

FIGURE 66. CALCULATION WITHIN A VERTICALLY INTEGRATED FIRM

Does such a firm employ calculation within itself, and if so, how? Yes. The firm assumes that it *sells itself* the fourth-rank capital good. It separates its net income as a producer of fourth-rank capital from its role as producer of third-rank capital. It calculates the net income for each separate division of its enterprise and allocates resources according to the profit or loss made in each division. *It is able to make such an internal calculation only because it can refer to an existing explicit market price for the fourth-stage capital good.* In other words, a firm can accurately estimate the profit or loss it makes in a stage of its enterprise only by finding out the *implicit* price of its internal product, and it can do this only if an *external* market price for that product is established elsewhere.

To illustrate, suppose that a firm is vertically integrated over two stages, with each stage covering one year's time. The general rate of interest in the economy tends towards 5 percent (per annum). This particular firm, say, the Jones Manufacturing Company, buys and sells its factors as shown in Figure 66.

This vertically integrated firm buys factors at the fifth rank for 100 ounces and original factors at the fourth rank for 15 ounces; it sells the final product at 140 ounces. It *seems* that it has made a

handsome entrepreneurial profit on its operations, but can it find out which stage or stages is making this profitable showing? If there is an external market for the product of the stage that the firm has vertically integrated (stage 4), the Jones Company is able to calculate the profitability of specific *stages* of its operations. Suppose, for example, that the price of the fourth-order capital good on the external market is 103 ounces. The Jones Company then estimates its *implicit* price for this intermediate product at what it *would have brought on the market* if it had been sold there. This price will be about 103 ounces.⁵⁶ Assuming that the price is estimated at 103, then the total amount of money spent by Jones' lower-order plant on factors is 15 (explicit, on original factors) plus 103 (implicit, on capital goods) for a total of 118.

Now the Jones Company can calculate the profits or losses made at *each stage* of its operations. The "higher" stage bought factors for 100 ounces and "sold" them at 103 ounces. It made a 3-percent return on its investment. The lower stage bought its factors for 118 ounces and sold the product for 140 ounces, making a 29-percent return. It is obvious that, instead of enjoying a general profitability, the Jones Company suffered a 2-percent entrepreneurial loss on its earlier stage and gained a 24-percent profit on its later stage. Knowing this, it will shift resources from the higher to the lower stage in accordance with their respective profitabilities—and therefore in accordance with the desires of consumers. Perhaps it will abandon its higher stage altogether, buying the capital good from an external firm and concentrating its resources in the more profitable lower stage.

On the other hand, suppose that there is no external market, i.e., that the Jones Company is the only producer of the intermediate good. In that case, it would have no way of knowing

⁵⁶The implicit price, or opportunity cost of selling to oneself, might be less than the existing market price, since the entry of the Jones Company on the market might have lowered the price of the good, say to 102 ounces. There would be no way at all, however, to estimate the implicit price if there were no external market and external price.

which stage was being conducted profitably and which not. It would therefore have no way of knowing how to allocate factors to the various stages. There would be no way for it to estimate any implicit price or opportunity cost for the capital good at that particular stage. Any estimate would be completely arbitrary and have no meaningful relation to economic conditions.

In short, if there were no market for a product, and all of its exchanges were internal, there would be no way for a firm or for anyone else to determine a price for the good. A firm can estimate an implicit price when an external market exists; but when a market is absent, the good can have no price, whether implicit or explicit. Any figure could be only an arbitrary symbol. Not being able to calculate a price, the firm could not rationally allocate factors and resources from one stage to another.

Since the free market always tends to establish the most efficient and profitable type of production (whether for type of good, method of production, allocation of factors, or size of firm), we must conclude that complete vertical integration for a capital-good product can never be established on the free market (above the primitive level). *For every capital good, there must be a definite market in which firms buy and sell that good.* It is obvious that this economic law sets a definite maximum to the relative size of any particular firm on the free market.⁵⁷ Because of this law, firms cannot merge or cartelize for complete vertical integration of stages or products. Because of this law, there can never be One Big Cartel over the whole economy or mergers until One Big Firm owns all the productive assets in the economy. The force of this law multiplies as the area of the economy

⁵⁷On the size of a firm, see the challenging article by R.H. Coase, "The Nature of the Firm" in George J. Stigler and Kenneth E. Boulding, eds., *Readings in Price Theory* (Chicago: Richard D. Irwin, 1952), pp. 331–51. In an illuminating passage Coase pointed out that State "planning is imposed on industry, while firms arise voluntarily because they represent a more efficient method of organizing production. In a competitive system there is an 'optimum' amount of planning." *Ibid.*, p. 335 n.

increases and as islands of noncalculable chaos swell to the proportions of masses and continents. As the area of incalculability increases, the degrees of irrationality, misallocation, loss, impoverishment, etc., become greater. Under *one* owner or *one* cartel for the whole productive system, there would be no possible areas of calculation at all, and therefore complete economic chaos would prevail.⁵⁸

Economic calculation becomes ever more important as the market economy develops and progresses, as the stages and the complexities of type and variety of capital goods increase. Ever more important for the maintenance of an advanced economy, then, is the preservation of *markets* for all the capital and other producers' goods.

Our analysis serves to expand the famous discussion of the possibility of economic calculation under socialism, launched by Professor Ludwig von Mises over 40 years ago.⁵⁹ Mises, who has had the last as well as the first word in this debate, has demonstrated irrefutably that a socialist economic system cannot calculate, since it lacks a market, and hence lacks prices for

⁵⁸Capital goods are stressed here because they are the product for which the calculability problem becomes important. Consumers' goods *per se* are no problem, since there are always many consumers buying goods, and therefore consumers' goods will always have a market.

⁵⁹See the classic presentation of the position in Ludwig von Mises, "Economic Calculation in the Socialist Commonwealth," reprinted in F.A. Hayek, ed., *Collectivist Economic Planning* (London: George Routledge & Sons, 1935), pp. 87–130. *Also see* in the Hayek volume the other essays by Hayek, Pierson, and Halm. Mises continued his argument in *Socialism* (2nd ed.; New Haven: Yale University Press, 1951), pp. 135–63, and refutes more recent criticisms in his *Human Action*, pp. 694–711. Aside from these works, the best book on the subject of economic calculation under socialism is Trygve J.B. Hoff, *Economic Calculation in the Socialist Society* (London: William Hodge, 1949). *Also see* F.A. Hayek, "Socialist Calculation III, the Competitive 'Solution,'" in *Individualism and the Economic Order*, pp. 181–208, and Henry Hazlitt's remarkable essay in fictional form, *The Great Idea* (New York: Appleton-Century-Crofts, 1951).

producers' and especially for capital goods.⁶⁰ Now we see that, paradoxically, the reason why a socialist economy cannot calculate is *not* specifically because it is socialist! Socialism is that system in which the State forcibly seizes control of all the means of production in the economy. The reason for the impossibility of calculation under socialism is that *one agent* owns or directs the use of all the resources in the economy. It should be clear that it does not make any difference whether that one agent is the State or one private individual or private cartel. Whichever occurs, there is no possibility of calculation anywhere in the production structure, since production processes would be only internal and without markets. There could be no calculation, and therefore complete economic irrationality and chaos would prevail, whether the single owner is the State or private persons.

The difference between the State and the private case is that our economic law debars people from ever establishing such a system in a free-market society. Far lesser evils prevent entrepreneurs from establishing even islands of incalculability, let alone infinitely compounding such errors by eliminating calculability altogether. But the State does not and cannot follow such guides of profit and loss; its officials are not held back by fear of losses from setting up all-embracing cartels for one or more vertically integrated products. The State is free to embark upon socialism without considering such matters. While there is therefore no possibility of a one-firm economy or even a one-firm vertically integrated product, there is much danger in an attempt at socialism by the State. A further discussion of the State and State intervention will be found in chapter 12 of this book.

A curious legend has become quite popular among the writers on the socialist side of the debate over economic calculation. This runs as follows: Mises, in his original article, asserted "theoretically" that there could be no economic calculation

⁶⁰It is remarkable that so many antisocialist writers have never become aware of this critical point.

under socialism; Barone proved mathematically that this is false and that calculation is possible; Hayek and Robbins conceded the validity of this proof but then asserted that calculation would not be "practical." The inference is that the argument of Mises has been disposed of and that all socialism needs is a few practical devices (perhaps calculating machines) or economic advisers to permit calculation and the "counting of the equations."

This legend is almost completely wrong from start to finish. In the first place, the dichotomy between "theoretical" and "practical" is a false one. In economics, all arguments are theoretical. And, since economics discusses the real world, these theoretical arguments are by their nature "practical" ones as well.

The false dichotomy disposed of, the true nature of the Barone "proof" becomes apparent. It is not so much "theoretical" as irrelevant. The proof-by-listing-of-mathematical-equations is no proof at all. It applies, at best, only to the evenly rotating economy. Obviously, our whole discussion of the calculation problem applies to the real world and *to it only*. *There can be no calculation problem in the ERE because no calculation there is necessary.* Obviously, there is no need to calculate profits and losses when all future data are known from the beginning and where there *are no* profits and losses. In the ERE, the best allocation of resources proceeds automatically. For Barone to demonstrate that the calculation difficulty does not exist in the ERE is not a solution; it is simply a mathematical belaboring of the obvious.⁶¹ The difficulty of calculation applies to the real world only.⁶²

⁶¹Far from being refuted, Mises had already disposed of this argument in his original article. See Hayek, *Collectivist Economic Planning*, p. 109. Further, Barone's article was written in 1908, 12 years before Mises'. A careful perusal of Mises' original article, in fact, reveals that he there disposed of almost all the alleged "solutions" which decades later were brought forth as "new" attempts to refute his argument.

⁶²Part of the confusion stems from an unfortunate position taken by two followers of Mises in this debate—Hayek and Robbins. They argued that a socialist government could not calculate because it simply could

4. The Economics of Location and Spatial Relations

One very popular subdivision of economics has been “international trade.” In a purely free market, such as we are analyzing in the bulk of this work, there can be no such thing as an “international trade” problem. For nations might then possibly continue as cultural expressions, but not as economically meaningful units. Since there would be neither trade nor other barriers between nations nor currency differences, “international trade” would become a mere appendage to a general study of interspatial trade. It would not matter whether the trade was within or outside a nation.⁶³

The laws of the free market that we have been enunciating apply, therefore, to the whole extent of the market, i.e., to the “world” or the “civilized world.” In the case of a completely isolated country, the laws would apply throughout that area. Thus, the pure interest rate will tend to be uniform throughout the world, prices for the same good will tend to be uniform throughout, and, therefore, so will wages for the same type of labor.

Wage rates will tend toward uniformity for the same labor in different geographical areas in precisely the same way as from industry to industry or firm to firm. Any temporary differential will induce laborers to move from the low- to the high-wage area and businesses to move from the latter to the former, until equilibrium is reached. Once again, just as in the more general case considered above, workers may have particular positive or

not compute the millions of equations that would be necessary. This left them open to the obvious retort that now, with high-speed computers available to the government, this practical objection is no longer relevant. In reality, the job of rational calculation has nothing to do with computing equations. Nobody has to worry about “equations” in real life except mathematical economists. Cf. Lionel Robbins, *The Great Depression* (New York: Macmillan & Co., 1934), p. 151, and Hayek in *Collectivist Economic Planning*, pp. 212 f.

⁶³See Gottfried von Haberler, *The Theory of International Trade* (London: William Hodge, 1936), pp. 3–8.

negative attachments toward working in a certain *area*, just as we saw they may have toward working in a certain industry. There may be a general psychic benefit from living and working in a certain place, and a psychic disutility involved in working at some other location. Since it is *psychic*, not money, wage rates that are being equalized, money wage rates will be equalized throughout the world *plus or minus* negative or positive psychic attachment components.

That the prices of each good will be uniform throughout the world rests on a precise definition of the term "good." Suppose, for example, that wheat is grown in Kansas and that the bulk of the consumers of the wheat are in New York. The wheat in Kansas, even when ready for shipment, is *not* the same good as the wheat in New York. It may be the same physical-chemical bundle, but it is not the same *good* vis-à-vis its objective use-value to the consumers. In short, wheat in Kansas is a higher-stage capital good than wheat in New York (when the consumer is in New York rather than in Kansas). Transporting the wheat to New York is a stage in the process of production. The price of wheat in Kansas will then tend to equal the price of wheat in New York *minus* the necessary costs of transport from Kansas to New York.

What determines how people and businesses will be distributed over the face of the earth? Obviously, the major factor is the marginal productivity of labor. This will differ from location to location in accordance with the distribution of natural resources and the distribution of capital equipment inherited from ancestors. Another factor influencing location will be positive or negative attachments to certain areas, as we have seen above. The actual dispersal over the face of the earth is caused chiefly by the distribution of productive land and natural resources over the earth's surface. This has been one of the chief forces limiting the concentration of industry, the size of each firm, and population in purely industrial areas.⁶⁴

⁶⁴See Mises, *Human Action*:

The fact that the production of raw materials and food-stuffs cannot be centralized and forces people to disperse

In considering the location of industry, entrepreneurs must account for costs of transportation from raw material sites to the centers of consumer population. Certain areas of the world will tend to have higher costs of transportation than other parts. Wheat is further away in New York than in Kansas, and the theater further away in Kansas. Some areas may enjoy lower transport costs for the bulk of consumers' goods, while others may have higher transport costs. Thus, Alaska will probably have higher transport costs for its consumers' goods than less remote areas such as San Francisco. Therefore, to obtain the same products, Alaskan consumers must be willing to pay higher prices in Alaska than in San Francisco, even though purchasing power and prices are uniform throughout the world. As a result, the "cost component" for anyone working in Alaska will be a certain positive amount. Because of the transport problem, the same money wage in Alaska will buy fewer goods than in San Francisco. This increased "cost of living" establishes a positive cost component in the wage, so that for similar labor a worker would require a higher money wage to work in Alaska than elsewhere.

If the costs attached to a geographical area are particularly high or low, a positive or a negative cost component will be attached to the wage rate in that area. Instead of saying that money wage rates for the same type of labor will be equalized throughout the world, we must say rather that there will be a tendency for equalization of money wage rates *plus* or *minus* the attachment component, and *plus* or *minus* the cost component, for every geographic area.⁶⁵

over the various parts of the earth's surface enjoins also upon the processing industries a certain degree of decentralization. It makes it necessary to consider the problems of transportation as a particular factor of production costs. The costs of transportation must be weighed against the economies to be expected from more thoroughgoing specialization. (pp. 341-42)

⁶⁵See Mises, *Human Action*, pp. 622-24.

The purchasing power of the monetary unit will also be equalized throughout the world. This case will be treated below in chapter 11 on Money.

The tendency of an advancing market economy, of course, is to lower transportation costs, i.e., to increase labor productivity in the transport field. Other things being equal, then, the cost components tend to become relatively less important as the economy progresses.

We have seen that a “good” must be considered as homogeneous in *use-value*, and not in physical substance.⁶⁶ Wheat in Kansas was a different good from wheat in New York. Some economists have taken the law that all goods tend to be uniform in price throughout the world economy to mean that all *physically* homogeneous things will be equal in price. But a difference in position with respect to consumers makes a physically identical thing a different good. Suppose, for example, that two firms are producing a certain product, say cement, and that one is located in Rochester and one in Detroit. Let us say that the bulk of the consumers of cement are in New York City.

Let us call the cement produced in Rochester, C_r , and the cement produced in Detroit, C_d . Now, in equilibrium, the price of C_r in New York City will equal the price of C_r in Rochester plus the freight cost from Rochester to New York. Also, in equilibrium, the price of C_d in New York City will equal the price of C_d in Detroit plus the freight cost from Detroit to New York. Which cement prices will be equal *to each other* in equilibrium? Many writers maintain that the price of C_r in Rochester will be equal to the price of C_d in Detroit, i.e., that the “mill prices,” or

⁶⁶For the weighty implications of this “Misesian” analysis for the theory of “international trade,” cf. not only Mises’ *Theory of Money and Credit*, but also the excellent, though neglected, Chi-Yuen Wu, *An Outline of International Price Theories* (London: George Routledge & Sons, 1939), pp. 115, 233–35, and *passim*.

the “f.o.b. prices,” of cement will be equal in each of the two localities in equilibrium. But it is clear that these writers have adopted the confusion of treating “good” in the technological rather than in the use-value sense.⁶⁷

We must, in short, take the point of view of the *consumer*—the man who uses the good—and he is in New York City. From his point of view, cement in Detroit is a far different good from cement in Rochester, since Rochester is closer to him and freight costs are greater from Detroit. From his point of view, the *homogeneous* goods are: C_r in New York City and C_d in New York City. Wherever it comes from, cement *at the place where he must use it* is the homogeneous good for the consumer.

Therefore, in equilibrium, it is C_r in New York City that will be equal to C_d in New York City—and these are the “delivered prices” of cement to the consumer.⁶⁸ Substituting this equality in the above equations, we see that it implies that the price of C_r in Rochester, plus freight cost from Rochester to New York, will equal the price of C_d in Detroit, plus freight cost from Detroit to New York. The freight costs at any time are readily calculable, and *ceteris paribus*, they will be greater for longer distances. In other words, in equilibrium on the free market, the price of C_r in Rochester is equal to the price of C_d in Detroit *plus* the *differential* in freight costs for the longer as compared to

⁶⁷This error lies at the root of attacks on the “basing-point system” of pricing in some industries. The critics assume that *uniform pricing* of a good means uniform pricing *at the various mills*, whereas it really implies uniform “delivered prices” of the various firms at any given *consumer center*. On the basing-point question, see also the analysis in *United States Steel Corporation T.N.E.C. Papers* (New York: United States Steel Corporation, 1940), II, pp. 102–35.

⁶⁸For purposes of simplification, we have omitted the consumers in Rochester, Detroit, and elsewhere, but the same law applies to them. For consumers in Rochester and Detroit, in equilibrium:

$$P(C_r) \text{ in Rochester} = P(C_d) \text{ in Rochester, and}$$

$$P(C_r) \text{ in Detroit} = P(C_d) \text{ in Detroit, etc.}$$

the shorter distance to the consumer. Generalizing, *the “mill price” of cement at a shorter distance from the consumer will equal the “mill price” of cement at the longer distance plus the freight differential.* This is applicable not only to cement, but to every product in the economic system, and not only to products serving ultimate consumers, but also to those to be “consumed” by lower-order capitalists.

In proportion as firms are more distantly located from the consumer, they will then not be able to remain in business unless their average costs at the mill are sufficiently lower than those of their competitors to compensate for the increased freight costs. This is not, as might be thought, a “penalty” on the “technological superiority” of the distant firm, for the latter is *inferior* with respect to the important economic factor of location. It is precisely this mechanism that helps to determine the location of firms and assures that firms will be economically located in relation to the consumer. The influence of the location-difference factor in the price of a product will, of course, depend upon the proportion that freight costs bear to the other costs of producing the good. The higher the proportion, the greater the influence.

A firm with a location closer to the consumer market therefore has a spatial advantage conferred by its location. Given the same costs in other fields as its competitors, it earns a profit from its superior location. The gains of location will be imputed to the site value of the ground land of the plant. The owner of the site obtains its marginal value product. Therefore, gains to a firm resulting from improvement in locational advantage, as well as losses resulting from a locational disadvantage, will accrue as changes in ground rent and capital value to the owner of the specific site, whether the owner be the firm itself or someone else.

5. A Note on the Fallacy of “Distribution”

Ever since the days of early classical economics, many writers have discussed “distribution theory” as if it were completely

separate and isolated from production theory.⁶⁹ Yet we have seen that “distribution” theory is simply production theory. The receivers of income earn wages, rent, interest, and increases in capital values; and these earnings are the prices of productive factors. The theory of the market determines the prices and incomes accruing to productive factors, thereby also determining the “functional distribution” of the factors. “Personal distribution”—how much money each *person* receives from the productive system—is determined, in turn, by the functions that he or his property performs in that system. There is no separation between production and distribution, and it is completely erroneous for writers to treat the productive system as if producers dump their product onto some stockpile, to be later “distributed” in some way to the people in the society. “Distribution” is only the other side of the coin of production on the market.

Many people criticize the free market as follows: Yes, we agree that production and prices will be allocated on the free market in a way best fitted to serve the needs of the consumers. But this law is necessarily based on a *given initial distribution of income* among the consumers; some consumers begin with only a little money, others with a great deal. The market system of production can be commended only if the original distribution of income meets with our approval.

This initial distribution of income (or rather of money assets) did not originate in thin air, however. It, too, was the necessary consequence of a market allocation of prices and production. It was the consequence of serving the needs of previous consumers. It was not an arbitrarily given distribution, but one that itself emerged from satisfying consumer needs. It too was inextricably bound up with production.

As we saw in chapter 2, a person’s presently owned property could have been ultimately obtained in only one of the following

⁶⁹For a critique of some aspects of this separation in the “new welfare economics,” see B.R. Rairikar, “Welfare Economics and Welfare Criteria,” *Indian Journal of Economics*, July, 1953, pp. 1–15.

ways: through personal production, voluntary exchange for a personal product, the finding and first using of unappropriated land, or theft from a producer. On a free market, only the first three can obtain, so that any “distribution” served by producers was in itself the result of free production and exchange.

Suppose, however, that at some preceding time the bulk of the wealthy consumers had acquired their property through theft and not through serving other consumers on the free market. Does this not instill a “built-in bias” into the market economy, since future producers must satisfy demands ensuing from unjust incomes?

The answer is that after the initial period, the effect of unjust incomes becomes less and less important. For in order to keep and increase their ill-gotten gains, the former robbers, now that a free economy is established, have to invest and recoup their funds so as to serve consumers correctly. If they are not fit for this task, and their exploits in predation have certainly not trained them for it, then entrepreneurial losses will diminish their assets and shift them to more able producers.

6. A Summary of the Market

The explanation of the free economic system constitutes a great architectural edifice. Starting from human action and its implications, proceeding to individual value scales and a money economy, we have demonstrated that the quantity of goods produced, the prices of consumers’ goods, the prices of productive factors, the interest rate, profits and losses, all can be explained by the same deductive apparatus. Given a stock of land and labor factors, given existing capital goods inherited from the past, given individual time preferences (and, more broadly, technological knowledge), the capital goods structure and total production is determined. Individual preferences set prices for the various consumers’ goods, and the alternative combinations of various factors in their production set the marginal value-productivity schedules of these factors. Ultimately, the marginal value product

accruing to capital goods is resolved into returns to land, labor, and interest for time. The point at which a land or labor factor will settle on its DMVP schedule will be determined by the stock available. Since each factor will operate in an area of diminishing physical and certainly diminishing value returns, any increased stock of the factor, other things being equal, will enter at a lower DMVP point. The intersecting points on the DMVP schedules will yield the prices of the factors, also known as "rents" and "wage rates" (in the case of labor factors). The pure interest rate will be determined by the time-preference schedules of all individuals in the economy. Its chief expression will be not in the loan market, but in the discounts between prices in the various stages of production. Interest on the loan market will be a reflection of this "natural" interest rate. All the prices of each good, as well as the interest rate, will be uniform throughout the entire market. The capital value of every durable good will equal the discounted value of the sum of future rents to be obtained from the good, the discount being the rate of interest.

All this is a picture of the evenly rotating economy—the equilibrium situation toward which the real economy is always tending. If consumer valuations and the supply of resources remained constant, the relevant ERE would be reached. The forces driving toward the ERE are the profit-seeking entrepreneurs, who take the lead in meeting the uncertainties of the real world. By seeking out discrepancies between existing conditions and the equilibrium situation and remedying them, entrepreneurs make profits; those businessmen who unwittingly add to the maladjustments on the market are penalized with losses. Thus, to the extent that producers wish to make money, they drive toward ever more efficient servicing of the desires of the consumers—allocating resources to the most value-productive areas and away from the least value-productive. The (monetary) value productivity of a course of action depends on the extent to which it serves consumer needs.

But consumer valuations and supplies of resources are always changing, so that the ERE goal always changes as well and is

never reached. We have analyzed the implications of changing elements in the economy. An increase in the labor supply may lower the DMVP of labor and hence wage rates, or raise them because of the further advantages of the division of labor and a more extended market. Which will occur depends on the optimum population level. Since labor is relatively more scarce than land, and relatively nonspecific, there will always be idle and zero-rent land, while there will never be involuntarily idle or zero-wage labor. An increase or decrease in the supply of "submarginal" land will have no effect on production; an increase in *suprzmarginal* land will increase production and render hitherto marginal land submarginal.

Lower time preferences will increase capital investment and thereby lengthen the structure of production. Such lengthening of the production structure, increasing the supply of capital goods, is the only way for man to advance from his bare hands and empty acres of land to more and more civilized standards of living. These capital goods are the necessary way stations on the road to higher total production. But they must be maintained and replaced as well as initially produced if people wish to keep their higher standard over any length of time.

To expand production, the important consideration is not so much technological improvement as greater capital investment. At no time has invested capital exhausted the best technological opportunities available. Many firms still use old, unimproved processes and techniques simply because they do not have the capital to invest in new ones. They would know how to improve their plant if capital were available. Thus, while the state of technology is ultimately a very important consideration, at no given time does it play a *direct* role, since the *narrower* limit on production is always the supply of capital.

In a progressing economy, given a constant supply of money, increased investment and a longer capital structure bring about lower money prices for factors and still lower prices for consumers' goods. "Real" factor prices (corrected for changes in the purchasing power of the monetary unit) increase.

In net terms, this means that real land rents and real wage rates will increase in the progressing economy. Interest rates will fall as time-preference rates drop and the proportion of gross investment to consumption increases.

If rents are earned by a durable factor, they can be and are “capitalized” on the market, i.e., they have a capital value equivalent to the discounted sum of their expected future rents. Since land is a form of investment on the market just as are shares of a firm, its future rents will be capitalized so that land will tend to earn the same uniform interest rate as any other investment. In a progressing economy, the real capital value of land will increase, although the value will fall in money terms. To the extent that future changes in the value of land can be foreseen, they will be immediately incorporated into its present capital value. Therefore, future owners of land will benefit by future increases in its real capital value only to the extent that previous owners failed to anticipate the increase. To the extent that it was anticipated, the future owners will have paid it in their purchase price.

The course of change in a retrogressing economy will be the opposite. In a *stationary* economy, total production, the capital structure, real wages per capita, real capital values of land, and the rate of interest will remain the same, while the allocation of factors of production and the relative prices of various products will vary.⁷⁰

⁷⁰The last few years have seen signs of a revival of “Austrian” production theory—the tradition in which these chapters have been written. In addition to works cited above, see Ludwig M. Lachmann, *Capital and Its Structure* (London: London School of Economics, 1956) and *idem*, “Mrs. Robinson on the Accumulation of Capital,” *South African Journal of Economics*, June, 1958, pp. 87–100. Robert Dorfman’s “Waiting and the Period of Production,” *Quarterly Journal of Economics*, August, 1959, pp. 351–72, and his “A Graphical Exposition of Böhm-Bawerk’s Interest Theory,” *Review of Economic Studies*, February, 1959, pp. 153–58, are interesting chiefly as a groping attempt by a leading mathematical economist to return to the Austrian road. For an incisive critique of Dorfman, see Egon Neuberger, “Waiting and the Period of Production: Comment,” *Quarterly Journal of Economics*, February, 1960, pp. 150–53.

MONOPOLY AND COMPETITION

1. The Concept of Consumers' Sovereignty

A. CONSUMERS' SOVEREIGNTY VERSUS INDIVIDUAL SOVEREIGNTY

WE HAVE SEEN THAT IN the free market economy people will tend to produce those goods most demanded by the consumers.¹ Some economists have termed this system "consumers' sovereignty." Yet there is no compulsion about this. The choice is purely an independent one by the producer; his dependence on the consumer is purely voluntary, the result of his own choice for the "maximization" of utility, and it is a choice that he is free to revoke at any time. We have stressed many times that the pursuit of monetary return (the consequence of consumer demand) is engaged in by each individual *only to the extent that other things are equal*. These other things are the individual producer's psychic valuations, and they may counteract monetary influences. An example is a laborer or other factor-owner engaged in a certain line of work at less monetary return than elsewhere. He does this because of his enjoyment of the particular line of work and product and/or his

¹This applies not only to specific types of goods, but also to the allocation between present and future goods, in accordance with the time preferences of the consumers.

distaste for other alternatives. Rather than “consumers’ sovereignty,” it would be more accurate to state that in the free market there is *sovereignty of the individual*: the individual is sovereign over his own person and actions and over his own property.² This may be termed *individual self-sovereignty*. To earn a monetary return, the individual producer must satisfy consumer demand, but the extent to which he obeys this expected monetary return, and the extent to which he pursues other, nonmonetary factors, is entirely a matter of his own free choice.

The term “consumers’ sovereignty” is a typical example of the abuse, in economics, of a term (“sovereignty”) appropriate only to the *political* realm and is thus an illustration of the dangers of the application of metaphors taken from other disciplines. “Sovereignty” is the quality of ultimate political power; it is the power resting on the use of violence. In a purely free society, each individual is sovereign over his own person and property, and it is therefore this self-sovereignty which obtains on the free market. No one is “sovereign” over anyone else’s actions or exchanges. Since the consumers do not have the power to coerce producers into various occupations and work, the former are not “sovereign” over the latter.

²Of course, we may formally salvage the concept of “consumers’ sovereignty” by asserting that all these psychic elements and evaluations constitute “consumption” and that the concept therefore still has validity. However, it would seem to be more appropriate in the *catalloctic context of the market* (which is the area here under discussion) to reserve “consumption” to mean the enjoyment of *exchangeable goods*. Naturally, in the final sense, everyone is an ultimate consumer—both of exchangeable and of nonexchangeable goods. However, the market deals only in exchangeable goods (by definition), and when we separate the consumer and the producer in terms of the market, we distinguish the demanding, as compared to the supplying, of exchangeable goods. It is more appropriate, then, not to consider a nonexchangeable good as an object of consumption in this particular context. This is important in order to discuss the contention that individual producers are somehow subject to the sovereign rule of *other* individuals—the “consumers.”

B. PROFESSOR HUTT AND CONSUMERS' SOVEREIGNTY

The metaphorical shibboleth of "consumers' sovereignty" has misled even the best economists. Many writers have used it as an ideal with which to contrast the allegedly imperfect free-market system. An example is Professor W.H. Hutt of the University of Cape Town, who has made the most careful defense of the concept of consumers' sovereignty.³ Since he is the originator of this concept and his use of the term is widespread in the literature, his article is worth particular attention. It will be used as the basis for a critique of the concept of consumers' sovereignty and its implications for the problems of competition and monopoly.

In the first part of his article, Hutt defends his concept of consumers' sovereignty against the criticism that he has neglected the desires of *producers*. He does this by asserting that if a producer desires a *means* as an *end in itself*, then he is "consuming." In this *formal* sense, as we have seen, consumers' sovereignty, by definition, always obtains. Formally, there is nothing wrong with such a definition, for we have stressed throughout this book that an individual evaluates ends (consumption) on his value scale and that his valuation of means (for production) is dependent upon the former. In this sense, then, consumption always rules production.

But this formal sense is not very useful for analyzing the situation on the *market*. And it is precisely the latter sense that Hutt and others employ. Thus, suppose producer A withdraws his labor or land or capital service from the market. For whatever reason, he is exercising his sovereignty over his person and property. On the other hand, if he supplies them to the market, he is, to the extent that he aims at monetary return, submitting

³W.H. Hutt, "The Concept of Consumers' Sovereignty," *Economic Journal*, March, 1940, pp. 66–77. Hutt originated the term in an article in 1934. For an interesting use of a similar concept, cf. Charles Coquelin, "Political Economy" in *Lalor's Cyclopedie*, III, 222–23.

himself to the demands of the consumers. In the aforementioned general sense, “consumption” rules in any case. But the critical question is: *which* “consumer”? The market consumer of exchangeable goods who buys these goods with money, or the market producer of exchangeable goods who sells these goods for money? To answer this question, it is necessary to distinguish between the “producer of exchangeable goods” and the “consumer of exchangeable goods,” since the market, by definition, can deal only in such goods. In short, we can designate people as “producers” and as “consumers,” even though every man must act as a consumer, and every man must also act, in another context, as a producer (or as the receiver of a gift from a producer).

Making this distinction, we find that, contrary to Hutt, each individual has *self-sovereignty* over his person and property on the free market. The producer, and the producer alone, decides whether or not he will keep his property (including his own person) idle or sell it on the market for money, the results of his production then going to the consumers in exchange for their money. This decision—concerning how much to allocate to the market and how much to withhold—is the decision of the individual producer and of him alone.

Hutt implicitly recognizes this, however, since he soon shifts his argument and begins inconsistently to hold up “consumers’ sovereignty” as an *ethical ideal against which the activities of the free market are to be judged*. Consumers’ sovereignty becomes almost an Absolute Good, and any action by producers to thwart this ideal is considered as little less than moral treason. Wavering between consumers’ sovereignty as a *necessary fact* and the contradictory concept of consumers’ sovereignty as an *ideal* that can be violated, Hutt attempts to establish various criteria to determine when this sovereignty *is* being violated. For example, he asserts that when a producer withdraws his person or property out of a desire to use it for enjoyment *as a consumers’ good*, then this is a legitimate act, in keeping with rule by the

consumer. On the other hand, when the producer acts to withhold his property in order to attain more monetary income than otherwise (presumably, although Hutt does not state this, by taking advantage of an inelastic demand curve for his product), then he is engaging in a vicious infringement on the consumers' will. He may do so by acting to restrict production of his own personal product, or, if he makes the same product as other producers, by acting in concert with them to restrict production in order to raise the price. This is the doctrine of monopoly price, and it is this monopoly price that is allegedly the instrument by which producers pervert their rightful function.

Hutt recognizes the enormous difficulty of distinguishing among the producer's motives in any concrete case. The individual who withholds his own labor may be doing so in order to obtain leisure; and even the owner of land or capital may be withholding it in order to derive, say, an aesthetic enjoyment from the contemplation of his unused property. Suppose, indeed, that there is a *mixture* of motives in both cases. Hutt is definitely inclined to solve these difficulties by *not* giving the producer the benefit of the doubt, particularly in the case of property.

But the difficulty is far greater than Hutt imagines. Every individual producer is always engaged in an attempt to maximize his "psychic income," to arrive at the highest place on his value scale. To do so, he balances on this scale monetary income and various nonmonetary factors, in accordance with his particular valuations. Let us take the producer first as a *seller of labor*. In judging how much of his labor to sell and at what price, the producer will take into consideration the monetary income to be gained, the psychic return from the type of work and the "working conditions," and the leisure forgone, balancing them in accordance with the operation of his various marginal utilities. Certainly, if he can earn a higher income by working less, he will do so, since he also gains leisure thereby. And the question arises: Why is this immoral?

Moreover, (1) it is *impossible*, not simply impracticable, to separate the leisure from monetary considerations here, since both elements are involved, and only the person himself will know the intricate balancing of his own valuations. (2) More important, this act does *not* contravene the truth that the producer can earn money only by serving the consumers. Why has he been able to extract a “monopoly price” through restricting his production? Only because the demand for his services (either directly by consumers or indirectly from them through lower-order producers) is *inelastic*, so that a decreased production of the good and a higher price will lead to increased expenditure on his product and therefore increased income for him. Yet this inelastic demand schedule is purely the result of the *voluntary demands* of the consumers. If the consumers were really angry at this “monopolistic action,” they could easily make their demand curves *elastic* by *boycotting* the producer and/or by increasing their demands at the “competitive” production level. The fact that they do not do so signifies their satisfaction with the existing state of affairs and demonstrates that they, as well as the producer, benefit from the resulting voluntary exchanges.

What about the producer in his capacity as a seller of property—the main target of the “anti-monopoly-price” school? The principle, first of all, is virtually the same. Individual producers may restrict the production and sale of their land or capital goods, either individually or in concert (by means of a “cartel”) in order to increase their expected monetary incomes from the sale. Once again, there is nothing distinctively immoral about such action. The producers, other things being equal, are attempting to maximize the monetary income from their factors of production. This is no more immoral than any other attempt to maximize monetary income. Furthermore, they can do so only by *serving the consumers*, since, once again, the sale is voluntary on the part of both producers and consumers. Again, such a “monopoly price,” to be established either by one individual or by individuals co-operating together in a cartel, is possible only if the demand curve (directly or indirectly of the consumers) is

inelastic, and this inelasticity is the resultant of the purely voluntary choices of consumers in their maximization of satisfaction. For this "inelasticity" is simply a label for a situation in which consumers spend more money on a good at a higher than at a lower price. If the consumers were really opposed to the cartel action, and if the resulting exchanges really hurt them, they would boycott the "monopolistic" firm or firms, they would lower their purchasing so that the demand curve became *elastic*, and the firm would be forced to increase its production and reduce its price again. If the "monopolistic price" action had been taken by a cartel of firms, and the cartel had no other advantages for rendering production more efficient, it would then have to disband, because of the now demonstrated elasticity of the demand schedule.

But, it may be asked, is it not true that the consumers would prefer a lower price and that therefore achievement of a "monopoly price" constitutes a "frustration of consumers' sovereignty"? The answer is: Of course, consumers would prefer lower prices; they always would. In fact, the lower the price, the more they would like it. Does this mean that the ideal price is zero, or close to zero, for all goods, because this would represent the greatest degree of producers' sacrifice to consumers' wishes?

In their role as consumers, men would always like lower prices for their purchases; in their capacity as producers, men always like higher prices for their wares. If Nature had originally provided a material Utopia, then all exchangeable goods would be free for the taking, and there would be no need for any labor to earn a money return. This Utopia would also be "preferred," but it too is a purely imaginary condition. Man must necessarily work within a given *real* environment of inherited land and durable capital.

In *this* world, there are two, and only two, ways to settle what the prices of goods will be. One is the way of the free market, where prices are set voluntarily by each of the participating individuals. In this situation, exchanges are made on

terms benefiting all the exchangers. The other way is by violent intervention in the market, the way of hegemony as against contract. Such hegemonic establishment of prices means the outlawing of free exchanges and the institution of exploitation of man by man—for exploitation occurs whenever a coerced exchange is made. If the free-market route—the route of mutual benefit—is adopted, then there can be no other criterion of justice than the free-market price, and this includes alleged “competitive” and “monopoly” prices, as well as the actions of cartels. In the free market, consumers and producers adjust their actions in voluntary cooperation.

In the case of barter, this conclusion is evident; the various producer-consumers either determine their mutual exchange rates voluntarily in the free market, or else the ratios are set by violence. There seems to be no reason why it should be more or less “moral,” on any grounds, for the horse-price of fish to be higher or lower than it is on the free market, or, in other words, why the fish-price of horses should be lower or higher. Yet it is no more evident why any money price should be lower or higher than it is on the market.⁴

2. Cartels and Their Consequences

A. CARTELS AND “MONOPOLY PRICE”

But is not monopolizing action a restriction of production, and is not this restriction a demonstrably antisocial act? Let us first take what would seem to be the worst possible case of such action: the actual destruction of part of a product by a cartel. This is done to take advantage of an inelastic demand curve and to raise the price to gain a greater monetary income for the whole group. We can visualize, for example, the case of a coffee cartel burning great quantities of coffee.

⁴To be consistent, currently fashionable theory would have to accuse Crusoe and Friday of being vicious “bilateral monopolists,” busily charging each other “monopoly prices” and therefore ripe for State intervention!

In the first place, such actions will surely occur very seldom. Actual destruction of its product is clearly a highly wasteful act, even for the cartel; it is obvious that the factors of production which the growers had expended in producing the coffee have been spent in vain. Clearly, the production of the total quantity of coffee itself has proved to be an error, and the burning of coffee is only the aftermath and reflection of the error. Yet, because of the uncertainty of the future, errors are often made. Man could labor and invest for years in the production of a good which, it may turn out, consumers hardly want at all. If, for example, consumers' tastes had changed so that coffee would not be demanded by anyone, regardless of price, it would again have to be destroyed, with or without a cartel.

Error is certainly unfortunate, but it cannot be considered immoral or antisocial; nobody aims deliberately at error.⁵ If coffee were a durable good, it is obvious that the cartel would *not* destroy it, but would store it for gradual future sale to consumers, thus earning income on the "surplus" coffee. In an evenly rotating economy, where errors are barred by definition, there would be no destruction, since optimum stocks for the attainment of money income would be produced in advance. Less coffee would be produced from the beginning. *The waste lies in the excessive production of coffee* at the expense of other goods that could have been produced. *The waste does not lie in the actual burning of the coffee.* After the production of coffee is lowered, the other factors which would have gone into coffee production will not be wasted; the other land, labor, etc., will go into other and more profitable uses. It is true that excess specific factors will remain idle; but this is always the fate of specific factors when the realities of consumer demand do not sustain their use in production. For example, if there is a sudden dwindling of consumer demand for a good, so that it becomes unremunerative for labor to work with certain specialized machines,

⁵See chapter 8, p. 516 above.

this “idle capacity” is *not* a social waste, but is rather socially useful. It is proved an error to have produced the machines; and now that the machines *are* produced, working on them turns out to be less profitable than working with other lands and machines to produce some other result. Therefore, the economical step is to leave them idle or perhaps to transform their material stuff into other uses. Of course, in an errorless economy, no excessive specific capital goods will be produced.

Suppose, for example, that before the coffee cartel went into operation, X amount of labor and Y amount of land co-operated to produce 100 million pounds of coffee a year. The coffee cartel determined, however, that the most remunerative production was 60 million pounds and therefore reduced annual output to this level. It would have been absurd, of course, to continue wasteful production of 100 million pounds and then to burn 40 millions. But what of the now surplus labor and land? These shift to the production, say, of 10 million pounds of rubber, 50,000 hours of service as jungle guides, etc. Who is to say that the second structure of production, the second allocation of factors, is less “just” than the first? In fact, we may say it is *more* just, since the new allocation of factors will be more profitable, and hence more *value-productive*, to consumers. In the value sense, then, overall production has now *expanded*, not contracted. It is clear we cannot say that production, overall, has been *restricted*, since output of goods other than coffee has increased, and the only comparison between the decline of one good and the increase in another must be made in these broad valuational terms. Indeed, the shifting of factors to rubber and jungle guidance no more *restricts* coffee production than a previous shift of factors to coffee *restricted* the production of the former goods.

The whole concept of “restricting production,” then, is a fallacy when applied to the free market. In the real world of scarce resources in relation to possible ends, *all* production involves choice and the allocation of factors to serve the most highly valued ends. In short, the production of *any* product is

necessarily always “restricted.” Such “restriction” follows simply from the universal scarcity of factors and the diminishing marginal utility of any one product. But then it is absurd to speak of “restriction” at all.⁶

We cannot, then, say that the cartel has “restricted production.” After the final allocation has eliminated the producer’s error, the cartel’s action will effect a maximization of producers’ incomes in the service of the consumers, as do all other free-market allocations. This is the result that people on the market tend to attain, in consonance with their skill as forecasting entrepreneurs, and this is the only situation in which man as consumer harmonizes with man as producer.

It follows from our analysis that the producers’ original production of 100 million pounds was an unfortunate error, later

⁶In the words of Professor Mises:

That the production of a commodity p is not larger than it really is, is due to the fact that the complementary factors of production required for an expansion were employed for the production of other commodities. . . . Neither did the producers of p intentionally restrict the production of p . Every entrepreneur’s capital is limited; he employs it for those projects which, he expects, will, by filling the most urgent demand of the public, yield the highest profit.

An entrepreneur at whose disposal are 100 units of capital employs, for instance, 50 units for the production of p and 50 units for the production of q . If both lines are profitable, it is odd to blame him for not having employed more, e.g., 75 units, for the production of p . He could increase the production of p only by curtailing correspondingly the production of q . But with regard to q the same fault could be found by the grumblers. If one blames the entrepreneur for not having produced more p , one must blame him also for not having produced more q . This means: one blames the entrepreneur for the fact that there is a scarcity of the factors of production and that the earth is not a land of Cockaigne. (Mises, *Planning for Freedom*, pp. 115–16)

corrected by them. Instead of being a vicious restriction of production to the detriment of the consumers, the cutback in coffee production was, on the contrary, a correction of the previous error. Since only the free market can allocate resources to serve the consumer, in accordance with monetary profitability, it follows that in the previous situation, "too much" coffee and "too little" rubber, jungle guide service, etc., were being produced. The cartel's action, in reducing the production of coffee and causing an increase in the production of rubber, jungle guiding, etc., led to an *increase* in the power of the productive resources to satisfy consumer desires.

If there are anticartelists who disagree with this verdict and believe that the *previous* structure of production served the consumers better, they are always at perfect liberty to bid the land, labor, and capital factors away from the jungle-guide agencies and rubber producers, *and themselves* embark on the production of the allegedly "deficient" 40 million pounds of coffee. Since *they* are not doing so, they are hardly in a position to attack the *existing* coffee producers for not doing so. As Mises succinctly stated:

Certainly those engaged in the production of steel are not responsible for the fact that other people did not likewise enter this field of production. . . . If somebody is to blame for the fact that the number of people who joined the voluntary civil defense organization is not larger, then it is not those who have already joined but those who have not.⁷

The position of the anticartelists implies that someone else is producing *too much* of some *other* product; yet they offer no standards except their own arbitrary decrees to determine *which* production is excessive.

Criticism of steel owners for not producing "enough" steel or of coffee growers for not producing "enough" coffee also

⁷*Ibid.*, p. 115.

implies the existence of a caste system, whereby a certain caste is permanently designated to produce steel, another caste to grow coffee, etc. Only in such a caste society would such criticism make sense. Yet the free market is the reverse of the caste system; indeed, choice between alternatives implies mobility between alternatives, and this mobility obviously holds for entrepreneurs or lenders with money to invest in production.

Furthermore, as we have stated above, an inelastic demand curve is purely the result of consumers' choice. Thus, suppose that 100 million pounds of coffee have been produced and lie in stock, and a group of growers jointly decide that a burning of 40 million pounds of coffee will, say, double the price from one gold grain per pound to two gold grains per pound, thus giving them a higher total income acting jointly. This would be impossible if the growers knew that they would be confronted with an effective consumer boycott at the higher price. Further, consumers have another way, *if they so desire*, to prevent destruction of the good. Various consumers, acting either individually or jointly, could offer to purchase the existing coffee *at higher than present prices*. They could do this either because of their desire for coffee or because of their philanthropic dismay at the destruction of a useful good, or from a combination of both motives. At any rate, if they did so, they would prevent the producers' cartel from decreasing the supply sold on the market. The boycott at a higher price and/or increased offers at the lower price would change the demand curve and render it elastic at the present stock level, thereby removing any incentive or need for the formation of a cartel.

To regard a cartel as immoral or as hampering some sort of consumers' sovereignty is therefore completely unwarranted. And this is true even in the seemingly "worst" case of a cartel that we may assume is founded *solely* for "restrictive" purposes, and where, as a result of previous error and the perishability of product, actual destruction will occur. If consumers really wish to prevent this action, they need only change their demand schedules for the product, either by an actual change in their

taste for coffee or by a combination of boycott and philanthropy. The fact that such a development does not take place in any given circumstance signifies that the producers are still maximizing their monetary income in the service of the consumers—by a cartel action, as well as by any other action. Some readers might object that, in offering higher demands for existing stock, the consumers would be bribing the producers, and that this constitutes an unwarranted extortion on the part of the producers. But this charge is untenable. Producers are guided by the goal of maximizing monetary income; they are not extorting, but simply producing where their gains are at a maximum, through exchanges concluded voluntarily by producers and consumers alike. This is no more nor less a case of “extortion” than when a laborer shifts from a lower-paying to a higher-paying job or when an entrepreneur invests in what he thinks will be a more rather than a less profitable project.

It must be recognized that once an error has been committed, as it had been in the aforementioned situation, the rational course is not to bewail the past, nor to attempt to “recover” historical costs, but to make the best (*ceteris paribus*, the most money) of the present situation. We recognize this when previously produced machines or other capital goods face a loss of demand for their product. In the production process, as we have seen, labor energies work on natural and produced factors to arrive at the most urgently demanded consumers’ goods. Since error is inevitable, this process is bound to lead to a considerable amount of “idle” capital goods at any given time. Similarly, much original land area will remain idle because existing labor has more profitable work to do on other lands. In short, the “idle” coffee is the result of an error in forecasting and should be no more shocking or reprehensible than “idle capacity” in any other type of capital good.

Our argument is just as applicable to a single firm producing a unique product with an inelastic demand as it is to a cartel of firms. A single firm, with inelastic demand for its product, could also destroy part of its stock after committing a forecasting error.

Our critique of the “anti-monopoly-price” and consumers’-sovereignty doctrines applies equally well to such a case.

B. CARTELS, MERGERS, AND CORPORATIONS

A common argument holds that cartel action involves *collusion*. For one firm may achieve a “monopoly price” as a result of its natural abilities or consumer enthusiasm for its particular product, whereas a cartel of many firms allegedly involves “*collusion*” and “*conspiracy*.” These expressions, however, are simply emotive terms designed to induce an unfavorable response. What is actually involved here is *co-operation* to increase the incomes of the producers. For what is the essence of a cartel action? Individual producers agree to pool their assets into a common lot, this single central organization to make the decisions on production and price policies for all the owners and then to allocate the monetary gain among them. *But is this process not the same as any sort of joint partnership or the formation of a single corporation?* What happens when a partnership or corporation is formed? Individuals agree to pool their assets into a central management, this central direction to set the policies for the owners and to allocate the monetary gains among them. In both cases, the pooling, lines of authority, and allocation of monetary gain take place according to rules agreed upon by all from the beginning. *There is therefore no essential difference between a cartel and an ordinary corporation or partnership.* It might be objected that the ordinary corporation or partnership covers only *one* firm, while the cartel includes an entire “industry” (i.e., all firms producing a certain product). But such a distinction does not necessarily hold. Various firms may refuse to enter a cartel, while, on the other hand, a single firm may well be a “monopolist” in the sale of its particular unique product, and therefore it may also encompass an entire “industry.”

The correspondence between a co-operative partnership or corporation—not generally considered reprehensible—and a cartel is further enhanced when we consider the case of a *merger*

of various firms. Mergers have been denounced as "monopolistic," but not nearly as vehemently as have cartels. Merging firms pool their capital assets, and the owners of the individual firms now become part owners of the single merged firm. They will agree on rules for the exchange ratios of the shares of the different companies. If the merging firms encompass the entire industry, then a merger is simply a permanent form of cartel. Yet clearly the only difference between a merger and the *original forming of a single corporation* is that the merger pools existing capital goods assets, while the original birth of a corporation pools *money* assets. It is clear that, economically, there is little difference between the two. A merger is the action of individuals with a certain quantity of already produced capital goods, adjusting themselves to their present and expected future conditions by cooperative pooling of assets. The formation of a new company is an adjustment to expected future conditions (before any specific investment has been made in capital goods) by cooperative pooling of assets. The essential similarity lies in the voluntary pooling of assets in a more centralized organization for the purpose of increasing monetary income.

The theorists who attack cartels and monopolies do not recognize the identity of the two actions. As a result, a merger is considered less reprehensible than a cartel, and a single corporation far less menacing than a merger. Yet an industry-wide merger is, in effect, a permanent cartel, a permanent combination and fusion. On the other hand, a cartel that maintains by voluntary agreement the separate identity of each firm is by nature a highly transitory and ephemeral arrangement and, as we shall see below, generally tends to break up on the market. In fact, in many cases, a cartel can be considered as simply a tentative step in the direction of permanent merger. And a merger and the original formation of a corporation do not, as we have seen, essentially differ. The former is an adaptation of the size and number of firms in an industry to new conditions or is the correction of a previous error in forecasting. The latter is a *de novo* attempt to adapt to present and future market conditions.

C. ECONOMICS, TECHNOLOGY, AND THE SIZE OF THE FIRM

We do not know, and economics cannot tell us, the optimum size of a firm in any given industry. The optimum size depends on the concrete technological conditions of each situation, as well as on the state of consumer demand in relation to the given supply of various factors in this and in other industries. All these complex questions enter into the decisions of producers, and ultimately of consumers, concerning how large the firms in various lines of production will be. In line with consumer demand and with opportunity costs for the various factors, factor-owners and entrepreneurs will produce in those industries and firms in which they can maximize their monetary income or profit (other psychic factors being equal). Since forecasting is the function of entrepreneurs, successful entrepreneurs will minimize their errors and hence their losses as well. As a result, *any existing situation on the free market will tend to be the most desirable for the satisfaction of consumers' demands (including herein the non-monetary wishes of the producers)*.

Neither economists nor engineers can decide the most efficient size of a firm in any situation. Only the entrepreneurs themselves can determine what size of firm will operate most efficiently, and it is presumptuous and unwarranted for economists or for any other outside observers to attempt to dictate otherwise. In this and other matters, the wishes and demands of the consumers are "telegraphed" through the price system, and the resulting drive for maximum monetary income and profits will always tend to bring about the optimum allocation and pricing. There is no need for the external advice of economists.

It is clear that when several thousand individuals decide *not* to produce and own individual steel plants by themselves, but rather to pool their capital into an organized corporation—which will purchase factors, invest and direct production, and sell the product, later allocating the monetary gains among the owners—they are enormously increasing their efficiency. Compared to production in hundreds of tiny plants, the quantity of

production per given factors will be greatly increased. The large firm will be able to purchase heavily capitalized machinery and to finance better organized marketing and distributing outlets. All this is quite clear when thousands of individuals pool their capital into the establishment of a steel firm. But why may it not be equally true when *several small steel firms merge into one large company?*

It might be replied that in the latter merger, particularly in the case of a cartel, joint action is taken, not to increase efficiency, but solely to increase income by restricting sales. Yet there is no way that an outside observer can distinguish between a "restrictive" and an efficiency-increasing operation. In the first place, we must not think of the plant or factory as being the only productive factors the efficiency of which can increase. Marketing, advertising, etc., are also *factors of production*; for "production" is not simply the physical transformation of a product, but also consists in transporting it and placing it into the hands of users. The latter implies the expenses of informing the user about the existence and nature of the product and of selling that product to him. Since a cartel always engages in joint marketing, who can deny that the cartel might render marketing more efficient? How, therefore, can this efficiency be separated from the "restrictive" aspect of the operation?⁸

⁸Much error would have been avoided if economists had heeded the words of Arthur Latham Perry:

Every man who puts forth an effort to satisfy the desire of another, with the expectation of a return, is . . . a Producer. The Latin word *producere* means *to expose anything to sale*. . . . We must rid ourselves at the outset of the notion . . . that it is only to be applied to forms of *matter*, that it means . . . to *transform* something only. . . . The fundamental meaning of the root-word, both in Latin and in English, is *effort with reference to a sale*. A product is a service ready to be rendered. A producer is any person who gets something ready to sell and sells it. (Perry, *Political Economy*, pp. 165–66)

Furthermore, technological factors in production can never be considered in a vacuum. Technological knowledge tells us of a whole host of alternatives that are open to us. But the crucial questions—in what to invest? how much? what production method to choose?—can be answered only by economic, i.e., by *financial* considerations. They can be answered only on a market actuated by a drive for money incomes and profits. Thus, how is a producer to decide, in digging a subway tunnel, what material to use in its construction? From a purely technological point of view, solid platinum may be the best choice, the most durable, etc. Does this mean that he should choose platinum? He can make a choice among factors, methods, goods to produce, etc., only by comparing the necessary monetary expenses (which are equal to the income the factors could earn elsewhere) with expected monetary income from the production. Only by maximizing monetary gain can factors be allocated in the service of consumers; otherwise, and on purely technological grounds, there would be nothing to prevent the building of platinum-lined subway tunnels the breadth of the continent. The only reason this cannot be done under present conditions is the heavy money “cost” caused by the waste of drawing away factors and resources from uses far more urgently demanded by the consumers. But the fact of this urgent alternative demand—and thus *the fact of the waste*—can be discovered only through being recorded by a price system actuated by a drive by producers for money incomes. Only empirical observation of the market reveals to us the full absurdity of such a transcontinental subway.

Moreover, there are no physical units with which we can compare the different types of physical factors and physical products. Thus, suppose a producer attempts to determine the most efficient use of two hours of his labor. In a romantic moment, he tries to determine this efficiency by purely abstracting from “sordid” considerations of monetary gain. Assume that he is confronted with three technologically known alternatives. These are tabulated as follows:

<i>Factors</i>	:	<i>Product</i>
<i>A</i>		
2 hours of labor		
5 pounds of clay	:	1 pot
1 oven-hour		
<i>B</i>		
2 hours of labor		
1 block of wood	:	1 pipe
1 oven-hour		
<i>C</i>		
2 hours of labor		
1 block of wood	:	1 model boat
1 oven-hour		

Which of these alternatives, *A*, *B*, or *C*, is the most efficient, the most technologically “useful,” way of allocating his labor? It is clear that the “idealistic,” self-sacrificing producer has no way of knowing! He has no rational way of deciding whether or not to produce the pot, the pipe, or the boat. Only the “selfish” money-seeking producer has a rational way of determining the allocation. In seeking maximum monetary gain, the producer compares the money costs (necessary expenses) of the various factors with the prices of the products. Considering *A* and *B*, for example, if the purchase of the clay and oven-hour would cost one gold ounce, and the pot could sell for two gold ounces, his labor would earn one gold ounce. On the other hand, if the wood and oven-hour would cost one and a half gold ounces, and the pipe could sell for four gold ounces, he would earn two and a half ounces for his two hours of labor and would choose to make this product. The prices of both the product and the factors are reflections of consumer demand and of producers’ attempts to earn money in its service. The only way the producer could determine which product to make is to compare expected monetary gains. If the boat would sell for five gold

ounces, he would produce the boat rather than the pipe, and thus satisfy a more urgent consumer demand, as well as his own desire for monetary income.

There can therefore be no separation of technological efficiency from financial considerations. The only way that we can determine whether one product is more demanded than another, or one process more efficient than another, is through concrete actions of the free market. We may think it self-evident, for example, that the optimum efficient size of a steel plant is larger than that of a barber shop. But we know this not as economists from a priori or praxeological reasoning, but purely by empirical observation of the free market. There is no way that economists or any other outside observers can set the technological optimum for any plant or firm. This can be done only on the market itself. But if this is true in general, it is also true in the specific cases of mergers and cartels. The impossibility of isolating a technological element becomes even clearer when we remember that the critical problem is not the size of the *plant*, but the size of the *firm*. The two are by no means synonymous. It is true that the firm will consider the optimum-sized plant for whatever scale its operations will be on, and, further, that a larger-sized plant will, *ceteris paribus*, require a larger-sized firm. But its range of decisions cover a much broader ground: how much to invest, what good or goods to produce, etc. A firm may encompass one or more plants or products and always encompasses marketing facilities, financial organization, etc., which are overlooked when only the plant is held in view.⁹

These considerations, incidentally, serve to refute the very popular distinction between "production for use" and "production for profit." In the first place, *all* production is for use;

⁹R.H. Coase, in an illuminating article, has pointed out that the extent to which transactions take place *within* a firm or *between* firms is dependent on the balancing of the necessary costs of using the price mechanism as against the costs of organizing a structure of production within a firm. Coase, "The Nature of the Firm."

otherwise it would not take place. In the market economy, this almost always means goods for the use of *others*—the consumers. Profit can be earned only through servicing consumers with produced goods. On the other hand, there can be no rational production, above the most primitive level, based on technological or utilitarian considerations abstracted from monetary gain.¹⁰

It is important to realize what we have *not* said in this section. We have not said that cartels will always be more efficient than individual firms or that “big” firms will always be more efficient than small ones. Our conclusion is that economics can make few valid statements about the optimal size of a firm *except* that the free market will come as close as possible to rendering maximum service to consumers, whether we are considering the size of a firm or any other aspect of production. All the concrete problems in production—the size of the firm, the size of the industry, the location, price, size and nature of the output, etc.—are for entrepreneurs, not economists, to solve.

We should not leave the problem of the size of the firm without considering a common worry of economic writers: What if the average cost curve of a firm continues to fall indefinitely? Would not the firm then grow so big as to constitute a “monopoly”? There is much lamentation that competition “breaks down” in such a situation. Much of the emphasis on this problem comes, however, from preoccupation with the case of “pure competition,” which, as we shall see below, is an impossible figment. Secondly, it is obvious that no firm ever has been or can be infinitely large, so that limiting obstacles—rising or less rapidly falling costs—must enter somewhere, and relevantly, for

¹⁰This spurious distinction was brought into wide currency by Thorstein Veblen and continued in the happily short-lived “technocracy” movement of the early 1930’s. According to his biographer, this distinction was the keynote of all Veblen’s writings. Cf. Joseph Dorfman, *The Economic Mind in American Civilization* (New York: Viking Press, 1949), III, 438 ff.

every firm.¹¹ Thirdly, if a firm, through greater efficiency, does obtain a “monopoly” in some sense in its industry, it clearly does so, in the case we are considering (falling average cost), by lowering prices and benefiting the consumers. And if (as all the theorists who attack “monopoly” agree) what is wrong with “monopoly” is precisely a *restriction* of production and a *rise* in price, there is obviously nothing wrong with a “monopoly” achieved by pursuing the directly opposite path.¹²

D. THE INSTABILITY OF THE CARTEL

Analysis demonstrates that a cartel is an inherently unstable form of operation. If the joint pooling of assets in a common cause proves in the long run to be profitable for each of the individual members of the cartel, then they will act formally to *merge* into one large firm. The cartel then disappears in the merger. On the other hand, if the joint action proves unprofitable for one or more members, the dissatisfied firm or firms will break away from the cartel, and, as we shall see, any such independent action almost always destroys the cartel. The cartel form, therefore, is bound to be highly evanescent and unstable.

If joint action is the most efficient and profitable course for each member, a merger will soon take place. The very fact that each member firm retains its potential independence in the cartel means that a breakup could take place at any time. The cartel will have to assign production totals and quotas to each of the member firms. This is likely to lead first to a good deal of bickering among the firms over the assignment of quotas, with each member attempting to gain a larger share of the assignment. Whatever basis quotas are assigned on will necessarily be arbitrary and will always be subject to challenge by one or more

¹¹On the “orthodox” neglect of cost limitations, *see* Robbins, “Remarks upon Certain Aspects of the Theory of Costs.”

¹²Cf. Mises, *Human Action*, p. 367.

members.¹³ In a merger, or in the formation of one corporation, the stockholders, by majority vote, form a decision-making organization. In the case of a cartel, however, disputes arise among *independent* owning entities.

Particularly likely to be restive under the imposed joint action will be the more efficient producers, who will be eager to expand their business rather than be fettered by shackles and quotas to provide shelter for their less efficient competitors. Clearly, the more efficient firms will be the ones to break up the cartel. This will be increasingly true as time goes on and conditions change from the time the cartel was first formed. The quotas, the jealously made agreements that formerly seemed plausible to all, now become intolerable restrictions for the more efficient firms, and the cartel soon breaks up; for once one firm breaks away, expands output and cuts prices, the others must follow.

If the cartel does not break up from within, it is even more likely to do so from without. To the extent that it has earned unusual monopoly profits, outside firms and outside producers will enter the same field of production. Outsiders, in short, rush in to take advantage of the higher profits. But once one strong competitor arises to challenge it, the cartel is doomed. For as

¹³As Professor Benham states:

Firms which have produced a relatively large share of output in the past will demand the same share in the future. Firms which are expanding—owing, for example, to an unusually efficient management—will demand a larger share than they obtained in the past. Firms with a greater “capacity” for producing, as measured by the size of their . . . plant will demand a correspondingly greater share. (Benham, *Economics*, p. 232)

On the difficulties faced by cartels, see also Bjarke Fog, “How Are Cartel Prices Determined?” *Journal of Industrial Economics*, November, 1956, pp. 16–23; Donald Dewey, *Monopoly in Economics and Law* (Chicago: Rand McNally, 1959), pp. 14–24; and Wieser, *Social Economics*, p. 225.

the firms in the cartel are bound by production quotas, they must watch new competitors expand and take away sales from them at an accelerating rate. As a result, the cartel must break up under the pressure of the newcomers' competition.¹⁴

E. FREE COMPETITION AND CARTELS

There are other arguments that opponents of cartels use in decrying cartel action. One thesis asserts that there is something wicked about formerly competing firms now uniting, e.g., "restricting competition" or "restraining trade." Such restriction is supposed to injure the consumers' freedom of choice. As Hutt phrased it in his previously cited article: "Consumers are free . . . and consumers' sovereignty is realizable, only to the extent to which the power of substitution exists."

But surely this is a complete misconception of the meaning of freedom. Crusoe and Friday bargaining on a desert island have very little *range* or *power* of choice; their power of substitution is limited. Yet if neither man interferes with the other's person or property, each one is absolutely *free*. To argue otherwise is to adopt the fallacy of confusing freedom with abundance or range of choice. *No individual producer is or can be responsible for other people's power to substitute.* No coffee grower or steel producer, whether acting singly or jointly, is responsible to anyone because he chose not to produce more. If Professor X or consumer Y believes that there are not enough coffee producers in existence or that they are not producing enough, these critics are free to enter the coffee or steel business as they see fit, thus increasing both the number of competitors and the quantity of the good produced.

¹⁴For illustrations of this instability in the history of cartels, see Fairchild, Furniss, and Buck, *Elementary Economics*, II, 54–55; Charles Norman Fay, *Too Much Government, Too Much Taxation* (New York: Doubleday, Page, 1923), p. 41, and *Big Business and Government* (New York: Doubleday, Page, 1912); A.D.H. Kaplan, *Big Enterprise in a Competitive System* (Washington, D.C.: Brookings Institute, 1954), pp. 11–12.

If consumer demand had really justified more competitors or more of the product or a greater variety of products, then entrepreneurs would have seized the opportunity to profit by satisfying this demand. The fact that this is not being done in any given case demonstrates that no such unsatisfied consumer demand exists. But if this is true, then it follows that *no man-made actions can improve the satisfaction of consumer demand more than is being done on the unhampered market*. The false confusion of freedom with abundance rests on a failure to distinguish between the *conditions given by nature* and *man-made actions to transform nature*. In a state of raw nature, there is no abundance; in fact, there are few, if any, goods at all. Crusoe is *absolutely free*, and yet on the point of starvation. Of course, it would be pleasant for everyone if the nature-given conditions had been far more abundant, but these are vain fantasies. For vis-à-vis nature, this *is* the best of all *possible* worlds, because it is the *only* possible one. Man's condition on earth is that he must work with the given natural conditions and improve them by human action. *It is a reflection on nature, not on the free market, that everyone is "free to starve."*

Economics demonstrates that individuals, entering into mutual relations in a free market in a free society—and *only* in such relations—can provide abundance for themselves and for the entire society. (“Free,” as always in this book, is used in the interpersonal sense of being unmolested by other persons.) To employ freedom as itself equivalent to abundance obstructs understanding of these truths.

The free market in the world of production may be termed “free competition” or “free entry,” meaning that in a free society anyone is free to compete and produce in any field he chooses. “Free competition” is the application of liberty to the sphere of production: the freedom to buy, sell, and transform one’s property without violent interference by an external power.

We have seen above that in a regime of free competition consumers’ satisfaction will, at any time, tend to be at the maximum

possible, given natural conditions. The best forecasters will tend to emerge as the dominant entrepreneurs, and if anyone sees an opportunity passed up, he is free to take advantage of his superior foresight. The regime that tends to maximize consumers' satisfaction, therefore, is not "pure competition" or "perfect competition" or "competition without cartel action,"¹⁵ or anything other than one of simple *economic liberty*.

Some critics charge that there is no "real" free entry or free competition in a free market. For how can anyone compete or enter a field when an enormous amount of money is needed to invest in efficient plants and firms? It is easy to "enter" the pushcart peddling "industry" because so little capital is required, but it is almost impossible to establish a new automobile firm, with its heavy requirements of capital.

This argument is but another variant of the prevailing confusion between freedom and abundance. In this case, the abundance refers to the money capital which a man has been able to amass. Every man is perfectly free to become a baseball player; but this freedom does not imply that he will be as good a baseball player as the next man. A man's range or power of action, dependent on his ability and the exchange-value of his property, is something completely distinct from his freedom. As we have said, a free society will in the long run lead to general abundance and is the necessary condition for that abundance. But the two must be kept conceptually distinct, and not confused by phrases such as "real freedom" or "true freedom." Therefore, the fact that everyone is *free* to enter an industry does not mean that everyone is *able*, either in terms of personal qualities or monetary capital, to do so. In industries requiring more capital, fewer people will be able to take advantage of their freedom to set up a new firm than in those requiring less capital, just as fewer laborers will be able to take advantage of freedom of entry in a very highly skilled profession than in a menial position. There is no mystery about either situation.

¹⁵These terms will be explained below.

In fact, the disability is much more relevant in the case of labor than in the case of business competition. What are modern devices such as corporations but means of pooling capital by many people of greater and lesser wealth? The "difficulty" of investing in a new automobile firm should be considered, not in terms of the hundreds of millions of dollars required for total investment, but in terms of the 50 or so dollars required to purchase one share of stock. But while capital can be pooled, beginning with the smallest units, labor ability cannot be pooled.

Sometimes the argument reaches absurd lengths. For example, it is often asserted that now, in this modern world, firms are so large that new people "cannot" compete or enter the industry because the capital cannot be raised. These critics do not seem to see that the aggregate capital and wealth of individuals have advanced along with the increase in wealth required to launch a new enterprise. In fact, these are two sides of the same coin. There is no reason to suppose that it was easier to raise the capital to launch a new retail shop many centuries ago than it is to raise capital for the automobile firm today. If there is enough capital to finance the large firms currently existing, there is enough to finance one more; in fact, capital could be withdrawn from existing large firms and shifted to new ones if there is a need for them. Of course, if the new enterprise would be unprofitable and therefore unserviceable to consumers, it is easy to see why there is reluctance in the free market to embark on the venture.

That there is inequality of ability or monetary income on the free market should surprise no one. As we have seen above, men are not "equal" in their tastes, interests, abilities, or locations. Resources are not distributed "equally" over the earth.¹⁶ This inequality or diversity in abilities and distribution of resources insures inequality of income on the free market. And, since a man's monetary assets are derived from his and his ancestors'

¹⁶Clearly, the very term "equal" is unusable here. What does it mean to say that lawyer Jones' ability is "equal" to teacher Smith's?

abilities in serving consumers on the market, it is not surprising that there is inequality of monetary *wealth* as well.

The term "free competition," then, will prove misleading unless it is interpreted to mean free action, i.e., freedom to compete or not to compete as the individual wills.

It should be clear from the foregoing discussion that there is nothing particularly reprehensible or destructive of consumer freedom in the establishment of a "monopoly price" or in a cartel action. A cartel action, if it is a voluntary one, cannot injure freedom of competition and, if it proves profitable, *benefits* rather than injures the consumers. It is perfectly consonant with a free society, with individual self-sovereignty, and with the earning of money through serving consumers.

As Benjamin R. Tucker brilliantly concluded in dealing with the problem of cartels and competition:

That the right to cooperate is as unquestionable as the right to compete; the right to compete involves the right to refrain from competition; cooperation is often a method of competition, and competition is always, in the larger view, a method of cooperation . . . each is a legitimate, orderly, non-invasive exercise of the individual will under the social law of equal liberty . . .

Viewed in the light of these irrefutable propositions, the trust, then, like every other industrial combination endeavoring to do collectively nothing but what each member of the combination might fully endeavor to do individually, is, *per se*, an unimpeachable institution. To assail or control or deny this form of cooperation on the ground that it is itself a denial of competition is an absurdity. It is an absurdity, because it proves too much. *The trust is a denial of competition in no other sense than that in which competition itself is a denial of competition.* (Italics ours.) The trust denies competition only by producing and selling more cheaply than those outside of the trust can produce

and sell; but in that sense every successful individual competitor also denies competition. . . . The fact is that there is one denial of competition which is the right of all, and that there is another denial of competition which is the right of none. All of us, whether out of a trust or in it, have a right to deny competition by competing, but none of us, whether in a trust or out of it, have a right to deny competition by arbitrary decree, by interference with voluntary effort, by forcible suppression of initiative.¹⁷

This is not to say, of course, that joint co-operation or combination is necessarily “better than” competition among firms. We simply conclude that the relative extent of areas *within* or *between* firms on the free market will be precisely that proportion most conducive to the well-being of consumers and producers alike. This is the same as our previous conclusion that the size of a firm will tend to be established at the level most serviceable to the consumers.¹⁸

¹⁷From his Address to the Civic Federation Conference on Trusts, held in Chicago, September 13–16, 1899, *Chicago Conference on Trusts* (Chicago, 1900), pp. 253–54, reprinted in Benjamin R. Tucker, *Individual Liberty* (New York: Vanguard Press, 1926), pp. 248–57. Said a lawyer at the conference:

The control of prices can be brought about permanently only by such a superiority in the methods of manufacture as will successfully defy competition. Any price established by a combination which enables competitors to make a reasonable profit will soon encourage such competition as will reduce the price. (Azel F. Hatch, *Chicago Conference*, p. 70)

See also the excellent article by A. Leo Weil, *ibid.*, pp. 77–96; and W.P. Potter, *ibid.*, pp. 299–305; F.B. Thurber, *ibid.*, pp. 124–36; Horatio W. Seymour, *ibid.*, pp. 188–93; J. Sterling Morton, *ibid.*, pp. 225–30.

¹⁸Does our discussion imply, as Dorfman has charged (J. Dorfman, *Economic Mind in American Civilization*, III, 247), that “whatever is, is right”? We cannot enter into a discussion of the relation of economics to ethics at this point, but we can state briefly that our answer, pertaining to

F. THE PROBLEM OF ONE BIG CARTEL

The myth of the evil cartel has been greatly bolstered by the nightmare image of “one big cartel.” “This is all very well,” one may say, “but suppose that all the firms in the country amalgamated or cartelized into One Big Cartel. What of the horrors then?”

The answer can be obtained by referring to chapter 9, pp. 612ff above, where we saw that the free market placed definite limits on the size of the firm, i.e., the limits of *calculability* on the market. In order to calculate the profits and losses of each branch, a firm must be able to refer its internal operations to *external markets* for *each* of the various factors and intermediate products. When any of these external markets disappears, because all are absorbed *within* the province of a single firm, calculability disappears, and there is no way for the firm rationally to allocate factors to that specific area. The more these limits are encroached upon, the greater and greater will be the sphere of irrationality, and the more difficult it will be to avoid losses. One big cartel would not be able rationally to allocate producers’ goods at all and hence could not avoid severe losses. Consequently, it could never really be established, and, if tried, would quickly break asunder.

In the production sphere, socialism is equivalent to One Big Cartel, compulsorily organized and controlled by the State.¹⁹ Those who advocate socialist “central planning” as the more

the free market, is a qualified Yes. Specifically, our statement would be: *Given the ends* on the value scales of individuals, as revealed by their real actions, the maximum satisfaction of those ends for every person is achieved only on the free market. Whether individuals have the “proper” ends or not is another question entirely and cannot be decided by economics.

¹⁹If all the factors and resources are absolutely *controlled* by the State, it makes little difference if, legally, the State *owns* these resources. For ownership connotes control, and if the nominal owner is coercively deprived of control, it is the controller who is the real owner of the resource.

efficient method of production for consumer wants must answer the question: If this central planning is really more efficient, why has it not been established by profit-seeking individuals on the free market? The fact that One Big Cartel has never been formed voluntarily and that it needs the coercive might of the State to be formed demonstrates that it could not possibly be the most efficient method of satisfying consumer desires.²⁰

Let us assume for a moment that One Big Cartel could be established on the free market and that the calculability problem does not arise. What would the economic consequences be? Would the cartel be able to "exploit" anyone? In the first place, *consumers* could not be "exploited." For consumers' demand curves would still be elastic or inelastic, as the case may be. Since, as we shall see further below, consumers' demand curves for a firm are always elastic above the free-market equilibrium price, it follows that the cartel will not be able to raise prices or earn more from consumers.

What about the factors? Could not *their* owners be exploited by the cartel? In the first place, the universal cartel, to be effective, would have to include owners of primary land; otherwise whatever gains they might have might be imputed to land. To put it in its strongest terms, then, could a universal cartel of all land *and* capital goods "exploit" laborers by systematically paying the latter less than their discounted marginal value products? Could not the members of the cartel agree to pay a very low sum to these workers? If that happened, however, there would be created great opportunities for entrepreneurs either to spring up outside the cartel or to break away from the cartel and profit by hiring workers for a higher wage. This competition would have the double effect of (*a*) breaking up the universal cartel and (*b*) tending again to yield to the laborers their

²⁰The only author, to our knowledge, that looks forward to One (voluntary) Big Cartel as a potential ideal is Heath, *Citadel, Market, and Altar*, pp. 184–87.

marginal product. As long as competition is free, unhampered by governmental restrictions, no universal cartel could either exploit labor or remain universal for any length of time.²¹

3. The Illusion of Monopoly Price

So far we have established that there is nothing “wrong” with a monopoly price, either when instituted by one firm or by a cartel; that, in fact, whatever price the free market (unhampered by violence or the threat of violence) establishes will be the “best” price. We have also shown the impossibility of separating “monopolizing” from efficiency considerations in cartel actions or of separating technology from profitability in general; and we have seen the great instability of the cartel form.

In this section we investigate a further problem: Granted that there is nothing “wrong” with monopoly prices, how tenable is the very concept of “monopoly price” on the free market? Can it be distinguished at all from “competitive price,” its supposed polar opposite? To answer this question, we must explore what the theory of monopoly price is all about.

A. DEFINITIONS OF MONOPOLY

Before investigating the theory of monopoly price, we must begin by defining *monopoly*. Despite the fact that monopoly problems occupy an enormous quantity of economic writings, little or no clarity of definition exists.²² There is, in fact, enormous vagueness and confusion on the subject. Very few economists have formulated a coherent, meaningful definition of monopoly.

²¹Cf. Mises, *Human Action*, p. 592.

²²The same confusion exists in the laws concerning monopoly. Despite constitutional warnings against vagueness, the Sherman Anti-Trust Act outlaws “monopolizing” actions without once defining the concept. To this day there has been no clear legislative decision concerning what constitutes illegal monopolistic action.

A common example of a confused definition is: “Monopoly exists when a firm has control over its price.” This definition is a mixture of confusion and absurdity. In the first place, on the free market there is no such thing as “control” over the price in an exchange; in any exchange the price of the sale is *voluntarily* agreed upon by both parties. No “control” is exercised by either party; the only control is each person’s control over *his own* actions—stemming from his self-sovereignty—and consequently his control will be over his own decision to enter or not to enter into an exchange at any hypothetical price. There is no direct control over price because price is a *mutual* phenomenon. On the other hand, each person has *absolute* control over his own action and therefore over the price which he will *attempt* to charge for any particular good. Any man can set any price that he wants for any quantity of a good that he sells; the question is whether he can find any buyers at that price. Similarly, of course, any buyer can set any price at which he will purchase a certain good; the question is whether he can find a seller at that price. It is this process, indeed, of mutual bids and offers that yields the daily prices on the market.

There is an all-too-common assumption, however, that if we compare, say, Henry Ford and a small wheat farmer, the two differ enormously in their respective powers of control. It is believed that the wheat farmer finds his price “given” to him by the market, while Ford can “administer” or “set his own” price. The wheat farmer is allegedly subject to the impersonal forces of the market, and ultimately to the consumer, while Ford is, to a greater or lesser extent, the master of his own fate, if not indeed the ruler of the consumers. Further, it is believed that Ford’s “monopoly power” stems from his being “large” in relation to the automobile market, while the farmer is a “pure competitor” because he is “small” compared to the total supply of wheat. Usually, Ford is not considered an “absolute” monopolist, but someone with a vague “degree of monopoly power.”

In the first place, it is completely false to say that the farmer and Ford differ in their control over price. Both have exactly the

same degree of control and of noncontrol: i.e., both have absolute *control* over the quantity they produce and the price which they attempt to get;²³ and absolute *noncontrol* over the price-and-quantity transaction that finally takes place. The farmer is free to ask any price he wants, just as Ford is, and is free to look for a buyer at such a price. He is not in the least compelled to sell his produce to the organized "markets" if he can do better elsewhere. Every producer of every product is free, in a free-market society, to produce as much as he wants of whatever he possesses or can purchase and to try to sell it, at whatever price he can get, to anyone he can find.²⁴ Naturally, every seller, as we have repeatedly stated, will attempt to sell his produce for the highest possible price; similarly, every buyer will attempt to purchase goods at the lowest possible price. It is precisely the voluntary interaction of these buyers and sellers that establishes the entire supply and demand structure for consumers' and producers' goods. To accuse Ford or a waterworks or any other producer of "charging whatever the traffic will bear" and to take this as a sign of monopoly is pure nonsense, for this is precisely the action of everyone in the economy: the small wheat farmer, the laborer, the landowner, etc. "Charging whatever the traffic will bear" is simply a rather emotive synonym for charging as high a price as can be freely obtained.

Who officially "sets" the price in any exchange is a completely trivial and irrelevant technological question—a matter of institutional convenience rather than economic analysis. The fact that Macy's posts its prices each day does not mean that Macy's has some sort of mysterious "control" of its price over the consumer;²⁵ similarly, that large-scale industrial buyers of

²³We are, of course, not considering here particular uncertainties of agriculture resulting from climate, etc.

²⁴For further discussion, see Murray N. Rothbard, "The Bogey of Administered Prices," *The Freeman*, September, 1959, pp. 39–41.

²⁵On the contrary, the consumers control Macy's to the extent that the store desires monetary income. Cf. John W. Scoville and Noel Sargent,

raw materials often post their bid prices does not mean that they exercise some sort of extra control over the price obtained by the growers. Rather than acting as a means of control, in fact, posting simply furnishes needed information to all would-be buyers and/or sellers. The process of price determination through the interaction of value scales occurs in precisely the same way regardless of the concrete details and institutional conditions of market arrangements.²⁶

Each individual producer, then, is sovereign over his own actions; he is free to buy, produce, and sell whatever he likes and to whoever will purchase. The farmer is not compelled to sell to any particular market or to any particular company, any more than Ford is compelled to sell to John Brown if he does not wish to do so (say, because he can get a higher price elsewhere). But, as we have seen, in so far as a producer wishes to maximize his monetary return, he does submit himself to the control of consumers, and he sets his output accordingly. This is true of the farmer, of Ford, or of anyone else in the entire economy—landowner, laborer, service-producer, product-owner, etc. Ford, then, has no more “control” over the consumer than the farmer has.

One common objection is that Ford is able to acquire “monopoly power” or “monopolistic power” because his product has a recognized brand name or trade-mark, which the wheat farmer has not. This, however, is surely a case of putting the cart before the horse. The brand name and the wide knowledge of the brand come from consumers’ desire for the product attached to that particular brand and are therefore a *result* of consumer demand rather than a pre-existing means for some sort of

eds., *Fact and Fancy in the T.N.E.C. Monographs* (New York: National Association of Manufacturers, 1942), p. 312.

²⁶One reason often given for ascribing “control over price” to Ford and not the small wheat grower is that Ford is so large that his actions affect the market price of his product, while the farmer is so small that his actions do not affect the price. On this, see the critique below of “monopolistic competition” theories.

“monopolistic power” over the consumers. In fact, farmer Hiram Jones is perfectly free to stamp the brand name “Hiram Jones Wheat” on his product and attempt to sell it on the market. The fact that he has not done so signifies that it would not be a profitable step in the concrete market condition of his product. The chief point is that in some cases consumers and lower-order entrepreneurs consider each individual brand name as representing a *unique* product, while in other cases purchasers consider the output of one firm—one product-owner or set of product-owners operating jointly—as identical in use-value with products of other firms. Which situation will occur is entirely dependent on the buyers’ valuations in each concrete case.

Later in this chapter we shall analyze in greater detail the tangled web of fallacies involved in the various theories of “monopolistic competition”; at this point we are attempting to arrive at a definition of monopoly *per se*. To proceed: There are three possible coherent definitions of monopoly. One is derived from its linguistic roots: *monos* (only) and *polein* (to sell), i.e., *the only seller of any given good* (definition 1). This is certainly a legitimate definition, but it is an extraordinarily broad one. It means that, whenever there is any differentiation at all among individual products, the individual producer and seller is a “monopolist.” John Jones, lawyer, is a “monopolist” over the legal services of John Jones; Tom Williams, doctor, is a “monopolist” over his own unique medical services, etc. The owner of the Empire State Building is a “monopolist” over the rental services in his building. This definition, therefore, labels all consumer distinctions between individual products as establishing “monopolies.”

It must be remembered that only *consumers* can decide whether two commodities offered on the market are one good or two different goods. This issue cannot be settled by a physical inspection of the product. The elemental physical nature of the good may be only *one* of its properties; in most cases, a brand name, the “good will” of a particular company, or a more pleasant atmosphere in the store will differentiate the product from

its rivals in the view of many of its customers. The products then become *different goods* for the consumers. No one can ever be certain in advance—least of all the economist—whether a commodity sold by A will be treated on the market as homogeneous with the same basic physical good sold by B.^{27,28}

²⁷Economists have often charged, for example, that consumers who will pay a higher price for the same good at a store with a more pleasant atmosphere are acting “irrationally.” Actually, they are by no means doing so, since consumers are buying not just a physical can of beans, but a can of beans sold in a certain store by certain clerks, and these factors may (or may not) make a difference to them. Businessmen are far less motivated by such “nonphysical” considerations (although good will affects their purchases too), *not* because they are “more rational” than consumers, but because they are not concerned, as consumers are, with their *own* value scales in deciding their purchases. As we have seen above, businessmen are generally motivated purely by the expected revenue that goods will bring on the market. For an excellent treatment of the definition of “homogeneous product,” see G. Warren Nutter, “The Plateau Demand Curve and Utility Theory,” *Journal of Political Economy*, December, 1955, pp. 526–28. *Also see* Alex Hunter, “Product Differentiation and Welfare Economics,” *Quarterly Journal of Economics*, November, 1955, pp. 533–52.

²⁸Professor Lawrence Abbott, in one of the outstanding theoretical works of recent years, demonstrates also that as civilization and the economy advance, products will become more and more differentiated and less and less homogeneous. For one thing, greater differentiation occurs at the consumer than at the producer level, and the expanding economy takes over an increasing proportion of goods once made by the consumer himself and therefore supplies more finished goods than raw materials to the consumer than formerly (bread rather than flour, sweaters rather than wool yarn, etc.). Thus, there is greater opportunity for differentiation.

Furthermore, to the familiar charge that business advertising tends to create differentiation in the consumer’s mind that is not “really” there, Abbott replies incisively that the *reverse* is more likely to be true and that advancing civilization increases the consumer’s perception and discrimination of differences of which he was previously ignorant. Writes Abbott:

as man becomes more civilized, he develops greater powers of perception with regard to quality differences. Subjective homogeneity may exist even when objective

Hence, there is hardly any way that definition 1 of “monopoly” can be successfully used. For this definition depends on how we choose a “homogeneous good,” and this can never be decided by an economist. What constitutes a homogeneous commodity” (i.e., an industry)—neckties, bow ties, bow ties with polka dots, etc., or bow ties made by Jones? Only consumers will decide, and they, as different consumers, will be likely to decide differently in each concrete case. Use of definition 1, therefore, will probably reduce to the barren definition of monopoly as *each man's exclusive ownership of his own property*—and this, absurdly, would make every single person a monopolist!²⁹

homogeneity does not, due to the inability or unwillingness of buyers to perceive differences between almost identical products and discriminate between them. . . . As a society matures and education improves, people learn to develop more acute powers of discrimination. Their wants become more detailed. They begin . . . to develop a preference, say, not simply for white wine, but for 1948 Chablis. . . . People generally tend to underestimate the significance of apparently trivial differences in fields in which they are not expert. An unmusical person may be unwilling to concede that there is any difference in tone between a Steinway and a Chickering piano, being unable himself to detect it. A nongolfer is more likely than a habitual player to believe that all brands of golf balls are virtually alike. (Lawrence Abbott, *Quality and Competition* [New York: Columbia University Press, 1955], pp. 18–19, and chap. I)

Also see *ibid.*, pp. 45–46 and Edward H. Chamberlin, “Product Heterogeneity and Public Policy” in *Towards a More General Theory of Value* (New York: Oxford University Press, 1957), p. 96.

²⁹Oddly, despite the reams of literature on monopolies, very few economists have bothered to *define* monopoly, and these problems have therefore been overlooked. Mrs. Robinson, in the beginning of her famous *Economics of Imperfect Competition*, saw the difficulty and then evaded the issue throughout the rest of the book. She concedes that under careful analysis either a monopoly would be defined as every producer's control over his own product or monopoly could simply not exist

Definition 1, then, is coherent, but highly inexpedient. Its usefulness is very limited, and the term has acquired highly charged emotional connotations from past use of quite different definitions. For reasons detailed below, the term "monopoly" has sinister and evil connotations to most people. "Monopolist" is generally a word of abuse; to apply the term "monopolist" to at least the vast majority of the population and perhaps to every man would have a confusing and even ludicrous effect.

The second definition is related to the first, but differs very significantly. It, in fact, was the *original* definition of monopoly and the very definition responsible for its sinister connotations in the public mind. Let us turn to its classic expression by the great seventeenth-century jurist, Lord Coke:

A monopoly is an institution or allowance by the king, by his grant, commission, or otherwise . . . to any person or persons, bodies politic or corporate, for the *sole* buying, selling, making, working, or using of anything, whereby any person or persons, bodies

on the free market at all. For competition exists among all products for the consumer's dollar, while very few articles are rigorously homogeneous. Mrs. Robinson then tries to evade the issue by falling back on "common sense" and defining monopoly as existing where there is a "marked gap" between the product and other substitutes the consumer may buy. But this will not do. Economics, in the first place, can establish no quantitative laws, so that there is nothing we can say about sizes of gaps. When does the gap become "marked"? Secondly, even if such "laws" were meaningful, there would be no way to measure the cross-elasticities of demands, the elasticity of substitution between the products, etc. These elasticities of substitution are changing all the time and could not be measured successfully even if they all remained constant, since supply conditions are always changing. No laboratory exists where all economic factors may be held fixed. After this point in her discussion, Mrs. Robinson practically forgets all about heterogeneity of product. Joan Robinson, *Economics of Imperfect Competition* (London: Macmillan & Co., 1933), pp. 4-6. Also cf. Hunter, "Product Differentiation and Welfare Economics," pp. 547 ff.

politic or corporate, are sought to be restrained of any freedom or liberty that they had before, or hindered in their lawful trade.³⁰

In other words, by this definition, *monopoly* is a *grant of special privilege by the State, reserving a certain area of production to one particular individual or group*. Entry into the field is prohibited to others and this prohibition is enforced by the gendarmes of the State.

This definition of monopoly goes back to the common law and acquired great political importance in England during the sixteenth and seventeenth centuries, when an historic struggle took place between libertarians and the Crown over the issue of monopoly as opposed to freedom of production and enterprise. Under this definition of the term, it is not surprising that “monopoly” took on connotations of sinister interest and tyranny in the public mind. The enormous restrictions on production and trade, as well as the establishment by the State of a monopoly caste of favorites, were the objects of vehement attack for several centuries.³¹

That this definition was formerly important in economic analysis is clear in the following quotation from one of the first American economists, Francis Wayland:

³⁰Quoted in Richard T. Ely and others, *Outlines of Economics* (3rd ed.; New York: Macmillan & Co., 1917), pp. 190–91. Blackstone gave almost the same definition and called monopoly a “license or privilege allowed by the king.” *Also see* A. Leo Weil, *Chicago Conference*, p. 86.

³¹The onrush of monopoly grants by Queen Elizabeth I and Charles I provoked resistance from even the Crown’s subservient judges, and, in 1624, Parliament declared that “all monopolies are altogether contrary to the laws of this realm and are and shall be void.” This antimonopoly spirit was deeply ingrained in America, and the original Maryland constitution declared that monopolies were “odious” and “contrary to . . . principles of commerce.” Ely, *Outlines of Economics*, pp. 191–92. *Also see* Francis A. Walker, *Political Economy* (New York: Henry Holt & Co., 1911), pp. 483–84.

A monopoly is an exclusive right granted to a man, or to a monopoly of men, to employ their labor or capital in some particular manner.³²

It is obvious that this type of monopoly can *never* arise on a free market, unhampered by State interference. In the free economy, then, according to this definition, there can be *no* “monopoly problem.”³³ Many writers have objected that brand names and trade-marks, generally considered as part of the free market, really constitute grants of special privilege by the State. No other firm can “compete” with Hershey chocolates by producing its own product and calling it Hershey chocolates.³⁴ Is this not a State-imposed restriction on freedom of entry? And how can there be “real” freedom of entry under such conditions?

This argument, however, completely misconceives the nature of liberty and of property. Every individual in the free society has a right to ownership of his *own self* and to the exclusive use of his own property. Included in his property is his *name*, the linguistic label which is uniquely his and is identified with him. A name is an essential part of a man’s identity and

³²Francis Wayland, *The Elements of Political Economy* (Boston: Gould & Lincoln, 1854), p. 116. Cf. this later definition by Arthur Latham Perry: “A monopoly, as the derivation of the word implies, is a restriction imposed by a government upon the sale of certain services.” Perry, *Political Economy*, p. 190. In recent years this definition has all but died out. A rare current example is: “Monopoly exists when government by its coercive power limits to a particular person or organization, or combination of them, the right to sell particular goods or services. . . . It is an infringement of the right to make a living.” Heath, *Citadel, Market, and Altar*, p. 237.

³³As Weil stated: “Monopolies cannot be created by association or agreement. We now have no letters patent giving exclusive right. . . . It is therefore wholly unjustifiable to use the term monopoly as applied to the effects of industrial consolidation.” Weil, *Chicago Conference*, pp. 86 f.

³⁴For example, Edward H. Chamberlin, *Theory of Monopolistic Competition* (7th ed.; Cambridge: Harvard University Press, 1956), pp. 57 ff., 270 ff.

therefore of his property. To say that he is a "monopolist" over his name is saying no more than that he is a "monopolist" over his own will or property, and such an extension of the word "monopolist" to every individual in the world would be an absurd usage of the term. The "governmental" function of defense of person and property, vital to the existence of a free society so long as any people are disposed to invade them, involves the defense of each person's particular name or trademark against the fraud of *forgery* or *imposture*. It means the outlawing of John Smith's pretending to be Joseph Williams, a prominent lawyer, and selling his own legal advice after stating to clients that he is selling that of Williams. This fraud is not only implicit theft of the consumer, but it is also abusing the property right of Joseph Williams to his unique name and individuality. And the use by some other chocolate firm of the Hershey label would be an equivalent perpetration of an invasive act of fraud and forgery.³⁵

Before adopting this definition of monopoly as the proper one, we must consider a final alternative: the defining of a monopolist as *a person who has achieved a monopoly price* (definition 3). This definition has never been explicitly set forth, but it has been implicit in the most worthwhile of the neoclassical writings on this subject. It has the merit of focusing attention on the important economic question of monopoly price, its nature and consequences. In this connection, we shall now investigate the neoclassical theory of monopoly price and inquire whether it really has the substance it seems at first glance to possess.

³⁵It might be objected that these concepts are vague and give rise to problems. Problems do arise, but they are not insuperable. Thus, if one man is named Joseph Williams, does this preclude anyone else from having the same name, and is any future Joseph Williams to be considered a criminal? The answer is clearly: No, so long as there is no attempt by one to impersonate the other. In short, it is not so much the name *per se* which an individual owns, but the name as an affiliate of his person.

B. THE NEOCLASSICAL THEORY OF MONOPOLY PRICE³⁶

In previous sections we have referred to a monopoly price as one established either by a monopolist or by a cartel of producers. At this point we must investigate the theory more closely. A succinct definition of monopoly price has been supplied by Mises:

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.³⁷

The monopoly price doctrine may be summed up as follows: A certain quantity of a good, when produced and sold, yields a *competitive price* on the market. A monopolist or a cartel of firms can, if the *demand curve is inelastic at the competitive-price point*, restrict sales and raise the price, to arrive at the point of maximum returns. If, on the other hand, the demand curve as it presents itself to the monopolist or cartel is *elastic* at the competitive-price point, the monopolist will not restrict sales to attain a higher price. As a result, as Mises points out, there is no need to be concerned with the “monopolist” (in the sense of definition 1 above); whether or not he is the sole producer of a commodity is unimportant and irrelevant for catallactic problems. It becomes important only if the configuration of his demand curve enables him to restrict sales and achieve a higher income

³⁶For clear expositions of the theory of monopoly price, see Mises, *Socialism*, pp. 385–92, and *Human Action*, pp. 278, 354–84; Menger, *Principles of Economics*, pp. 207–25; Fetter, *Economic Principles*, pp. 73–85, 381–85; Harry Gunnison Brown, “Competitive and Monopolistic Price-Making,” *Quarterly Journal of Economics*, XXII (1908), pp. 626–39; and Wieser, *Social Economics*, pp. 204, 211–12. In this particular case, “neoclassical” includes “Austrian.”

³⁷Mises, *Human Action*, p. 278.

at a monopoly price.³⁸ If he learns about the inelastic demand curve *after* he has erroneously produced too great a stock, he must destroy or withhold part of his stock; after that, he restricts production of the commodity to the most remunerative level.

The monopoly price analysis is portrayed in the diagram in Figure 67. The basic assumption, usually only implicit, is that

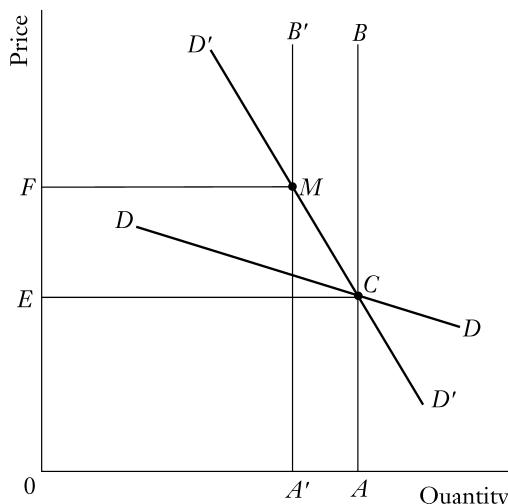


FIGURE 67. FORMATION OF A MONOPOLY PRICE
ACCORDING TO NEOCLASSICAL DOCTRINE

³⁸Thus:

The mere existence of monopoly does not mean anything. The publisher of a copyright book is a monopolist. But he may not be able to sell a single copy, no matter how low the price he asks. Not every price at which a monopolist sells a monopolized commodity is a monopoly price. Monopoly prices are only prices at which it is more advantageous for the monopolist to restrict the total amount to be sold than to expand sales to the limit which a competitive market would allow. (Mises, *Human Action*, p. 356)

there is some identifiable stock, say OA , and some identifiable market price, say, AC , which will result from *competitive* conditions. AB then represents the stock line under "competition." Then, according to the theory, if the demand curve is *elastic* above this price, there will be no occasion to restrict sales and obtain a higher, or "monopoly," price. Such a demand curve is DD . On the other hand, if the demand curve is inelastic above the competitive-price point, as in $D'D'$, it will pay the monopolist to restrict sales to, say, OA' (stock line represented by $A'B'$) and achieve a monopoly price, $A'M$. This would yield the maximum monetary income for the monopolist.³⁹

The inelastic demand curve, giving rise to an opportunity to monopolize, may present itself either to a single monopolist of a given product or to "an industry as a whole" when organized into a cartel of the different producers. In the latter case, *the demand curve, as it presents itself to each firm, is elastic*. At the competitive price, if one firm raises its price, the customers preponderantly shift to purchasing from its competitors. On the other hand, if the firms are cartelized, in many cases the lesser range of substitution by consumers would render *the demand curve, as*

³⁹Here we abstract from monetary expense or "money cost" considerations. When the producer is considering sale of *already produced* stock, such past monetary expenses are completely irrelevant. When he is considering present and future production for future sale, present money-cost considerations become important, and the producer strives for maximum *net* returns. At any rate, some A' point will be set, whatever the actual configuration of money costs, unless, indeed, average money costs are falling rapidly enough in this region to make the "competitive point" the most remunerative after all. It is curious that it is precisely the condition of falling average cost that has given the most worry to anti-monopoly writers, who have been concerned that one given firm in any industry might grow to "monopoly" size because of this condition. And yet, if it is "monopoly price," not monopoly, that is particularly important, such worry is clearly unfounded. On the general unimportance of cost considerations in monopoly theory, see Chamberlin, *Theory of Monopolistic Competition*, pp. 193–94.

presented to the cartel, inelastic. This condition serves as the impetus to the formation of the cartels studied above.

C. CONSEQUENCES OF MONOPOLY-PRICE THEORY

(1) *The Competitive Environment*

Before engaging in a critical analysis of the monopoly-price theory itself, we might explore some of the consequences which do or do not follow from it. In this section we for the moment assume that the monopoly-price theory is valid.⁴⁰ In the first place, it is *not* true that the “monopolist” (used here in the sense of definition 3—*an obtainer of a monopoly price*) is removed from the influence of competition or has the power to dictate to consumers at will. The best of the monopoly-price theorists admit that the monopolist is as subject to the forces of competition as are other firms. The monopolist cannot set prices as high as he would like, being limited by the configurations of consumer demand. By definition, in fact, the demand curve as presented to the monopolist *becomes elastic above the monopoly-price point*. There has been an unfortunate tendency of writers to refer to an “elastic demand curve” or an “inelastic demand curve” without pointing out that every curve has different *ranges* along which there will be varying degrees of elasticity or inelasticity. By definition, the monopoly-price point is that which maximizes the firm’s or the cartel’s income; above that price any further “restriction” of production and sales will lower the monopolist’s monetary income. This implies that the *demand curve will become elastic above that point*, just as it is also elastic above the *competitive-price point* when that is established on the market. Consumers make the curve elastic by their power of substituting purchases of other goods. Many other goods compete

⁴⁰We are devoting space to analysis of monopoly-price theory and its consequences because the theory, though invalid on the *free* market, will prove very useful in analyzing the consequences of monopoly grants by government.

“directly” in their use-value to the consumer. If some firm or combination of firms should, for example, achieve a monopoly-price for cake soap, housewives can shift to detergents and thus limit the height of the monopoly price. But, in addition, *all goods*, without exception, compete for the consumer’s dollar or gold ounce. If the price of yachts becomes too high, the consumer can substitute expenditure on mansions, or he can substitute books for television sets, etc.⁴¹

Furthermore, as the market advances, as capital is invested and the market becomes more and more specialized, the demand curve for each product tends to become more and more *elastic*. As the market develops, the range of consumers’ goods available increases enormously. The more consumers’ goods are available, the more goods can be purchased by consumers, and the more elastic, *ceteris paribus*, the demand curve for each good will tend to be. As a result, the opportunities for the establishment of monopoly prices will tend to diminish as the market and “capitalist” methods develop.

⁴¹As Mises warns:

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 catalectic competition on the market. Catalectic 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. (Mises, *Human Action*, p. 278)

(2) *Monopoly Profit versus Monopoly Gain to a Factor*

Many monopoly-price theorists have declared that establishment of the monopoly price means that the monopolist is able to attain permanent "monopoly profits." This is then contrasted with "competitive" profits and losses, which, as we have seen, disappear in the evenly rotating economy. Under "competition," if one firm is seen to be making great profits in a particular productive process, other firms rush in to take advantage of the anticipated opportunities, and the profits disappear. But in the case of the monopolist, it is asserted, his unique position allows him to keep making these profits permanently.⁴²

To use such terminology is to misconceive the nature of "profit" and "loss." Profits and losses are purely the results of entrepreneurial activity, and that activity is the consequence of the uncertainty of the future. Entrepreneurship is the action on the market that takes advantage of estimated discrepancies between selling prices and buying prices of factors. The better forecasters make profits, and the incorrect ones suffer losses. In the evenly rotating economy, where everyone has settled down to an unchanging round of activity, there can be no profit or loss because there is no uncertainty on the market. The same is true for the monopolist. In the evenly rotating economy, he obtains his "specific monopoly gain," *not* as an entrepreneur, but as the owner of the product which he sells. His monopoly gain is an added *income* to his monopolized product; whether for an individual or for a cartel, it is this product which earns more income through restriction of its supply.

The question arises: Why cannot other entrepreneurs seize the gainful opportunity and enter into the production of this good, thereby tending to eliminate the opportunity? In the case of the cartel, this is precisely the tendency that will always

⁴²We are not discussing here the generally conceded point that monopoly profits are capitalized in capital gains to the shares of the firm's stock.

prevail and lead to the breakup of a monopoly-price position. Even if new firms entering the industry are "bought off" by being offered quota positions in the old cartel, and both the new and the old firms have been able to agree on allocations of production and income, such actions will not suffice to preserve the cartel. For new firms will be tempted to acquire a share in the monopoly gains, and ever more will be created until the entire cartel operation is rendered unprofitable, there being too many firms to share the benefits. In such situations, the pressure will become greater and greater for the more efficient firms to cut loose from the cartel and to refuse further to provide a comfortable shelter for the host of inefficient firms.

In the case of a single monopolist, either his brand name and unique goodwill with the consumers prevents others from taking away his monopoly gains, or else he is a recipient of special monopoly privilege from the government, in which case other producers are prevented by force from producing the same good.

Our analysis of monopoly gain must be pursued further. We have said that the gain is derived from income from the sale of a certain product. But this product must be produced by *factors*, and we have seen that the return to any product is resolved into returns to the factors which produce it. Such "imputation," in the market, must also take place for monopoly gains. Let us say, for example, that the Staunton Washing Machine Company has been able to achieve a monopoly price for its product. It is clear that the monopoly gain cannot be attributed to the machines, the plant, etc., which produce the washers. If the Staunton Company bought these machines from other producers, then any monopoly gains would, in the long run, as the machines were replaced, accrue to the producers of the machines. In the evenly rotating economy, where entrepreneurial profits and losses disappear, and the price of a product equals the sum of the prices of its factors, all the monopoly gain would accrue to a *factor* and not a product. Furthermore, *no* income, except time

income, could accrue to the owner of a capital good, because every capital good must, in turn, be produced by higher-order factors. Ultimately, all capital goods are resolvable into *labor*, *land*, and *time* factors. But if the Staunton Washing Machine Company cannot *itself* achieve a monopoly gain from a monopoly price, then obviously it does not benefit by restricting production in order to obtain this gain. Therefore, just as *no* income in the evenly rotating economy can accrue specifically to owners of capital goods, neither can specific monopoly gains.

The monopoly gains must, then, be imputed to either labor or land factors. In the case of a *brand* name, for example, a certain *kind* of labor factor is being monopolized. A name, as we have seen, is a unique identifying label for a person (or a group of persons acting co-operatively), and is therefore an attribute of the *person* and his energy. Considered *generally*, labor is the term designating the productive efforts of personal energy, whatever its concrete content. A brand name, therefore, is *an attribute of a labor factor*; specifically the owner or owners of the firm. Or, considered *catastically*, the brand name represents the *decision-making rent* accruing to the owner and his name. If a monopoly price is achieved by the baseball prowess of Mickey Mantle, this is a specific monopoly gain attributable to a labor factor. In both of these cases, then, the monopoly price stems, not simply from the unique possession of the final product, but, more basically, *from the unique possession of one of the factors necessary to the final product*.

A monopoly gain might also be imputable to ownership of a unique natural resource or "land" factor. Thus, a monopoly price for diamonds may be attributable to a monopoly of diamond mines, from which diamonds must be ultimately produced.

Under the analysis of monopoly price, then, there cannot be, in the evenly rotating system, any such thing as "monopoly profits"; there are only specific monopoly income gains to owners of labor or land factors. No monopoly gain can accrue to an

owner of a capital good. If a monopoly price has been imposed because of a grant of monopoly privilege by the State, then obviously the monopoly gain is attributable to this special privilege.⁴³

(3) *A World of Monopoly Prices?*

Is it possible, within the framework of monopoly-price theory, to assert that *all prices* on the free market may be *monopoly* prices?⁴⁴ Can all selling prices be monopoly prices?

There are two ways in which we may analyze this problem. One is by turning our attention to the monopolized industry. As we have seen, the industry with a monopoly price restricts production in that industry (either by a cartel or a single firm), thereby releasing nonspecific factors to enter other fields of production. But it is evidently impossible to conceive of a world of monopoly prices, because this would imply a piling up of unused nonspecific factors. Since wants do not remain unfulfilled, labor and other nonspecific factors will be used somewhere, and the industries that acquire *more* factors and produce more cannot be monopoly-price industries. *Their* prices will be *below* the competitive price level.

We may also consider consumer demand. We have seen that a necessary condition for the establishment of monopoly price is a consumers' demand schedule inelastic above the competitive-price point. Obviously, it is impossible for *every* industry to have such an inelastic demand schedule. For the definition of *inelastic* is that consumers will spend a greater total sum of money on the good when the price is higher. But consumers

⁴³To attain a monopoly price, the factor-owner must meet two conditions: (*a*) He must be a monopolist (in the sense of definition 1) over the factor; if he were not, the monopoly gain could be bid away by competitors entering the field; and (*b*) the demand curve for the factor must be inelastic above the competitive-price point.

⁴⁴This is the underlying assumption in Mrs. Joan Robinson's *Economics of Imperfect Competition*.

have a certain given total stock of money assets and money income, as well as a given amount, at any one time, which they may allocate to consumption spending. If they spend more on a certain good, they have less to spend on other goods. Therefore, they cannot spend more on *every* good, and not all prices can be monopoly prices.

There can never, then, be a world of monopoly prices, even assuming monopoly-price theory. Because of the fixity of consumers' monetary stock and the employment of displaced factors, monopoly prices could not be established in more than approximately half of the economy's industries.

(4) "Cutthroat" Competition

A popular theme in the literature is the alleged evil of "cut-throat competition." Curiously, cutthroat, or "excessive," competition, is linked by critics to the achievement of a monopoly price. The usual charge is that a "big" firm, for example, deliberately sells below the most profitable price, even to the extent of suffering losses. The firm acts so peculiarly in order to force another firm producing the same product to cut its price also. The "stronger" firm, with the capital resources to endure the losses, then drives the "weaker" firm out of business and establishes a monopoly of the field.

But, first, what is wrong with such a monopoly (definition 1)? What is wrong with the fact that the firm more efficient in serving the consumer remains in business, while consumers refuse to patronize the inefficient firm? A firm's suffering losses signifies that it is not as successful as other firms in serving consumer desires. Factors then shift from the inefficient to the efficient firms. A firm's going out of business harms no owner of any factor it employs and injures only the entrepreneur who miscalculated in his advance-production decisions. A firm goes out of business precisely because it suffers entrepreneurial losses, i.e., its monetary revenues in sales to consumers are less than the money it paid out previously to owners of factors. But so much money had to be paid out for factors, i.e., costs were so

high, because these factors could earn as much money elsewhere. If this entrepreneur cannot profitably employ the factors at their given prices, the reason is that factor-owners can sell their services to other firms. In so far as factors may be specific to the firm, and to the extent that their owners will accept a reduced price and income as the price of the firm's product is reduced, total money costs can be reduced and the firm can be maintained in operation. Therefore, failure by business firms is due solely to entrepreneurial error in forecasting and to entrepreneurial inability to secure the factors of production by outbidding those firms more successful in serving the consumer.⁴⁵ Thus, the elimination of inefficient firms cannot harm factor-owners or lead to their "unemployment," since their failure was due precisely to the more attractive competing bids made by other firms (or, in some cases, to the alternatives of leisure or production outside the market). Their failure also helps consumers by transferring resources from wasteful to efficient producers. It is largely the entrepreneurs who suffer from their own errors, errors incurred through their own voluntarily adopted risks.

It is curious that the critics of "cutthroat competition" are generally the same as those who complain about the market's subversion of "consumers' sovereignty." For selling a product at very low prices, even at short-term losses, is a bonanza to the consumers, and there is no reason why this gift to the consumers should be deplored. Furthermore, if the consumers were really indignant about this form of competition, they would scornfully refuse to accept this gift and instead continue to patronize the allegedly "victimized" competitor. When they do not do so and instead rush to acquire the bargains, they are indicating their perfect contentment with this state of affairs. From the point of view of consumers' sovereignty or individual sovereignty, there is nothing at all wrong with "cutthroat competition."

⁴⁵Bidding takes place among numerous firms in various industries, not only among firms in the same industry.

The only conceivable problem is the one usually cited: that after the single firm has driven everyone else out of business through sustained selling at very low prices, *then* the final monopolist will restrict sales and raise its price to a monopoly price. Even granting for a moment the tenability of the monopoly-price concept, this does not seem a very likely occurrence. In the first place, it is time enough to complain *after* the monopoly price is established, especially since we have seen that we cannot consider "monopoly" *per se* (definition 1) as an evil.⁴⁶ Secondly, a firm will not always be able to achieve a monopoly price. In all such cases, including (*a*) where not all the other firms in the industry can be driven out, or (*b*) where the demand curve is such that the monopolist cannot achieve a monopoly price, the "cutthroat competition" is then a pure boon with no harmful effects.

Incidentally, it is by no means true that the *large* firms will always be the strongest in a "price-cutting war." Often, depending on the concrete conditions, it is the smaller, more mobile firm, not burdened with heavy investments, that is able to "cut its costs" (particularly when its factors are more specific to it, such as the labor of its management) and outcompete the larger firm. In such cases, of course, there is no monopoly-price problem whatever. The fact that the lowly pushcart peddler for centuries has been set upon by governmental violence at the behest of his more lordly and heavily capitalized

⁴⁶An amusing instance of this concern is this argument for compulsory legal cartelization by West German industrialists: "that the so-called unrestricted competition would produce a catastrophe in which the stronger industries would destroy the weaker and establish themselves as monopolies." Create an *inefficient* monopoly now to avoid an *efficient* monopoly later! M.S. Handler, "German Unionism Supports Cartels," *New York Times*, March 17, 1954, p. 12. For other such instances, see Charles F. Phillips, *Competition? Yes, but . . .* (Irvington-on-Hudson, N.Y.: Foundation for Economic Education, 1955).

competitors bears witness to the practical possibilities of such a situation.⁴⁷

Suppose, however, that after this lengthy and costly process, a firm has finally been able to achieve a monopoly price by the route of “cutthroat competition.” What is there to prevent this monopoly gain from attracting other entrepreneurs who will try to undercut the existing firm and achieve some of the gain for themselves? What is to prevent new firms from coming in and driving the price down to competitive levels again? Is the firm to resume “cutthroat competition” and the same deliberate losing process once more? In that case, we are likely to find that consumers of the good will be receiving gifts far more often than facing a monopoly price.⁴⁸

⁴⁷What of the allegedly vast “financial power” of a big firm, rendering it impervious to cost? In a brilliant article, Professor Wayne Leeman has pointed out that a larger firm will also have larger volume and will therefore suffer greater losses when selling below cost. Having a larger volume, it has more to lose. What is relevant, therefore, is not the *absolute* size of the financial resources of the competing firms, but the size of their resources in relation to their volume of sales and expenditures. And this changes the conventional picture drastically. Wayne A. Leeman, “The Limitations of Local Price-Cutting as a Barrier to Entry,” *Journal of Political Economy*, August, 1956, pp. 331–32.

⁴⁸After investigating conditions in the retail gasoline industry (one particularly subject to allegedly “cutthroat” competition), an economist declared:

Some people think that leading marketers occasionally reduce prices to drive out competition so that they may later enjoy a monopoly. But, as one oil man has put it, “That is like trying to sweep back the ocean to get a dry place to sit down” [Competitors] . . . never scare, and never hesitate for long, and would move in immediately when prices were restored, offering little opportunity to a single marketer to recoup his losses. (Harold Fleming, *Oil Prices and Competition* [American Petroleum Institute, 1953], p. 54)

Professor Leeman has pointed out⁴⁹ that the smaller firm, driven out by "cutthroat competition," may simply close down, wait for the larger firm to reap its expected gain of a higher "monopoly price," and then reopen! More important, even if the small firm is driven into bankruptcy, its *physical plant* remains intact, and it may be bought by a new entrepreneur at bargain prices. As a result, the new firm will be able to produce at very low cost and damage the "victor" firm considerably. To avoid this threat, the big firm would have to delay raising its price for the very long time required for the small plant to wear out or become obsolete.

Leeman also demonstrates that the big firm could not keep new, small firms out by a mere *threat* of cutthroat competition. For (*a*) new firms will probably interpret the high price charged by the "monopolist" as a sign of inefficiency, providing a ripe opportunity for profits; and (*b*) the "monopolist" can demonstrate his power satisfactorily only by *actually* selling at low prices for long periods of time. Hence, only by keeping its costs down and its prices low, i.e., by *not* extracting a monopoly price, can the "victor" firm keep out potential rivals. But this means that the cutthroat competition, far from being a route to a monopoly price, was a pure gift to consumers and a pure loss to the "victor."⁵⁰

But what of a standard problem brought forward by critics of cutthroat competition"? Cannot the big firm check the entry of efficient small firms by simply buying up the new rival's plant and putting it out of production? Perhaps a short period of cutthroat price-cutting will convince the new small firm of the advantage of selling out and will permit the monopolist to avoid the long periods of losses just mentioned.

⁴⁹Leeman, "The Limitations of Local Price-Cutting," pp. 330-31.

⁵⁰A leading oil executive told Leeman: "We have invested too much in plant and equipment in this area to want to invite in a host of competitors under an umbrella of high prices." *Ibid.*, p. 331.

No one seems to realize, however, the high costs such buying will entail. Leeman points out that the really efficient small firm can demand such a high price for its assets as to make the whole procedure prohibitively expensive. And, further, any later attempt by the large firm to recoup its losses by charging the monopoly price will only invite new entry by other firms and redouble the expensive buying-out process again and again. Buying out competitors, then, will be even more costly than simple cutthroat competition, which we have seen to be unprofitable.^{51,52}

⁵¹Leeman points out, in a striking refutation of one of the myths of our age, that this is *precisely* what happened to John D. Rockefeller.

According to a widely accepted view, he softened up small competitors in the oil business by a period of intensive price competition, bought them out for a song, and then raised prices to consumers to make up his losses. Actually, the softening-up process did not work . . . for Rockefeller usually ended up paying . . . so handsomely that the sellers, often in violation of promises made, proceeded to build another plant for its nuisance value, hoping again to collect a reward from their benefactor. . . . Rockefeller after a time got tired of paying . . . "blackmail" and . . . decided that the best way to hold the dominant position he wanted was to keep profit margins small all the time.

(*Ibid.*, p. 332)

Also see Marian V. Sears, "The American Businessman at the Turn of the Century," *The Business History Review*, December, 1956, p. 391. Moreover, Professor McGee has shown, after an intensive investigation, that in not one instance did Standard Oil attempt "predatory price-cutting," thus destroying the Standard Oil myth once and for all. John S. McGee, "Predatory Price-Cutting: The Standard Oil (New Jersey) Case," *The Journal of Law and Economics*, October, 1958, pp. 137-69.

⁵²Leeman concludes, quite correctly, that large rather than small firms dominate many markets, *not* as a result of victorious cutthroat competition and monopolistic pricing, but by taking advantage of the low costs of much large-scale production and keeping prices low in fear of *potential* as well as actual rivals. Leeman, "The Limitations of Local Price-Cutting," pp. 333-34.

A final argument against the doctrines of “cutthroat competition” is that *it is impossible to determine whether it is taking place or not.* The fact that a monopoly might ensue afterward does not even establish the motive and is certainly no *criterion* of cutthroat procedures. One proposed criterion has been selling “below costs”—most cogently, below what is usually termed “variable costs,” the expenses of using factors in production, assuming previously sunk investment in a fixed plant. But this is no criterion at all. As we have already declared, *there is no such thing as costs* (apart from speculation on a higher future price) *once the stock has been produced.* Costs take place along the path of decisions to produce—at each step along the way that investments (of money and effort) are made in factors. The allocations, the opportunities forgone, take place at each step as future production decisions must be taken and commitments made. Once the stock has been produced, however (and there is no expectation of a price rise), the sale is *costless*, since there are no advantages forgone by selling the product (costs in making the sale being here considered negligible for purposes of simplification). Therefore, the stock will tend to be sold at whatever price is obtainable. There is no such thing, then, as “selling below costs” on stock already produced. The cutting of price may just as well be due to inability to dispose of stock at any higher price as to “cutthroat” competition, and it is impossible for an observer to separate the two elements.

D. THE ILLUSION OF MONOPOLY PRICE ON THE UNHAMPERED MARKET

Up to this point we have explained the neoclassical theory of monopoly price and have pointed out various misconceptions about its consequences. We have also shown that there is nothing bad about monopoly price and that it constitutes no infringement on any legitimate interpretation of individuals' sovereignty or even of consumers' sovereignty. Yet there has been a great deficiency in the economic literature on this whole issue: a failure to realize *the illusion in the entire concept*

of monopoly price.⁵³ If we turn to the definition of monopoly price on page 672 above, or the diagrammatic interpretation in Figure 67, we find that there is assumed to be a “competitive price,” to which a higher “monopoly price”—an outcome of restrictive action—is contrasted. Yet, if we analyze the matter closely, it becomes evident that the entire contrast is an illusion. In the market, there is no discernible, identifiable competitive price, and therefore there is no way of distinguishing, even conceptually, any given price as a “monopoly price.” The alleged “competitive price” can be identified neither by the producer himself nor by the disinterested observer.

Let us take a firm which is considering the production of a certain good. The firm can be a “monopolist” in the sense of producing a unique good, or it can be an “oligopolist” among a few firms. Whatever its position, it is irrelevant, because we are interested only in whether or not it can achieve a monopoly price as compared to a competitive price. This, in turn, depends on the elasticity of the demand curve as it is presented to the firm over a certain range. Let us say that the firm finds itself with a certain demand curve (Figure 68).

The producer must decide how much of the good to produce and sell in a future period, i.e., at the time when this demand curve will become relevant. He will set his output at whatever point is expected to maximize his monetary earnings (other psychic factors being equal), taking into consideration the necessary monetary expenses of production for each quantity, i.e., the amounts that can be produced for each amount of money invested. As an entrepreneur he will attempt to maximize profits, as a labor-owner to maximize his monetary income, as a land-owner to maximize his monetary income from that factor.

⁵³We have found in the literature only one hint of the discovery of this illusion: Scoville and Sargent, *Fact and Fancy in the T.N.E.C. Monographs*, p. 302. See also Bradford B. Smith, “Monopoly and Competition,” *Ideas on Liberty*, No. 3, November, 1955, pp. 66 ff.

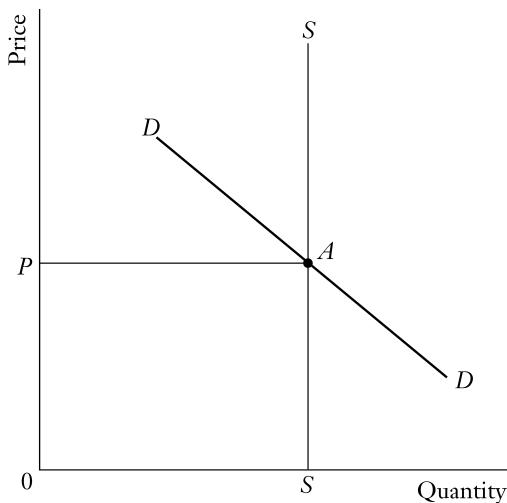


FIGURE 68. PRICE FORMATION IN A FREE MARKET

On the basis of this logic of action, the producer sets his investment to produce a certain stock, or as a factor-owner to sell a certain amount of service, say OS . Assuming that he has correctly estimated his demand curve, the intersection of the two will establish the market-equilibrium price, OP or SA .

The critical question is this: Is the market price, OP , a "competitive price" or a "monopoly price"? The answer is that *there is no way of knowing*. Contrary to the assumptions of the theory, there is no "competitive price" which is clearly established somewhere, and which we may compare OP with. Neither does the elasticity of the demand curve establish any criterion. Even if all the difficulties of discovering and identifying the demand curve were waived (and this identifying can be done, of course, only by the producer himself—and only in a tentative fashion), we have seen that the price, if accurately estimated, will always be set by the seller so that the *range above the market price will be elastic*. How is anyone, including the producer himself, to know whether or not this market price is competitive or monopoly?

Suppose that, after having produced OS , the producer decides that he will make more money if he produces less of the good in the next period. Is the higher price to be gained from such a cutback necessarily a “monopoly price”? Why could it not just as well be a movement from a *subcompetitive* price to a competitive price? In the real world, a demand curve is not simply “given” to a producer, but must be estimated and discovered. If a producer has produced too much in one period and, in order to earn more income, produces less in the next period, *this is all that can be said about the action*. For there is no criterion that will determine whether or not he is moving from a price *below* the alleged “competitive price” or moving *above* this price. Thus, we cannot use “restriction of production” as the test of monopoly vs. competitive price. A movement from a subcompetitive to a competitive price also involves a “restriction” of production of this good, coupled, of course, with an expansion of production in other lines by the released factors. *There is no way whatever to distinguish such a “restriction” and corollary expansion from the alleged “monopoly-price” situation.*

If the “restriction” is accompanied by increased leisure for the owner of a labor factor rather than increased production of some other good on the market, it is still an expansion of the yield of a consumers’ good—leisure. There is still no way of determining whether the “restriction” resulted in a “monopoly” or a “competitive” price or to what extent the motive of increased leisure was involved.

To define a *monopoly price* as a price attained by selling a smaller quantity of a product at a higher price is therefore meaningless, since the same definition applies to the “competitive price” as compared with a subcompetitive price. There is no way to define “monopoly price” because there is also no way of defining the “competitive price” to which the former must refer.

Many writers have attempted to establish some criterion for distinguishing a monopoly price from a competitive price. Some call the monopoly price that price achieving permanent,

long-run “monopoly profits” for a firm. This is contrasted to the “competitive price,” at which, in the evenly rotating economy, profits disappear. Yet, as we have already seen, there are never permanent monopoly profits, but only monopoly gains to owners of land or labor factors. Money costs to the entrepreneur, who must buy factors of production, will tend to equal money revenues in the evenly rotating economy, whether the price is competitive or monopoly. The monopoly gains, however, are secured as *income* to labor or land factors. *There is therefore never any identifiable element that could provide a criterion of the absence of monopoly gain.* With a monopoly gain, the factor’s income is greater; without it, it is less. But where is the criterion for distinguishing this from a change in the income of a factor for “legitimate” demand and supply reasons? How to distinguish a “monopoly gain” from a simple increase in factor income?

Another theory attempts to define a monopoly gain as income to a factor greater than that received by another, similar factor. Thus, if Mickey Mantle receives a greater monetary income than another outfielder, that difference represents the “monopoly gain” resulting from his natural monopoly of unique ability. The crucial difficulty with this approach is that it implicitly adopts the old classical fallacy of treating all the various labor factors, as well as all the various land factors, as somehow homogeneous. If all the labor factors are somehow *one* good, then the variations in income accruing to each must be explained by reference to some sort of “monopolistic” or other mysterious element. Yet a good with a homogeneous supply is only a *good* if all its units are interchangeable, as we saw at the beginning of this work. But the very fact that Mantle and the other outfielder are treated differently in the market signifies that they are selling *different*, not the same, goods. Just as in tangible commodities, so in personal labor services (whether sold to other producers or to consumers directly): each seller may be selling a unique good, and yet he is “competing” with more or less close substitutability against all the other sellers for the purchases of consumers (or lower-order producers). But since each

good or service is unique, we cannot state that the difference between the prices of any two represents any sort of "monopoly price"; monopoly price vis-à-vis competitive price can refer only to alternative prices of *the same good*. Mickey Mantle may indeed be a person of unique ability and a "monopolist" (*as is everyone else*) over the disposition of his own talents, but whether or not he is achieving a "monopoly price" (and therefore a monopoly gain) from his service can never be determined.

This analysis is equally applicable to land. It is just as illegitimate to dub the difference between the income of the site of the Empire State Building and that of a rural general store a "monopoly gain" as to apply the same concept to the additional income of Mickey Mantle. The fact that both areas are land makes them no more homogeneous on the market than the fact that Mickey Mantle and Joe Doakes are both baseball players or, in a broader category, both laborers. The fact that each is remunerated at a different price and income signifies that they are considered different on the market. To treat differential gains for *different* goods as instances of "monopoly gain" is to render the term completely devoid of significance.

Neither is the attempt to establish the existence of idle resources as a criterion of monopolistic "withholding" of factors any more valid. Idle labor resources will always mean increased leisure, and therefore the leisure motive will always be intertwined with any alleged "monopolistic" motive. It therefore becomes impossible to separate them. The existence of idle land may always be due to the fact of the relative scarcity of labor as compared with available land. This relative scarcity makes it more serviceable to consumers, and hence more remunerative, to invest labor in certain areas of land, and not in others. The land areas least productive of potential earnings will be forced to lie idle, the amount depending on how much labor supply is available. We must stress that all "land" (i.e., every nature-given resource) is involved here, including urban sites and natural resources as well as agricultural areas. The allocation of labor to land is comparable to Crusoe's having to decide on which plot

of ground to build his shelter or in which stream to fish. Because of the natural, as well as voluntary, limitations on his labor effort, that area of land on which he produces the highest utility will be cultivated, and the rest will be left idle. This element also cannot be separated from any alleged monopolistic element. For if someone objects that the "withheld" land is of the *same quality* as the land in use and therefore that monopolistic restriction is afoot, it may always be answered that the two pieces of land *necessarily differ*—in *location* if in no other attribute—and that the very fact that the two are treated differently on the market tends to confirm this difference. By what mystical criterion, then, does some outsider assert that the two lands are economically identical? In the case of capital goods it is also true that the limitations of available labor supply will often make idle those goods which are expected to yield a lesser return as compared with other capital that can be employed by labor. The difference here is that idle capital goods are always the result of previous *error* by producers, since no such idleness would be necessary if the present events—demands, prices, supplies—had all been forecast correctly by all the producers. But though error is always unfortunate, the keeping idle of unremunerative capital is the best course to follow; it is making the best of the *existing* situation, not of the situation that would have obtained if foresight had been perfect. In the evenly rotating economy, of course, there would never be idle capital goods; there would be only idle land and idle labor (to the extent that leisure is voluntarily preferred to money income). In no case is it possible to establish an identification of purely "monopolistic" withholding action.

A similar proposed criterion for distinguishing a monopoly price from a competitive price runs as follows: In the competitive case, the marginal factor produces no rent; in the monopoly-price case, however, use of the monopolized factor is restricted, so that its marginal use *does* yield a rent. We may answer, in the first place, that there is no reason to say that every factor will, in the competitive case, always be worked until it

yields *no* rent. On the contrary, every factor is worked in a region of *diminishing* but positive marginal product, not zero product. Indeed, as we have shown above, if the value product of a unit of a factor is zero, it will not be used at all. Every unit of a factor is used because it yields a value product; otherwise, it would not be used in production. And if it yields a value product, it will earn its discounted value product in income.

It is clear, further, that this criterion could never be applied to a monopolized labor factor. What labor factor earns a *zero* wage in a competitive market? Yet many monopolized (definition 1) factors are labor factors—such as brand names, unique services, decision-making ability in business, etc. Land is more abundant than labor, and therefore some lands will be idle and receive zero rent. Even here, however, it is only the *submarginal* lands that receive no rent; the *marginal* lands in use receive *some* rent, however small.

Furthermore, even if it were true that marginal lands received zero rent, this would be irrelevant for our discussion. It would apply only to “poorer” or “inferior,” as compared with more productive, lands. But a criterion of monopoly or competitive price must apply, *not* to factors of *different* quality, but to homogeneous factors. The monopoly-price problem is one of a supply of units of *one* homogeneous factor, *not* of various different factors within the one broad category, land. In this case, as we have stated, every factor will earn some value product in a diminishing zone, and not zero.⁵⁴

Since, in the “competitive” case, all factors in use will earn some rent, there is still no basis for distinguishing a “competitive” from a “monopoly” price.

⁵⁴In the case of depletable natural resources, *any* allocation of use necessarily involves the use of some of the resource in the present (even considering the resource as homogeneous) and the “withholding” of the remainder for allocation to future use. But there is no way of conceptually distinguishing such withholding from “monopolistic” withholding and therefore of discussing a “monopoly price.”

Another very common attempt to distinguish between a competitive and a monopoly price rests on the alleged ideal of "marginal-cost pricing." Failure to set prices equal to marginal cost is considered an example of "monopoly" behavior. There are several fatal errors in this analysis. In the first place, as we shall see further below, there *can be* no such thing as "pure competition," that hypothetical state in which the demand curve for the output of a firm is infinitely elastic. Only in this never-never land does price equal marginal cost in equilibrium. Otherwise, marginal cost equals "marginal revenue" in the ERE, i.e., the revenue that a given increment of cost will yield to the firm. (Only if the demand curve were perfectly elastic would marginal revenue boil down to "average revenue," or price.) There is now no way of distinguishing "competitive" from "monopolistic" situations, since marginal cost will in *all* cases tend to equal marginal revenue.

Secondly, this equality is only a *tendency* that *results from* competition; it is not a *precondition* of competition. It is a property of the equilibrium of the ERE that the market economy always tends toward, but never can reach. To uphold it as a "welfare ideal" for the real world, an ideal with which to gauge existing conditions, as so many economists have done, is to misconceive completely the nature of the market and of economics itself.

Thirdly, there is no reason why firms should ever deliberately balk at being guided by marginal-cost considerations. Their aiming at maximum net revenue will see to that. But there is no one simple, determinate "marginal cost," because, as we have seen above, there is no one identifiable "short-run" period, such as is assumed by current theory. The firm faces a gamut of variable periods of time for the investment and use of factors, and its pricing and output decisions depend on the future period of time which it is considering. Is it buying a new machine, or is it selling old output piled up in inventory? The marginal cost considerations will differ in the two cases.

It is clear that it is impossible to distinguish competitive or monopolistic behavior on the part of a firm. It is no more possible to speak of monopoly price in the case of a cartel. In the first place, a cartel, when it sets the amount of its production in advance for the next period, is in *exactly the same* position as the single firm: it sets the amount of its production at that point which it believes will maximize its monetary earnings. There is still no way of distinguishing a monopoly from a competitive or a subcompetitive price.

Furthermore, we have seen that there is no essential difference between a cartel and a merger, or between a merger of producers with money assets and a merger of producers with previously existing capital assets to form a partnership or corporation. As a result of the tradition, still in evidence in the literature, of identifying a *firm* with a *single* individual entrepreneur or producer, we tend to overlook the fact that most existing firms are constituted through the voluntary merging of monetary assets. To pursue the similarity further, suppose that firm A wishes to expand its production. Is there an essential difference between its buying new land and building a new plant, and its purchasing an old plant owned by another firm? Yet the latter case, if the plant constitutes all the assets of firm B, will involve, in fact, a merger of the two firms. The degree of merger or the degree of independence in the various parts of the productive system will depend entirely upon the most remunerative method for the producers concerned. This will also be the method most serviceable to the consumers. And there is no way of distinguishing between a cartel, a merger, and one larger firm.

It might be objected at this point that there are many useful, indeed indispensable, theoretical concepts which cannot be practically isolated in their pure form in the real world. Thus, the interest rate, in practice, is not strictly separable from profits, and the various components of the interest rate are not separable in practice, but they can be separated in analysis. But these concepts *are each definable in terms independent of one another and of the complex reality being investigated*. Thus, the

“pure” interest rate may never exist in practice, but the market interest rate is theoretically analyzable into its components: pure interest rate, price-expectation component, risk component. They are so analyzable because each of these components is *definable independently* of the complex market-interest rate and, moreover, is *independently deducible from the axioms of praxeology*. The existence and determination of the pure interest rate is strictly deducible from the principles of human action, time preference, etc. Each of these components, then, is arrived at *a priori* in relation to the concrete market interest rate itself and is deduced from previously established truths about human action. In all such cases, the components are definable through independently established theoretical criteria. In this case, however, there is, as we have seen, *no independent way by which we can define and distinguish a “monopoly price” from a “competitive price.”* There is no prior rule available to guide us in framing the distinction. To say that the monopoly price is formed when the configuration of demand is inelastic above the competitive price tells us nothing because we have no way of independently defining the “competitive price.”

To reiterate, the seemingly unidentifiable elements in other areas of economic theory are independently deducible from the axioms of human action. Time preference, uncertainty, changes in purchasing power, etc., can all be independently established by prior reasoning, and their interrelations analyzed through the method of mental constructions. The evenly rotating economy can be seen as the ever-moving goal of the market, through our analysis of the direction of action. But here, all that we know from prior analysis of human action is that individuals co-operate on the market to sell and purchase factors, transform them into products, and expect to sell the products to others—eventually to final consumers; and that the factors are sold, and entrepreneurs undertake the production, in order to obtain monetary income from the sale of their product. How much any given person will produce of any given good or service is determined by his expectations of greatest monetary income, other psychic

considerations being equal. But nowhere in the analysis of such action is it possible to separate conceptually an alleged “restrictive” from a nonrestrictive act, and nowhere is it possible to define “competitive price” in any way that would differ from the *free-market price*. Similarly, there is no way of conceptually distinguishing “monopoly price” from *free-market price*. But if a concept has no possible grounding in reality, then it is an empty and illusory, and not a meaningful, concept. On the free market there is no way of distinguishing a “monopoly price” from a “competitive price” or a “subcompetitive price” or of establishing any changes as movements from one to the other. No criteria can be found for making such distinctions. The concept of monopoly price as distinguished from competitive price is therefore untenable. We can speak only of the *free-market price*.

Thus, we conclude not only that there is nothing “wrong” with “monopoly price,” but also that the entire concept is meaningless. There is a great deal of “monopoly” in the sense of a single owner of a unique commodity or service (definition 1). But we have seen that this is an inappropriate term and, further, that it has no catallactic significance. A “monopoly” would be of importance only if it led to a monopoly price, and we have seen that there is no such thing as a monopoly price or a competitive price on the market. There is only the “free-market price.”

E. SOME PROBLEMS IN THE THEORY OF THE ILLUSION OF MONOPOLY PRICE

(1) *Location Monopoly*

It might be objected that in the case of a *location monopoly*, a monopoly price *can* be distinguished from a competitive price on a free market. Let us consider the case of cement. There are cement consumers, say, who live in Rochester. A cement firm in Rochester could competitively charge a mill price of X gold grams per ton. The nearest competitor is stationed in Albany, and freight costs from Albany to Rochester are three gold grams per ton. The Rochester firm is then able to increase its price to

obtain $(X + 2)$ gold grams per ton from Rochester consumers. Does its locational advantage not confer upon it a monopoly, and is not this higher price a monopoly price?

First, as we have seen above, the good that we must consider is the good in the hands of the consumers. The Rochester firm is superior locationally for the Rochester market; the fact that the Albany firm cannot compete is not to be blamed on the Rochester firm. Location is also a factor of production. Furthermore, another firm could, if it wished, set itself up in Rochester to compete.

Let us, however, be generous to the location-monopoly theorists and grant that, in a sense (definition 1) this monopoly is enjoyed by *all* individual sellers of any good or service. This is due to the eternal law of human action, and indeed of all matter, *that only one thing can be in one place at one time*. The retail grocer on Fifth Street enjoys a monopoly of the sale of groceries *for that street*; the grocer on Fourth Street enjoys a monopoly of grocery service for *his street*, etc. In the case of stores which all cluster together in the same block, say radio stores, there are still a few feet of sidewalk over which each owner of a radio store exercises a location monopoly. Location is as specific to a firm or plant as ability is to a person.

Whether this element of location takes on any importance in the market depends on the configuration of consumer demand and on which policy is most profitable for each seller in the concrete case. In some cases a grocer, for example, can charge higher prices for his goods than another because of his monopoly of the block. In that case, his monopoly over the good "eggs available on Fifth Street" has taken on such a significance for the consumers in his block that he can charge them a higher price than the Fourth Street grocer and still retain their patronage. In other cases, he cannot do so because the bulk of his customers will desert him for the neighboring grocer if the latter's prices are lower.

Now, a good is homogeneous if consumers evaluate its units in the same way. If that condition holds, its units will be sold for

a uniform price on the market (or rapidly tend to be sold at a uniform price). If, now, various grocers must adhere to a uniform price, then there *is* no location monopoly.

But what of the case where the Fifth Street grocer *can* charge a higher price than his competitor? Do we not have here a clear case of an identifiable monopoly price? Can we not say that the Fifth Street grocer who can charge more than his competitor for the same goods has found that the demand curve for his products is inelastic for a certain range above the "competitive price," the competitive price being taken as that equal to the price charged by his neighbor? Can we not say this even though we recognize that there is no "infringement on consumers' sovereignty" in this action, since it is due to the specific tastes of his consuming customers? The answer is an emphatic *No*. The reason is that the economist can never equate a good with some physical substance. A *good*, we remember, is a quantity of a thing divisible into a supply of homogeneous units. And this homogeneity, we repeat, must be in the minds of the consuming public, *not* in its physical composition. If a malted milk consumed at a luncheonette is the same good in the minds of consumers as the malted at a fashionable restaurant, then the price of the malted will be the same in both places. On the other hand, we have seen that the consumer buys not only the physical good, *but all attributes of a thing*, including its name, the wrappings, and the atmosphere in which it is consumed. If most of the consumers differentiate sufficiently between food consumed in the restaurant and food consumed at the luncheonette, so that a higher price can be charged in one case than in the other, then the food *is* a different good in each case. A malted consumed in the restaurant becomes, for a significant body of consumers, a *different good* from a malted consumed at the luncheonette. The same situation obtains for brand names, even in those situations where a minority of the consumers do regard several brands as "actually" the same good. As long as the bulk of the consumers regard them as different goods, then they *are* different goods, and their prices will differ. Similarly, goods may

differ physically, but as long as they are regarded by consumers as the same, they *are* the same good.⁵⁵

The same analysis applies to the case of location. Where the Fifth Street consumers regard groceries at Fifth Street as a significantly better good than groceries at Fourth Street, so that they are willing to pay more rather than walk the extra distance, *then the two will become different goods*. In the case of location, there will always be a tendency for the two to be different goods, but very often this will not be significant on the market. For a consumer may and almost always will prefer groceries available on this block to groceries available on the next block, but often this preference will *not be enough* to overcome any higher price for the former goods. If the bulk of the consumers shift to the latter good at a higher price, the *two, on the market, will be the same good*. And it is action on the market, real action, that we are interested in, not the nonsignificant pure valuations by themselves. In praxeology we are interested only in preferences that result in, and are therefore demonstrated by, *real choices*, not in the preferences themselves.

A good cannot be independently established as such apart from consumer preference on the market. Groceries on Fifth Street may be higher in price than groceries on Fourth Street to the Fifth Street consumers. If so, it will be because the former is a different good to the consumers. In the same way, Rochester cement may cost more than Albany cement in *Albany* to Rochester consumers, but the two are different goods by virtue of their difference in location. And there is no way of determining whether or not the price in Rochester or on Fifth Street is a "monopoly price" or a "competitive price" or of determining what the "competitive price" might be. It certainly could not be the price charged by the other firm elsewhere, since these prices are really for two different goods. There is no theoretical criterion by which we can distinguish simple locational income to sites from alleged "monopoly" income to sites.

⁵⁵See the reference to Abbott, *Quality and Competition*, in note 28 above.

There is another reason for abandoning any theory of locational monopoly price. If all sites are purely specific in locational value, there is no sense to the statement that they earn a “monopoly rent.” For monopoly price, according to the theory, can be established only by selling less of a good and thus commanding a higher price. But *all* locational properties of a site differ in quality because they differ in location, and therefore there can be no restriction of sales to *part* of a site. Either a site is in production, or it is idle. But the idle sites necessarily differ in location from the sites in use and are therefore idle *because their value productivity is inferior*. They are idle because they are submarginal, not because they are “monopolistically” withheld parts of a certain homogeneous supply.

The locational-monopoly-price theorist, then, is refuted whichever way he turns. If he takes a limited view of locational monopoly (in the sense of definition 1) and confines it to such examples as Rochester vs. Albany, he can never establish a criterion for monopoly price, for another firm can enter Rochester, either actually or potentially, to bid away any locational profit that the first firm may earn. His prices cannot be compared with those of his competitors, because they are selling different goods. If the theorist takes an extensive view of locational monopoly—which would take into consideration the fact that every location necessarily differs from every other—and compares locations a few feet apart, then there is no sense at all in talking of “monopoly price,” for (a) the price of a product at one location cannot be precisely compared with another, because they are different goods, and (b) each site is different in locational quality, and therefore no site can be conceptually split up into different homogeneous units—some to be sold and some to be withheld from the market. Each site is a unit in itself. But such a splitting is essential for the establishment of a monopoly-price theory.

(2) *Natural Monopoly*

A favorite target of the critics of “monopoly” is the so-called “natural monopoly” or “public utility,” where “competition is

naturally not feasible." A typically cited case is the water supply of a city. It is supposed to be technologically feasible for only one water company to exist for serving a city. No other firms are therefore able to compete, and special interference is alleged to be necessary to curb monopoly pricing by this utility.

In the first place, such a "limited-space monopoly" is just one case in which only one firm in a field is profitable. How many firms will be profitable in any line of production is an institutional question and depends on such concrete data as the degree of consumer demand, the type of product sold, the physical productivity of the processes, the supply and pricing of factors, the forecasting of entrepreneurs, etc. Spatial limitations may be unimportant; as in the case of the grocers, the spatial limits may allow only the narrowest of "monopolies"—the monopoly over the portion of sidewalk owned by the seller. On the other hand, conditions may be such that only one firm may be feasible in the industry. But we have seen that this is irrelevant; "monopoly" is a meaningless appellation, unless monopoly price is achieved, and, once again, there is no way of determining whether the price charged for the good is a "monopoly price" or not. And this applies to *all* circumstances, including a nation-wide telephone firm, a local water company, or an outstanding baseball player. All these persons or firms will be "monopolies" within their "industry." And in all these cases, the dichotomy between "monopoly price" and "competitive price" is still an illusory one. Furthermore, there are no rational grounds by which we can preserve a separate sphere for "public utilities" and subject them to special harassment. A "public utility" industry does not differ conceptually from any other, and there is no nonarbitrary method by which we can designate certain industries to be "clothed in the public interest," while others are not.⁵⁶

⁵⁶On "natural monopoly" doctrine as applied to the electrical industry, see Dean Russell, *The TVA Idea* (Irvington-on-Hudson, N.Y.: Foundation for Economic Education, 1949), pp. 79–85. For an excellent discussion of the regulation of public utilities, see Dewing, *Financial Policy of Corporations*, I, 308–68.