

HUMAN ACTION

by Ludwig von Mises, 4th edition (1996)

PART FOUR

CATALLACTICS OR ECONOMICS OF THE MARKET SOCIETY

XXIII. THE DATA OF THE MARKET

1. The Theory and the Data

Catallactics, the theory of the market economy, is not a system of theorems valid only under ideal and unrealizable conditions and applicable to reality merely with essential restrictions and modifications. All the theorems of catallactics are rigidly and without any exception valid for all phenomena of the market economy, provided the particular conditions which they presuppose are present. It is, for instance, a simple question of fact whether there is direct or indirect exchange. But where there is indirect exchange, all the general laws of the theory of indirect exchange are valid with regard to the acts of exchange and the media of exchange. As has been pointed out¹, praxeological knowledge is precise or exact knowledge of reality. All references to the epistemological issues of the natural sciences and all analogies derived from comparing these two radically different realms of reality and cognition are misleading. There is, apart from formal logic, no such thing as a set of "methodological" rules applicable both to cognition by means of the category of causality and to that by means of the category of finality.

Praxeology deals with human action as such in a general and universal way. It deals neither with the particular conditions of the environment in which man acts nor with the concrete content of the valuations which direct his actions. For praxeology data are the bodily and psychological features of the acting men, their desires and value judgments, and the theories, doctrines, and ideologies they develop in order to adjust themselves purposively to the conditions of their environment and thus to attain the ends they are aiming at. These data, although permanent in their structure and strictly determined by the laws controlling the order of the universe, are perpetually fluctuating and varying; they change from instant to instant².

The fullness of reality can be mentally mastered only by a mind resorting both to the conception of praxeology and to the understanding of history; and the latter requires command of the teachings of the natural sciences. Cognition and prediction are provided by the totality of knowledge. What the various single branches of science offer is always fragmentary; it must be complemented by the results of all the other branches. From the point of view of acting man the specialization of knowledge and its breaking up into the various sciences is merely a device of the division of labor. In the same way in which the consumer utilizes the products of various branches of production, the actor must base his decisions on knowledge brought about by various branches of thought and investigation.

¹ See above, p. 39.

² Cf. Strigl, *Die ökonomischen Kategorien und die Organisation der Wirtschaft* (Jena, 1923), pp. 18 ff.

It is not permissible to disregard any of these branches in dealing with reality. The Historical School and the Institutionalists want to outlaw the study of praxeology and economics and to occupy themselves merely with the registration of the data or, as they call them nowadays, the institutions. But no statement concerning these data can be made without reference to a definite set of economic theorems. When an institutionalist ascribes a definite event to a definite cause, e.g., mass unemployment to the alleged deficiencies of the capitalist mode of production, he resorts to an economic theorem. In objecting to the closer examination of the theorem tacitly implied in his conclusions, he merely wants to avoid the exposure of the fallacies of his argument. There is no such thing as a mere recording of unadulterated facts apart from any reference to theories. As soon as two events are recorded together or integrated into a class of events, a theory is operative. The question whether there is any connection between them can only be answered by a theory, i.e., in the case of human action by praxeology. It is vain to search for coefficients of correlation if one does not start from a theoretical insight acquired beforehand. The coefficient may have a high numerical value without indicating any significant and relevant connection between the two groups³.

2. The Role of Power

The Historical School and Institutionalism condemn economics for disregarding the role which power plays in real life. The basic notion of economics, viz., the choosing and acting individual, is, they say, an unrealistic concept. Real man is not free to choose and to act. He is subject to social pressure, to the sway of irresistible power. It is not the individuals' value judgments, but the interactions of the forces of power that determine the market phenomena.

These objections are no less spurious than all other statements of the critics of economics.

Praxeology in general and economics and catallactics in particular do not contend or assume that man is free in any metaphysical sense attached to the term *freedom*. Man is unconditionally subject to the natural conditions of his environment. In acting he must adjust himself to the inexorable regularity of natural phenomena. It is precisely the scarcity of the nature-given conditions of his welfare that enjoins upon man the necessity to act⁴.

In acting man is directed by ideologies. He chooses ends and means under the influence of ideologies. The might of an ideology is either direct or indirect. It is direct when the actor is convinced that the content of the ideology is correct and that he serves his own interests directly in complying with it. It is indirect when the actor rejects the content of the ideology as false, but is under the necessity of adjusting his actions to the fact that this ideology is endorsed by other people. The mores of their social environment are a power which people are forced to consider. Those recognizing the spuriousness of the generally accepted opinions and habits must in each instance choose between the advantages to be derived from resorting to a more efficient mode of acting and the disadvantages resulting from the contempt of popular prejudices, superstitions, and folkways.

³ Cf. Cohen and Nagel, *An Introduction to Logic and Scientific Method* (New York, 1939), pp. 316-322.

⁴ Most social reformers, foremost among them Fourier and Marx, pass over in silence the fact that the nature-given means of removing human uneasiness are scarce. As they see it, the fact that there is not an abundance of all useful things is merely caused by the inadequacy of the capitalist mode of production and will therefore disappear in the "higher phase" of communism. An eminent Menshevik author who could not help referring to the nature-given barriers to human well-being, in genuinely Marxian style, calls Nature "the most relentless exploiter." Cf. Manya Gordon, *Workers Before and After Lenin* (New York, 1941), pp. 227; 458.

The same is true with regard to violence. In choosing man must take into account the fact that there is a factor ready to exercise violent compulsion upon him.

All the theorems of catallactics are valid also with regard to actions influenced by such social or physical pressure. The direct or indirect might of an ideology and the threat of physical compulsion are merely data of the market situation. It does not matter, for instance, what kind of considerations motivate a man not to offer a higher bid for the purchase of a commodity than the one he really makes without obtaining the good concerned. For the determination of the market price it is immaterial whether he spontaneously prefers to spend his money for other purposes or whether he is afraid of being looked upon by his fellow men as an upstart, or as a spendthrift, afraid of violating a government-decreed ceiling price or of defying a competitor ready to resort to violent revenge. In any case, his abstention from bidding a higher price contributes to the same extent to the emergence of the market price⁵.

It is customary nowadays to signify the position which the owners of property and the entrepreneurs occupy on the market as economic power or market power. This terminology is misleading when applied to the conditions of the market. All that happens in the unhampered market economy is controlled by the laws dealt with by catallactics. All market phenomena are ultimately determined by the choices of the consumers. If one wants to apply the notion of power to phenomena of the market, one ought to say: in the market all power is vested in the consumers. The entrepreneurs are forced, by the necessity of earning profits and avoiding losses, to consider in every regard--e.g. also in the conduct of the wrongly so-called "internal" affairs of their plants, especially personnel management--the best possible and cheapest satisfaction of the consumers as their supreme directive. It is very inexpedient to employ the same term "power" in dealing with a firm's ability to supply the consumers with automobiles, shoes, or margarine better than others do and in referring to the strength of a government's armed forces to crush any resistance.

Ownership of material factors of production as well as entrepreneurial or technological skill do not--in the market economy--bestow power in the coercive sense. All they grant is the privilege to serve the real masters of the market, the consumers, in a more exalted position than other people. Ownership of capital is a mandate entrusted to the owners, under the condition that it should be employed for the best possible satisfaction of the consumers. He who does not comply with this imposition forfeits his wealth and is relegated to a place in which his ineptitude no longer hurts people's well-being.

3. The Historical Role of War and Conquest

Many authors glorify war and revolution, bloodshed and conquest. Carlyle and Ruskin, Nietzsche, Georges Sorel, and Spengler were harbingers of the ideas which Lenin and Stalin, Hitler and Mussolini put into effect.

The course of history, say these philosophies, is not determined by the mean activities of materialistic peddlers and merchants, but by the heroic deeds of warriors and conquerors. The economists err in abstracting from the experience of the short-lived liberal episode a theory to which they ascribe universal validity. This epoch of liberalism, individualism, and capitalism; of democracy, tolerance, and freedom; of the disregard of all "true" and "eternal" values; and

⁵ The economic consequences of the interference of external compulsion and coercion with the market phenomena are dealt with in the sixth part of this book.

of the supremacy of the rabble is now vanishing and will never return. The dawning age of manliness requires a new theory of human action.

However, no economist ever ventured to deny that war and conquest were of utmost importance in the past and that Huns and Tartars, Vandals and Vikings, Normans and conquistadors played an enormous part in history. One of the determinants of the present state of mankind is the fact that there were thousands of years of armed conflicts. Yet, what remains and is the essence of human civilization, is not the legacy inherited from the warriors. Civilization is an achievement of the "bourgeois" spirit, not of the spirit of conquest. Those barbarian peoples who did not substitute working for plundering disappeared from the historical scene. If there is still any trace left of their existence, it is in the achievements they accomplished under the influence of the civilization of the subdued peoples. Latin civilization survived in Italy, France, and the Iberian peninsula in defiance of all barbarian invasions. If capitalist entrepreneurs had not succeeded Lord Clive and Warren Hastings, British rule in India might one day have become such an insignificant historical reminiscence as are the one hundred and fifty years of Turkish rule in Hungary.

It is not the task of economics to enter into an examination of the endeavors to revive the ideals of the Vikings. It has merely to refute the statements that the fact that there are armed conflicts reduces its teachings to nought. With regard to this problem there is need to emphasize again the following:

First: The teachings of catallactics do not refer to a definite epoch of history, but to all actions characterized by the two conditions *private ownership of the means of production* and *division of labor*. Whenever and wherever, in a society in which there is private ownership of the means of production, people not only produce for the direct satisfaction of their own wants but also consume goods produced by other people, the theorems of catallactics are strictly valid.

Second: If apart from the market and outside of the market there is robbing and plundering, these facts are a datum for the market. The actors must take into account the fact that they are threatened by murderers and robbers. If killing and robbing become so prevalent that any production appears useless, it may finally happen that productive work ceases and mankind plunges into a state of war of every man against every other man.

Third: In order to seize booty, something to be plundered must be available. The heroes can only live if there are enough "bourgeois" to be expropriated. The existence of producers is a condition for the survival of conquerors. But the producers could do without the plunderers.

Fourth: There are, of course, other imaginable systems of a society based on the division of labor besides the capitalist system of private ownership of the means of production. Champions of militarism are consistent in asking for the establishment of socialism. The whole nation should be organized as a community of warriors in which the noncombatants have no other task than that of supplying the fighting forces with all they need. (The problems of socialism are dealt with in the fifth part of this book.)

4. Real Man as a Datum

Economics deals with the real actions of real men. Its theorems refer neither to ideal nor to perfect men, neither to the phantom of a fabulous economic man (*homo oeconomicus*) nor to

the statistical notion of an average man (*homme moyen*). Man with all his weaknesses and limitations, every man as he lives and acts, is the subject matter of catallactics. Every human action is a theme of praxeology.

The subject matter of praxeology is not only the study of society, societal relations, and mass phenomena, but the study of all human actions. The term "the social sciences" and all its connotations are in this regard misleading.

There is no yardstick that a scientific investigation can apply to human action other than that of the ultimate goals the acting individual wants to realize in embarking upon a definite action. The ultimate goals themselves are beyond and above any criticism. Nobody is called upon to establish what could make another man happy. What an unaffected observer can question is merely whether or not the means chosen for the attainment of these ultimate goals are fit to bring about the results sought by the actor. Only in answering this question is economics free to express an opinion about the actions of individuals and groups of individuals, or of the policies of parties, pressure groups, and governments.

It is customary to disguise the arbitrariness of the attacks launched against the value judgments of other people by converting them into a critique of the capitalist system or of the conduct of entrepreneurs. Economics is neutral with regard to all such statements.

To the arbitrary statement that "the balance between the production of different goods is admittedly faulty under capitalism,"⁶ the economist does not oppose the statement that this balance is faultless. What the economist asserts is that in the unhampered market economy this balance is in agreement with the conduct of the consumers as displayed in the spending of their incomes⁷. It is not the task of the economist to censure his fellow men and to call the result of their actions faulty.

The alternative to the system in which the individual's value judgments are paramount in the conduct of production processes is autocratic dictatorship. Then the value judgments of the dictators alone decide although they are no less arbitrary than those of other people.

Man is certainly not a perfect being. His human weakness taints all human institutions and thus also the market economy.

5. The Period of Adjustment

Every change in the market data has its definite effects upon the market. It takes a definite length of time before all these effects are consummated, i.e., before the market is completely adjusted to the new state of affairs.

Catallactics has to deal with all the various individuals' conscious and purposive reactions to the changes in the data and not, of course, merely with the final result brought about in the market structure by the interplay of these actions. It may happen that the effects of one change in the data are counteracted by the effects of another change occurring, by and large, at the same time and to the same extent. Then no considerable change in the market prices finally

⁶ Cf. Albert L. Meyers, *Modern Economics* (New York, 1946), p. 672.

⁷ This is the general feature of democracy whether political or economic. Democratic elections do not provide the guarantee that the man elected is free from faults, but merely that the majority of the voters prefer him to other candidates.

results. The statistician, exclusively preoccupied with the observation of mass phenomena and the outgrowth of the totality of market transactions as manifested in market prices, ignores the fact that the nonemergence of changes in the height of prices is merely accidental and not the outcome of a continuance in the data and the absence of specific adjustment activities. He fails to see any movement and the social consequences of such movements. Yet each change in the data has its own course, generates certain reactive responses on the part of the individuals affected and disturbs the relation between the various members of the market system even if eventually no considerable changes in the prices of the various goods and no changes at all in the figures concerning the total amount of capital in the whole market system result⁸.

Economic history can give vague information, after the fact, about the length of adjustment periods. The method of attaining such information is, of course, not measurement, but historical understanding. The various adjustment processes are in reality not isolated. Synchronously an indefinite number of them take their course, their paths intersect, and they mutually influence one another. To disentangle this intricate tissue and to observe the chain of actions and reactions set into motion by a definite change in the data is a difficult task for the historian's understanding and the results are mostly meager and questionable.

The understanding of the length of adjustment periods is also the most difficult task incumbent upon those eager to understand the future, the entrepreneurs. Yet for success in entrepreneurial activities mere anticipation of the direction in which the market will react to a certain event is of little significance if it is not supplemented by an adequate anticipation of the length of the various adjustment periods involved. Most of the mistakes committed by entrepreneurs in the conduct of affairs and most of the blunders vitiating the prognoses of future business trends on the part of "expert" forecasters are caused by errors concerning the length of adjustment periods.

In dealing with effects brought about by changes in the data, it is customary to distinguish between the temporally nearer and the temporally remoter effects, viz., the short-run effects and the long run effects. This distinction is much older than the terminology in which it is expressed nowadays.

In order to discover the immediate--the short-run--effects brought about by a change in a datum, there is as a rule no need to resort to a thorough investigation. The short-run effects are for the most part obvious and seldom escape the notice of a naive observer unfamiliar with searching investigations. What started economic studies was precisely the fact that some men of genius began to suspect that the remoter consequences of an event may differ from the immediate effects visible even to the most simple-minded layman. The main achievement of economics was the disclosure of such long-run effects hitherto unnoticed by the unaffected observer and neglected by the statesman.

From their startling discoveries the classical economists derived a rule for political practice. Governments, statesmen, and political parties, they argued, in planning and acting should consider not only the short-run consequences but also the long-run consequences of their measures. The correctness of this inference is incontestable and indisputable. Action aims at the substitution of a more satisfactory state of affairs for a less satisfactory. Whether or not the

⁸ With regard to changes in the elements determining the purchasing power of money see above, p. 419. With regard to the documulation and accumulation of capital see above, pp. 515-516.

outcome of a definite action will be considered more or less satisfactory depends on a correct anticipation of all its consequences, both short run and long run.

Some people criticize economics for alleged neglect of the short-run effects and for alleged preference given to the study of the long-run effects. The reproach is nonsensical. Economics has no means of scrutinizing the results of a change in the data other than to start with its immediate consequences and to analyze, step by step, proceeding from the first reaction to the remoter reactions, all the subsequent consequences, until it finally arrives at its ultimate consequences. The long-run analysis necessarily always fully includes the short-run analysis.

It is easy to understand why certain individuals, parties and pressure groups are eager to propagate the exclusive sway of the short-run principle. Politics, they say, should never be concerned about the long-run effects of a device and should never abstain from resorting to a measure form which benefits are expected in the short run merely because its long-run effects are detrimental. What counts is only the short-run effects; "in the long run we shall all be dead." All that economics has to answer to these passionate critics is that every decision should be based on a careful weighing of all its consequences, both those in the short run and those in the long run. there are certainly, both in the actions of individuals and in the conduct of public affairs, situations in which the actors may have good reasons to put up even with very undesirable long-run effects in order to avoid what they consider still more undesirable short-run conditions. It may sometimes be expedient for a man to heat the stove with his furniture. But if he does, he should know what the remoter effects will be. He should not delude himself by believing that he has discovered a wonderful new method of heating his premises.

That is all that economics opposes to the frenzy of the short-run principle==this revival of Madame de Pompadour's notorious phrase *apres nous le deluge*--played in the most serious crisis of Western civilization. It will have to show how welcome this slogan was to governments and parties whose policies aimed at the consumption of the spiritual and material capital inherited from earlier generations.

6. The Limits of Property Rights and the Problems of External Costs and External Economies

Property rights as they are circumscribed by laws and protected by courts and the police, are the outgrowth of an age-long evolution. The history of these ages is the record of struggles aiming at the abolition of private property. Again and again despots and popular movements have tried to restrict the rights of private property or to abolish it altogether. These endeavors, it is true, failed. But they have left traces in the ideas determining the legal form and definition of property. The legal concepts of property do not fully take account of the social function of private property. There are certain inadequacies and incongruities which are reflected in the determination of the market phenomena.

Carried through consistently, the right of property would entitle the proprietor to claim all the advantages which the good's employment may generate on the one hand and would burden him with all the disadvantages resulting from its employment on the other hand. Then the proprietor alone would be fully responsible for the outcome. In dealing with his property he would take into account all the expected results of his action, those considered favorable as well as those considered unfavorable. But if some of the consequences of his action are outside of the sphere of the benefits he is entitled to reap and of the drawbacks that are put to

his debit, he will not bother in his planning about *all* the effects of his action. He will disregard those benefits which do not increase his own satisfaction and those costs which do not burden him. His conduct will deviate from the line which it would have followed if the laws were better adjusted to the economic objectives of private ownership. He will embark upon certain projects only because the laws release him from responsibility for some of the costs incurred. He will abstain from other projects merely because the laws prevent him from harvesting all the advantages derivable.

The laws concerning liability and indemnification for damages caused were and still are in some respects deficient. By and large the principle is accepted that everybody is liable to damages which his actions have inflicted upon other people. But there were loopholes left which the legislators were slow to fill. In some cases this tardiness was intentional because the imperfections agreed with the plans of the authorities. When in the past in many countries the owners of factories and railroads were not held liable for the damages which the conduct of their enterprises inflicted on the property and health of neighbors, patrons, employees, and other people through smoke, soot, noise, water pollution, and accidents caused by defective or inappropriate equipment, the idea was that one should not undermine the progress of industrialization and the development of transportation facilities. The same doctrines which prompted and still are prompting many governments to encourage investment in factories and railroads through subsidies, tax exemption, tariffs, and cheap credit were at work in the emergence of a legal state of affairs in which the liability of such enterprises was either formally or practically abated. Later again the opposite tendency began to prevail in many countries and the liability of manufacturers and railroads was increased as against that of other citizens and firms. Here again definite political objectives were operative. Legislators wished to protect the poor, the wage earners, and the peasants against the wealthy entrepreneurs and capitalists.

Whether the proprietor's relief from responsibility for some of the disadvantages resulting from his conduct of affairs is the outcome of a deliberate policy on the part of governments and legislators or whether it is an unintentional effect of the traditional working of laws, it is at any rate a datum which the actors must take into account. They are faced with the problem of *external costs*. Then some people choose certain modes of want-satisfaction merely on account of the fact that a part of the costs incurred are debited not to them but to other people.

The extreme instance is provided by the case of no-man's property referred to above⁹. If land is not owned by anybody, although legal formalism may call it public property, it is utilized without any regard to the disadvantages resulting. Those who are in a position to appropriate to themselves the returns--lumber and game of the forests, fish of the water areas, and mineral deposits of the subsoil--do not bother about the later effects of their mode of exploitation. For them the erosion of the soil, the depletion of the exhaustible resources and other impairments of the future utilization are external costs not entering into their calculation of input and output. They cut down the trees without any regard for fresh shoots or reforestation. In hunting and fishing they do not shrink from methods preventing the repopulation of the hunting and fishing grounds. In the early days of human civilization, when soil of a quality not inferior to that of the utilized pieces was still abundant, people did not find any fault with such predatory methods. When their effects appeared in a decrease in the net returns, the ploughman abandoned his farm and moved to another place. It was only when a country was more densely settled and unoccupied first class land was no longer available for

⁹ See above, p. 639.

appropriation, that people began to consider such predatory methods wasteful. At that time they consolidated the institution of private property in land. They started with arable land and then, step by step, included pastures, forests, and fisheries. The newly settled colonial countries overseas, especially the vast spaces of the United States, whose marvelous agricultural potentialities were almost untouched when the first colonists from Europe arrived, passed through the same stages. Until the last decades of the nineteenth century there was always a geographic zone open to newcomers--the frontier. Neither the existence of the frontier nor its passing was peculiar to America. What characterizes American conditions is the fact that at the time the frontier disappeared ideological and institutional factors impeded the adjustment of the methods of land utilization to the change in the data.

In the central and western areas of continental Europe, where the institution of private property and been rigidly established for many centuries, things were different. There was no question of soil erosion of formerly cultivated land. There was no problem of forest devastation in spite of the fact that the domestic forests had been for ages the only source of lumber for construction and mining and of fuel for heating and for the foundries and furnaces, the potteries and the glass factories. The owners of the forests were impelled to conservation by their own selfish interests. In the most densely inhabited and industrialized areas up to a few years ago between a fifth and a third of the surface was still covered by first-class forests managed according to the methods of scientific forestry¹⁰.

It is not the task of catallactic theory to elaborate an account of the complex factors that produced modern American land-ownership conditions. Whatever these factors were, they brought about a state of affairs under which a great many farmers and lumber enterprises had reason to consider the disadvantages resulting from the neglect of soil and forest conservation as external costs¹¹.

It is true that where a considerable part of the costs incurred are external costs from the point of view of the acting individuals or firms, the economic calculation established by them is manifestly defective and their results deceptive. But this is not the outcome of alleged deficiencies inherent in the system of private ownership of the means of production. It is on the contrary a consequence of loopholes left in this system. It could be removed by a reform of the laws concerning liability for damages inflicted and by rescinding the institutional barriers preventing the full operation of private ownership.

The case of external economies is not simply the inversion of the case of external costs. It has its own domain and character. If the results of an actor's action benefit not only himself, but also other people, two alternatives are possible:

¹⁰ Late in the eighteenth century European governments began to enact laws aiming at forest conservation. However, it would be a serious blunder to ascribe to these laws any role in the conservation of the forests. Before the middle of the nineteenth century there was no administrative apparatus available for their enforcement. Besides the governments of Austria and Prussia, to say nothing of those of the smaller German states, virtually lacked the power to enforce to such laws against the aristocratic lords. No civil servant before 1914 would have been bold enough to rouse the anger of a Bohemian or Silesian magnate or a German mediatised *standesheer*. These princes and counts were spontaneously committed to forest conservation because they felt perfectly safe in the possession of their property and were eager to preserve unabated the source of their revenues and the market price of their estates.

¹¹ One could as well say that they considered the advantage to be derived from giving care to soil and forest conservation external economies.

1. The planning actor considers the advantages which he expects for himself so important that he is prepared to defray all the costs required. The fact that his project also benefits other people will not prevent him from accomplishing what promotes his own well-being. When a railroad company erects dikes to protect its tracks against snowslides and avalanches, it also protects the houses on adjacent grounds. But the benefits which its neighbors will derive will not hinder the company from embarking upon an expenditure that it deems expedient.
2. The costs incurred by a project are so great that none of those whom it will benefit is ready to expend them in full. The project can be realized only if a sufficient number of those interested in it share in the costs.

It would hardly be necessary to say more about external economies if it were not for the fact that this phenomenon is entirely misinterpreted in current pseudo-economic literature.

A project *P* is unprofitable when and because consumers prefer the satisfaction expected from the realization of some other projects to the satisfaction expected from the realization of *P*. The realization of *P* would withdraw capital and labor from the realization of some other projects for which the demand of the consumers is more urgent. The layman and the pseudo-economist fail to recognize this fact. They stubbornly refuse to notice the scarcity of the factors of production. As they see it, *P* could be realized without any cost at all, i.e., without foregoing any other satisfaction. It is merely the wantonness of the profit system that prevents the nation from enjoying gratuitously the pleasures expected from *P*.

Now, these short-sighted critics go on to say, the absurdity of the profit system becomes especially outrageous if the unprofitability of *P* is merely due to the fact that the entrepreneur's calculations neglect those advantages of *P* which for them are external economies. From the point of view of the whole of society such advantages are not external. They benefit at least some members of society and would increase "total welfare." The nonrealization of *P* is therefore a loss for society. As profit-seeking business, entirely committed to selfishness, declines to embark upon such unprofitable projects, it is the duty of government to fill the gap. Government should either run them as public enterprises or it should subsidize them in order to make them attractive for the private entrepreneur and investor. The subsidies may be granted either directly by money grants from public funds or indirectly by means of tariffs the incidence of which falls upon the buyers of the products.

However, the means which a government needs in order to run a plant at a loss or to subsidize an unprofitable project must be withdrawn either from the taxpayers' spending and investing power or from the loan market. The government has no more ability than individuals to create something out of nothing. What the government spends more, the public spends less. Public works are not accomplished by the miraculous power of a magic wand. They are paid for by funds taken away from the citizens. If the government had not interfered, the citizens would have employed them for the realization of profit-promising projects the realization of which they must omit because their means have been curtailed by the government. For every unprofitable project that is realized by the aid of the government there is a corresponding project the realization of which is neglected merely on account of the government's intervention. Yet this nonrealized project would have been profitable, i.e., it would have employed the scarce means of production in accordance with the most urgent needs of the consumers. From the point of view of the consumers the employment of these means of production for the realization of an unprofitable project is wasteful. It deprives them of

satisfactions which they prefer to those which the government-sponsored project can furnish them.

The gullible masses who cannot see beyond the immediate range of their physical eyes are enraptured by the marvelous accomplishments of their rulers. They fail to see that they themselves foot the bill and must consequently renounce many satisfactions which they would have enjoyed if the government had spent less for unprofitable projects. They have not the imagination to think of the possibilities that the government has not allowed to come into existence¹².

These enthusiasts are still more bewildered if the government's interference enables submarginal producers to continue producing and to stand the competition of more efficient plants, shops, or farms. Here, they say, it is obvious that total production is increased and something is added to the wealth that would not have been produced without the assistance of the authorities. What happens in fact is just the opposite; the magnitude of total production and of total wealth is curtailed. Outfits producing at higher costs are brought into existence or preserved while other outfits producing at lower costs are forced to curtail or to discontinue their production. The consumers are not getting more, but less.

There is, for instance, the very popular idea that it is a good thing for the government to promote the agricultural development of those parts of the country which nature has poorly endowed. Costs of production are higher in these districts than in other areas; it is precisely this fact that qualifies a large part of their soil as submarginal. When unaided by public funds, the farmers tilling these submarginal lands could not stand the competition of the more fertile farms. Agriculture would shrink or fail to develop and the whole area would become a backward part of the country. In full cognizance of this state of affairs profit-seeking business avoids investing in the construction of railroads connecting such inauspicious areas with the centers of consumption. The plight of the farmers is not caused by the fact that they lack transportation facilities. The causation is the other way round; because business realizes that the prospects for these farmers are not propitious, it abstains from investing in railroads which are likely to become unprofitable for lack of a sufficient amount of goods to be shipped. If the government, yielding to the demands of the interested pressure groups, builds the railroad and runs it at a deficit, it certainly benefits the owners of farm land in those poor districts of the country. As a part of the costs that the shipping of their products requires is borne by the treasury, they find it easier to compete with those tilling more fertile land to whom such aid is denied. But the boon of these privileged farmers is paid for by the taxpayers who must provide the funds required to defray the deficit. It affects neither the market price nor the total available supply of agricultural products. It merely makes profitable the operation of farms which hitherto were submarginal and makes other farms, the operation of which was hitherto profitable, submarginal. It shifts production from land requiring lower costs to land requiring higher costs. It does not increase total supply and wealth, it curtails them, as the additional amounts of capital and labor required for the cultivation of high-cost fields instead of low-cost fields are withheld from employments in which they would have made possible the production of some other consumers' goods. The government attains its end of benefiting some parts of the country with what they would have missed, but it produces somewhere else costs which exceed these gains of a privileged group.

¹² Cf. the brilliant analysis of public spending in Henry Hazlitt's book *Economics in One Lesson* (new ed. New York, 1962), pp. 21 ff.

The External Economies of Intellectual Creation

The extreme case of external economies is shown in the "production" of the intellectual groundwork of every kind of processing and constructing. The characteristic mark of formulas, i.e., the mental devices directing the technological procedures, is the inexhaustibility of the services they render. These services are consequently not scarce, and there is no need to economize their employment. Those considerations that resulted in the establishment of the institution of private ownership of economic goods did not refer to them. They remained outside the sphere of private property not because they are immaterial, intangible, and impalpable, but because their serviceableness cannot be exhausted.

People began to realize only later that this state of affairs has its drawbacks too. It places the producers of such formulas--especially the inventors of technological procedures and authors and composers--in a peculiar position. They are burdened with the cost of production, while the services of the product they have created can be gratuitously enjoyed by everybody. What they produce is for them entirely or almost entirely external economies.

If there are neither copyrights nor patents, the inventors and authors are in the position of an entrepreneur. They have a temporary advantage as against other people. As they start sooner in utilizing their invention or their manuscript themselves or in making it available for use to other people (manufacturers or publishers), they have the chance to earn profits in the time interval until everybody can likewise utilize it. As soon as the invention or the content of the book are publicly known, they become "free goods" and the inventor or author has only his glory.

The problem involved has nothing to do with the activities of the creative genius. These pioneers and originators of things unheard of do not produce and work in the sense in which these terms are employed in dealing with the affairs of other people. They do not let themselves be influenced by the response their work meets on the part of their contemporaries. They do not wait for encouragement¹³.

It is different with the broad class of professional intellectuals whose services society cannot do without. We may disregard the problem of second-rate authors of poems, fiction, and plays and second-rate composers and need not inquire whether it would be a serious disadvantage for mankind to lack the products of their efforts. But it is obvious that handing down knowledge to the rising generation and familiarizing the acting individuals with the amount of knowledge they need for the realization of their plans require textbooks, manuals, handbooks, and other nonfiction works. It is unlikely that people would undertake the laborious task of writing such publications if everyone were free to reproduce them. This is still more manifest in the field of technological invention and discovery. The extensive experimentation necessary for such achievements is often very expensive. It is very probable that technological progress would be seriously retarded if, for the inventor and for those who defray the expenses incurred by his experimentation, the results obtained were nothing but external economies.

Patents and copyrights are results of the legal evolution of the last centuries. Their place in the traditional body of property rights is still controversial. People look askance at them and deem them irregular. They are considered privileges, a vestige of the rudimentary period of their

¹³ See above, pp. 139-140.

evolution when legal protection was accorded to authors and investors only by virtue of an exceptional privilege granted by the authorities. They are suspect, as they are lucrative only if they make it possible to sell at monopoly prices¹⁴. Moreover, the fairness of patent laws is contested on the ground that they reward only those who put the finishing touch leading to practical utilization of achievements of many predecessors. these precursors go empty-handed although their main contribution to the final result was often much more weighty than that of the patentee.

It is beyond the scope of catallactics to enter into an examination of the arguments brought forward for and against the institution of copyrights and patents. It has merely to stress the point that this is a problem of delimitation of property rights and that with the abolition of patents and copyrights authors and inventors would for the most part be producers of external economies.

Privileges and Quasi-privileges

The restrictions which laws and institutions impose upon the discretion to choose and to act are not always so insurmountable that they could not be overcome under certain conditions. To some favorites exemption from the obligation binding the rest of the people may be granted as an explicit privilege either by the laws themselves or by an administrative act of the authorities entrusted with the law's enforcement. Some may be ruthless enough to defy the laws in spite of the vigilance of the authorities; their daring insolence secures them a quasi-privilege.

A law that nobody observes is ineffectual. A law that is not valid for all or which not all obey, may grant to those who are exempt--whether by virtue of the law itself or by virtue of their own audacity--the opportunity to reap either differential rent or monopoly gains.

With regard to the determination of the market phenomena it does not matter whether the exemption is legally valid as a privilege or illegal as a quasi-privilege. Neither does it matter whether the costs, if any, incurred by the favored individual or firm for the acquisition of the privilege or quasi-privilege are legal (e.g., a tax levied on licensees) or illegal (e.g., bribes paid to corrupt officers). If an importation embargo is mitigated by the importation of a certain quantity, the prices are affected by the quantity imported and the specific costs incurred by the acquisition and the utilization of the privilege or quasi-privilege. But whether the importation was legal (e.g., a license granted under the system of quantitative trade control to some privileged people), or illegal contraband does not affect the price structure.

¹⁴ See above, pp. 364-365.