

# VON MISES AND TIME-PREFERENCE

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IN HIS JUSTLY ACCLAIMED WORK *Human Action*, Professor Ludwig von Mises argued that time-preference (the higher ranking of an end attained sooner over the ranking of the *same* end attained later) is an a priori category of human action, deducible with certainty from the nature of action.<sup>1</sup> Such a strong claim deviated from the prior conceptions of Austrian economists, such as Eugen von Böhm-Bawerk, who sought the explanation of time-preference in empirical, primarily psychological (von Mises would say thymological), considerations.<sup>2</sup> And yet the Misesian thesis has seemingly been accepted as correct praxeological reasoning by the current generation of Austrian economists.<sup>3</sup> This paper reasons to a rejection of the Misesian time-preference view and calls for the necessary modifications of Austrian theory that this entails.<sup>4</sup>

What is Professor Mises's derivation of the categorical certainty of time-preference? Quoting from *Human Action*:

Time-preference is a categorical requisite of human action. No mode of action can be thought of in which satisfaction within a nearer period of the future is not, other things being equal, preferred to that in a later period. The very act of gratifying a desire implies that gratification at the present instant is preferred to that at a later instant. He who consumes a nonperishable good instead of postponing consumption for an indefinite later moment thereby reveals a higher valuation of present satisfaction as compared with later satisfaction. 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.<sup>5</sup>

Two problems prevent the above from logically achieving the desired conclusion, one of them fundamental. I discuss the nonfundamental one first.

Even granting that "he who consumes a nonperishable good instead of postponing consumption for an indefinite later moment thereby reveals a higher valuation of present satisfaction as compared with later satisfaction," this reasoning says nothing with certainty about time-preference with respect to perishable items. Why might this distinction matter? Because perishability entails a future offering a decisively different set of alternatives to the

actor, a condition incompatible with the "other things being equal" clause of Mises's proof. If the power in a house is turned off for two days, is the increased intake of perishable foodstuffs from a nonfunctioning refrigerator really to be interpreted as a preference for present consumption over future consumption? Or is it rather that the homeowners would really have preferred to wait and consume at a later date, but that circumstances prevented that option? In which case, perhaps the nonimmediate consumption of such perishable items when a functioning refrigeration unit *is* present should be interpreted, in part, as a preference of later consumption over earlier consumption—a negative time-preference.

There is a correlated problem here that I have not seen discussed in Austrian literature; for Austrians, action demonstrates a preference in the actor's value hierarchy, indicating a higher ranking of the end the action seeks to attain than the rankings of any alternative ends the actor could have sought. The Austrians make clear, of course, that action in this sense need not be *physically* active; the continuation of what you are doing when you could instead do something else, the mere zombie-like sitting and watching the flow of events past you—these are, on this view, equally actions with the more strenuous activities usually connoted by the term. With this in mind, consider a man with, say, four alternatives to choose from: he can watch TV, play poker, go for a walk, or sit aimlessly staring into space. Further assume that he ranks not watching TV over watching TV, not playing poker over playing poker, and not going for a walk over going for a walk; so he sits aimlessly staring into space. Are we to conclude that he preferred this alternative? Perhaps (is it possible?) he's doing that by default, having *actively* (by demonstrated preference of *not* doing them) rejected his other alternatives. Perhaps, if you asked this man what he was doing, he would *not* say, "I'm staring aimlessly into space," but say instead, "Why isn't it obvious—I'm engaged in the act of not watching TV, not playing poker, and not going for a walk."

The problem lies in the ambiguity of the meaning of action. To act means to attempt to achieve a state of affairs that one values over the state of affairs that would occur had one not made the attempt. The ambiguity is in the state of affairs valued less, the one that would have occurred had the actor not so acted. Is this the state of affairs that would have occurred had the actor been comatose, or been transfixed like a statue for a period of time, or not existed, or simply acted another way? The problem is that, in real life, the actor has to be "doing" *something* at all times (certainly at all conscious moments). So in observing someone else, we must question whether what he is doing is an action demonstrating preference or the result of a (different) action of demonstrating the preference of *not* doing (not-doing) anything else (within the possible alternatives open to him). In other words, it might be advisable when considering the alternative actions an actor did not choose, to distinguish between actions he wanted to pursue, but not as much as the one he

actually did pursue, and actions he *actively did not want* to pursue. If this distinction is made, an action may demonstrate, not one, but many preferences. Given alternatives W, X, Y, Z, doing X may not only show a preference of X but may also show a preference of not-W or not-Z. This obviously relates to the question of time-preference: when a consumer good is not consumed immediately, this may be because the actor wants to consume it but wants to perform some other action even more, *or* because the actor actively wants not to consume that particular good at this particular instant. This latter possibility is, of course, negative time-preference, and the mere existence of this possibility precludes the apodicticness of Mises's proof. Does anyone really believe that the best explanation of a sailor, stranded on a desert island hopefully awaiting rescue, not immediately drinking his one remaining ounce of water is not a negative time-preference?

Returning to the refrigerator case, note that it is not answerable in the same way as the case of the man who drives his mother-in-law to the bus station even though he would (he says) have preferred not to. The Austrian response to the mother-in-law man is that he has demonstrated his *actual* preference through his action in the face of alternatives. Put another way, the Austrians would say that if you asked the man why, if he "really" preferred not driving his mother-in-law to the bus station, he drove her anyway, he would respond with reasons (e.g., to keep peace with the wife, to avoid argument, to remain in the mother-in-law's will, etc.) which make it obvious that *all things considered*, he really did prefer to take the mother-in-law to the bus station. What he may have preferred even more—namely, *not* taking her and still (somehow) avoiding all the bad consequences of not taking her—was not an alternative open to him, and so, the Austrians conclude, his action does indicate his preference of the act taken over his available alternatives.<sup>6</sup>

This demonstrated-preference argument does not help with the refrigerator case. What if, while stuffing himself with food that would otherwise spoil, the man whose refrigerator was not working said he would have *preferred* waiting until later to consume this food? Does his action actually demonstrate otherwise? If *this* man were asked why he was consuming at present when he preferred to consume later, he would *not* give reasons why his actual course of action was, all things considered, preferable, but would instead give reasons why his preferred course of action was impossible (because my refrigerator was on the fritz and this stuff would spoil soon). Thus, even though the man's action demonstrates the preference of eating the perishables over letting them spoil, it does not demonstrate the preference of eating now over eating later because eating later is *not* a possible alternative. So here the action taken does not preclude the possible truth of the asserted preference. The negative time-preference indicated is here a counterfactual preference and so not demonstrable, but it may still be a preference, for all that, and stand as a counterexample to the Misesian thesis.<sup>7</sup>

Another Austrian response to any alleged counterexample to the Misesian

time-preference doctrine is to question the alleged goods' equality of what is being compared. Consider a typical counterexample eligible for this response: during the winter, a man prefers not consuming an ice block during the present but instead saves it for consumption at a later date, say the following summer.<sup>8</sup> Is this an example of negative time-preference? No, say the Austrians; for negative time-preference to be shown, it would have to be the case that good A consumed at a later date is preferred to good A consumed at an earlier date. The *same* good, of course, needs to be compared; showing that good A consumed later is valued over good B consumed earlier tells us nothing of time-preference. And goods are shown to be the same, not by indicating unchanged physical characteristics, but by showing that they are ranked equally by the actor. It is the subjective use-value and not the physical characteristics that must be considered. And ice-in-the-summer has different (more valued) uses from ice-in-the-winter. So they are not the same good; nothing has been shown about time-preference.

Two dangers of this response must be considered. First, if the *only* justification for regarding as different two units of what appear to be the same good is that the actor values obtaining the one later over the other earlier (which would imply negative time-preference if they were the same good), this argument becomes question-begging. If, in the summer of 1977, our actor chooses not to consume his ice block but instead chooses to wait and consume it in the *summer* of 1978, are we to conclude that 1978 summer ice is valued over 1977 summer ice? For what reason, other than the fact that 1978 is later than 1977? How are their subjective use-values different when we abstract away the time factor? We must neglect the time factor and explain the difference in some other way if we are to justify time-preference and not merely assert time-preference to justify the different-goods claim.

The second danger of this response is that it has a tendency to misconstrue the problem of time-preference. In studying economics, Austrians are not engaged in superficial analysis—they seek to understand, not merely describe, economic phenomena. It would be wrong, therefore, to interpret the Misesian stand on time-preference as the following challenge: We find the variables affecting man's action so manifold that we can hold one of them—time-preference—constant and still explain all valuation phenomena. Winter ice is valued over summer ice in winter—that's time-preference; summer ice is valued over winter ice in winter—that's evidence that summer ice is a higher-valued good than winter ice; summer ice is valued over winter ice in summer—that's time-preference; winter ice is valued over summer ice in summer—that's speculation on the future demand and supply schedules for winter ice. If we were merely attempting to devise an action schema whereby any action could be guaranteed possible description (A acted X; therefore A acted as if Y), such responses would be adequate; but Austrians seek to understand reality—they seek to understand the causal relations which underlie real people's interacting and from which arise

economic phenomena.<sup>9</sup> And a search for causal phenomena cannot be satisfied with *as ifs*. The question we seek to answer is, Are some actions attributable to negative time-preferences, or are only positive time-preferences predicable of man? In which case, the question to ask of any proffered example is not, Can this be explained without the necessity of positing negative time-preference? but, Is negative time-preference an acceptable explanation? For we do not claim that negative time-preference is the *only* possible explanation, but only that it *is* a possible explanation. This mere possibility forces the rejection of the Misesian thesis.

But what if there were some way to reconstruct the problem of time-preference with respect to perishable items so that my objections no longer held or were shown fallacious? Or what if the Austrians are swayed by my critique and adopt a modified time-preference doctrine positing apodictic certainty only in relation to nonperishables? This would still not suffice, for there remains the more fundamental objection that, strictly as a matter of logic, Mises's proof is deficient.

I now turn to this more fundamental objection to Mises's proof. Why does he say, "If he were not to prefer satisfaction in a nearer period of the future to that in a remoter period, he would never consume. . . . He would not consume today, but he would not consume tomorrow either, as the morrow would confront him with the same alternatives"?<sup>10</sup> This is a somewhat confusing statement from a man who has also said, "Men react to the same stimuli in different ways, and the same man at different instants of time may react in ways different from his previous or later conduct."<sup>11</sup> (Consider, especially, that this latter statement comprises the grounds Mises offers for the methodological differences between the natural and praxeological sciences.) For Mises's *former* statement seems to imply that if a man has a negative time-preference at one particular moment, he will continue to have that negative time-preference in the future. In other words, he seems to assume a constancy for time-preference valuations that he had previously decried as an unrealistic assumption for value scales in general.

Let us call the assertion that there exist at least some men who, for some ends, at some times, prefer the attainment of the end sooner to later the *weak time-preference* doctrine; the corresponding assertion that all men at all times prefer the attainment of any end sooner to later is the *strong time-preference* doctrine.<sup>12</sup>

Mises's proof of time-preference is in the form of a *reductio ad absurdum*—a logical argument wherein the truth of a proposition is demonstrated by showing its negation to be contradictory. But the tale of men never consuming is a negation of *weak* time-preference, while Mises used the absurdity of this negation to conclude the soundness of the *strong* time-preference doctrine. This was an unwarranted leap; Mises's proof by itself can conclude with nothing more than weak time-preference.

Perhaps this point will become clearer if we analogize Mises's time-

preference doctrine in an attempt to create a space-preference doctrine. Following Mises, we could say: Space-preference is a categorical requisite of human action. No mode of action can be thought of in which satisfaction at a nearer position is not, other things being equal, preferred to that at a farther position. The very act of gratifying a desire implies that gratification at the present spot is preferred to that at a distant spot. He who consumes a nonperishable good instead of postponing consumption for an indefinite destination farther on thereby reveals a higher valuation of here-satisfaction as compared with there-satisfaction. If he were not to prefer satisfaction at a nearer spot to that at a remoter spot, he would never consume and so satisfy wants. He would not consume here, but he would not consume there either, as there (which for him is now here) would confront him with the same alternatives.

This novel approach to transportation costs, not without its insights, is clearly flawed. What is to prevent us from desiring to consume in St. Louis? While traveling there from San Francisco we have there-preference; once we reach St. Louis, we have here-preference. Similarly, what is to prevent us from desiring to consume on January 13, 1982? While "traveling" there from March 2, 1977, we have negative time-preference. Once we reach January 13, 1982, we have positive time-preference.

In addition to problems relating to the constancy of time-preference valuations one can also detect a holistic flaw in Mises's reasoning—he deals with time-preference instead of a set of time-preferences corresponding to the set of consumer goods available. He imagines a man never consuming anything because he has a negative time-preference for everything, and he fails to consider the possibility of an actor with negative time-preference for only some things. Consider: I never eat onions, even though they grow wild in my garden and are mine for the picking. How can this be understood? We might (reasonably) say I actively dislike onions, but Austrians seem to avoid considering disvalue of a consumer good, bringing the concept up only with reference to labor (perhaps on the argument that one never acts to attain that which is actively disvalued, and so, for the actor in question, this is *not* a consumer good, even though it is sold in the market to (other) consumers). If we accept the restriction of never disvaluing items of consumption, how do we explain my never consuming the onions? *Either* I always want to consume it *now*, whenever that is an alternative open to me, but (as the fates would have it) whenever it *is* an alternative, there is always *another* alternative action available now (not necessarily the same one at different *nows*) that I want to engage in even more (i.e., the onion consumption always ranks positive on my value-scale, but something else always ranks more positive); *or* I always want to consume it *later* (i.e., negative time-preference with respect to me and the onion).<sup>13</sup> There is no way to distinguish between these possibilities by observation of action, for each predicts the same action sequence (each predicts that I never eat onions).

Why does Mises categorically deny the second possibility? It is certainly reasonable and expected that a given actor at a given time will have *different* time-preference rankings for different items (I prefer one ounce of gold now to one ounce of gold later, and I prefer one dollar now to one dollar later, but I *more* prefer having the gold now to having a dollar now—i.e., I will choose one ounce of gold now and one dollar later to one dollar now and one ounce of gold later). Why can't some of these time-preferences for some of these goods be negative some of the time? Why can't they be negative all of the time for items I never consume? What does the subjectivity-of-value doctrine so intimately connected to the names of Mises, Menger, and the Austrian school<sup>14</sup> mean if not that a volitional actor can choose to arrange his value hierarchy so that at least for some times the value of a good consumed later ranks higher than the value of the same good consumed earlier?

Let us assume here that there are no ways to revise the Misesian proof so that it arrives at its desired destination and that there are no other sound arguments leading to strong time-preference; let us, indeed, assume the strong-time-preference doctrine is false. Can the vast economic edifice the Austrians have constructed on the foundation of that doctrine stand on the foundation of weak time-preference?

This is too broad a topic to be covered within the constraints of the present paper; I believe, however, that the substance of Austrian teachings can remain unmodified if based on a version of weak time-preference stating that *most* men, for *most* ends, at *most* times prefer the attainment of the end sooner to later. Call this real time-preference.

How can real time-preference be justified? The Misesian proof justifies weak time-preference but does not allow us to quantify the *somes* to *mosts*. Real time-preference could be accepted as a fundamental empirical assumption, justified by observation, similar to the assumption of the existence of a variety of human and natural resources, or the assumption of leisure as a consumers' good.<sup>15</sup> Economics, in general, could deal with a world in which weak time-preference held in only its weakest sense—where each individual consumed only enough to survive, all reveling in the joy of postponing consumption—just as it could deal with worlds in which people work until they drop, leisure not being a consumer good; or in which all natural and human resources are homogeneous. Economics, practically, does not deal with such a world, however, for the empirical observation of real time-preference tells us such an analysis would be a waste of time and would not explain acting man as we know him.

Alternatively, we could seek to explain time-preference as following from a more fundamental postulate of man, this more fundamental postulate being an empirical observation such as those above.<sup>16</sup>

What observations about the world could lead us to accept the real-time-preference doctrine? One that may not come to mind is the observance of a positive interest rate. The reason this may not come to mind is that it appears

to be circular—time-preference explains a positive interest rate, and a positive interest rate explains time-preference. I do not claim, however, that a positive interest rate *explains* time-preference, but only that it *counts as evidence* of time-preference, and this leads to no circularity, especially if there is other evidence of time-preference as well.<sup>17</sup>

One piece of such evidence is the observation that land does not sell at an infinite price, even though this would be the sum of its marginal-value products over the life of the factor, which in the case of land is infinite.<sup>18</sup> This can be understood as land selling, not at the sum of its MVP, but at the sum of its *discounted MVP*, with the discounting implying positive time-preference.<sup>19</sup> Though this argument only indicates time-preference with respect to land, the inability to enumerate relevant distinctions between people's time-preference for this factor and their time-preferences for other factors or consumer goods would allow the extension of the presumption of time-preference over all goods and services in the market, if not, perhaps, to all ends aimed at.

If the goal of praxeology—and especially of its thus far best-developed part, economics—is the logical development of the implications of the existence of human action, then it is crucial to know exactly where, how, and whether any auxiliary propositions were asserted and to know, as well, the classification of these propositions—deducible from prior considerations or generalizations from the observations of actual action; a priori or empirical. This knowledge is crucial from the viewpoint both of understanding and of explanation. This knowledge is crucial from the viewpoint of truth. If a defense of time-preference as an empirical generalization about men as we know them, and not a categorical truth derivable from the essence of action, goes against the actual teachings of Ludwig von Mises, we can only hope that it is in the spirit of supreme dedication to the search for truth that has long stood as the hallmark of that great man's teachings.

1. Ludwig von Mises, *Human Action*, 3d rev. ed. (Chicago: Henry Regnery, 1966), p. 484.

2. For the distinction between modern psychology and what Mises calls thymology, see his *Theory and History*, 2d ed. (New Rochelle, N.Y.: Arlington House, 1969), p. 264–71. Böhm-Bawerk's position is found in his *Capital and Interest*; more detailed references can be found through Mises, *Human Action*, p. 488. See also Mises's critique of Böhm-Bawerk reprinted in English in Percy Greaves, *Mises Made Easier* (New York: Free Market Books, 1974), p. 150–57.

3. Murray N. Rothbard, for example, claims that knowledge of time-preference is deducible from the nature of action, though his reasoning differs somewhat from Mises's. See his excellent *Man, Economy, and State* (Los Angeles: Nash Publishing, 1972), 1:13. For a critique of Rothbard's reasoning, see Robert Nozick, "On Austrian Methodology," *Synthese* 36 (1977): 378–79.

4. After this paper was conceived, I found out, through a personal communication from



Larry White, that deficiencies in Mises's a priori derivation of time-preference were discussed at the 1975 Austrian conference at the University of Hartford; in addition, I believe Nozick has made a criticism of Mises's view similar to my own in his "On Austrian Methodology" (the relevant page was missing from the copy of Nozick's paper, as yet unpublished, available to me at the time of this writing in early 1977).

Throughout this paper, the term *time-preference* appears, often modified with either of the adjectives *positive* or *negative*. It is a convention throughout this paper, in keeping with Austrian literature, that *time-preference*, if unmodified, should be interpreted to refer to *positive* time-preference.

5. See n. 1.

6. The relation between preference and action is considered further in Nozick, "On Austrian Methodology," pp. 369-78.

7. Is it meaningful to speak of preferences not exhibited in action? Mises warned of using the construct of a value hierarchy as a guide to action rather than as a tool to interpret action, claiming that the only information we have about the value scales of others is the observation of actual human action (*Human Action*, p. 95). Nor can a series of observations of some man acting (choosing) allow us to construct a value hierarchy, since we would further have to presume a constancy of value preference, an assumption which is patently false.

Of course, someone, without choosing between them, could *tell* us that he prefers A to B. But he could be lying; all we know for sure is that he preferred telling us he preferred A to B, since that is how he acted. But to claim we can *never* know preference except through action is to claim that *everyone* who states these nonacted preferences must be lying, else we could know a preference without seeing the action-choice. (Or does it only mean that we can never *know* whether or not anyone stating such a preference is lying? Such strong skeptical presumptions should be argued for; is there no corresponding difficulty in knowing what a person's action is?) Furthermore, if a man is lying when he says he prefers A to B, then he must prefer B to A, which equally is a non-demonstrated-through-action preference. (This assumes, of course, that A and B cannot be equally preferable, an assumption Austrians continually make; the argument that the act of choosing one over the other demonstrates a preference of one over the other says nothing, it should be noted, about the possibility of equal preference of two goods no one of which is ever a possible alternative whenever the other is chosen. Of course, such niceties may be irrelevant if economics studies only the results of demonstrated preferences.)

Nozick, "On Austrian Methodology," pp. 372-76, submits the strong claim that preference is never demonstrated other than through action to a critical analysis. There is one point, however, that Nozick declined to comment on: if the Misesian contention is correct, then the Austrian analysis of government intervention is meaningless. The evil of government is not that it forces us to choose an action not highest-ranking on our value scale—indeed, if the Austrian notion of demonstrated preference holds, it is impossible to force a man to choose among his alternatives an end not most highly ranked; it is only possible to severely restrict his possible alternatives. The evil of government is that it restricts the sphere of acceptable alternatives so that the action highest-ranked among alternatives open to us need not correspond to the action that would have ranked highest in a free-market society. But for this to be a meaningful complaint, it must be possible to discuss preferences not demonstrable in action.

8. This is taken from Rothbard, *Man, Economy, and State*, 1: 436, n. 15.

9. Those ordered patterns in society not purposefully aimed at by any individual.

10. See n. 1.

11. Mises, *Theory and History*, p. 5.

12. Of course, by mixing quantifications on men, ends, and time, we can construct several

other—intermediate—time-preference doctrines, but these two will serve for now.

13. A combination of these possibilities is also possible.

14. Other names and other schools are also associated with the subjective-value doctrine. See Larry White's *Methodology of the Austrian School*, Center for Libertarian Studies Occasional Paper Series No. 1 (New York, 1977).

15. By the way, does this mean that for all men at all times leisure is a consumer good, or only for some men at some times leisure is a consumer good?

16. This is the route taken by Nozick, "On Austrian Methodology," pp. 380-84.

17. A similar distinction between "reason for believing" and "explanation of" was used by Nozick, *ibid.*, p.389, n. 21, though not in the same context; and was helpful to Michael Gorr in his "Trivus on Economic Value," *Reason Papers*, No. 3 (Fall 1976), p. 87.

18. See Rothbard, *Man, Economy, and State*.

19. Is this the only explanation for the discounting? Maybe it's due to the uncertainty of the land really being useful for an infinite period of time.