MENGER ON THE NATURE OF CAPITAL AND ITS STRUCTURE: A REPLY

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I. INTRODUCTION

In his "Comment" on our paper (Endres and Harper 2011, hereafter E&H), Eduard Braun makes two central claims:

- 1. Menger's notion of capital must be understood by attending exclusively to his 1888 article on the subject; the notion of capital discussed therein must be privileged so that all the other contributions by Menger on the subject before 1888 must either be ignored, or treated as irrelevant or regarded as having been recanted.
- 2. Menger's ideas on capital and its structure are "diametrically opposed" to those of Lachmann ("Comment," pp. 98, 101); the doctrinal link between Menger and Lachmann made in E&H is the result of a "serious misinterpretation" of Menger's "attitude regarding capital" and "cannot be upheld at all" (pp. 98, 101).

Our main response to this comment is twofold. First, nowhere in the 1888 article or subsequently does Menger expressly repudiate or recant what he had written on the subject of capital before that date; there is no fundamental break in his capital theory. Second, we present further evidence in support of the Menger–Lachmann trajectory on capital and its structure as originally established in E&H.

The very title of the "Comment" ("The Menger-Lachmann Trajectory on Capital"), betrays a misunderstanding of the focus of the E&H article, which was, in fact, concerned with Menger's ideas (and those of his followers) on the "Nature of Capital and Its Structure," as our title indicates. Now, this subject includes, but advances well beyond, Menger's (1888, p. 37) "common parlance" working definition of capital as a sum of money used by accountants in the realm of day-to-day financial calculation. That Menger adopted "a point of view of business life and therefore of the accountant" ("Comment," p. 101) only when treating the subject of capital in his 1888 article is surely not the full story; if it were, there would be no place for a discussion of the role of capital in the process of production and the associated agency of entrepreneurs who combine and structure capital goods in particular ways to satisfy human needs.

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In short, there would be no point in consulting Menger's rich discussion of these matters in his *Grundsätze* (1871, trans. as *Principles of Economics*, 1950). We shall return to this matter at several points in the following discussion.

II. MENGER ON THE NATURE AND STRUCTURE OF CAPITAL

In section II of E&H (pp. 359–363), Menger's philosophical and methodological suggestions are taken seriously in directing our study of the ontology of capital. We show that Menger (1883, trans. 1985) in fact reflected deeply on ontological matters in relating to capital and other key economic phenomena. It is a pity that the "Comment" shows no appreciation of that section of our article. Menger considered capital to be a relational phenomenon and not something purely technical that exists independently of the human mind and human purposes and expectations. Capital has a form and relational structure that is created by economizing agents. We quote Menger's directive that economic fundaments such as capital must be understood "in all their complexity and multi-formity" (E&H, p. 360). While this does not exclude the way capital is treated in everyday life, economic science must delve more deeply into the typical connections between economic phenomena (e.g., in production processes) and create theoretical representations of those connections.

In Menger (1950, pp. 303-304) and in his 1876 Lectures to Crown Prince Rudolf (Menger [1876] 1994, pp. 61–65), capital goods are considered heterogeneous "means of production," such as machines, buildings, land, and implements. Such goods may be used and transformed in production in various ways, are conceivably species of things called "capital" in everyday life, and may be classed for legal and accounting purposes into asset types that are "reckoned in terms of money" (Menger 1950, p. 304). (Note that this last point concerning calculation is entirely consistent with Menger [1888].) However, these capital goods cannot be "elevated into the status of the genus [capital] itself' (Menger 1950, p. 304). Thus, while money capital is a particular exemplification of "capital," it does not, on its own, form the organically created structure of capital. The capital "genus" is a mentally selected and structured combination of heterogeneous capital goods used in production; that is, "complementary quantities" of those goods "whose productivity is of an essentially different nature" from the things that constitute them as unconnected elements (p. 304; also pp. 155–157). Capital does not exist and is not "reckoned" in limbo. The money form in which capital is calculated in real life under some historical and legal conditions, as emphasized by Menger (1888), does not explain or constitute the full nature of capital (for the latter, we need to consult Menger 1871 and 1883).² Capital is an integrated connection of capital goods in production processes driven ultimately by "human purposes" (pp. 73-74). Menger's capital is also more than the sum of its parts, since its parts (capital goods) are ordered or structured by economizing agents (e.g., entrepreneurs), whereas money can be represented for some purposes as a homogenous mass or structureless sum, such as when accountants construct a balance sheet or calculate a business's income.

¹All page references to the *Grundsätze* that follow refer to the 1950 English edition.

²On the different levels of abstraction in Menger's economics, see E&H (pp. 359–361) and Mäki (1990).

To be sure, the "services of capital have an economic character and yield an income" (Menger 1950, p. 304). Those "services" possess both an historical element, in that entrepreneurs create capital that yields a given income in the present, and a prospective element, in that capital has an uncertain income that is expected to be forthcoming at a future date. It is, therefore, quite understandable why Menger (1888) discusses the earnings accruing from the services of capital in the sphere of economic calculation (hence, his frequent reference to the everyday practices of lawyers and accountants). Endres (1997, pp. 167–171) demonstrates how the ideas on capital in Menger's early work dovetail with his 1888 article; Braun's "Comment" would be better had he consulted this earlier work, which was cited in E&H. Be that as it may, Menger's capital emphatically cannot have any point without a production objective in view. A theory that neither delves into how and why capital is formed nor explains its productivity and its earnings (or returns) is not a theory of capital at all. As the "Comment" would have it, Menger (1888) was interested only in sterile definitions of capital for their own sake, and that article must not be read as an elaboration and extension of Menger's earlier, substantive approach to capital in the Grundsätze. Braun wishes to separate capital calculations from capital in production ("Comment," p. 101), but that would be a travesty because it would not amount to a full explanation of Menger's theory of capital. In that theory, capital is always and everywhere productive. Menger's main point in the 1888 article is that capital is "productive property, whatever technical nature it may have, so far as its money value is the subject of economic calculation, that is, if it appears in our accounting as a productive sum of money." His exact words were:

Der Realbegriff des Kapitalsumfaßt das Vermögen der Erwerbswirtschaft, welcher technischen Natur dasselbean sich auch sein mag, insofern sein Geldwert Gegenstand unseres ökonomischenKalküls ist, d. i. wenn dasselbe sich uns rechnungsmäßig als eine werbende Geldsumme darstellt. (Menger 1888, p. 40)

Moreover, we agree with Hayek's (1934, p. 410) interpretation of Menger's 1888 article. First, one of its key motivations was doctrinal: Menger wanted to emphasize the importance of the popular notion of capital "as the money value of the property devoted to acquisitive purposes against the Smithian concept of the 'produced means of production," since the latter, English, classical idea had also crept into Böhm-Bawerk's contribution to the subject. It is well known that Menger took exception to Böhm-Bawerk's treatment. Friedrich Wieser ([1889] 1930, p.125, n.1) was, no doubt, referring to the scientific approach used by English classical economists (and not all scientific approaches) when he remarked politely that Menger (1888) had the express purpose of rehabilitating the "popular as against the scientific concept of capital." Second, we concur with Hayek that the main substantive point in Menger (1888) was the "necessity of clearly distinguishing between the rent obtained from already existing instruments of production and interest proper" (p. 411). In making this important distinction, Menger has priority in a doctrinal sense, and this has been noticed by the most authoritative expositor of early Austrian capital theory, Klaus Hennings. According to Hennings (1987, p. 115), Menger (1888, p. 44) implicitly drew a distinction between "capital goods which earn quasi-rents, and the money capital which earns interest. In essence this is the distinction between production and investment: capital goods are used in production, and if used productively, earn quasi-rents; money capital is invested, and if invested successfully, earns interest." And, crucially, we have Lachmann's (1976, pp. 147, 151) approval of this important distinction, which he attributes to Menger and even cites Menger (1888) in support! We know that Menger did not subsequently formulate a comprehensive theory of interest (e.g., on the scale of Böhm-Bawerk or Fisher; see Endres 1997, pp.172–176), but his theory of capital was fully and consistently developed from 1871 through to 1888.

Finally, if the argument of our commentator were to be accepted, Menger (1888) would not be consistent with the principles he established on capital theory in 1871. And yet, no historians of Austrian economics of high standing (e.g., Hayek, Schumpeter) have ever noticed or commented upon an alleged break in his thinking on the subject. Among more modern distinguished historians of Austrian economics, Erich Streissler (1972, p. 435) recognizes the centrality of capital-goods complementarities in Menger's theory of capital proper. The sterile definitions that preoccupy our commentator were not central to Menger's theory of capital. Streissler and Weber (1973, p. 231) consider the 1888 article as "a further elaboration of [Menger's] own theory of capital" rather than a rejection of his substantive treatment in the *Grundsätze*. In addition, Karl Milford (2012, p. 418) interpreted the 1888 article as an extension of Menger's theory of value and as being consistent with his earlier rejection of capital theories that focus on the technical origin of capital goods. Without textual substantiation in support, Braun has interpreted Menger's 1888 article in isolation from Menger's earlier work and has, moreover, claimed implicitly that it constitutes a fundamental break in his thinking on capital.

III. THE MENGER–LACHMANN TRAJECTORY ON CAPITAL AND ITS STRUCTURE

The "Comment" (p. 99) asserts that Menger "deals with capital only cursorily" in his work prior to 1888. Nothing could be further from the truth. There is much more in Menger's work on capital than is evident in the explicit statements on pages 304–305 of the *Grundsätze*. His long discussion in the *Grundsätze* of the classification of goods into different orders and the role of higher-order goods in production is essentially about a capital-goods-using economy; it describes the productivity of capital goods and their valuation (Menger 1950, pp.150–160; Striessler 1969, p. 249; see also Garrison 1990). Furthermore, it is precisely on this point—on the role of capital goods in production—that Lachmann (1956, p. 54, n. 1) cites Menger. Yet Braun believes this to be a citation on a "pretty peripheral issue" ("Comment," p. 99). Again, nothing could be further from the truth. If he had consulted Lachmann's works more widely, he would have discovered that Lachmann cites Menger extensively. Indeed, Lachmann argues frequently that the issue of the order of goods in production was, in fact, central to understanding capital formation and its structure. Space considerations do not allow us to present, chapter and verse, all Lachmann's citations of Menger. The following illustrations suffice to substantiate our point that the commentator's critique of the Menger-Lachmann trajectory is not founded on systematic research.

The "Comment" suggests that the Menger–Lachmann trajectory in E&H is about "lumping together" (pp. 97, 98, 101). Menger and Lachmann by Procrustean means,

but, in fact, it is about tracing intellectual connections and the development of Austrian economic thought. Braun proposes that Lachmann, "at least in regard of capital theory," would have had "little to learn from Menger" (p. 101) because Menger considered capital to be calculated in terms of money in real life. It is hyperbolical to claim that Menger's and Lachmann's theories of capital are "diametrically opposed" (pp. 98, 101) and that they "totally disagree" (p. 99) about the nature of capital simply because they may have had different views on the way capital is calculated in practice. A description of how capital might be calculated does not make for a genuine capital *theory*; there is much more to Menger's theory. Lachmann (1976) had much to learn from Menger, and he says so in no uncertain terms in his citation (as mentioned above) of Menger (1888). Thus, in respect of conceptualizing the earnings of capital, which is a major dimension of capital theory that the "Comment" inexplicably ignores,

If we follow Menger instead of Böhm-Bawerk, a distinction may be made between the rate of interest on loans and the rate of profit on capital invested. The former does exist, that is, there is a structure of interest rates determined daily in the loan market as its equilibrium price. The latter does not. (Lachmann 1976, p. 147)

Lachmann expressly celebrates the "Mengerian criticism" (embodied in the 1888 article) of macro-based, equilibrium doctrines of the rate of return on capital. Menger (1888) admits of a uniform rate of yield on capital assets of the same class (e.g., administered by the same or similar businesses at the micro level), doubtless calculated either in terms of monetary dividend or earnings yield. However, "this rate of yield has nothing to do with" classical ideas on the economy-wide rate of profit (e.g., Ricardo's). The sheer heterogeneity of capital combinations in the economy does not make very meaningful the idea of a uniform rate of profit on capital invested, except in a static, fully equilibrated economy, which, of course, was anathema to Menger. So much, then, for diametric opposition!

Lachmann also drew upon some key Mengerian themes in his theory of capital formation and structure. For instance, Lachmann (1948, p. 141) cites Menger in the context of developing the idea of capital-goods complementarities—a pivotal concept in Lachmann's capital theory and as elaborated in E&H. Menger also receives a favorable citation in Lachmann (1975, p. 201) in the context of an examination of the meaning of capital productivity and "the complementarity between mobile investible resources and certain potential natural resources which, until the capital required for their exploitation has come into existence, were not 'scarce' and thus had no economic value." As far as the process of capital formation is concerned, Menger (1950, pp. 159-160) made the fundamental point that the "process of transforming goods of higher order into goods of lower order ... must always be planned and conducted, with some economic purpose in view, by an economizing individual." While Lachmann does not cite this passage, it is abundantly clear that this Mengerian theme is encapsulated in Lachmann's (1956) concept of "planned complementarity." For both Menger and Lachmann, capital is consciously organized and structured by entrepreneurs. (For elaboration on this point, see Harper and Endres [2010, pp. 32-34].) If we accept Braun's point of view on Menger's capital concept, entrepreneurial agency vaporizes—we are left with lifeless automatons and rule-following accountants.

IV. CONCLUSION

Enough has now been presented to dispose of the two main pillars of the "Comment." There is no evidence that Menger's 1888 article on capital is opposed to his earlier views on the subject, and the Menger–Lachmann trajectory established in E&H remains intact.

All too often, scholars in the history of economic thought are too hasty to draw conclusions without considering the full gamut of contributions of an author in question. This point applies with some force to Braun in light of his "Comment." As already stated, taking Menger's work as a coherent whole, he wanted to investigate capital, among other key economic phenomena, in all its "complexity and multi-formity." As Streissler (1972, p. 435) so neatly put the matter, in Menger's "vision everything immediately ramified in some five to ten dimensions. Menger would describe the accumulation of capital as an increase in the range of capital goods and an everincreasing complexity of the web of complementarities." As we maintained in E&H, this, too, was Lachmann's vision. For Lachmann, the Mengerian order of capital goods in production was central to the ongoing formation of capital and its structure. By contrast, the "Comment" has privileged a single dimension of Menger's treatment of capital and arrived at a conclusion—that Menger advanced a "homogeneous concept of capital" (p. 102)—that amounts to a *reductio ad absurdum*.

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