gone beyond the original intent of the legislation, however, and with the aid of agricultural marketing orders may have been able to maintain certain commodity prices above competitive levels.

Some antitrust powers seem to limit competition rather than promote market efficiency. For example, the Robinson-Patman Act (1936), which limits certain forms of price discrimination, is almost universally criticized by economists as unduly protecting small firms from competition by larger firms. Two recent Presidential commissions on the antitrust laws, the Neal Commission appointed by President Johnson and the Stigler Commission appointed by President Nixon, recommended that this law be reformed.

REGULATION OF MONOPOLY

As mentioned earlier, some industries are characterized by economies of scale over relevant ranges of output. Among the examples frequently cited are local distribution systems for telephone service and electric power transmission, where the high fixed costs associated with fixed facilities tend to preclude viable competition. Under such circumstances, it is argued, the establishment of a regulated monopolist would be a more efficient way of organizing the market. Such regulation, however, is inherently limited in its ability to promote efficient production and resource allocation.

Effective regulation depends on a great deal of information which is often difficult to obtain and interpret. In practice, neither the judgment nor the information of those responsible for regulation can be perfect. For example, even under the best of conditions it is difficult to ascertain the true cost base of a regulated monopolist, and often it is not very easy to determine the firm's cost of capital for the purpose of regulating its return on investment.

Idealized regulation also presumes that firms are passive with respect to the restraints imposed by the regulations. Recent studies suggest that a regulated monopolist will overcapitalize or undercapitalize, depending on the relation between the regulator's "guaranteed" return on investment and the firm's perceived cost of capital. Moreover, by forbidding the regulated firm to raise prices during times of excess demand, regulation reduces the incentive for the monopolist to maintain sufficient excess capacity. On the other hand, the assurance that regulation will shelter the firm from the costs associated

with scheduling too much excess capacity will act in the opposite direction, so the net effect is open to question.

During times of rapidly rising or falling prices, strict adherence to historical costs may have significant adverse effects. The delays necessary in regulatory proceedings frequently cause regulated prices to be held down unduly during times of rapidly rising costs. Unless the firm has a considerable degree of flexibility in altering production costs by reducing the quality of service—and even here demand must not respond too negatively to this diminution in quality—relying on historical costs may erode the firm's cash flow position and possibly even lead to bankruptcy. Although the results are seldom so severe, regulatory delays often cause deterioration of service and costly deferments in investment and maintenance expenditures.

REGULATION OF COMPETITION

Most governmental regulation is now concerned with the regulation of competition rather than with the regulation of monopoly. This change has come partly as a result of historical and technological evolution. For example, the ICC was understandably concerned with railroad monopoly power during the first years of its existence. In the first part of this century, however, technological advances brought about considerable competition for the railroads from trucking. Because of cross-subsidy, some railroad rates were unduly high, and truckers tended to concentrate on this kind of traffic. If the system of regulation were to be preserved, there had to be ways of administering it without bankrupting the railroads. Therefore, in 1935 the ICC and the railroads were successful in bringing most trucking under the regulatory umbrella, despite objections at that time from some truckers. In 1940, coverage was extended to inland water carriers. Thus, an opportunity to deregulate railroads made possible by new competition was sacrificed, and the scope of regulation was expanded.

As opposed to monopoly, markets with significant competition present the regulator with a slightly different set of problems. Although as a matter of law the regulator must still determine the rate base and the "fair" profit element, the more important problem is to understand and assess the way rate changes affect service under these quasi-competitive conditions, and how policies regarding price, entry, and exit affect the financial viability of the regulated firms.

In regard to financial viability, although exit from an industry via bankruptcy is a normal characteristic of efficient competitive markets, the bankruptcy of a regulated firm tends to be viewed as a sign of regulatory failure. To prevent bankruptcies, regulators are thus prone to protect firms from competition—frequently to the detriment of efficient service. For example, since the establishment of the Civil Aeronautics Board (CAB) in 1938, not a single trunk air carrier has gone bankrupt, although several trunk airlines at the brink of bankruptcy have merged with stronger carriers. For the purpose of limiting institutional failures, the Federal Reserve Board (FRB), the

Federal Deposit Insurance Corporation (FDIC), and the Federal Home Loan Bank Board (FHLBB) have set maximum rates of interest that may be paid on deposits and on savings and loan shares. A policy of protection can lead to knotty problems when the competitors employ different production techniques—as, for example, with trucking and railroading. ICC regulation has not been able to prevent (and probably has contributed significantly toward) the bankruptcy of several rail carriers in the northeastern part of the country. Protection is also difficult when technology changes. Thus, some regulated competitive industries are slow in introducing innovations.

The second major problem for the regulator of a quasi-competitive industry derives from the fact that, depending on technical feasibility and how firms view the response patterns of their rivals, there will be a tendency for changes in the extent of nonprice competition to raise or lower costs to match the regulated price. In such cases, cost tends to be determined by price, rather than the other way around, and the regulator's control over price amounts to regulating the extent of nonprice competition in the industry—and thus the quality and price choices available to buyers. Since higher quality will be associated with higher costs, a broad range of combinations of price and quality is often consistent with reasonably competitive returns to the individual firms, or at least to the firms as a group. In these circumstances the regulatory commission, in effect, serves as a surrogate for the general public, choosing the price and quality option which will be offered.

One ramification of this behavior among regulated competitive industries is that explicit regulation of the industry's rate of return may not be possible without additional controls, such as direct restraints on the extent of non-price competition. Another aspect is that, whatever its justification, cross-subsidy may not be feasible. Purported "high-profit" markets will realize more costly, higher-quality service rather than excess profits; in alleged "losing" markets firms will restrict the quality of service to where average cost is in line with the low price.

EXAMPLES OF ECONOMIC REGULATION

Each regulated industry has different economic characteristics and ways of behaving under regulation. In several areas the economic costs of regulation have become apparent and are indeed significant.

TRANSPORTATION

Of all sectors of the American economy, few are more important than transportation, and none is more affected by Federal economic regulation.

Trucking

In interstate trucking an antitrust exemption allows carriers to agree upon rates in secret, through rate-bureau negotiations. Although these rates are subject to review by the ICC, they are seldom challenged except in cases

of general across-the-board increases. For example, during fiscal 1974, only 5 percent of motor common carrier rates were even challenged, and fewer than one-third of those challenged were ultimately disapproved. As a result of this process, rates tend to be set so as to cover the costs of less efficient carriers. The consequences are windfall profits to more efficient truckers and higher prices to consumers. In trucking markets with two or more carriers, service competition—for example, providing more frequent schedules or larger trucks—tends to eliminate the potential excess profits. However, the reduction in profits results not from lower rates but from the creation of excess capacity which has a lower value to the shipper than the extra price paid. In those markets where only one trucker has a certificate to serve, this process of rate setting helps the carrier to earn excess profits by offering poorer service, at the regulated price, than would be the case if other firms were allowed to compete.

The problems of excess capacity in “competitive” markets and of poor service in “monopoly” markets would both be eliminated if entry into the trucking industry were not restricted and if the ICC encouraged meaningful price competition. A monopolist earning excess profits would attract new firms; the result, in turn, would be lower rates and improved service. In those previously regulated competitive markets which had excess capacity, incumbent carriers would offer lower rates consistent with higher average loads. If they did not, new carriers would enter and force rates downward; the incumbent carriers would then have to respond with rate reductions or else lose out to the new competition. The ICC, however, has stringently controlled entry and price competition in trucking. Opportunities for profits attract many potential entrants, and during fiscal 1974 more than 70 percent of the Commission’s case workload consisted of processing motor carrier operating permits.

Railroads

In railroad freight transportation, the problem is exit rather than entry. As outlying areas of the country gained access to good highways, and especially interstate highways, firms began to utilize trucks for much of their transport. This meant that low-density rail lines were used less and less, until many of them were no longer economical to operate. Nevertheless, regulation has prevented the railroads from discontinuing such services as fast as would seem warranted. The losses on unprofitable lines have impaired the overall financial position of the railroads and have reduced needed maintenance and capital investments elsewhere.

The structure of railroad rates often provides incentives that are inconsistent with an efficiently organized transport sector. Regulation enforces a considerable amount of cross-subsidy among commodities—to the point where certain high-valued items, such as machinery and equipment, are hauled at rates greatly exceeding their transport costs, while the rates for other items, such as crude ores, are much less than their transport costs. Simi-

larly, regulation attempts to maintain an elaborate system of discriminatory rate "equalizations" which tend to favor certain regions over others.

Rates that rail carriers pay for the use of other carriers' cars (called per diem) and the rates shippers pay carriers when they hold freight cars for extended periods (demurrage) are maintained at levels far below the opportunity cost on rail cars. As a result, freight cars are retained by carriers and are used excessively by shippers for warehousing. On average, a rail boxcar moves only 1 hour in 8, and its average speed while moving is less than 20 miles per hour.

Air Travel

In the domestic airline industry, regulation has served primarily to bring about a nonoptimal choice of price and quality. Because the CAB had a fairly liberal policy during the 1950's and 1960's toward the entry of existing carriers into city-pair markets, the principal markets are now served by two or more airlines. However, since their fares are regulated by the CAB, the airlines tend to compete on the basis of scheduling, over which the Board does not exercise direct control. The result is "excess capacity," and efforts to raise the regulated fares in order to assure a return on investment greater than the industry's perceived cost of capital serve only to set the stage for further capacity augmentation.

Carriers as a group have consequently tended to earn neither excess profits nor losses, but the traveling public has paid higher fares because of the regulation-induced excess capacity. While excess capacity does yield some benefit in the form of more frequent departures, less crowding, and a better chance of obtaining a seat on the preferred departure, the value of this excess capacity is almost surely less than its cost. As evidence, in the relatively unregulated California and Texas intrastate markets the competitively determined (higher-load factor) service has historically been sold at prices some 40 percent below the prices of comparable interstate (CAB-regulated) services. Moreover, a recent study reports that in 1969 domestic air passengers paid "excess fares" ranging between \$366 million and \$538 million, for which they received service quality improvements valued at between \$118 and \$182 million. The difference, between \$248 million and \$356 million, represents a deadweight loss to society.

In its recent Domestic Passenger Fare Investigation the CAB established target load factors of 55 percent. Since the prevailing load factors were around 50 percent, this policy had the effect of reducing excess capacity and lowering fares. However, it would appear that a much higher load factor standard is justified, especially in view of the recent increases in fuel prices. The Board's new policy of encouraging agreements among carriers to limit capacity is not an appropriate way of dealing with this problem. In markets covered by agreements, the passenger's total cost of service is increased because of increased delays, but the fare is not reduced.

Airline regulation imposes other costs, which are not generally well perceived. For instance, through the regulatory process, fares have tended

to be set at levels and with a structure that maximizes total seat capacity, as opposed to maximizing total passenger traffic, the result being added congestion and environmental costs, as well as increased costs of airports and airways. By restricting the entry of new firms into trunk carrier service in order to protect less efficient incumbent firms, regulation has also penalized potentially more efficient firms and has resulted in higher fares for a given quality of service.

These costs of airline regulation could be reduced substantially or even eliminated if entry into and exit from markets were made easier and if control over fares were liberalized so as to encourage price competition. Under such circumstances an individual airline could attract more passengers by lowering its price rather than increasing its total capacity.

FINANCIAL INSTITUTIONS

Banks and thrift institutions are among the most highly regulated businesses in the United States. The FRB, the FDIC, and the FHLBB, together with a host of other Federal and State agencies, regulate virtually every aspect of financial intermediation: entry, expansion, and exit, as well as pricing practices and allowable assets and liabilities. Opening a new bank, for instance, requires a charter that can be obtained from the appropriate State or Federal agency only if the applicant can demonstrate that a new bank would be in the public interest. Opening a new branch of an existing bank requires similar evidence in those States which permit branch banking. Comparable entry tests exist for thrift institutions.

Financial institutions are subject to a number of regulations when they issue liabilities (deposits) or buy assets. Banks, for example, are required to hold cash reserves for their deposits, and they are precluded from holding certain assets, including common stocks. Thrift institutions are subject to similar restrictions; in addition they are not permitted to issue checking accounts. Finally, and perhaps most importantly, except on large certificates of deposit, financial institutions may not pay interest to their depositors at rates that exceed maximums imposed by law or by regulation.

Although the rationale for regulating financial institutions is to safeguard deposits and assure market stability, in recent years the desirability of some forms of financial regulation has been increasingly questioned. This is particularly true of those regulations that were established before the 1930's, when Federal insurance of deposits greatly increased the security of banks and thrift institutions. One suggested reform is to reduce the restriction on the types of assets that banks and thrift institutions may hold and to allow thrift institutions to issue checking accounts. These changes would make financial institutions more flexible in their adjustments to changing market conditions and would also make the industry more competitive. An even more important proposed reform would eliminate interest rate ceilings on all deposits. Depositors could then enjoy competitive rates of return (especially during high interest rate periods like 1969 and 1973-74), and the flow of loanable funds for such purposes as housing would increase.

NATURAL GAS

Regulation of the field price of natural gas by the Federal Power Commission illustrates the problems of controlling the price of a commodity when entry into and exit from the industry are free. It also illustrates the sometimes illogical results when statutory requirements are divorced from the economic rationale behind their enactment. In this case, the price of gas, a commodity, is regulated because of its connection with transporting gas, a service; the price of a similar commodity, oil (perhaps produced from the same well), is not similarly regulated, though it is a close substitute for gas in final use markets. Results contrary to intentions could have been expected and at least one such result has been perverse: instead of assuring consumers access to supplies of gas, regulation has done exactly the reverse.

By holding the price of gas below the market-clearing levels, regulation has created chronic and growing shortages in the regulated interstate market beginning in the late 1960's. The shortages have resulted partly because of inadequate incentives for producers to explore for gas and bring it to market. Additionally, consumers are charged a price based upon the average cost of gas, and this price is lower because of the large volumes of gas flowing at the lower prices established in the past. Consumers therefore base their purchase decisions on a price below the regulated price for gas currently coming on the market, which itself is below the market-clearing level. Consumers respond to this energy "bargain" by seeking to use more gas than if they had to pay the full cost of replacing the gas reserves they consume.

The final factor in the interstate gas shortage is the diversion of gas supplies to the intrastate market where the price is higher. Onshore producers of gas usually have the legal option to sell it into either the regulated or the unregulated market. (Producers from Federal offshore leases must sell into the regulated market.) Even at comparable prices the intrastate market would be preferred by on shore producers because the absence of Federal jurisdiction gives them more certainty. The interstate market has thus always been the residual market for producers. Consequently, the price for intrastate gas rose little with the increase in total gas demand relative to supply; instead a larger proportion of the available gas went to intrastate sales. When no more gas could be diverted, the intrastate price began to rise rapidly. Producers who had a choice ceased selling into the regulated market except under special emergency provisions which allow higher prices.

The interstate shortage of natural gas induced by regulation has led to losses in output and to unintended redistributions of income. For example, many gas distributors have been unable to add new customers. In this situation a loss occurs because the value of the gas to the customers willing to bid some of it away would outweigh that realized by consumers who use it at volumes based on its constrained lower price. Income is redistributed toward those who consume gas at a subsidized price and away from those who are unable to obtain gas at all.

Interstate shortages, accompanied as they have been by adequate gas intrastate, have led industries to move to gas-producing States merely to obtain fuel. Greater quantities of other resources are used when gas regulation induces these otherwise uneconomic changes in industry location. Potential output for the economy is again reduced, while some regions are benefited and others harmed.

Another result of regulation has been a deterioration of the reserve base underlying gas consumption, and especially of the gas deliverable in the interstate market. The full requirements of already connected customers cannot now be met. Consequently, regulatory authorities must decide which parties get gas and which do not, even though each potential purchaser has equal contractual standing.

The effect of these shortfalls is exacerbated because of the way authorities allocate the available gas. Residential and some commercial customers, for whom a shift to alternative fuels would be impractical, are given the highest priority of service. Other firms are granted different priorities on the basis of the end use to which gas is put. Under this method, firms which have high priorities in the curtailment scheme do not shift to alternative fuels, even if a switch is practical. For them, natural gas remains the cheapest fuel. They have no incentive to make even a minor adjustment. While some customers would find a loss of gas supply only moderately damaging, curtailed supplies may force other users out of business altogether because fuel substitution is either impossible or prohibitively expensive. Yet, under current regulatory practice, there is no opportunity for mutually beneficial exchanges to redirect the available gas to its most valuable use. Output falls as a result; even the shortage is not allocated efficiently.

Importation of natural gas in liquefied form and its manufacture from other fossil fuels have also been encouraged by regulation. These expedients would have been either uneconomic or less significant if the natural gas price had not been held below equilibrium. A higher field price would have restricted demand, slowed the depletion of existing reserves, and raised supply, with the result that shortages would not exist at prices below the cost of alternatives.

Finally, imports of petroleum and petroleum products have been increased because of the natural gas shortage. Regulation of natural gas increases the demand for fuels as a whole. It also decreases the supply of domestic natural gas and, to some extent, of crude oil and natural gas liquids. The unsatisfied demand for natural gas in part is shifted to its closest substitute, oil. Because domestic oil supplies are limited, this demand is largely translated into increased oil imports.

* * * * *

The examples of regulation discussed above are primarily Federal regulation by independent commissions. There are other types of regulation that deserve close scrutiny for the costs they may impose on the economy.

State and local governments also practice the commission form of regulation, particularly with respect to insurance and financial institutions. Another pervasive form of State and local regulation is occupational licensure. Depending on the State, people in an extremely broad range of occupations must obtain licenses: accountants, architects, attorneys, automobile mechanics, barbers, beauticians, chiropractors, electricians, embalmers, opticians, pharmacists, physicians, plumbers, radio/TV repairmen, surveyors, and others. In a similar vein, State and local governments often acquiesce in price-fixing arrangements, such as real estate settlement fees and fee schedules by professional associations. Often too, local codes of ethics and State statutes prohibit sellers of professional services from advertising or competing on the basis of price.

Federal, State, and local governments are also involved in regulating the use of so-called public resources. With regard to social costs and benefits, perhaps the most important example is regulation of the environment. There are two issues here: first, balancing the polluting uses against the nonpolluting uses, and second, choosing the appropriate instruments in order to minimize the cost of achieving this balance.

Both points are illustrated in the Federal Government's control of automobile emissions under the 1970 Clean Air Act Amendments. A recent report sponsored by the National Academy of Sciences and the National Academy of Engineering estimates the annual benefits of the existing program at \$5 billion, but the annual cost at \$11 billion (assuming that catalytic converters are replaced after 50,000 miles). According to the study, however, if the long-term standards on oxides of nitrogen (NOX) were relaxed, from 0.4 grams to 2.0 grams per mile, that cost would fall to only \$5 billion. Alternatively, a policy of applying the long-term standards only to automobiles operated principally in seriously polluted or impacted areas, 37 percent of the total, also would lower the cost from \$11 billion to approximately \$5 billion. In either case, the reduction in benefits would not be substantial, and if the NOX standard were relaxed, changing technology might ultimately render the program's cost negligible.

Governments also regulate product and input standards. For example, in the case of drugs the costs of regulation include not only the direct costs of testing (borne by the FDA and private drug manufacturers) but also its side effects: fewer new drugs and delays in the introduction of those drugs which ultimately get to the market. In 1962 Congress amended the Food, Drug, and Cosmetic Act of 1938 to require that new drugs be proved effective as well as safe. Since then, the rate of introduction of new drugs has fallen more than 50 percent and the average testing period has more than doubled. Moreover, it is not clear that the average efficacy of drugs introduced after 1962 is any higher than that of drugs previously introduced. One recent study estimates that the 1962 drug amendments cost consumers, on balance, between \$300 million and \$400 million during 1970.

REGULATORY REFORM

This discussion of governmental regulation suggests that existing laws and institutions are imposing significant costs on the economy. In surface transportation alone, one study puts the cost of regulation at between \$4 billion and \$9 billion annually. Precise estimates of the total costs of regulation are not available, but existing evidence suggests that this may range up to 1 percent of gross national product, or approximately \$66 per person per year. Reforming regulation to eliminate these costs would undoubtedly entail some income transfers. Those favored by regulation (particularly existing regulated firms, their owners, and their employees) would lose somewhat and some others (particularly ultimate consumers) would gain. For that reason and to minimize other transitional difficulties it might be desirable to provide certain kinds of adjustment assistance and to introduce changes over a period of several years. But enacting such reforms could save billions of dollars by releasing resources for other uses, helping combat inflation, and making the economy more efficient and more productive in future years.

The Administration is moving forward to accomplish such needed reforms. During 1975 it plans to submit legislation to reform the regulation of airlines, railroads, trucking, and related areas. These legislative initiatives will call for a program which includes: more freedom for carriers to raise and lower rates without regulatory interference, greater freedom to enter markets and to exit from uneconomic services, and a narrowing of the regulator's power to grant antitrust immunity.

To address other regulatory issues, the Administration has taken or has in prospect several actions. First, the President has endorsed legislation to repeal the antitrust exemption that allows fair trade laws. Second, the Administration will resubmit proposals to reform the regulation of financial institutions. Third, the Administration's proposal for a National Commission on Regulatory Reform is being resubmitted. Fourth, the Administration plans to explore with State and local officials various concrete ways of reducing the anticompetitive effects of State and local regulations. Fifth, the Administration has created a high-level task force to examine the entire range of antitrust exemptions and to make recommendations to the President within 90 days. Finally, the President will shortly outline to the public his more detailed program of regulatory reform and may include additional proposals which are now under review.