The Quarterly Journal of Austrian Economics

VOL. 16 | No. 3 | 317–330
FALL 2013

Comment on "A Note on Two Erroneous Ways of Defending the PTPT of Interest"

Jeffrey Herbener

ABSTRACT: In response to Topan and Păun in this issue, this comment upholds two lines of argument in defense of the Pure Time Preference Theory of interest. Ludwig von Mises claimed that time preference is a fundamental concept of human action. It is not the conclusion of arguments about interest and consumption-saving decisions, but a presupposition of such arguments. Frank Fetter held that the exchange of present money for future money, not the exchange of present goods for future goods, can isolate the time preference element in inter-temporal trade because the monetary unit is the unit of economic calculation. As such, all the monetary units have "equivalent value," even inter-temporally. When people trade money inter-temporally to satisfy their time preferences, the pure rate of interest isolates time preferences.

KEYWORDS: time preference, pure time preference theory of interest

JEL CLASSIFICATION: B13, B25, B53, E43

Vlad Topan and Cristian Păun (2013) purport to show that two arguments made in defense of the Pure Time Preference Theory of interest are erroneous, one made by Ludwig von Mises and

Jeffrey Herbener (jmherbener@gcc.edu) is a professor of economics at Grove City College and is a senior fellow with the Ludwig von Mises Institute.

the other by Frank Fetter. To their credit, they avoid basing their criticism on the ambiguity of expression used by defenders of the PTPT. Instead, they (Topan and Păun 2013, pp. 301-303) rightly quote statements by Mises (1998, pp. 480-481) and Rothbard (2004, p. 15) that define time preference in terms of satisfaction and not goods.[1] Unfortunately, Topan and Păun construct their critique under a misapprehension of the arguments made by Mises and Fetter.

Concerning Mises's views, they (Topan and Păun, 2013, p. 299-300) claim that the opposite of time preference "must be proven absurd for time preference to be established as a praxeological (and not just as a fairly general empirically true) law." They (Topan and Păun 2013, pp. 300-301 and 304-305) then assert that Mises argued for the existence of time preference as a "praxeological law" on the basis of a *reductio ad absurdum*: if a person did not have time preference, i.e., he did not prefer a given satisfaction sooner instead of later, then he would never consume; but the idea of a person who does not consume is absurd and therefore, the existence of time preference is proven.

Mises, however, famously claimed that the fundamental conceptual structure of action is known a priori. These a priori categories are not proven as the conclusion of an argument but are the beginning presuppositions of arguments that establish economic laws. Mises (1998, pp. 34–35) wrote:

> The fundamental logical relations are not subject to proof or disproof. Every attempt to prove them must presuppose their validity….They are ultimate unanalyzable categories….They are the indispensable prerequisite of perception, apperception, and experience.
>
> The human mind is not a tabula rasa on which the external events write their own history. It is equipped with a set of tools for grasping reality…. these tools are logically prior to any experience.
>
> Man is not only an animal totally subject to the stimuli unavoidably determining the circumstances of his life. He is also an acting being. And the category of action is logically antecedent to any concrete act.
>
> Everybody in his daily behavior again and again bears witness to the immutability and universality of the categories of thought and action.

[1] On arguments against the PTPT based on ambiguous definitions used by its proponents, see Herbener (2011), pp. 55–58.

From the reflective knowledge of the fundamental concepts of action, the economist deduces the theorems of economics. Mises (1998, p. 64) wrote:

> The scope of praxeology is the explication of the category of human action. All that is needed for the deduction of all praxeological theorems is knowledge of the essence of human action…. The only way to a cognition of these theorems is logical analysis of our inherent knowledge of the category of action. We must bethink ourselves and reflect upon the structure of human action.

As an illustration of how Mises constructed arguments that incorporated the fundamental concepts of human action, consider the concept of preference. He (Mises 1998, pp. 92–98) claimed that preference is a fundamental category of action and hence, a presupposition for economic reasoning. Thus, if Mises were to infer that without preferring and setting aside there can be no action, he would not be attempting to demonstrate the existence of preference by a *reductio ad absurdum*: if a person did not have a preference, he could not act; but the idea of a person who does act is absurd and therefore, the existence of preference is proven. Instead, Mises would be demonstrating the logical coherence of the fundamental categories of action with the economic theory that explains action. The fundamental categories of action themselves are proven by reflection (Mises 1998, pp. 17–18 and 92–96). Mises (1998, p. 38) wrote:

> The starting point of praxeology is not a choice of axioms and a decision about methods of procedure, but reflection about the essence of action. There is no action in which the praxeological categories do not appear fully and perfectly.

Like preference, time preference is a fundamental category of action. As Topan and Păun (2013, p. 304) quote Mises (1998, p. 481):

> 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 equal—preferred to that in a later period.

The existence of time preference as a praxeological concept is not demonstrated by any argument. Its existence is proven by reflection about action and its meaning is unfolded by apprehending the logical coherence of the fundamental categories of action and deducing economic theory from them. Time preference is the logical requisite for understanding the inter-temporal relationship between the actions of production and consumption. It is not an implication drawn from the relationship between these actions. Mises (1998, p. 480) wrote:

> Other things being equal, satisfaction in a nearer period of the future is preferred to satisfaction in a more distant period: there is disutility in waiting.
>
> This fact is already implied in the statement stressed at the beginning of this chapter, that man distinguishes the time before satisfaction is attained and the time for the duration of which there is satisfaction. If any role at all is played by the time element in human life, there cannot be any question of equal valuation of nearer and remoter periods of the same length. Such an equal valuation would mean that people do not care whether success is attained sooner or later. It would be tantamount to the complete elimination of the time element from the process of valuation.

Just as the distinction we make as human persons between more and less of a good is bound up with our preference for more of a good over less, the distinction we make between sooner and later satisfaction of an end is bound up with our preference for sooner satisfaction over later. No argument is necessary to prove the existence of either preference or time preference. They are revealed to be true as one reflects on the meaning of action and that truth is reinforced by drawing out what can be logically implied by them. Mises (1998, p. 490) wrote:

> The value of time, i.e., time preference or the higher valuation of want satisfaction in nearer periods of the future as against that in remoter periods, is an essential element of human action. It determines every choice and every action. There is no man for whom the difference between sooner and later does not count. The time element is fundamental in the formation of all prices of all commodities and services.

That Mises is not attempting to prove time preference by a *reductio ad absurdum* argument dismisses Topan and Păun's (2013, p. 305) objection that Mises was attempting to "negate a general statement…and arrives at a general statement" instead of negating a general statement with a specific statement.[2] It does not, however, dismiss the objection they (Topan and Păun, 2013, p. 305) make that Mises errs by stating his claim about the logical implication of time preference in terms of consumption instead of action in general. Topan and Păun (2013, p. 304) cite Mises (1998, pp. 481 and 487) who wrote:

> 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.
>
> If acting man, other conditions being equal, were not to prefer, without exception, consumption in a nearer future to that in the remoter future, he would always save, never consume.

"Mises frames his expositions of the time-preference principle mostly in terms of *consumption*," Topan and Păun (2013, p. 305, italics original) write, "even though it can also be put in (more general) terms of *action*." As Topan and Păun (2013, p. 304) have shown, however, Mises states the principle of time preference neither in terms of consumption nor action, but in terms of satisfaction. By re-stating time preference in terms of consumption, which is the realization of the satisfaction a person receives from attaining an end, Mises is providing a transition to further implications of time preference.[3] He is attempting to isolate and analyze the inter-temporal dimension of valuing in choice and action (Mises 1998, pp. 476–496). Action can either directly or indirectly satisfy ends. Although some ends can be attained directly in acts of consumption, attaining others requires a series of acts of production before an act of consumption can be taken to attain them. The value of acts of production, by which an end is indirectly satisfied, is not realized until the act of consumption, which the previous acts of production

[2] Even if we grant for the sake of argument that Mises is trying to use a *reductio ad absurdum* to prove the existence of time preference, it is not clear that the form of Mises's argument is as Topan claims. Instead, Mises's alleged argument would appear to be a hypothetical syllogism: If a person lacked time preference, then he would not consume; a non-consuming person, i.e., a person who never realizes satisfaction, is absurd and therefore, a person cannot lack time preference.

[3] Time preference as a satisfaction can be stated either in terms of consumption or action as long as it's kept in mind that the goal of action is receiving the satisfaction from attaining its end. Rothbard (2004, p. 51) states this in the quote cited by Topan and Păun (2013, p. 305).

make possible, actually satisfies an end. Time preference determines how a person will arrange a sequence of acts of production over time into a structure of capital goods to produce consumer goods by which his most highly-valued ends will be satisfied. Because longer production processes render more or superior consumer goods or both, a person who made no distinction between a satisfaction sooner and the same satisfaction later would continually engage in acts of production, thereby lengthening out the capital structure, so that he could enjoy greater consumption satisfaction in the more distant future. Of course, such a person would act, but he would never consume because he would still prefer more goods to less goods and superior goods to inferior goods and he could, by entering into longer production processes, wind up in the more distant future with more and better consumer goods than he could have in the less distant future with shorter production processes. Mises (1998, pp. 479–480) wrote:

> If acting men were not to pay heed to the length of the waiting time, they would never say that a goal is temporally so distant that one cannot consider aiming at it. Faced with the alternative of choosing between two processes of production which render different output with the same input, they would always prefer that process which renders the greater quantity of the same products or better products in the same quantity, even if this result could be attained only by lengthening the period of production. Increments in input which result in a more than proportionate increase in the product's duration of serviceableness would unconditionally be deemed advantageous. The fact that men do not act this way evidences that they value fractions of time of the same length in a different way according as they are nearer or remoter from the instant of the actor's decision.

Whether a person prefers sooner satisfaction of an end over later satisfaction or makes no distinction between sooner and later, he will act. But if a person makes no distinction between sooner and later satisfaction, his action will be production to the exclusion of consumption. Mises states the implication of time preference in terms of consumption instead of action in general to highlight the difference these two cases of inter-temporal valuation have on consumption and production. There is, logically, a third case of inter-temporal valuation. A person could prefer a satisfaction later to the same satisfaction sooner. If a person prefers later satisfaction of an end over sooner satisfaction, then he will not act at all. This is the case in the quote cited by Topan and Păun (2013, p. 305) from Huerta de Soto (2006, p. 271): "A world without time preference… would mean people always preferred the future to the present." The quote cited by Topan and Păun (2013, p. 306) from Walter Block (1990, p. 199) can also be understood this way. Thus, we have three cases of inter-temporal valuation: a person preferring sooner over later both produces and consumes; a person making no distinction between sooner and later produces but does not consume; a person preferring later over sooner neither produces nor consumes. Mises deals exclusively with the case in which a person makes no distinction between sooner and later.[4] For this reason, he does not state the implication of a lack of time preference in terms of the elimination of action itself, but in terms of the elimination of consumption, i.e., receiving the satisfaction from the realization of the end.

In response to Fetter's argument by which he concludes that the pure rate of interest can be isolated in inter-temporal trade of money but not in the inter-temporal trade of goods, Topan and Păun also operate under a misapprehension. They (Topan and Păun 2013, p. 312, italics original) write that Fetter's argument makes two claims: "(1) that non-monetary goods *always* suffer from the timing problem while (2) money *never* suffers from the same." The first assertion must be true, they (Topan and Păun 2013, p. 313, note 8) write, "otherwise inter-temporal exchanges in terms of other goods… could presumably also isolate pure… interest. And this undermines the case for the peculiar role of money in this respect." In making these assertions, Topan and Păun rely on my summary statement of Fetter's work instead of consulting Fetter's extended explanation.[5] Fetter (1915, p. 264) gave a succinct statement of his argument in his 1915 book, *Economic Principles*:

> Now as money is the common price denominator, and the price of nearly all things whether they are sold for cash or on credit is expressed in money, it is the unit in which the comparison of goods is made when

[4] The one possible exception is in the quote cited by Topan and Păun (2013, p. 304; Mises 1998, p. 481): "The very act of gratifying a desire implies that gratification at the present instant is preferred to that at a later instant." Mises, however, goes on in the same passage: "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."

[5] My summary statement of Fetter's views is found in Herbener (2011).

> one chooses goods in different periods of time. It is not an absolute standard of value; a "dollar" is not necessarily of the same value-magnitude to any one person from year to year, much less to all persons together…. But money is taken as the objective standard in borrowing and lending to which the time preferences of men are adjusted, as value is adjusted to price.

Fetter's argument is that money is chosen for inter-temporal exchange because money, as the general medium of exchange, provides the only unit that can serve as the basis of economic calculation. The unit of money performs the function of economic calculation both for present exchanges and inter-temporal exchanges. Fetter (1915, p. 312) wrote:

> Money being at the same time the medium of exchange, the common denominator of prices and the standard of deferred payments, is the unit in which all these valuations are expressed. In one form preeminently, the interest contract, the rate of time preference comes to a definite arithmetic expression.

Fetter's claim, then, would not be contradicted by an occasional instance of inter-temporal trade of a good any more than money's status as the general medium of exchange would be contradicted by an occasional act of barter.

Fetter explicates his argument in his 1905 book, *Principles of Economics*. He (Fetter 1905, p. 104) wrote:

> Money serves as a "common denominator," for, as all other things can be expressed in terms of money, through it the value of other things can be compared. The other things can be expressed in money because they are constantly exchanged for it. All things being compared with money, can in turn be compared with each other.

Only the general medium of exchange performs the function of allowing each person to make comparisons of value among all the diverse circumstances of action, including different moments in time. Fetter argues that both timing aspects and the time preference aspect affect the value of goods at different moments in time. If it were not possible to eliminate the timing aspect from inter-temporal exchange, then interest, i.e., the time preference discount, could not appear unalloyed. Fetter (1905, p. 141) wrote:

> Time value is the difference between the values of things at different times. Things differ in value according to form, place, quality of goods, and according to the feelings of men and—not the least important factor—according to time. The simplest and clearest case of time-value is the difference noticeable in the same thing at different moments. Is this good worth more now or next week? Shall this apple be eaten now or next winter? These questions can be answered only after comparing the marginal utilities which differ according to the varying conditions of the two periods.

The time preference aspect within time value can be isolated by finding a good of "equivalent value." Fetter (1905, p. 141) wrote:

> All the other cases of time-value can, by the practical device of substituting other goods of equivalent value, be reduced to the typical case of comparison of the same thing at different times. The comparison may be between very similar things, the one consumed being replaced by a duplicate. An apple borrowed now may be returned next year in the form of one of the same size and quality. The essential thing in this comparison is not physical identity, but equivalence in size, sort, and quality at the two periods. This is borrowing under the renting contract.

But no good, save money, will have equivalent value for each person at different moments in time across all persons. The "same thing" in which lending and borrowing are done is money because only money provides the unit of economic calculation. All the different goods and combinations of goods are bought with money and therefore, valued against the monetary unit. The monetary unit, therefore, is the basis for comparing all the different goods in all the different circumstance across all the different persons who are acting. Fetter (1905, pp. 141–142) wrote:

> But two or more quite different things may be expressed in terms of another thing and so be made comparable. Money becomes the value-unit through which different things may be reduced to the same terms of comparison. With this mode of expressing the value-equivalence of various goods, the interest contract first becomes possible, money… being the thing exchanged…at two periods of time.

The "equivalent value" of each unit of money permits the comparison of the value of different things whether they are traded in the present or inter-temporally. What is being compared in the interest contract, fundamentally, are two satisfactions one available sooner and another available later. Fetter (1905, p. 142) wrote:

> What is really compared are various gratifications which may be produced by very different material things or services. In its last analysis comparison of values at different periods of time must be comparison of psychic incomes, of two sums of gratification. The comparison of the value of a bushel of apples with that of a barrel of potatoes or a suit of clothes at the same moment appears simple enough. When all are expressed in terms of money, the comparison of each with its value-equivalent at a later date becomes easy.

For Fetter, the unit of economic calculation, i.e., the monetary unit, is the suitable unit for making comparisons of sooner satisfactions relative to later satisfactions. No other good renders equivalent value units for comparing different subjective values held by different persons in all the diverse circumstances of acting, including across time.[6]

The "equivalent value" units of money, then, do not refer to the subjective value people place on money. Regardless of the differences in subjective valuations a person might have for different goods, different circumstances, different moments in time, etc. they can be compared using the monetary unit. The ability people have to use the monetary unit to make such comparisons inter-temporally would be lost if the item used as money no longer served as the medium of exchange in the future. As long as the item continues to serve as money, then people can express their comparison of sooner satisfactions to latter satisfactions through the monetary unit for the same reason they can express their satisfaction for one good relative to another good through the monetary unit in the present. Thus, Fetter's argument does not imply, as Topan and Păun (2013, p. 312) write, that "the intuition that one needs money at certain moments for certain payments [is] completely absurd." That a person has different subjective valuations for money at two moments in time is no more an argument against the unit of money being useful for inter-temporal economic calculation than that two persons at the same moment in time have different subjective valuations of money is an argument against the unit of money being useful for economic calculation at the present moment. When a person lends a unit of

[6] Fetter (1905, p. 116) wrote, "In the interest contract for the loan of capital the interest always is and must be expressed in money; the capital sum must be expressed as value; and the interest rate expresses the relation between these two values."

money in exchange for receiving a premium and another person borrows a unit of money in exchange for paying a premium, then their inter-temporal trade expresses their time preferences. Just as, when a person sells a good in exchange for receiving the money price and another person buys the good in exchange for paying the price, then their trade expresses their preferences.

What Fetter is stressing is that the interest rate does not have a necessary temporal value in it when money is traded inter-temporally as it would if goods were traded inter-temporally. If people traded goods inter-temporally, there would be a different "interest rate" for each of the different goods traded. Each one reflecting the combined effect of the two causes: time preference and timing. With money, the pure rate of interest is uniform. The pure rate of interest is the ratio of the premium of future money paid for present money lent. The unit of money in the numerator is compatible with the unit of money in the denominator, otherwise no ratio could be formed. The "equivalent value" of the unit of money inter-temporally permits the premium paid to express the different value placed on present satisfaction relative to future satisfaction. Mises (1998, p. 535) wrote:

> It has been pointed out already that in the imaginary construction of the evenly rotating economy, the rate of originary interest is uniform. There prevails in the whole system only one rate of interest. The rate of interest on loans coincides with the rate of originary interest as manifested in the ratio between prices of present and of future goods.

Topan and Păun (2013, p. 314) miss the mark, then, when they cite Mises (1998, p. 531, italics added) who wrote, "originary interest can therefore in the *changing* economy never appear in a pure unalloyed form." In the text preceding this quote, Mises explained that in a world without change, the market rate of interest would be the unalloyed pure rate. Mises (1998, p. 530) wrote:

> Under the conditions of a market economy the rate of originary interest is, provided the assumptions involved in the imaginary construction of the evenly rotating economy are present, equal to the ratio of a definite amount of money available today and the amount available at a later date which is considered as its equivalent.

The monetary unit, for the purposes of economic calculation both in the present and inter-temporally, can be considered to have "equivalent value," as Fetter would put it. It is this feature of the monetary unit that permits the isolation of time preference to be expressed in inter-temporal trade. Time preference is the only causal factor bringing about the pure rate of interest. In the actual market economy as opposed to the ERE, however, the pure rate of interest is not isolated from the entrepreneurial component and the price premium component in the gross market rate of interest (Mises 1998, pp. 535–542). Fetter (1905, pp. 132–133 and 150-151 and 1915, pp. 302–304), Mises (1998, pp. 535–542), and Rothbard (2004, pp. 550–552, 773–776, and 792–798) each hold the view that the gross market rate of interest consists of component elements, one of which is time preference, and that the time preference component is isolated in the pure rate of interest.

Finally, Topan and Păun (2013, p. 313) claim that money can suffer from the timing problem is built on the misapprehension that has been exposed by a careful review of Fetter's argument. The timing problem is not referring to the different subjective value of either the goods that could be bought with a sum of money at different points in time or the holding of that sum of money at different points in time. It refers, instead, to the different circumstances at different moments in time that would make it impossible to have an "equivalent unit" of something for the purpose of inter-temporal economic calculation. The monetary unit, however, provides an "equivalent unit" for making inter-temporal exchange. In the ERE, time preference would generate the only component of the market rate of interest. The pure rate of interest would emerge. In the real world, the pure rate is intertwined with the other components making up the various gross market rates of interest.

Because I share the premise with Topan and Păun (2013, p. 315) that "correct theories must be defended by correct arguments," I hope my attempt to ward off misapprehensions will open the door to further progress in developing the theory of interest.

REFERENCES

De Soto, Jesús Huerta. 2006. *Money, Bank Credit, and Economic Cycles*. Auburn, Ala.: Ludwig von Mises Institute.

Fetter, Frank. 1915. *Economic Principles*. New York: The Century Company.

Fetter, Frank. 1905. *The Principles of Economics*. New York: The Century Company.

Herbener, Jeffrey, ed. 2011. *The Pure Time Preference Theory of Interest*. Auburn, Ala.: Ludwig von Mises Institute.

Mises, Ludwig von. 1949. *Human Action: A Treatise on Economics*. Auburn, Ala.: Ludwig von Mises Institute, 1998.

Rothbard, Murray. 1962. *Man, Economy, and State*. Auburn, Ala.: Ludwig von Mises Institute, 2004.

Topan, Vlad, and Cristian Păun. 2013. "A Note on Two Erroneous Ways of Defending the PTPT of Interest." *Quarterly Journal of Austrian Economics* 16, no. 3: 299-315.