Critique of a Version of Austrian Economics

In December of 2021 I had an online <u>debate</u> with Walter Block, a libertarian economist, comparing the approaches to economics associated with the Chicago and Austrian schools. When I asked him what version of Austrian economics he wanted to defend he pointed me at <u>Man, Economy and State</u> by Murray Rothbard. This chapter is much expanded from that debate. It starts with my view of the essential difference between the two approaches and why one of them is wrong, continues to a detailed critique of Rothbard's arguments.

Two Approaches to Doing Economics

Rothbard starts with an axiom from Ludwig von Mises: *Human action is purposive behavior*, the first sentence of chapter 1 of his *Human Action*. I start by defining economics as *that way of understanding behavior that starts from the assumption that individuals have objectives and tend to choose the correct way to achieve them*, the third paragraph of Chapter 1 of my *Price Theory*. The wording is different, the essential idea the same. The two approaches share many theoretical tools, differ in what they do with them.

The Chicago approach is to use the theoretical structure to form a conjecture, something we think likely but not certain to be true, and test it against real world evidence. An example is the claim that increasing the minimum wage reduces the demand for the sort of labor that is paid minimum wage. We expect that to be true since increasing the cost of an input usually makes it in the interest of firms to use less of it.

To test the conjecture we look for occasions when the minimum wage rate increased substantially and nothing else relevant was changing to see what happened to employment in labor markets that consist largely of low paid labor, such as teen-aged workers. If it decreased, that is evidence in favor of our conjecture.

What if it didn't? That might be because we made a mistake in our test, missed something else important that was changing at the same time, misread the data, perhaps looked at the wrong segment of the labor market. It might be because the conjecture was false due to a mistake in our logic. It might be because there were factual assumptions implicit in our argument that were not true of the situation we were looking at.

One benefit of testing your conjectures against the real world is that you might learn that they are wrong, might even learn why. I discovered another with my first published journal article in economics, "A Theory of the Size and Shape of Nations." I submitted it to the *Journal of Political Economy*. George Stigler, the editor, rejected it; for an article to be publishable in his journal it had to include evidence that the theory it offered was true. I found such evidence, revised the article, and it was accepted.

Testing the predictions of the theory made me more confident that it was correct, but that was not the only benefit. In order to find measurable consequences of the theory I had to define it more precisely than when it was only words on paper. The result was a better theory.

¹ Since our debate was Chicago vs Austrian I have put most of this chapter in those terms. Much of what I write would be true of Marshallian economics more generally.

That is the Chicago approach: Form conjectures based on economic theory, test the conjectures against the real world, confirm or revise them accordingly. Accept that you are, at best, coming up with good reasons to believe something, not certainty.

What about the alternative?

The approach portrayed by Rothbard in *Man*, *Economy and State* is simpler. Deduce a theoretical structure from axioms with certainty. Use that structure to derive conclusions about the real world with certainty. There is no need to test the conclusions since you know they are true; real world facts may provide useful illustrations of your conclusions but cannot contradict them.

The problem with that approach is that it cannot be done. Economic theory, largely the same theory in both schools, is useful in understanding things. But there are no real-world conclusions that can be deduced with certainty from economic theory alone. Since economic theory does not tell us what objectives people wish to achieve; any action could be purposive behavior if that action was itself the objective. "Why am I standing on my head on the table with a burning thousand-dollar bill between my toes? Because I want to stand on my head on the table with a burning thousand-dollar bill between my toes." The theory does not tell us what actions produce what results. If one is sufficiently agnostic about that it is possible to explain a very wide, perhaps unlimited, range of behavior.

Consider again the case of a minimum wage law. Imagine a world where most of the people who consume goods produced by unskilled labor have a strong aversion to buying things made by workers receiving too low a wage, so strong that they will not buy such goods unless they are sure the workers are making at least ten dollars an hour. Further assume that the process by which goods get from the original producers to the consumers is sufficiently complicated so that is not practical for a seller to prove to his customers what wages were paid to the workers who produced the goods he sells. In that world, absent a minimum wage law, consumers avoid goods produced with the use of unskilled labor. Impose a minimum wage law and the demand for goods produced by unskilled labor goes up, as does the employment of workers who make such goods.

That example of how the obvious conclusion from economic theory could be is false depends on the actors having objectives that are implausible but not impossible. For another, imagine an economy where the employers of unskilled labor are monopsonies, each the only employer of unskilled labor in its town, workers are sufficiently immobile so that they are reluctant to move to a different town for higher wages. Just as a monopoly finds it in its interest to hold down the amount it produces in order to hold up the price it receives, a monopsony finds it in its interest to hold down the amount it purchases, in this case the amount of unskilled labor it employs, in order to hold down the price it pays, in this case the wage. Even if the marginal revenue product, the increase in the firm's income from hiring another worker, is ten dollars an hour, the firm may be better off paying only eight. It loses out on the opportunity to make money on the additional workers it could hire at ten but doing so would raise its costs by two dollars an hour on the labor it is already hiring. Impose a ten dollar minimum wage and the firm no longer has an incentive to hold down its hiring in order to hold wages down, so doesn't. Employment of unskilled workers goes up instead of down.

² As Rothbard himself writes, "It is important to realize that economics does not propound any laws about the content of man's ends." *Man, Economy and State*, p. 72:

³ For something in the real world a little like this, consider the fair trade movement.

This is a better example because it depends not on an objective invented for the purpose but on a set of facts that, while implausible in the U.S. in the twenty-first century, could easily enough exist in another place and time.⁴

The solution to the limited power of theory is to combine economic theory with knowledge about the real world. I do not know with certainty what objectives other humans have but, being myself a human and having observed other humans, I know that they are unlikely to include a strong desire to dramatically burn thousand-dollar bills. I am a little less confident that they do not include a preference to buy only goods produced by well paid workers but if such a preference were common I think I would have noticed. I do not know what all labor markets are like in all times and places but in the modern American economy I observe unskilled workers being employed in multiple industries, each industry consisting of multiple firms, and workers moving from one place to another in response to higher wages. Hence I have good reason, although reason short of certainty, to expect that increasing the minimum wage rate will reduce employment opportunities for the sort of people who get paid minimum wage.

When you have good reason short of certainty to believe something the obvious thing to do is to find ways of testing it. If the evidence supports your conjecture you now have an even better reason to believe it. If not, perhaps you should think through the argument that led you to your conclusion more carefully.

My size of nations article is a clearer example of the point, further from certainty hence more dependent on evidence. In order to argue that the size and shape of nations could be explained by competition for land among rulers trying to maximize their net tax revenue, hence that changes over time could be explained by changes in what was available to be taxed, I had to assume away the effects of factors such as military technology, political ideology or religious belief. I did that not because I had good reason to think those things did not matter but because my simplified model explained the puzzle I started with — why, when the Roman Empire fell, it shattered, was replaced not by another nation or nations of comparable size but a patchwork of virtually independent feudal holdings. Having developed the theory for that purpose I discovered that it predicted a variety of other things which turned out to be true. If I had limited myself to conclusions that could be reached with confidence on the basis of theory alone or even on the basis of theory plus facts I already knew, I would never have engaged in the project. While I doubt that anyone has a complete explanation of why nations are the size and shape they are, I have more of one than before I wrote the article. Imperfect knowledge is still worth having.

Those are my reasons for preferring the Chicago approach.

Contra Rothbard

There are a variety of things in *Man*, *Economy and State* that I believe are mistaken. Some, such as the purported proofs of positive time preference and declining marginal utility, are important steps in the construction of the author's theoretical machinery. If those principles cannot be

⁴ The implications of monopsony on the labor market were pointed out in Card, David, and Alan Krueger, "Minimum Wage and Employment: A Case of the Fast-Food Industry in New Jersey and Pennsylvania," *American Economic Review* 84 (September 1994). I first encountered the point there, later discovered that it had been pointed out much earlier by George Stigler: "The Economics of Minimum Wage Legislation." *American Economic Review* Vol. 36, No. 3., pp. 358-365, (Jun., 1946).

⁵ Such as changes in the political map of Europe after the bubonic plague and the later rise of linguistic nationalism.

deduced with certainty from the axioms that reduces the range of conclusions theory can support. Other errors, such as Rothbard's attack on fractional reserve banking, I would not expect to be shared by all Austrian economists. They are relevant to my general point chiefly as evidence of the sort of mistakes than can be made by a theorist who depends only on the logic of his arguments, is unwilling to confront their implications with evidence.

I begin with two false proofs:

Thus, if no units of a good (whatever the good may be) are available, the first unit will satisfy the most urgent wants that such a good is capable of satisfying. If to this supply of one unit is added a second unit, the latter will fulfill the most urgent wants remaining, but these will be less urgent than the ones the first fulfilled. Therefore, the value of the second unit to the actor will be less than the value of the first unit. Similarly, the value of the third unit of the supply (added to a stock of two units) will be less than the value of the second unit. ... Thus, for all human actions, as the quantity of the supply (stock) of a good increases, the utility (value) of each additional unit decreases. (p. 24⁻)

This is Rothbard's proof of the principle of declining marginal utility. To see why it is wrong, consider tires for my car. The marginal utility of the third tire, the benefit of having three tires instead of two, is less, not more, than the marginal utility of the fourth tire. Rothbard's proof works as long as each unit is used for a different and unrelated purpose since, as he argues, you rationally choose to achieve the most important purposes first. It breaks down any time the use of the earlier units makes it possible to use later units in ways they before could not have been used.

Rothbard responds to this argument, using eggs instead of tires:

It is possible that a man needs four eggs to bake a cake. In that case, the second egg may be used for a less urgent use than the first egg, and the third egg for a less urgent use than the second. However, since the fourth egg allows a cake to be produced that would not otherwise be available, the marginal utility of the fourth egg is greater than that of the third egg.

This argument neglects the fact that a "good" is not the physical material, but any material whatever of which the units will constitute an equally serviceable supply. Since the fourth egg is not equally serviceable and interchangeable with the first egg, the two eggs are *not* units of the same supply, and therefore the law of marginal utility does not apply to this case at all. To treat eggs in this case as homogeneous units of one good, it would be necessary to consider *each set of four eggs* as a unit. (pp. 73-4)

The fourth egg is not equally serviceable with the first because having the first three eggs increase the options for the fourth — it can be used to make a cake. The second glass of water is not equally serviceable with the first because it is not needed to quench my thirst. The fact that possession of

⁶ The attack on fractional reserve banking is inconsistent with the views of Mises as showng in the treatment of fiduciary media in Chapter XVII sections 11 and 12 of *Human Action*. For a long discussion of the issue by two non-Rothbardian Austrians, see "In Defense of Fiduciary Media-or, We are Not Devo(lutionists), We are Misesians" by George Selgin and Lawrence H. White in *The Review of Austrian Economics* Vol. 9, No. 2 (1996):83-107.

⁷ Quotes are from *Man, Economy and State* unless another source is stated.

earlier units changes what later units can be used for is what makes marginal utility decline — or, in the case of eggs and tires, increase.

Later in the book, Rothbard writes:

This individual has, of necessity, a diminishing marginal utility of money, so that each additional unit of money acquired ranks lower on his value scale. This is necessarily true.

It is not true if the best use of the money happens, in his example, to be buying eggs, since the money that lets him buy the fourth egg is worth more than the money that lets him buy the first, second, and third. To avoid that conclusion he has to consider a sum of money that will buy four eggs not as more money than a sum smaller by the price of one egg but as an entirely different good.

Rothbard offers a parallel argument for the declining marginal utility of leisure.

Leisure, like any other good, is subject to the law of marginal utility. The first unit of leisure satisfies a most urgently felt desire; the next unit serves a less highly valued end; the third unit a still less highly valued end, etc. The marginal utility of leisure decreases as the supply increases (p. 45)

Again, this assumes that the first hour satisfies one desire, the second another and unrelated desire, and so on. But suppose what I want to do with my leisure is to play a video game that takes two hours to complete. Quitting half-way through is frustrating, so the value to me of two hours instead of one is greater than the value of one hour instead of none. Rothbard might argue, along the lines of the previous quote, that the unit of leisure is now two hours — but that is a claim about the declining marginal utility of plays of the video game not of time spent playing it. And it might not be true for the game — it could be more fun the second time I play it.

Another and different error:

A fundamental and constant truth about human action is that man prefers his end to be achieved in the shortest possible time. Given the specific satisfaction, the sooner it arrives, the better. *This results from the fact that time is always scarce, and a means to be economized.* The sooner any end is attained, the better. (p. 15)

The third sentence, which I have italicized, is Rothbard's proof that time preference is always positive, that faced with the choice between a pleasure now or the identical pleasure in the future you will always prefer the pleasure now. It confuses two different senses in which one uses time. Using an hour for labor means you have one less hour for leisure. But whether I have an ice cream cone now or this time tomorrow, I will have the same twenty-four hours available to divide among labor, leisure, and sleep. Labor uses up scarce time. Leisure uses up scarce time. Delaying a pleasure does not use up scarce time. If time preference is always positive that is an observed fact of human psychology not a deduction from the fact that time is scarce.

A second argument for why time preference must always be positive comes from Ludwig Von Mises, a major influence on Rothbard:

If he were not to prefer satisfaction in a nearer period of the future to that in a remoter period, he would never consume and so satisfy wants. He would always accumulate, he would never consume and enjoy. He would not consume today, but he would not consume

tomorrow either, as the morrow would confront him with the same alternatives (*Human Action* p. 484)

Suppose I have neutral time preference, am indifferent between a pleasure now and a pleasure next year. If I spent all my money next year and none this year, the pleasure I would get from a dollar spent next year would be much less than from a dollar this year, due to declining marginal utility.[§] I would instead divide my income equally between this year and next year, assuming the opportunities to get value by spending money were the same in each year. Expand the argument to N years and I spread my expenditure out evenly across them.

Next suppose I have negative time preference: I prefer a pleasure next year to the same pleasure this year. I will spend more of my money next year than this year but not all of it, again because of declining marginal utility. A dollar spent next year, when I am spending lots of dollars, gets me a rib eye steak instead of a sirloin steak. A dollar spent this year gets me hamburger instead of baked beans. I prefer a pleasure in the future to an equal pleasure in the present but a dollar of present consumption produces more pleasure than a dollar of future consumption. Expand the argument to N years and my expenditure rises year by year by just enough so that the declining marginal utility balances the negative time preference.

Hence Mises' claim is false.

In a variant of the same argument, applied to investment rather than saving, Rothbard writes:

It is obvious that the factor which holds every man back from investing more and more of his land and labor in capital goods is his time preference for present goods.

Someone might have no current investment opportunities with non-negative return. He might have some, but a limited number. Even if he had an unlimited ability to get a return on investments of unlimited length, shifting consumption from the present to the future raises the marginal utility of present consumption, lowers that of future consumption, so he will only invest until the utility of a unit of current consumption is just equal to the present utility of the larger number of units of future consumption that he would get by investing that unit.

Missing Tools

Rothbard writes:

but it would be completely meaningless for him to try to assign units to his preference and say, "I am two and a half times happier because of this choice than I would have been playing bridge. (p. 19)

. . .

Accordingly, the numbers by which ends are ranked on value scales are ordinal, not cardinal, numbers. Ordinal numbers are only ranked; they cannot be subject to the processes of measurement. Thus, in the above example, all we can say is that going to a

⁸ Which Rothbard believes always holds and I believe usually does.

concert is valued more than playing bridge, and either of these is valued more than watching the game. We cannot say that going to a concert is valued "twice as much" as watching the game; the numbers two and four cannot be subject to processes of addition, multiplication, etc. (Fn 17)

The view that utility is ordinal not cardinal was proposed by Menger in the late 19th century and came to be widely accepted in neoclassical economics, Marshallian as well as Austrian. That changed in 1947 when Von Neumann and Morgenstern published the second edition of *Theory of Games and Economic Behavior*. An appendix to that book showed how cardinal utility could be used to describe behavior under uncertainty. If choices under uncertainty fit the Von Neumann axioms, arguably features of rational choice, it was possible to assign utilities to outcomes in such a way that an individual choosing among alternative sets of probabilistic outcomes would always choose the set with the highest expected utility.

Consider Rothbard's example. "The utility to me of going to a concert instead of watching the game is twice as large as the utility of playing bridge instead of watching the game" means that if I am choosing between a certainty of playing bridge and a gamble with probabilities p of going to the concert and 1-p of watching the game, I will prefer bridge to the gamble if and only if the probability of getting to go to the concert is less than .5. Hence assigning magnitudes to utilities is not "completely meaningless."

Later in the book, discussing decisions under uncertainty, Rothbard writes:

We may explain the entire act of deciding whether or not to perform an act of capital formation as the balancing of relative utilities, "discounted" by the actor's rate of time preference and also by the uncertainty factor. (p. 61)

He does not say how to discount utilities by the uncertainty factor, which is what cardinal utility was invented to do. Rothbard rejects the Von Neumann definition of cardinal utility for reasons explained elsewhere in his writing." But it is misleading to describe cardinal utility as "completely meaningless" without mentioning what it is used for and what it means.

Rejecting the usual mathematical presentation of economics, where demand, supply, utility are all treated as continuous functions, Rothbard writes:

Such a treatment is fallacious and misleading, however, since human action must treat all matters only in terms of discrete steps ... It is this mistaken substitution of mathematical elegance for the realities of human action that lends a seeming importance to the concept of "elasticity of supply," comparable to the concept of elasticity of demand. (Fn27)

Many goods are continuous. You can buy a gallon of water, two gallons, but also 1.436 gallons. You can work for an hour, two hours, 1.32 hours. Time is continuous and we are often interested in demand and supply in terms of rates of production or consumption. Hence it makes sense to treat demand and supply curves in the general case as continuous functions of price, lumpy goods as a special case. Rothbard instead insists on treating all choice in terms of number, not quantity.

⁹ https://en.wikipedia.org/wiki/Cardinal_utility.

¹⁰ https://en.wikipedia.org/wiki/Von_Neumann%E2%80%93Morgenstern_utility_theorem

¹¹ Toward a Reconstruction of Utility and Welfare Economics.

Contrary to Rothbard's claim, elasticity of supply is a useful concept for the same reasons elasticity of demand is. It plays the same role in the ability of a monoposonist to profit by reducing how much he buys that elasticity of demand plays in the ability of a monopolist to profit by reducing how much he sells. Further ...

Rothbard writes:

An income tax cannot be shifted to anyone else. The taxpayer himself bears the burden. He earns profits from entrepreneurial activity, interest from time preference, and other income from marginal productivity, and none can be increased to cover the tax. Income taxation reduces every taxpayer's money income and real income, and hence his standard of living. His income from working is more expensive, and leisure cheaper, so that he will tend to work less. (p. 1164)

If a tax on the income of doctors results in doctors working less that pushes up the price of medical services, pushes up the wages of doctors, hence some of the burden is born by consumers of medical services in higher prices, some by doctors in lower after tax income. If the supply of physicians' services is perfectly inelastic or the demand perfectly elastic the burden of the tax is born entirely by the physicians, in less extreme cases the division of tax burden between buyer and seller is determined by the relative elasticities of supply and demand.

Judging Outcomes

Rothbard writes:

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. (p. 65)

And

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 nonmonetary wishes of the producers). (p. 645)

What do those statements mean? A different arrangement would make some consumers and some producers better off — a steel tariff, for example, could make steel workers better off — so for this statement to be meaningful you need some way of adding up costs and benefits across people. The solution in neoclassical economics is economic efficiency, variously justified by arguments from Marshall, Pareto, or Hicks and Kaldor. Rothbard offers nothing along those lines.

There are arguments against the concept of economic efficiency. The obvious one is that a net improvement should be calculated in utility, not dollars, and we have no way of doing it since we have no way of making interpersonal comparisons of utility. But without economic efficiency or some similar concept, many of the things Rothbard writes, such as the two quoted above, are meaningless. It becomes impossible to answer important questions economists are asked, such as whether tariffs are a good or bad thing.

¹² The version of economic efficiency I prefer originates with Marshall's definition of an economic improvement. Marshall was a utilitarian who offered the concept as an imperfect proxy for a utility improvement. My defense of economic efficiency can be found in *Price Theory*, *Hidden Order* and *Law's Order*.[add links?]

Rothbard's response is found not in *Man*, *Economy and State* but in "Toward a Reconstruction of Utility and Welfare Economics." For example:

But what about Reder's bogey: the envious man who hates the benefits of others? To the extent that he himself has participated in the market, to that extent he reveals that he likes and benefits from the market. And we are not interested in his opinions about the exchanges made by others, since his preferences are not demonstrated through action and are therefore irrelevant. How do we know that this hypothetical envious one loses in utility because of the exchanges of others? Consulting his verbal opinions does not suffice, for his proclaimed envy might be a joke or a literary game or a deliberate lie. We are led inexorably, then, to the conclusion that the processes of the free market always lead to a gain in social utility. And we can say this with absolute validity as economists, without engaging in ethical judgments.

So "X leads to a gain in social utility" does not mean "we have a reason to believe that X makes everyone better off" but only "We cannot prove it does not make everyone better off because some of the information necessary to do so cannot be known with certainty." Rothbard, like Pareto, avoids the problem of interpersonal comparison with a unanimity rule. The problem, as with Pareto, is that there are almost no changes that benefit everyone, no situations that could not be changed in a way that benefits someone.

Rothbard's solution? Since he cannot prove that everyone is better off with the free market than with any alternative he redefines "is better off" to mean "cannot be proved with certainty by *a priori* arguments to be worse off."

Monopoly

If the consumers were really opposed to the cartel action, and if the resulting exchanges really hurt them, they would be opposed to "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. (p. 635)

This is supposed to show that cartel pricing cannot make consumers worse off than they would otherwise be. One consumer changing his demand curve will not bring the price down significantly, so is not worth doing, so to get the argument to work one must assume that all members of a group will act in the group interest even if each individual knows that his action will make him worse off.

Yet Rothbard also writes:

The "problem" of "oligopsony"—a "few" buyers of labor—is a pseudo problem. As long as there is no monopsony, competing employers will tend to drive up wage rates until they equal their DMVPs.

If a group always acts in the interest of the group, why won't the buyers of labor act together to hold wage rates down in their common interest?

In arguing that there is no useful distinction between competition and monopoly, Rothbard writes:

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; and absolute noncontrol over the price-and-quantity transaction that finally takes place. (pp. 662-3)

The farmer can control the quantity he sells but not the price he gets, since if he charges more than other farmers he sells nothing. Ford can control either the price he sells at or the quantity, but not both. So not "exactly the same degree of control and of noncontrol." The farmer only has to decide how much to produce at the market price. Ford has to decide how much to produce, knowing that the more cars he produces the lower the price he can sell them for.

In 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. (Fn 54)

The conceptual difference is between that degree of withholding that would maximize the firm's profits if the amount withheld did not affect the market price and that degree that maximizes profits allowing for the effect of the firm's actions on market prices.

Again, Rothbard writes:

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." (p. 695)

The competitive price is the price that would maximize the firm's profit if the amount it sold did not affect the market price.

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. (p. 695)

in an industry of small wheat farms (the implicit model for "pure competition"), each small farm contributes a part of the total supply, and there can be no total without a contribution from each farm. Therefore, each farm has a perceptible, even if very small, influence. No perfectly elastic demand curve can, then, be postulated even in such a case. (p. 721)

A market with many firms producing a homogeneous product is very close to that hypothetical state; the demand curve it faces is very close to perfectly elastic.

Earlier Rothbard argued that sufficiently small amounts don't matter because actors won't perceive the difference.

If, for example, the utility of X is so little smaller than the utility of Y that it can be regarded as identical or negligibly different, then human action will treat them as such, i.e., as the same good. (p. 131)

By the same logic, if the effect of a firm's output on the price is so small that it can be regarded as negligibly different, then human action will treat it as such, hence the firm will behave as if it faced a perfectly elastic demand curve. That is a response consistent with Rothbard's approach although, I prefer the conventional response that perfect competition is an approximate description of the real situation and we see how much of a problem that is by seeing how closely the predictions fit real world observations.

Rothbard writes:

however, such a "monopsony" for the purchase of labor would have to encompass all the entrepreneurs in the society. If it did not, then labor, a nonspecific factor, could move into other firms and other industries. (pp. 717-18)

Labor is inhomogeneous in both abilities and location, so a firm hiring a particular sort of labor in a particular location might be a monopsony.

Rothbard writes:

For praxeology cannot establish quantitative laws, only qualitative ones. (p. 722)

Also:

In "oligopoly," where several firms are producing an identical product, there cannot persist any situation in which one firm charges a higher price than another, since there is always a tendency toward the formation of a uniform price for each uniform product. (p. 725)

A "tendency." Since there are no quantitative laws there is no way of knowing how strong the tendency is, hence no way of knowing whether such a situation can persist for only a week or only a century. Yet in attacking the idea of perfect competition, any deviation from a perfectly elastic demand curve is supposed to make the idea invalid.

In the course of a long discussion of monopoly, Rothbard repeatedly puts the argument he is rebutting in terms of morality:

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. (p. 634)

He never mentions the conventional economic argument against monopoly — that the monopolist's gain from charging more than the competitive price is less than the consumers' loss, hence we would be on net better off if the monopolist charged the lower price.

Rothbard writes:

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?

According to the conventional analysis of monopoly, the analysis that Rothbard never mentions, a zero price would cost the producer more than it would benefit the consumers, hence would not be ideal.

Fractional Reserve Banking

When a man deposits goods at a warehouse, he is given a receipt and pays the owner of the warehouse a certain sum for the service of storage. (p. 801)

p. 804: Even if the receipt does not say on its face that the warehouse guarantees to keep it in its vaults, such an agreement is implicit in the very issuance of the receipt. For it is obvious that if any pseudo receipts are issued, it immediately becomes impossible for the bank to redeem all of them, and therefore fraud is immediately being committed. If a bank has 20 pounds of gold in its vaults, owned by depositors, and gold certificates redeemable on demand for 30 pounds, then notes to the value of 10 pounds are fraudulent.

The bank notes issued by private fractional reserve banks were not warehouse receipts but promises to pay a specified amount, say an ounce of silver. A warehouse receipt for the note holder's silver coin would specify which particular silver coin it was a receipt for and banknotes didn't. As long as the bank has liquid assets larger than its liabilities, it can fulfill its promises by exchanging other assets for silver any time its reserves run low.

Rothbard writes, correctly:

An increase in the supply of money confers no social benefit whatever; it simply benefits some at the expense of others, as will be detailed further below. Similarly, a decrease in the money stock involves no social loss. (p. 766)

In Chapter 13 of the *Principles of Political Economy*, David Ricardo wrote:

If gold were the produce of one country only, and it were used universally for money, a very considerable tax might be imposed on it, which would not fall on any country, except in proportion as they used it in manufactures, and for utensils; upon that portion which was used for money, though a large tax might be received, nobody would pay it. ... The benefit would be this, that if less gold were produced, less capital would be employed in producing it; ... From such a tax, as far as money was concerned, the nations of Europe would suffer no injury whatever; they would have the same quantity of goods, and consequently the same means of enjoyment as before, but these goods would be circulated with a less quantity, because a more valuable money. ...If in consequence of the tax, only one tenth of the present quantity of gold were obtained from the mines, that tenth would be of equal value with the ten tenths now produced. (Ricardo 1951 pp. 194-196.)

This, as pointed out in an article coauthored by Walter Block,¹³ raises a problem for Rothbard's claim that the outcome of the free market is ideal, since it implies that resources are being wasted

¹³ Barnett II, William and Walter E. Block. 2012. "<u>The Optimum Quantity of Money, Once Again.</u>" Economics, Management, and Financial Markets; Vol. 7, No. 1, March, pp. 9-24.

mining enough gold to provide the equilibrium amount of money when a smaller quantity of gold would do as well — Ricardo's point.

One implication is that a sufficiently well managed fiat money system would be superior to a commodity standard, since it provides the same services without having to bear the cost of mining gold; one can think of that as the limiting case of Ricardo's tax. Unfortunately there may be no mechanism for reliably producing such a system, judging by the observed failures, most dramatically hyperinflation, of real world fiat systems. A commodity system is a solution to the problem of guaranteeing a stable value for the monetary unit. A fractional reserve system does it at a lower cost than a system of circulating gold coins or the hundred percent reserve system that Rothbard advocates, since less gold has to be mined to provide the same level of monetary services. The gold being held as reserves serves a useful function, since it is required to let the bank fulfill its obligation to redeem its notes and it is that obligation that is keeping the bank honest and maintaining a predictable value for its money. The amount of gold required for that purpose is determined by the technology of fractional reserve banking — less the easier it is for the bank to convert interest earning assets into gold, greater the greater the frequency with which holders of notes or demand deposits choose to demand redemption.

Minor Mistakes

Rothbard writes:

Other producers' goods may be relatively nonspecific and capable of being used in a wide variety of employments. They could never be perfectly nonspecific—equally useful in all production of consumers' goods—for in that case they would be general conditions of welfare available in unlimited abundance for all purposes. There would be no need to economize them. (p. 38)

Something could be equally useful for producing all consumer goods but available in limited supply.

He writes:

The addition of the element of disagreeableness in certain types of labor may reinforce and certainly does not counteract the increasing marginal disutility imposed by the cumulation of leisure forgone as the time spent in labor increases.

The element of disagreeableness could have diminishing marginal disutility. Consider a workplace smell which bothers you for the first hour but becomes unnoticeable once you get used to it.

Therefore, at any given point in time, all men will have invested in all the shorter periods of production to satisfy the most urgently felt wants that their knowledge of recipes allows; any further formation of capital will go into longer processes of production.

If a longer period of production gives a sufficiently larger return, it will be made first. Planting an orange tree gives no return for several years but might still be preferred to growing parsley.

(Mises, quoted by Rothbard): If the earth's surface were such that the physical conditions of production were the same at every point and if one man were . . . equal to all other men . . . division of labor would not offer any advantages for acting man. (pp. 96-97)

There could still be gains to division of labor via economies of scale. All three of us have identical abilities to produce. Each of us can produce one unit of good A, good B or good C in an hour, which is all we want —both goods are perishable, cannot be stored — or three units in two hours. So the first person produces three units of A, the second of B, the third of C, then they trade. Each gets one unit of each good, works two hours. Without trade, each would have to work three hours to get one unit of each.

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. (p. 672)

That is only true if marginal cost is zero. As long as producing costs something, reducing output saves more in cost of production than it loses in revenue as long as the demand curve is not too elastic.

In Summary

As I think I have shown, Rothbard's version of economics cannot prove the things he claims. It does not imply declining marginal utility of either consumption or leisure nor positive time preference, tools Rothbard uses in his arguments, does not provide any way of showing what economic arrangements are best. It fails to do these things because it rejects any conclusion that cannot be demonstrated with certainty. It cannot, and Marshallian economics can, answer questions such as the desirability or undesirability of minimum wage laws, tariffs, cartels or monopolies.¹⁴

The Marshallian approach gives answers but with less than certainty. Economic improvement is, as Marshall himself recognized, an imperfect proxy for utility increase, hence the observation that a tariff or minimum wage law reduces efficiency does not tell us with certainty that it reduces total utility hence is not, even for a utilitarian, a proof that it is undesirable. Further, the tools used to show a reduction in efficiency depend on factual assumptions not known with certainty to be precisely true, as I have demonstrated in the case of the effect of a minimum wage law. What Marshallian economics gives us is not a proof that a tariff or a minimum wage law is a bad thing but only a good reason to think it is.

To reject the approach on that basis is to make the best the enemy of the good.

Beyond Rothbard

Ludwig von Mises describes two fields, praxeology, which is pure theory, and economic history, which is the combination of theory with real facts. The theory gives conclusions conditional on real world facts — the conditional statement is known with certainty, the conclusion is not. To know if the conclusions are true one has to check whether the facts they depend on hold. The Chicago approach to economics also combines theoretical arguments with real world evidence, which raises the question of whether there is any difference beyond terminology, "economic history" vs "economics." Rothbard, who was a student of Mises, may for all I know have agreed

¹⁴ My point here holds for Marshallian economics in general, not only the variant associated with Chicago.

with that approach, but *Man*, *Economy and State* contains only one passing mention of economic history.¹⁵

Mises does not mention the option of testing conclusions instead of the facts they depend on. If the conclusion is false it follows that either there was an error in the theoretical argument or the facts that the conclusion depends on do not hold. If, for example, we observe an increase in the minimum wage with no (or positive) effect on low wage employment, that could mean that one of the assumptions of the argument was not true, perhaps that the relevant labor market was monopsonistic, or it could mean that there was an error in the theory.

I see no reason in principle why that approach would be inconsistent with Mises' views, but there may be a reason he does not suggest it. He writes:

But the experience to which the natural sciences owe all their success is the experience of the experiment in which the individual elements of change can be observed in isolation. The facts amassed in this way can be used for induction, a peculiar procedure of inference which has given pragmatic evidence of its expediency, although its satisfactory epistemological characterization is still an unsolved problem.

The experience with which the sciences of human action have to deal is always an experience of complex phenomena. No laboratory experiments can be performed with regard to human action. We are never in a position to observe the change in one element only, all other conditions of the event being equal to a case in which the element concerned did not change. (Human Action p. 31)

His argument is that the inductive approach to knowledge is workable for the physical sciences because they can do experiments in which all relevant variables are held fixed but the equivalent cannot be done for economics since the relevant variables are not under our control. He concludes that economic theory must depend on the deductive approach, taking advantage of the fact that we, being humans, can use introspection to derive axioms of human behavior.

This exaggerates the difference; the physicist can never know for certain that all relevant factors are being held constant because he does not know what all the relevant factors are. Real world examples are Kelvin's calculation of the age of the Earth based on the physics of cooling, which got the answer wrong by an order of magnitude because it did not account for heat produced by radioactive decay, and calculations of the age of the sun by Helmholz and Newcomb which got the answer low by more than two orders of magnitude because they did not know about nuclear fusion.

Mises exaggerate the difference on the other side as well. Although the economist cannot control all relevant variables he can draw conclusions from situations where the factors he believes important are not changing. Inn some cases, he can estimate the likely size of errors due to factors he is not allowing for. Ricardo, for example, assumed that all goods are produced with the same ratio of capital to labor in order to make the theory he was constructing simple enough for him to draw conclusions from it and calculated an estimate of the likely size of effects on relative prices due to the fact that they were not.¹⁶

¹⁵ He writes "which commodities are chosen as media of exchange ... is subject matter for economic history."

¹⁶ George Stigler, "Ricardo and the 93% Labor Theory of Value," AER vol. 48 no.3 (June 1958) pp. 357-367.

Another difference is that Mises regards only things known with certainty through logical reasoning from axioms known *a priori* as economic theories. Something like my theory of the size and shape of nations, which gets its simplicity by assuming away possibly relevant complications, does not qualify. The Chicago approach allows for theories close enough to true to make their conclusions likely. What matters is not how large the effects I assume away are but how badly they disrupt the patterns implied by the theory. The test is the accuracy of the theory's predictions.

That is the underlying logic of the claim that theories are to be judged by their predictive power rather than the realism of their assumptions, one of the positions associated with the Chicago school and rejected by at least some Austrians.¹⁷

The problem with this description of the difference between the two schools is Austrian Business Cycle Theory. It appears to be regarded by Austrian economists as a theory. It does not follow by deduction from axioms, because it depends on a particular assumption of how businesses respond to temporarily low interest rates — that they mistakenly interpret them as permanent. That isn't impossible but it isn't necessary. So ABCT seems to be a conjecture suggested by theory accepted because it is believed to fit the historical data — which, if my interpretation of Mises is correct, is just the sort of thing that Austrians object to when Chicago school economists, or Marshallians more generally, do it.

Which suggests that there may be no essential theoretical difference between the schools, just a lot of inessential differences in presentation and application coming out of two different lines of scholarly development, converging because they are both constrained by the same rules of logic and facts of reality.

Think of it as parallel evolution.

¹⁷ Milton Friedman, "The Methodology of Positive Economics," in *Essays in Positive Economics*, University of Chicago Press 1953.