

ARTICLES

The Development and Application of the Disutility of Labor in Marginalist Theory

Jonathan Yen^{1a}, Ryan Turnipseed^{2b}, Guriy Borodkin^{3c}

¹ Montana State University, ² Oklahoma State University, ³ Loyola University New Orleans

JEL Classifications: B13 Neoclassical through 1925 (Austrian, Marshallian, Walrasian, Wicksellian), B25 Historical - Institutional - Evolutionary - Austrian - Stockholm School, B53 Austrian, J22 Time Allocation and Labor Supply

<https://doi.org/10.35297/001c.155757>

Quarterly Journal of Austrian Economics

Vol. 28, Issue 4, 2025

Within the Austrian school, labor economics is among the topics least emphasized, so that crucial concepts such as the disutility of labor and opportunity cost are divorced from their original contexts. This article examines the origins and evolution of the disutility of labor postulate and analyzes how this concept affected the thinking of major Austrian theorists such as Ludwig von Mises. We trace the subject back to William Stanley Jevons, David Ricardo, David I. Green, and Philip Wicksteed and find that the assumption of the disutility of labor went from being grounded in real cost terms to opportunity cost terms. Notably, we offer a novel finding in illustrating Mises's changing thoughts on the matter as they developed from a theory similar to that of Jevons into one similar to that of Wicksteed and Green. Finally, an examination of the real cost and opportunity cost doctrines finds that both are at odds with the core principles of Mengerian marginal analysis, challenging the typical manner in which the disutility of labor is treated by Austrian economists.

The historical background of an idea's development is necessary for fruitful discussion and to further develop it in the present. This is why the development of the Austrian School of economics has been of academic interest to many great Austrian scholars and students (Hülsmann 2007; Schulak and Unterköfler 2011; Mises 1984; Salerno 1993, 1999; Boettke et al. 2022) and to academics in sibling fields (Andersson and Hudik 2021; Streissler 1988; Kauder 1958). One of the most recent discussions of the foundations of Austrian economics can be found in Fegley and Israel's (2020) "The Disutility of Labor" and Salerno's (2020) comments on it.

a Jonathan Yen (jonathan.yen@student.montana.edu) graduated from Montana State University with a BS in business (finance emphasis) and a BS in economics.

b Ryan Turnipseed (ryturni@okstate.edu) is a PhD student in the School of Entrepreneurship, Spears School of Business, at Oklahoma State University.

c Guriy Borodkin (borodkinguriy@gmail.com) is an independent scholar based in New York City.

The authors are grateful to Tate Fegley, Karl-Friedrich Israel, Per Bylund, Walter Block, Lucas Engelhardt, Jonathan Newman, and Patrick Newman for comments on earlier versions of this article. They have also benefited from comments provided by the editor and two anonymous reviewers. All remaining errors are the authors'.

In their article, Fegley and Israel argue that the currently accepted view on the disutility of labor—that it is an additional empirical datum limiting the supply of labor—is redundant because leisure is an attendant and necessary complement of all consumption. Acting man, therefore, does not supply the full quantity of labor possible, since he must make the marginal choice to consume, which requires leisure. By contrast, Salerno defends the traditional Misesian view. What this exchange omits, however, is a critical look at the development of these concepts in the history of economic thought—both articles only cite economists who postdate the original debates surrounding this issue—so that both sides divorce the concepts of labor, leisure, and the disutility of labor from their original context.

This article seeks to provide that original context by exploring the development of the disutility of labor as a concept, revealing how it was used in different ways by distinct schools of thought and outlining the skepticism toward it expressed by early Austrian economists. We further explore how the Ricardian disutility of labor gradually diverged into a real cost theory supported by Jevons and Marshall and an opportunity cost theory supported by Green and Wicksteed—the latter view introduced to the Austrian school through the cost debates of the late nineteenth century. With the context established, we then analyze Mises’s own views, which appear to have moved from the Jevonsian to the Wicksteedian theory. Finally, we show how Mises’s treatment of labor and leisure as classes of goods contradicts marginalist theory while reintroducing marginal analysis to the subject. This article, therefore, as an exposition of the history of the disutility of labor, illustrates how errors from earlier economic schools have been carried over in some form to the Austrian school.

The reintroduction of marginal analysis gives Austrians new tools with which to understand and analyze the world, furthering efforts to develop a full theory of the supply and demand of labor at the individual and market levels and a coherent praxeological understanding of leisure. When both concepts are fully elucidated, the way becomes clear for Austrians to further contribute to fields that focus on labor and leisure, such as managerial motivation, entrepreneurship, and labor theory.

Literature Review

Fegley and Israel (2020) sparked a modern academic inquiry into the Austrian concept of the disutility of labor and its epistemological status—specifically questioning whether the assumption that leisure is a consumer good is a redundant claim if leisure, as they argue, is a necessary complement of all consumption. This was dismissed in the same issue by Salerno (2020), who defended the traditional Misesian view on the matter.

The argument made by Fegley and Israel centers around what will be referred to here as the opportunity cost conception of the disutility of labor. They argue that, since leisure is a necessary complement of all consumption, leisure must be a consumer good, and the disutility of labor must exist as a trade-off of bodily energies as either a means or an end. In response, Salerno defends the traditional account of the opportunity cost doctrine laid out by Mises (1998) and Rothbard (2009), employing various hypothetical scenarios to demonstrate how labor does not necessarily carry the opportunity cost of forgone leisure.

The exchange, however, does not explore how the opportunity cost doctrine of the disutility of labor arose in the first place. Salerno (2020, 187) briefly alludes to this in his response:

The same could be said of the opportunity cost doctrine itself, which Fegley and Israel make extensive use of. . . . On one side of this “battle of giants” were arrayed the opportunity-cost theorists led by Böhm-Bawerk, Wieser, Wicksteed, and Davenport; on the other, stood the British economists Marshall and Edgeworth, who upheld the real-cost doctrine. Robbins perceptively pointed out that the debate turned on the different forms of the supply functions for labor and capital assumed by each side. Böhm-Bawerk et al. made the simplifying empirical assumption that labor and capital supply curves were perfectly inelastic, while Marshall and Edgeworth, in a quest for greater “realism,” assumed upward-sloping supply curves.

Fegley and Israel (2020) also raise an issue related to the history of economic thought—specifically, that Mises appears to treat the disutility of labor in two conflicting ways: “The expenditure of labor is deemed painful. Not to work is considered a state of affairs more satisfactory than working. Leisure is, other things being equal, preferred to travail. People work only when they value the return of labor higher than the decrease in satisfaction brought about by the curtailment of leisure. To work involves disutility” (Mises 1998, 131–32). Fegley and Israel claim that Mises (1998, 65) conceived of the disutility of labor both psychologically and as an opportunity cost construct, straddling the concept between thymology and praxeology: “We see that men renounce advantages which they could get by working more—that is, that they are ready to make sacrifices for the attainment of leisure. We infer from this fact that leisure is valued as a good and that labor is regarded as a burden.”

Although it could shine light on the subject, the history of the concept of the disutility of labor has been eclipsed in the current discussion. A greater understanding of this history would facilitate greater academic inquiry and discussion on the topic and anything relating to it. In the following

section, we provide a comprehensive historical overview of the development of the Austrian school—as well as of the aligned and opposing schools of thought—as it bears on the disutility of labor and its relation to leisure.

A Taxonomy of Historical Views

The disutility of labor, sometimes called *toil* in earlier works (Davenport 1908, 69), is a product of classical economics used to explain a natural limit to the supply of labor. Later, Jevons (Spencer 2003a), paralleling Gossen's theory of the labor supply (Derobert 2001),¹ reformulated labor theory in terms of subjective appraisal, in which positive benefits are balanced against disutility. This trade-off influences the workers' marginal choices to continue working. Marshall supported Jevons's view but criticized Jevons for failing to emphasize the importance of the intrinsic enjoyments of working (Spencer 2003a).

Early Austrian school economists—mainly, Böhm-Bawerk and Wieser—initially dismissed the disutility of labor as unimportant, arguing that workers do not usually choose their hours (Spencer 2003a). This subject became a point of contention during the cost debates of the late nineteenth century over whether cost should refer to pain endured or opportunity sacrificed. Green (1894),² and later Wicksteed (1910, 524–26), developed a new opportunity cost theory of the disutility of labor to combat Jevons's pain cost doctrine. In the opportunity cost theory of the disutility of labor, disutility is not a subjectively felt unpleasantness but rather the forgoing of nonlabor enjoyments, otherwise known as leisure (Spencer 2003a; Derobert 2001). Notably, Davenport (1894), despite supporting the opportunity cost faction in the cost debate, dissented from the Austrians during this time, claiming that workers limited their laboring not to engage in leisure but to avoid the disutility, or unpleasantness, accompanying labor.

Mises, in his earlier work *Socialism* (1951, 166), uses the Jevonsian pain cost concept of the disutility of labor when arguing against socialist central planning. But in his seminal treatise, *Human Action* (Mises 1998, 131–32), he uses the opportunity cost concept to analyze the labor market. Mises (1998, 585–87) relegates Jevons's subjective unpleasantness of labor to the category of *tedium* but only discusses the term briefly. Crucially, Mises builds upon Green and Wicksteed's opportunity cost doctrine by adding two additional propositions: (1) the disutility of labor is praxeologically equivalent to leisure's (the absence of labor's) value as a consumer good;³ and (2)

1 Derobert speculates that Jevons may have plagiarized Gossen's work, since their theories are so similar. The eleventh edition *Encyclopaedia Britannica* (1910–22, s.v. "Jevons, William Stanley") claims that Jevons did not know about Gossen's work until after his *Theory of Political Economy* was published.

2 Davenport (1908, vii) credits the largely forgotten David Green, not Wieser, for first developing opportunity cost to its now commonly understood form.

3 Wicksteed (1910, 525) has an earlier formulation of this postulate but does not develop it as fully as Mises does.

the disutility of labor is not a categorical or an a priori truth but an a posteriori datum known through experience. Mises's elaborated opportunity cost doctrine—later echoed by Rothbard (2009, 43)—has been generally accepted as orthodoxy in the Austrian school since the publication of *Human Action*.⁴

The above history indicates two⁵ differing views on the concept of the disutility of labor within the Austrian school and other aligned and opposing schools: (1) the disutility of labor as a real cost resulting from the experience of unpleasantness, held by the classical economists and supported by Jevons, Gossen, McVane (Barbieri and Filho 2023), Edgeworth, Marshall (Spencer 2003a), Mises (1951, 166) in his earlier writing, and in modified forms by Keynes (1936, 5–6), Fetter (1904, 113),⁶ and Davenport (1894); and (2) the disutility of labor as the opportunity cost of forgone leisure, supported by Green, Wicksteed, Robbins, Becker, Knight (Spencer 2003a), Mises (1998, 131–32) in his later work, Rothbard (2009, 45), Salerno (2020), and most modern Austrian economists (Fegley and Israel 2020).

The premarginalist classical economists viewed the disutility of labor within a system of objective value arising from the labor expended in production (Davenport 1965, 6). Whitaker (1904, 19) observes that Smith, Malthus, and Ricardo often use the word labor to mean disutility in the colloquial sense, “X action cost me a great deal of labor.” Within the classical view, the utility of workers' wages tends to equal the totality of unpleasantness that accompanies their labor. Davenport (1908, 69) identifies Ricardo and Cairnes as key to the development of this concept:

Ricardo had assumed without argument, that, as a general proposition and in broad averages, wages are paid in proportion to the painfulness of the employment: thus the entrepreneur outlays and the attendant market value become proportional to the pain costs of the real value. . . . Ricardo had said that the remuneration must be appropriate to the disutility—the pain—of labor, else the laborer would change to other lines of production, and thereby a readjustment to the supplies of product and the supplies of labor take place so as to bring the situation back into nearer approach to the normal.

4 The only widely read criticism of Mises's disutility of labor comes from outside the economic field altogether. Nozick (1977) critiques Mises's formulation of disutility of labor on the grounds that the additional empirical assumption is redundant in light of the existing data of scarce human energy and time. This foreshadowed arguments made decades later by Fegley and Israel (2020).

5 Böhm-Bawerk appears to view the subject as largely irrelevant, going so far as to describe the disutility of labor as “extremely unimportant in its practical bearing” (Spencer 2003a, 241). This would put him in a unique third category.

6 Fetter, in *Principles of Economics* (1904, 113), uses both the opportunity cost and real cost doctrines while also alluding to Böhm-Bawerk's position (Spencer 2003b) that employees do not get to choose their hours. Fetter appears to hold all positions in equivalency.

The disutility of labor in this classical sense, then, is both a limiting and rebalancing force on wages and production. Ricardo specifically identifies the pain of labor as determining the value of the product, which must be distinguished from the riches produced by the sale of the product (Davenport 1908, 3).

During the marginalist revolution, Jevons incorporated the disutility of labor into his theory of the labor supply. In this model, the supply of labor is determined by the attractiveness of wages and intrinsic enjoyments of working, subjectively balanced by workers against the totality of subjectively unpleasant factors, or disutility (Spencer 2003a).

Böhm-Bawerk expressed extreme skepticism toward the concept of the disutility of labor (Spencer 2003b), criticizing Jevons and Gossen by name.

The well-known controversy that long monopolized the attention of the classical economists, whether the price of goods depends upon the quantity of labor expended, as Ricardo taught, or upon the amount of wages, as Mill correctly [*sic*] suggested, afforded ample opportunity to correct this error. They failed, however, to do so. The old Smithian “toil and trouble” remained in a sort of scientific haziness, until, through Gossen, and especially through Jevons, it was brought to full and clear recognition. Then, for the first time under the name of the “disutility of labor,” it was raised to the rank of an elementary economic power, while its counterpart, the utility of the good, was set over against it. The old confusion, however, attached itself to the new names. If I am not greatly mistaken, not only the followers of the old classical school, but also many of the adherents of the newer theory, developed by Jevons, still stand under this ban. . . . I may remark that there is a rule which may be called the law of disutility, according to which the value of all goods that come under its influence tend to be in equilibrium with the amount of the pain involved in their production. But this is far from being the same as the great empirical law of cost. It depends upon quite different assumptions, and upon the play of other and intermediate motives. Finally, it has a different and much smaller field of operation. On the one side, it includes but a small part of the territory covered by the empirical law of cost, and on the other, it includes a certain portion of territory which is not covered by the law of cost. (Böhm-Bawerk 1894, 178–80)

It is plain from the tone and content of this quote that Böhm-Bawerk considers the disutility of labor to be an inferior repackaging of Smith and Ricardo’s law of cost in marginalist language.

Despite Böhm-Bawerk’s dismissal of the plainly antimarginalist “toil and trouble,” the disutility question was seriously engaged by Austrians as a part of the wider debate about whether cost should refer to pain endured or opportunity sacrificed. It was during a salvo in this theoretical debate—namely, an academic dialogue between several Austrian opportunity cost theorists and Canadian real cost theorist Silas Marcus MacVane (Barbieri and Filho 2023)—that Austrian economist David I. Green⁷ (1894) first adopted the disutility⁸ of labor into an Austrian framework. Green argues that the supply of labor is not determined by “pain costs” (unpleasant consequences of working) but rather by the forgoing of other ends, making him the first Austrian to bring the disutility of labor concept under a marginalist framework:⁹

The laborer stops work at a certain hour, not simply because he is tired but because he wants some opportunity for pleasure and recreation. What gives a man strength in his demand for higher pay is his ability to secure higher pay elsewhere. By devoting our efforts to any one task, we necessarily give up the opportunity of doing other things which would yield us some return; and it is, in general, for this sacrifice of opportunity that we insist on being paid rather than for any pain which may be involved in the work performed (Green 1894).

Green goes on to detail how the availability of more remunerative labor increases the opportunity cost for workers and increases the wages they demand, as well as how the desire for leisure actions, beyond the rest physically necessary to continue work, is an opportunity cost of labor. All labor actions have an implicit second-best sacrifice. Sometimes this sacrifice is a directly satisfying leisure action, and other times it is another labor action marginally less rewarding—in terms of wages or other subjective criteria—than the labor action chosen. The embryonic form of Mises’s disutility of labor in *Human Action* can be seen here. Unlike Mises, however, Green does not seem interested in the epistemological status of the disutility of labor. Moreover, he does not appear to hold that leisure’s being a desirable good is in any way a unique limiting factor¹⁰ or postulate. Rather, he sees this as no different from the opportunity cost attendant on all action as a motive for economization: “But, when we once recognize the sacrifice of opportunity

7 There is almost no academic work on Green’s life and work, except for his groundbreaking 1894 article. It might be appropriate to consider Green a lost member of the American psychological school.

8 Green does not use the word *disutility*, and this omission appears to be intentional since he does not treat the economization of human time or energy differently from the economization of any other good. If one were to accept Green’s framework, it would be appropriate to call the sacrificed second-best option of any employment of a good the disutility of said employment.

9 This view was later shared by Phillip Wicksteed (Spencer 2003b).

10 The specific emphasis in Mises on the disutility of labor as a limiting factor—unique from other factors limiting the labor supply—appears to come from Jevons, not Green, who treats it as simply another application of opportunity cost. This is not surprising considering that Jevons’s theory is rooted in English classical political economy, which generally gives human labor a special status.

as an element in the cost of production, we find that the principle has a very wide application. Not only time and strength, but commodities, capital, and many of the free gifts of nature, such as mineral deposits and the use of fruitful land, must be economized if we are to act reasonably” (Green 1894).

Mises (1951, 165), in *Socialism*, uses the Jevonsian concept of the disutility of labor¹¹ in arguing against the followers of the utopian socialist Fourier. In fact, the only graph in Mises’s published work (Fegley and Israel 2020)—a chart showing disutility increase as labor output increases—is remarkably similar to a graph in Jevons’s *Theory of Political Economy*.¹² Mises (1951, 66) explains the graph as such: “The curve *a, b, c, p* represents labour disutility and immediate labour satisfaction in relation to the product. When labour commences it is found disagreeable. After the first difficulties have been overcome and body and mind are better adapted, then the disagreeableness declines. At *b* neither disagreeableness nor satisfaction predominates. Between *b* and *c* direct satisfaction prevails. After *c* disagreeableness recommences.” In this passage, Mises explicitly identifies the disutility of labor as synonymous with disagreeableness or pain cost. Disutility is not stated in terms of what has been forgone but rather what is subjectively experienced by the worker during the performance of labor. He continues: “Labour will be continued so long as the dissatisfaction which it arouses is counterbalanced by the pleasure derived from its product. Labour will only be discontinued at the point at which its continuation would give rise to more disutility than utility.” Again, disutility is contrasted with pleasure or satisfaction. Like Jevons, Mises sees the marginal choice to continue working as a subjective mental scale: the worker will continue only if the rewards—both intrinsic enjoyment and wages—outweigh the unpleasant disutility.

Later, in *Human Action*, Mises endorses Green and Wicksteed’s model, while never explicitly using the term *opportunity cost*. Mises’s apparent change of heart on these issues may stem from his criticisms of Jevons’s intellectual predecessor Gossen, as Gossen and Jevons (1957, 306) identify marginal utility with the physical phenomenon of satiation. Mises (1998, 65) vehemently disagrees with such a view:¹³

Experience teaches that there is disutility of labor. But it does not teach it directly. There is no phenomenon that introduces itself as disutility of labor. There are only data of experience

11 Mises was thirteen years old when Böhm-Bawerk’s virtually unknown English article on this subject was published by the American Academy of Political and Social Science. This, combined with the later view that the discussion was irrelevant (Spencer 2003a), paints a possibility that Mises was unfamiliar with the intricacies of Böhm-Bawerk’s dismissal of Jevons.

12 Mises’s graph can be found in *Socialism* (Mises 1951, 166), where he cites Jevons’s *Theory of Political Economy*. Jevons’s graph from that book is reprinted in Spencer (2003a, 238).

13 Even in this passage, Mises still retains the Jevonsian treatment of labor as a special category of good. When Mises writes that “no phenomenon introduces itself as disutility of labor,” the obvious answer from Green (1894) is that opportunity cost is the phenomenon introducing itself.

which are interpreted, on the ground of aprioristic knowledge, to mean that men consider leisure i.e., the absence of labor—other things being equal, as a more desirable condition than the expenditure of labor. We see that men renounce advantages which they could get by working more—that is, that they are ready to make sacrifices for the attainment of leisure. We infer from this fact that leisure is valued as a good and that labor is regarded as a burden.

This definition of disutility of labor makes no mention of pain costs or other unpleasantness aroused by performing labor.

Mises, and later Rothbard, claims that the disutility of labor and its necessary corollary datum, leisure—the absence of labor (Rothbard 2009, 43)—tends to be valued as a consumer good (Mises 1998, 65) and explains why acting man does not perform as much labor as physically possible. Crucially, Mises adds to Green's opportunity cost model by stating that the disutility of labor is neither categorical nor a priori but known a posteriori and thus understood through experience. This model of the labor supply is now the predominant Austrian view.

Jevons's Theory

As discussed in the earlier taxonomy, Mises (1951, 165–70), in *Socialism*, uses the Jevonsian real cost view of the disutility of labor to disprove Fourier's claim that work will become a pleasure in a utopic society and that one would perform it only to stave off boredom and to signal one's social status. Mises responds by drawing from Jevons and claiming that labor has an inherent toilsome or disutilitous quality preventing man from laboring as much as society's productive processes require without being compensated.

While this analysis is empirically viable¹⁴ and could present an intuitive counter to utopian socialism in the early twentieth century, the point is lost in the modern West. Compared to when Jevons and Mises were writing, the nature of the labor involved in work seems to have progressively decreased in physical intensity.¹⁵ Even demanding physical labor has followed this progression as miners and farmers have gained all manner of amenities and capital to alleviate any disagreeableness that arises in the course of their work.

14 Mises (1951, 166) claims, "With other forms of labour the curve may run differently, as in $o c_1 p_1$ or $o p_2$. That depends on the nature of the work and the personality of the workers. It is different for navies and for jockeys: it is different for dull and for energetic men." He then cites Jevons.

15 One counter to this view could be to claim that modern work arrangements require a greater expenditure of mental energy and are thus subjected to mostly the same effect. This view would fail to account for the innovations in computing and artificial intelligence which greatly lessen the minimum mental burden required to complete most modern tasks.

If the disutility or discomfort of labor is a real limiting factor on the present supply of labor, then one should expect to see in the modern age the available supply of labor—adjusted for population—continually expand toward the maximum amount physically possible as the unpleasant disutility decreases. But this trend has not been observed. Mises and other Austrians have an explanation for this: labor carries the opportunity cost of forgone leisure. It is this statement which must be tested.

The Classical Fallacy

Mises (1998, 131–32), when he supports the opportunity cost doctrine, places two distinct limitations on the supply of labor: (1) the human body has limited energy, both in terms of total lifespan and energy available at any given moment; and (2) labor carries disutility, now defined as the opportunity cost of forgone leisure.¹⁶

What exactly does the second proposition mean? Opportunity cost refers to the best alternative given up when an individual chooses between multiple employments of scarce means (Buchanan 1991, 520–25).¹⁷ For example, Mr. Jones buys a sandwich for lunch and so must forgo a hotdog, which is the second-best alternative by his own subjective valuation. But Mises, Rothbard, and the other opportunity cost theorists of the disutility of labor do not use opportunity cost in their analysis. Instead, they claim that the class¹⁸ of labor, as a producer good, tends to carry the opportunity cost of the class of leisure, as a consumer good—not that all or most individual labor actions carry the opportunity cost of specific leisure actions (the best alternative forgone). There are many times in the real world when the opportunity cost of a specific labor action is a less valuable labor action.¹⁹

Analyzing opportunity cost in terms of classes of goods is highly dubious because it cuts against the entire Mengerian system of marginal utility; however, most Austrian economists, such as Rothbard (2009, 43), have implicitly defined leisure as *time not spent in labor* or *the state of not laboring*.

16 Unlike the earlier passage from *Human Action*, Mises (1998, 131) here superficially appears to support both doctrines simultaneously when he writes, “The expenditure of labor is deemed painful. To work is considered a state of affairs more satisfactory than working.” But the argument presented in this chapter in toto is obviously on the side of the opportunity cost doctrine.

17 In their defense, neither Mises in *Human Action* nor Rothbard in *Man, Economy, and State* uses the term *opportunity cost* when describing the disutility of labor. Salerno (2020) does defend this terminology. Given his familiarity with the authors and subject matter, this framing can be assumed as well.

18 One could assume that Mises and Rothbard implied a marginal analysis when they used these general terms, but this implication does not appear to hold. Mises and Rothbard employ classical language in their analyses, confounding the issue.

19 Similarly, many leisure actions have the opportunity cost of a less valuable labor action. Davenport (1896, 51) observes that disutility of labor is only the opportunity cost of forgone leisure if there is only one desired consumptive end and one corresponding productive means: “If a man desired only one sort of satisfactions, only one sacrifice would be required of him, the sacrifice attendant upon effort. But when exertion is certain in one direction or another, and when therefore nonexertion is not the alternative in the choice, and when therefore the sacrifice involved in obtaining one thing is the deprivation of another thing obtainable by the same labour, the measure of the value of the first is in the sacrifice of the unobtained thing, and not in the sacrifice of mere effort.” In such a situation, Mises’s empirical postulate would not be applicable since the absence of labor (what Mises would call leisure) would be, by necessity, the only possible alternative to the one labor action.

This categorization is equivalent to the following: Mr. Jones values sandwiches. He values nonsandwiches as consumer goods. He does not consume as many sandwiches as possible, because the opportunity cost of sandwiches is forgone nonsandwiches. The fact that Mr. Jones values nonsandwiches as a consumer good is a necessary empirical postulate to explain why he does not eat as many sandwiches as his body is capable of eating.

The above statements obfuscate the action by homogenizing goods into classes. Homogenizing labor and leisure into classes instead of discrete actions is no more appropriate than homogenizing all sandwiches into the class *sandwiches* and all other consumer goods into the class *nonsandwiches*. Acting man values discrete units of goods, and opportunity cost is only meaningful in terms of a marginal choice between employments of discrete quantities. It cannot be observed that all discrete labor actions necessarily, or even probably, carry the opportunity cost of a leisure action. One might just as plausibly carry the cost of another labor action, whose expected future product the acting man values less than the product of the labor action he chooses. Even under the vague definition of leisure as *the time spent not laboring* or *the state of not laboring*, one cannot know for sure that, for any given use of an acting individual's bodily energies as means, the most valuable satisfaction forgone was *not laboring*.²⁰

Thus, the term *disutility of labor*—insofar as it refers to labor carrying the opportunity cost of forgone leisure—is spurious. It confuses the science of praxeology by homogenizing classes of goods in such a way as to annul Carl Menger's theory of marginal utility in the specific case of labor and leisure. "All costs are opportunity costs" is a useful and praxeologically valid proposition. "The class of good X has the opportunity cost of the class of goods not X" is neither useful nor praxeologically sound. Even if this term is applied to individual actions and not classes of actions, it cannot be externally observed.²¹

20 A leisure action very well could be an implicit cost of most or all labor actions, but this is irrelevant to the point since action only occurs between the best choice and the second-best alternative as valued by the actor.

21 This is not to deny the existence of an internal subjective calculation of expected psychic profit relative to other costs of an individual's action but rather to say that opportunity costs cannot be observed externally (see Rothbard 2009, 741).

Also, in Green's (1894) view, sacrificing the second-best option to a chosen labor action leads a man to economize his energies toward that labor action. But it does not follow that leisure's being a consumer good is per se a limit on the labor supply, since one must again begin to homogenize goods into very general classes to come to this conclusion. A leisure action of pure play with no productive end—for example, twiddling one's thumbs—could be the opportunity cost of any given labor action, thus creating a motive for economizing and limiting its supply.

The Current Theoretical Dispute

Now that the issue with the opportunity cost of the disutility of labor has been revealed, we will address the dialogue between Salerno (2020) and Fegley and Israel (2020) since this debate illustrates how the misuse of opportunity cost in Austrian labor analysis has led to misunderstandings.

Fegley and Israel come close to the core issue when they write, “If, as Rothbard (1957, 316) states, the proposition that leisure is a good is so generally true as to be self-evident, why do we not resort to an assumption about the ‘disutility of leisure’ to explain why individuals ever start to labor in the first place? Indeed, why not assume that every action involves ‘disutility’ to explain why people ever stop doing anything” (Fegley and Israel 2020).

They, however, do not identify the key problem the disutility of labor creates. Their framework accepts that labor as a class contains the forgone opportunity cost of leisure as a class but, contra Mises, argues for the a priori status of leisure as always inherently desirable. The argument that leisure must always be desired by acting man as a complement to consumption is fascinating but does not remedy the issue with Fegley and Israel’s reformulated labor supply. Their error comes from homogenizing labor and leisure into classes instead of discrete actions. Even if, as Fegley and Israel are suggesting, it is possible to know a priori that leisure is always a consumer good, it does not follow that all labor actions carry the opportunity cost of a forgone leisure action any more than the fact that sandwiches are a consumer good means that all other consumer goods carry the opportunity cost of forgone sandwiches.

Salerno (2020), in response, provides the classic Misesian imaginary world²² in which acting man expends all the energy he can during a labor period to increase the quantity of consumer goods, which are only enjoyed in a separate leisure period. Salerno’s example effectively demonstrates the issue with Fegley and Israel’s model. In this imaginary world, the energy available for labor is limited: labor is a scarce factor and not a general condition of production—meaning that it exhibits Mises’s (1951, 156) first empirical limit on the supply of labor—but energy for consumptive leisure is superabundant during the predetermined leisure time. A leisure action is not the second-best alternative forgone during the predetermined labor time; however, for the reasons explained above, it is not correct to say that, in the real world,

²² Salerno’s examples are not quite the same as Mises’s (1998, 131) world without disutility of labor, namely in the fact that there is some physiological barrier that demarcates when labor and leisure can occur. In other words, not only is a leisure action not the second-best option during the labor periods, but a leisure action is not physically possible at all. This physiological requirement weakens Mises’s original imaginary construct by making the lack of ‘disutility’ a physiological barrier rather than a simple arrangement of preferences, taking away the possibility of a purposive choice to do leisure instead of labor.

labor carries the opportunity cost of leisure. Therefore, Salerno's, and by extension Mises's, defense of the disutility of labor as an empirical datum is conceptually flawed insofar as it misuses opportunity cost.

The Marginalist Limit on the Supply of Labor

Because Austrian analyses of labor since Mises hinge on a theory at odds with the Mengerian analysis of rank-ordered ends, one of the following theories must be rejected: (1) that man acts according to value scales is a praxeological truth; (2) that man values goods, in this case labor and leisure, as whole classes, each of which carries the opportunity cost of the other class. However, any claim of man valuing entire classes of goods is directly at odds with the praxeological truth of marginal analysis. The physiological nature of labor as perceived by humans is not the economic explanation for the limit on the supply of labor any more than the natural occurrence of a metal is the economic explanation for the limit on its supply in the market. In both instances, the marginal valuation and economization of discrete units of either good, rather than the data of thymology or geology, ultimately determines any given supply and demand for those goods.

To demonstrate the marginal economizing of labor and leisure and thus resolve the classical fallacy, we provide an example²³ here involving the value scale of an employee at a firm. For a specific duration of time the employee works, his value scale is as follows:

1. Complete a project (energy expended for remuneration for future consumption—labor).
2. Answer emails (energy expended for remuneration for future consumption—labor).
3. Browse social media (energy expended for immediate psychic remuneration—leisure).
4. Eat a snack (energy expended for immediate psychic remuneration—leisure).

Here we can see that our employee's most valued end in the moment of choosing is to complete a project, which is subjectively classified as labor. The employee thus supplies the amount of labor needed to fulfill the specific end *complete a project*. The opportunity cost is to answer emails, a project that would also have the employee supply labor, but in a different amount for the different project (assuming that *complete a project* and *answer emails*

²³ This example denominates labor in terms of hours, but one could just as well use energy, product, or whatever else.

require different amounts of energy). Notably, the employee's opportunity cost, in terms of allocating his energy, is not a leisure activity but another labor activity.

When the employee supplies labor for the firm in completing a project, the use of energy fits the praxeological definition of labor given by Mises (1998, 131) and Rothbard (2009, 10). But it is important to recognize that the possible uses of the energy were discrete activities with different valuations by the employee, which demonstrates the personal side of valuing discrete actions classified economically as labor or leisure.

The labor supplied by a worker is limited not necessarily by the passage of time or because he finds the work to be disutilitous—though that may affect the employee's valuation of that discrete activity—but because he more urgently prefers to allocate his energy to a specific action. To demonstrate the point, let us say that the employee only has enough time to complete two ends. Here is the employee's value scale:

1. Complete a project (energy expended for remuneration for future consumption—labor).
2. Browse social media (energy expended for immediate psychic remuneration—leisure).
3. Eat a snack (energy expended for immediate psychic remuneration—leisure).
4. Answer emails (energy expended for remuneration for future consumption—labor).

In this value scale, the employee supplies labor to complete a project—a labor activity—and then expends his energy for direct satisfaction on the leisure activity of browsing social media. In contrast to all formulations of the disutility of labor, here it is strictly the discrete valuation of the uses of energy in time which provides a limit on labor. The reasons for the specific valuation are merely incidental.

The above examples are crafted to illustrate two ways in which marginal analysis accounts for limiting the total supply of labor at any given moment. Given the empirical fact that humans produce for consumptive ends and desire to engage in leisure actions, both these ends on a man's value scale necessarily limit the amount of labor provided at any point, which is not necessarily tied to the psychological or physiological disutility of the labor. In the first example, the amount of labor supplied depends on the specific action taken by the employee. In the second example, the employee values expending only so much energy as labor before he will expend it as directly satisfying leisure.

As for the opportunity cost doctrine of the disutility of labor, we see in the employee's economizing that labor and leisure do not carry the opportunity cost of the whole other class. Rather, discrete, heterogenous units of time are allocated in different ways for varying ends. In the first example, the opportunity cost of the energy spent completing a project is not the class of goods *leisure* but rather the use of energy to answer emails (another labor action). If our employee did not value completing a project, the opportunity cost would only then become a discrete leisure action—namely, browsing social media. This scenario is completely unaccountable when labor and leisure are considered classes of goods that carry each other as opportunity costs. To quote Davenport (1896, 51) on this issue,

If a man desired only one sort of satisfactions, only one sacrifice would be required of him, the sacrifice attendant upon effort. But when exertion is certain in one direction or another, and when therefore nonexertion is not the alternative in the choice, and when therefore the sacrifice involved in obtaining one thing is the deprivation of another thing obtainable by the same labour, the measure of the value of the first is in the sacrifice of the unobtained thing, and not in the sacrifice of mere effort.

That is, if the only choices available to a given man are to labor for one specific end or not to do so, the labor carries the opportunity cost of nonlabor. But as soon as multiple ends are accounted for, specific labor actions can carry the opportunity cost of other specific labor actions rather than the class of goods *leisure*. Acting man in the world, therefore, marginally economizes the use of discrete, heterogenous units of time, energies, effort, or any other applicable unit of measurement between distinct actions, and any chosen action carries the opportunity cost of discrete, heterogenous units of those measures that could have been used for the second-best alternative, whether that specific action is labor or leisure.

As a final note, while the concepts of labor and leisure have been economically misapplied, they are still useful for modern economic analysis because, as words, they are short and readily understood—especially as compared with phrasing everything in terms of means and ends on a value scale.

Future Research Directions

This article sheds light on the history of the disutility of labor in Austrian theory and its flawed theoretical basis in the Austrian model of the labor supply. But we have also indicated the potential for future Austrian contributions to the fields of entrepreneurship, managerial motivation, and labor theory.

Modern Austrian academics have made valuable contributions to entrepreneurship theory (e.g., Klein et al. 2010; Bylund and McCaffrey 2017), but competing schools, such as the nonprofit entrepreneurship theorists (Wasserman 2004; Benz 2009), have used labor utility models to argue for a self-rewarding entrepreneurship. An Austrian labor theory which incorporates the marginal valuation of discrete units of labor—time, energy, or any other measure—could provide novel answers to these critics by replacing the cardinal utility functions their models rely on with a causal realist explanation of the nonpecuniary rewards and costs associated with entrepreneurship—possibly even incorporating and refitting arguments from these competing entrepreneurship schools into a proper praxeological framework.

Similarly, this article provides a basis for a praxeologically rooted theory of managerial motivation which analyzes labor and leisure actions through marginal analysis and tries to lay the groundwork for an overarching theory of how managers estimate the opportunity costs and subjective valuations of their employees. As Green (1894) observed, the level of wages demanded by workers arises from the opportunity costs of other, more remunerative employment. An entrepreneurial manager cannot observe his employees' opportunity costs directly, but he can infer from observed employee behavior that nonpecuniary opportunity costs exist when employees forgo more remunerative job positions or career paths for less remunerative ones. Such observations do not allow the manager to make intersubjective utility comparisons between different employees, but, provided the employees' valuations continue to follow the same general pattern, they do allow for entrepreneurial guesses about the marginal effectiveness of pecuniary incentives versus nonpecuniary incentives in successfully promoting qualified employees to positions where they will be effective and in retaining desired employees who may otherwise leave the firm. Future Austrian contributions may be able to form a full Austrian motivation theory which, unlike the existing psychological and trait analysis theories, will be grounded in the certainty of praxeological reasoning.

Finally, this article provides a substructure for more sophisticated criticisms of neoclassical labor theory, which conceives of the disutility of labor as a differentiable trade-off curve between labor and leisure (Vercherand 2014, 54–59). Such future investigation, while outside the scope of this current article, will be a necessary extension of our research, specifically as it relates to the slope of the general labor supply curve and how a subjectivist understanding of labor and leisure can be integrated into a broader economic philosophy. This article also opens a new line of critique against Keynes's (1936, 6) theory of frictional unemployment, which relies on similar assumptions. Since the Austrian school is consistent in applying marginal analysis, remedying the issues with its labor foundations requires minimal effort: neoclassical and Keynesian models explicitly treat labor and leisure

as classes of goods, committing the classical fallacy and exposing themselves to praxeological criticism. Since opportunity cost cannot apply to classes of goods, any model that does so—whether neoclassical, Keynesian, or any other genus—is unfit for economic science.

Conclusion

The assumption of the disutility of labor has been a part of the Austrian school since the days of Mises. Its importance has attracted recent attempts to explain and elucidate both the concept and its implications, but the history of the idea remained unexplored. This article unearths the history of the disutility of labor and recontextualizes the concept. In its historical examination, we have also introduced a taxonomy of the disutility of labor, bifurcating the doctrine into two subdoctrines: one of opportunity cost and one of real cost.

As shown above, Jevons, needing a way to ground his analysis of the labor supply, relied on a Ricardian real cost theory of the disutility of labor. Claiming labor must necessarily come with a real psychological cost, he drew the conclusion that labor always carries the disutility associated with that psychological burden. Wicksteed and Green, on the other hand, introduced an opportunity cost theory which claimed that labor carries disutility not because of an associated real cost but because it carries the opportunity cost of forgone leisure.

Proceeding from this taxonomy, we analyzed the evolution of strictly Austrian perspectives. In tracking Mises's writing specifically, the conflicting influences of both Jevons and Wicksteed became visible as we saw Mises shift from real cost theory (Mises 1951, 165–70) to opportunity cost theory (Mises 1998, 65). Since Mises's writing on the subject, there has been little theoretical development on the economic grounding of the disutility of labor. Modern discussion has instead considered the epistemological foundations of the assumption—specifically, Fegley and Israel's 2020 article and Salerno's comment on it debate whether knowledge of the disutility of labor is *a priori* or *a posteriori*.

This article focuses on the economic grounding of the disutility of labor and demonstrates the problem with debating its epistemological status—namely, that both the opportunity cost and real cost explanations are faulty. Real costs are not a sufficient explanation for disutility, since Austrians reject the existence of objective costs. Nor can opportunity costs serve as the explanation, since these never involve classes of goods such as *labor* and *leisure*.

This article proposes a replacement not for the opportunity cost or real cost doctrines but for the entire disutility of labor postulate. Noticing that labor and leisure are not special classes of goods leads to the conclusion that no unique assumption about their disutility is necessary—standard marginal analysis is sufficient.

Submitted: March 24, 2025 CST. Accepted: November 07, 2025 CST. Published: February 06, 2026 CST.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CCBY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons.org/licenses/by/4.0/legalcode> for more information.

REFERENCES

- Andersson, David Emanuel, and Marek Hudik. 2021. “The Austrian School and the Theory of Markets.” In *The Palgrave Handbook of the History of Human Sciences*, edited by David McCallum, 1–22. Singapore: Palgrave Macmillan. https://doi.org/10.1007/978-981-15-4106-3_6-2.
- Barbieri, Fabio, and Marcelo Lourenço Filho. 2023. “From ‘Tired Muscles’ to ‘Might-Have-Beens’: A Debate on the Nature of Costs in the Late Nineteenth Century.” *Journal of the History of Economic Thought* 46 (1): 27–47. <https://doi.org/10.1017/s1053837223000226>.
- Benz, Matthias. 2009. “Entrepreneurship as a Non-profit-seeking Activity.” *International Entrepreneurship Management Journal* 5:23–44. <https://doi.org/10.1007/s11365-006-0031-y>.
- Boettke, Peter J., Rosolino Candela, Karras J. Lambert, and Dillon Tauzin. 2022. “The Austrian School of Economics.” In *Handbook of Alternative Theories of Political Economy*, edited by Frank Stilwell, David Primrose, and Tim Thornton, 231–44. Cheltenham, U.K.: Edward Elgar. <https://doi.org/10.4337/9781789909067.00023>.
- Böhm-Bawerk, Eugen von. 1894. “The Ultimate Standard of Value.” Translated by C. W. Macfarlane. *Annals of the American Academy of Political and Social Science* 5 (2): 163–208. <https://doi.org/10.1177/000271629400500201>.
- Buchanan, James M. 1991. “Opportunity Cost.” In *The World of Economics*, edited by John Eatwell, Murray Milgate, and Peter Newman, 520–25. London: Macmillan. https://doi.org/10.1007/978-1-349-21315-3_69.
- Bylund, Per L., and Matthew McCaffrey. 2017. “A Theory of Entrepreneurship and Institutional Uncertainty.” *Journal of Business Venturing* 32 (5): 461–75. <https://doi.org/10.1016/j.jbusvent.2017.05.006>.
- Chisholm, Hugh, ed. 1910–1922. *Encyclopaedia Britannica*. 11th ed. 32 vols. New York: Encyclopaedia Britannica. <https://catalog.hathitrust.org/Record/007910230>.
- Davenport, Herbert Joseph. 1894. “The Formula of Sacrifice.” *Journal of Political Economy* 2 (4): 561–73. <https://doi.org/10.1086/250243>.
- . 1896. *Outlines of Economic Theory*. New York: Macmillan. <https://catalog.hathitrust.org/Record/008462869>.
- . 1908. *Value and Distribution: A Critical and Constructive Study*. Chicago: University of Chicago Press. https://www.google.com/books/edition/Value_and_Distribution/axsXAAAAYAAJ.
- . 1965. *The Economics of Alfred Marshall*. New York: Augustus M. Kelley.
- Derobert, Laurent. 2001. “On the Genesis of the Canonical Labor Supply Model.” *Journal of the History of Economic Thought* 23 (2): 197–215. <https://doi.org/10.1080/10427710120049228>.
- Fegley, Tate, and Karl-Friedrich Israel. 2020. “The Disutility of Labor.” *Quarterly Journal of Austrian Economics* 23 (2): 171–79. <https://doi.org/10.35297/qjae.010064>.
- Fetter, Frank A. 1904. *The Principles of Economics, with Practical Applications to Practical Problems*. New York: Century. <https://archive.org/details/principlesofecon00fett/mode/2up>.
- Green, David I. 1894. “Pain-Cost and Opportunity-Cost.” *Quarterly Journal of Economics* 8 (2): 218–29. <https://doi.org/10.2307/1883711>.
- Hülsmann, Jörg Guido. 2007. *Mises: The Last Knight of Liberalism*. Auburn, Ala.: Ludwig von Mises Institute. <https://mises.org/library/mises-last-knight-liberalism-0>.
- Jevons, W. Stanley. 1957. *The Theory of Political Economy*. 5th ed. New York: Augustus M. Kelley.

- Kauder, Emil. 1958. "Intellectual and Political Roots of the Older Austrian School." *Zeitschrift für Nationalökonomie* 17 (4): 411–25. <https://doi.org/10.1007/bf01318563>.
- Keynes, John Maynard. 1936. *The General Theory of Employment, Interest and Money*. London: Macmillan.
- Klein, Peter G., Joseph T. Mahoney, Anita M. McGahan, and Christos N. Pitelis. 2010. "Toward a Theory of Public Entrepreneurship." *European Management Review* 7 (1): 1–15. <https://doi.org/10.1057/emr.2010.1>.
- Mises, Ludwig von. 1951. *Socialism: An Economic and Sociological Analysis*. Translated by J. Kahane. New Haven, Conn.: Yale University Press.
- . 1984. *The Historical Setting of the Austrian School of Economics*. Auburn, Ala.: Ludwig von Mises Institute. <https://mises.org/library/book/historical-setting-austrian-school-economics>.
- . 1998. *Human Action: A Treatise on Economics*. Scholar's ed. Auburn, Ala.: Ludwig von Mises Institute. <https://mises.org/library/human-action-0>.
- Nozick, Robert. 1977. "On Austrian Methodology." *Synthese* 36 (3): 353–92. <https://doi.org/10.1007/BF00486025>.
- Rothbard, Murray N. 2009. *Man, Economy, and State with Power and Market*. 2nd scholar's ed. Auburn, Ala.: Ludwig von Mises Institute. <https://mises.org/library/man-economy-and-state-power-and-market>.
- Salerno, Joseph T. 1993. "Mises and Hayek Dehomogenized." *Review of Austrian Economics* 6 (2): 113–46. <https://doi.org/10.1007/BF00842707>.
- . 1999. "The Place of Mises's *Human Action* in the Development of Modern Economic Thought." *Quarterly Journal of Austrian Economics* 2 (1): 35–65. <https://doi.org/10.1007/s12113-999-1025-8>.
- . 2020. "The Disutility of Labor: A Comment on Fegley and Israel." *Quarterly Journal of Austrian Economics* 23 (2): 180–91. <https://doi.org/10.35297/qjae.010065>.
- Schulak, Eugen Maria, and Herbert Unterköfler. 2011. *The Austrian School of Economics: A History of Its Ideas, Ambassadors, and Institutions*. Translated by Arlene Oost-Zinner. Auburn, Ala.: Ludwig von Mises Institute. <https://mises.org/library/book/austrian-school-economics-history-its-ideas-ambassadors-and-institutions>.
- Spencer, David A. 2003a. "Love's Labor's Lost? The Disutility of Work and Work Avoidance in the Economic Analysis of Labor Supply." *Review of Social Economy* 61 (2): 235–50. <https://doi.org/10.1080/0034676032000098237>.
- . 2003b. "'The Labor-less Labor Supply Model' in the Era before Philip Wicksteed." *Journal of the History of Economic Thought* 25 (4): 505–13. <https://doi.org/10.1080/1042771032000147533>.
- Streissler, Erich. 1988. "The Intellectual and Political Impact of the Austrian School of Economics." *History of European Ideas* 9 (2): 191–204. [https://doi.org/10.1016/0191-6599\(88\)90040-x](https://doi.org/10.1016/0191-6599(88)90040-x).
- Vercherand, Jean. 2014. "The Neoclassical Model of the Labour Market." In *Labour: A Heterodox Approach*, translated by Keith Hodson, 53–74. Basingstoke, U.K.: Palgrave Macmillan. https://doi.org/10.1057/9781137373618_3.
- Wasserman, Noam. 2004. "Executive Compensation in Entrepreneurial Teams: The Founder Gap, Board Membership, and Pay for Milestones." *Academy of Management Proceedings*, no. 1, E1–E6. <https://doi.org/10.5465/ambpp.2004.13863657>.
- Whitaker, Albert C. 1904. *History and Criticism of the Labor Theory of Value in English Political Economy*. New York: AMS Press. <https://doi.org/10.7312/whit91420>.

Wicksteed, Phillip H. 1910. *The Common Sense of Political Economy, Including a Study of the Human Basis of Economic Law*. London: Macmillan. <https://archive.org/details/cu31924030395606>.