

GOVERNMENT AND THE MARKET

Procter Thomson, associate professor of economics, Claremont Men's College and Claremont Graduate School

THE DIVISION OF LABOR BETWEEN GOVERNMENT AND THE MARKET

Most of the great problems of social policy in this century involve the division of labor between government and the market. The conditions of freedom and equity, of order, efficiency, and progress depend upon our answer to the question: What things should be done by group decision operating through the political process, and what things should be done by individual decisions mediated by the mechanism of the market? The line which divides these processes is neither intuitively obvious nor eternally fixed; it must be decided by free discussion among the responsible citizens of a free society; it changes according to the circumstances of the times, the understanding of the citizenry, and the capabilities of the Government. Nevertheless, there are some general principles which can, or should, guide rational discussion of this great problem.¹

What are the peculiar characteristics of these two processes? What ends do they seek? How can they work together to achieve these ends?

The political process

In any society, the political process is concerned with the allocation of power. In a democratic society that process is designed to secure a group consensus on specific issues of social policy. The consensus is always subject to discussion and modification, but, while it remains in effect, the rules of the game compel individual dissent to be subordinated to group decision. An importer of Swiss watches, for example, may doubt the wisdom of protective tariffs, but, so long as these duties stand on the schedules, he foots the bill and harbors his questions till the next election.

If we take a broad and cursory view of the political process, we find that the scene is occupied by the following groups of actors:² First, the electorate, the citizens, who exercise the franchise in the light of their values, their information, and their interests; second, the political parties, who propose issues to the electorate; third, the

¹ For background, see Frank H. Knight, *The Ethics of Competition, The Ethics of Competition and Other Essays*, reprint edition, London, George Allen & Unwin, 1936, especially pp. 49-58. Classical discussion of the problem can be found in Adam Smith, *Wealth of Nations*, book V, ch. i: *Of the Expenses of the Sovereign or Commonwealth*, and John Stuart Mill, *Principles of Political Economy*, book V, ch. i: *Of the Functions of Government*; ch. xi: *Of the Grounds and Limits of the Laissez-Faire or Non-Interference Principle*.

For a summary of current economic thought, see Fritz Machlup, *The Division of Labor Between Government and Private Enterprise*, *American Economic Review*, XXXIII (March 1943), pp. 87-104. For a sociological treatment, see Max Weber, *The Theory of Social and Economic Organization*, translated by A. M. Henderson and Talcott Parsons, New York; Oxford University Press, 1947, ch. ii. Also consult Henry C. Simons, *A Positive Program for Laissez-Faire, Economic Policy for a Free Society*, Chicago, the University of Chicago Press, 1948.

² This is an expanded version of the list given in Ernest Barker, *The Parliamentary System of Government, Essays on Government*, second edition, Oxford, the Clarendon Press, 1951.

legislature or parliament, who are selected by the electorate, from the parties, to represent their interests and to transplant the general consensus into specific laws; fourth, the executive, who translates both the laws of the legislature and the consensus of the body politic into specific acts of policy; fifth, the permanent bureaucracy, who carry out the details of executive policy and perform the routine tasks of government; sixth, the judiciary, who interpret the law and adjudicate disputes.

The role-structure of the political process is extraordinarily complex. Equally complex are the functions carried on within this structure. For, in all its variety and complexity, the political process represents the most characteristic activity of organized society; namely, problem solving according to specified rules, under given conditions, in an environment of uncertainty. Despite the humbug and chicanery, the oratory and ideologies which lend color and interest to the process, political choice in a democratic society is the solution of common problems through group discussion. Discussion is the essence of democracy. And since the solution of the problem cannot be known beforehand, the outcome of the process is indeterminant; it cannot be predicted from given conditions. In this respect it differs radically from the market process in which the given conditions of consumer preferences, industrial technology, and available resources dictate the outcome within tolerable limits of accuracy.

Another outstanding feature of decisions made through political discussion is their uniformity. They must be, so to speak, the same for everyone—everyone, that is, whose circumstances are similar. By contrast with the market mechanism, individual differences are not taken into account save through the ad hoc device of administrative discretion. For example, if the political process determined the disposition of goods among consumers, every household might have an annual dividend of 4 pairs of shoes and 5 quarts of whisky, even though a barefoot teetotaler would find these goods superfluous. On distribution day he would truck them to the public square and barter them for something else, a costly and annoying expedient which the price system renders unnecessary.

Despite the indeterminacy of the political process in general, the roles of some of the actors can be identified and tentative predictions ventured. The individual citizen, in his capacity as a voter, a lobbyist, and a political persuader, acts to maximize the satisfactions he receives from his government. Representatives act to maximize their terms of office. Political parties act to maximize the power they command which, under democratic conditions, is equivalent to maximizing the votes they receive.³ In this connection, political parties act as entrepreneurs and innovators. Just as entrepreneurs in the market economy design and offer for sale the commodities among which consumers choose, so political parties package the issues on which elections are decided. But the range of choices is much narrower for the American voter than for the American consumer. The voter, therefore, is confronted with a "tie-in purchase." To buy a box of apples, he must take a peck of leeks. To get a labor and taxation policy he likes, he may have to swallow a foreign policy he abominates.

³ Anthony Downs, *An Economic Theory of Democracy*, New York, Harper & Bros., 1957.

The differences between voting and purchasing also call for brief comment. In democratic societies, the rule is, "One citizen, one vote"—except for juveniles, prisoners, and migrants across political boundaries unable to establish legal residence before the election. In the market, the rule is "Purchases are made with money, and money income is distributed among people in accord with inheritance, effort, and the chances of life." Though public policy must ultimately be ratified by votes, voting is by no means the crucial nexus of the political process, and the formal equality of the ballot box is countervailed a hundred times over by inequalities of power and ability which make themselves felt in the strategy of decision. Given its initial inequality in the distribution of wealth and income, the democracy of the market consists in the fact that one man's dollar is the equal of another man's dollar. Neither race, religion, nor prejudice can stay these instruments from their appointed ends—to guide production and govern the allocation of resources. Finally, the voting mechanism accomplishes its results indirectly and by remote control, as it were; the vote does not immediately call forth that which was voted for. Purchasing, on the other hand, both indicates a preference and accomplishes possession of the thing preferred.⁴

Problem solving through the political process is a necessary consequence of the existence of uncertainty. The degree of uncertainty faced by the society exercises a profound influence on the structure and function of its institutions: The greater the degree of uncertainty, the higher is the cost of acquiring information on issues of public policy. The ordinary citizen being unwilling to bear the costs of acquainting himself with the issues, society specializes the function of detailed policy decisions in a small group of elected representatives. But, again, the greater the uncertainty, the greater the likelihood of error. Thus, the necessity of checks and balances to hold legislative folly within tolerable limits. Political parties are another byproduct of uncertainty; they specify the issues to which voters react, and conduct exploratory expeditions to sample the consensus of the body politic. The normal administrative work of the bureaucracy represents still another aspect of society's unending struggle to routinize the unexpected.

If uncertainty were to vanish, by far the greater part of the apparatus of government would be altogether superfluous. No uncertainty, no problems; no problems, no politics. For in a world without uncertainty the costs of acquiring information about the future are reduced from infinity to zero; the consensus of the body politic is formulated and made known without doubt or delay. Therefore "representative" government and political parties would be obsolescent. Administrative decisions would be reduced to repetitive routine so that the executive arm of the Government would consist of tax collectors and producers of public services. Given perfect certainty, both the verdict of justice and the balance sheet of power are intuitively obvious so that neither adjudication nor a trial of strength are necessary. Order follows inevitably. For disorder arises either from fraud or from an appeal to force; the first is impossible when concealment is impossible and the second is superfluous when the outcome is inevitable.

⁴For further comment, see James M. Buchanan, *Social Choice, Democracy, and Free Markets*, *Journal of Political Economy*, LXII (April 1954), pp. 114-123.

In this event a society which shared a common pattern of values and which was not plagued with fundamental conflicts of interest has no use for a central authority to maintain order. A society divided into contending interest groups but united by a common standard of justice would decide differences by rational compromise in order to establish equity and preserve stability. In both cases the reserves of force are impounded in a common bank and need never pass into active circulation. (Only the uncertain society needs a central authority to collect and, on occasion, spend these reserves of force.) But a divided society without common standards of justice would impose order in the interests of the strongest.⁵

The market mechanism

The market mechanism is concerned with the allocation of resources. It is designed to answer the questions: (1) What things shall be produced? (2) How shall they be produced? (3) How shall the output be distributed among the agents who, jointly, produce it? (4) How shall society provide for maintenance and progress?

In an individualistic social order characterized by free exchange, private property, and personal responsibility these decisions are initiated by individual consumers and individual producers; but the market is a device for making these multitudes of choices mutually consistent, for translating individual decisions about bread, houses, and automobiles into social decisions about prices and outputs. For the buyer, prices are costs which provide both a signal and an incentive to cut back on his use of things that are dear and push forward on his use of things that are cheap. For the seller, prices are returns which provide both signal and incentive to make more of the things that are expensive and less of those that are cheap. For the system as a whole, prices settle at the level which clears the market. The prices of productive services, together with the pattern of ownership of resources, determine the distribution of income among persons and families; and the income of resource owners represents the costs of producers, while the expenditures of resource owners—as consumers of goods and services—represents the income of producers.

The broad and general case for the free market is simply this: Left to their own devices owners of resources will be guided by the signals of the market to put scarce agencies to the most productive uses. Given freedom of maneuver plus reasonable knowledge of the facts, resources will be channeled into the areas where demand is brisk and returns are high and diverted from the uses where demand is slack and returns are low. And the attempt of each economic agent to maximize his net returns leads, under free competition, to equal returns at the margin for agents of equal capacity. Finally, equal returns at the margin means maximum returns for the community as a whole.

But even if the system of the market worked with perfect efficiency, the ends it secures are no better and no worse than the initial distribution of resource ownership on which it is based. Allocative efficiency does not mean distributive justice. Further, the sovereign consumer whom the market serves may command it to perform serv-

⁵ In the uncertain society, as Thomas Hobbes argued in his *Leviathan* (1651), preservation of order is the elementary task of civilized government. But whatever the degree of uncertainty, order without equity is tyranny.

ices which are, at best, frivolous and, at worst, subversive of higher esthetic and moral values.⁶ Consumer sovereignty is no guaranty of individual integrity.

These, however, are evils easier indicted than remedied. For, in addition to the democratic presumption of individual responsibility which forbids arbitrary interference with the means he commands and the ends he chooses, we encounter the political dilemma that public intervention can scarcely be expected to rise above the private standards of the citizens who sanction it. It would be a rare thing, indeed, if citizens displayed more wisdom at the polls than in the market.

Still further, one of the notorious facts of economic and social life is that not all individuals have effective power to exercise their formal freedoms. Freedom without power is illusory. The faith, the presumption, or the hope that the individual is the best judge of his own interests is altogether untrue if his abilities are limited or his understanding corrupted. Here again, however, democracy faces one of its critical dilemmas: How do we detect significant aberrations from rational self-interest and how do we intervene to correct them? Above and beyond the limits of individual ability are the subtle barriers to formal freedoms erected by prejudice, by custom, and by overt coalitions that narrow his range of effective action.

The market, like the political process, is powerfully affected by the degree of uncertainty which the society faces. Economic knowledge is a scarce commodity; and actual adjustments of the market are bound to diverge from the ideal because of the intrusion of the unexpected into the affairs of both producers and consumers. Chance creates both windfall gains and losses in the lifetime income stream of the individual. Uncertainty also takes its toll on the income stream of the society in the form of periodic fluctuations in income, employment, and prices. The market creates an elaborate series of adjustments to handle the problem of uncertainty. The major adjustment consists of a division of labor between those who receive relatively fixed returns (sellers of labor and renters of capital) and those who receive fluctuating returns (stockholders or owners) based on the fortunes of the enterprise. In this picture, the business entrepreneur bundles together the risks which a specific firm is designed to exploit and sells pieces of these chances to owners (or to himself) who pledge their capital to the firm.

In the absence of uncertainty, most of economic life would be reduced to repetitive routine. Entrepreneurship would vanish; administration and decisionmaking would become unnecessary. The business cycle would cease to trouble us. The economic problems remaining would be the age old ones of scarcity and poverty in—I might add—an environment of unrelieved monotony.

FRAMEWORK ACTIVITIES OF GOVERNMENT

In discussing the various grounds on which government participates in economic activity, I have divided the normative role of the state into two broad categories. The first covers the "framework" or regulatory activities of government, the second the "allocative" activities. Framework activities establish the structure within which the market

⁶ Frank H. Knight, *The Ethics of Competition*.

functions. They alter or help to establish the "given conditions"—the tastes, resources, and technology—which govern the equilibrium of market forces. Though framework activities involve some use of resources, this aspect of the problem is relatively trivial; the chief issue is the substantive content of the rules and orders which government establishes. Allocative activities, on the other hand, involve substantial use of resources, or modify the distribution of income, or affect the level of economic activity. As we shall see presently, there is some overlap in these categories.

In this and the section following I have attempted to say what government should do; i. e., to extract from the existing body of doctrine in political economy some normative criteria for the economic role of the state. But Leviathan has an insatiable appetite; in the effort to satisfy the political temper of the times, parties often propose and enact measures of doubtful—doubtful, I say, not negative—economic value. These dubious expedients are briefly treated under the catchall heading of "Price Fixing and Government Enterprise."

Rules of the game

In democratic societies, standards of behavior can be regarded as a series of overlapping circles: The circle of broadest compass is the mores, values, and norms of the society. Inside this is the domain of the common law, based on judicial recognition of social mores. Inside this is basic or constitutional law plus judicial interpretation of constitutional provisions. Still narrower in scope but more detailed in form is statutory law. At the final and smallest of the circles we find administrative law and administrative custom.⁷

Government, then, codifies and administers the common rules of the market as part of this set of overlapping sanctions. It does in two different ways.

1. Standards and norms: The State is the agency which standardizes practices. The great body of doctrine which defines the "law of contract," establishes the meaning of "private property," or implements "the rule of reason" represents the standardizing activities of government as the articulate instrument of custom. This body of rules governs the legal qualities of money, the procedures for buying and selling, the liabilities of partners and stockholders, the means for collecting debts, and the paths to be followed in going into bankruptcy. Law and administrative decisions also guide the process of taking out a trademark, of conducting collective bargaining, of selling stocks and bonds, and of passing on an inheritance.

These positive rules implement order and stability in commercial interchange. In economic terms, they are part of the definition of "resources." For an agent of production is not just a technological datum, for example, so many acres of land or man-hours of labor; it is that plus an invisible penumbra of rights and duties embodied in the law of contract and other parts of the framework.⁸

2. Prevention of force and fraud: Government exercises a monopoly of force in order to prevent fraud and forestall the use of force by

⁷ The breadth of the circles does not indicate legal priority. Constitutions and statutes can, to be sure, set aside the common law, and the evolution of judicial decisions which modify the common law need not parallel the evolution of the mores. I am indebted to my colleague Prof. Winston M. Fick for this formulation.

⁸ The "institutions of the contract" is discussed in Émile Durkheim, *On the Division of Labor in Society*, translated by G. Simpson. New York: The Macmillan Co., 1933.

private parties. Private force must be held in check, because its use is subversive of both public order and justice. So far as the market is concerned, the reservoir of force at the disposal of the State is employed to uphold contracts and prevent "taxation" of one private citizen by another.

Though illegal use of force almost always involves fraud or concealment, prevention of fraud per se rests on different grounds than does prevention of force. In the long run the fraudulent merchant, the vendor of stocks in nonexistent oil wells, or the manufacturer of tainted foods would be forced into bankruptcy by a free and informed market. But in the meantime the costs of detecting fraud through trial and error involve extraordinary burdens on those who are short-changed, fleeced, or poisoned. It is cheaper all around, therefore, to rule these practices illegal and provide the machinery for enforcing these rules. At the Federal level the Pure Food and Drug Act or the activities of the Securities and Exchange Commission are notable examples of this practice.

Defining the group whose welfare is to be maximized

Part of the exercise of national sovereignty consists in defining the limits of the social body whose welfare is to be maximized. In practice this ordinarily means the ethnic and racial groups who occupy the territory of the state. This object is implemented by a simple but enormously important device—the restriction of immigration.

The broad outlines of social policy on immigration are very largely a closed issue in most nations of the Western World, though they may be reopened for review by changes in the balance of power or by shifts in population structure. Barriers to migration raise the income of labor competitive to potential immigrants and lower the earnings of specialized resources that are complementary to potential migrants. If no restraints are imposed on exports of capital or imports of commodities, neither the rate of interest nor the relative price of internationally traded goods will be much affected by these barriers.

Freedom of entry

Given a framework of rules and a definition of the group to be served, the case for freedom of entry is overwhelming on both economic and political grounds. Freedom of access is both an implication of political democracy and a necessary condition for economic efficiency.

So far as economic efficiency is concerned, barriers to entry result in the production of less of the restricted commodities and more of all other things than the economy either wants or could have if the barriers were broken down. How do these restrictions arise and how should the State move to demolish them? In the absence of public intervention, the degree of restraint on the free movement of resources would be established by the balance of two contrary tendencies: On the one hand, there is a clear and obvious gain from combining to restrict competition and raise prices—as, for example, a coalition of bakers or of housebuilders in a particular locality or a cartel of metal fabricators or a syndicate of truckdrivers in the country at large. (These gains are greater the smaller the possibility of securing substi-

tutes for the commodity or service the coalition controls.)⁹ On the other hand the costs of coordinating the coalition plus the restless forces of competition act to erode these gains away.

The State should, and in some cases does, aid the market in restraining the growth of coalitions. As a minimum it ought not to countenance nor encourage these barriers by law and administrative decisions that create a favorable climate for suspending competition. At the maximum it ought to seek out and break up trusts, combines, and syndicates. This is no easy matter as the complex history of law and court procedures under antitrust clearly demonstrates. However the existence of the Sherman and Clayton Acts plus the activities of the Federal Trade Commission have exercised a profound influence on our economic structure and have helped to prevent the growth of cartelized inefficiency on the European model.

Restrictive practices by trade unions represent still another example of barriers to free entry. The union need not ration entry to the trade or occupation by direct controls such as membership quotas, elaborate apprenticeship requirements, or high membership dues. The same result can be accomplished indirectly by persuading the buyer of labor services not to offer employment below some stipulated wage. The wage rations entry. Unlike producer coalitions, unions have very low overhead costs and can proliferate indefinitely without running into diseconomies of scale.

Regulation of natural monopoly

Natural monopoly is an obvious candidate for public regulation. Monopoly creates economic inefficiency by distorting the pattern of production. The price of monopolized articles is higher, the output lower, and the output of all other things is greater than would be the case if monopoly were conducted in the public interest.¹⁰

Natural monopoly ordinarily arises when the advantages of large-scale production plus the conditions of demand are such that one producer engrosses the entire market for a commodity. And competition in the industry will be imperfect if production and demand conditions are such that a small number of firms dominate the scene. For either pure monopoly or "competition among the few," the individual producer occupies a large enough share of the market so that variations in his output exert an appreciable influence on the price of the goods. In the effort to maximize returns producers will jack up prices above the incremental costs of production.

Given the definition of "the commodity," the degree of monopoly power depends on the extent of substitution in both production and consumption. Everyone has a bit of a monopoly on something: The unctuous manners of a neighborhood grocery-store proprietor may earn him a preferred position over his quarrelsome competitors, but if he attempts to capitalize this dividend into his prices he will merely increase the business of the chainstore down the block. A rutabaga

⁹ For discussion of the underlying economic issues see Alfred Marshall, *Principles of Economics*, 8th edition: London: Macmillan & Co., 1920, book V., ch. vi; as modified by J. R. Hicks, *The Theory of Wages*. Reprint edition; New York: Peter Smith, 1948, pp. 241-247. Further see George J. Stigler, *The Theory of Price*, revised edition; New York: The Macmillan Co., 1952, p. 208.

¹⁰ Melvin W. Reder, *Studies in the Theory of Welfare Economics*. New York: Columbia University Press, 1947; ch. IV, An Obstacle to the Attainment of Maximum Welfare: Monopoly.

monopoly would be of small avail so long as potatoes, lima beans, and squash could readily be had. A monopoly on gas or electric power in a particular town is a somewhat more serious matter, however, because of the unavailability of close substitutes. Most State and local regulation of monopoly lies in the field of public utilities, and the Federal Power Commission exercises jurisdiction over interstate movements of natural gas and hydroelectric power. A monopoly over a factor of production such as aluminum would also raise questions of public policy even though a host of other metals compete with it for its various purposes.

Now given the economic indictment of monopoly, regulation ought to be designed to encourage efficient use of resources; that is, to force the monopoly to price at its incremental cost of production. But this criterion raises a host of technical issues which it is inappropriate to pursue here.¹¹

In some instances the public may elect to take over and run the monopoly. In principle, both regulation and operation should arrive at the same end, but since the latter involves government ownership and allocation of resources it will be briefly treated under another heading.

External economies and diseconomies

In allocating resources by the market, private welfare is synonymous with public welfare so long as prices reflect the full costs or the full benefits of economic activity. But this reflection is often imperfect, and some of these imperfections raise important issues of policy. A famous illustrative example concerns the manufacture of a commodity which creates smoke or noxious vapors that pollute the surrounding air. The "private cost" to the manufacturer is the expense of labor, raw materials, wear and tear on the plant, et cetera, incurred in producing the article. The "social cost" is that plus the inconvenience and danger which pollution creates for the inhabitants roundabout.¹² For an inhabitant of southern California this is no trivial example, I might add. (In the long run with free choice of places of residence no one would put up with the nuisance unless he felt that other advantages of the locale compensated for it; and thus the place affected would have to offer lower rents or a higher dividend of conveniences in order to be of equal attractiveness with other places. Thus, the long-run cost of the nuisance would be the distortion it created in regard to choice of residence.)

This case illustrates an external diseconomy—external because it operates outside the price system and diseconomy because it creates a cost for someone. In general an external economy (or diseconomy) is created whenever the consumption or production of some commodity or service by one agent creates benefits (or costs) for other persons not covered in the price. There are four categories of these external effects: (1) between consumers, (2) between producers, (3) from producers to consumers, and (4) from consumers to producers.¹³ In order to push forward on the production and consumption of

¹¹ For a summary of these issues see Nancy Ruggles, *The Welfare Basis of the Marginal Cost Pricing Principle and Recent Developments in the Theory of Marginal Cost Pricing*, *Review of Economic Studies*, XVII (1949-50), 29-48, 107-126.

¹² A. C. Pigou, *The Economics of Welfare*, 4th edition; London: Macmillan & Co., 1932; pt. II, ch. IX.

¹³ Tibor Scitovsky, *Two Concepts of External Economies*, *Journal of Political Economy*, LXII (April 1954), 143-151.

things which create external economies and to cut back on those that create diseconomies, public intervention in the interests of economic efficiency is required if the effects are important enough to be worth bothering about. In some instances laws and regulation alone will suffice; in others—to be discussed under the second of our major headings—public resources must be expended.

For the smoke nuisance case, as an example, zoning regulations and requirements concerning manufacturing processes, private incinerators, and perhaps automobile exhausts seem the appropriate remedy, though—as the Los Angeles case again demonstrates—considerable research, financed by public money, will be needed before precise correctives are discovered.

Most of the important cases where regulation is appropriate involve external diseconomies between producers, or between producers and consumers. Many of these instances also involve the conservation of resources.

An important instance where intervention can improve allocation is presented by external diseconomies between lumbering and farming. Cutting timber increases the rate at which water drains off the surface and exposes farmlands downhill or downstream to the likelihood of flood and erosion. Various remedies have been proposed: one is a requirement that lumber companies replant as they cut (some of them find this profitable to do on their own); another is that they modify the cutting pattern so as to leave undergrowth and small trees standing.

External diseconomies between producers in the same industry are exemplified by the extraction of crude oil from a particular deposit or pool. If drilling rights are owned by a variety of operators, each will seek to pump the deposit as rapidly as possible with the result that pressure of natural gas inside the dome will fall and cut down the yield of the pool. Each producer creates external diseconomies for the others. But production could be maximized if ownership were unified so that external burdens would be transformed into internal costs. If one producer cannot buy out the others—because it is too troublesome or requires more capital than he can lay his hands on—unified extraction can be achieved by public regulation, providing the rules are enforceable and technologically feasible.¹⁴

The fisheries case is another instance of producer diseconomies, with one additional complication—the economic opportunity, the fishing ground, cannot be owned. Given certain biological variables, which are but imperfectly known at present, the annual rate of take will exert an influence on the total population of certain species of ocean fish. But the individual fisherman does not consider changes in the underlying stock of resources when he voyages out to make his catch. Each one, consequently, creates diseconomies for the others; rational management of the fish population goes by default and is left to chance.¹⁵ The remedy would appear to include some sort of international licensing organization.

Still another aspect of producer diseconomies is found in activities whose unregulated pursuit would clutter up the city streets or create

¹⁴ Clair Wilcox, *Public Policies Toward Business*. Chicago: Richard D. Irwin, Inc., 1955, pp. 363–366.

¹⁵ Anthony Scott, *The Fishery: The Objectives of Sole Ownership*, *Journal of Political Economy*, LXIII (April 1955), 116–124.

chaos through unlimited exploitation of limited facilities. An interesting, but somewhat trivial example, is taxicabs in metropolitan areas. In the interests of holding down the burden on other forms of traffic, the number of licenses granted to cabdrivers is limited, the number being decided by a rough estimate of the advantages of service to the consumer versus the disadvantages of cabs to other drivers. Taverns and liquor stores are similarly limited on the presumption, no doubt, that a plethora of such facilities would lower the character and quality of the region. A much more important example is Federal licensing of radio and TV broadcasting in order to prevent dual exploitation of a single channel. Now, whatever the grounds on which such limits are fixed, the license to exploit the facility represents a partial patent of monopoly. Public authority may place hedges on the license; for example, the Federal Communications Commission in granting TV licenses seeks to disperse control over the channels of mass communication. But other things the same, it is surely contrary to either policy or economy to give these prerequisites away. They should be sold on the open market to the highest bidder—providing the applicant meets the other conditions which policy imposes. This criterion most certainly applies to radio and television franchises.

Economies in pursuing interests and acquiring knowledge

The case for the free market presumes that the individual knows his own interests and is aware of economic alternatives. Common observation suggests that departures in practice from these conditions are as pervasive as they are regrettable. Individual conduct shows many instances of obstinate attachment to "irrational" objectives; the costs of acquiring knowledge of the market are frequently so high that, in the absence of outside help, the sensible man decides that it is more efficient to remain ignorant.

Now the paternalistic role of the state in democratic societies, intervention to improve behavior or combat ignorance, is capable of infinite abuse and must be severely limited. The following represent some of the steps that may be taken on this ground.

Some transactions are restricted or altogether prohibited—e. g., sale of habit-forming drugs, gambling, and the practice of the world's oldest profession. While dope addiction and other aberrations work some hardships on persons outside the transaction, i. e., create external diseconomies, the primary reason for their prohibition is that they do violence to the self.

On a somewhat different level, the state requires the individual to maintain ownership in himself; he may offer his services for rent but cannot sell himself in bondage. Nor can individual citizens sell their electoral franchise. Clearly, however, these actions are prohibited because of their adverse external effects since, if widely practiced, they would subvert the whole climate of freedom.

An intrusion of the state which is widely accepted in practice but still debated in principle is compulsory saving under the Social Security Act. Although the actuarial value of the pension exceeds the accumulated worth of the contributions, the compulsory portion of old-age and survivors insurance is founded on the theory that the ordinary worker shortchanges his future, i. e., discounts future income at a higher rate of interest than he ought rationally to employ.

A still different set of interventions, directed, I think, against the effects of ignorance of market alternatives is licensing of professional practitioners such as doctors, lawyers, and pharmacists. A free market with exact knowledge makes licensing unnecessary, for the self-interest of the buyer rewards the seller according to his worth, and the incompetent can find no customers. But in the absence of exact knowledge the license testifies, when properly administered, to some minimum level of competence and saves the time and cost of determining whether the practitioner deserves his title. For law or medicine these costs would be high. I doubt whether the same is true, however, for barbers, beauticians, and others who need a public certificate to set up shop.

ALLOCATIVE ACTIVITIES OF GOVERNMENT

“Allocative” activities of Government employ resources, influence the distribution of income, or affect the level of national output. Despite their great variety and complexity and despite the even greater complexity of that incredible document, the Federal Budget, which authorizes them, the grounds or reasons for undertaking them are relatively few in number.

Indivisible services

Among its other functions, market price is a rationing device which governs the volume of goods or services at the disposal of the user. No price, no service. But many activities that are “in the highest degree necessary” cannot be rationed by price and must be available to everyone if they are available to anyone. An example which conveys the essence of the case: lighthouses.¹⁶

In some cases an indivisible activity could easily be carried on by a voluntary agency which supported itself by fees charged to the user. Shipowners, conceivably, might band together in an association to build lighthouses, or the residents of a river valley might embark on a joint operation to control floods—another indivisible activity which Government ordinarily performs—but the difficulties of promoting and administering the agency, the trouble involved in collecting fees from unwilling beneficiaries, etc., would render the prospect of such associations dubious. In this connection, however, Government may be regarded as a holding company for a group of associations rendering a variety of indivisible services to the citizenry.¹⁷ While Government can more readily promote and finance such associations, the holding company is likely to be somewhat larger than optimum size (and not always responsive to the needs of its customers).

Headed by national defense, the dominant function of central governments under existing conditions, the major indivisible services may be listed as follows:

1. National defense and related functions
2. Police protection
3. Foreign aid and development
4. Public health
5. Pure research

¹⁶ J. S. Mill, *Principles*, Bk. V, ch. XI, sec. 15.

¹⁷ Paul A. Samuelson, *The Pure Theory of Public Expenditures*, *Review of Economics and Statistics*, XXXVI (November 1954), 387-389.

6. Navigational aids and flood control
7. Streets and highways—with exceptions as noted below
8. Wildlife preservation
9. Public monuments, buildings, and parks—with exceptions

Comments on selected items:

(2) Individuals can and do hire private watchmen and carry arms to fend off marauders but prevention, detection, and punishment of crime are public offices.

(3) Foreign aid is a function of political and military policy, but long range economic development probably depends on exports of private capital.

(4) Pure research is undertaken both by government and by private nonprofit agencies, such as universities and foundations.

(6) Navigational aids and flood control on inland waterways are often conducted jointly with power production and irrigation which can be rationed by prices.

(7) Save for limited access roads and bridges, highways are indivisible services in the first instance but can be financed by taxes on cars and gasoline in joint demand with highways. These taxes represent user charges whose yield provides a clue to the optimum size of the highway network.

(9) Imposing public edifices and parks, to the extent they have esthetic value, are an indivisible service for the public in general. But visiting a national park, hunting on a game preserve, and using a public recreation facility should, if practicable, be rationed by admission charges or licences in order to prevent overcrowding and cover the costs of operation.¹⁸

How should indivisible services be produced? Both economic efficiency and political liberty require that Government use the signals and incentives of the price system in acquiring and combining the resources which supply these services. The market for indivisibles is blind on the demand side, but the supply side should use prices to the fullest extent possible. This clearly implies (1) that Government should pay market prices for the resources it hires, (2) that, whenever possible, Government should contract with private producers to perform services instead of supplying them directly. For, to amplify the second of these criteria, the optimum size of government from the standpoint of political policy may exceed the optimum for purposes of managerial efficiency. If public bodies can contract out or delegate the task of management to private enterprise, they may both reduce the costs and improve the quality of operations.

To exemplify: Highways, public buildings, and dams can be, and normally are, built by private contractors rather than by public employees. The complex weapons and devices needed for military preparedness in the postatomic age are manufactured by private concerns rather than by Government arsenals. The thousands of different items used in the daily operation of government are ordinarily purchased from private dealers. To these statements there are some exceptions. Highway departments sometimes build their own roads; the Military Establishment does manufacture some of its own weapons; and Government agencies sometimes fabricate their own supplies.

¹⁸ Procter Thomson, *Prices Versus Taxes in the Allocation of Public Resources*, Proceedings of the 48th Annual Conference of the National Tax Association, Sacramento, Calif.: National Tax Association, 1956, pp. 140-157.

These exceptions ought to be rigorously and carefully scrutinized. In all too many cases the waste and malfeasance which there occurs would be incompatible with survival under private auspices. But the details of this topic belong elsewhere.

Requisition of military manpower represents one important area where Government ignores the signals of the price system though, to be sure, the ground rules for the draft vary from time to time and coercion is sweetened by persuasion. As a result, it is impossible to ascertain the real costs of defense, i. e., the costs in terms of the value of manpower in other uses. Cheap military manpower secured via the draft is, moreover, an expensive bargain in the long run. In an age where the soldier must command a formidable arsenal of technical weapons, these reluctant defenders are scarcely the equal of a seasoned cadre of professionals recruited by voluntary inducements. At a time, moreover, where potential annihilation lurks in the dark of night for those who stay at home as well as those who go to war, no great premium would be necessary to hire all the permanent staff of our forces or to pay, if need be, for short periods of duty followed by transfer to the Reserves. In a mature and responsible society, finally, a mercenary army of professional soldiers poses no great threat to our democratic freedoms.

External economies and diseconomies

As was argued above, prices sometimes fail to reflect the full costs and benefits of particular activities, with the result that the private market produces too few of the things that create external economies and too many of those that create diseconomies. In many cases these departures from optimum can be handled by public regulation and involve no direct use of resources. Particularly is this true of external diseconomies, e. g., the smoke-nuisance case and the oil-well case. But where the activity creates benefits for persons other than the producer or consumer, a subsidy is needed to stimulate its production. From the standpoint of public resources, education represents by far the most important example of this principle.

The education of individual A produces, of course, a direct and immediate benefit to A himself; and self-interest alone would induce him, or his parents acting for him, to build up his capital of ability. But A's education also confers advantages on B, and C, and D. For in a democratic society with a universal franchise, education is a necessary condition for wise and responsible exercise of political freedoms. A, if uninstructed and ignorant, could not exercise his franchise wisely and an illiterate electorate would imperil the whole future of democracy. Further, cultural interchange and all the amenities of civilized society demand individual sensitivity to values, ideas, and the world about us. But if left to its own devices, family A might not purchase as much schooling as B, C, and D would like to see them buy. This important instance of external economies in consumption justifies public subsidy for education.

The school government, in this context, is a corporation that implements the interest of each in the education of others. For, to be sure, B's concern for A (and A's for B, etc.) could be implemented by a series of private gifts. But these interests would be better served by a mutual compact among families A, B, C, and D stipulating that each would match—or meet in some agreed ratio—the contributions of the

other. A community referendum on school taxes and expenditures assumes precisely this sort of mutual compact. Because of external economies, families A, B, C, and D would elect to expend a greater amount per child than would have resulted from individual purchases plus private philanthropy.

Public subsidies for schools could be expended in a number of ways. Government could subsidize private schools; it could dispense certificates to the family, who could spend the certificate at an accredited school of their choice; or it could operate schools as a department of government. For political and other reasons, current practice favors the latter alternative.

External economies are a pervasive feature of human life but most of them are too trivial to be worth bothering about as subjects of public intervention. Examples are the householder whose well-kept lawn beautifies the neighborhood, or the merchant whose store windows gladden the eye of passing pedestrians.

An analytical curiosity which puzzles and intrigues economists but may or may not be of great practical importance is the possibility of "increasing returns to scale" for a particular industry. In this form of external economy, expansion of production by the firm lowers costs for the industry because optimum size for the exploitation of some common facility has not yet been achieved.¹⁹ These cases, when identified, are appropriate candidates for subsidy. But possibilities for such economies appear to be rather limited, and, in any event, no one seems able to identify these curiosities in practice.²⁰

Operation of natural monopolies

Monopoly, as already argued, represents an obvious threat to efficiency. The case for controlling it by public intervention is equally obvious. The choice between regulation or public operation turns upon some difficult issues of politics, economics, and administration whose solution varies according to circumstances. Regulation may tempt an alert and aggressive monopoly to befuddle or bribe the regulators. Operation involves the possibility of aggravated bureaucratic waste.

Monopolies in power, water, gas, and transport are often operated by municipalities. The Post Office Department is a monopoly operated by the Federal Government. How should these monopolies be conducted? On the one hand, optimum efficiency is achieved when the price of the service covers the cost of producing the last unit of that service. On the other hand optimum efficiency requires that total sales receipts cover total costs of producing the service; for taxes to finance subsidies inevitably warp the pattern of economic alternatives; moreover equity (equal treatment of equals) is violated when nonusers subsidize users—except in special cases where nonusers receive benefits that are not reflected in the structure of prices. These criteria conflict when the demand schedule for the service intersects the schedule of incremental (or marginal) costs at a point which lies below the schedule of average costs.²¹

¹⁹ Allyn Young, Increasing Returns and Economic Progress, *Economic Journal*, XXXVIII (December 1928), 527-542.

²⁰ Seftovsky, *External Economies*, J. P. E., LXII.

²¹ For background and further exposition see the articles of Nancy Ruggles cited in footnote 11. Roughly, however, when average cost (total cost divided by number of units) falls as output rises, because of economies of scale, the expenses of producing the last increment of the service are bound to be lower than the average cost of the entire

If pricing on the basis of incremental costs involves subsidizing the monopoly from the Public Treasury, the governing authority has a number of strings to its bow which it can employ in important special cases. It can vary the quality of the product. By reducing the cost and quality of its services it can eventually come to rest at a point where demand price, incremental cost, and average cost coincide, and where incremental pricing, therefore, just covers total expenses.²²

For the post office, a Federal monopoly which chronically runs at a substantial deficit, these technical considerations are relevant and important.²³ Under existing practices and rates, the postal deficit subsidizes advertisers, book publishers, magazines, other departments of government, and inhabitants of rural areas. (Due to the vagaries of Government accounting, the post office does not bear the full cost of contributions to pensions for employees; on the other hand it is, or was, used as a vehicle for delivering handsome subsidies to private transport agencies such as airlines.) Subsidy in general is justified by the presence of a substantial degree of external economies. In the remote past subventions to publishers might have been justified as a contribution to literacy and education. Surely this presumption is of negligible worth at the present juncture. Surely, also, the diseconomies of high taxes render the postal deficit, and the additional taxation thereto attached, an enterprise devoutly to be liquidated.

Through what steps can the postal service be induced to balance its budget? First, put it on notice that it must balance its accounts. Second, unscramble the records so that it bears the full costs, but no more than the full costs, of its operation; this implies payment by other departments for use of postal buildings and delivery of Government mail and payment of overhead and retirement costs by the post office. Third, and most important, let it set its own rates and establish a defensible system of mail classification. Under this dispensation the postal service would be a quasi-independent corporation free to use the methods of the market, save for the stipulation that (having no stockholders) surpluses, if any, must be plowed into additional facilities. Deficits, when they occurred, would be financed by postal bonds sold to the private market.

If these three steps were taken, might it not be possible to contemplate a fourth and more radical proposal, namely opening the postal business to private enterprise? The quaint and antiquated devices

range of output. (For instance if a batter who is hitting .250 before a particular game, pulls his average down, his "incremental" performance that day was less than 1 out of 4.) It follows as a matter of simple arithmetic that incremental cost times number of units sold falls short of total cost.

²² The existence of an equilibrium at this intersection can be shown as follows: Given an enterprise where incremental cost and demand schedules intersect at any point, each increase (or decrease) in quality will raise (or lower) the cost schedules and raise (or lower) the demand schedule. Given diminishing returns to investment in quality of service, each rise in quality will raise the demand price (for a given output) by less than the cost price; each fall in quality will lower the demand price by less than the cost price. Eventually the average cost schedule can be made to overtake the demand schedule where the former crosses the schedule of incremental costs.

By similar reasoning, a monopoly that earns a surplus in the first instance is in the happy position of being able to achieve balance by raising its level of service.

If, now, increasing returns to investment in quality prevail over the relevant range, a public monopoly that incurs a deficit in the first instance should raise rather than lower the quality of its service.

What do variations in "quality" entail? For a city transport system obviously, or for the Federal Post Office (as argued below) many such variations in convenience, promptness, and comfort can be undertaken. For municipal gas, water, and electricity, technical possibilities of variation are much more limited. Installing and repairing facilities, and billing customers would appear to exhaust the range.

²³ Jane Kennedy, Structure and Policy in Postal Rates, *Journal of Political Economy*, LXV (June 1957), 185-208.

by which, it is sometimes alleged, the post office conducts operations would be put to the test of the market, while prospects of private monopoly would be counteracted by public competition.

Equality

A free and open market tends to pay productive agents the value of what they produce. The income of individuals depends on the unit price of productive services times the number of units which they own—including both capital goods and their own labor power. The number of units of productive services which they own, or have embodied in them, depends on inheritance, effort, and luck. For reasons too obvious to enumerate, the benefits of inheritance, effort, and luck are not equally distributed in the existing social order and are not likely to be so distributed in any conceivable scheme of social organization.

But inevitability does not justify inequality. More accurately speaking, inequality of wealth and income can be modified by social policy; and a democratic social order is powerfully determined to undertake that policy. Equality, or mitigation of gross inequalities, is both an end value of the democratic community and a means to other ends.

In this context the happiest exercise of the power of the state is to promote equality by removing the barriers which restrict opportunity; barriers founded on caste or prejudice, barriers heightened by the presence of ignorance, and barriers which the market itself would sweep away if given scope to do so—all this is a necessary exercise of democratic public power.²⁴

The State also intervenes to purchase equality, or mitigate inequity, through the tax-expenditure mechanism. Depending on the schedule of taxes and the imputation of benefits to individuals, the balance of benefits bestowed minus taxes collected is generally positive for the lower income groups and negative for higher income groups.²⁵ Despite opportunities for evasion, the saw tooth monster embodied in present income and inheritance tax schedules has cut down significantly on the relative share of upper income groups in the Nation divided over the past quarter century.²⁶ Approach toward equality, then, is both a valid aim and a real accomplishment of our democratic fiscal system.

Given the conditions of economic life, a tax-expenditure system which promotes equality conflicts, after a certain point, with other end values of the community. Specifically it conflicts, after some specified point, with productivity. In full perspective, the relation between equality and productivity doubtless runs as follows: If wealth and income were very unequally distributed, there is a range over which the community could probably achieve both higher output and more equality by redistributing resources from rich to poor. If redistribution continued, a point of maximum productivity and moderate equality would be reached. Thereafter, additional degrees of equality could be purchased only at the expense of some sacrifice of productiv-

²⁴ Allan G. B. Fisher, *Alternative Techniques for Promoting Equality in a Capitalist Society*, *American Economic Review*, XL (May 1950), 356-368.

²⁵ James M. Buchanan, *The Pure Theory of Government Finance: A Suggested Approach*, *Journal of Political Economy*, LVII (December 1949), 496-505, refers to this balance—with the sign reversed, however—as the “fiscal residuum.”

²⁶ Simon Kuznets, *Shares of Upper Income Groups in Income and Savings*, New York: National Bureau of Economic Research, 1952.

ity. These sacrifices would be small at first, but would increase steadily till, at the limit, complete equality—the same income for everyone—would be reached only by a very considerable sacrifice of total output.

Now why must equality and productivity be competitive values beyond a certain point? Answer No. 1 is to be found in the adverse incentive effect of progressive taxation on initiative, risk taking, and enterprise. Answer No. 2 rests on the adverse incentive effect of receiving income without expending effort. (Up to a point, of course, the latter effect would be counterbalanced by improvements in ability and standard of living created by subsidies to low-income families.)

To continue: So long as society can get more of both values, both more equality and more income (from a given body of resources), it would be wasteful not to do so. But the problem of choice arises when the two values cannot increase simultaneously, when, that is, additional equality can be purchased only by some sacrifice of productivity and progress. Because we are, or may be, faced with this kind of choice is, of course, no reason for abjuring additional equality. We may judge it worth the price. But in so judging we must take account of the terms of trade between equality and productivity. Here, in brief, is a central problem of democratic government—how much more (or less) equality do we want in terms of the sacrifice (or gain) in productivity involved in moving toward it.

Finally, equality is not achieved by any one activity of government. It is a byproduct and an end product of the whole system of government finance.

Humanitarianism

The market is an impersonal agency. It takes no account of need unless signalized by price and recognizes virtues only when they are marketable. In larger perspective, however, “no man is an island,” or, in the language of economics rather than literature, one man’s utility function may contain a term for the welfare of another. Humanitarian activities are thus an important special case of external effects between consumers.

Humanitarian objectives can be undertaken by voluntary nonprofit agencies to which individuals contribute in accord with their means and desires. (In the division of labor between government and the market these institutions share some of the elements of both.) Citizen X, however, might be more willing to support some humanitarian activity if assured that Y and Z would follow suit. Accordingly he makes a compact with them under which each is to vote on the amount that all will contribute. Before voting, they decide that the total will be allocated between them in accord with their means. In this way each dollar that X contributes will be accompanied by, say, half a dollar from Y and two from Z. When the vote is taken, therefore, the tax each levies on himself exceeds the amount he would have contributed on his own. Government philanthropy, then, can be regarded as a device to administer such a compact for the community as a whole, voting, of course, being conducted by representatives rather than by the entire electorate.

Humanitarian activities of government include a series of transfer payments for assistance to dependent children, aid to the aged, compensation of the unemployed, and general relief for the indigent and unfortunate.

Economic stability

An economic environment of individual decisions, mutual interdependence, and uncertain prospects is inevitably subject to fluctuations in income, employment, and prices. While these erratic movements are, in some sense, a concomitant of progress, the business cycle generates a train of evils which no responsible society will passively endure. (1) Uncertainty itself creates costs; elaborate and expensive adjustments must be undertaken by individuals in order to cope with it. (2) Both inflation and depression generate diseconomies in the form of overexpansion of certain sectors of the economy during a runaway boom and underutilization of resources during a slump. (3) The incidence of the cycle is inequitably distributed between individuals. (4) Aggravated uncertainty of the system plus waste and inequity generate political pressures which threaten the stability of democracy.

From the individual point of view the cycle appears as a capital levy of arbitrary amount, levied without announcement or compensation. If the cycle cannot be tamed but must be accepted as an act of providence, social policy, as a bare minimum, ought to share its burdens more equitably.

Under modern conditions, the cycle can, or some of its components can, be mitigated, though not completely controlled, by fiscal and monetary policy. Government can stabilize certain elements of the budget and these in turn can exert a tranquillizing effect upon the market; it can stabilize the level of expenditures over the cycle: it can fix the rates, though not the yield, of the tax system: it can stabilize the quantity of money but not, of course, the number of times that money circulates during the period.

Government can also intervene to stabilize several important variables for the market as a whole. It can, if needed, fix the price of particular things though not the quality and quantity of goods exchanged at this price; it can fix the rate of interest; it can stabilize the general level of prices; and it can stabilize the level of employment.

Under modern conditions, however, the chief problems of fiscal policy are conflict among objectives and inadequacy of means. Regarding conflict, the Government may not be able simultaneously to stabilize the level of prices and the volume of employment. Full employment at forced draft spells inflation, although the terms of trade between more inflation and more employment vary erratically over the course of the cycle. Regarding means, stabilizing either employment or prices or some selected combination of the two can be attempted either through automatic devices or through forecasting and administrative action. Automatic devices or built-in stabilizers take time to operate; forecasting is subject to error, and administrative action may involve both error and delay.

In any event economists know appallingly little about the cure of the cycle and still less about its causes. The situation counsels humility, caution—and more resources for basic research.

MISCELLANEOUS ACTIVITIES: PRICE FIXING AND GOVERNMENT
ENTERPRISE*Price fixing*

On an ad hoc basis, the Central Government intervenes to regulate the prices of particular goods and services. In most instances save the control of prices during wartime, these interventions establish minimum prices and redound to the advantage of particular producers.

Primary instances of these activities are farm price supports, tariffs, transportation prices, and minimum wage legislation.

In the short run, parity prices and production quotas on basic agricultural commodities sold in the private market represent an income subsidy to wealthy farmers financed by a sales tax on low income city consumers. For the rise in price is equivalent to a levy on consumption; the larger the farmer's output (or acreage) the greater is the extent of the subsidy which this rise in prices (or soil bank payments) confers upon him; and the wheat, cotton, corn, and tobacco which this program covers are staples of the city worker's budget. (The portion of the crop sequestered in storage by the Commodity Credit Corporation and its equivalents is paid for from general revenues, though a portion of the cost may be recovered if the commodity is later sold or dumped abroad.)

In the long run, the portion of the subsidy that finds its way into income of farm labor tends to retard the migration of workers to the city and slow down the rate of urban economic development. The portion imputed to land bids up the price of farms.²⁷ In addition to the income subsidy, the stability of agricultural prices which the program administers enables farmers to employ resources more effectively.²⁸

Tariffs and import quotas subsidize producers at the expense of consumers in the short run, while in the long run they draw more resources into the protected trades than would otherwise be the case and lower the national dividend by cutting us off from the advantages of international specialization. In addition, tariff hampers exports, fosters domestic monopoly, and creates political pressures for subsidies to foreign governments. Tariff, however, prevents deterioration in the economic position of workers and investors who are threatened by foreign competition and who can raise enough leverage to secure protection.

The legal minimum wage raises the price but reduces the volume of employment for workers in the trades it protects. For no tendency in economics is more certain or definite than the principle that states: the higher the price of something, other things the same, the less the volume of purchases. This principle, unfortunately, applies to the hiring of unskilled workers in sweated industries. An effective floor on wages which raises costs of production will diminish employment because, first, employers substitute capital for labor and, second, consumers substitute other goods for those produced by the protected trades. If demand for unskilled labor is elastic the minimum wage also reduces the total wages bill and purchasing power placed in the hands of the protected workers.

²⁷ For general discussion see T. W. Schultz, *Agriculture in an Unstable Economy*, New York: McGraw-Hill, 1945.

²⁸ D. Gale Johnson, *Forward Prices for Agriculture*, Chicago: The University of Chicago Press, 1947.

Benefits of minimum wages are secured by those who gain employment under its provisions. Costs are borne, first, by the workers whom it prices out of the market, second, by consumers who buy the products of protected industries, and third, by resources which are complementary to unskilled labor.

Government enterprises

In addition to operating natural monopolies which sell to the general public, Government also produces a great variety of supplies and services; for many, but not all of these, Government itself is the sole customer. The Defense Department operates a galaxy of establishments which manufacture arms, build ships, and produce supplies. The Government operates a railroad in Alaska and in Panama; it has turned its hand to the production of rum and molasses in the Virgin Islands; it lends money to farmers (the Farmers' Home Administration), to small-business men (the Small Business Administration), and to importers and exporters (the Export-Import Bank). It builds and owns ships which are leased to private concerns. Finally, Government is the landlord of 400 millions of acres within the 48 States.

What issues of principle and practice are raised by these activities? In general, as suggested above, Government is a most indifferent manager of enterprises. Why? Because Government employees are stupid and lazy? Not at all; here, as elsewhere, the servant is worthy of his hire. Because the civil service, while an admirable device for preventing corruption, tends to protect mediocrity and inhibit initiative? Perhaps; but too much cannot be made of this argument. Because Government is immune from the discipline of the competitive market? In part, yes, but large sections of corporate bureaucracy also enjoy some relative immunity. The ineffectiveness of Government management arises from its diseconomies of scale. Government is too large for maximum efficiency. Or, put a bit more carefully, Government may be no larger than necessary in order to discharge the functions which it alone must command, but if some activity which the market could have performed is added to its structure, that activity will, in general, be conducted less effectively than it could have been conducted by the market. Not only that; but the addition of this activity will dilute the managerial capacity of the top echelon, and existing activities will suffer in consequence.

Now, of course, this general presumption must be modified in particular cases. Many old-line Government bureaus (such as the Forestry Service) and many quasi-public corporations (such as the TVA) have great dedication and initiative with high esprit de corps amongst their staff and are fully the equal of comparable sectors of private enterprise. But the general presumption against Government enterprise should not lightly be cast aside. Government ought not to duplicate the efforts of the market and when it has done so, because of some temporary expediency, it should withdraw as gracefully and rapidly as possible. Exceptions require very strong proof indeed.

Unfortunately, once Government is embroiled in one of these ventures, the cost of disentanglement is high. In some cases no private firms are willing to take the thing off the Government's hands save at bargain-basement prices. Or—as in the case of loans to farmers and small-business men—the activity involves a concealed subsidy which the political power of the beneficiaries is mobilized to retain. Or an

arsenal, a manufacturing plant, and an insurance agency become symbols of empire and all the massive power and artful devices of entrenched bureaucracy are arrayed in their defense.

RATIONAL CHOICE IN BUDGETARY POLICY

Given the grounds which sanction Government activities, how should we decide how much of our resources to devote to public purposes? Since the market cannot register the demand for these services, the political process must answer this question for us.

To economize on the labor of decision-making, elected representatives review policy and decide the details of public expenditure. In this, however, they do but reflect the ultimate consensus of the body politic so far as it lies within their power to determine it. Let us inquire, therefore, how the rational society would determine expenditures if the people themselves, after due investigation and debate, held a mass referendum on budgetary policy.

The decision could be made in two separate stages. The first order of business would be determination of the system of taxes, i. e., the array of rates for collecting any given amount of revenue from various income groups. To simplify exposition let us suppose that the revenue is to be collected by a universal tax on personal income. For each amount of revenue some sets of rates promise more equality, and some less; some would exact a smaller sacrifice in productivity, others a greater sacrifice. Indeed each set of rates would yield a specific combination of equality and productivity. The rational voter would select the rates that corresponded to his preferences as a citizen and his interests as a producer.

The society as a whole, let us say, decides to accept some rough average of the systems of rates for which its members voted. This being decided, the taxes levied upon members of each income class for each different amount of revenue are ascertained and announced.

Our citizen-taxpayers repair to the polls again to vote for the level of expenditures. Let us suppose that they are to cast a separate vote for each of the major categories: national defense, health and welfare, conservation, and so forth. How does the rational taxpayer cast his vote? He is aware that, say, expenditures of \$10 billion of the community entail \$100 in personal taxes, \$15 billions, \$150 and so on. Given his income and the structure of taxes, each extra dollar levied on him is accompanied by an additional \$100 million from the community at large. (These accompanying amounts, of course, vary from one income group to another and from one expenditure level to another.) As a rational citizen-taxpayer he assesses the technical results of these expenditures and evaluates the personal satisfactions they create for him. For each class of activities, he votes for the level of public expenditures where the satisfactions created through Government by the outlay which necessarily accompanies the last dollar in personal taxes equal the satisfactions he would have secured from a dollar of private expenditure. He equalizes at the margin the satisfactions secured from alternative avenues of expenditure.

Depending on their income, their preferences, and the structure of the tax system, each individual selects some different level of expenditures in each category of the budget. The community, let us suppose, balances off these votes by compromising at the median, by taking,

that is, the level which slices the votes in half; 50 percent voted for some higher level, 50 percent for some lower amount.

The result, inevitably, satisfies no one perfectly and dissatisfies some exceedingly. First, the tax system appears arbitrary when viewed by citizens who hold different preferences for the terms of trade between equality and productivity. Second, the degree of freedom the voter exercises depends on the number of expenditure categories arrayed for his decision. Third, the optimum for which he votes is surrounded by a margin of doubt. For his choice on "national defense" is bound to be affected by public expenditures and personal taxes for "conservation." But he votes for each in ignorance of the amount the community will determine for the other. Fourth, the community—under the median rule or any other rule—is not likely to satisfy his preferences precisely (unless, by accident, he was the median voter). If, for instance, the community chooses \$10 billion, those who wanted more will feel shortchanged, while those who selected less may fancy themselves abused.

What role does representative government play in rational budgetary policy? The variety and complexity of government is beyond the scope of the ordinary citizen, nor would it be at all sensible for him to spend any large fraction of his time and his fortune in public business. That task is entrusted to elected agents who both accumulate knowledge of public affairs and serve as middlemen between the body politic and its government. Even the most dedicated of these agents can form no more than a rough estimate of the issues at stake, and can collect only the most cursory of samples of the true state of public opinion. But given their limits and their commitments, the role of the legislator is to vote as the citizens would have voted if they knew as much as he knows.