no tasks to be solved by reason. Beings which would have thrived in such a world would never have developed reasoning and thinking. If ever such a world were to be given to the descendants of the human race, these blessed beings would see their power to think wither away and would cease to be human. For the primary task of reason is to cope consciously with the limitations imposed upon man by nature, is to fight against scarcity. Acting and thinking man is the product of a universe of scarcity in which whatever well-being can be attained is the prize of toil and trouble, of conduct popularly called economic.

2. The Method of Imaginary Constructions

The specific method of economics is the method of imaginary constructions.

This method is the method of praxeology. That it has been carefully elaborated and perfected in the field of economic studies in the narrower sense is due to the fact that economics, at least until now, has been the best-developed part of praxeology. Everyone who wants to express an opinion about the problems commonly called economic takes recourse to this method. The employment of these imaginary constructions is, to be sure, not a procedure peculiar to the scientific analysis of these problems. The layman in dealing with them resorts to the same method. But while the layman's constructions are more or less confused and muddled, economics is intent upon elaborating them with the utmost care, scrupulousness, and precision, and upon examining their conditions and assumptions critically.

An imaginary construction is a conceptual image of a sequence of events logically evolved from the elements of action employed in its formation. It is a product of deduction, ultimately derived from the fundamental category of action, the act of preferring and setting aside. In designing such an imaginary construction the economist is not concerned with the question of whether or not it depicts the conditions of reality which he wants to analyze. Nor does he bother about the question of whether or not such a system as his imaginary construction posits could be conceived as really existent and in operation. Even imaginary constructions which are inconceivable, self-contradictory, or unrealizable can render useful, even indispensable services in the comprehension of reality, provided the economist knows how to use them properly.

The method of imaginary constructions is justified by its success. Praxeology cannot, like the natural sciences, base its teachings upon laboratory experiments and sensory perception of external objects. It had to develop methods entirely different from those of physics and biology. It would be a serious blunder to look for analogies to the imaginary constructions in the field of the natural sciences. The imaginary constructions of praxeology can never be confronted with any experience of things external and can never be appraised from the point of view of such experience. Their function is to serve man in a scrutiny which cannot rely upon his senses. In confronting the imaginary constructions with reality we cannot raise the question of whether they correspond to experience and depict adequately the empirical data. We must ask whether the assumptions of our construction are identical with the conditions of those actions which we want to conceive.

The main formula for designing of imaginary constructions is to abstract from the operation of some conditions present in actual action. Then we are in a position to grasp the hypothetical consequences of the absence of these conditions and to conceive the effects of their existence. Thus we conceive the category of action by constructing the image of a state in which there is no action, either because the individual is fully contented and does not feel any uneasiness or because he does not know any procedure from which an improvement in his well-being (state of satisfaction) could be expected. Thus we conceive the notion of originary interest from an imaginary construction in which no distinction is made between satisfactions in periods of time equal in length but unequal with regard to their distance from the instant of action.

The method of imaginary constructions is indispensable for praxeology; it is the only method of praxeological and economic inquiry. It is, to be sure, a method difficult to handle because it can easily result in fallacious syllogisms. It leads along a sharp edge; on both sides yawns the chasm of absurdity and nonsense. Only merciless self-criticism can prevent a man from falling headlong into these abysmal depths.

3. The Pure Market Economy

The imaginary construction of a pure or unhampered market economy assumes that there is division of labor and private ownership (control) of the means of production and that consequently there is market exchange of goods and services. It assumes that the operation of the market is not obstructed by institutional factors. It assumes that the government, the social apparatus of compulsion and coercion, is intent upon preserving the operation of the market system, abstains from hindering its functioning, and protects it against encroachments on the part of other people. The market is free; there is no interference of factors, foreign to the market, with prices, wage rates, and interest rates. Starting from these assumptions economics tries to elucidate the operation of a pure market economy. Only at a later stage, having exhausted everything which can be learned from the study of this imaginary construction, does it turn to the study of the various problems raised by interference with the market on the part of governments and other agencies employing coercion and compulsion.

It is amazing that this logically incontestable procedure, the only one that is fitted to solve the problems involved, has been passionately attacked. People have branded it as a prepossession in favor of a liberal economic policy, which they stigmatize as reactionary, economic royalism, Manchesterism, negativism, and so on. They deny that anything can be gained for the knowledge of reality from occupation with this imaginary construction. However, these turbulent critics contradict themselves as they take recourse to the same method in advancing their own assertions. In asking for minimum wage rates they depict the alleged unsatisfactory conditions of a free labor market and in asking for tariffs they describe the alleged disasters brought about by free trade. There is, of course, no other way available for the elucidation of a measure limiting the free play of the factors operating on an unhampered market than to study first the state of affairs prevailing under economic freedom.

It is true that economists have drawn from their investigations the conclusion that the goals which most people, practically even all people, are intent on attaining by toiling and working and by economic policy can best be realized where the free market system is not impeded by government decrees. But this is not a preconceived judgment stemming from an insufficient occupation with the operation of government interference with business. It is, on the contrary, the result of a careful unbiased scrutiny of all aspects of interventionism.

It is also true that the classical economists and their epigones used to call the system of the unhampered market economy “natural” and government meddling with market phenomena “artificial” and “disturbing.” But this terminology also was the product of their careful scrutiny of the problems of interventionism. They were in conformity with the semantic practice of their age in calling an undesirable state of social affairs “contrary to nature.”

Theism and Deism of the Age of Enlightenment viewed the regularity of natural phenomena as an emanation of the decrees of Providence. When the philosophers of the Enlightenment discovered that there prevails a regularity of phenomena also in human action and in social evolution, they were prepared to interpret it likewise as evidence of the paternal care of the Creator of the universe. This was the true meaning of the doctrine of the predetermined harmony as expounded by some economists.[4] The social philosophy of paternal despotism laid stress upon the divine mission of kings and autocrats predestined to rule the peoples. The liberal retorted that the operation of an unhampered market, on which the consumer—i.e., every citizen—is sovereign, brings about more satisfactory results than the decrees of anointed rulers. Observe the functioning of the market system, they said, and you will discover in it too the finger of God.

Along with the imaginary construction of a pure market economy the classical economists elaborated its logical counterpart, the imaginary construction of a socialist commonwealth. In the heuristic process which finally led to the discovery of the operation of a market economy this image of a socialist order even had logical priority. The question which preoccupied the economists was whether a tailor could be supplied with bread and shoes if there was no government decree compelling the baker and the shoemaker to provide for his needs. The first thought was that authoritarian interference is required to make every specialist serve his fellow citizens. The economists were taken aback when they discovered that no such compulsion is needed. In contrasting productivity and profitability, self-interest and public welfare, selfishness and altruism, the economists implicitly referred to the image of a socialist system. Their astonishment at the "automatic," as it were, steering of the market system was precisely due to the fact that they realized that an "anarchic" state of production results in supplying people better than the orders of a centralized omnipotent government. The idea of socialism—a system of the division of labor entirely controlled and managed by a planning authority—did not originate in the heads of utopian reformers. These utopians aimed rather at the autarkic coexistence of small self-sufficient bodies; take, for instance, Fourier's *phalanstere*. The radicalism of the reformers turned toward socialism when they took the image of an economy managed by a national government or a world authority, implied in the theories of the economists, as a model for their new order.

The Maximization of Profits

It is generally believed that economists, in dealing with the problems of a market economy, are quite unrealistic in assuming that all men are always

4. The doctrine of the predetermined harmony in the operation of an unhampered market system must not be confused with the theorem of the harmony of the rightly understood interests within a market system, although there is something akin between them. Cf. below, pp. 673-682.

eager to gain the highest attainable advantage. They construct, it is said, the image of a perfectly selfish and rationalistic being for whom nothing counts but profit. Such a homo oeconomicus may be a likeness of stock jobbers and speculators. But the immense majority are very different. Nothing for the cognition of reality can be learned from the study of the conduct of this delusive image.

It is not necessary to enter again into a refutation of all the confusion, error, and distortion inherent in this contention. The first two parts of this book have unmasked the fallacies implied. At this point it is enough to deal with the problem of the maximization of profits.

Praxeology in general and economics in its special field assume with regard to the springs of human action nothing other than that acting man wants to remove uneasiness. Under the particular conditions of dealing on the market, action means buying and selling. Everything that economics asserts about demand and supply refers to every instance of demand and supply and not only to demand and supply brought about by some special circumstances requiring a particular description or definition. To assert that a man, faced with the alternative of getting more or less for a commodity he wants to sell, *ceteris paribus* chooses the high price, does not require any further assumption. A higher price means for the seller a better satisfaction of his wants. The same applies mutatis mutandis to the buyer. The amount saved in buying the commodity concerned enables him to spend more for the satisfaction of other needs. To buy in the cheapest market and to sell in the dearest market is, other things being equal, not conduct which would presuppose any special assumptions concerning the actor's motives and morality. It is merely the necessary offshoot of any action under the conditions of market exchange.

In his capacity as a businessman a man is a servant of the consumers, bound to comply with their wishes. He cannot indulge in his own whims and fancies. But his customers' whims and fancies are for him ultimate law, provided these customers are ready to pay for them. He is under the necessity of adjusting his conduct to the demand of the consumers. If the consumers, without a taste for the beautiful, prefer things ugly and vulgar, he must, contrary to his own convictions, supply them with such things.[5] If consumers do not want to pay a higher price for domestic products than for those produced abroad, he must buy the foreign product, provided it is cheaper. An employer cannot grant favors at the expense of his customers. He cannot pay wage rates higher than those determined by the market if the buyers are

5. A painter is a businessman if he is intent upon making paintings which could be sold at the highest price. A painter who does not compromise with the taste of the buying public and, disdaining all unpleasant consequences, lets himself be guided solely by his own ideals is an artist, a creative genius. Cf. above, pp. 139-140.

not ready to pay proportionately higher prices for commodities produced in plants in which wage rates are higher than in other plants.

It is different with man in his capacity as spender of his income. He is free to do what he likes best. He can bestow alms. He can, motivated by various doctrines and prejudices, discriminate against goods of a certain origin or source and prefer the worse or more expensive product to the—technologically—better and cheaper one.

As a rule people in buying do not make gifts to the seller. But nonetheless that happens. The boundaries between buying goods and services needed and giving alms are sometimes difficult to discern. He who buys at a charity sale usually combines a purchase with a donation for a charitable purpose. He who gives a dime to a blind street musician certainly does not pay for the questionable performance; he simply gives alms.

Man in acting is a unity. The businessman who owns the whole firm may sometimes efface the boundaries between business and charity. If he wants to relieve a distressed friend, delicacy of feeling may prompt him to resort to a procedure which spares the latter the embarrassment of living on alms. He gives the friend a job in his office although he does not need his help or could hire an equivalent helper at a lower salary. Then the salary granted appears formally as a part of business outlays. In fact it is the spending of a fraction of the businessman's income. It is, from a correct point of view, consumption and not an expenditure designed to increase the firm's profits.[6]

Awkward mistakes are due to the tendency to look only upon things tangible, visible, and measurable, and to neglect everything else. What the consumer buys is not simply food or calories. He does not want to feed like a wolf, he wants to eat like a man. Food satisfies the appetite of many people the better, the more appetizingly and tastefully it is prepared, the finer the table is set, and the more agreeable the environment is in which the food is consumed. Such things are regarded as of no consequence by a consideration exclusively occupied with the chemical aspects of the process of digestion.[7] But the fact that they play an important role in the determination of food prices is perfectly compatible with the assertion that people prefer, ceteris paribus, to buy in the cheapest market. Whenever a buyer, in choosing between two things which chemists and technologists deem perfectly equal, prefers the more expensive, he has a reason.

6. Such overlapping of the boundaries between business outlays and consumptive spending is often encouraged by institutional conditions. An expenditure debited to the account of trading expenses reduces net profits and thereby the amount of taxes due. If taxes absorb 50 per cent of profits, the charitable businessman spends only 50 per cent of the gift out of his own pocket. The rest burdens the Department of Internal Revenue.

7. To be sure, a consideration from the point of view of the physiology of nutrition will not regard such things as negligible.

If he does not err, he pays for services which chemistry and technology cannot comprehend with their specific methods of investigation. If a man prefers an expensive place to a cheaper one because he likes to sip his cocktails in the neighborhood of a duke, we may remark on his ridiculous vanity. But we must not say that the man's conduct does not aim at an improvement of his own state of satisfaction.

What a man does is always aimed at an improvement of his own state of satisfaction. In this sense—and in no other—we are free to use the term selfishness and to emphasize that action is necessarily always selfish. Even an action directly aiming at the improvement of other people's conditions is selfish. The actor considers it as more satisfactory for himself to make other people eat than to eat himself. His uneasiness is caused by the awareness of the fact that other people are in want.

It is a fact that many people behave in another way and prefer to fill their own stomach and not that of their fellow citizens. But this has nothing to do with economics; it is a datum of historical experience. At any rate, economics refers to every kind of action, no matter whether motivated by the urge of a man to eat or to make other people eat.

If maximizing profits means that a man in all market transactions aims at increasing to the utmost the advantage derived, it is a pleonastic and perphrastic circumlocution. It only asserts what is implied in the very category of action. If it means anything else, it is the expression of an erroneous idea.

Some economists believe that it is the task of economics to establish how in the whole of society the greatest possible satisfaction of all people or of the greatest number could be attained. They do not realize that there is no method which would allow us to measure the state of satisfaction attained by various individuals. They misconstrue the character of judgments which are based on the comparison between various people's happiness. While expressing arbitrary value judgments, they believe themselves to be establishing facts. One may call it just to rob the rich in order to make presents to the poor. However, to call something fair or unfair is always a subjective value judgment and as such purely personal and not liable to any verification or falsification. Economics is not intent upon pronouncing value judgments. It aims at a cognition of the consequences of certain modes of acting.

It has been asserted that the physiological needs of all men are of the same kind and that this equality provides a standard for the measurement of the degree of their objective satisfaction. In expressing such opinions and in recommending the use of such criteria to guide the government's policy, one proposes to deal with men as the breeder deals with his cattle. But the reformers fail to realize that there is no universal principle of alimentation valid for all men. Which one of the various principles one chooses depends entirely on the aims one wants to attain. The cattle breeder does not feed his cows in order to make them happy, but in order to attain the ends which he has assigned to them in his own plans. He may prefer more milk or more meat or something else. What type of men do the man breeders want to rear—athletes or mathematicians? Warriors or factory hands? He who would make man the material of a purposeful system of breeding and feeding would arrogate to himself despotic powers and would use his fellow citizens as means for the attainment of his own ends, which differ from those they themselves are aiming at.

The value judgments of an individual differentiate between what makes him more satisfied and what less. The value judgments a man pronounces about another man's satisfaction do not assert anything about this other man's satisfaction. They only assert what condition of this other man better satisfies the man who pronounces the judgment. The reformers searching for the maximum of general satisfaction have told us merely what state of other people's affairs would best suit themselves.

4. The Autistic Economy

No other imaginary construction has caused more offense than that of an isolated economic actor entirely dependent on himself. However, economics cannot do without it. In order to study interpersonal exchange it must compare it with conditions under which it is absent. It constructs two varieties of the image of an autistic economy in which there is only autistic exchange: the economy of an isolated individual and the economy of a socialist society. In employing this imaginary construction the economists do not bother about the problem of whether or not such a system could really work.[8] They are fully aware of the fact that their imaginary construction is fictitious. Robinson Crusoe, who, for all that, may have existed, and the general manager of a perfectly isolated socialist commonwealth that never existed, would not have been in a position to plan and to act as people can only when taking recourse to economic calculation. However, in the frame of our imaginary construction we are free to pretend that they could calculate whenever such a fiction may be useful for the discussion of the specific problem to be dealt with.

The imaginary construction of an autistic economy is at the bottom of the popular distinction between productivity and profitability as it developed as

8. We are dealing here with problems of theory, not history. We can therefore abstain from refuting the objections raised against the concept of an isolated actor by referring to the historical role of the self-sufficient household economy.

a yardstick of value judgments. Those resorting to this distinction consider the autistic economy, especially that of the socialist type, the most desirable and most perfect system of economic management. Every phenomenon of the market economy is judged with regard to whether or not it could be justified from the viewpoint of a socialist system. Only to acting that would be purposeful in the plans of such a system's manager are positive value and the epithet *productive* attached. All other activities performed in the market economy are called unproductive in spite of the fact that they may be profitable to those who perform them. Thus, for example, sales promotion, advertising, and banking are considered as activities profitable but nonproductive.

Economics, of course, has nothing to say about such arbitrary value judgments.

5. The State of Rest and the Evenly Rotating Economy

The only method of dealing with the problem of action is to conceive that action ultimately aims at bringing about a state of affairs in which there is no longer any action, whether because all uneasiness has been removed or because any further removal of felt uneasiness is out of the question. Action thus tends toward a state of rest, absence of action.

The theory of prices accordingly analyzes interpersonal exchange from this aspect. People keep on exchanging on the market until no further exchange is possible because no party expects any further improvement of its won conditions from a new act of exchange. The potential buyers consider the prices asked by the potential sellers unsatisfactory, and vice versa. No more transactions take place. A state of rest emerges. This state of rest, which we may call the *plain state of rest*, is not an imaginary construction. It comes to pass again and again. When the stock market closes, the brokers have carried out all orders which could be executed at the market price. Only those potential sellers and buyers who consider the market price too low or too high respectively have not sold or bought.[9] The same is valid with regard to all transactions. The whole market economy is a big exchange or market place, as it were. At any instant all those transactions take place which the parties are ready to enter into at the realizable price. New sales can be effected only when the valuations of at least one of the parties have changed.

9. For the sake of simplicity we disregard the price fluctuations in the course of the business day.

It has been asserted that the notion of the plain state of rest is unsatisfactory. It refers, people have said, only to the determination of prices of goods of which a definite supply is already available, and does not say anything about the effects brought about by these prices upon production. The objection is unfounded. The theorems implied in the notion of the plain state of rest are valid with regard to all transactions without exception. It is true, the buyers of factors of production will immediately embark upon producing and very soon reenter the market in order to sell their products and to buy what they want for their own consumption and for continuing production processes. But this does not invalidate the scheme. this scheme, to be sure, does not contend that the state of rest will last. The lull will certainly disappear as soon as the momentary conditions which brought it about change.

The notion of the plain state of rest is not an imaginary construction but the adequate description of what happens again and again on every market.

In this regard it differs radically from the imaginary construction of the final state of rest. In dealing with the plain state of rest we look only at what is going on right now. We restrict our attention to what has happened momentarily and disregard what will happen later, in the next instant or tomorrow or later. We are dealing only with prices really paid in sales, i.e., with the prices of the immediate past. We do not ask whether or not future prices will equal these prices.

But now we go a step further. We pay attention to factors which are bound to bring about a tendency toward price changes. We try to find out to what goal this tendency must lead before all its driving force is exhausted and a new state of rest emerges. The price corresponding to this future state of rest was called the *natural price* by older economists; nowadays the term *static price* is often used. In order to avoid misleading associations it is more expedient to call it the *final price* and accordingly to speak of the *final state of rest*. This final state of rest is an imaginary construction, not a description of reality. For the final state of rest will never be attained. New disturbing factors will emerge before it will be realized. What makes it necessary to take recourse to this imaginary construction is the fact that the market at every instant is moving toward a final state of rest. Every later new instant can create new facts altering this final state of rest. But the market is always disquieted by a striving after a definite final state of rest.

The market price is a real phenomenon; it is the exchange ratio which was actual in business transacted. The final price is a hypothetical price. The market prices are historical facts and we are therefore in a position to note them with numerical exactitude in dollars and cents. The final price can only be defined by defining the conditions required for its emergence. No definite numerical value in monetary terms or in quantities of other goods can be attributed to it. It will never appear on the market. The market price can never coincide with the final price coordinated to the instant in which this market structure is actual. But catallactics would fail lamentably in its task of analyzing the problems of price determination if it were to neglect dealing with the final price. For in the market situation from which the market price emerges there are already latent forces operating which will go on bringing about price changes until, provided no new data appear, the final price and the final state of rest are established. We would unduly restrict our study of price determination if we were to look only upon the momentary market prices and the plain state of rest and to disregard the fact that the market is already agitated by factors which must result in further price changes and a tendency toward a different state of rest.

The phenomenon with which we have to cope is the fact that changes in the factors which determine the formation of prices do not produce all their effects at once. A span of time must elapse before all their effects are exhausted. Between the appearance of a new datum and the perfect adjustment of the market to it some time must pass. (And, of course, while this period of time elapses, other new data appear.) In dealing with the effects of any change in the factors operating on the market, we must never forget that we are dealing with events taking place in succession, with a series of effects succeeding one another. We are not in a position to know in advance how much time will have to elapse. But we know for certain that some time must elapse, although this period may sometimes be so small that it hardly plays any role in practical life.

Economists often erred in neglecting the element of time. Take for instance the controversy concerning the effects of changes in the quantity of money. some people were only concerned with its long-run effects, i.e., with the final prices and the final state of rest. Others saw only the short-run effects, i.e., the prices of the instant following the change in the data. Both were mistaken and their conclusions were consequently vitiated. Many more examples of the same blunder could be cited.

The imaginary construction of the final state of rest is marked by paying full regard to change in the temporal succession of events. In this respect it differs from the imaginary construction of the *evenly rotating economy* which is characterized by the elimination of change in the data and of the time element. (It is inexpedient and misleading to call this imaginary construction, as is usual, the static economy or the static equilibrium, and it is a bad mistake to confuse it with the imaginary construction of a stationary economy.[10]) The evenly rotating economy is a fictitious system in which the market prices of all goods and services coincide with the final prices. There are in its frame no price changes whatever; there is perfect price stability. The same market transactions are repeated again and again. The goods of the higher orders pass in the same quantities through the same stages of processing until ultimately the produced consumers' goods come into the hands of the consumers and are consumed. No changes in the market data occur. Today does not differ from yesterday and tomorrow will not differ from today. The system is in perpetual flux, but it remains always at the same spot. It revolves evenly round a fixed center, it rotates evenly. The plain state of rest is disarranged again and again, but it is instantly reestablished at the previous level. All factors, including those bringing about the recurring disarrangement of the plain state of rest, are constant. Therefore prices—commonly called static or equilibrium prices—remain constant too.

The essence of this imaginary construction is the elimination of the lapse of time and of the perpetual change in the market phenomena. The notion of any change with regard to supply and demand is incompatible with this construction. Only such changes as do not affect the configuration of the price-determining factors can be considered in its frame. It is not necessary to people the imaginary world of the evenly rotating economy with immortal, non-aging and nonproliferating men. We are free to assume that infants are born, grow old, and finally die, provided that total population figures and the number of people in every age group remain equal. Then the demand for commodities whose consumption is limited to certain age groups does not alter, although the individuals from whom it originates are not the same.

In reality there is never such a thing as an evenly rotating economic system. However, in order to analyze the problems of change in the data and of unevenly and irregularly varying movement, we must confront them with a fictitious state in which both are hypothetically eliminated. It is therefore preposterous to maintain that the construction of an evenly rotating economy does not elucidate conditions within a changing universe and to require the economists to substitute a study of "dynamics"

10.See below, pp. 250-251.

for their alleged exclusive occupation with “statics.” This so-called static method is precisely the proper mental tool for the examination of change. There is no means of studying the complex phenomena of action other than first to abstract from change altogether, then to introduce an isolated factor provoking change, and ultimately to analyze its effects under the assumption that other things remain equal. It is furthermore absurd to believe that the services rendered by the construction of an evenly rotating economy are the more valuable the more the object of our studies, the realm of real action, corresponds to this construction in respect to absence of change. The static method, the employment of the imaginary construction of an evenly rotating economy, is the only adequate method of analyzing the changes concerned without regard to whether they are great or small, sudden or slow.

The objections hitherto raised against the use of the imaginary construction of an evenly rotating economy missed the mark entirely. Their authors did not grasp in what respect this construction is problematic and why it can easily engender error and confusion.

Action is change, and change is in the temporal sequence. But in the evenly rotating economy change and succession of events are eliminated. Action is to make choices and to cope with an uncertain future. But in the evenly rotating economy there is no choosing and the future is not uncertain as it does not differ from the present known state. Such a rigid system is not peopled with living men making choices and liable to error; it is a world of soulless unthinking automatons; it is not a human society, it is an ant hill.

These insoluble contradictions, however, do not affect the service which this imaginary construction renders for the only problems for whose treatment it is both appropriate and indispensable: the problem of the relation between the prices of products and those of the factors required for their production, and the implied problems of entrepreneurship and of profit and loss. In order to grasp the function of entrepreneurship and the meaning of profit and loss, we construct a system from which they are absent. This image is merely a tool for our thinking. It is not the description of a possible and realizable state of affairs. It is even out of the question to carry the imaginary construction of an evenly rotating system to its ultimate logical consequences. For it is impossible to eliminate the entrepreneur from the picture of a market economy. The various complementary factors of production cannot come together spontaneously. They need to be combined by the purposive efforts of men aiming at certain ends and motivated by the urge to improve their state of satisfaction. In eliminating the entrepreneur one eliminates the driving force of the whole market system.

Then there is a second deficiency. In the imaginary construction of an evenly rotating economy, indirect exchange and the use of money are tacitly implied. But what kind of money can that be? In a system without change in which there is no uncertainty whatever about the future, nobody needs to hold cash. Every individual knows precisely what amount of money he will need at any future date. He is therefore in a position to lend all the funds he receives in such a way that the loans fall due on the date he will need them. Let us assume that there is only gold money and only one central bank. With the successive progress toward the state of an evenly rotating economy all individuals and firms restrict step by step their holding of cash and the quantities of gold thus released flow into nonmonetary—industrial—employment. When the equilibrium of the evenly rotating economy is finally reached, there are no more cash holdings; no more gold is used for monetary purposes. The individuals and firms own claims against the central bank, the maturity of each part of which precisely corresponds to the amount they will need on the respective dates for the settlement of their obligations. The central bank does not need any reserves as the total sum of the daily payments of its customers exactly equals the total sum of withdrawals. All transactions can in fact be effected through transfer in the bank's books without any recourse to cash. Thus the "money" of this system is not a medium of exchange; it is not money at all; it is merely a *numeraire*, an etheral and undetermined unit of accounting of that vague and indefinable character which the fancy of some economists and the errors of many laymen mistakenly have attributed to money. The interposition of these numerical expressions between seller and buyer does not affect the essence of the sales; it is neutral with regard to the people's economic activities. But the notion of a neutral money is unrealizable and inconceivable in itself.[11] If we were to use the inexpedient terminology employed in many contemporary economic writings, we would have to say: Money is necessarily a "dynamic factor"; there is no room left for money in a "static" system. But the very notion of a market economy without money is self-contradictory.

The imaginary construction of an evenly rotating system is a limiting notion. In its frame there is in fact no longer any action. Automatic reaction is substituted for the conscious striving of thinking man after the removal of uneasiness. We can employ this problematic imaginary con-

11.Cf. below, pp. 416-419.

struction only if we never forget what purposes it is designed to serve. We want first of all to analyze the tendency, prevailing in every action, toward the establishment of an evenly rotating economy; in doing so, we must always take into account that this tendency can never attain its goal in a universe not perfectly rigid and immutable, that is, in a universe which is living and not dead. Secondly, we need to comprehend in what respects the conditions of a living world in which there is action differ from those of a rigid world. This we can discover only by the *argumentum a contrario* provided by the image of a rigid economy. Thus we are led to the insight that dealing with the uncertain conditions of the unknown future—that is, speculation—is inherent in every action, and that profit and loss are necessary features of acting which cannot be conjured away by any wishful thinking. The procedures adopted by those economists who are fully aware of these fundamental cognitions may be called the *logical method* of economics as contrasted with the technique of the *mathematical method.*

The mathematical economists disregard dealing with the actions which, under the imaginary and unrealizable assumption that no further new data will emerge, are supposed to bring about the evenly rotating economy. They do not notice the individual speculator who aims not at the establishment of the evenly rotating economy but at profiting from an action which adjusts the conduct of affairs better to the attainment of the ends sought by acting, the best possible removal of uneasiness. They stress exclusively the imaginary state of equilibrium which the whole complex of all such actions would attain in the absence of any further change in the data. They describe this imaginary equilibrium by sets of simultaneous differential equations. They fail to recognize that the state of affairs they are dealing with is a state in which there is no longer any action but only a succession of events provoked by a mystical prime mover. They devote all their efforts to describing, in mathematical symbols, various "equilibria," that is, states of rest and the absence of action. They deal with equilibrium as if it were a real entity and not a limiting notion, a mere mental tool. What they are doing is vain playing with mathematical symbols, a pastime not suited to convey any knowledge.[12]

6. The Stationary Economy

The imaginary construction of a stationary economy has sometimes been confused with that of an evenly rotating economy. But in fact these

12.For a further critical examination of mathematical economics see below, pp. 350-357.

two constructions differ.

The stationary economy is an economy in which the wealth and income of the individuals remain unchanged. With this image changes are compatible which would be incompatible with the construction of the evenly rotating economy. Population figures may rise or drop provided that they are accompanied by a corresponding rise or drop in the sum of wealth and income. The demand for some commodities may change; but these changes must occur so slowly that the transfer of capital from those branches of production which are to be restricted in accordance with them into those to be expanded can be effected by not replacing equipment used up in the shrinking branches and instead investing in the expanding ones.

The imaginary construction of a stationary economy leads to two further imaginary constructions: the progressing (expanding) economy and the retrogressing (shrinking) economy. In the formet the per capita quota of wealth and income of the individuals and the population figure tend toward a higher numerical value, in the latter toward a lower numerical value.

In the stationary economy the total sum of all profits and of all losses is zero. In the progressing economy the total amount of profits exceeds the total amount of losses. In the retrogressing economy the total amount of profits is smaller than the total amount of losses.

The precariousness of these three imaginary constructions is to be seen in the fact that they imply the possibility of the measurement of wealth and income. As such measurements cannot be made and are not even conceivable, it is out of the question to apply them for a rigorous classification of the conditions of reality. Whenever economic history ventures to classify economic evolution within a certain period according to the scheme stationary, progressing or retrogressing, it resorts in fact to historical understanding and does not "measure."

7. The Integration of Catallactic Functions

When men in dealing with the problems of their own actions, and when economic history, descriptive economics, and economic statistics in reporting other people's actions, employ the terms entrepreneur, capitalist, landowner, worker, and consumer, they speak of ideal types. When economics employs the same terms it speaks of catallactic categories. The entrepreneurs, capitalists, landowners, workers, and consumers of economic theory are not living men as one meets them in the reality of life and history. They are the embodiment of distinct functions in the market operations. The fact that both acting men and historical sciences apply in their reasoning the results of economics and that they construct their ideal types on the basis of and with reference to the categories of praxeological theory, does not modify the radical logical distinction between ideal type and economic category. The economic categories we are concerned with refer to purely integrated functions, the ideal types refer to historical events. Living and acting man by necessity combines various functions. He is never merely a consumer. He is in addition either an entrepreneur, landowner, capitalist, or worker, or a person supported by the intake earned by such people. Moreover, the functions of the entrepreneur, the landowner, the capitalist, and the worker are very often combined in the same persons. History is intent upon classifying men according to the ends they aim at and the means they employ for the attainment of these ends. Economics, exploring the structure of acting in the market society without any regard to the ends people aim at and the means they employ, is intent upon discerning categories and functions. These are two different tasks. The difference can best be demonstrated in discussing the catallactic concept of the entrepreneur.

In the imaginary construction of the evenly rotating economy there is no room left for entrepreneurial activity, because this construction eliminates any change of data that could affect prices. As soon as one abandons this assumption of rigidity of data, one finds that action must needs be affected by every change in the data. As action necessarily is directed toward influencing a future state of affairs, even if sometimes only the immediate future of the next instant, it is affected by every incorrectly anticipated change in the data occurring in the period of time between its beginning and the end of the period for which it aimed to provide (period of provision[13]). Thus the outcome of action is always uncertain. Action is always speculation. This is valid not only with regard to a market economy but no less for Robinson Crusoe, the imaginary isolated actor, and for the conditions of a socialist economy. In the imaginary construction of an evenly rotating system nobody is an entrepreneur and speculator. In any real and living economy every actor is always an entrepreneur and speculator; the people taken care of by the actors—minor family members in the market society and the masses of a socialist society—are, although themselves not actors and therefore not speculators, affected by the outcome of the actors' speculations.

Economics, in speaking of entrepreneurs, has in view not men, but a definite function. This function is not the particular feature of a special group

13.Cf. below, p. 481.

or class of men; it is inherent in every action and burdens every actor. In embodying this function in an imaginary figure, we resort to a methodological makeshift. The term entrepreneur as used by catallactic theory means: acting man exclusively seen from the aspect of the uncertainty inherent in every action. In using this term one must never forget that every action is embedded in the flux of time and therefore involves a speculation. The capitalists, the landowners, and the laborers are by necessity speculators. So is the consumer in providing for anticipated future needs. There's many a slip 'twixt cup and lip.

Let us try to think the imaginary construction of a pure entrepreneur to its ultimate logical consequences. This entrepreneur does not own any capital. The capital required for his entrepreneurial activities is lent to him by the capitalists in the form of money loans. The law, it is true, considers him the proprietor of the various means of production purchased by expanding the sums borrowed. Nevertheless he remains propertyless as the amount of his assets is balanced by his liabilities. If he succeeds, the net profit is his. If he fails, the loss must fall upon the capitalists who have lent him the funds. Such an entrepreneur would, in fact, be an employee of the capitalists who speculates on their account and takes a 100 per cent share in the net profits without being concerned about the losses. But even if the entrepreneur is in a position to provide himself a part of the capital required and borrows only the rest, things are essentially not different. To the extent that the losses incurred cannot be borne out of the entrepreneur's own funds, they fall upon the lending capitalists, whatever the terms of the contract may be. A capitalist is always also virtually an entrepreneur and speculator. He always runs the chance of losing his funds. There is no such thing as a perfectly safe investment.

The self-sufficient landowner who tills his estate only to supply his own household is affected by all changes influencing the fertility of his farm or his personal needs. Within a market economy the result of a farmer's activities is affected by all changes regarding the importance of his piece of land for supplying the market. The farmer is clearly, even from the point of view of mundane terminology, an entrepreneur. No proprietor of any means of production, whether they are represented in tangible goods or in money, remains untouched by the uncertainty of the future. The employment of any tangible goods or money for production, i.e., the provision for later days, is in itself an entrepreneurial activity.

Things are essentially the same for the laborer. He is born the proprietor of certain abilities; his innate faculties are a means of production which is better fitted for some kinds of work, less fitted for others, and not at all fitted for still others.[14] If he has acquired the skill needed for the performance of certain kinds of labor, he is, with regard to the time and the material outlays absorbed by this training in the position of an investor. He has made an input in the expectation of being compensated by an adequate output. The laborer is an entrepreneur in so far as his wages are determined by the price the market allows for the kind of work he can perform. This price varies according to the change in conditions in the same way in which the price of every other factor of production varies.

In the context of economic theory the meaning of the terms concerned is this: Entrepreneur means acting man in regard to the changes occurring in the data of the market. Capitalist and landowner mean acting man in regard to the changes in value and price which, even with all the market data remaining equal, are brought about by the mere passing of time as a consequence of the different valuation of present goods and of future goods. Worker means man in regard to the employment of the factor of production human labor. Thus every function is nicely integrated: the entrepreneur earns profit or suffers loss; the owners of means of production (capital goods or land) earn originary interest; the workers earn wages. In this sense we elaborate the imaginary construction of *functional distribution* as different from the actual historical distribution.[15]

Economics, however, always did and still does use the term "entrepreneur" in a sense other than that attached to it in the imaginary construction of functional distribution. It also calls entrepreneurs those who are especially eager to profit

14.In what sense labor is to be seen as a nonspecific factor of production see above, pp. 133-135.

15.Let us emphasize again that everybody, laymen included, in dealing with the problems of income determination always takes recourse to this imaginary construction. The economists did not invent it; they only purged it of the deficiencies peculiar to the popular notion. For an epistemological treatment of functional distribution cf. John Bates Clark, *The Distribution of Wealth* (New York, 1908), p. 5, and Eugen von Bohm-Bawerk, *Gesammelte Schriften*, ed. F. X. Weiss (Vienna, 1924), p. 299. The term "distribution" must not deceive anybody; its employment in this context is to be explained by the role played in the history of economic thought by the imaginary construction of a socialist state (cf. above, p. 240). There is in the operation of a market economy nothing which could properly be called distribution. Goods are not first produced and then distributed, as would be the case in a socialist state. The word "distribution" as applied in the term "functional distribution" complies with the meaning attached to "distribution" 150 years ago. In present-day English usage "distribution" signifies dispersal of goods among consumers as effected by commerce.

from adjusting production to the expected changes in conditions, those who have more initiative, more venturesomeness, and a quicker eye than the crowd, the pushing and promoting pioneers of economic improvement. This notion is narrower than the concept of an entrepreneur as used in the construction of functional distribution; it does not include many instances which the latter includes. It is awkward that the same term should be used to signify two different notions. It would have been more expedient to employ another term for this second notion—for instance, the term "promoter."

It is to be admitted that the notion of the entrepreneur-promoter cannot be defined with praxeological rigor. (In this it is like the notion of money which also defies—different from the notion of a medium of exchange—a rigid praxeological definition.[16]) However, economics cannot do without the promoter concept. For it refers to a datum that is a general characteristic of human nature, that is present in all market transactions and marks them profoundly. This is the fact that various individuals do not react to a change in conditions with the same quickness and in the same way. The inequality of men, which is due to differences both in their inborn qualities and in the vicissitudes of their lives, manifests itself in this way too. There are in the market pacemakers and others who only imitate the procedures of their more agile fellow citizens. The phenomenon of leadership is no less real on the market than in any other branch of human activities. The driving force of the market, the element tending toward unceasing innovation and improvement, is provided by the restlessness of the promoter and his eagerness to make profits as large as possible.

There is, however, no danger that the equivocal use of this term may result in any ambiguity in the exposition of the catallactic system. Wherever any doubts are likely to appear, they can be dispelled by the employment of the term promoter instead of entrepreneur.

The Enrepreneurial Function in the Stationary Economy

The futures market can relieve a promoter of a part of his entrepreneurial function. As far as an entrepreneur has hedged himself through suitable forward transactions against losses he may possibly suffer, he ceases tobe an entrepreneur and the entrepreneurial function devolves on the other party to the contract. The cotton spinner who, buying raw cotton for is mill, sells the same quantity forward has abandoned a part of his entrepreneurial function. He will neither profit nor lose from changes in the cotton price occurring in the period concerned. Of course, he does not entirely cease to

16.Cf. below, p. 398.

serve in the entrepreneurial function. Those changes in the price of yarn in general or in the price of the special counts and kinds he produces which are not brought about by a change in the price of raw cotton affect him nonetheless. Even if he spins only as a contractor for a remuneration agreed upon, he is still in an entrepreneurial function with regard to the funds invested in his outfit.

We may construct the image of an economy in which the conditions required for the establishment of futures markets are realized for all kinds of goods and services. In such an imaginary construction the entrepreneurial function is fully separated from all other functions. There emerges a class of pure entrepreneurs. The prices determined on the futures markets direct the whole apparatus of production. The dealers in futures alone make profits and suffer losses. All other people are insured, as it were, against the possible adverse effects of the uncertainty of the future. They enjoy security in this regard. The heads of the various business units are virtually employees, as it were, with a fixed income.

If we further assume that this economy is a stationary economy and that all futures transactions are concentrated in one corporation, it is obvious that the total amount of this corporation's losses precisely equals the total amount of its profits. We need only to nationalize this corporation in order to bring about a socialist state without profits and losses, a state of undisturbed security and stability. But this is so only becuase our definition of a stationary economy implies equality of the total sum of losses and that of profits. In a changing economy an excess either of profits or of losses must emerge.

It would be a waste of time to dwell longer upon such oversophisticated images which do not further the analysis of economic problems. The only reason for mentioning them is that they reflect ideas which are at the bottom of some criticisms made against the economic system of capitalism and of some delusive plans suggested for a socialist control of business. Now, it is true that a socialist scheme is logically compatible with the unrealizable imaginary constructions of an evenly rotating economy and of a stationary economy. The predilection with which mathematical economists almost exclusively deal with the conditions of these imaginary constructions and with the state of "equilibrium" implied in them, has made people oblivious of the fact that these are unreal, self-contradictory and imaginary expedients of thought and nothing else. They are certainly not suitable models for the construction of a living society of acting men.

XV. THE MARKET

1. The Characteristics of the Market Economy

THE market economy is the social system of the division of labor under private ownership of the means of production. Everybody acts on his own behalf; but everybody's actions aim at the satisfaction of other people's needs as well as at the satisfaction of his own. Everybody in acting serves his fellow citizens. Everybody, on the other hand, is served by his fellow citizens. Everybody is both a means and an end in himself, an ultimate end for himself and a means to other people in their endeavors to attain their own ends.

This system is steered by the market. The market directs the individual's activities into those channels in which he best serves the wants of his fellow men. There is in the operation of the market no compulsion and coercion. The state, the social apparatus of coercion and compulsion, does not interfere with the market and with the citizens' activities directed by the market. It employs its power to beat people into submission solely for the prevention of actions destructive to the preservation and the smooth operation of the market economy. It protects the individual's life, health, and property against violent or fraudulent aggression on the part of domestic gangsters and external foes. Thus the state creates and preserves the environment in which the market economy can safely operate. The Marxian slogan "anarchic production" pertinently characterizes this social structure as an economic system which is not directed by a dictator, a production tsar who assigns to each a task and compels him to obey this command. Each man is free; nobody is subject to a despot. Of his own accord the individual integrates himself into the cooperative system. The market directs him and reveals to him in what way he can best promote his own welfare as well as that of other people. The market is supreme. The market alone puts the whole social system in order and provides it with sense and meaning.

The market is not a place, a thing, or a collective entity. The market is a process, actuated by the interplay of the actions of the various individuals cooperating under the division of labor. The forces determining the—continually changing—state of the market are the value judgments of these individuals and their actions as directed by these value judgments. The state of the market at any instant is the price structure, i.e., the totality of the exchange ratios as established by the interaction of those eager to buy and those eager to sell. There is nothing inhuman or mystical with regard to the market. The market process is entirely a resultant of human actions. Every market phenomenon can be traced back to definite choices of the members of the market society.

The market process is the adjustment of the individual actions of the various members of the market society to the requirements of mutual cooperation. The market prices tell the producers what to produce, how to produce, and in what quantity. The market is the focal point to which the activities of the individuals converge. It is the center from which the activities of the individuals radiate.

The market economy must be strictly differentiated from the second thinkable—although not realizable—system of social cooperation under the division of labor; the system of social or governmental ownership of the means of production. This second system is commonly called socialism, communism, planned economy, or state capitalism. The market economy or capitalism, as it is usually called, and the socialist economy preclude one another. There is no mixture of the two systems possible or thinkable; there is no such thing as a mixed economy., a system that would be in part capitalist and in part socialist. Production is directed by the market or by the decrees of a production tsar or a committee of production tsars.

If within a society based on private ownership by the means of production some of these means are publicly owned and operated—that is, owned and operated by the government or one of its agencies—this does not make for a mixed system which would combine socialism and capitalism. The fact that the state or municipalities own and operate some plants does not alter the characteristic features of the market economy. The publicly owned and operated enterprises are subject to the sovereignty of the market. They must fit themselves, as buyers of raw materials, equipment, and labor, and as sellers of goods and services, into the scheme of the market economy. They are subject to the laws of the market and thereby depend on the consumers who may or may not patronize them. They must strive for profits or, at least, to avoid losses. The government may cover losses of its plants or shops by drawing on public funds. But this neither eliminates nor mitigates the supremacy of the market; it merely shifts it to another sector. For the means for covering the losses must be raised by the imposition of taxes. But this taxation has its effects on the market and influences the economic structure according to the laws of the market. It is the operation of the market, and not the government collecting the taxes, that decides upon whom the incidence of the taxes falls and how they affect production and consumption. Thus the market, not the government bureau, determines the working of these publicly operated enterprises.

Nothing that is in any way connected with the operation of a market is in the praxeological or economic sense to be called socialism. The notion of socialism as conceived and defined by all socialists implies the absence of a market for factors of production and of prices of such factors. The "socialization" of individual plants, shops, and farms—that is, their transfer from private into public ownership—is a method of bringing about socialism by successive measures. It is a step on the way toward socialism, but not in itself socialism. (Marx and the orthodox Marxians flatly deny the possibility of such a gradual approach to socialism. According to their doctrine the evolution of capitalism will one day reach a point in which at one stroke capitalism is transformed into socialism.)

Government-operated enterprises and the Russian Soviet economy are, by the mere fact that they buy and sell on markets, connected with the capitalist system. They themselves bear witness to this connection by calculating in terms of money. They thus utilize the intellectual methods of the capitalist system that they fanatically condemn.

For monetary economic calculation is the intellectual basis of the market economy. The tasks set to acting within any system of the division of labor cannot be achieved without economic calculation. The market economy calculates in terms of money prices. That it is capable of such calculation was instrumental in its evolution and conditions its present-day operation. The market economy is real because it can calculate.

2. Capital Goods and Capital

There is an impulse inwrought in all living beings that directs them toward the assimilation of matter that preserves, renews, and strengthens their vital energy. The eminence of acting man is manifested in the fact that he consciously and purposefully aims at maintaining and enhancing his vitality. In the pursuit of this aim his ingenuity leads him to the construction of tools that first aid him in the appropriation of food, then, at a later stage, induce him to design methods of increasing the quantity of foodstuffs available, and finally, enable him to provide for the satisfaction of the most urgently felt among those desires that are specifically human. As Bohm-Bawerk described it: Man chooses roundabout methods of production that require more time but compensate for this delay by generating more and better products.

At the outset of every step forward on the road to a more plentiful existence is saving—the provisionment of products that makes it possible to prolong the average period of time elapsing between the beginning of the production process and its turning out of a product ready for use and consumption. The products accumulated for this purpose are either intermediary stages in the technological process, i.e. tools and half-finished products, or goods ready for consumption that make it possible for man to substitute, without suffering want during the waiting period, a more time-absorbing process for another absorbing a shorter time. These goods are called capital goods. Thus, saving and the resulting accumulation of capital goods are at the beginning of every attempt to improve the material conditions of man; they are the foundation of human civilization. Without saving and capital accumulation there could not be any striving toward non-material ends.[1]

From the notion of capital goods one must clearly distinguish the concept of capital.[2] The concept of capital is the fundamental concept of economic calculation, the foremost mental tool of the conduct of affairs in the market economy. Its correlative is the concept of income.

The notions of capital and income as applied in accountancy and in the mundane reflections of which accountancy is merely a refinement, contrast the means and the ends. The calculating mind of the actor draws a boundary line between the consumer's goods which he plans to employ for the immediate satisfaction of his wants and the goods of all orders—including those of the first order[3]—which he plans to employ for providing by further acting, for the satisfaction of future wants. The differentiation of means and ends thus becomes a differentiation of acquisition and consumption, of

1. Capital goods have been defined also as produced factors of production and as such have been opposed to the nature given or original factors of production, i. e., natural resources (land) and human labor. This terminology must be used with great caution as it can be easily misinterpreted and lead to the erroneous concept of real capital criticized below.

2. But, of course, no harm can result if, following the customary terminology, one occasionally adopts for the sake of simplicity the terms "capital accumulation" (or "supply of capital," "capital shortage," etc.) for the terms "accumulation of capital goods," "supply of capital goods," etc.

3. For this man these goods are not goods of the first order, but goods of a higher order, factors of further production.

business and household, of trading funds and of household goods. The whole complex of goods destined for acquisition is evaluated in money terms, and this sum—the capital—is the starting point of economic calculation. The immediate end of acquisitive action is to increase or, at least, to preserve the capital. That amount which can be consumed within a definite period without lowering the capital is called income. If consumption exceeds the income available, the difference is called capital consumption. If the income available is greater than the amount consumed, the difference is called saving. Among the main tasks of economic calculation are those of establishing the magnitudes of income, saving, and capital consumption.

The reflection which led acting man to the notions implied in the concepts of capital and income are latent in every premeditation and planning of action. Even the most primitive husbandmen are dimly aware of the consequences of acts which to a modern accountant would appear as capital consumption. The hunter's reluctance to kill a pregnant hind and the uneasiness felt even by the most ruthless warriors in cutting fruit trees were manifestations of a mentality which was influenced by such considerations. These considerations were present in the age-old legal institution of usufruct and in analogous customs and practices. But only people who are in a position to resort to monetary calculation can evolve to full clarity the distinction between an economic substance and the advantages derived from it, and can apply it neatly to all classes, kinds, and orders of goods and services. They alone can establish such distinctions with regard to the perpetually changing conditions of highly developed processing industries and the complicated structure of the social cooperation of hundreds of thousands of specialized jobs and performances.

Looking backward from the cognition provided by modern accountancy to the conditions of the savage ancestors of the human race, we may say metaphorically that they too used "capital." A contemporary accountant could apply all the methods of his profession to their primitive tools of hunting and fishing, to their cattle breeding and their tilling of the soil, if he knew what prices to assign to the various items concerned. Some economists concluded therefrom that "capital" is a category of all human production, that it is present in every thinkable system of the conduct of production processes—i.e., no less in Robinson Crusoe's involuntary hermitage than in a socialist society—and that it does not depend upon the practice of monetary calculation.[4] This is, however, a confusion. The concept of capital

4. Cf. e.g., R. v. Strigl, *Kapital und Produktion* (Vienna, 1934), p. 3.

cannot be separated from the context of monetary calculation and from the social structure of a market economy in which alone monetary calculation is possible. It is a concept which makes no sense outside the conditions of a market economy. It plays a role exclusively in the plans and records of individuals acting on their own account in such a system of private ownership of the means of production, and it developed with the spread of economic calculation in monetary terms.[5]

Modern accountancy is the fruit of a long historical evolution. Today there is, among businessmen and accountants, unanimity with regard to the meaning of capital. Capital is the sum of the money equivalent of all assets minus the sum of the money equivalent of all liabilities as dedicated at a definite date to the conduct of the operations of a definite business unit. It does not matter in what these assets may consist, whether they are pieces of land, buildings, equipment, tools, goods of any kind and order, claims, receivables, cash, or whatever.

It is a historical fact that in the early days of accountancy the tradesmen, the pacemakers on the way toward monetary calculation, did not for the most part include the money equivalent of their buildings and land in the notion of capital. It is another historical fact that agriculturists were slow in applying the capital concept to their land. Even today in the most advanced countries only a part of the farmers are familiar with the practice of sound accountancy. Many farmers acquiesce in a system of bookkeeping that neglects to pay heed to the land and its contribution to production. Their book entries do not include the money equivalent of the land and are consequently indifferent to changes in this equivalent. Such accounts are defective because they fail to convey that information which is the sole aim sought by capital accounting. They do not indicate whether or not the operation of the farm has brought about a deterioration in the land's capacity to contribute to production, that is, in its objective use value. If an erosion of the soil has taken place, their books ignore it, and thus the calculated income (net yield) is greater than a more complete method of bookkeeping would have shown.

It is necessary to mention these historical facts because they influenced the endeavors of the economists to construct the notion of *real capital.*

The economists were and are still today confronted with the superstitious belief that the scarcity of factors of production could be brushed away, either entirely or at least to some extent, by increasing the amount of money in

5. Cf. Frank A. Fetter in *Encyclopaedia of the Social Sciences*. III, 190.

circulation and by credit expansion. In order to deal adequately with this fundamental problem of economic policy they considered it necessary to construct a notion of real capital and to oppose it to the notion of capital as applied by the businessman whose calculation refers to the whole complex of his acquisitive activities. At the time the economists embarked upon these endeavors the place of the money equivalent of land in the concept of capital was still questioned. Thus the economists thought it reasonable to disregard land in constructing their notion or real capital. They defined real capital as the totality of the produced factors of production available. Hairsplitting discussions were started as to whether inventories of consumers' goods held by business units are or are not real capital. But there was almost unanimity that cash is not real capital.

Now this concept of totality of the produced factors of production is an empty concept. The money equivalent of the various factors of production owned by a business unit can be determined and summed up. But if we abstract from such an evaluation in money terms, the totality of the produced factors of production is merely an enumeration of physical quantities of thousands and thousands of various goods. Such an inventory is of no use to acting. It is a description of a part of the universe in terms of technology and topography and has no reference whatever to the problems raised by the endeavors to improve human well-being. We may acquiesce in the terminological usage of calling the produced factors of production *capital goods*. But this does not render the concept of real capital any more meaningful.

The worst outgrowth of the use of the mythical notion of real capital was that economists began to speculate about a spurious problem called the productivity of (real) capital. A factor of production is by definition a thing that is able to contribute to the success of a process of production. Its market price reflects entirely the value that people attach to this contribution. The services expected from the employment of a factor of production (i.e., its contribution to productivity) are in market transactions paid according to the full value people attach to them. These factors are considered valuable only on account of these services. These services are the only reason why prices are paid for them. Once these prices are paid, nothing remains that can bring about further payments on the part of anybody as a compensation for additional productive services of these factors of production. It was a blunder to explain interest as an income derived from the productivity of capital.[6]

6. Cf. below, pp. 526-534.

No less detrimental was a second confusion derived from the real capital concept. People began to mediate upon a concept of *social capital* as different from *private capital.* Starting from the imaginary construction of a socialist economy, they were intent upon defining a capital concept suitable to the economic activities of the general manager of such a system. They were right in assuming that this manager would be eager to know whether his conduct of affairs was successful (viz., from the point of view of his own valuations and the ends aimed at in accordance with these valuations) and how much he could expend for his wards' consumption without diminishing the available stock of factors of production and thus impairing the yield of further production. A socialist government would badly need the concepts of capital and income as a guide for its operations. However, in an economic system in which there is no private ownership of the means of production, no market, and no prices for such goods the concepts of capital and income are mere academic postulates devoid of any practical application. In a socialist economy there are capital goods, but no capital.

The notion of capital makes sense only in the market economy. It serves the deliberations and calculations of individuals or groups of individuals operating on their own account in such an economy. It is a device of capitalists, entrepreneurs and farmers eager to make profits and to avoid losses. It is not a category of all acting. It is a category of acting within a market economy.

3. Capitalism

All civilizations have up to now been based on private ownership of the means of production. In the past civilization and private property have been linked together. Those who maintain that economics is an experimental science and nevertheless recommend public control of the means of production, lamentably contradict themselves. If historical experience could teach us anything, it would be that private property is inextricably linked with civilization. There is no experience to the effect that socialism could provide a standard of living as high as that provided by capitalism.[7]

The system of market economy has never been fully and purely tried. But there prevailed in the orbit of Western civilization since the Middle Ages by and large a general tendency toward the abolition of institutions hindering the operation of the market economy. With the successive progress of this ten-

7. For an examination of the Russian "experiment" see Mises, *Planned Chaos* (Irvington-on-Hudson, 1947), pp. 80-87 (reprinted in the new edition of Mises, *Socialism* [New Haven, 1951] pp. 527-592).

dency, population figures multiplied and the masses' standard of living was raised to an unprecedented and hitherto undreamed of level. The average American worker enjoys amenities for which Croesus, Crassus, the Medici, and Louis XIV would have envied him.

The problems raised by the socialist and interventionist critique of the market economy are purely economic and can be dealt with only in the way in which this book tries to deal with them: by a thorough analysis of human action and all thinkable systems of social cooperation. The psychological problem of why people scorn and disparage capitalism and call everything they dislike "capitalistic" and everything they praise "socialistic" concerns history and must be left to the historians. But there are several other issues which we must stress at this point.

The advocates of totalitarianism consider "capitalism" a ghastly evil, an awful illness that came upon mankind. In the eyes of Marx it was an inevitable stage of mankind's evolution, but for all that the worst of evils; fortunately salvation is imminent and will free man forever from this disaster. In the opinion of other people it would have been possible to avoid capitalism if only men had been more moral or more skillful in the choice of economic policies. All such lucubrations have one feature in common. They look upon capitalism as if it were an accidental phenomenon which could be eliminated without altering conditions that are essential in civilized man's acting and thinking. As they neglect to bother about the problem of economic calculation, they are not aware of the consequences which the abolition of the monetary calculus is bound to bring about. They do not realize that socialist men for whom arithmetic will be of no use in planning action, will differ entirely in their mentality and in their mode of thinking from our contemporaries. In dealing with socialism, we must not overlook this mental transformation, even if we were ready to pass over in silence the disastrous consequences which would result for man's material well-being.

The market economy is a man-made mode of acting under the division of labor. But this does not imply that it is something accidental or artificial and could be replaced by another mode. The market economy is the product of a long evolutionary process. It is the outcome of man's endeavors to adjust his action in the best possible way to the given conditions of his environment that he cannot alter. It is the strategy, as it were, by the application of which man has triumphantly progressed from savagery to civilization.

Some authors argue: Capitalism was the economic system which brought about the marvelous achievements of the last two hundred years; therefore it is done for because what was beneficial in the past cannot be so for our time and for the future. Such reasoning is in open contradiction to the principles of experimental cognition. There is no need at this point to raise again the question of whether or not the science of human action can adopt the methods of the experimental natural sciences. Even if it were permissible to answer this question in the affirmative, it would be absurd to argue as these *a rebours* experimentalists do. Experimental science argues that because *a* was valid in the past, it will be valid in the future too. It must never argue the other way round and assert that because *a* was valid in the past, it is not valid in the future.

It is customary to blame the economists for an alleged disregard of history. The economists, it is contended, consider the market economy as the ideal and eternal pattern of social cooperation. They concentrate their studies upon investigating the conditions of the market economy and neglect everything else. They do not bother about the fact that capitalism emerged only in the last two hundred years and that even today it is restricted to a comparatively small area of the earth's surface and to a minority of peoples. There were and are, say these critics, other civilizations with a different mentality and different modes of conducting economic affairs. Capitalism is, when seen *sub specie aeternitatis,* a passing phenomenon, an ephemeral stage of historical evolution, just the transition from precapitalistic ages to a postcapitalistic future.

All these criticisms are spurious. Economics is, of course, not a branch of history or of any other historical science. It is the theory of all human action, the general science of the immutable categories of action and of their operation under all thinkable special conditions under which man acts. It provides as such the indispensable mental tool for dealing with historical and ethnographic problems. A historian or an ethnographer who neglects in his work to take full advantage of the results of economics is doing a poor job. In fact he does not approach the subject matter of his research unaffected by what he disregards as theory. He is at every step of his gathering of allegedly unadulterated facts, in arranging these facts, and in his conclusions derived from them, guided by confused and garbled remnants of perfunctory economic doctrines constructed by botchers in the centuries preceding the elaboration of an economic science and long since entirely exploded.

The analysis of the problems of the market society, the only pattern of human action in which calculation can be applied in planning action, opens access to the analysis of all thinkable modes of action and of all economic problems with which historians and ethnographers are confronted. All noncapitalistic methods of economic management can be studied only under the hypothetical assumption that in them too cardinal numbers can be used in recording past action and planning future action. This is why economists place the study of the pure market economy in the center of their investigations.

It is not the economists who lack the "historical sense" and ignore the factor of evolution, but their critics. The economists have always been fully aware of the fact that the market economy is the product of a long historical process which began when the human race emerged from the ranks of the other primates. The champions of what is mistakenly called "historicism" are intent upon undoing the effects of evolutionary changes. In their eyes everything the existence of which they cannot trace back to a remote past or cannot discover in the customs of some primitive Polynesian tribes is artificial, even decadent. They consider the fact that an institution was unknown to savages as a proof of its uselessness and rottenness. Marx and Engels and the Prussian professors of the Historical School exulted when they learned that private property is "only" a historical phenomenon. For them this was the proof that their socialist plans were realizable.[8]

The creative genius is at variance with his fellow citizens. As the pioneer of things new and unheard of he is in conflict with their uncritical acceptance of traditional standards and values. In his eyes the routine of the regular citizen, the average or common man, is simply stupidity. For him "bourgeois" is a synonym of imbecility.[9]

8. The most amazing product of this widespread mode of thought is the book of a Prussian professor, Bernhard Laum (*Die geschlossene Wirtschaft* [Tubingen, 1933]). Laum assembles a vast collection of quotations from ethnographical writings showing that many primitive tribes considered economic autarky as natural, necessary, and morally good. He concludes from this that autarky is the natural and most expedient state of economic management and that the return to autarky which he advocates is "a biologically necessary process." (p. 491).

9. Guy de Maupassant analyzed Flaubert's alleged hatred of the bourgeois in *Etude sur Gustave Flaubert* (reprinted in *Oeuvres completes de Gustave Flaubert* [Paris, 1885], Vol, VII). Flaubert, says Maupassant, "aimait le monde" (p. 67); that is, he liked to move inthe circle of Paris society composed of aristocrats, wealthy bourgeois, and the elite of artists, writers, philosophers, scientists, statesmen, and entrepreneurs (promoters). He used the term bourgeois as synonymous with imbecility and defined it this way: "I call bourgeois whoever has mean thoughts (*pense bassement*)." Hence it is obvious that in employing the term bourgeois Flaubert did not have in mind the *bougeoise* as a social class, but a kind of imbecility he most frequently found in this class. He was full of contempt for the common man (*"le bon peuple"*) as well. However, as ha had more frequent contacts with the *"gens du monde"* than with workers, the stupidity of the former annoyed him more than that of the latter (p. 59). These observations of Maupassant held good not only for flaubert, but for the "anti-bourgeois" sentiments of all artists. Incidentally, it must be emphasized that from a Marxian point of view Flaubert is a "bourgeois" writer and his novels are an "ideological superstructure" of the "capitalist or bourgeois mode of production."

The frustrated artists who take delight in aping the genius's mannerism in order to forget and to conceal their own impotence adopt this terminology. These Bohemians call everything they dislike "bourgeois." Since Marx has made the term "capitalist" equivalent to "bourgeois," they use both words synonymously. In the vocabularies of all languages the words "capitalistic" and "bourgeois" signify today all that is shameful, degrading, and infamous.[10] Contrariwise, people call all that they deem good and praiseworthy "socialist." The regular scheme of arguing is this; A man arbitrarily calls anything he dislikes "capitalistic," and then deduces from this appellation that the thing is bad.

This semantic confusion goes still further. Sismondi, the romantic eulogists of the Middle Ages, all socialist authors, the Prussian Historical School, and the American Institutionalists taught that capitalism is an unfair system of exploitation sacrificing the vital interests of the majority of people for the sole benefit of a small group of profiteers. No decent man can advocate this "mad" system. The economists who contend that capitalism is beneficial not only to a small group but to everyone are "sycophants of the bourgeoisie." They are either too dull to recognize the truth or bribed apologists of the selfish class interests of the exploiters.

Capitalism, in the terminology of these foes of liberty, democracy, and the market economy, means the economic policy advocated by big business and millionaires. Confronted with the fact that some—but certainly not all-wealthy entrepreneurs and capitalists nowadays favor measures restricting free trade and competition and resulting in monopoly, they say: Contemporary capitalism stands for protectionism, cartels, and the abolition of competition. It is true, they add, that at a definite period of the past British capitalism favored free trade both on the domestic market and in international relations. This was because at that time the class interests of the British bourgeoisie were best served by such a policy. Conditions, however, changed and today capitalism, i.e., the doctrine advocated by the exploiters, aims at another policy.

It has already been pointed out that this doctrine badly distorts both economic theory and historical facts.[11] There were and there will always be people whose selfish ambitions demand protection for vested interests and who hope to derive advantage from measures restricting competition. Entrepreneurs grown old and tired and the decadent heirs of people who succeeded in the past dislike the agile parvenus who challenge their wealth and their eminent social position.

10.The Nazi's used "Jewish" as a synonym of both "capitalist" and "bourgeois."

11.Cf. above, pp. 80-84.

Whether or not their desire to make economic conditions rigid and to hinder improvements can be realized, depends on the climate of public opinion. The ideological structure of the nineteenth century, as fashioned by the prestige of the teachings of the liberal economists, rendered such wishes vain. When the technological improvements of the age of liberalism revolutionized the traditional methods of production, transportation, and marketing, those whose vested interests were hurt did not ask for protection because it would have been a hopeless venture. But today it is deemed a legitimate task of government to prevent an efficient man from competing with the less efficient. Public opinion sympathizes with the demands of powerful pressure groups to stop progress. The butter producers are with considerable success fighting against margarine and the musicians against recorded music. The labor unions are deadly foes of every new machine. It is not amazing that in such an environment less efficient businessmen aim at protection against more efficient competitors.

It would be correct to describe this state of affairs in this way: Today many or some groups of business are no longer liberal; they do not advocate a pure market economy and free enterprise, but, on the contrary, are asking for various measures of government interference with business. But it is entirely misleading to say that the meaning of the concept of capitalism has changed and that "mature capitalism"—as the American Institutionalists call it—or "late capitalism"—as the Marxians call it—is characterized by restrictive policies to protect the vested interests of wage earners, farmers, shopkeepers, artisans, and sometimes also of capitalists and entrepreneurs. The concept of capitalism is as an economic concept immutable; if it means anything, it means the market economy. One deprives oneself of the semantic tools to deal adequately with the problems of contemporary history and economic policies if one acquiesces in a different terminology. This faulty nomenclature becomes understandable only if we realize that the pseudo-economists and the politicians who apply it want to prevent people from knowing what the market economy really is. They want to make people believe that all the repulsive manifestations of restrictive government policies are produced by "capitalism."

4. The Sovereignty of the Consumers

The direction of all economic affairs is in the market society a task of the entrepreneurs. Theirs is the control of production. They are at the helm and steer the ship. A superficial observer would believe that they are supreme. But they are not. They are bound to obey unconditionally the captain's orders. The captain is the consumer. Neither the entrepreneurs nor the farmers nor the capitalists determine what has to be produced. The consumers do that. If a businessman does not strictly obey the orders of the public as they are conveyed to him by the structure of market prices, he suffers losses, he goes bankrupt, and is thus removed from his eminent position at the helm. Other men who did better in satisfying the demand of the consumers replace him.

The consumers patronize those shops in which they can buy what they want at the cheapest price. Their buying and their abstention from buying decides who should own and run the plants and the farms. They make poor people rich and rich people poor. They determine precisely what should be produced, in what quality, and in what quantities. They are merciless bosses, full of whims and fancies, changeable and unpredictable. For them nothing counts other than their own satisfaction. They do not care a whit for past merit and vested interests. If something is offered to them that they like better or that is cheaper, they desert their old purveyors. In their capacity as buyers and consumers they are hard-hearted and callous, without consideration for other people.

Only the sellers of goods and services of the first order are in direct contact with the consumers and directly depend on their orders. But they transmit the orders received from the public to all those producing goods and services of the higher orders. For the manufacturers of consumers' goods, the retailers, the service trades, and the professions are forced to acquire what they need for the conduct of their own business from those purveyors who offer them at the cheapest price. If they were not intent upon buying in the cheapest market and arranging their processing of the factors of production so as to fill the demands of the consumers in the best and cheapest way, they would be forced to go out of business. More efficient men who succeeded better in buying and processing the factors of production would supplant them. The consumer is in a position to give free rein to his caprices and fancies. The entrepreneurs, capitalists, and farmers have their hands tied; they are bound to comply in their operations with the orders of the buying public. Every deviation from the lines prescribed by the demand of the consumers debits their account. The slightest deviation, whether willfully brought about or caused by error, bad judgment, or inefficiency, restricts their profits or makes them disappear. A more serious deviation results in losses and thus impairs or entirely absorbs their wealth.Capitalists, entrepreneurs, and landowners can only preserve and increase their wealth by filling best the orders of the consumers. They are not free to spend money which the consumers are not prepared to refund to them in paying more for the products. In the conduct of their business affairs they must be unfeeling and stony-hearted because the consumers, their bosses, are themselves unfeeling and stony-hearted.

The consumers determine ultimately not only the prices of the consumers' goods, but no less the prices of all factors of production. They determine the income of every member of the market economy. The consumers, not the entrepreneurs, pay ultimately the wages earned by every worker, the glamorous movie star as well as the charwoman. With every penny spent the consumers determine the direction of all production processes and the details of the organization of all business activities. This state of affairs has been described by calling the market a democracy in which every penny gives a right to cast a ballot.[12] It would be more correct to say that a democratic constitution is a scheme to assign to the citizens in the conduct of government the same supremacy the market economy gives them in their capacity as consumers. However, the comparison is imperfect. In the political democracy only the votes cast for the majority candidate or the majority plan are effective in shaping the course of affairs. The votes polled by the minority do not directly influence policies. But on the market no vote is cast in vain. Every penny spent has the power to work upon the production processes. The publishers cater not only to the majority by publishing detective stories, but also to the minority reading lyrical poetry and philosophical tracts. The bakeries bake bread not only for healthy people, but also for the sick on special diets. The decision of a consumer is carried into effect with the full momentum he gives it through his readiness to spend a definite amount of money.

It is true, in the market the various consumers have not the same voting right. The rich cast more votes than the poorer citizens. But this inequality is itself the outcome of a previous voting process. To be rich, in a pure market economy, is the outcome of success in filling best the demands of the consumers. A wealthy man can preserve his wealth only by continuing to serve the consumers in the most efficient way.

Thus the owners of the material factors of production and the entrepreneurs are virtually mandataries or trustees of the consumers, revocably appointed by an election daily repeated.

There is in the operation of a market economy only one instance in which the proprietary class is not completely subject to the supremacy of the

12.Cf. Frank A. Fetter, *The Principles of Economics* (3d ed. New York, 1913), pp. 394-410.

consumers. Monopoly prices are an infringement of the sway of the consumers.

The Metaphorical Employment of the Terminology of Political Rule

The orders given by businessmen in the conduct of their affairs can be heard and seen. Nobody can fail to become aware of them. Even messenger boys know that the boss runs things around the shop. But it requires a little more brains to notice the entrepreneur's dependence on the market. The orders given by the consumers are not tangible, they cannot be perceived by the senses. Many people lack the discernment to take cognizance of them. They fall victim to the delusion that entrepreneurs and capitalists are irresponsible autocrats whom nobody calls to account for their actions.[13]

The outgrowth of this mentality is the practice of applying to business the terminology of political rule and military action. Successful businessmen are called kings or dukes, their enterprise an empire, a kingdom, or a dukedom. It this idiom were only a harmless metaphor, there would be no need to criticize it. But it is the source of serious errors which play a sinister role in contemporary doctrines.

Government is an apparatus of compulsion and coercion. It has the power to obtain obedience by force. The political sovereign, be it an autocrat or the people as represented by its mandataries, has power to crush rebellions as long as his ideological might subsists.

The position which entrepreneurs and capitalists occupy in the market economy is of a different character. A "chocolate king" has no power over the consumers, his patrons. He provides them with chocolate of the best possible quality and at the cheapest price. He does not rule the consumers, he serves them. The consumers are not tied to him. They are free to stop patronizing his shops. He loses his "kingdom" if the consumers prefer to spend their pennies elsewhere. Nor does he "rule" his workers. He hires their services by paying them precisely that amount which the consumers are ready to restore to him in buying the product. Still less do the capitalists and entrepreneurs exercise political control. The civilized nations of Europe and America were long controlled by governments which did not considerably hinder the operation of the market economy. Today these countries too are dominated by parties which are hostile to capitalism and believe that every harm inflicted upon capitalists and entrepreneurs is extremely beneficial to the people.

In an unhampered market economy the capitalists and entrepreneurs

13. Beatrice Webb, Lady Passfield, herself the daughter of a wealthy businessman, may be quoted as an outstanding example of this mentality. Cf. *My Apprenticeship* (New York, 1926), p. 42.

cannot expect an advantage from bribing officeholders and politicians. On the other hand, the officeholders and politicians are not in a position to blackmail businessmen and to extort graft from them. In an interventionist country powerful pressure groups are intent upon securing for their members privileges at the expense of weaker groups and individuals. Then the businessmen may deem it expedient to protect themselves against discriminatory acts on the part of the executive officers and the legislature by bribery; once used to such methods, they may try to employ them in order to secure privileges for themselves. At any rate the fact that businessmen bribe politicians and officeholders and are blackmailed by such people does not indicate that they are supreme and rule the countries. It is those ruled—and not the rulers—who bribe and are paying tribute.

The majority of businessmen are prevented from resorting to bribery either by their moral convictions or by fear. They venture to preserve the free enterprise system and to defend themselves against discrimination by legitimate democratic methods. They form trade associations and try to influence public opinion. The results of these endeavors have been rather poor, as is evidenced by the triumphant advance of anticapitalist policies. The best that they have been able to achieve is to delay for a while some especially obnoxious measures.

Demagogues misrepresent this state of affairs in the crassest way. They tell us that these associations of bankers and manufacturers are the true rulers of their countries and that the whole apparatus of what they call "plutodemocratic" government is dominated by them. A simple enumeration of the laws passed in the last decades by any country's legislature is enough to explode such legends.

5. Competition

In nature there prevail irreconcilable conflicts of interests. The means of subsistence are scarce. Proliferation tends to outrun subsistence. Only the fittest plants and animals survive. The antagonism between an animal starving to death and another that snatches the food away from it is implacable.

Social cooperation under the division of labor removes such antagonisms. It substitutes partnership and mutuality for hostility. The members of society are united in a common venture.

The term competition as applied to the conditions of animal life signifies the rivalry between animals which manifests itself in their search for food. We may call this phenomenon *biological competition*. Biological competition must not be confused with *social competition,* i.e., the striving of individuals to attain the most favorable position in the system of social cooperation. As there will always be positions which men value more highly than others, people will strive for them and try to outdo rivals. Social competition is consequently present in every conceivable mode of social organization. If we want to think of a state of affairs in which there is no social competition, we must construct the image of a socialist system in which the chief in his endeavors to assign to everybody his place and task in society is not aided by any ambition on the part of his subjects. The individuals are entirely indifferent and do not apply for special appointments. They behave like the stud horses which do not try to put themselves in a favorable light when the owner picks out the stallion to impregnate his best brood mare. But such people would no longer be acting men.

Catallactic competition is emulation between people who want to surpass one another. It is not a fight, although it is usual to apply to it in a metaphorical sense the terminology of war and internecine conflict, of attack and defense, of strategy and tactics. Those who fail are not annihilated; they are removed to a place in the social system that is more modest, but more adequate to their achievements than that which they had planned to attain.

In a totalitarian system, social competition manifests itself in the endeavors of people to court the favor of those in power. In the market economy, competition manifests itself in the fact that the sellers must outdo one another by offering better or cheaper goods and services, and that the buyers must outdo one another by offering higher prices. In dealing with this variety of social competition which may be called *catallactic competition,* we must guard ourselves against various popular fallacies.

The classical economists favored the abolition of all trade barriers preventing people from competing on the market. Such restrictive laws, they explained, result in shifting production from those places in which natural conditions of production are more favorable to places in which they are less favorable. They protect the less efficient man against his more efficient rival. They tend to perpetuate backward technological methods of production. In short they curtail production and thus lower the standard of living. In order to make all people more prosperous, the economists argued, competition should be free to everybody. In this sense they used the term *free competition*. There was nothing metaphysical in their employment of the term *free*. They advocated the nullification of privileges barring people from access to certain trades and markets. All the sophisticated lucubrations caviling at the metaphysical connotations of the adjective *free* as applied to competition are spurious; they have no reference whatever to the catallactic problem of competition.

As far as natural conditions come into play, competition can only be "free" with regard to those factors of production which are not scarce and therefore not objects of human action. In the catallactic field competition is always restricted by the inexorable scarcity of the economic goods and services. Even in the absence of institutional barriers erected to restrict the number of those competing, the state of affairs is never such as to enable everyone to compete in all sectors of the market. In each sector only comparatively small groups can engage in competition.

Catallactic competition, one of the characteristic features of the market economy, is a social phenomenon. It is not a right, guaranteed by the state and the laws, that would make it possible for every individual to choose ad libitum the place in the structure of the division of labor he likes best. To assign to everybody his proper place in society is the task of the consumers. Their buying and abstention from buying is instrumental in determining each individual's social position. Their supremacy is not impaired by any privileges granted to the individuals qua producers. Entrance into a definite branch of industry is virtually free to newcomers only as far as the consumers approve of this branch's expansion or as far as the newcomers succeed in supplanting those already occupied in it by filling better or more cheaply the demands of the consumers. Additional investment is reasonable only to the extent that it fills the most urgent among the not yet satisfied needs of the consumers. If the existing plants are sufficient, it would be wasteful to invest more capital in the same industry. The structure of market prices pushes the new investors into other branches.

It is necessary to emphasize this point because the failure to grasp it is at the root of many popular complaints about the impossibility of competition. Some sixty years ago people used to declare: You cannot compete with the railroad companies; it is impossible to challenge their position by starting competing lines; in the field of land transportation there is no longer competition. The truth was that at that time the already operating lines were by and large sufficient. For additional capital investment the prospects were more favorable in improving the serviceableness of the already operating lines and in other branches of business than in the construction of new railroads. However, this did not interfere with further technological progress in transportation technique. The bigness and the economic "power" of the railroad companies did not impede the emergence of the motor car and the airplane.

Today people assert the same with regard to various branches of big business: You cannot challenge their position, they are too big and too powerful. But competition does not mean that anybody can prosper by simply imitating what other people do. It means the opportunity to serve the consumers in a better or cheaper way without being restrained by privileges granted to those whose vested interests the innovation hurts. What a newcomer who wants to defy the vested interests of the old established firms needs most is brains and ideas. If his project is fit to fill the most urgent of the unsatisfied needs of the consumers or to purvey them at a cheaper price than their old purveyors, he will succeed in spite of the much talked of bigness and power of the old firms.

Catallactic competition must not be confused with prize fights and beauty contests. The purpose of such fights and contests is to discover who is the best boxer or the prettiest girl. The social function of catallactic competition is, to be sure, not to establish who is the smartest boy and to reward the winner by a title and medals. Its function is to safeguard the best satisfaction of the consumers attainable under the given state of the economic data.

Equality of opportunity is a factor neither in prize fights and beauty contests nor in any other field of competition, whether biological or social. The immense majority of people are by the physiological structure of their bodies deprived of a chance to attain the honors of a boxing champion or a beauty queen. Only very few people can compete on the labor market as opera singers and movie stars. The most favorable opportunity to compete in the field of scientific achievement is provided to the university professors. Yet, thousands and thousands of professors pass away without leaving any trace in the history of ideas and scientific progress, while many of the handicapped outsiders win glory through marvelous contributions.

It is usual to find fault with the fact that catallactic competition is not open to everybody in the same way. The start is much more difficult for a poor boy than for the son of a wealthy man. But the consumers are not concerned about the problem of whether or not the men who shall serve them start their careers under equal conditions. Their only interest is to secure the best possible satisfaction of their needs. As the system of hereditary property is more efficient in this regard, they prefer it to other less efficient systems. They look at the matter from the point of view of social expediency and social welfare, not from the point of view of an alleged, imaginary, and unrealizable "natural" right of every individual to compete with equal opportunity. The realization of such a right would require placing at a disadvantage those born with better intelligence and greater will power than the average man. It is obvious that this would be absurd.

The term competition is mainly employed as the antithesis of monopoly. In this mode of speech the term monopoly is applied in different meanings which must be clearly separated.

The first connotation of monopoly, very frequently implied in the popular use of the term, signifies a state of affairs in which the monopolist, whether an individual or a group of individuals, exclusively controls one of the vital conditions of human survival. Such a monopolist has the power to starve to death all those who do not obey his orders. He dictates and the others have no alternative but either to surrender or to die. With regard to such a monopoly there is no market or any kind of catallactic competition. The monopolist is the master and the rest are slaves entirely dependent on his good graces. There is no need to dwell upon this kind of monopoly. It has no reference whatever to a market economy. It is enough to cite one instance. A world-embracing socialist state would exercise such an absolute and total monopoly; it would have the power to crush its opponents by starving them to death.[14]

The second connotation of monopoly differs from the first in that it describes a state of affairs compatible with the conditions of a market economy. A monopolist in this sense is an individual or a group of individuals, fully combining for joint action, who has the exclusive control of the supply of a definite commodity. If we define the term monopoly in this way, the domain of monopoly appears very vast. The products of the processing industries are more or less different from one another. Each factory turns out products different from those of the other plants. Each hotel has a monopoly on the sale of its services on the site of its premises. The professional services rendered by a physician or a lawyer are never perfectly equal to those rendered by any other physician or lawyer. Except for certain raw materials, foodstuffs, and other staple goods, monopoly is everywhere on the market.

However, the mere phenomenon of monopoly is without any significance and relevance for the operation of the market and the determination of prices. It does not give the monopolist any advantage in selling his products. Under copyright law every rhymester enjoys a monopoly in the sale of his poetry. But this does not influence the market. It may happen that no price whatever can be realized for his stuff and that his books can only be sold at their waste paper value.

Monopoly in this second connotation of the term becomes a factor in the determination of prices only if the demand curve for the monopoly good

14. Cf. Trotsky (1937) as quoted by Hayek, *The Road to Serfdom* (London, 1944), p. 89.

concerned is shaped in a particular way. If conditions are such that the monopolist can secure higher net proceeds by selling a smaller quantity of his product at a higher price than by selling a greater quantity of his supply at a lower price, there emerges a *monopoly price* higher than the potential market price would have been in the absence of monopoly. Monopoly prices are an important market phenomenon, while monopoly as such is only important if it can result in the formation of monopoly prices.

It is customary to call prices which are not monopoly prices *competitive prices*. While it is questionable whether or not this terminology is expedient, it is generally accepted and it would be difficult to change it. But one must guard oneself against its misinterpretation. It would be a serious blunder to deduce from the antithesis between monopoly price and competitive price that the monopoly price is the outgrowth of the absence of competition. There is always catallactic competition on the market. Catallactic competition is no less a factor in the determination of monopoly prices than it is in the determination of competitive prices. The shape of the demand curve that makes the appearance of monopoly prices possible and directs the monopolists' conduct is determined by the competition of all other commodities competing for the buyers' dollars. The higher the monopolist fixes the price at which he is ready to sell,the more potential buyers turn their dollars toward other vendible goods. On the market every commodity competes with all other commodities.

There are people who maintain that the catallactic theory of prices is of no use for the study of reality because there has never been "free" competition or because, at least today, there is no longer any such thing. All these doctrines are wrong.[15] They misconstrue the phenomena and simply do not know what competition really is. It is a fact that the history of the last decades is a record of policies aiming at the restriction of competition. It is the manifest intention of these schemes to grant privileges to certain groups of producers by protecting them against the competition of more efficient competitors. In many instances these policies have brought about the conditions required for the emergence of monopoly prices. In many other instances this was not the case and the result was only a state of affairs preventing many capitalists, entrepreneurs, farmers, and workers from entering those branches of industry in which they would have rendered the most valuable services to their fellow citizens. Catallactic competition has

15.For a refutation of the fashionable doctrines of imperfect and of monopolistic competition cf. F. A. Hayek, *Individualism and Economic Order* (Chicago, 1948), pp. 92-118.

been seriously restricted, but the market economy is still in operation although sabotaged by government and labor union interference. The system of catallactic competition is still functioning although the productivity of labor has been seriously reduced.

It is the ultimate end of these anticompetition policies to substitute for capitalism a socialist system of planning in which there is no catallactic competition at all. While shedding crocodile tears about the decline of competition, the planners want to abolish this "mad" competitive system. They have attained their goal in some countries. But in the rest of the world they have only restricted competition in some branches of business by increasing the number of people competing in other branches.

The forces aiming at a restriction of competition play a great role in our day. It is an important task of the history of our age to deal with them. Economic theory has no need to refer to them in particular. The fact that there are trade barriers, privileges, cartels, government monopolies and labor unions is merely a datum of economic history. It does not require special theorems for its interpretation.

6. Freedom

Philosophers and lawyers have bestowed much pain upon attempts to define the concept of freedom or liberty. It can hardly be maintained that these endeavors have been successful.

The concept of freedom makes sense only as far as it refers to interhuman relations. There were authors who told stories about an original—natural—freedom which man was supposed to have enjoyed in a fabulous state of nature that preceded the establishment of social relations. Yet such mentally and economically self-sufficient individuals or families, roaming about the country, were only free as long as they did not run into a stronger fellow's way. In the pitiless biological competition the stronger was always right, and the weaker was left no choice except unconditional surrender. Primitive man was certainly not born free.

Only within the frame of a social system can a meaning be attached to the term *freedom*. As a praxeological term, freedom refers to the sphere within which a acting individual is in a position to choose between alternative modes of action. A man is free in so far as he is permitted to choose ends and the means to be used for the attainment of those ends. A man's freedom is most rigidly restricted by the laws of nature as well as by the laws of praxeology. He cannot attain ends which are incompatible with one another. If he chooses to indulge in gratifications that produce definite effects upon the functioning of his body or his mind, he must put up with these consequences. It would be inexpedient to say that man is not free because he cannot enjoy the pleasures of indulgence in certain drugs without being affected by their inevitable results, commonly considered as highly undesirable. While this is admitted by and large by all reasonable people, there is no such unanimity with regard to the appreciation of the laws of praxeology.

Man cannot have both the advantages derived from peaceful cooperation under the principle of the division of labor within society and the license of embarking upon conduct that is bound to disintegrate society. He must choose between the observance of certain rules that make life within society possible and the poverty and insecurity of the "dangerous life" in a state of perpetual warfare among independent individuals. This is no less rigid a law determining the outcome of all human action than are the laws of physics.

Yet there is a far-reaching difference between the sequels resulting from a disregard of the laws of nature and those resulting from a disregard of the laws of praxeology. Of course, both categories of law take care of themselves without requiring any enforcement on the part of man. But the effects of a choice made by an individual are different. A man who absorbs poison harms himself alone. But a man who chooses to resort to robbery upsets the whole social order. While he alone enjoys the short-term gains derived from his action, the disastrous long-term effects harm all the people. His deed is a crime because it has detrimental effects on his fellow men. If society were not to prevent such conduct, it would soon become general and put an end to social cooperation and all the boons the latter confers upon everybody.

In order to establish and to preserve social cooperation and civilization, measures are needed to prevent asocial individuals from committing acts that are bound to undo all that man has accomplished in his progress from the Neanderthal level. In order to preserve the state of affairs in which there is protection of the individual against the unlimited tyranny of stronger and smarter fellows, an institution is needed that curbs all antisocial elements. Peace—the absence of perpetual fighting by everyone against everyone—can be attained only by the establishment of a system in which the power to resort to violent action is monopolized by a social apparatus of compulsion and coercion and the application of this power in any individual case is regulated by a set of rules—the man-made laws as distinguished both from the laws of nature and those of praxeology. The essential implement of a social system is the operation of such an apparatus commonly called government.

The concepts of freedom and bondage make sense only when referring to the way in which government operates. It would be highly inexpedient and misleading to say that a man is not free because, if he wants to stay alive, his power to choose between a drink of water and one of potassium cyanide is restricted by nature. It would be no less inconvenient to call a man unfree because the law imposes sanctions upon his desire to kill another man and because the police and the penal courts enforce them. As far as the government—the social apparatus of compulsion and oppression—confines the exercise of its violence and the threat of such violence to the suppression and prevention of antisocial action, there prevails what reasonably and meaningfully can be called liberty. What is restrained is merely conduct that is bound to disintegrate social cooperation and civilization, thus throwing all people back to conditions that existed at the time homo sapiens emerged from the purely animal existence of its nonhuman ancestors. Such coercion does not substantially restrict man's power to choose. Even if there were no government enforcing man-made laws, the individual could not have both the advantages derived from the existence of social cooperation on the one hand, and, on the other, the pleasures of freely indulging in the rapacious animal instincts of aggression.

In the market economy, the laissez-faire type of social organization, there is a sphere within which the individual is free to choose between various modes of acting without being restrained by the threat of being punished. If, however, the government does more than protect people against violent or fraudulent aggression on the part of antisocial individuals, it reduces the sphere of the individual's freedom to act beyond the degree to which it is restricted by praxeological law. Thus we may define freedom as that state of affairs in which the individual's discretion to choose is not constrained by governmental violence beyond the margin within which the praxeological law restricts it anyway.

This is what is meant if one defines freedom as the condition of an individual within the frame of the market economy. He is free in the sense that the laws and the government do not force him to renounce his autonomy and self-determination to a greater extent than the inevitable praxeological law does. What he foregoes is only the animal freedom of living without any regard to the existence of other specimens of his species. What the social apparatus of compulsion and coercion achieves is that individuals whom malice, shortsightedness or mental inferiority prevent from realizing that by indulging in acts that are destroying society they are hurting themselves and all other human beings are compelled to avoid such acts.

From this point of view one has to deal with the often-raised problem of whether conscription and the levy of taxes mean a restriction of freedom. If the principles of the market economy were acknowledged by all people all over the world, there would not be any reason to wage war and the individual states could live in undisturbed peace.[16] But as conditions are in our age, a free nation is continually threatened by the aggressive schemes of totalitarian autocracies. If it wants to preserve its freedom, it must be prepared to defend its independence. If the government of a free country forces every citizen to cooperate fully in its designs to repel the aggressors and every able-bodied man to join the armed forces, it does not impose upon the individual a duty that would step beyond the tasks the praxeological law dictates. In a world full of unswerving aggressors and enslavers, integral unconditional pacifism is tantamount to unconditional surrender to the most ruthless oppressors. He who wants to remain free, must fight unto death those who are intent upon depriving him of his freedom. As isolated attempts on the part of each individual to resist are doomed to failure, the only workable way is to organize resistance by the government. The essential task of government is defense of the social system not only against domestic gangsters but also against external foes. He who in our age opposes armaments and conscription is, perhaps unbeknown to himself, an abettor of those aiming at the enslavement of all.

The maintenance of a government apparatus of courts, police officers, prisons, and of armed forces requires considerable expenditure. To levy taxes for these purposes is fully compatible with the freedom the individual enjoys in a free market economy. To assert this does not, of course, amount to a justification of the confiscatory and discriminatory taxation methods practiced today by the self-styled progressive governments. There is need to stress this fact, because in our age of interventionism and the steady “progress” toward totalitarianism the governments employ the power to tax for the destruction of the market economy.

Every step a government takes beyond the fulfillment of its essential functions of protecting the smooth operation of the market economy against aggression, whether on the part of domestic or foreign disturbers, is a step forward on a road that directly leads into the totalitarian system where there is no freedom at all.

Liberty and freedom are the conditions of man within a contractual society. Social cooperation under a system of private ownership of the factors of production means that within the range of the market the individual

16. See below, p. 685.

is not bound to obey and to serve an overlord. As far as he gives and serves other people, he does so of his own accord in order to be rewarded and served by the receivers. He exchanges goods and services, he does not do compulsory labor and does not pay tribute. He is certainly not independent. He depends on the other members of society. But this dependence is mutual. The buyer depends on the seller and the seller on the buyer.

The main concern of many writers of the nineteenth and twentieth centuries was to misrepresent and to distort this obvious state of affairs. The workers, they said, are at the mercy of their employers. Now, it is true that the employer has the right to fire the employee. But if he makes use of this right in order to indulge in his whims, he hurts his own interests. It is to his own disadvantage if he discharges a better man in order to hire a less efficient one. The market does no directly prevent anybody from arbitrarily inflicting harm on his fellow citizens; it only puts a penalty upon such conduct. The shopkeeper is free to be rude to his customers provided he is ready to bear the consequences. The consumers are free to boycott a purveyor provided they are ready to pay the costs. What impels every man to the utmost exertion in the service of his fellow men and curbs innate tendencies toward arbitrariness and malice is, in the market, not compulsion and coercion on the part of gendarmes, hangmen, and penal courts; it is self-interest. The member of a contractual society is free because he serves others only in serving himself. What restrains him is only the inevitable natural phenomenon of scarcity. For the rest he is free in the range of the market.

There is no kind of freedom and liberty other than the kind which the market economy brings about. In a totalitarian hegemonic society the only freedom that is left to the individual, because it cannot be denied to him, is the freedom to commit suicide.

The state, the social apparatus of coercion and compulsion, is by necessity a hegemonic bond. If government were in a position to expand its power ad libitum, it could abolish the market economy and substitute for it all-round totalitarian socialism. In order to prevent this, it is necessary to curb the power of government. This is the task of all constitutions, bills of rights, and laws. This is the meaning of all struggles which men have fought for liberty.

The detractors of liberty are in this sense right in calling it a “bourgeois” issue and in blaming the rights guaranteeing liberty for being negative. In the realm of state and government, liberty means restraint imposed upon the exercise of the police power.

There would be no need to dwell upon this obvious fact if the champions of the abolition of liberty had not purposely brought about a semantic confusion. They realized that it was hopeless for them to fight openly and sincerely for restraint and servitude. The notions liberty and freedom had such prestige that no propaganda could shake their popularity. Since time immemorial in the realm of Western civilization liberty has been considered as the most precious good. What gave to the West its eminence was precisely its concern about liberty, a social ideal foreign to the oriental peoples. The social philosophy of the Occident is essentially a philosophy of freedom. The main content of the history of Europe and the communities founded by European emigrants and their descendants in other parts of the world was the struggle for liberty. “Rugged” individualism is the signature of our civilization. No open attack upon the freedom of the individual had any prospect of success.

Thus the advocates of totalitarianism chose other tactics. They reversed the meaning of words. They call true or genuine liberty the condition of the individuals under a system in which they have no right other than to obey orders. In the United States, they call themselves true *liberals* because they strive after such a social order. They call democracy the Russian methods of dictatorial government. They call the labor union methods of violence and coercion “industrial democracy.” They call freedom of the press a state of affairs in which only the government is free to publish books and newspapers. They define liberty as the opportunity to do the “right” things, and, of course, they arrogate to themselves the determination of what is right and what is not. In their eyes government omnipotence means full liberty. To free the police power from all restraints is the true meaning of their struggle for freedom.

The market economy, say these self-styled liberals, grants liberty only to a parasitic class of exploiters, the bourgeoisie. These scoundrels enjoy the freedom to enslave the masses. The wage earner is not free; he must toil for the sole benefit of his masters, the employers. The capitalists appropriate to themselves what according to the inalienable rights of man should belong to the worker. Under socialism the worker will enjoy freedom and human dignity because he will no longer have to slave for a capitalist. Socialism means the emancipation of the common man, means freedom for all. It means, moreover, riches for all.

These doctrines have been able to triumph because they did not encounter effective rational criticism. Some economists did a brilliant job in unmasking their crass fallacies and contradictions. But the public ignores the teachings of economics. The arguments advanced by average politicians and writers against socialism are either silly or irrelevant. It is useless to stand upon an alleged “natural” right of individuals to own property if other people assert that the foremost “natural” right is that of income equality. Such disputes can never be settled. It is beside the point to criticize nonessential, attendant features of the socialist program. One does not refute socialism by attacking the socialists’ stand on religion, marriage, birth control, and art. Moreover, in dealing with such matters the critics of socialism were often in the wrong.

In spite of these serious shortcomings of the defenders of economic freedom it was impossible to fool all the people all the time about the essential features of socialism. The most fanatical planners were forced to admit that their projects involve the abolition of many freedoms people enjoy under capitalism and “plutodemocracy.” Pressed hard, they resorted to a new subterfuge. The freedom to be abolished, they emphasize, is merely the spurious “economic” freedom of the capitalists that harms the common man. Outside the “economic sphere” freedom will not only be fully preserved, but considerably expanded. “Planning for Freedom” has lately become the most popular slogan of the champions of totalitarian government and the Russification of all nations.

The fallacy of this argument stems from the spurious distinction between two realm of human life and action, entirely separated from one another, viz., the “economic” sphere and the “noneconomic” sphere. With regard to this issue there is no need to add anything to what has been said in the preceding parts of this book. However, there is another point to be stressed.

Freedom, as people enjoyed it in the democratic countries of Western civilization in the years of the old liberalism’s triumph, was not a product of constitutions, bills of rights, laws, and statutes. Those documents aimed only at safeguarding liberty and freedom, firmly established by the operation of the market economy, against encroachments on the part of officeholders. No government and no civil law can guarantee and bring about freedom otherwise than by supporting and defending the fundamental institutions of the market economy. Government means always coercion and compulsion and is by necessity the opposite of liberty. Government is a guarantor of liberty and is compatible with liberty only if its range is adequately restricted to the preservation of what is called economic freedom. Where there is no market economy, the best_intentioned provisions of constitutions and laws remain a dead letter.

The freedom of man under capitalism is an effect of competition. The worker does not depend on the good graces of an employer. If his employer discharges him, he finds another employer.[17] The consumer is not at the mercy of the shopkeeper. He is free to patronize another shop if he likes. Nobody must kiss other people's hands or fear their disfavor. Interpersonal relations are business-like. the exchange of goods and services is mutual; it is not a favor to sell or to buy, it is a transaction dictated by selfishness on either side.

It is true that in his capacity as a producer every man depends either directly—e.g., the entrepreneur—or indirectly—e.g., the hired worker—on the demands of the consumers. However, this dependence upon the supremacy of the consumers is not unlimited. If a man has a weighty reason for defying the sovereignty of the consumers, he can try it. There is in the range of the market a very substantial and effective right to resist oppression. Nobody is forced to go into the liquor industry or into a gun factory if his conscience objects. He may have to pay a price for his conviction; there are in this world no ends the attainment of which is gratuitous. But it is left to a man's own decision to choose between a material advantage and the call of what he believes to be his duty. In the market economy the individual alone is the supreme arbiter in matters of his satisfaction.[18]

Capitalist society has no means of compelling a man to change his occupation or his place of work other than to reward those complying with the wants of the consumers by higher pay. It is precisely this kind of pressure which many people consider as unbearable and hope to see abolished under socialism. They are too dull to realize that the only alternative is to convey to the authorities full power to determine in what branch and at what place a man should work.

17.See below, pp. 598-600.

18.In the political sphere resistance to oppression on the part of the established government is the *ultima ratio* of those oppressed. However illegal and unbearable the oppression, however lofty and noble the motives of the rebels, and however beneficial the consequences of their violent resistance, a revolution is always an illegal act, disintegrating the established order of state and government. It is an essential mark of civil government that it is in its territory the only agency which is in a position to resort to measures of violence or to declare legitimate whatever violence is practiced by other agencies. A revolution is an act of warfare between the citizens, it abolishes the very foundations of legality and is at best restrained by the questionable international customs concerning belligerency. If victorious, it can afterwards establish a new legal order and a new government. But it can never enact a legal "right to resist oppression." Such an impunity granted to people venturing armed resistance to the armed forces of the government is tantamount to anarchy and incompatible with any mode of government. The Constituent Assembly of the first French Revolution was foolish enough to decree such a right; but it was not so foolish as to take its own decree seriously.

In his capacity as consumer man is no less free. He alone decides what is more and what is less important for him. He chooses how to spend his money according to his own will.

The substitution of economic planning for the market economy removes all freedom and leaves to the individual merely the right to obey. The authority directing all economic matters controls all aspects of a man's life and activities. It is the only employer. All labor becomes compulsory labor because the employee must accept what the chief deigns to offer him. The economic tsar determines what and how much of each the consumer may consume. There is no sector of human life in which a decision is left to the individual's value judgments. The authority assigns a definite task to him, trains him for his job, and employs him at the place and in the manner it deems expedient.

As soon as the economic freedom which the market economy grants to its members is removed, all political liberties and bills of rights become humbug. Habeas corpus and trial by jury are a sham if, under the pretext of economic expediency, the authority has full power to relegate every citizen it dislikes to the arctic or to a desert and to assign him "hard labor" for life. Freedom of the press is a mere blind if the authority controls all printing offices and paper plants. And so are all the other rights of men.

A man is free as far as he shapes his life according to his own plans. A man whose fate is determined by the plans of a superior authority, in which the exclusive power to plan is vested, is not free in the sense in which this term "free" was used and understood by all people until the semantic revolution of our day brought about a confusion of tongues.

7. Inequality of Wealth and Income

The inequality of individuals with regard to wealth and income is an essential feature of the market economy.

The fact that freedom is incompatible with equality of wealth and income has been stressed by many authors. There is no need to enter into an examination of the emotional arguments advanced in these writings. Neither is it necessary to raise the question of whether the renunciation of liberty could in itself guarantee the establishment of equality of wealth and income and whether or not a society could subsist on the basis of such an equality. Our task is merely to describe the role inequality plays in the framework of the market society.

In the market society direct compulsion and coercion are practiced only for the sake of preventing acts detrimental to social cooperation. For the rest individuals are not molested by the police power. The law-abiding citizen is free from the interference of jailers and hangmen. What pressure is needed to impel an individual to contribute his share to the cooperative effort of production is exercised by the price structure of the market. This pressure is indirect. It puts on each individual's contribution a premium graduated according to the value which the consumers attach to this contribution. In rewarding the individual's effort according to its value, it leaves to everybody the choice between a more or less complete utilization of his own faculties and abilities. This method cannot, of course, eliminate the disadvantages of inherent personal inferiority. But it provides an incentive to everybody to exert his faculties and abilities to the utmost.

The only alternative to this financial pressure as exercised by the market is direct pressure and compulsion as exercised by the police power. The authorities must be entrusted with the task of determining the quantity and quality of work that each individual is bound to perform. As individuals are unequal with regard to their abilities, this requires an examination of their personalities on the part of the authorities. The individual becomes an inmate of a penitentiary, as it were, to whom a definite task is assigned. If he fails to achieve what the authorities have ordered him to do, he is liable to punishment.

It is important to realize in what the difference consists between direct pressure exercised for the prevention of crime and that exercised for the extortion of a definite performance. In the former case all that is required from the individual is to avoid a certain mode of conduct, precisely determined by law. As a rule it is easy to establish whether or not this interdiction has been observed. In the second case the individual is liable to accomplish a definite task; the law forces him toward an indefinite action, the determination of which is left to the decision of the executive power. The individual is bound to obey whatever the administration orders him to do. Whether or not the command issued by the executive power was adequate to his forces and faculties and whether or not he has complied with it to the best of his abilities is extremely difficult to establish. Every citizen is with regard to all aspects of his personality and with regard to all manifestations of his conduct subject to the decisions of the authorities. In the market economy in a trial before a penal court the prosecutor is obliged to produce sufficient evidence that the defendant is guilty. But in matters of the performance of compulsory work it devolves upon the defendant to prove that the task assigned to him was beyond his abilities or that he has done all that can be expected of him. The administrators combine in their persons the offices of the legislator, the executor of the law, the public prosecutor, and the judge. The defendants are entirely at their mercy. This is what people have in mind when speaking of lack of freedom.

No system of the social division of labor can do without a method that makes individuals responsible for their contributions to the joint productive effort. If this responsibility is not brought about by the price structure of the market and the inequality of wealth and income it begets, it must be enforced by the methods of direct compulsion as practiced by the police.

8. Entrepreneurial Profit and Loss

Profit, in a broader sense, is the gain derived from action; it is the increase in satisfaction (decrease in uneasiness) brought about; it is the difference between the higher value attached to the result attained and the lower value attached to the sacrifices made for its attainment; it, in other words, yield minus costs. To make profit is invariably the aim sought by any action. If an action fails to attain the ends sought, yield either does not exceed costs or lags behind costs. In the latter case the outcome means a loss, a decrease in satisfaction.

Profit and loss in this original sense are psychic phenomena and as such not open to measurement and a mode of expression which could convey to other people precise information concerning their intensity. A man can tell a fellow man that *a* suits him better than *b*; but he cannot communicate to another man, except in vague and indistinct terms, how much the satisfaction derived from *a* exceeds that derived from *b*.

In the market economy all those things that are bought and sold against money are marked with money prices. In the monetary calculus profit appears as a surplus of money received over money expended and loss as a surplus of money expended over money received. Profit and loss can be expressed in definite amounts of money. It is possible to ascertain in terms of money how much an individual has profited or lost. However, this is not a statement about a social phenomenon, about the individual's contribution to the societal effort as it is appraised by the other members of society. It does not tell us anything about the individual's increase or decrease in satisfaction or happiness. It merely reflects his fellow men's evaluation of his contribution to social cooperation. This evaluation is ultimately determined by the efforts of every member of society to attain the highest possible psychic profit. It is the resultant of the composite effect of all these people's subjective and personal value judgments as manifested in their conduct on the market. But it must not be confused with these value judgments as such.

We cannot even think of a state of affairs in which people act without the intention of attaining psychic profit and in which their actions result neither in psychic profit nor in psychic loss.[19] In the imaginary construction of an evenly rotating economy there are neither money profits nor money losses. But every individual derives a psychic profit from his actions, or else he would not act at all. The farmer feeds and milks his cows and sells the milk because he values the things he can buy against the money thus earned more highly than the costs expended. The absence of money profits or losses in such an evenly rotating system is due to the fact that, if we disregard the differences brought about by the higher valuation of present goods as compared with future goods, the sum of the prices of all complementary factors needed for production precisely equals the price of the product.

In the changing world of reality differences between the sum of the prices of the complementary factors of production and the prices of the products emerge again and again. It is these differences that bring about money profits and money losses. As far as such changes affect the sellers of labor and those of the original nature-given factors of production and of the capitalists as moneylenders, we will deal with them later. At this point we are dealing with the promoters' entrepreneurial profit and loss. It is this problem that people have in mind when employing the terms profit and loss in mundane speech.

Like every acting man, the entrepreneur is always a speculator. He deals with the uncertain conditions of the future. His success or failure depends on the correctness of his anticipation of uncertain events. If he fails in his understanding of things to come, he is doomed. The only source from which an entrepreneur's profits stem is his ability to anticipate better than other people the future demand of the consumers. If everybody is correct in anticipating the future state of the market of a certain commodity, its price and the prices of the complementary factors of production concerned would already today be adjusted to this future state. Neither profit nor loss can emerge for those embarking upon this line of business.

The specific entrepreneurial function consists in determining the employ-

19. If an action neither improves nor impairs the state of satisfaction, it still involves a psychic loss because of the uselessness of the expended psychic effort. The individual concerned would have been better off if he had inertly enjoyed life.

ment of the factors of production. The entrepreneur is the man who dedicates them to special purposes. In doing so he is driven solely by the selfish interest in making profits and in acquiring wealth. But he cannot evade the law of the market. He can succeed only by best serving the consumers. His profit depends on the approval of his conduct by the consumers.

One must not confuse entrepreneurial profit and loss with other factors affecting the entrepreneur's proceeds.

The entrepreneur's technological ability does not affect the specific entrepreneurial profit or loss. As far as his own technological activities contribute to the returns earned and increase his net income, we are confronted with a compensation for work rendered. It is wages paid to the entrepreneur for his labor. Neither does the fact that not every process of production succeeds technologically in bringing about the product expected, influence the specific entrepreneurial profit or loss. Such failures are either avoidable or unavoidable. In the first case they are due to the technologically inefficient conduct of affairs. then the losses resulting are to be debited to the entrepreneur's personal insufficiency, i.e., either to his lack of technological ability or to his lack of the ability to hire adequate helpers. In the second case the failures are due to the fact that the present state of technological knowledge prevents us from fully controlling the conditions on which success depends. This deficiency may be caused either by incomplete knowledge concerning the conditions of success or by ignorance of methods for controlling fully some of the known conditions. The price of the factors of production takes into account this unsatisfactory state of our knowledge and technological power. The price of arable land, for instance, takes into full account the fact that there are bad harvests, as it is determined by the anticipated average yield. The fact that the bursting of bottles reduces the output of champagne does not affect entrepreneurial profit and loss. It is merely one of the factors determining the cost of production and the price of champagne.[20]

Accidents affecting the process of production, the means of production, or the products while they are still in the hands of the entrepreneur are an item in the bill of production costs. Experience, which conveys to the businessman all other technological knowledge, provides him also with

20.Cf. Mangoldt, *Die Lehre vom Unternehmergewinn* (Leipzig, 1855), p. 82. The fact that out of 100 liters of plain wine one cannot produce 100 liters of champagne, but a smaller quantity, has the same significance as the fact that 100 kilograms of sugar beet do not yield 100 kilograms of sugar but a smaller quantity.

information about the average reduction in the quantity of physical output which such accidents are likely to bring about. By opening contingency reserves, he converts their effects into regular costs of production. With regard to contingencies the expected incidence of which is too rare and too irregular to be dealt with in this way by individual firms of normal size, concerted action on the part of sufficiently large groups of firms take care of the matter. The individual firms cooperate under the principle of insurance against damage caused by fire, flood, or other similar contingencies. Then an insurance premium is substituted for an appropriation to a contingency reserve. At any rate, the risks incurred by accidents do not introduce uncertainty into the conduct of the technological processes.[21] If an entrepreneur neglects to deal with them duly, he gives proof of his technical insufficiency. The losses thus incurred are to be debited to bad techniques applied, not to his entrepreneurial function.

The elimination of those entrepreneurs who fail to give to their enterprises the adequate degree of technological efficiency or whose technological ignorance vitiates their cost calculation is effected on the market in the same way in which those deficient in the performance of the specific entrepreneurial functions are eliminated. It may happen that an entrepreneur is so successful in his specific entrepreneurial function that he can compensate losses caused by his technological failure. It may also happen that an entrepreneur can counterbalance losses due to failure in his entrepreneurial function by the advantages derived from his technological superiority or from the differential rent yielded by the higher productivity of the factors of production he employs. But one must not confuse the various functions which are combined in the conduct of a business unit. The technologically more efficient entrepreneur earns higher wage rates or quasi-wage rates than the less efficient in the same wy in which the more efficient worker earns more than the less efficient. The more efficient machine and the more fertile soil produce higher physical returns per unit of costs expended; they yield a differential rent when compared with the less efficient machine and the less fertile soil. The higher wage rates and the higher rent are, ceteris paribus, the corollary of higher physical output. But the specific entrepreneurial profits and loses are not produced by the quantity of physical output. The depend on the adjustment of output to the most urgent wants of the consumers. What produces them is the extent to which the entrepreneur

21.Cf. Knight, *Risk, Uncertainty and Profit* (Boston, 1921), pp. 211-213.

has succeeded or failed in anticipating the future—necessarily uncertain—state of the market.

The entrepreneur is also jeopardized by political dangers. Government policies, revolutions, and wars can damage or annihilate his enterprise. Such events do not affect him alone; they affect the market economy as such and all individuals, although not all of them to the same extent. For the individual entrepreneur they are data which he cannot alter. If he is efficient, he will anticipate them in time. But it is not always possible for him to adjust his operations in such a way as to avoid damage. If the dangers expected concern only a part of the territory which is accessible to his entrepreneurial activities, he can avoid operating in the menaced areas and can prefer countries in which the danger is less imminent. But if he cannot emigrate, he must stay where he is. If all entrepreneurs were fully convinced that the total victory of Bolshevism was impending, they would nevertheless not abandon their entrepreneurial activities. The expectation of imminent expropriation will impel the capitalists to consume their funds. The entrepreneurs will be forced to adjust their plans to the market situation created by such capital consumption and the threatened nationalization of their shops and plants. But they will not stop operating. If some entrepreneurs go out of business, others will take their place—newcomers or old entrepreneurs expanding the size of their enterprises. In the market economy there will always be entrepreneurs. Policies hostile to capitalism may deprive the consumers of the greater part of the benefits they would have reaped from unhampered entrepreneurial activities. But they cannot eliminate the entrepreneurs as such if they do not entirely destroy the market economy.

The ultimate source from which entrepreneurial profit and loss are derived is the uncertainty of the future constellation of demand and supply.

If all entrepreneurs were to anticipate correctly the future state of the market, there would be neither profits nor losses. The prices of all the factors of production would already today be fully adjusted to tomorrow's prices of the products. In buying the factors of production the entrepreneur would have to expend (with due allowance for the difference between the prices of present goods and future goods) no less an amount than the buyers will pay him later for the product. An entrepreneur can make a profit only if he anticipates future conditions more correctly than other entrepreneurs. Then he buys the complementary factors of production at prices the sum of which, including allowance for the time difference, is smaller than the price at which he sells the product.

If we want to construct the image of changing economic conditions in which there are neither profits nor losses, we must resort to an unrealizable assumption: perfect foresight of all future events on the part of all individuals. If those primitive hunters and fishermen to whom it is customary to ascribe the first accumulation of produced factors of production had known in advance all the future vicissitudes of human affairs, and if they and all their descendants until the last day of judgment, equipped with the same omniscience, had appraised all factors of production accordingly, entrepreneurial profits and losses would never have emerged. Entrepreneurial profits and losses are created through the discrepancy between the expected prices and the prices later really fixed on the markets. It is possible to confiscate profits and to transfer them from the individuals to whom they have accrued to other people. But neither profits nor losses can ever disappear from a changing world not populated solely with omniscient people.

9. Entrepreneurial Profits and Losses in a Progressing Economy

In the imaginary construction of a stationary economy the total sum of all entrepreneurs' profits equals the total sum of all entrepreneurs' losses. What one entrepreneur profits is in the total economic system counterbalanced by another entrepreneur's loss. The surplus which all the consumers together expend for the acquisition of a certain commodity is counterbalanced by the reduction in their expenditure for the acquisition of other commodities.[22]

It is different in a progressing economy.

We call a progressing economy an economy in which the per capita quota of capital invested is increasing. In using this term we do not imply value judgments. We adopt neither the "materialistic" view that such a progression is good nor the "idealistic" view that it is bad or at least irrelevant from a "higher point of view." Of course, it is a well-known fact that the immense majority of people consider the consequences of progress in this sense as the most desirable state of affairs and yearn for conditions which can be realized only in a progressing economy.

In the stationary economy the entrepreneurs, in the pursuit of their

22.If we were to apply the faulty concept of a "national income" as used in popular speech, we would have to say that no part of national income goes into profits.

specific functions, cannot achieve anything other than to withdraw factors of production, provided that they are still convertible,[23] from one line of business in order to employ them in another line, or to direct the restoration of the equivalent of capital goods used up in the course of production processes toward the expansion of certain branches of industry at the expense of other branches. In the progressing economy the range of entrepreneurial activities includes, moreover, the determination of the employment of the additional capital goods accumulated by new savings. The injection of these additional capital goods is bound to increase the total sum of the income produced, i.e., of that supply of consumers' goods which can be consumed without diminishing the capital available and thereby without reducing the output of future production. The increase of income is effected either by an expansion of production without altering the technological methods of production or by an improvement in technological methods which would not have been feasible under the previous conditions of a less ample supply of capital goods.

It is out of this additional wealth that the surplus of the total sum of entrepreneurial profits over the total sum of entrepreneurial losses flows. But it can be easily demonstrated that this surplus can never exhaust the total increase in wealth brought about by economic progress. The laws of the market divide this additional wealth between the entrepreneurs and the suppliers of labor and those of certain material factors of production in such a way that the lion's share goes to the nonentrepreneurial groups.

First of all we must realize that entrepreneurial profits are not a lasting phenomenon but only temporary. There prevails an inherent tendency for profits and losses to disappear. The market is always moving toward the emergence of the final prices and the final state of rest. If new changes in the data were not to interrupt this movement and not to create the need for a new adjustment of production to the altered conditions, the prices of all complementary factors of production would—due allowance being made for time preference—finally equal the price of the product, and nothing would be left for profits or losses. In the long run every increase of productivity benefits exclusively the workers and some groups of the owners of land and of capital goods.

In the groups of the owners of capital goods there are benefitted:

1. Those whose saving has increased the quantity of capital goods

23.The problem of the convertibility of capital goods is dealt with below, pp. 503-505.

available. They own this additional wealth, the outcome of their restraint in consuming.

2. The owners of those capital goods already previously existing which, thanks to the improvement in technological methods of production, are now better utilized than before. Such gains are, of course, temporary only. They are bound to disappear as they cause a tendency toward an intensified production of the capital goods concerned.

On the other hand, the increase in the quantity of capital goods available lowers the marginal productivity of these capital goods; it thus brings about a fall in the prices of the capital goods and thereby hurts the interests of all those capitalists who did not share at all or not sufficiently in the process of saving and the accumulation of the additional supply of capital goods.

In the group of the landowners all those are benefitted for whom the new state of affairs results in a higher productivity of their farms, forests, fisheries, mines, and so on. On the other hand, all those are hurt whose property may become submarginal on account of the higher return yielded by the land owned by those benefitted.

In the group of labor all derive a lasting gain from the increase in the marginal productivity of labor. But, on the other hand, in the short run some may suffer disadvantages. These are people who were specialized in the performance of work which becomes obsolete as a result of technological improvement and are fitted only for jobs in which—in spite of the general rise in wage rates—they earn less than before.

All these changes in the prices of the factors of production begin immediately with the initiation of the entrepreneurial actions designed to adjust the processes of production to the new state of affairs. In dealing with this problem as with the other problems of changes in the market data, we must guard ourselves against the popular fallacy of drawing a sharp line between short-run and long-run effects. What happens in the short run is precisely the first stages of the chain of successive transformations which tend to bring about the long-run effects. The long-run effect is in our case the disappearance of entrepreneurial profits and losses. The short-run effects are the preliminary stages of this process of elimination which finally, if not interrupted by a further change in the data, would result in the emergence of the evenly rotating economy.

It is necessary to comprehend that the very appearance of an excess in the total amount of entrepreneurial profits over the total amount of entrepreneurial losses depends upon the fact that this process of the elimination of entrepreneurial profit and loss begins at the same time as the entrepreneurs begin to adjust the complex of production activities to the changed data. There is never in the whole sequence of events an instant in which the advantages derived from the increase in the amount of capital available and from technical improvements benefit the entrepreneurs only. If the wealth and the income of the other strata were to remain unaffected, these people could buy the additional products only by restricting their purchases of other products accordingly. Then the profits of one group of entrepreneurs would exactly equal the losses incurred by other groups.

What happens is this: The entrepreneurs embarking upon the utilization of the newly accumulated capital goods and the improved technological methods of production are in need of complementary factors of production. Their demand for these factors is a new additional demand which must raise their prices. Only as far as this rise in prices and wage rates occurs, are the consumers in a position to buy the new products without curtailing the purchase of other goods. Only so far can a surplus of the total sum of all entrepreneurial profits over all entrepreneurial losses come into existence.

The vehicle of economic progress is the accumulation of additional capital goods by means of saving and improvement in technological methods of production the execution of which is almost always conditioned by the availability of such new capital. The agents of progress are the promoting entrepreneurs intent upon profiting by means of adjusting the conduct of affairs to the best possible satisfaction of the consumers. In the performance of their projects for the realization of progress they are bound to share the benefits derived from progress with the workers and also with a part of the capitalists and landowners and to increase the portion allotted to these people step by step until their own share melts away entirely.

From this it becomes evident that it is absurd to speak of a "rate of profit" or an "average rate of profit." Profit is not related to or dependent on the amount of capital employed by the entrepreneur. Capital does not "beget" profit. Profit and loss are entirely determined by the success or failure of the entrepreneur to adjust production to the demand of the consumers. There is nothing "normal" in profits and there can never be an "equilibrium" with regard to them. Profit and loss are, on the contrary, always a phenomenon of a deviation from "normalcy," of changes unforeseen by the majority, and of a "disequilibrium." They have no place in an imaginary world of normalcy and equilibrium. In a changing economy there prevails always an inherent tendency for profits and losses to disappear. It is only the emergence of new changes which revives them again. Under stationary conditions the "average rate" of profits and losses is zero. An excess of the total amount of profits over that of losses is a proof of the fact that there is economic progress and an improvement in the standard of living of all strata of the population. The greater this excess is, the greater is the increment in general prosperity.

Many people are utterly unfit to deal with the phenomenon of entrepreneurial profit without indulging in envious resentment. In their eyes the source of profit is exploitation of the wage earners and the consumers, i.e., an unfair reduction in wage rates and a no less unfair increase in the prices of the products. By rights there should not be any profits at all.

Economics is indifferent with regard to such arbitrary value judgments. It is not interested in the problem of whether profits are to be approved or condemned from the point of view of an alleged natural law and of an alleged eternal and immutable code of morality about which personal intuition or divine revelation are supposed to convey precise information. Economics merely establishes the fact that entrepreneurial profits and losses are essential phenomena of the market economy. There cannot be a market economy without them. It is certainly possible for the police to confiscate all profits. But such a policy would by necessity convert the market economy into a senseless chaos. Man has, there is no doubt, the power to destroy many things, and he has made in the course of history ample use of this faculty. He could destroy the market economy too.

If those self-styled moralists were not blinded by their envy, they would not deal with profit without dealing simultaneously with its corollary, loss. They would not pass over in silence the fact that the preliminary conditions of economic improvement are an achievement of those whose saving accumulates the additional capital goods and of the inventors, and that the utilization of these conditions for the realization of economic improvement is effected by the entrepreneurs. The rest of the people do not contribute to progress, but they are benefitted by the horn of plenty which other people's activities pour upon them.

What has been said about the progressing economy is *mutatis mutandis* to be applied to the conditions of a retrogressing economy, i.e., an economy in which the per capita quota of capital invested is decreasing. In such an economy there is an excess in the total sum of entrepreneurial losses over that of profits. People who cannot free themselves from the fallacy of thinking in concepts of collectives and whole groups might raise the question of how in such a retrogressing economy there could be any entrepreneurial activity at all. Why should anybody embark upon an enterprise if he knows in advance that mathematically his chances of earning profits are smaller than those of suffering losses? However, this mode of posing the problem is fallacious. Like everyone else, entrepreneurs do not act as members of a class, but as individuals. No entrepreneur bothers a whit about the fate of the totality of the entrepreneurs. It is irrelevant to the individual entrepreneur what happens to other people whom theories, according to a certain characteristic, assign to the same class they assign him. In the living, perpetually changing market society there are always profits to be earned by efficient entrepreneurs. The fact that in a retrogressing economy the total amount of losses exceeds the total amount of profits does not deter a man who has confidence in his own superior efficiency. A prospective entrepreneur does not consult the calculus of probability which is of no avail in the field of understanding. He trusts his own ability to understand future market conditions better than his less gifted fellow men.

The entrepreneurial function, the striving of entrepreneurs after profits, is the driving power in the market economy. Profit and loss are the devices by means of which the consumers exercise their supremacy on the market. The behavior of the consumers makes profits and losses appear and thereby shifts ownership of the means of production from the hands of the less efficient into those of the more efficient. It makes a man the more influential in the direction of business activities the better he succeeds in serving the consumers. In the absence of profit and loss the entrepreneurs would not know what the most urgent needs of the consumers are. If some entrepreneurs were to guess it, they would lack the means to adjust production accordingly.

Profit-seeking business is subject to the sovereignty of the consumers, while nonprofit institutions are sovereign unto themselves and not responsible to the public. Production for profit is necessarily production for use, as profits can only be earned by providing the consumers with those things they most urgently want to use.

The moralists' and sermonizers' critique of profits misses the point. It is not the fault of the entrepreneurs that the consumers—the people, the common man—prefer liquor to Bibles and detective stories to serious books, and that governments prefer guns to butter. The entrepreneur does not make greater profits in selling "bad" things than in selling "good" things. His profits are the greater the better he succeeds in providing the consumers with those things they ask for most intensely. People do not drink intoxicating beverages in order to make the "alcohol capital" happy, and they do not go to war in order to increase the profits of the "merchants of death." The existence of the armaments industries is a consequence of the warlike spirit, not its cause.

It is not the business of the entrepreneurs to make people substitute sound ideologies for unsound. It rests with the philosophers to change people's ideas and ideals. The entrepreneur serves the consumers as they are today, however wicked and ignorant.

We may admire those who abstain from making gains they could reap in producing deadly weapons or hard liquor. However, their laudable conduct is a mere gesture without any practical effects. Even if all entrepreneurs and capitalists were to follow their example, wars and dipsomania would not disappear. As was the case in the precapitalistic ages, governments would produce the weapons in their own arsenals and drinkers would distill their own liquor.

The Moral Condemnation of Profit

Profit is earned by the adjustment of the utilization of the human and material factors of production to changes in conditions. It is those benefitted by this adjustment who, scrambling for the products concerned and offering and paying for them prices that exceed the costs expended by the seller, generate the profits. Entrepreneurial profit is not a "reward" granted by the customer to the supplier who served him better than the sluggish routinists; it is the result of the eagerness of the buyers to outbid others who are equally anxious to acquire a share of the limited supply.

The dividends of corporations are popularly called profits. Actually they are interest on the capital invested plus that part of profits that is not ploughed back into the enterprise. If the enterprise does not operate successfully, either no dividends are paid or the dividends contain only interest on the whole or a part of the capital.

Socialists and interventionists call profit and interest *unearned income*, the result of depriving the workers of a considerable part of the fruits of their effort. As they see it, the products come into existence through toiling as such and nothing else, and should by rights benefit the toilers alone.

Yet bare labor produces very little if not aided by the employment of the outcome of previous saving and accumulation of capital. The products are the outgrowth of a cooperation of labor with tools and other capital goods directed by provident entrepreneurial design. The savers, whose saving accumulated and maintains the capital, and the entrepreneurs, who channel the capital into those employments in which it best serves the consumers, are no less indispensable for the process of production than the toilers. It is nonsensical to impute the whole product to the purveyors of labor and to pass over in silence the contribution of the purveyors of capital and of entrepreneurial ideas. What brings forth usable goods is not physical effort as such, but physical effort aptly directed by the human mind toward a definite goal. The greater (with the advance of general well-being) the role of capital goods, and the more efficient their utilization in the cooperation of the factors of production, the more absurd becomes the romantic glorification of the mere performing of manual routine jobs. The marvelous economic improvements of the last two hundred years were an achievement of the capitalists who provided the capital goods required and of the elite of technologists and entrepreneurs. The masses of the manual workers were benefitted by changes which they not only did not generate but which, more often than not, they tried to cut short.

Some Observations on the Underconsumption Bogey and on the Purchasing Power Argument

In speaking of underconsumption, people mean to describe a state of affairs in which a part of the goods produced cannot be consumed because the people who could consume them are by their poverty prevented from buying them. These goods remain unsold or can be swapped only at prices not covering the cost of production. Hence various disarrangements and disturbances arise, the total complex of which is called economic depression.

Now it happens again and again that entrepreneurs err in anticipating the future state of the market. Instead of producing those goods for which the demand of the consumers is most intense, they produce less urgently needed goods or things which cannot be sold at all. These inefficient entrepreneurs suffer losses while their more efficient competitors who anticipated the wishes of the consumers earn profits. The losses of the former group of entrepreneurs are not caused by a general abstention from buying on the part of the public; they are due to the fact that the public prefers to buy other goods.

If it were true, as the underconsumption myth implies, that the workers are too poor to buy the products because the entrepreneurs and the capitalists unfairly appropriate to themselves what by rights should go to the wage earners, the state of affairs would not be altered. The “exploiters” are not supposed to exploit from sheer wantonness. They want, it is insinuated, to increase at the expense of the “exploited” either their own consumption or their own investments. They do not withdraw their booty from the universe. They spend it either in buying luxuries for their own household or in buying producers’ goods for the expansion of their enterprises. Of course, their demand is directed toward goods other than those the wage earners would have bought if the profits had been confiscated and distributed among them.

Entrepreneurial errors with regard to the state of the market of various classes of commodities as created by such "exploitation" are in no way different from any other entrepreneurial shortcomings. Entrepreneurial errors result in losses for the inefficient entrepreneurs which are counterbalanced by the profits of the efficient entrepreneurs. They make business bad for some groups of industries and good for other groups. They do not bring about a general depression of trade.

The underconsumption myth is baseless self-contradictory balderdash. Its reasoning crumbles away as soon as one begins to examine it. It is untenable even if one, for the sake of argument, accepts the "exploitation" doctrine as correct.

The purchasing power argument runs in a slightly different manner. It contends that a rise in wage rates is a prerequisite of the expansion of production. If wage rates do not rise, there is no use for business to increase the quantity and to improve the quality of the goods produced., For the additional products would find no buyers or only such buyers as restrict their purchases of other goods. What is needed first for the realization of economic progress is to make wage rates rise continually. Government or labor union pressure and compulsion aiming at the enforcement of higher wage rates are the main vehicles of progress.

As has been demonstrated above the emergence of an excess in the total sum of entrepreneurial profits over the total sum of entrepreneurial losses is inseparably bound up with the fact that a portion of the benefits derived from the increase in the quantity of capital goods available and from the improvement of technological procedures goes to the nonentrepreneurial groups. The rise in the prices of complementary factors of production, first among them wage rates, is neither a concession which the entrepreneurs will-nilly must make to the rest of the people nor a clever device of the entrepreneurs in order to make profits. It is an unavoidable and necessary phenomenon in the chain of successive events which the endeavors of the entrepreneurs to make profits by adjusting the supply of the consumers' goods to the new state of affairs are bound to bring about. The same process which results in an excess of entrepreneurial profits over losses causes first—i.e., before such an excess appears—the emergence of a tendency toward a rise in wage rates and in the prices of many material factors of production. And it is again the same process that would in the further course of events make this excess of profits over losses disappear, provided that no further changes, increasing the amount of capital goods available, were to occur. The excess of profits over losses is not a consequence of the rise in the prices of the factors of production. The two phenomena—the rise in the prices of the factors of production and the excess of profits over losses—are both steps in the process of adjustment of production to the increase in the quantity of capital goods and to the technological changes which the entrepreneurial actions actuate. Only to the extent that the other strata of the population are enriched by this adjustment can an excess of profits over losses temporarily come into being.

The basic error of the purchasing power argument consists in misconstruing this causal relation. It turns things upside down when considering the rise in wage rates as the force bringing about economic improvement.

We will discuss at a later stage of this book the consequences of the attempts of the governments and of organized labor violence to enforce wage rates higher than those determined by a nonhampered market.[24] Here we must only add one more explanatory remark.

When speaking of profits and losses, prices and wage rates, what we have in mind is always real profits and losses, real prices and real wage rates. It is the arbitrary interchange of money terms and real terms that has led many people astray. This problem too will be dealt with exhaustively in later chapters. Let us incidentally only mention the fact that a rise in real wage rates is compatible with a drop in nominal wage rates.

10. Promoters, Managers, Technicians, and Bureaucrats

The entrepreneur hires the technicians, i.e., people who have the ability and the skill to perform definite kinds and quantities of work. The class of technicians includes the great inventors, the champions in the field of applied science, the constructors and designers as well as the performers of the most simple tasks. The entrepreneur joins their ranks as far as he himself takes part in the technical execution of his entrepreneurial plans. The technician contributes his own toil and trouble; but it is the entrepreneur qua entrepreneur who directs his labor toward definite goals. And the entrepreneur himself acts as a mandatary, as it were, of the consumers.

The entrepreneurs are not omnipresent. They cannot themselves attend to the manifold tasks which are incumbent upon them. Adjustment of production to the best possible supplying of the consumers with the goods they are asking for most urgently does not merely consist in determining the general plan for the utilization of resources. There is, of course, no doubt that this is the main function of the promoter and speculator. But besides the great adjustments, many small adjustments are necessary too. Each of them may seem trifling and of little bearing upon the total result. But the cumulative effect of shortcomings in many of these minor matters can be such as to frustrate entirely the success of a correct solution of the great problems. At any rate, it is certain that every failure to handle the smaller problems

24.Cf. below, pp. 769-779.

results in a squandering of scarce factors of production and consequently in impairing the best possible satisfaction of the consumers.

It is important to conceive in what respects the problem we have in mind differs from the technological tasks of the technicians. The execution of every project upon which the entrepreneur has embarked in making his decision with regard to the general plan of action requires a multiplicity of minute decisions. Each of these decisions must be effected in such a way as to prefer that solution of the problem which—without interfering with the designs of the general plan for the whole project—is the most economical one. It must avoid superfluous costs in the same way as does the general plan. The technician from his purely technological point of view either may not see any difference in the alternatives offered by various methods for the solution of such a detail or may give preference to one of these methods on account of its greater output in physical quantities. But the entrepreneur is actuated by the profit motive. This enjoins upon him the urge to prefer the most economical solution, i.e., that solution which avoids employing factors of production whose employment would impair the satisfaction of the more intensely felt wants of the consumers. He will prefer among the various methods with regard to which the technicians are neutral, the one the application of which requires the smallest cost. He may reject the technicians' suggestion to choose a more costly method securing a greater physical output if his calculation shows that the increase in output would not outweigh the increase in cost required. Not only in the great decisions and plans but no less in the daily decisions of small problems as they turn up in the current conduct of affairs, the entrepreneur must perform his task of adjusting production to the demand of the consumers as reflected in the prices of the market.

Economic calculation as practiced in the market economy, and especially the system of double-entry bookkeeping, make it possible to relieve the entrepreneur of involvement in too much detail. He can devote himself to his great tasks without being entangled in a multitude of trifles beyond any mortal man's range of sight. He can appoint assistants to whose solicitude he entrusts the care of subordinate entrepreneurial duties. And these assistants in their turn can be aided according to the same principle by assistants appointed for a smaller sphere of duties. In this way a whole managerial hierarchy can be built up.

A *manager* is a junior partner of the entrepreneur, as it were, no matter what the contractual and financial terms of his employment are. The only relevant thing is that his own financial interests force him to attend to the best of his abilities to the entrepreneurial functions which are assigned to him within a limited and precisely determined sphere of action.

It is the system of double-entry bookkeeping that makes the functioning of the managerial system possible. Thanks to it, the entrepreneur is in a position to separate the calculation of each part of his total enterprise in such a way that he can determine the role it plays within his whole enterprise. Thus he can look at each section as if it were a separate entity and can appraise it according to the share it contributes to the success of the total enterprise. Within this system of business calculation each section of a firm represents an integral entity, a hypothetical independent business,as it were. It is assumed that this section "owns a definite part of the whole capital employed in the enterprise, that it buys from other sections and sells to them, that it has its own expenses and its own revenues, that its dealings result either in a profit or in a loss which is imputed to its own conduct of affairs as distinguished from the result of the other sections. Thus the entrepreneur can assign to each section's management a great deal of independence. The only directive he gives to a man whom he entrusts with the management of a circumscribed job is to make as much profit as possible. An examination of the accounts shows how successful or unsuccessful the managers were in executing this directive. Every manager and submanager is responsible for the working of his section or subsection. It is to his credit if the accounts show a profit, and it is to his disadvantage if they show a loss. His own interests impel him toward the utmost care and exertion in the conduct of his section's affairs. If he incurs losses, he will be replaced by a man whom the entrepreneur expects to be more successful, or the whole section will be discontinued. At any rate, the manager will lose his job. If he succeeds in making profits, his income will be increased, or at least he will not be in danger of losing it. Whether or not a manager is entitled to a share in the profit imputed to his section is not important with regard to the personal interest he takes in the results of his section's dealings. His welfare is at any rate closely connected with that of his section. His task is not like that of the technician, to perform a definite piece of work according to a definite precept. It is to adjust—within the limited scope left to his discretion—the operation of his section to the state of the market. Of course, just as an entrepreneur may combine in his person entrepreneurial functions and those of a technician, such a union of various functions can also occur with a manager.

The managerial function is always subservient to the entrepreneurial function. It can relieve the entrepreneur of a part of his minor duties; it can never evolve into a substitute for entrepreneurship. This fallacy to the contrary is due to the error confusing the category of entrepreneurship as it is defined in the imaginary construction of functional distribution with conditions in a living and operating market economy. The function of the entrepreneur cannot be separated from the direction of the employment of factors of production for the accomplishment of definite tasks. The entrepreneur controls the factors of production; it is this control that brings him either entrepreneurial profit or loss.

It is possible to reward the manager by paying for his services in proportion to the contribution of his section to the profit earned by the entrepreneur. But this is of no avail. As has been pointed out, the manager is under any circumstances interested in the success of that part of the business which is entrusted to his care. But the manager cannot be made answerable for the losses incurred. These losses are suffered by the owners of the capital employed. They cannot be shifted to the manager.

Society can freely leave the care for the best possible employment of capital goods to their owners. In embarking upon definite projects these owners expose their own property, wealth, and social position. They are even more interested in the success of their entrepreneurial activities than is society as a whole. For society as a whole the squandering of capital invested in a definite project means only the loss of a small part of its total funds; for the owner it means much more, for the most part the loss of his total fortune. But if a manager is given a completely free hand, things are different. He speculates in risking other people's money. He sees the prospects of an uncertain enterprise from another angle than that of the man who is answerable for the losses. It is precisely when he is rewarded by a share of the profits that he becomes foolhardy because he does not share in the losses too.

The illusion that management is the totality of entrepreneurial activities and that management is a perfect substitute for entrepreneurship is the outgrowth of a misinterpretation of the conditions of the corporations, the typical form of present-day business. It is asserted that the corporation is operated by the salaried managers, while the shareholders are merely passive spectators. All the powers are concentrated in the hands of hired employees. The shareholders are idle and useless; they harvest what the managers have sown.

This doctrine disregards entirely the role that the capital and money market, the stock and bond exchange, which a pertinent idiom simply calls the "market," plays in the direction of corporate business. The dealings of this market are branded by popular anticapitalistic bias as a hazardous game, as mere gambling. In fact, the changes in the prices of common and preferred stock and of corporate bonds are the means applied by the capitalists for the supreme control of the flow of capital. The price structure as determined by the speculations on the capital and money markets and on the big commodity exchanges not only decides how much capital is available for the conduct of each corporation's business; it creates a state of affairs to which the managers must adjust their operations in detail.

The general direction of a corporation's conduct of business is exercised by the stockholders and their elected mandataries, the directors. The directors appoint and discharge the managers. In smaller companies and sometimes even in bigger ones the offices of the directors and the managers are often combined in the same persons. A successful corporation is ultimately never controlled by hired managers. The emergence of an omnipotent managerial class is not a phenomenon of the unhampered market economy. It was, on the contrary, an outgrowth of the interventionist policies consciously aiming at an elimination of the influence of the shareholders and at their virtual expropriation. In Germany, Italy, and Austria it was a preliminary step on the way toward the substitution of government control of business for free enterprise, as has been the case in Great Britain with regard to the Bank of England and the railroads. Similar tendencies are prevalent in the American public utilities. The marvelous achievements of corporate business were not a result of the activities of a salaried managerial oligarchy; they were accomplished by people who were connected with the corporation by means of the ownership of a considerable part or of the greater part of its stock and whom part of the public scorned as promoters and profiteers.

The entrepreneur determines alone, without any managerial interference, in what lines of business to employ capital and how much capital to employ. He determines the expansion and contraction of the size of the total business and its main sections. He determines the enterprise's financial structure. These are the essential decisions which are instrumental in the conduct of business. They always fall upon the entrepreneur, in corporations as well as in other types of a firm's legal structure. Any assistance given to the entrepreneur in this regard is of ancillary character only; he takes information about the past state of affairs from experts in the fields of law, statistics, and technology; but the final decision implying a judgment about the future state of the market rests with him alone. The execution of the details of his projects may then be entrusted to managers.

The social functions of the managerial elite are no less indispensable for the operation of the market economy than are the functions of the elite of inventors, technologists, engineers, designers, scientists, and experimenters. In the ranks of the managers many of the most eminent men serve the cause of economic progress. Successful managers are remunerated by high salaries and often by a share in the enterprise's gross profits. Many of them in the course of their careers become themselves capitalists and entrepreneurs. Nonetheless, the managerial function is different from the entrepreneurial function.

It is a serious mistake to identify entrepreneurship with management as in the popular antithesis of "management" and "labor." This confusion is, of course, intentional. It is designed to obscure the fact that the functions of entrepreneurship are entirely different from those of the managers attending to the minor details of the conduct of business. The structure of business, the allocation of capital to the various branches of production and firms, the size and the line of operation of each plant and shop are considered as given facts and it is implied that no further changes will be effected with regard to them. The only task is to go on in the old routine. In such a stationary world, of course, there is no need for innovators and promoters; the total amount of profits is counterbalanced by the total amount of losses. To explode the fallacies of this doctrine it is enough to compare the structure of American business in 1960 with that of 1940.

But even in a stationary world it would be nonsensical to give "labor," as a popular slogan demands, a share in management. The realization of such a postulate would result in syndicalism.[25]

There is furthermore a readiness to confuse the manager with a bureaucrat.

Bureaucratic management, as distinguished from *profit management*, is the method applied in the conduct of administrative affairs, the result of which has no cash value on the market. The successful performance of the duties entrusted to the care of a police department is of the greatest importance for the preservation of social cooperation and benefits each member of society. But it has no price on the market, it cannot be bought or sold; it can therefore not be confronted with the expenses incurred in the endeavors to secure it. It results in gains, but these gains are not reflected in profits liable to expression in terms of money. The methods of economic calculation, and especially those of double-entry bookkeeping, are not applicable to them.

25.Cf. below, pp. 812-820.

Success or failure of a police department's activities cannot be ascertained according to the arithmetical procedures of profit-seeking business. No accountant can establish whether or not a police department or one of its subdivisions has succeeded.

The amount of money to be expended in every branch of profit-seeking business is determined by the behavior of the consumers. If the automobile industry were to treble the capital employed, it would certainly improve the services it renders to the public. There would be more cars available. But this expansion of the industry would withhold capital from other branches of production in which it could fill more urgent wants of the consumers. This fact would render the expansion of the automobile industry unprofitable and increase profits in other branches of business. In their endeavors to strive after the highest profit obtainable, entrepreneurs are forced to allocate to each branch of business only as much capital as can be employed in it without impairing the satisfaction of more urgent wants of the consumers. Thus the entrepreneurial activities are automatically, as it were, directed by the consumers' wishes as they are reflected in the price structure of consumers' goods.

No such limitation is enjoined upon the allocation of funds for the performance of the tasks incumbent upon government activities. There is no doubt that the services rendered by the police department of the City of New York could be considerably improved by trebling the budgetary allocation. But the question is whether or not this improvement would be considerable enough to justify either the restriction of the services rendered by other departments—e.g., those of the department of sanitation—or the restriction of the private consumption of the taxpayers. This question cannot be answered by the accounts of the police department. These accounts provide information only about the expenses incurred. They cannot provide any information about the results obtained, as these results cannot be expressed in money equivalents. The citizens must directly determine the amount of services they want to get and are ready to pay for. They discharge this task by electing councilmen and officeholders who are prepared to comply with their intentions.

Thus the mayor and the chiefs of the city's various departments are restricted by the budget. They are not free to act upon what they themselves consider the most beneficial solution of the various problems the citizenry has to face. They are bound to spend the funds allocated for the purposes the budget has assigned them. They must not use them for other tasks. Auditing in the field of public administration is entirely different from that in the field of profit-seeking business. Its goal is to establish whether or not the funds allocated have been expended in strict compliance with the provisions of the budget.

In profit-seeking business the discretion of the managers and submanagers is restricted by considerations of profit and loss. The profit motive is the only directive needed to make them subservient to the wishes of the consumers. There is no need to restrict their discretion by minute instructions and rules. If they are efficient, such meddling with details would at best be superfluous, if not pernicious in tying their hands. If they are inefficient, it would not render their activities more successful. It would only provide them with a lame excuse that the failure was caused by inappropriate rules. The only instruction required is self-understood and does not need to be especially mentioned: Seek profit.

Things are different in public administration, in the conduct of government affairs. In this field the discretion of the officeholders and their subaltern aids is not restricted by consideration of profit and loss. If their supreme boss—no matter whether he is the sovereign people or a sovereign despot—were to leave them a free hand, he would renounce his own supremacy in their favor. These officers would become irresponsible agents, and their power would supersede that of the people or the despot. They would do what pleased them, not what their bosses wanted them to do. To prevent this outcome and to make them subservient to the will of their bosses it is necessary to give them detailed instructions regulating their conduct of affairs in every respect. Then it becomes their duty to handle all affairs in strict compliance with these rules and regulations. Their freedom to adjust their acts to what seems to them the most appropriate solution of a concrete problem is limited by these norms. They are bureaucrats, i.e., men who in every instance must observe a set of inflexible regulations.

Bureaucratic conduct of affairs is conduct bound to comply with detailed rules and regulations fixed by the authority of a superior body. It is the only alternative to profit management. Profit management is inapplicable in the pursuit of affairs which have no cash value on the market and in the non-profit conduct of affairs which could also be operated on a profit basis. The former is the case of the administration of the social apparatus of coercion and compulsion; the latter is the case in the conduct of an institution on a non-profit basis, e.g., a school, a hospital, or a postal system. Whenever the operation of a system is not directed by the profit motive, it must be directed by bureaucratic rules.

Bureaucratic conduct of affairs is, as such, not an evil. It is the only appropriate method of handling governmental affairs, i.e., the social apparatus of compulsion and coercion. As government is necessary, bureaucratism is—in this field—no less necessary. Where economic calculation is unfeasible, bureaucratic methods are indispensable. A socialist government must apply them to all affairs.

No business, whatever its size or specific task, can ever become bureaucratic so long as it is entirely and solely operated on a profit basis. But as soon as it abandons profit seeking and substitutes for it what is called the service principle—i.e., the rendering of services without regard as to whether or not the prices to be obtained for them cover the expenses—it must substitute bureaucratic methods for those of entrepreneurial management.[26]

11. The Selective Process

The selective process of the market is actuated by the composite effort of all members of the market economy. Driven by the urge to remove his own uneasiness as much as possible, each individual is intent, on the one hand, upon attaining that position in which he can contribute most to the best satisfaction of everyone else and, on the other hand, upon taking best advantage of the services offered by everyone else. This means that he tries to sell on the dearest market and to buy on the cheapest market. The resultant of these endeavors is not only the price structure but no less the social structure, the assignment of definite tasks to the various individuals. The market makes people rich or poor, determines who shall run the big plants and who shall scrub the floors, fixes how many people shall work in the copper mines and how many in the symphony orchestras. None of these decisions is made once and for all; they are revocable every day. The selective process never stops. It goes on adjusting the social apparatus of production to the changes in demand and supply. It reviews again and again its previous decisions and forces everybody to submit to a new examination of his case. There is no security and no such thing as a right to preserve any position acquired in the past. Nobody is exempt from the law of the market, the consumers' sovereignty.

Ownership of the means of production is not a privilege, but a social liability. Capitalists and landowners are compelled to employ their property for the best possible satisfaction of the consumers. If they are slow and inept in the performance of their duties, they are penalized by losses. If they do

26.For a detailed treatment of the problems involved, cf. Mises, *Bureaucracy* (New Haven, 1944).

not learn the lesson and do not reform their conduct of affairs, they lose their wealth. No investment is safe forever. He who does not use his property in serving the consumers in the most efficient way is doomed to failure. There is no room left for people who would like to enjoy their fortunes in idleness and thoughtlessness. The proprietor must aim to invest his funds in such a way that principal and yield are at least not impaired.

In the ages of caste privileges and trade barriers there were revenues not dependent on the market. Princes and lords lived at the expense of the humble slaves and serfs who owed them tithes, statute labor,and tributes. Ownership of land could only be acquired either by conquest or by largesse on the part of a conqueror. It could be forfeited only by recantation on the part of the donor or by conquest on the part of another conqueror. Even later, when the lords and their liegemen began to sell their surpluses on the market, they could not be ousted by the competition of more efficient people. Competition was free only within very narrow limits. The acquisition of manorial estates was reserved to the nobility, that of urban real property to the citizens of the township, that of farm land to the peasants. Competition in the arts and crafts was restricted by the guilds. The consumers were not in a position to satisfy their wants in the cheapest way, as price control made underbidding impossible to the sellers. The buyers were at the mercy of their purveyors. If the privileged producers refused to resort to the employment of the most adequate raw materials and of the most efficient methods of processing, the consumers were forced to endure the consequences of such stubbornness and conservatism.

The landowner who lives in perfect self-sufficiency from the fruits of his own farming is independent of the market. But the modern farmer who buys equipment, fertilizers, seed, labor, and other factors of production and sells agricultural products is subject to the law of the market. His income depends on the consumers and he must adjust his operations to their wishes.

The selective function of the market works also with regard to labor. The worker is attracted by that kind of work in which he can expect to earn most. As is the case with material factors of production, the factor labor too is allocated to those employments in which it best serves the consumers. There prevails the tendency not to waste any quantity of labor for the satisfaction of less urgent demand if more urgent demand is still unsatisfied. Like all other strata of society, the worker is subject to the supremacy of the consumers. If he disobeys, he is penalized by a cut in earnings.

The selection of the market does not establish social orders, castes, or classes in the Marxian sense. Nor do the entrepreneurs and promoters form an integrated social class. Each individual is free to become a promoter if he relies upon his own ability to anticipate future market conditions better than his fellow citizens and if his attempts to act at his own peril and on his own responsibility are approved by the consumers. One enters the ranks of the promoters by spontaneously pushing forward and thus submitting to the trial to which the market subjects, without respect for persons, everybody who wants to become a promoter or to remain in this eminent position. Everybody has the opportunity to take his chance. A newcomer does not need to wait for an invitation or encouragement from anyone. He must leap forward on his own account and must himself know how to provide the means needed.

It has been contended again and again that under the conditions of "late" or "mature" capitalism it is no longer possible for penniless people to climb the ladder to wealth and entrepreneurial position. No attempt has ever been made to prove this thesis. Since it was first advanced, the composition of the entrepreneurial and capitalist groups has changed considerably. A great part of the former entrepreneurs and their heirs have been eliminated and other people, newcomers, have taken their places. It is, of course, true that in the last years institutions have been purposely developed which, if not abolished very soon, will make the functioning of the market in every regard impossible.

The point of view from which the consumers choose the captains of industry and business is exclusively their qualification to adjust production to the needs of the consumers. They do not bother about other features and merits. They want a shoe manufacturer to fabricate good and cheap shoes. They are not intent upon entrusting the conduct of the shoe trade to handsome amiable boys, to people of good drawing-room manners, of artistic gifts, of scholarly habits, or of any other virtues or talents. A proficient businessman may often be deficient in many accomplishments which contribute to the success of a man in other spheres of life.

It is quite common nowadays to deprecate the capitalists and entrepreneurs. A man is prone to sneer at those who are more prosperous than himself. These people, he contends, are richer only because they are less scrupulous than he. If he were not restrained by due consideration for the laws of morality and decency, he would be no less successful than they are. Thus men glory in the aureole of self-complacency and Pharisaic self-righteousness.

Now it is true that under the conditions brought about by interventionism many people can acquire wealth by graft and bribery. In many countries interventionism has so undermined the supremacy of the market that it is more advantageous for a businessman to rely upon the aid of those in political office than upon the best satisfaction of the needs of the consumers. But it is not this that the popular critics of other people's wealth have in mind. They contend that the methods by which wealth is acquired in a pure market society are objectionable from the ethical point of view.

Against such statements it is necessary to emphasize that, so far as the operation of the market is not sabotaged by the interference of governments and other factors of coercion, success in business is the proof of services rendered to the consumers. The poor man need not be inferior to the prosperous businessman in other regards; he may sometimes be outstanding in scientific, literary, and artistic achievements or in civic leadership. But in the social system of production he is inferior. The creative genius may be right in his disdain for commercial success; it may be true that he would have been prosperous in business if he had not preferred other things. But the clerks and workers who boast of their moral superiority deceive themselves and find consolation in this self-deception. They do not admit that they have been tried and found wanting by their fellow citizens, the consumers.

It is often asserted that the poor man's failure in the competition of the market is caused by his lack of education. Equality of opportunity, it is said, could be provided only by making education at every level accessible to all. There prevails today the tendency to reduce all differences among various peoples to their education and to deny the existence of inborn inequalities in intellect, will power, and character. It is not generally realized that education can never be more than indoctrination with theories and ideas already developed. Education, whatever benefits it may confer, is transmission of traditional doctrines and valuations; it is by necessity conservative. It produces imitation and routine, not improvement and progress. Innovators and creative geniuses cannot be reared in schools. They are precisely the men who defy what the school has taught them.

In order to succeed in business a man does not need a degree from a school of business administration. These schools train the subalterns for routine jobs. They certainly do not train entrepreneurs. An entrepreneur cannot be trained. A man becomes an entrepreneur in seizing an opportunity and filling the gap. No special education is required for such a display of keen judgment, foresight, and energy. The most successful businessmen were often uneducated when measured by the scholastic standards of the teaching profession. But they were equal to their social function of adjusting production to the most urgent demand. Because of these merits the consumers chose them for business leadership.

12. The Individual and the Market

It is customary to speak metaphorically of the automatic and anonymous forces actuating the "mechanism" of the market. In employing such metaphors people are ready to disregard the fact that the only factors directing the market and the determination of prices are purposive acts of men. There is no automatism; there are only men consciously and deliberately aiming at ends chosen. There are no mysterious mechanical forces; there is only the human will to remove uneasiness. There is no anonymity; there is I and you and Bill and Joe and all the rest. And each of us is both a producer and a consumer.

The market is a social body; it is the foremost social body. The market phenomena are social phenomena. They are the resultant of each individual's active contribution. But they are different from each such contribution. They appear to the individual as something given which he himself cannot alter. He does not always see that he himself is a part, although a small part, of the complex of elements determining each momentary state of the market. Because he fails to realize this fact, he feels himself free, in criticizing the market phenomena, to condemn with regard to his fellow men a mode of conduct which he considers as quite right with regard to himself. He blames the market for its callousness and disregard of persons and asks for social control of the market in order to "humanize" it. He asks on the one hand for measures to protect the consumer against the producers. But on the other hand he insists even more passionately upon the necessity of protecting himself as a producer against the consumers. The outcome of these contradictory demands is the modern methods of government interference whose most outstanding examples were the Sozialpolitik of imperial Germany and the American New Deal.

It is an old fallacy that it is a legitimate task of civil government to protect the less efficient producer against the competition of the more efficient. One asks for a "producers' policy: as distinct from a "consumers' policy." While flamboyantly repeating the truism that the only aim of production is to provide ample supplies for consumption, people emphasize with no less eloquence that the "industrious" producer should be protected against the "idle" consumer.

However, producers and consumers are identical. Production and consumption are different stages in acting. Catallactics embodies these differences in speaking of producers and consumers. But in reality they are the same people. It is, of course, possible to protect a less efficient producer against the competition of more efficient fellows. Such a privilege conveys to the privileged the benefits which the unhampered market provides only to those who succeed in best filling the wants of the consumers. But it necessarily impairs the satisfaction of the consumers. If only one producer or a small group is privileged, the beneficiaries enjoy an advantage at the expense of the rest of the people. But if all producers are privileged to the same extent, everybody loses in his capacity as consumer as much as he gains in his capacity as a producer. Moreover, all are injured because the supply of products drops if the most efficient men are prevented from employing their skill in that field in which they could render the best services to the consumers.

If a consumer believes that it is expedient or right to pay a higher price for domestic cereals than for cereals imported from abroad, or for manufactures processed in plants operated by small business or employing unionized workers than for those of another provenance, he is free to do so. He would only have to satisfy himself that the commodity offered for sale meets the conditions upon which he makes the allowance of a higher price depend. Laws which forbid counterfeiting of labels of origin and trademarks would succeed in attaining the ends aimed at by tariffs, labor legislation, and privileges granted to small business. But it is beyond doubt that the consumers are not prepared to act in this way. The fact that a commodity is marked as imported does not impair its salability if it is better or cheaper, or both. As a rule the buyers want to buy as cheaply as possible without regard for the origin of the article or some particular characteristics of the producers.

The psychological root of the producers' policy as practiced today in all parts of the world is to be seen in spurious economic doctrines. These doctrines flatly deny that the privileges granted to less efficient producers burden the consumer. Their advocates contend that such measures are prejudicial only to those against whom they discriminate. When, pressed further, they are forced to admit that the consumers are damaged took they maintain that the losses of the consumers are more than compensated by an increase in their money income which the measures in question are bound to bring about.

Thus in the predominantly industrial countries of Europe the protectionists were first eager to declare that the tariff on agricultural products hurts exclusively the interests of the farmers of the predominantly agricultural countries and of the grain dealers. It is certain that these exporting interests are damaged too. But it is no less certain that the consumers of the country that adopts the tariff policy are losing with them. They must pay higher prices for their food. Of course, the protectionist retorts, that this is not a burden. For, he argues, the additional amount that the domestic consumer pays increases the farmers' income and their purchasing power; they will spend the whole surplus in buying more of the products manufactured by the nonagricultural strata of the population. This paralogism can easily be exploded by referring to the well-known anecdote of the man who asks an innkeeper for a gift of ten dollars; it will not cost him anything because the beggar promises to spend the whole amount in his inn. But for all that, the protectionist fallacy got hold of public opinion, and this alone explains the popularity of the measures inspired by it. Many people simply do not realize that the only effect of protection is to divert production from those places in which it could produce more per unit of capital and labor expended to places in which it produces less. It makes people poorer, not more prosperous.

The ultimate foundation of modern protectionism and of the striving for economic autarky of each country is to be found in this mistaken belief that they are the best means to make every citizen, or at least the immense majority of them, richer. The term riches means in this connection an increase in the individual's real income and an improvement in his standard of living. It is true that the policy of national economic insulation is a necessary corollary of the endeavors to interfere with domestic business, and that it is an outcome of warlike tendencies as well as one of the factors producing these tendencies. But the fact remains that it would never have been possible to sell the idea of protection to the voters if one had not been able to convince them that protection not only does not impair their standard of living but raises it considerably.

It is important to emphasize this fact because it utterly explodes a myth propagated by many popular books. According to these myths, contemporary man is no longer motivated by the desire to improve his material well-being and to raise his standard of living. The assertions of the economists to the contrary are mistaken. Modern man gives priority to "noneconomic" or "irrational" things and is ready to forego material betterment whenever its attainment stands in the way of those "ideal" concerns. It is a serious blunder, common mostly with economists and businessmen, to interpret the events of our time from an "economic" point of view and to criticize current ideologies with regard to the alleged economic fallacies implied. People long for other things more than for a good life.

It is hardly possible to misconstrue the history of our age more crassly. Our contemporaries are driven by a fanatical zeal to get more amenities and by an unrestrained appetite to enjoy life. A characteristic social phenomenon of our day is the pressure group, an alliance of people eager to promote their own material well-being by the employment of all means, legal or illegal, peaceful or violent. For the pressure group nothing matters but the increase of its members' real income. It is not concerned with any other aspects of life. It does not bother whether or not the realization of its program hurts the vital interests of other men, of their own nation or country, and of the whole of mankind. But, of course, every pressure group is anxious to justify its demands as beneficial to the general public welfare and to stigmatize its critics as abject scoundrels, idiots, and traitors. In the pursuit of its plans it displays a quasi-religious ardor.

Without exception all political parties promise their supporters a higher real income. There is no difference in this respect between nationalists and internationalists and between the supporters of a market economy and the advocates of either socialism or interventionism. If a party asks its supporters to make sacrifices for its cause, it always explains these sacrifices as the necessary temporary means for the attainment of the ultimate goal, the improvement of the material well-being of its members. Each party considers it as an insidious plot against its prestige and its survival if somebody ventures to question the capacity of its projects to make the group members more prosperous. Each party regards with a deadly hatred the economists embarking upon such a critique.

All varieties of the producers' policy are advocated on the ground of their alleged ability to raise the party members' standard of living. Protectionism and economic self-sufficiency, labor union pressure and compulsion, labor legislation, minimum wage rates, public spending, credit expansion, subsidies, and other makeshifts are always recommended by their advocates as the most suitable or the only means to increase the real income of the people for whose votes they canvass. Every contemporary statesman or politician invariably tells his voters: My program will make you as affluent as conditions may permit, while my adversaries' program will bring you want and misery.

It is true that some secluded intellectuals in their esoteric circles talk differently. They proclaim the priority of what they call eternal absolute values and feign in their declamations—not in their personal conduct—a disdain of things secular and transitory. But the public ignores such utterances. The main goal of present-day political action is to secure for the respective pressure group memberships the highest material well-being. The only way for a leader to succeed is to instill in people the conviction that his program best serves the attainment of this goal.

What is wrong with the producers' policies is their faulty economics.

If one is prepared to indulge in the fashionable tendency to explain human things by resorting to the terminology of psychopathology, one might be tempted to say that modern man in contrasting a producers' policy with a consumers' policy has fallen victim to a kind of schizophrenia. He fails to realize that he is an undivided and indivisible person, i.e., an individual, and as such no less a consumer than a producer. The unity of his consciousness is split into two parts; his mind is inwardly divided against himself. But it matters little whether or not we adopt this mode of describing the fact that the economic doctrine resulting in these policies is faulty. We are not concerned with the pathological source from which an error may stem, but with the error as such and with its logical roots. The unmasking of the error by means of ratiocination is the primary fact. If a statement were not exposed as logically erroneous, psychopathology would not be in a position to qualify the state of mind from which it stems as pathological. If a man imagines himself to be the king of Siam, the first thing which the psychiatrist has to establish is whether or not he really is what he believes himself to be. Only if this question is answered in the negative can the man be considered insane.

It is true that most of our contemporaries are committed to a fallacious interpretation of the producer-consumer nexus. In buying they behave as if they were connected with the market only as buyers, and vice versa in selling. As buyers they advocate stern measures to protect them against the sellers, and as sellers they advocate no less harsh measures against the buyers. But this antisocial conduct which shakes the very foundations of social cooperation is not an outgrowth of a pathological state of mind. It is the outcome of a narrow-mindedness which fails to conceive the operation of the market economy and to anticipate the ultimate effects of one's own actions.

It is permissible to contend that the immense majority of our contemporaries are mentally and intellectually not adjusted to life in the market society although they themselves and their fathers have unwittingly created this society by their actions. But this maladjustment consists in nothing else than in the failure to recognize erroneous doctrines as such.

13. Business Propaganda

The consumer is not omniscient. He does not know where he can obtain at the cheapest price what he is looking for. Very often he does not even know what kind of commodity or service is suitable to remove most efficaciously the particular uneasiness he wants to remove. At best he is familiar with the market conditions of the immediate past and arranges his plans on the basis of this information. To convey to him information about the actual state of the market is the task of business propaganda.

Business propaganda must be obtrusive and blatant. It is its aim to attract the attention of slow people, to rouse latent wishes, to entice men to substitute innovation for inert clinging to traditional routine. In order to succeed, advertising must be adjusted to the mentality of the people courted. It must suit their tastes and speak their idiom. Advertising is shrill, noisy, coarse, puffing, because the public does not react to dignified allusions. It is the bad taste of the public that forces the advertisers to display bad taste in their publicity campaigns. The art of advertising has evolved into a branch of applied psychology, a sister discipline of pedagogy.

Like all things designed to suit the taste of the masses, advertising is repellent to people of delicate feeling. This abhorrence influences the appraisal of business propaganda. Advertising and all other methods of business propaganda are condemned as one of the most outrageous outgrowths of unlimited competition. It should be forbidden. The consumers should be instructed by impartial experts; the public schools, the "nonpartisan" press, and cooperatives should perform this task.

The restriction of the right of businessmen to advertise their products would restrict the freedom of the consumers to spend their income according to their own wants and desires. It would make it impossible for them to learn as much as they can and want about the state of the market and the conditions which they may consider as relevant in choosing what to buy and what not to buy. They would no longer be in a position to decide on the basis of the opinion which they themselves have formed about the seller's appraisal of his products; they would be forced to act on the recommendation of other people. It is not unlikely that these mentors would save them some mistakes. But the individual consumers would be under the tutelage of guardians. If advertising is not restricted, the consumers are by and large in the position of a jury which learns about the case by hearing the witnesses and examining directly all other means of evidence. If advertising is restricted, they are in the position of a jury to whom an officer reports about the result of his own examination of evidence.

It is a widespread fallacy that skillful advertising can talk the consumers into buying everything that the advertiser wants them to buy. The consumer is, according to this legend, simply defenseless against "high-pressure" advertising. If this were true, success or failure in business would on the mode of advertising only. However, nobody believes that any kind of advertising would have succeeded in making the candlemakers hold the field against the electric bulb, the horsedrivers against the motorcars, the goose quill against the steel pen and later against the fountain pen. But whoever admits this implies that the quality of the commodity advertised is instrumental in bringing about the success of an advertising campaign. Then there is no reason to maintain that advertising is a method of cheating the gullible public.

It is certainly possible for an advertiser to induce a man to try an article which he would not have bought if he had known its qualities beforehand. But as long as advertising is free to all competing firms, the article which is better from the point of view of the consumers' appetites will finally outstrip the less appropriate article, whatever methods of advertising may be applied. The tricks and artifices of advertising are available to the seller of the better product no less than to the seller of the poorer product. But only the former enjoys the advantage derived from the better quality of his product.

The effects of advertising of commodities are determined by the fact as a rule the buyer is in a position to form a correct opinion about the usefulness of an article bought. The housewife who has tried a particular brand of soap or canned food learns from experience whether it is good for her to buy and consume that product in the future too. Therefore advertising pays the advertiser only if the examination of the first sample bought does not result in the consumer's refusal to buy more of it. It is agreed among businessmen that it does not pay to advertise products other than good ones.

Entirely different are conditions in those fields in which experience cannot teach us anything. The statements of religious, metaphysical, and political propaganda can be neither verified nor falsified by experience. With regard to the life beyond and the absolute, any experience is always the experience of complex phenomena which is open to different interpretations; the only yardstick which can be applied to political doctrines is aprioristic reasoning. Thus political propaganda and business propaganda are essentially different things, although they often resort to the same technical methods.

There are many evils for which contemporary technology and therapeutics have no remedy. There are incurable diseases and there are irreparable personal defects. It is a sad fact that some people try to exploit their fellow men's plight by offering them patent medicines. Such quackeries do not make old people young and ugly girls pretty. They only raise hopes. It would not impair the operation of the market if the authorities were to prevent such advertising, the truth of which cannot be evidenced by the methods of the experimental natural sciences. But whoever is ready to grant to the government this power would be inconsistent if he objected to the demand to submit the statements of churches and sects to the same examination. Freedom is indivisible. As soon as one starts to restrict it, one enters upon a decline on which it is difficult to stop. If one assigns to the government the task of making truth prevail in the advertising of perfumes and tooth paste, one cannot contest it the right to look after truth in the more important matters of religion, philosophy, and social ideology.

The idea that business propaganda can force the consumers to submit to the will of the advertisers is spurious. Advertising can never succeed in supplanting better or cheaper goods by poorer goods.

The costs incurred by advertising are, from the point of view of the advertiser, a part of the total bill of production costs. A businessman expends money for advertising if and as far as he expects that the increase in sales resulting will increase the total net proceeds. In this regard there is no difference between the costs of advertising and all other costs of production. An attempt has been made to distinguish between production costs and sales costs. An increase in production costs, it has been said, increases supply, while an increase in sales costs (advertising costs included) increases demand.[27] This is a mistake. All costs of production are expended with the intention of increasing demand. If the manufacturer of candy employs a better raw material, he aims at an increase in demand in the same way as he does in making the wrappings more attractive and his stores more inviting and in spending more for advertisements. In increasing production costs per unit of the product the idea is always to increase demand. If a businessman wants to increase supply, he must increase the total cost of production, which often results in lowering production costs per unit.

27.Cf. Chamberlin, *The Theory of Monopolistic Competition* (Cambridge, Mass., 1935), pp. 123 ff.

14. The "Volkswirtschaft"

The market economy as such does not respect political frontiers. Its field is the world.

The term *Volkswirtschaft* was long applied by the German champions of government omnipotence. Only much later did the British and the French begin to speak of the "British economy" and "*l'economie francaise*" as distinct from the economies of other nations. But neither the English nor the French language produced an equivalent of the term Volkswirtschaft. With the modern trend toward national planning and national autarky, the doctrine involved in this German word became popular everywhere. Nonetheless, only the German language is able to express in one word all the ideas implied.

The Volkswirtschaft is a sovereign nation's total complex of economic activities directed and controlled by the government. It is socialism realized within the political frontiers of each nation. In employing this term people are fully aware of the fact that real conditions differ from the state of affairs which they deem the only adequate and desirable state. But they fudge everything that happens in the market economy from the point of view of their ideal. They assume that there is an irreconcilable conflict between the interests of the Volkswirtschaft and those of the selfish individuals eager to seek profit. They do not hesitate to assign priority to the interests of the Volkswirtschaft over those of the individuals. The righteous citizen should always place the *volkswirtscaftliche* interests above his own selfish interests. He should act of his own accord as if he were an officer of the government executing its orders. *Gemeinnutz geht vor Eigennutz* (the welfare of the nation takes precedence over the selfishness of the individuals) was the fundamental principle of Nazi economic management. But as people are too dull and too vicious to comply with this rule, it is the task of government to enforce it. The German princes of the seventeenth and eighteenth century, foremost among them the Hohenzollern Electors of Brandenburg and Kings of Prussia, were fully equal to this task. In the nineteenth century, even in Germany the liberal ideologies imported from the West superseded the well-tried and natural policies of nationalism and socialism. However, Bismarck's and his successors' *Sozialpolitik* and finally Nazism restored them.

The interests of a Volkswirtschaft are seen as implacably opposed not only to those of the individuals, but no less to those of the Volkswirtschaft of any foreign nation. The most desirable state of a Volkswirtschaft is complete economic self-sufficiency. A nation which depends on any imports from abroad lacks economic independence; its sovereignty is only a sham. Therefore a nation which cannot produce at home all that it needs is bound to conquer all the territories required. To be really sovereign and independent a nation must have *Lebensraum*, i.e., a territory so large and rich in natural resources that it can live in autarky at a standard no lower than that of any other nation.

Thus the idea of the Volkswirtschaft is the most radical denial of all the principles of the market economy. It was this idea that guided, more or less, the economic policies of all nations in the last decades. It was the pursuit of this idea that brought about the terrific wars of our century and may kindle still more pernicious wars in the future.

From the early beginnings of human history the two opposite principles of the market economy and of the Volkswirtschaft fought each other. Government, i.e, a social apparatus of coercion and compulsion, is a necessary requisite of peaceful cooperation. The market economy cannot do without a police power safeguarding its smooth functioning by the threat or the application of violence against peace-breakers. But the indispensable administrators and their armed satellites are always tempted to use their arms for the establishment of their own totalitarian rule. For ambitious kings and generalissimos the very existence of a sphere of the individuals' lives not subject to regimentation is a challenge. Princes, governors, and generals are never spontaneously liberal. They become liberal only when forced to by the citizens.

The problems raised by the plans of the socialists and the interventionists will be dealt with in later parts of this book. Here we have only to answer the question of whether or not any of the essential features of the Volkswirtschaft are compatible with the market economy. For the champions of the idea of the Volkswirtschaft do not consider their scheme merely as a pattern for the establishment of a future social order. They declare emphatically that even under the system of the market economy, which, of course, in their eyes is a debased and vicious product of policies contrary to human nature, the Volkswirtschaften. As they see it, what separates one Volkswirtschaft from all the others is not, as the economists would have us believe, merely political institutions. It is not the trade and migration barriers established by government interference with business and the differences in legislation and in the protection granted to the individuals by the courts and tribunals that bring about the distinction between domestic trade and foreign trade. This diversity, they say, is, on the contrary, the necessary outcome of the very nature of things, of an inextricable factor; it cannot be removed by an ideology and produces its effects whether the laws and the administrators and judges are prepared to take notice of it or not. Thus in their eyes the Volkswirtschaft appears as a nature-given reality, while the world-embracing ecumenic society of men, the world economy (*Weltwirtschaft*) is only an imaginary phantom of a spurious doctrine, a plan devised for the destruction of civilization.

The truth is that individuals in their acting, in their capacity as producers and consumers, as sellers and buyers, do not make any distinction as between the domestic market and the foreign market. They make a distinction as between local trade and trading with more distant places as far as the costs of transportation play a role. If government interference, such as tariffs, renders international transactions more expensive, they take this fact into account in the same way in which they pay regard to shipping costs. A tariff on caviar has no effect other than would a rise in the cost of transportation. A rigid prohibition of the importation of caviar produces a state of affairs no different from that which would prevail if caviar could not stand shipping without an essential deterioration in its quality.

There has never been in the history of the West such a thing as regional or national autarky. There was, as we may admit, a period in which the division of labor did not go beyond the members of a family household. There was autarky of families and tribes which did not practice interpersonal exchange. But as soon as interpersonal exchange emerged, it crossed the boundaries of the political communities. Barter between the inhabitants of regions more remote from one another, between the members of various tribes, villages, and political communities preceded the practice of barter between neighbors. What people wanted first to acquire by barter and trade were things they could not produce themselves out of their own resources. Salt, other minerals and metals the deposits of which are unequally distributed over the earth's surface, cereals which one could not grow on the domestic soil, and artifacts which only the inhabitants of some regions were able to manufacture, were the first objects of trade. Trade started as foreign trade. Only later did domestic exchange develop between neighbors. The first holes that opened the closed household economy to interpersonal exchange were made by the products of distant regions. No consumer cared on his own account whether the salt and the metals he bought were of "domestic" or of "foreign" provenance. If it had been otherwise, the governments would not have had any reason to interfere by means of tariffs and other barriers to foreign trade.

But even if a government succeeds in making the barriers separating its domestic market from foreign markets insurmountable and thus establishes perfect national autarky, it does not create a Volkswirtschaft. A market economy which is perfectly autarkic remains for all that a market economy; it forms a closed and isolated catallactic system. The fact that its citizens miss the advantages which they could derive from the international division of labor is simply a datum of their economic conditions. Only if such an isolated country goes outright socialist, does it convert its market economy into a Volkswirtschaft.

Fascinated by the propaganda of Neo-Mercantilism, people apply idioms which are in contrast to the principles they take as guides in their acting and to all the characteristics of the social order in which they are living. Long ago the British began to call plants and farms located in Great Britain, and even those located in the Dominions, in the East Indies, and in the colonies, "ours." But if a man did not just want to make a show of his patriotic zeal and to impress other people, he was not prepared to pay a higher price for the products of his "own" plants than for those of the "foreign" plants. Even if he had behaved in this way, the designation of the plants located within the political boundaries of his nation as "ours" would not be adequate. In what sense could a Londoner, before the nationalization, call coalmines located in England which he did not own "our" mines and those of the Ruhr "foreign" mines? Whether he bought "British" coal or "German" coal, he always had to pay the full market price. It is not "america" that buys champagne from "France." It is always an individual American who buys it from an individual Frenchman.

As far as there is still some room left for the actions of individuals, as far as there is private ownership and exchange of goods and services between individuals, there is no Volkswirtschaft. Only if full government control is substituted for the choices of individuals does the Volkswirtschaft emerge as a real entity.

XVI. PRICES

1. The Pricing Process

IN an occasional act of barter in which men who ordinarily do not resort to trading with other people exchange goods ordinarily not negotiated, the ratio of exchange is determined only within broad margins. Catallactics, the theory of exchange ratios and prices, cannot determine at what point within these margins the concrete ration will be established. All that it can assert with regard to such exchanges is that they can be effected only if each party values what he receives more highly than what he gives away.

The recurrence of individual acts of exchange generates the market step by step with the evolution of the division of labor within a society based on private property. As it becomes a rule to produce for other people's consumption, the members of society must sell and buy. The multiplication of the acts of exchange and the increase in the number of people offering or asking for the same commodities narrow the margins between the valuations of the parties. Indirect exchange and its perfection through the use of money divide the transactions into two different parts: sale and purchase. What in the eyes of one party is a sale, is for the other party a purchase. The divisibility of money, unlimited for all practical purposes, makes it possible to determine the exchange ratios with nicety. The exchange ratios are now as a rule money prices. They are determined between extremely narrow margins: the valuations on the one hand of the marginal buyer and those of the marginal offerer who abstains from selling, and the valuations on the other hand of the marginal seller and those of the marginal potential buyer who abstains from buying.

The concatenation of the market is an outcome of the activities of entrepreneurs, promoters, speculators, and dealers in futures and in arbitrage. It has been asserted that catallactics is based on the assumption—contrary to reality—that all parties are provided with perfect knowledge concerning the market data and are therefore in a position to take best advantage of the most favorable opportunities for buying and selling. It is true that some economists really believed that such an assumption is implied in the theory of prices. These authors not only failed to realize in what respects a world peopled with men perfectly equal in knowledge and foresight would differ from the real world which all economists wanted to interpret in developing their theories; they also erred in being unaware of the fact that they themselves did not resort to such an assumption in their own treatment of prices.

In an economic system in which every actor is in a position to recognize correctly the market situation with the same degree of insight, the adjustment of prices to every change in the data would be achieved at one stroke. It is impossible to imagine such uniformity in the correct cognition and appraisal of changes in data except by the intercession of superhuman agencies. we would have to assume that every man is approached by an angel informing him of the change in data which has occurred and advising him how to adjust his own conduct in the most adequate way to this change. certainly the market that catallactics deals with is filled with people who are to different degrees aware of the changes in data and who, even if they have the same information, appraise it differently. The operation of the market reflects the fact that changes in the data are first perceived only by a few people and that different men draw different conclusions in appraising their effects. The more enterprising and brighter individuals take the lead, others follow later. The shrewder individuals appreciate conditions more correctly than the less intelligent and therefore succeed better in their actions. Economists must never disregard in their reasoning the fact that the innate and acquired inequality of men differentiates their adjustment to the conditions of their environment.

The driving force of the market process is provided neither by the consumers nor by the owners of the means of production—land, capital goods, and labor—but by the promoting and speculating entrepreneurs. These are people intent upon profiting by taking advantage of differences in prices. Quicker of apprehension and farther-sighted than other men, they look around for sources of profit. They buy where and when they deem prices too low, and they sell where and when they deem prices too high. They approach the owners of the factors of production, and their competition sends the prices of these factors up to the limit corresponding to their anticipation of the future prices of the products. They approach the consumers, and their competition forces prices of consumers' goods down to the point at which the whole supply can be sold. Profit-seeking speculation is the driving force of the market as it is the driving force of production.

On the market agitation never stops. The imaginary construction of an evenly rotating economy has no counterpart in reality. There can never emerge a state of affairs in which the sum of the prices of the complementary factors of production, due allowance being made for time preference, equals the prices of the products and no further changes are to be expected. There are always profits to be earned by somebody. The speculators are always enticed by the expectation of profit.

The imaginary construction of the evenly rotating economy is a mental tool for comprehension of entrepreneurial profit and loss. It is, to be sure, not a design for comprehension of the pricing process. The final prices corresponding to this imaginary conception are by no means identical with the market prices. The activities of the entrepreneurs or of any other actors on the economic scene are not guided by consideration of any such things as equilibrium prices and the evenly rotating economy. The entrepreneurs take into account anticipated future prices, not final prices or equilibrium prices. They discover discrepancies between the height of the prices of the complementary factors of production and the anticipated future prices of the products, and they are intent upon taking advantage of such discrepancies. These endeavors of the entrepreneurs would finally result in the emergence of the evenly rotating economy if no further changes in the data were to appear.

The operation of the entrepreneurs brings about a tendency toward an equalization of prices for the same goods in all subdivisions of the market, due allowance being made for the cost of transportation and the time absorbed by it. Differences in prices which are not merely transitory and bound to be wiped out by entrepreneurial action are always the outcome of particular obstacles obstructing the inherent tendency toward equalization. Some check prevents profit-seeking business from interfering. An observer not sufficiently familiar with actual commercial conditions is often at a loss to recognize the institutional barrier hindering such equalization. But the merchants concerned always know what makes it impossible for them to take advantage of such differences.

Statisticians treat this problem too lightly. When they have discovered differences in the wholesale price of a commodity between two cities or countries, not entirely accounted for by the cost of transportation, tariffs, and excise duties, they acquiesce in asserting that the purchasing power of money and the “level” of prices are different.[1] On the basis of such statements people draft programs to remove these differences by monetary measures. However, the root cause of these differences cannot lie in monetary conditions. If prices in both countries are quoted in terms of the same kind of money, it is necessary to answer the question as to what prevents businessmen from embarking upon dealings which are bound to make price differences disappear. Things are essentially the same if the prices are expressed in terms of different kinds of money. For the mutual exchange ratio between various kinds of money tends toward a point at which there is no further margin left to profitable exploitation of differences in commodity prices. Whenever differences in commodity prices between various places persist, it is a task for economic history and descriptive economics to establish what institutional barriers hinder the execution of transactions which must result in the equalization of prices.

All the prices we know are past prices. They are facts of economic history. In speaking of present prices we imply that the prices of the immediate future will not differ from those of the immediate past. However, all that is asserted with regard to future prices is merely an outcome of the understanding of future events.

The experience of economic history never tells us more than that at a definite date and definite place two parties *A* and *B* traded a definite quantity of the commodity *a* against a definite number of units of the money *p*. In speaking of such acts of buying and selling at the market price of *a*, we are guided by a theoretical insight, deduced from an aprioristic starting point. This is the insight that, in the absence of particular factors making for price differences, the prices paid at the same time and the same place for equal quantities of the same commodity tend toward equalization, viz., a final price. But the actual market prices never reach this final state. The various market prices about which we can get information were determined under different conditions. It is impermissible to confuse averages computed from them with the final prices.

Only with regard to fungible commodities negotiated on organized stock or commodity exchanges is it permissible, in comparing prices, to assume that they refer to the same quality. Apart from such prices negotiated in exchanges and from prices of commodities the homogeneity of which can

1. Sometimes the difference in price as established by price statistics is apparent only. The price quotations may refer to various qualities of the article concerned. Or they may, complying with the local usages of commerce, mean different things. They may, for instance, include or not include packing charges; they may refer to cash payment or to payment at a later date; and so on.

be precisely established by technological analysis, it is a serious blunder to disregard differences in the quality of the commodity in question. Even in the wholesale trade of raw textiles the diversity of the articles plays the main role. A comparison of prices of consumers' goods in mainly misleading on account of the difference in quality. The quantity traded in one transaction too is relevant in the determination of the price paid per unit. Shares of a corporation sold in one large lot bring a different price than those sold in several small lots.

It is necessary to emphasize these facts again and again because it is customary nowadays to play off the statistical elaboration of price data against the theory of prices. However, the statistics of prices is altogether questionable. Its foundations are precarious because circumstances for the most part do not permit the comparison of the various data, their linking together in series, and the computation of averages. Full of zeal to embark upon mathematical operations, the statisticians yield to the temptation of disregarding the incomparability of the data available. The information that a certain firm sold at a definite date a definite type of shoes for six dollars a pair relates a fact of economic history. A study of the behavior of shoe prices from 1923 to 1939 is conjectural, however sophisticated the methods applied may be.

Catallactics shows that entrepreneurial activities tend toward an abolition of price differences not caused by the costs of transportation and trade barriers. No experience has ever contradicted this theorem. The results obtained by an arbitrary identification of unequal things are irrelevant.

2. Valuation and Appraisement

The ultimate source of the determination of prices is the value judgments of the consumers. Prices are the outcome of the valuation preferring *a* to *b*. They are social phenomena as they are brought about by the interplay of the valuations of all individuals participating in the operation of the market. Each individual, in buying or not buying and in selling or not selling, contributes his share to the formation of the market prices. But the larger the market is, the smaller is the weight of each individual's contribution. Thus the structure of market prices appears to the individual as a datum to which he must adjust his own conduct.

The valuations which result in determination of definite prices are different. Each party attaches a higher value to the good he receives than to the good he gives away. The exchange ratio, the price,is not the product of an equality of valuation, but, on the contrary, the product of a discrepancy in valuation.

Appraisement must be clearly distinguished from valuation. Appraisement in no way depends upon the subjective valuation of the man who appraises. He is not intent upon establishing the subjective use-value of the good concerned, but upon anticipating the prices which the market will determine. Valuation is a value judgment expressive of a difference in value. Appraisement is the anticipation of an expected fact. It aims at establishing what prices will be paid on the market for a particular commodity or what amount of money will be required for the purchase of a definite commodity.

Valuation and appraisement are, however, closely connected. The valuations of an autarkic husbandman directly compare the weight he attaches to different means for the removal of uneasiness. The valuations of a man buying and selling on the market must not disregard the structure of market prices; they depend upon appraisement. In order to know the meaning of a price one must know the purchasing power of the amount of money concerned. It is necessary by and large to be familiar with the prices of those goods which one would like to acquire and to form on the ground of such knowledge an opinion about their future prices. If an individual speaks of the costs incurred by the purchase of some goods already acquired or to be incurred by the purchase of goods he plans to acquire, he expresses these costs in terms of money. But this amount of money represents in his eyes the degree of satisfaction he could obtain by employing it for the acquisition of other goods. The valuation makes a detour, it goes via the appraisement of the structure of market prices; but it always aims finally at the comparison of alternative modes for the removal of felt uneasiness.

It is ultimately always the subjective value judgments of individuals that determine the formation of prices. Catallactics in conceiving the pricing process necessarily reverts to the fundamental category of action, the preference given to *a* over *b*. In view of popular errors it is expedient to emphasize that catallactics deals with the real prices as they are paid in definite transactions and not with imaginary prices. The concept of final prices is merely a mental tool for the grasp of a particular problem, the emergence of entrepreneurial profit and loss. The concept of a “just” or “fair” price is devoid of any scientific meaning; it is a disguise for wishes, a striving for a state of affairs different from reality. Market prices are entirely determined by the value judgments of men as they really act.

If one says that prices tend toward a point at which total demand is equal to total supply, one resorts to another mode of expressing the same concatenation of phenomena. Demand and supply are the outcome of the conduct of those buying and selling. If, other things being equal, supply increases, prices must drop. At the previous price all those ready to pay this price could buy the quantity they wanted to buy. If the supply increases, they must buy larger quantities or other people who did not buy before must become interested in buying. This can only be attained at a lower price.

It is possible to visualize this interaction by drawing two curves, the demand curve and the supply curve, whose intersection shows the price. It is no less possible to express it in mathematical symbols. But it is necessary to comprehend that such pictorial or mathematical modes of representation do not affect the essence of our interpretation and that they do not add a whit to our insight. Furthermore it is important to realize that we do not have any knowledge or experience concerning the shape of such curves. Always, what we know is only market prices—that is, not the curves but only a point which we interpret as the intersection of two hypothetical curves. The drawing of such curves may prove expedient in visualizing the problems for undergraduates. For the real tasks of catallactics they are mere byplay.

3. The Prices of the Goods of Higher Orders

The market process is coherent and indivisible. It is an indissoluble intertwinement of actions and reactions, of moves and countermoves. But the insufficiency of our mental abilities enjoins upon us the necessity of dividing it into parts and analyzing each of these parts separately. In resorting to such artificial cleavages we must never forget that the seemingly autonomous existence of these parts is an imaginary makeshift of our minds. They are only parts, that is, they cannot even be thought of as existing outside the structure of which they are parts.

The prices of the goods of higher orders are ultimately determined by the prices of the goods of the first or lowest order, that is, the consumers' goods. As a consequence of this dependence they are ultimately determined by the subjective valuations of all members of the market society. It is, however, important to realize that we are faced with a connection of prices, not with a connection of valuations. The prices of the complementary factors of production are conditioned by the prices of the consumers' goods. The factors of production are appraised with regard to the prices of the products, and from this appraisement their prices emerge. Not the valuations but the appraisement are transferred from the goods of the first order to those of higher orders. The prices of the consumers' goods engender the actions resulting in the determination of the prices of the factors of production. These prices are primarily connected only with the prices of the consumers' goods. With the valuations of the individuals they are only indirectly connected, viz., through the intermediary of the prices of the consumers' goods, the products of their joint employment.

The tasks incumbent upon the theory of the prices of factors of production are to be solved by the same methods which are employed for treatment of the prices of consumers' goods. We conceive the operation of the market of consumer's goods in a twofold way. We think on the one hand of a state of affairs which leads to acts of exchange; the situation is such that the uneasiness of various individuals can be removed to some extent because various people value the same goods in a different way. On the other hand we think of a situation in which no further acts of exchange can happen because no actor expects any further improvement of his satisfaction by further acts of exchange. We proceed in the same way in comprehending the formation of the prices of factors of production. The operation of this market is actuated and kept in motion by the exertion of the promoting entrepreneurs, eager to profit from differences in the market prices of the factors of production and the expected prices of the products. The operation of this market would stop if a situation were ever to emerge in which the sum of the prices of the complementary factors of production—but for interest—equaled the prices of the products and nobody believed that further price changes were to be expected. Thus we have described the process adequately and completely by pointing out, positively, what actuates it and, negatively, what would suspend its motion. The main importance is to be attached to the positive description. The negative description resulting in the imaginary constructions of the final price and the evenly rotating economy is merely auxiliary. For the task is not the treatment of imaginary concepts, which never appear in life and action, but the treatment of the market prices at which the goods of higher orders are really bought and sold.

This method we owe to Gossen, Carl Menger, and Bohm-Bawerk. Its main merit is that it implies the cognition that we are faced with a phenomenon of price determination inextricably linked with the market process. It distinguishes between two things: (*a*) the direct valuation of the factors of production which attaches the value of the product to the total complex of the complementary factors of production, and (*b*) the prices of the single factors of production which are formed on the market as the resultant of the concurring actions of competing highest bidders. Valuation as it can be practiced by an isolated actor (Robinson Crusoe of a socialist board of production management) can never result in a determination of such a thing as quotas of value. Valuation can only arrange goods in scales of preference. It can never attach to a good something that could be called a quantity or magnitude of value. It would be absurd to speak of a sum of valuations or values. It is permissible to declare that, due allowance being made for time preference, the value attached to a product is equal to the value of the total complex of complementary factors of production. But it would be nonsensical to assert that the value attached to a product is equal to the "sum" of the values attached to the various complementary factors of production. One cannot add up values or valuations. One can add up prices expressed in terms of money, but not scales of preference. One cannot divide values or single out quotas of them. A value judgment never consists in anything other than preferring *a* to *b*.

The process of value imputation does not result in derivation of the value of the single productive agents from the value of their joint product. It does not bring about results which could serve as elements of economic. It is only the market that, in establishing prices for each factor of production, creates the conditions required for economic calculation. Economic calculation always deals with prices, never with values.

The market determines prices of factors of production in the same way in which it determines prices of consumers' goods. The market process is an interaction of men deliberately striving after the best possible removal of dissatisfaction. It is impossible to think away or to eliminate from the market process the men actuating its operation. One cannot deal with the market of consumers' goods and disregard the actions of the consumers. One cannot deal with the market of the goods of higher orders while disregarding the actions of the entrepreneurs and the fact that the use of money is essential in their transactions. There is nothing automatic or mechanical in the operation of the market. The entrepreneurs, eager to earn profits, appear as bidders at an auction, as it were, in which the owners of the factors of production put up for sale land, capital goods, and labor. The entrepreneurs are eager to outdo one another by bidding higher prices than their rivals. Their offers are limited on the one hand by their anticipation of future prices of the products and on the other hand by the necessity to snatch the factors of production away from the hands of other entrepreneurs competing with them.

The entrepreneur is the agency that prevents the persistence of a state of production unsuitable to fill the most urgent wants of the consumers in the cheapest way. All people are anxious for the best possible satisfaction of their wants and are in this sense striving after the highest profit they can reap. The mentality of the promoters, speculators, and entrepreneurs is not different from that of their fellow men. They are merely superior to the masses in mental power and energy. They are the leaders on the way toward material progress. They are the first to understand that there is a discrepancy between what is done and what could be done. They guess what the consumers would like to have and are intent upon providing them with these things. In the pursuit of such plans they bid higher prices for some factors of production and lower the prices of other factors of production by restricting their demand for them. In supplying the market with those consumers' goods in the sale of which the highest profits can be earned, they create a tendency toward a fall in their prices. In restricting the output of those consumers' goods the production of which does not offer chances for reaping profit, they bring about a tendency toward a rise in their prices. All these transformations go on ceaselessly and could stop only if the unrealizable conditions of the evenly rotating economy and of static equilibrium were to be attained.

In drafting their plans the entrepreneurs look first at the prices of the immediate past which are mistakenly called *present* prices. Of course, the entrepreneurs never make these prices enter into their calculations without paying regard to anticipated changes. The prices of the immediate past are for them only the starting point of deliberations leading to forecasts of future prices. The prices of the past do not influence the determination of future prices. It is, on the contrary, the anticipation of future prices of the products that determines the state of prices of the complementary factors of production. The determination of prices has, as far as the mutual exchange ratios between various commodities are concerned,[2] no direct causal relation whatever with the prices of the past. The allocation of the nonconvertible factors of production among the various branches of production[3] and the amount of capital goods available for future production are historical magnitudes; in this regard the past is instrumental in shaping the course of future production and in affecting the prices of the future. But directly the prices of the factors of

2. It is different with regard to the mutual exchange ratios between money and the vendible commodities and services. Cf. below, pp. 410-411.

3. The problem of the nonconvertible capital goods is dealt with below, pp. 503-509.

production are determined exclusively by the anticipation of future prices of the products. The fact that yesterday people valued and appraised commodities in a different way is irrelevant. The consumers do not care about the investments made with regard to past market conditions and do not bother about the vested interests of entrepreneurs, capitalists, landowners, and workers, who may be hurt by changes in the structure of prices. Such sentiments play no role in the formation of prices. (It is precisely the fact that the market does not respect vested interests that makes the people concerned ask for government interference.) The prices of the past are for the entrepreneur, the shaper of future production, merely a mental tool. The entrepreneurs do not construct afresh every day a radically new structure of prices or allocate anew the factors of production to the various branches of industry. They merely transform what the past has transmitted in better adapting it to the altered conditions. How much of the previous conditions they preserve and how much they change depends on the extent to which the data have changed.

The economic process is a continuous interplay of production and consumption. Today’s activities are linked with those of the past through the technological knowledge at hand, the amount and the quality of the capital goods among various individuals. They are linked with the future through the very essence of human action; action is always directed toward the improvement of future conditions. In order to see his way in the unknown and uncertain future man has within his reach only two aids: experience of past events and his faculty of understanding. Knowledge about past prices is a part of this experience and at the same time the starting point of understanding the future.

If the memory of all prices of the past were to fade away, the pricing process would become more troublesome, but not impossible as far as the mutual exchange ratios between various commodities are concerned. It would be harder for the entrepreneurs to adjust production to the demand of the public, but it could be done nonetheless. It would be necessary for them to assemble anew all the data they need as the basis of their operations. They would not avoid mistakes which they now evade on account of experience at their disposal. Price fluctuations would be more violent at the beginning, factors of production would be wasted, want-satisfaction would be impaired. But finally, having paid dearly, people would again have acquired the experience needed for a smooth working of the market process.

The essential fact is that it is the competition of profit-seeking entrepreneurs that does not tolerate the preservation of *false* prices of the factors of production. The activities of the entrepreneurs are the element that would bring about the unrealizable state of the evenly rotating economy if no further changes were to occur. In the world-embracing public sale called the market they are the bidders for the factors of production. In bidding, they are the mandataries of the consumers, as it were. Each entrepreneur represents a different aspect of the consumers' wants, either a different commodity or another way of producing the same commodity. The competition among the entrepreneurs is ultimately a competition among the various possibilities open to men to remove their uneasiness as far as possible by the acquisition of consumers' goods. The decisions of the consumers to buy one commodity and to postpone buying another determine the prices of factors of production required for manufacturing these commodities. The competition between the entrepreneurs reflects the prices of consumers' goods in the formation of the prices of the factors of production. It reflects in the external world the conflict which the inexorable scarcity of the factors of production brings about in the soul of each individual. It makes effective the subsumed decisions of the consumers as to what purpose the nonspecific factors should be used for and to what extent the specific factors of production should be used.

The pricing process is a social process. It is consummated by an interaction of all members of the society. All collaborate and cooperate, each in the particular role he has chosen for himself in the framework of the division of labor. Competing in cooperation and cooperating in competition all people are instrumental in bringing about the result, viz., the price structure of the market, the allocation of the factors of production to the various lines of want-satisfaction, and the determination of the share of each individual. These three events are not three different matters. They are only different aspects of one indivisible phenomenon which our analytical scrutiny separates into three parts. In the market process they are accomplished *uno actu*. Only people prepossessed by socialist leanings who cannot free themselves from longing glances at socialist methods speak of three different processes in dealing with the market phenomena: the determination of prices, the direction of productive efforts, and distribution.

A Limitation on the Pricing of Factors of Production

The process which makes the prices of the factors of production spring from the prices of products can achieve its results only if, of the complementary factors not replaceable by substitutes, not more than one is of absolutely specific character, that is, is not suitable for any other employment. If the production of a product requires two or more absolutely specific factors, only a cumulative price can be assigned to them. If all factors of production were absolutely specific, the pricing process would not achieve more than such cumulative prices. It would accomplish nothing more than statements like this: as combining 3 *a* and 5 *b* produce one unit of *p*, 3 *a* and 5 *b* together are equal to 1 *p* and the final price of 3 *a*+5 *b* is—due allowance being made for time preference—equal to the final price of 1 *p*. As entrepreneurs who want to use *a* and *b* for purposes other than the production of *p* do not bid for them, a more detailed price determination is impossible. Only if a demand emerges for *a* (or for *b*) on the part of entrepreneurs who want to employ *a* (or *b*) for other purposes, does competition between them and the entrepreneurs planning the production of *p* arise and a price for *a* (or *b*) come into existence, the height of which determines also the price of *b* (or *a*).

A world in which all the factors of production are absolutely specific could manage its affairs with such cumulative prices. In such a world there would not exist the problem of how to allocate the means of production to various branches of want-satisfaction. In our real world things are different. There are many scarce means of production which can be employed for various tasks. There the economic problem is to employ these factors in such a way that no unit of them should be used for the satisfaction of a less urgent need if this employment prevents the satisfaction of a more urgent need. It is this that the market solves in determining the prices of the factors of production. The social service rendered by this solution is not in the least impaired by the fact that for factors which can be employed only cumulatively no other than cumulative prices are determined.

Factors of production which can be used in the same ratio of combination for the production of various commodities but do not allow of any other use, are to be considered as absolutely specific factors. They are absolutely specific with regard to the production of an intermediary product which can be utilized for various purposes. The price of this intermediary product can be assigned to them cumulatively only. Whether this intermediary product can be directly apperceived by the senses or whether it is merely the invisible and intangible outcome of their joint employment makes no difference.

4. Cost Accounting

In the calculation of the entrepreneur costs are the amount of money required for the procurement of the factors of production. The entrepreneur is intent upon embarking upon those business projects from which he expects the highest surplus of proceeds over costs and upon shunning projects from which he expects a lower amount of profit or even a loss. In doing this he adjusts his effort to the best possible satisfaction of the needs of the consumers. The fact that a project is not profitable because costs are higher than proceeds is the outcome of the fact that there is a more useful employment available for the factors of production required. There are other products in the purchase of which the consumers are prepared to allow for the prices of these factors of production. But the consumers are not prepared to pay these prices in buying the commodity the production of which is not profitable.

Cost accounting is affected by the fact that the two following conditions are not always present:

First, every increase in the quantity of factors expended for the production of a consumers' good increases its power to remove uneasiness.

Second, every increase in the quantity of a consumers' good requires a proportional increase in the expenditure of factors of production or even a more than proportional increase in their expenditure.

If both these conditions were always and without any exception fulfilled, every increment *z* expended for increasing the quantity *m* of a commodity *g* would be employed for the satisfaction of a need viewed as less urgent than the least urgent need already satisfied by the quantity *m* available previously. At the same time the increment *z* would require the employment of factors of production to be withdrawn from the satisfaction of other needs considered as more pressing than those needs whose satisfaction was foregone in order to produce the marginal unit of *m*. One the one hand the marginal value of the satisfaction derived from the increase in the quantity available of *g* would drop. On the other hand the costs required for the production of additional quantities of *g* would increase in marginal disutility: factors of production would be withheld from employments in which they could satisfy more urgent needs. Production must stop at the point at which the marginal utility of the increment no longer compensates for the marginal increase in the disutility of costs.

Now these two conditions are present very often, but not generally without exception. There exist many commodities of all orders of goods whose physical structure is not homogeneous and which are therefore not perfectly divisible.

It would, of course, be possible to conjure away the deviation from the first condition mentioned above by a sophisticated play on words. One could say: half a motorcar is not a motorcar. If one adds to half a motorcar a quarter of a motorcar, one does not increase the "quantity" available; only the perfection of the process of production which turns out a complete car produces a unit and an increase in the "quantity" available. However, such an interpretation misses the point. The problem we must face is that not every increase in expenditure increases proportionately the objective use-value, the physical power of a thing to render a definite service. The various increments in expenditure bring about different results. There are increments the expenditure of which remains useless if no further increments of a definite quantity are added.

On the other hand—and this is the deviation from the second condition—an increase in physical output does not always require a proportionate increase in expenditure or even any additional expenditure. It may happen that costs do not rise at all or that their rise increases output more than proportionately. For many means of production are not homogeneous either and not perfectly divisible. This is the phenomenon known to business as the superiority of big-scale production. The economists speak of the law of increasing returns or decreasing costs.

We consider—as case *A*—a state of affairs in which all factors of production are not perfectly divisible and in which full utilization of the productive services rendered by every further indivisible element of each factor requires full utilization of the further indivisible elements of every other of the complementary factors. Then in every aggregate of productive agents each of the assembled elements—every machine, every worker, every piece of raw material—can be fully utilized only if all the productive services of the other elements are fully employed too. Within these limits the production of a part of the maximum output attainable does not require a higher expenditure than the production of the highest possible output. We may also say that the minimum-size aggregate always produces the same quantity of products; it is impossible to produce a smaller quantity of products even if there is no use for a part of it.

We consider—as case *B*—a state of affairs in which one group of the productive agents (*p*) is for all practical purposes perfectly divisible. On the other hand the imperfectly divisible agents can be divided in such a way that full utilization of the services rendered by each further indivisible part of one agent requires full utilization of the further indivisible parts of the other imperfectly divisible complementary factors. Then increasing production of an aggregate of further indivisible factors from a partial to a more complete utilization of their productive capacity requires merely an increase in the quantity of *p*, the perfectly divisible factors. However, one must guard