ECONOMIC CALCULATION AND WELFARE CONSIDERATIONS IN MONOPOLY AND FIRM THEORY

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What is the problem with monopoly neoclassical theory from an Austrian point of view?

The critical reaction of Austrian economists to the neoclassical monopoly theory could be explained by two major facts: this theory lacks definitional clarity, necessary for any serious theoretical analysis, and it contains a dangerous theory of welfare, which is not only incorrect, but tries to justify an aggressive intervention of the state into the realm of purely voluntary market exchanges.

The problems with monopolist as single producer and seller of a good resides, for neoclassical theory, in his capacity of reaching a higher price than in the perfect competition model, by offering (and selling) a lower quantity of goods. By this method, the monopolist increases his revenues and profit, as he meets an inelastic demand curve. Consumers are hurt, says the neoclassical economist. Therefore, the state must intervene, in order to prevent future monopolist “exploitation”.

The neoclassical theory was, curiously enough, accepted in its main points by Ludwig von Mises, who displaced however the perfect competition as standard for evaluating the “imperfection” of monopoly. He adopts instead a counterfactual comparison between the monopoly price and the competitive price that would have been reached on market. In fact, Mises uses two different meanings for the expression “competitive prices”; sometimes it express the prices formed on market, sometimes final equilibrium prices.

Monopolist’s decision of restricting the production and the quantity offered does not automatically bring to him the higher revenues/profits he is craving for. It depends on consumers’ specific demand. Says 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.”

Moreover, as in reality all action is conducted in a pervasive, inescapable uncertainty framework, the monopolist must anticipate, as all other producers and sellers, the configuration of demand; it means that the occurrence of monopoly price is for Mises more restricted than neoclassical economists would think. Even if Mises does not deny the possibility of a free market monopoly price, he admits that in general it is a result of state intervention on market.

We will analyze the explicit and implicit welfare criteria that Mises employs in his theory.

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Welfare and value theory\footnote{For this section, I rely upon Costea (2003), p. 47-62.}

In order to demonstrate that consumers are hurt by monopolist’s restriction of production, Mises makes an implicit value judgment and also assumes the possibility of an interpersonal comparison of utility. If the producers restrict the quantity produced and offered on the market and a smaller quantity of this particular good is produced, then a comparatively higher quantity of relatively nonspecific factors of production will be available for other products. This means that different consumers will enjoy a higher quantity of other goods offered on the market. By deploiring the perceived reduction in quantity produced, Mises overlooks the fact that a higher quantity would have diminished the quantity of other goods. For instance, using an additional quantity of lumber to produce chairs will necessarily diminish the number of tables which could have been otherwise obtained. This allocation of resources will bring about a lower price of chairs and a higher price of tables than otherwise. These results cannot be avoided in a world with nonspecific scarce resources.

Mises does not deny the necessity of choices people have to make when directing scarce resources to competing goals. He argues that the goods produced with the factors of production now more available are, from consumers’ point of view, less important than the restricted production of monopolized goods. “Capital and labour, set free by the restriction of production, must find employment in other production. . . . Thus against the smaller production of the monopolized goods one must set the increased production of other goods. But these, of course, are less important goods, which would not have been produced and consumed if the more pressing demands for a larger quantity of the monopolized commodity could have been satisfied. The difference between the value of these goods and the higher value of the quantity of the monopolized commodity not produced represents the loss of welfare which the monopoly has inflicted on the national economy. Here private profit and social productivity are at variance.”\footnote{Mises (1981), p. 348.} (Emphasis mine)

In the paragraph quoted, “value” could have two different interpretations: either monetary value, or subjective value. Let us analyze these possibilities and see if they could lead us to the conclusion that the monopolist restrictive decision brings about necessarily a lower satisfaction for consumers.

First of all, Mises frequently speaks about the fact that entrepreneurs, by looking for the highest net proceeds, respond to the most important desires of the consumers\footnote{See, for instance, Mises, (1998, p. 337). This is a widely accepted statement among market-oriented economists.}. Without questioning for the moment the legitimacy of this criterion, we wonder why, in the case of monopoly prices, this criterion no longer applies? Mises defines monopoly prices as prices at which net proceeds are higher than otherwise. Let us accept the view that higher monetary incomes are the expression of the better satisfaction of consumers’ desires and apply it to monopoly prices. The result is that the monopolistic “restriction of production” assures a rational combination of resources, a higher satisfaction of consumer preferences than otherwise, because consumers are ready to give a higher amount of money for the restricted production.
Thus, if, in the paragraph quoted above (Mises 1981, p. 348), “value” means total (monetary) proceeds obtained by sellers, it is contradicted by Mises’s second condition of the emergence of monopoly prices, i.e., inelasticity of the consumers’ demand. According to this condition, the monopolist allocates resources in order to obtain the highest net proceeds from the present use of the factors of production. This means that, by restricting production, he obtains higher net proceeds than otherwise, i.e., he directs resources to their most value-productive use. The complementary factors of production, which could have been devoted to an increase in the production of the “monopolized good,” are allocated to other, more remunerative activities. If our “monopolist” thinks he could obtain higher net proceeds by using these complementary factors of production to produce yet a higher quantity of the monopolized good, he would have done it.

Other entrepreneurs are ex ante more optimistic about the profitability of their enterprise and bid up the prices for these factors of production. This describes in fact the normal operation of market. In any moment, on the market, the factors of production are bought by capitalist-entrepreneurs who anticipate a higher value-productivity of factors of production in the production of goods and give a higher price for them. For market advocates, this method – competition based on economic calculation – assures the rational allocation of scarce resources, i.e. the satisfaction of the most important desires of consumers, at least from a prospective, ex ante point of view.

If “value” means satisfaction derived from consumption of the two different kinds of goods by different individuals on the market, Mises’s argument involves a clear case of an aggregation of subjective valuations and interpersonal comparison of subjective values. We should stress here that present productive use of factors of production make them less available, ceteris paribus, for future production. Thus, Mises would have to include in his analysis future consumers, along with present, actual or potential, consumers.

An additional difficulty comes from the very criterion “higher expected monetary proceeds means consumers’ better satisfaction”. Money spent for acquiring goods does not “measure” the buyer’s subjective value of these goods. Mises, as do the other Austrian economists, rejected any notion of measuring value by the money prices people are willing to give up in order to obtain desired goods: “People buy and sell only because they appraise the things given up less than those received. Thus the notion of measurement of value is vain. An act of exchange is neither preceded nor accompanied by any process which could be called a measuring of value.”¹

As Austrians emphasize, money prices are exchange ratios. There is no previous act of individuals that attaches value to goods received and given in exchange². From an act of exchange all that the external observer can deduce is that the individual prefers the good received to that given up. Nor is the situation on the monetary side any different. Money is nothing else than an economic good which serves as generalized medium of exchange. Individuals could prefer a good to a certain amount of money, i.e. they express greater preference for the good than for money, or the goods that this quantity of money could purchase.

¹ Ibidem, p. 205.
Additionally, “present” prices are formed at different points in time in the immediate past. Of course, the scales of value of individuals can change from one moment to another. This fact precludes us from deriving from the higher amount of money spent for a given good the conclusion that this good is more highly valued than another, cheaper alternative. Assume, for instance, that according to my value scale I am willing to give $1,200 for good x and $1,000 for good y, but the market prices are $800 for the first and $900 for the second. I am therefore a supra-marginal buyer for both goods. By purchasing them, I demonstrate only that at different points in time I prefer the good x to $800 (or to the goods which could be bought with this sum) and the good y to $900. But an external observer cannot say that the first good is ranked lower or higher on my value scale. He cannot even conclude that I have demonstrated preferences ranked on the same value scale.

Even if psychology would find one day an interpersonally, time-invariant measuring unit of subjective satisfaction, this discovery would not change the above economic conclusion. First, in order to assess the psychic profit or loss, people make counterfactual comparison, i.e. they compare there factual choices with an alternative they renounced upon, the counterfactual. We cannot “measure” something which was precluded to manifest in action by the very choice we made. So, we, the external observer, could measure “what is seen”, and not “what is not seen”. Second, people preferences change over time, the “same” goods – from a purely technical, chemical point of view – has different value even for the same individual. Juridical decision based on this utilitarian criterion would introduce an increase of uncertainty on market, as the individual cannot be sure ex ante if an otherwise (i.e. with respect to property rights) non-aggressive productive activity would amount at the end, after computing different people’ utilities, to be incorrectly considered as an aggression.

At the level of the market for a product, the welfare information which could possibly be conveyed by higher net proceeds is even less accurate than at the individual level. In the latter case, at least we have a choice of the individual, and thus a scale of value demonstrated in action. This is definitely not true for the market demand; we cannot construct a scale of value for all consumers taken together, and even if we could arrive at a certain ranking of the goods desired by these individuals, this would be the result of individual exchanges made at different moments, not the demonstrated preference of a supra-individual acting entity. Moreover, the attempt to arrive at a unique ranking of goods at the level of the community (irrespective of the criterion chosen) is useless, as the attainment of this goal, per impossible, will necessarily depend on subsequent voluntary interpersonal exchanges.

In this section we have shown that Mises embraces implicitly the nonscientific method of interpersonal comparison of utility in order to support his claim that “monopoly prices” would have a negative impact on consumers’ welfare.

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1 Otherwise, we have to explain why we do not remain in the same room for the rest of our life, if at a certain moment this is what is most important for us. Moreover, it would imply a sort of determination of people choices from a (clearly unacceptable) objective goods value – of course, at limit, it means to deny the very notion of choice, of human action and to adopt a strictly deterministic model of human being
This practice is unfortunately explicitly assumed in the neoclassical well-known demand-curve diagram.

**Rothbardian ethical approach**

The neoclassical approach of monopoly was seriously questioned by Murray Rothbard – followed, in the Austrian camp, by Walter Block, Hans-Hermann Hoppe, Dominick Armentano. The efforts of Austrian economists were directed toward proving the non-operationality of the concept of monopoly price on a (pure) free market, i.e. in the absence of state intervention. They rejected the Mises’s adulterated analysis of monopoly, by focusing their attention on the definitional non-validity of monopoly price, and also on the false implicit utilitarian criterion of justice. In fact, discussing and finding the presence of a monopoly price on free-market, Mises questioned, on economic grounds, the optimality of purely voluntary institutional arrangements. However, as opposed to neoclassical scholar, Mises did not justify on these grounds a legitimate state interference with market operation.

Rothbard shows that all the particular characteristics of the so-called “monopoly price” are ordinary features of market prices: the comparative restriction of production in order to achieve a higher price and the expectation of an elastic demand above the selling price. Rothbard emphasizes that the meaningful concept on the market is that of “self-sovereignty over his person and property”.1 This is closer to the meaning of the market as a private-property order. He relegates the existence of “monopoly prices” to the hampered market, where the difference between a market price and one resulting from privilege received from the state is logically coherent.

Here, the reduction in individual’s welfare stems from legal obstacles impeding market participants from following the most highly ranked use of their resources. The issue is discussed in terms of infringement on the property rights of individuals, who are prevented from allocating their property according to its most anticipatively appreciated use, irrespective of the changes in prices: “[T]he would-be competitors are injured and are forced to accept lower remuneration in less efficient and value-productive fields. The consumers are likewise injured, for they are prevented from purchasing their products from competitors whom they would freely prefer. And this injury takes place apart from any effect of the grant on prices”.2

Rothbard3 acknowledges that we cannot infer propositions concerning welfare by relying on monetary terms derived from value theory. Instead, his welfare criterion employs demonstrated preference based on respect for property rights.

The preeminence of the ethically grounded concept of welfare is apparent in Rothbard’s *Power and Market*. Having obtained a monopoly privilege, the entrepreneur is seeking, as always, the most monetary profitable investment, all other things being equal. In this particular case, his entrepreneurial success – obtained with the “help” of political means, even if he was not actively bribing for it – is not and could not be a “sign” of satisfying consumers. It means that the assessing of entrepreneurial success supposes a

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3 Rothbard, “Toward a Reconstruction of Utility and Welfare Theory”.

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preliminary ethical judgment: is this particular exchange a voluntary one or not? Otherwise, only the welfare of some people is promoted, at the expense of others’. More important, applying different (valid) welfare judgments/criteria supposes an already ordered structure of property, to know precisely to whom belong the goods we are speaking of.

Monopoly, vertical integration in one firm, and economic calculation

Is the economic calculation impaired by the presence of a single seller of a good on the market? Rothbard seems to imply it is. He argues that by integrating a whole productive structure – even if this process is developed on the market, through a chain of strictly voluntary exchanges – some of the prices needed to perform economic calculation disappear. In this case, the seller finds himself in the impossibility to assess the profitability of this enterprise.

The maximization of revenues/profits – at best, a historical criterion of welfare – guides the producers’ technological choices. Rothbard repeatedly stresses in *Man, Economy, and State* the instrument of economic calculation who perform this everyday task of practical organization of production.

The vertical integration by one firm of two or more production stages is analyzed by Rothbard with the same instrument of economic calculation. Thus, the absence of an external market – which offers the chance of an estimation of factors of production’ opportunity cost – has negative consequences for firm’s accountability, *i.e.* for the entrepreneurial rational allocation of resources between different production stages. The operation of natural selection on the market “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)”.¹ From this Rothbard concludes that the vertical integration for a capital good product cannot even appear on the market. “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.”²

Rothbard argues something more than the “mere” absence of the monetary calculation for an *ex-ante* assessment of the adequacy of means to goals. He claims that any movement toward complete cartelization on market would be impossible. “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… Ever more important for the maintenance of an advanced economy, then, is the preservation of markets for all the capital and other producers’ goods.”³ This is the essence of Misesian’ argument against the rational allocation of resources in a socialist commonwealth. As Rothbard emphasized, the problem identified by Mises is a purely economic one; the same difficulties are present whenever one agent (either an aggressive agent, like the State, or a private one) directs all resources in the economy. Rothbard provides, in this

² *Ibidem*, p. 548. [author’s italics]
way, a theoretical argument against the historical occurrence of monopolist integrative
tendencies.

Contrariwise, Hans-Hermann Hoppe denies that possible calculation problems, which would appear as a complete integration of all firms into one big firm, prove some market sub-optimality, even in this extreme case. His argument is ethic: as the movements toward integration of production stages are compatible with market functioning, we cannot oppose the result. As people did not acted against this market integration, *i.e.* did not demonstrated in action their preference for a more disperse productive organization, we cannot but conclude that this is, at least *ex ante*, the structure of production which satisfy consumers in the outmost.

Thus: "the existence of a monopoly would only allow one to say this: the monopolist clearly could not see any chance of improving his income by selling all or part of his means of production, otherwise he would do so. And no one else could see any chance of improving his income by bidding away factors from the monopolist or by becoming a capitalist producer himself through original saving, through transforming existing nonproductively used private wealth into productive capital, or through combining funds with others, otherwise it would be done. But then, if no one saw any chance of improving his income without resorting to aggression, it would evidently be absurd to see anything wrong with such a super-monopoly. Should it indeed ever come into existence within the framework of a market economy, it would only prove that this self-same super-monopolist was indeed providing consumers with the most urgently wanted goods and services in the most efficient way."1

Hoppe embraced a more Rothbardian position on this issue. Applying the Rothbardian theory of demonstrated preference in voluntary exchanges, Hoppe emphasized the non-aggressive context of successive movements performed by entrepreneur to the desired end of integrating into a One Big firm an industry and, an extreme case, even the entire economy. Two different questions arise at this point: are his actions directed under the guidance of economic calculation? And immediately following, are they counterfactually welfare enhancing? How could people assess it, except by resorting to simple value ordering on value scale, method inappropriate to the complex economy? The second question, a rhetorical one in the libertarian tradition, is: Could we legitimately initiate violence against, *i.e.* are we entitled to aggress, this enterprising person? The answer to this last question is, as least for people who make a substantive difference between violence and aggression, a negative one.

Disappearance of some prices would occur in other cases too, which are compatible with a private property order: when people’ preferences for cooperation do not endorse any more a complex division of labor, when a dramatic increase in social rate of time preference demand a readjustment toward a less capitalistic structure of production. The conclusion is that the level of division of labour is not exogenously determined on the market; it is, like all other economic features, establishes on market, and tends to reflect consumers’ preferences. There is a vast array of technologically possible breakings up of activities, but only some of them are economically rational, *i.e.* appropriate to the goals to be achieved.

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Operationality and Law

The critique raised by Murray Rothbard\(^1\) to the neoclassical theory of monopoly price – implicitly to Mises’ monopoly theory – was centered on conceptual and operational validity of monopoly price. He demonstrated that the necessary theoretical tools for a differentiation between monopoly price and any other price on (free) market are absent. We should stress here the concept of free market, \textit{i.e.} the social, voluntary cooperation of people, free from any state intervention.

The legal validity, \textit{i.e.} the legitimacy of suing a producer because he is the single seller of a good, is a very different issue. Rothbard could have very easily dismissed the legal relevance of monopoly price, by simply emphasizing the completely voluntary, non-aggressive character of free market exchanges. However, the arguments developed are useful for analyzing the effects of monopoly privileges, \textit{i.e.} special privileges given to some producers and defended by the state, on the hampered market.

In a recent article\(^2\), Hans-Hermann Hoppe and Walter Block identify the implicit theoretical error made by those who incriminate the monopolist: property rights on goods’ value, and not on physical aspects, which are operational and allow avoiding conflicts\(^3\). Applying this misleading theory to single seller’ case, it follows that the consumer has a sort of right to decide unilaterally what quantity should be produced and brought on market, and at what price; from an economic point of view, this is simply impossible, as any consumer would like to buy goods at the lowest price, even a zero price or, why not, to receive gifts. Price determination supposes at least two participants, with inverse valuation of the (two) goods on their value scale. It means that the buyer appreciate, at least \textit{ex ante}, more the goods he wants than the goods he is ready to get rid off (to sell). If the monopolist could be incriminated because he practices a “too high” price, it follows that any seller could be also accused on the same grounds, as for the buyer there is no price too low. From an ethical perspective, this “solution” is tantamount to a partial negation of owner’s just property rights.

The economic identification of monopoly price is nevertheless a necessary, but not sufficient condition for its relevance in law\(^4\). The economic differentiation of monopoly

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\(^{1}\) Vezi Murray Rothbard, 1993, cap. 10.
\(^{3}\) Armen Alchian, for instance, beliefs also that the defense of property rights is related to the physical attributes of property, and not to its exchange value or some psychological feelings of other people. See „Some Economics of Property Rights”, in \textit{Economic Forces at Work}, Liberty Press, Indianapolis, p. 131-132.
\(^{4}\) Israel Kirzner thinks that the presupposed encroachment upon the consumers’ sovereignty – that is what makes the unique owner of resource guilt for – would justify the aggressive intervention of the state. See, for instance: “For that situation—and only for that situation—it might indeed be rational for consumers to invoke political power to modify the outcomes forthcoming from the unhampered market.” [author’ italics] Kirzner, Israel, „Mises and his understanding of the capitalist system”, in \textit{Cato Journal}, vol. 19, no. 2 (fall 1999), p. 223, the same idea on p. 224, even if the operational validity of identification of monopoly price is wanting, which Kirzner recognizes. (See n. 5, p. 224): “Nor, it should be emphasized, is the case of monopoly price one that can be empirically identified and observed. Failure to use all the available
price from any other market price would be based on purely non-quantitative criteria. The quantitative dimension of restitution due to the victim(s) would be the result of a competitive legal system, notwithstanding the difficulties involved.

The emphasizing of the absence of operationality, present in Rothbard and Hoppe\(^1\), could mislead us. Other concepts, such as the three components of market rate of interest – the originary interest rate, the entrepreneurial component, and the price premium – are not operational; we cannot identify the dimension of each one simply looking at the market interest rate\(^2\). The big problem with the monopoly price is that we are unable to give to it a praxeological definition, i.e. from this particular perspective we cannot differentiate it from market price. If the operationality would be the only difficulty, we can rely completely on market competitive judges to solve the problem, i.e. to find the acceptable restitution. The same challenge arises when a battery is involved.

On market we – and who exactly? In fact, consumers would be qualified to demand restitution – are not entitled to suit the single owner and seller of a good not primarily because of the non-operationality; but for the absence of an encroachment upon property rights, the consumers are not in reality victims of the producer. We must remind here that – from a libertarian point of view – the use of retributive force is strictly circumscribed to the physical violence against just property.\(^3\)

If the neoclassical theorists desire to apply consequentially their own theory of monopoly, a plenty of monopoly privileges are awaiting for resolution. Why to limit the (supposed) negative consequences of monopoly to the private sphere, and not to apply the same theory to state monopoly. Take, for instance, the central bank: its aggressive character\(^4\) is revealed by legal tender law, by monopoly on the issuance of money, by enforcement of the fractional reserve – thus impeding the re-emergence on market of the


\(^{2}\) See, for instance, Murray Rothbard, Man, Economy, and State, p. 613, where he discusses the difference between prexeological concepts and operational concepts. “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 monopoly case is different: “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.” (p. 613)


\(^{4}\) See, for instance, Pascal Salin, Liberalisme, p. 183.
natural distinction between deposits and credits, without mentioning the effects of the increase in fiat money upon the economy (redistribution, a high probability of distortions in the economic calculation at the inter-temporal level, culminating in business cycle). Interestingly, the state monopoly is “justified” by other “theories”: public goods theory, the necessity of an increase in money supply, for an equilibration of demand and supply, to promote the investments etc.

The privileged producers enjoy advantages, but they cannot be, without a thorough analysis, classified as aggressors. If they pleaded for the privilege, on a contractual basis, implying a private enforcement (roughly “the offensive bribe”, in Rothbard’s words), for the exclusion of their actual or potential competitors from the market, they would have to pay retaliation. It would be difficult to determine the victims and the retaliation, as their privileges excluded, impeded people from entering certain domains or offering certain services. The solution would be, in this case, to eliminate completely the monopoly privileges.

Conclusion

The welfare arguments on which is built a neoclassical case against monopoly (as single producer and seller of a good) are wanting. They are based on interpersonal comparisons and aggregation of utility. But even if monopolist on market would counterfactually diminish the satisfaction of their consumers, suing him is not permissible, as he did not initiate violence against, i.e. aggress, anybody. Thus, the non-operationality of monopoly price (this was the problem identified by Austrian economists) deals only with the accuracy of a definition. On market, the economic calculation imposed a limit upon the vertical integration by a single firm of two or more production stages.

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