

CARL Menger BETWEEN ADAM SMITH AND EUGEN VON BÖHM-BAWERK ON
THE THEORY OF VALUE AND CAPITAL*

by

Ferdinando Meacci

Department of Economics and Management

University of Padova, Italy

ferdinando.meacci@unipd.it

Introduction. 1. From *commodities* as products of labour to *goods* as components of individual wealths. 2. From capital as *command* of productive labour to capital as *produced* means of production. 3. Adam Smith after Menger and Böhm-Bawerk on national *wealth*. 4. Böhm-Bawerk's view of capital as a *subsistence* fund. 5. Böhm-Bawerk vs. Menger vs. Böhm-Bawerk. 6. Concluding remarks.

*Provisional draft of a paper to be presented at the International Conference "Carl Menger: One Century Later. Originalities and Modernities", Nice, November 24-26, 2021

Introduction

The links between the theory of value and the theory of capital have been developed in different directions and with different intensities by the classics, starting from Adam Smith's *Wealth of Nations* ([1776] 1976), and by the Austrians, starting from Carl Menger's *Principles* ([1871] 2007) and reaching a climax in the posthumous edition of the three volumes of Böhm-Bawerk's *Capital and Interest* ([1921] 1959). What strikes most when moving from Smith's to Böhm-Bawerk's publications is less the theory of capital (on which some important similarities may be singled out, as argued below, between the works of these two great authors) than the theory of value (which, by contrast, was developed by the classics and the Austrians in two diverging directions). Reasons of space will here prevent from focusing on all the similarities and differences not only between, but also within, the classical and the Austrian theories here under discussion. Their complexities have been discussed so often in the literature to date that even a book may not be enough to deal with all their aspects and related controversies. This applies with particular regard to the theory of interest which, as is well known, has drawn the attention of economists of different generations and remains the object of Böhm-Bawerk's most important contributions to economic theory.

The scope of this paper is to avoid a discussion of the theory of interest and to focus instead, within the theory of value and capital, on the *main* similarities and differences between, on the one hand, Carl Menger and his disciple Eugen von Böhm-Bawerk as well as between, on the other hand, these two authors and Adam Smith in the first place. Section I is thus focused upon the apparently similar concepts of *commodities* and *goods* in the context of the different theories of value developed, first, by the classics with regard to commodities as goods produced and reproduced by means of labour, and, then, by Carl Menger with regard to goods, whether commodities or not. The concept of capital, which is briefly mentioned by Menger while dealing with his concept of the different "orders" of goods, is then discussed in Section II. This Section is based on Smith's concept of labour *command* as distinct from labour *embodied* as well as on Böhm-Bawerk's crucial distinction between *private* (or acquisitive) and *social* (or productive) capital as two different sources of, respectively, *individual* and *national* wealth. It is argued in this connection that the latter distinction is implicit in Smith's system of thought and that the concept of "social" capital can be split into Jevon's concepts of *free* and *invested* capital while the concept of "private" capital can in turn be split into the distinction, used by Menger himself, between *money capital* and *capital value*. Section III is focused instead upon Smith's and Menger's dissimilar concepts of *wealth* in the sense that Menger's prevailing focus is on individual wealth, as the value of goods *owned* by different

individuals, while Smith's (and the classics') prevailing focus is on *national* wealth as the goods made available in any country or society regardless of who owns them. This may be regarded as an introduction to the following Section IV. This is based on the similarities and dissimilarities between the classical concept of "wages fund" (rather than of Smith's more specific concept of "funds destined for the maintenance of productive labour") and Böhm-Bawerk's own concept of "subsistence fund". Section V is focused instead on the explicit or implicit conflicts, on the one hand, between Böhm-Bawerk and Menger on the different role assigned to "goods and services" as distinct from "rights and relations" in their common theory of value, as well as, on the other hand, between Menger and Böhm-Bawerk on the latter's "greatest error ever committed" with regard to the conflicting arguments developed in Book II and III of his *Positive Theory of Capital*. Most of these distinctions, similarities, differences and conflicts are briefly summarised in the final Section VI.

1. From *commodities* as products of labour to *goods* as components of individual wealth.

Menger's theory of value is developed in two steps. The initial step is focused on the *qualitative* relationship between "goods of higher order" and "goods of lower order" in a context of time and error (*Principles*, chap. I, secs. 2-4); and then on the *quantitative* relationship per unit of time between individual *requirements* (*Bedarf* in Menger's own terminology) for goods of any order and their actual supply (*ibid.*, chap. II). The second step is carried out in the crucial chapter III where Menger provides his own solution to what he later regards as "a question Adam Smith left unanswered" (*ibid.*, p. 175). This is the question of the role played by what Menger calls the "other causes" that support what Smith had called the "propensity of men to truck, barter, and exchange one thing for another". He identifies these "other causes" as what determines the *use value* of "economic" goods (as distinct from their *utility* which he regards as typical both of economic and of non-economic goods) in determining their *exchange value* (*ibid.*, chap. III, pp. 118-21, and chap. VI). After regarding the concept of use value (in Adam Smith's footsteps) as a necessary condition for the existence of exchangeable value, Ricardo ([1821] 1951, p. 11) had set it aside (again in Smith's footsteps) before focusing on the crucial question of the exchangeable value of *commodities* as *products* of labour and as distinct, therefore, from *goods* (whether products of labour or not)¹. By

¹It is here important to note that, if the concept of goods, whether "imaginary" or not (in the sense figured out in Menger's *Principles*, p. 53), were to coincide with the concept of commodities (which happens when goods are produced by means of labour), it remains to be seen whether, in the economy of an *individual*, commodities, in spite of their being produced by labour, are regarded or not by this individual as a source of utility (and therefore as goods). This implies that, starting from Smith's distinction between "value in use" and "value in exchange" and from Ricardo's associated clarification that "utility then is not the measure of exchangeable value, although it is absolutely essential to it" (*Principles*, p. 11), the exchangeable value on which the classics focused their attention is the exchangeable value of commodities as distinct from goods (and, therefore, as goods produced and reproduced by means of labour, labour embodied being the "original source" of such a value); whereas the concept of exchangeable value that lies at the core of Menger's thought is the exchange value of goods (whether commodities or not and,

contrast, Menger based his new theory of the exchange value of goods (as distinct from commodities) by focusing exclusively on their subjective values in the sense that “not only the *nature* but also the *measure* of value is subjective” (*Principles*, p. 146, Menger’s italics; see also p. 116 and pp. 120-1) but also in the sense that the value of goods of higher order is determined by the prospective value of the goods of lower order “in whose production they serve” (*ibid.*, p. 150). Hence his critical conclusion that “there is no necessary and direct connection between the value of a good and whether, or in what quantities, labor and other goods of higher order were applied to its production”; and his following criticism of “the opinion that the determining factor in the value of goods is the quantity of labor or other means of production that are necessary for their reproduction” (*ibid.* pp. 146-7, Menger’s italics).

It must here be noted that the term “reproduction” (which is used by Menger five times soon after this quotation and never again in his *Principles*) is adopted by Menger, first, in consistency with his new theory of value in the sense that “a large number of goods cannot be reproduced” so that “any factor connected with reproduction cannot be the determining principle of value in general” (*ibid.*, p. 147); and, secondly, in contrast with the classical theory of the exchange value of *commodities* as goods that are *produced* and *reproduced* by means of labour. Furthermore, when arguing that “the most egregious of the fundamental errors” of his predecessors was “the argument that goods attain value for us because goods were employed in their production” (*ibid.*, p. 149), Menger (who is here using the term “goods” in two different senses one of which replaces the more appropriate term “labour”) seems to be extending his criticism to the backward-looking approach of his predecessors’ theory of value (based as it was on the labour embodied in commodities) as distinct from the forward looking approach adopted by himself in his new theory of the value of goods as the source of a (direct or indirect) satisfaction of human needs. The difference, however, between these two theories of value is even deeper in so far as Menger’s theory is concerned with the behaviour of different *individuals* on the more advanced basis of the prospective utilities or disutilities of the goods they are about to buy or to sell (regardless of their actual knowledge and possible errors) while the theory of the classics is rather based on the more advanced context of the production and reproduction of *national wealth*².

therefore, whether produced or not by labour). Menger’s own treatment of such a distinction is repeatedly provided, within his own theory of value, in the light of his further distinction between a direct and an indirect satisfaction of human needs (see, in this connection, chapter VI and Appendixes F, G and H of his *Principles*). Hence Schumpeter’s observation that, according to this view, utility “was *more* than a mere condition of exchangeable value” ([1954] 1994, p. 600; italics added) and was regarded instead as the source or cause of such a value. On Menger’s own concept of “commodities” not as products of labour but as “all economic goods held ready for sale”, see *Principles*, chap. VII.

² On Austrian subjectivism as based on the notion of “different individuals” with “different preference functions” (at variance, therefore, with the Cambridge tradition of the “representative” individual), see Streissler (1990a, p. 120). Some minor implications of Menger’s subjectivism can be found in his criticisms of Hildebrand’s and Friedlander’s concepts of use value in Appendix D of his *Principles*. These criticisms are based on Menger’s own theory of value

Hence Menger's rejection of the classical "principle of equivalence in exchange" as embodying the "error of regarding the quantities of goods in an exchange as equivalents" (*Principles*, p. 192; see also Appendix F). Here Menger seems to be assessing his predecessors' theory of value in terms of his own theory. For this theory is rather based on the forward-looking approach by which the value of *final* goods is determined by the diverging and varying satisfactions experienced or expected by their individual *owners*, while the backward-looking approach is used by Menger only as an appendix needed to highlight how the value of goods of higher order is *derived*, according to the principle of imputation, from the value of goods of lower order³. By contrast, the classical theory of value had been based, first, on the backward-looking approach by which the value of commodities (as goods produced by means of labour) is essentially determined by the amount of (direct and indirect) labour employed in their production (regardless, therefore, of the different satisfactions provided by different quantities of given goods to their different consumers), but also, at least with regard to Smith's theory of value as distinct from Ricardo's, on the forward-looking approach by which the value of final goods, once produced by means of capital or not, is determined by the amounts of labour these goods will (directly or indirectly) command, or be exchanged for. This is consistent not only with Smith's explicit distinction between "work to be done" and "work done" (WN, I.vii.19) but also with his implicit distinction between the concept of *command* of labour and the concept of labour *commanded* (a past participle never used by Smith in this connection). While these two concepts, however different they may be, lead to the same conclusions in the case of a stationary economy (in the sense that here the exchangeable values both of "work to be done" and of "work done" remain unchanged from period to period), in the different case of a growing economy (where the demand for "work to be done" increases from period to period while the supply of labour remains constant or does not increase by as much), the most likely result will be an increase not only of national wealth but also of the quantity, quality and variety of wage goods as particular forms (in Marx's own terms) of *dead* labour exchanged for a given amount of *living* labour).

Hence Menger's conclusions, in consistency with his own theory of value, concerning what determines the value not only of goods (whether products of labour or not) but also of land, labour and capital (*Principles*, chap. III, sec. E). These conclusions are consistent not only with Menger's neglect of his predecessors' distinction between commodities and goods, but also with his replacement of the classical theory of the value of commodities (as goods produced and reproduced

both in the sense that "we are interested in a *measure* of the use value of goods that can be observed in *real* cases and with respect to *specific* persons", and in the sense that a measure of the "objective value" of different goods "does not, in reality, exist" (*ibid.*, pp. 297-9; italics added).

³The complicated links between imputation and distribution (in the context of the further distinctions between "disjunctive" and "conjunctive" principles and between "Zurechnung" and "Zuteilung") are discussed by Böhm-

by means of labour) by his new theory of the utility of goods (whether produced by labour or not) as determined by the (direct or indirect) satisfactions of the needs of different individuals. Thus the concept of utility, which was intended by the classics as nothing more than an unquestionable condition for the production and reproduction of commodities, is regarded by Menger as the key on which his own concept not only of the *use* value of goods of any kind (as a direct source of satisfaction of human needs) but also of their *exchange* value (as an indirect source of such a satisfaction) is ultimately based (*ibid.*, pp. 119-20, and chap. VI).

2. From capital as *command* of productive labour to capital as *produced* means of production.

The distinction between the backward-looking view of the determination of the value of commodities (as products of labour) and Menger's forward-looking view of the determination of the value of goods (as sources of human satisfaction) may be used to throw further light on the classical theory of value along two further directions. One concerns the role played by capital as command of productive labour in the *reproduction* of national wealth, the other concerns the increasing command of labour resulting from the process of capital *accumulation* in the economy as a whole. Adam Smith is the author who first undertook this double direction in the light of his twofold concept of exchangeable value highlighted above.

The first of these directions is covered by Smith in Book I of his *Wealth of Nations* when announcing an extension of his initial concept of exchangeable value as labour *embodied* to his further concept of exchangeable value as labour *command*. The clarification needed for singling out this direction (within Smith's own theory of value) consists in keeping apart (unlike what has been usually done in some past interpretations) the concept of labour *command* from the concept of labour *commanded*. This is made possible by Smith himself when resorting to the past participle "commanded" only four times in his *Wealth* and only with the meaning prevailing in a political or military context, while the term "command" is repeatedly used starting from his well-known treatment of the purchasing power of an individual as "the quantity either of other men's labour, or, what is the same thing, of the produce of other men's labour, which it enables him to purchase or command" (*WN*, I.v.1-3; italics added).

What is here worth noting is that the expression "what is the same thing" *might* be intended as ruling out any distinction between what determines the value of *labour* and what determines the value of its *products*. Yet a crucial aspect of Smith's theory of value is that this theory should be split into a theory of the value of *commodities* as different forms of "work done" in the latter case, and into a theory of the value of *labour* as different forms of "work to be done" in the former case. Thus

the ambiguity implicit in Smith's double concept of exchangeable value (depending on whether it comes to the value of labour or to the value of its products) disappears if the double meaning that might be assigned to the expression "labour commanded", when it comes to the economy of an *individual*, is kept apart from the meaning that *must* be assigned to it, when it comes to the economy of the whole *society*. For the value of commodities as command of labour may be intended, at an individual level, as the value of commodities owned by someone in terms of the labour, either dead or living, owned by someone else; whereas, if one moves to the level of the whole society, the only form of labour that can be "put into motion" from now onwards is the *living* labour (whether productive or unproductive) *now* exchanged for the final goods *already* produced and now employed (if it comes to productive labour) in time-consuming processes of production begun in the *past* or beginning in the *present*. Thus what moves the process of production of national wealth from now onwards is nothing but the command of living labour made possible by the wage goods inherited from a recent or distant past and now employed in order to command, or be exchanged for, a corresponding amount of labour.

As for the second direction mentioned above, this is undertaken by Smith himself when focusing, in Book II, *Of the Nature, Accumulation, and Employment of Stock*, of his *Wealth of Nations*, on what may cause a continuous increase of national wealth. A process of capital accumulation is here regarded as the fundamental force that supports such an increase through a further increase not only of the (horizontal or vertical) division of labour but also of the overall demand for living labour, and therefore of its exchangeable value (if only the long-run supply of labour does not exceed, or will be equal to, the demand for it). Hence Smith's and Ricardo's common focus (regardless of their crucial divergence on the value of commodities as labour command and on the associated determination of the value of labour) on the reproduction and distribution of national wealth, while Menger's theory is rather based on the role played by "economizing individuals" in determining the value of goods (regardless of whether they are commodities or not). This role consists in evaluating the different satisfactions provided by the different goods at the disposal of these individuals (subjective factor) as well as of the different satisfactions provided to the same individuals by different quantities of the *same* goods (objective factor) (*ibid.*, pp. 122-141).

The link between the theory of value and the theory of capital, which is not focused upon by Menger as much as by Smith, reappears in Böhm-Bawerk's *Positive Theory of Capital*. It is here impossible to dwell on all the aspects of these two theories as developed by Böhm-Bawerk in the three volumes of his *Capital and Interest*. What is here possible to do is to focus upon only some aspects of these theories by excluding, to begin with, the theory of interest. Thus the focus of what follows will be based, first (C1), on Böhm-Bawerk's own version of Smith's (and Ricardo's) initial

distinction between use value and exchangeable value, and, secondly (C2), on a deeper discussion of Böhm-Bawerk's crucial distinction between *private* (or acquisitive) and *social* (or productive) capital.

C1. As noted above, Ricardo himself had used the term “utility” when arguing, right at the beginning of his *Principles* and in Smith's explicit footsteps, not only that utility is a common feature both of commodities and of goods in general, but also that the only goods worth focusing upon are “such commodities *only* as can be increased in quantity by the exertion of human industry, and on the production of which competition operates without restraint” (*Principles.*, p. 12; italics added). Now Böhm-Bawerk's reaction to this classical assumption is based on Menger's diverging treatment, within his own theory of value, of the classical distinction between *use* value and *exchange* value. This distinction had been reformulated by Menger in different passages of his *Principles* and, more particularly, in chapter III where he mentions “the error underlying the confusion of utility and use value” (p. 119), and in chapter VI where he focuses again on his own view of that distinction (as discussed above in footnote 1).

Menger's own treatment of these issues is re-launched by Böhm-Bawerk in Part A and Part B of Book III of his *Positive Theory of Capital* by means of his own distinction between “subjective value” and “objective exchange value” in the context of his (and Menger's) new treatment of the latter as derived from the former. Here Böhm-Bawerk resorts, in Menger's footsteps, to the distinction between consumption goods and production goods in the sense that the former serve to satisfy wants directly while the latter do it only indirectly so that (regardless of the degree of their indirectness or of their higher or lower orders) “they neither violate nor disturb the chief law of value” (*ibid.*, pp.168-9). Thus Böhm-Bawerk, more explicitly than Menger, criticizes both Smith's and Ricardo's theory of the “value of all goods” founded on labour (where the term “goods” here used by Böhm-Bawerk should more properly be intended as “commodities”) in the sense that, according to Böhm-Bawerk, Smith contradicts this principle “every once in a while” while Ricardo places such restrictions on it that “one is hardly justified in maintaining that he held forth labor as the general and exclusive factor on which the value of goods is based” ([1921] 1959, Vol. I, chap. XII, p. 287).

Now it must be noted, with regard to Smith, that Böhm-Bawerk's criticisms are focused (in the volume just quoted) on Smith's three sentences, the first two of which (on the “beasts” and the “nature” used in agriculture) are quoted in Böhm-Bawerk's footnote 68 of the chapter just mentioned, while the third one (concerning the “toil and trouble” experienced or avoided by individuals and quoted by himself on pages 287-8 of the same volume) is what had been praised by Ricardo ([1821] 1951, p. 13) as “a doctrine of the utmost importance”. Here Böhm-Bawerk does

admit that Ricardo had distinguished the value determined by the rarity of goods from the value determined by the labour embodied in their production. But, after noting that Smith's third sentence above is exactly the same as the one quoted and appreciated by Ricardo [(1821] 1951, pp. 12-13), Böhm-Bawerk fails to notice that Ricardo's theory of value is focused (as much as Smith's in this connection) not only on the value of *commodities* as distinct from *goods* but also, and more specifically, on commodities as goods that are not only *produced* but are also to be *reproduced* by means of labour. Hence the importance of keeping apart the causal relationships concerning the *existence* as distinct from the *magnitude* (or, in Menger's own words mentioned above, the *nature* as distinct from the *measure*) of exchangeable value, depending on whether this is the value of the commodities to be reproduced by means of (direct and indirect) labour, or of goods not to be reproduced at all or not to be reproduced in the same amounts or in the same manner as before⁴.

C2. While Menger's treatment of goods of different order is mostly based on goods whose orders are assumed to be *given* rather than on how these orders may be increased, an increase in the number of these orders is Böhm-Bawerk's crucial object of research. Thus, unlike what he does in Book III which is focused, in Menger's footsteps, on the theory of value and price, Böhm-Bawerk devotes Book I of his *Positive Theory* to the concept and nature of capital as an introduction, first, to his concept of roundabout methods of production and, later on, to his more advanced theory of interest as developed in Book IV. While discussing within Book I the controversies on the concept of capital, Böhm-Bawerk comes to the following appreciation of Adam Smith's arguments on capital as "the initial step in the breaking down of the concept of capital into two independent concepts":

"For he [Adam Smith] remarked that the concept of capital may be applied, not only to the affairs of *individuals*, but to those of a whole economizing *society* as well. In such case, however, the shift in point of view brings about a shift in the nature of the things that fall within the concept of capital. For individuals can derive a gain not only from the production of new goods but also from lending to other individuals, for a consideration, goods that are intended for immediate consumption, such as dwelling houses, masquerade costumes, furniture and the like. Economizing *society*, however, has no way of enriching itself other than through the production of new goods. For society, therefore, the concept of means of *acquisition* coincides with the otherwise narrower concept of means of *production*" ([1921] 1959, Vol. II, Book I, chap. III, p. 20, italics added; see also p. 23, pp. 32-3, and p. 62).

Hence Böhm-Bawerk's own distinction between the "two radically different concepts" of *private*, or acquisitive, capital and *social* (a term he prefers to "national"; see p. 412, ft.1), or productive, capital (*ibid.*, pp. 20-22). Böhm-Bawerk returns to this distinction, first, when criticizing Menger's concept of money capital (*ibid.*, pp.50-2) and Marshall's apparently similar (but actually different) distinction between "individual" and "social" capital (*ibid.*, pp. 53-4); and, secondly, when

⁴ For a brief treatment of the relationship between Böhm-Bawerk's own view of value, as based on the marginal utility or on a "future use" of goods, and the classical view based on costs of production or on the "conditions of its origination", see Böhm-Bawerk ([1921] 1959), Vol. II, Book III, chap. VII, and Vol III, chap. VIII).

focusing on the further distinction between “capital goods” (intended as concrete means of production, or as a “source of income for society as a whole”) and “capital property” (where capital is intended as acquisitive capital, or as a source of individual incomes) (*ibid.*, pp. 68-9)⁵. It must here be noted, however, that, after distinguishing these concepts of capital, Böhm-Bawerk fails to highlight the two different forms of the concept of *social* capital as introduced by Jevons a few years before ([1871] 2013, chap. VII). These are the forms of *free* capital and *invested* capital, the former being the capital now employed in the command of living (and productive) labour (although Jevons writes “labourers of any kind or class”, *ibid.* p. 242), the latter being the capital resulting from a *previous* transformation of free capital into the means of production now employed in a process of further production of national wealth⁶. While putting forward his own distinction, however, Jevons fails to realize that it arises exclusively within the concept of social capital; and that Smith’s concepts of circulating and fixed capital acquire two different meanings depending on whether they are intended from the point of view of their individual owners or in the context of the economy as a whole. For, while in the former case capital is regarded as circulating or fixed depending on whether it does or does not imply a *change of hands* between its individual owners, in the latter case what is under discussion is not a change of ownership but the *change of matter* resulting (in periods of variable length) from the labour (directly or indirectly) employed in their production. Hence Smith’s own treatment of this distinction in the light of his more general distinction between the “stock which *a man* possesses” and the “general stock of any *country* or *society*” (*WN*, Book II, chap. I; italics added) which is regarded by Böhm-Bawerk himself as an introduction to his own distinction, mentioned above, between private and social capital. Smith’s distinction, however, may be further used in order not only to split Böhm-Bawerk’s concept of social capital into Jevons’ two concepts of

⁵ Böhm-Bawerk’s distinction between private (or acquisitive) and social (or productive) capital is shared by Garrison (1990) though not to the point of recognizing that this distinction is concerned with two general, rather than two specific, concepts. These are the concepts of capital as a “source of individual incomes” or as “produced means of production” depending on whether the standpoint on which they are based is that of their individual *owners* or of the whole *society*. This applies not only to material products as different forms of capital goods but also (contrary to Böhm-Bawerk’s observation appreciated by Garrison, *ibid.*, p. 150) to that portion of the “general stock of any country or society” known, in Adam Smith’s footsteps (*WN*, II.i.17), as *human* capital (whose peculiar aspect is that it can never be *transferred* from one individual to another but only *used* with some advantage by its owners in the first place). It must finally be noted that the concept conveyed by the term “social”, here used as synonymous with the term “productive”, must be kept apart from the concept conveyed by the same term as used by sociologists in recent times (see, in this connection, Hodgson, 2014). On the “representational theory of capital” based on “property titles representing claims over real goods”, see Zelmanovitz (2021). On Böhm-Bawerk’s 1881 (1962) essay on legal rights and relationships, see *ibid.*, pp. 66ff, and Section 5 below. See also, in this connection, Endres (1997, chap. 9).

⁶ Böhm-Bawerk’s failure is here due to his self-centered criticism of Jevons’s concept of free capital in the light of his own concept of capital as produced means of production. Thus, when concluding that Jevons “had in mind an idea that was quite correct but which he presented in an ill-chosen form”, Böhm-Bawerk supports his criticism on the basis of his own concept of capital by arguing that Jevons “confused a requirement for the formation of capital with capital itself” ([1921] 1959, Vol. I, chap. III, p. 50). For a brief discussion (in support partly of Böhm-Bawerk and partly of

free and invested capital, and Böhm-Bawerk's concept of private capital into the more specific concepts (in Menger's footsteps) of money capital and capital value; but also to single out the similarity between the concepts of money capital and free capital in spite of the fact that the former belongs to the economy of an *individual* while the latter belongs to the economy of the whole *society* (which, as implied in Böhm-Bawerk's footnote mentioned above, does not correspond to any particular nation).

3. Adam Smith after Menger and Bohm-Bawerk on the links between individual and national wealth

An interesting aspect of Menger's arguments on the theory of value is that he abstains from mentioning the names of Adam Smith and David Ricardo (as well as of other classical economists) when rejecting in chapter III of his *Principles* (and, more particularly, in its sections 2D and 3) their (only partly similar) labour theory of value. Another interesting aspect of this rejection is that Menger does not even mention Smith's own distinction between the value of commodities as labour *embodied* and the value of commodities as labour *command* (in the two different scenarios of living and dead labour mentioned above). Menger's explicit criticisms of Smith's thought, however, are made evident, first, when providing (in the first chapter of his *Principles*) his own discussion of Smith's treatment of the division of labour and when mentioning (at the beginning of chapter IV) the "other causes" which induce men to exchange goods and which "Adam Smith left unanswered"; and, secondly, when extending in Appendix B his own discussion of the concept of wealth initiated in chapter II. All these criticisms seem to descend from the fact, repeatedly mentioned above, that Menger's theory of value is focused not on commodities (as intended by the classics) but on goods (whether commodities or not) and, therefore, not on their (different) costs of production but on their (different) utilities or disutilities. Hence the different role assigned to individual behaviour in the theory of the classics as distinct from Menger's own theory. While, for instance, the individual is regarded by Menger as a *sovereign* in charge of deciding how much of any good to buy or to sell, the same individual is regarded by the classics –and by Smith in the first place– as an *agent* involved in the different processes leading, on the one hand, to the production and reproduction of national wealth, and, on the other hand, to the distribution of this wealth among the different classes of society.

Concerning Menger's initial criticisms of Smith, they start as follows:

"Adam Smith has made the progressive division of labor the central factor in the economic progress of mankind—in harmony with the overwhelming importance he attributes to labor as an element in human economy. I believe, however, that the distinguished author I have just quoted has cast light, in

Jevons) of the links between the concepts of time-consuming methods of production, free and invested capital, wages fund, and subsistence fund, see Strigl ([1934] 2000).

his chapter on the division of labor, on but a single cause of progress in human welfare while other, no less efficient, causes have escaped his attention” (*Principles*, p. 72).

It must be noted in this connection that the effects of the division of labour, so well discussed in the initial chapters of Smith’s *Wealth of Nations*, must be kept apart from the causes of the progress of this division. These causes are discussed by Smith in Book II, starting from its crucial introduction where it is pointed out that “as the accumulation of stock must, in the nature of things, be previous to the division of labour, so labour can be more and more subdivided in proportion *only* as stock is previously more and more accumulated” (*WN*, II. p. 277; italics added). Thus the criticisms levelled by Menger against Smith on this specific issue may be turned against Menger himself in the sense that, since one thing are the benefits deriving from the division of labour and another thing are the causes of increase of such a division, so one thing is the analysis of the different orders of the goods currently employed in production and another is the analysis of the forces that contribute to the creation of goods of ever higher order. These forces reside in the process of capital accumulation as discussed by Smith himself in Book II. Thus, when writing that, if the people of a country “progressively directs goods of ever higher orders to the satisfaction of its needs, and especially if each step in this direction is accompanied by an appropriate division of labour, we shall doubtless observe that progress in welfare which Adam Smith was disposed to attribute *exclusively* to the latter factor” (*Principles*, p. 73, italics added), Menger seems to be forgetting that this “exclusively” is overcome in the first place by Smith himself when moving to the analysis of the accumulation of capital as a necessary condition for the division of labour to increase beyond its initial levels. Thus Smith would here object that if (as argued by Menger on the page just mentioned) “the division of labour cannot even be designated as the most important cause of the economic progress of mankind”, this is because the “most important cause” of such a progress is not the division of labour as such but the accumulation of capital as the most important cause of the progress of this division. This cause would be better understood if only the terms “directs” and “direction” used by Menger in the passage quoted above with regard to goods of ever higher order were intended in the context of a process of capital accumulation and, even more so, if this process were intended as a *deepening* rather than as a *widening* process⁷.

⁷ The missing link between the accumulation of capital and the progress of the division of labour can be noticed soon after Menger’s passage quoted above. For, while dealing with a set of different orders of goods, here Menger introduces the dynamic argument by which, if a people “*progressively directs* goods of *ever* higher orders to the satisfaction of its needs, and especially if each step in this direction is accompanied by an appropriate division of labour, we shall doubtless observe that *progress* in welfare which Adam Smith was disposed to attribute exclusively to the latter factor” (*Principles*, p. 73; italics added). Menger, however, is here missing the opportunity to stress that a progress towards the employment of goods of ever higher order is usually due to a process of capital accumulation as the ultimate source of a continuous increase of a “vertical” division of labour. Some more explicit arguments in this connection are provided, however, by Menger himself when pointing out that economizing men can increase the consumption goods available “only on condition that they *lengthen* the periods of time over which their provident

With regard to the concept of *wealth*, it must likewise be noted that, when dealing with it in chapter 2 and in Appendix B of his *Principles*, Menger does it in perfect consistency with his view of the behaviour of “economizing individuals” as the exclusive source of the value of goods. The distinction between value and wealth had been highlighted by a number of classical authors, starting from Ricardo (1821, chap. XX) and Malthus (1836, Book I, chap. VII), on the basis of their own theories of value. But, while most of these authors had based their distinction (more or less in Smith’s footsteps) between *individual* wealth (as the exchange value of goods owned by different individuals) and *national* wealth (as the use values of goods available in the whole society regardless of who owns them), Menger re-based it in the light of his new theory of the value of goods, whether commodities or not. Thus, after regarding “the entire sum of goods at a person’s command” as “his *property*” and the “entire sum of *economic* goods at an economizing individual’s command” as “his *wealth*” (*ibid.*, p. 109; Menger’s italics), Menger comes to a distinction between individual and national wealth which differs from the classical distinction mentioned above. This is implicitly acknowledged by Menger himself when arguing that what he deals with in his work is not “the entire sum of economic goods available to a nation for the satisfaction of its needs” but “the totality of goods at the disposal of separate economizing individuals” (*ibid.*, p. 112). This “totality” is thus related, if one thinks of Menger’s crucial self-differentiation from the classics on the theory of value, to *any* good (whether final or not, and whether commodity or not) *owned* by different individuals and distinct, therefore, from all *final* goods available in a country in a given period.

Thus, when returning to this issue in Appendix B, Menger starts by arguing that his study of the nature of economic goods had began with “attempts to define the concept wealth in the economy of an individual”; and by pointing out that “Adam Smith barely touched upon the question” apart from his famous statement on “a man” who is regarded as rich or poor depending on the quantity of labour “which he can command or which he can afford to purchase” (*ibid.*, p. 288). In his following arguments Menger seems to be neglecting the change of concepts which is implied not only in Smith’s very different theory of value as labour command (rather than as labour embodied) but also when, right at the beginning of chap.V, Book I, of his *Wealth*, Smith actually moves from the concept of use value implied in his statement on “every man” (as the portion of national wealth that an individual “can afford to enjoy”) to the concept of exchangeable value lying behind his following statement on an individual’s power of purchasing over “all the labour” or “all the produce of labour which is then in the market” (WN, I.v.3)⁸. Thus when Menger comes to what he calls the fiction of

activity is to extend in the same degree that they *progress* to goods of higher order” (see *Principles*, chap. III, sec. B, p. 153; italics added).

⁸ It must here be noted that the concept of wealth is used by Smith with regard to the “wealth of a country”, the “wealth of the nation”, or the “wealth of the society” rather than to the wealth of an individual or individual wealth

all economizing persons of a society as “*one great economizing unit*” (*Principles*, p. 112; Menger’s italics), he moves briefly to the concept of national wealth *not* in the sense of the economic goods available in the whole society (regardles, therefore, of who owns them) *but* in the sense of his initial view of wealth based on individual property and, therefore, as individual wealth. Hence his final view of national wealth as “a complex of *wealths*” (*ibid.*, p. 113, italics added to stress their different ownerships) and, therefore, not as the set of goods produced in a recent or more distant past, but as the set of property rights on existing goods (whether commodities or not).

The idea of private property lies behind not only Menger’s concept of wealth but also his own concept of capital as dealt with, briefly, in chapter III and in Appendix E of his *Principles*; and, more extensively, in his essay *Zur Theorie des Kapitals* (1888)⁹. Hence Menger’s consistency in dealing with three different concepts of capital as the property of an individual depending on whether it comes to goods of different order, or to their capital value, or to money capital¹⁰. All these concepts, based as they are on the idea of private property, must be kept apart not only from Jevons’s two concepts, mentioned above, of free capital and invested capital, but also from one of Smith’s two views of circulating and fixed capital. For, while Jevon’s two concepts represent two aspects of the concept of capital intended as capital of the whole society; Smith’s two views of that distinction are based on whether the capital under discussion is the capital of an individual (which may, or may not, change hands at any moment) or the capital of the whole society (in which case capital reappears as a

(two expressions that are never used in the *Wealth of Nations*). It is also worth adding that what is implied in the very title of Smith’s *magnum opus* is not only the wealth of *one* nation as such but also the wealth of *all* nations taken together. This is implied by Smith himself when, for instance, he starts his fight against Mercantilism by comparing the Spaniards, whose first inquiry in America was “if there was any gold or silver to be found in the neighbourhood”, and the Tartars, who regarded cattle as “the instruments of commerce and the measures of value” (*WN*, V.i). Hence Smith’s crucial arguments on the principle of *free trade* as an extension to the whole world of the benefits of the division of labour and as a further application to the world economy of the *competition* between the “masters and manufacturers” of every country.

⁹ Reasons of space will here prevent from focusing on the peculiar concept of capital defended by Menger in this essay and even more so with regard to the possible links between this concept and the concepts used in his *Principles*. What, however, is most important to note in such an essay is that, after dealing in its initial sections with the concept of capital “*vorn Standpunkte der Singularwirtschaft*” as distinct from the concept of capital “*vom Standpunkte der Volkswirtschaft*”, Menger does admit, in Smith’s unrecognized footsteps, that the capital of an individual “does not necessarily increase” the revenue of the whole society although it may actually increase the revenue of its owner ([1888] 1933, pp. 164-5). Thus the ultimate link between Smith’s and Menger’s views of this issue seems to lie in the fact that Menger’s criticism of the second “*Standpunkte*” above is focused on the Historical School’s view of society as a “unitary subject” rather than on Smith’s own view of the national economy as the *outcome* of the different behaviour of all its individual members. For a detailed discussion of Menger’s essay and of the related literature, see Meacci (2021). Concerning some specific appreciations of Smith’s thought, see Menger ([1891] 2016) and Streissler E. W. and M. Streissler (eds.) (1994).

¹⁰ In Appendix E Menger defines money capital as “only one convenient form of capital” (so that “the concept of money is entirely foreign to the concept of capital”) and therefore in contrast with the popular usage by which “a particular form of capital has been elevated to the status of the genus itself” (*Principles*, pp. 304-5). As for the concept of capital value discussed in section C, this is based as usual on the discounting procedure by which the “present value of all the goods of higher order” is derived from the prospective value of their future products (*ibid.*, pp. 157-61).

set of capital goods produced in a recent or more distant past and now employed, regardless of who does or does not own them, in a process of further production)¹¹.

A further difference between Menger's and Smith's thought in this connection is implicit in those parts of his *Investigations* where Menger extends his criticisms of the historical school's "dogma of self-interest" by defending Adam Smith, the "great founder of our science", as follows:

"What distinguishes him and his school from our historians is the fact that he neither confused the history of economy with its theory nor even followed one-sidedly that orientation of research which I designated above with the expression empirical-realistic. Nor, finally, did he become a victim of the misunderstanding of seeing in theoretical investigations conducted from the point of view of the free play of human self-interest uninfluenced by other powers the acknowledgement of the "dogma" of human self-interest as the only actual mainspring of human actions" (*Investigations*, Book I, chap. VII, pp. 87-8).

Here Menger fails to highlight that the "human actions" focused upon by Smith in his *Wealth of Nations* (as distinct from the actions discussed in his *Theory of Moral Sentiments*) are not the actions of any individual but only the actions supported by capital in the formation and growth of national wealth. Menger comes, however, to an indirect support of Adam Smith when discussing, in the initial chapters of his *Investigations*, his own distinctions between the "individual" and "general" aspects, or between the "empirical" and "exact" laws, of different phenomena (their individual aspects and empirical laws being the object of historical or statistical studies while their general aspects and exact laws are the object of theoretical economics). These distinctions seem to reflect Kant's more general distinction between *constitutive* and *regulative* ideas, the former being based on *principles*, the latter on their *applications*¹². They actually lie behind Menger's own methodological distinctions between the "cognition" and the "understanding" of a phenomenon or between the "reason for its *being* and for its *being as it is*" (Menger, [1883] 1985, p. 43, Menger's italics). These distinctions, it should now be noted, may be used to support different theories of value, starting from the classical theory where labour embodied reappears as the *constitutive* cause of value, i.e. as the cause of its *existence* (or of "its being"), as distinct from the *regulative* causes of its *size* (or of "its being as it is"). Some minor aspects of these distinctions can also be noticed not only in Smith's own distinction between

¹¹ An important aspect of this double distinction has been highlighted above with regard to Böhm-Bawerk's own distinction between *private* and *social* capital. Another important aspect of the same distinction may also be noticed behind a further distinction put forward by James Stuart ([1770] 1997) before Adam Smith himself. According to this distinction, capital reappears, in the former case, as the source of *relative* profit, or of an increase of individual wealth, and, in the latter case, as the source of *positive* profit, or of an increase of national wealth. This further distinction is useful for keeping apart Menger's concept of wealth "as the entire sum of economic goods at the command of an economizing individual" (*Principles*, pp. 109-11) from Smith's (and the classics') concept of wealth as "the annual produce of the land and labour of the society" (*WN*, p. 12) before this wealth is appropriated by, and exchanged between, its individual members. For a detailed discussion of Stuart's distinction, see Meacci (2020).

¹² This distinction is also implicit in the "two parts" of BB's theory of *price* as distinct from his theory of *value*, i.e. the part concerning the "law of the basic phenomenon in its purest form", and the part concerning the incorporation into this law of the "modifications which result from the contributory activity of other motives and factual circumstances" ([1921] 1959, Vol. II, Book III, Part B, chap. I, pp. 212-4).

the *origin* and *use* of money (WN, I.iv) and in Menger's similar distinction between the *origin* of money and the different *forms* it takes in different countries, periods and times (1892 and 1900)¹³; but also in the more important distinction between *originating* and *determining* causes adopted by Böhm-Bawerk in his *Essay XII* with regard to *interest* as distinct from interest *rates* ([1921] 1959, Vol. III, pp. 191-2).

Where Menger fails to support Adam Smith properly is with regard to the concept of “national economy” as discussed in chapter 8, Book I, and in the important Appendix I of his *Investigations*. This chapter and this Appendix are a crucial part of Menger's criticisms of the Historical School and are based on the following observation:

“The *nation* as such is not a large subject that has needs, that works, practices economy, and consumes; and what is called “national economy is therefore not the economy of a nation in the true sense of the word. “National economy” is not a phenomenon analogous to the singular economies in the nation to which also the economy of finance belongs. It is not a large singular economy; just as little is it one opposed to or existing along with the singular economies in the nation” (*Investigations*, Book I, chap. 8, p. 93; Menger's italics).

Thus Menger extends his analysis of individual behaviour by focusing again on the “inadmissible fiction” of a national economy according to which “a complex of economies” is viewed as a “a large individual economy”. Hence Menger's conclusion that Adam Smith and his school have “subconsciously” neglected (unlike the historical school of German economists who developed the same conception “consciously”) to regard economic phenomena as “the *result* of numerous individual efforts, as the *outcome* of the endeavors of economic agents (actual or potential) bound together by their commerce” (*ibid.*, *Appendix I*, pp. 195-6; italics added).

This conclusion, it must now be noted, is somewhat surprising in so far as it calls to mind (regardless of any deviation of Smith's followers from Adam Smith's thought and of whether this deviation was “subconsciously” shared by Smith himself or not) not only Smith's own distinction, mentioned above, between *individual* and *national* wealth, but also his famous (and often misunderstood) concept of “invisible hand” (with regard to the role played by self-interested individuals in the production of national wealth under conditions of competition) which was later developed into the concepts of “spontaneous order” and of “unintended consequences of human action”¹⁴.

¹³ On some aspects of these distinctions, see Endres and Harper (2011). On Menger's theory of money, see Menger himself (1892, 1900) and some modern authors such as Streissler (1973), Hodgson (2006), Ikeda (2008), Arena and Gloria-Palermo (2008).

¹⁴ It is here impossible to dwell on all the past discussions and implications of Smith's “invisible hand”. See, to begin with, Merton (1936), Eatwell J., M. Milgate. and P. Newman. (eds.) (1989), Aydinonat (2008), Samuels W. J, M. F. Johnson, and W. H. Perry (eds.) (2011). An interesting case of “invisible hand” is discussed by Menger himself when, without ever using this expression, he celebrates the introduction and nature of money as “not an invention of the

4. Bohm-Bawerk's view of capital as subsistence fund

There must be a reason why Menger failed to focus on the concept of “wages fund” in spite of the success, including the disputes, that this concept had experienced since Smith had introduced a similar concept through his “funds destined for the maintenance of productive labour”. This reason seems to lie in Menger’s peculiar view of value which, as distinct from the view of the classics, is implied in his short treatment of the “prices of labor services” in section E, chapter III, of his *Principles*. Here Menger’s argument is that these prices (which may differ for different kinds of labour, as acknowledged in the first place by Smith himself) “cannot without the greatest violence be traced back to the prices of their costs of production” so that “neither the means of subsistence nor the minimum of subsistence of a laborer can be the direct cause or determining principle” of these prices ([1871], 2007, p. 171). The essence of the concept of wages fund can be noticed, however, in Book II of Smith’s *Wealth of Nations*, where it is argued, first, that one thing is the wages fund of a given period while a different thing is whether the labour that is commanded by the wages fund of this period is productive or unproductive labour; and, secondly, that the wages fund of a given period may exceed, be equal to, or fall short of the wages fund of previous or of subsequent periods in the context of a constant or changing population¹⁵.

It is here impossible to focus on the vast literature that has developed on these specific issues up to now. But, apart from Menger’s silence, it must nonetheless be noted that the concept of wages fund was not ignored by Menger’s followers (starting from Bohm-Bawerk who may have been invited by Menger to reject it). For Menger’s system of thought is focused, as argued above, on individual behaviour while the concept of wages fund was initially worked out in the context of the classical theory of national wealth. Hence the two directions along which the wages fund may be employed in the latter context. As highlighted by Smith in the first place (*WN*, Bk II chap. III), one direction consists in the unproductive expenditure of the revenue resulting from its previous process of production while the other direction consists in the formation of saving and the resulting

state” and “neither the product of a legislative act” but as the natural outcome of the self-interest of economizing individuals once they started to exchange one commodity for another (see *Principles*, chap. VIII, &1). For a detailed discussion of the “centripetal” and “centrifugal” forces unleashed by competition between self-interested individuals in Adam Smith’s work, see Kurz (2016).

¹⁵ One of the authors who brought to light Smith’s own formulation of this theory was Stigler ([1937], 1941, 1968). After distinguishing between a short-run and a long-run theory of the wages-fund, this author comes to the double conclusion that a short-run wages-fund theory was one of Smith’s “proper successes” while his rejection of the long-run subsistence theory of wages was one of his “improper failures” (in the sense of the “successes that Smith should have achieved, but did not” if he had developed such a rejection in greater detail) (Stigler, 1976). In this article, however, Stigler fails to highlight the link (as developed by Smith in Book II of his *Wealth*) between the accumulation of capital and the increasing division of labour,

investment of capital in the wider context of time-consuming processes of production. Once the latter direction is undertaken, Smith's initial treatment of capital can be further split into the sub-directions later pursued by scholars when distinguishing the accumulation of capital in "height" and in "breadth" (Wicksell [1934] 2007), the "deepening" and the "widening" forms of such an employment (Hawtrey [1937] 1952); the "ex ante" and the "ex post" aspects of the saving-investment relationship in a monetary economy (Myrdal [1939] 1965), and between the "vertical" and "horizontal", or the "successive" and "contemporaneous", division of labour (Hayek, [1941], chaps. VI, XX and XXI, and Taussig [1896] 1935, chap. I, respectively).

Whether implicit or not in Menger's *Principles*, the concept of *wages* fund must be kept apart, however, from the concept of *subsistence* fund. The first observation worth making in this connection is that one thing is whether these concepts are intended in the context of a *stationary* or of a *dynamic* economy, while another thing is whether, in the case of a stationary economy, this is intended as the economy of the "early and rude state of society" or of any more advanced state. In the latter and most important case, the subsistence fund (even if intended in the restricted sense of a wages fund) may include goods that were regarded by the people involved in a previous state as luxury goods (and appropriated in such a state only by landlords and capitalists). Thus the subsistence fund would include in this advanced state all the wage goods (whether luxury or not according to a previous classification) that are now exchanged for (productive or unproductive) labour (or even destined to "those who do not labour at all"). The distinction between these two different components of the subsistence fund is somewhat implicit in Menger's criticism of the minimum-of-subsistence as the principle "that governs the price of the most common labour" (*Principles*, p. 170). The arguments he puts forward in this connection are not based, however, on the (long-run) impact of the accumulation of capital on the demand for labour but on his peculiar view of the value of different kinds of labour as depending on the "magnitude of importance of the satisfactions that would have to remain unsatisfied if we were unable to command the labor services" (*ibid.* p. 171).

In order to stress the different *concepts* that may be conveyed by the same *words*, it is here important to focus on the different meanings assigned to the concept of subsistence fund in Book I and in Book IV of Böhm-Bawerk's *Positive Theory*. For, on the one hand, Böhm-Bawerk makes it clear in Book I that the concept of "national subsistence fund" seems more appropriate to the analysis of roundabout methods of production than his own concept of "intermediate products" while, on the other hand, he proceeds as follows:

"The latter does comprehend all goods which, *once the process of production has begun*, are created in the course of it, and which continue to follow it and assist in completing it. But it does not include the initial fund of consumption goods that is necessary if the roundabout process is to begin at all. It therefore excludes just that initial link in the chain which is so extremely important, while the concept

of the subsistence fund, *as I understand it* [italics added], encompasses the totality of goods which are the instrumentality for both the *initiation and the execution* of the capitalist production process” ([1921] 1959, Vol. I, Book I, chap. III, p. 34; Böhm-Bawerk’s italics).

This implies that, if the “totality of goods” were here intended as all final goods advanced and exchanged now both for the initiation of new production processes and for the continuation of the processes initiated in the past, the subsistence fund of this year would be intended as the current flow of final goods rather than in the sense later adopted in Böhm-Bawerk’s *Positive Theory of Capital*, Book IV, chaps. II and III. For in this Book the concept of subsistence fund is used in Böhm-Bawerk’s peculiar sense of including not only the *actual* but also the *potential* means of subsistence to be appropriated in future years by all members of a society (not only, therefore, by workers in exchange for their labour but also, and on different grounds, by landlords and capitalists) depending on the expected life of existing productive capacity. Thus, apart from the differences between Böhm-Bawerk’s final concept of “subsistence fund” and the classics’ “wages fund” (the most relevant difference being that the wages fund is made up of actual wage goods while Böhm-Bawerk’s final concept of subsistence fund includes all final goods, whether actual or potential, and whether wage goods or not), Böhm-Bawerk closes his chapter on social and private capital mentioned above by criticizing the “most astonishing” unanimity with which the members of the “earlier English School” regard “*the means of subsistence of productive workers* as a part of social capital” (p. 71, Böhm-Bawerk’s italics). Unfortunately, he explains his astonishment by simply arguing that “these things may not be reckoned as a part of capital from the standpoint of the whole nation, *if that capital is defined as a complex of means of production*” (italics added). This definition of capital, it must now be noted, is Böhm-Bawerk’s own definition. For it corresponds to Jevons’ concept of invested capital, and not at all to the latter’s concept of free capital, in spite of the fact that both these forms of capital are typical forms of *social*, as distinct from *private*, capital (according to Böhm-Bawerk’s own distinction highlighted above). Hence Böhm-Bawerk’s self-centered assessment of the “earlier English School” as persisting in the concept of capital as wages fund “even after the distinction between private capital and social capital had been revealed [as done by Böhm-Bawerk himself], and in spite of the fact that the definition of the latter as an aggregate of means of production had really dug the ground out from under its feet” (*ibid.* p. 73; square brackets added). So it is Böhm-Bawerk’s own treatment of capital as a set of intermediate products that prevents him from including (in connection with his own revision of the concept of subsistence fund) Jevons’ concept of free capital along with Smith’s concept of capital as “funds destined for the maintenance of productive labour” into his vertically integrated treatment of roundabout methods of production¹⁶.

¹⁶ See, in this connection, Böhm-Bawerk’s comments on Jevons’s treatment of capital ([1921] 1959, Vol. I, p. 326; Vol. II, pp. 24, 50, 281) and against Marshall’s comments on Jevons (*ibid.*, pp. 408-9, ft 90). The difference between

5. Böhm-Bawerk vs. Menger vs. Böhm-Bawerk

Böhm-Bawerk's criticisms of the "earlier English School" were *not* intended to support *any* argument of what may be called the "earlier Austrian School" as the system of thought created by Carl Menger. For, in spite of his further developments of many aspects of Menger's thought, Böhm-Bawerk did not fail to criticize some of these aspects within their common theory of value. Böhm-Bawerk's criticisms are originated by Menger's arguments (as put forward in the first chapter of his *Principles*) on the value of goods intended not only as *material* goods but also as *relations* between different individuals (such as good-will, copyrights, patents, trade licenses etc.). These criticisms are based on Böhm-Bawerk's own distinction (put forward in his [1881] 1962 essay) between "goods and services", on the one hand, and "rights and relations", on the other, and run as follows:

"Now it strikes me as a display of temerity to maintain that the power to dispose of goods, which is after all merely a relation to a good, is itself a good. I have stated elsewhere and in length my reasons for my opinion that it is economically inadmissible to recognize relations as *real* goods, in the sense that is assigned to that term in the parlance of economic theory" ([1921] 1959, Vol. I, chap. VIII, p. 171; italics added).

It should however be noted, in this connection, that one thing is to dispose of goods of *any* kind, another thing is to dispose of goods as *capital* goods; and also that one thing is the (current) disposal of capital goods as goods *already* produced (according, therefore, to their *actual* orders) while a completely different thing is the disposal of goods as the capital goods *to be* produced (in the different context, therefore, of their *potential* orders). Thus, if it is true that "by giving free play to expectations, Menger maintained a meaningful distinction between the *present* and the *future*" (Garrison, 1990, p. 139, italics added), it is nonetheless true that Böhm-Bawerk, by focusing on the

Jevons' concept of free capital and Böhm-Bawerk's concept of subsistence fund was noted by Hayek when discussing the "vague concept" of free capital and Böhm-Bawerk's "more refined" concept of subsistence fund (which, however, he regarded as equally unsatisfactory in so far as "a given stock of capital goods does not represent one single stream of potential output of definite size and time shape") (1941, pp. 146-7). Hence Hayek's self-centered conclusion that the concept of capital as "produced means of production" should be definitely abandoned as "a remnant of the cost of production theories of value", or as something that belongs to the *past* and that "has nothing whatever to do with the decision as to how the thing shall be used henceforth" (*ibid.*, p.89) in the sense that "all the time concepts used in the theory of capital" (here understood as his own theory) "refer to prospective periods and are always 'forward-looking' and never 'backward-looking'" (*ibid.*, p. 90). On the forward-looking view of capital from the standpoint of different individuals (in the sense of their diverging knowledge, uncertainty, plans and expectations before their decisions are taken (in historical rather than logical time), see Hutchison (1973), Robinson J. ([1974] 1979), Shackle (1958; [1972] 2009), Kirzner ([1966] 2010), Lachmann ([1956] 2007; 1977), Hicks (1976), and many others. On Menger's legacy in modern times, see Hicks and Weber (eds.) (1973), Hicks (1973b), Hayek (1973), Alter ([1990] 2019), Skousen (1990), Caldwell (ed.) (1990) and Gloria-Palermo (1999). On the major differences between Austrian economists, starting from Menger and Böhm-Bawerk, see, to begin with, Garrison (1990, 2001), Ravix (2006), Endres (1987), Endres and Harper (2011, 2014), Braun (2014, 2015). On some similarities between the subsistence-theory of wages and the wages-fund theory, see Hennings (1997, chaps. 8-9). For a comprehensive treatment of the wages-fund theory, see Taussig ([1896] 1932). On horizontal and vertical integration in economic analysis, see Hicks (1973a) and Pasinetti (1973). On some further links between the classical and the Austrian theory of capital and entrepreneurship, see Meacci (2009), and Meacci and Ferlito (2018).

existing structure of time-consuming methods of production, maintained an equally meaningful distinction between the *past* and the *present* without ignoring the possibility that this structure may be modified by the employment of new savings and the creation of new maturity classes (in the context of what Garrison calls “a thinning of the outer rings” and “a padding of the inner rings”). Furthermore, it should also be noted, in accordance with what was highlighted above, that while Menger develops his concept of capital as the property of different individuals, Böhm-Bawerk bases his own concept on produced means of production regardless of who owns them. This is a completely different concept which can be rather related to Jevons’ concept of invested capital or, to use Smith’s own concepts again, of particular forms of “work done” (in the sense of labour embodied in existing means of production or final products) rather than of “work to be done” (in the sense of labour to be employed in the production of these means and products). Thus, however less consistent than Menger’s theory of capital, Böhm-Bawerk’s own theory is more complete in that it is focused upon not only two different concepts of capital such as “individual” and “social” capital but also two different versions of social capital such as “subsistence fund” and “produced means of production”.

These distinctions, it must however be noted, are not explained by Böhm-Bawerk as clearly as they would deserve. A bird’s-eye view of their limits may start by comparing the arguments developed by Böhm-Bawerk in Book II, *Capital as a Tool of Production*, with the arguments developed in Part A and Part B of Book III, *Value and Price*, of his *Positive Theory*. The crucial difference between these two Books is that while Book II is focused on the concept of social capital (and on the associated concept of national wealth), Book III is rather focused on the concept of individual behaviour (and on the associated concepts of the *value* and *price* of particular goods).¹⁷ Thus, while Book II is focused on the higher productivity of the roundabout methods of production prevailing in the whole economy, Book III is rather focused on the values and prices of goods resulting from the behaviour of individual consumers and producers. Furthermore, when dealing in Book III with his theory of value as distinct from the theory of price, Böhm-Bawerk seems to resort to the general distinction, mentioned above, between *originating* and *determining* causes of value. For, according to Böhm-Bawerk, these causes consist, in the former case, in the (total or marginal) utility supporting his concept of the “subjective value” of goods and, in the latter case, in the role

¹⁷ This difference reflects the distinction between Böhm-Bawerk’s *objectivism* (which prevails in his Book II) and Menger’s *subjectivism* (which prevails instead in Böhm-Bawerk’s Book III) as well as the distinction between “formalism” and “subjectivism” as developed by Lachmann starting from his arguments on resources which are not “man-made” but are only “man-used” ([1956] 200, .p. 11), See, in this connection, Garrison (1990), Gloria-Palermo (1999), Ikeda (2012) and Tomo (2012).

played by supply and demand in determining the “objective exchange value” of these goods¹⁸. Thus, if the arguments developed by Böhm-Bawerk in Book II are compared with those developed in Book III, one may come to the conclusion that the latter are based on the forward-looking approach supporting the analysis of the behaviour of different individuals while the former arguments are based on the backward-looking approach supporting the analysis of national wealth as the *outcome* of the behaviour of all these individuals¹⁹. Hence Böhm-Bawerk’s final arguments, in Book III, Part A, chap. VII, *against* the cost of production of goods as the *source* of their (subjective) *values*; and, in Book III, Part B, chap. IV, in *support* of the *possible* equality between the market *prices* of these goods and their *costs* of production. Hence the links, within Böhm-Bawerk’s theory of capital, between, on the one hand, the forward-looking and the backward-looking approach and between, on the other hand, the behaviour of individuals and the formation of national wealth. This may be the reason why the arguments developed by Böhm-Bawerk in Books II and III of his *Positive Theory* may have been the source, if taken together, of what Menger regarded, in the light of the forward-looking approach adopted by himself within his theory of individual behaviour, as the “greatest error ever committed” (Schumpeter, 1954, p. 847, ft 8)²⁰.

6. Concluding remarks

The prevailing links (whether positive or negative) between Smith, Menger and Böhm-Bawerk have been discussed above as resulting, up to a certain point, from their common focus (with regard to Smith and Menger) on the role of self-interest and of the division of labour, and (with regard to Smith and Böhm-Bawerk) on the most important distinctions between private (or acquisitive) and social (or productive) capital, on the one hand, and between individual and national wealth, on the other. While the links between Smith and Menger can be noticed in the latter’s *Investigations* more

¹⁸ BB’s own distinction is well rendered in his example ([1921] 1959, Vol. II, pp. 207-8) of the impact of the throw of a stone on a tranquil lake as distinct from the impact of a wind blowing in gusts or with sudden changes on the cliffs of high seas: while the former phenomenon reflects a change of values as *subjective* values, the latter does reflect a change of prices as *objective* exchange values (*ibid.*, p. 124).

¹⁹ On Böhm-Bawerk’s criticisms of the classical theory, see also [1921] 1959, Vol. I, pp. 287ff, and (in Menger’s footsteps as visible in his *Principles* p.146ff.) Vol. II, p. 121ff., p. 146ff. and p. 248ff.

²⁰ Schumpeter’s dictum has been more frequently cited than discussed in the literature that followed suit. This applies to Schumpeter himself who, instead of going deeper into this dictum, eventually regarded Böhm-Bawerk as just “one of the great architects of economic science” and his whole work as just “a first draft” which “had not been permitted to mature” (*ibid.*, p. 847). See, in this connection, Streissler (1972), Streissler and Weber (1973), Endres (1987), Faber ([1986] 2013), Braun (2014) and many other authors. See, in particular, Garrison’s evaluation of Böhm-Bawerk as the author who “straddled the fence between subjectivism and formalism” by focusing, in the latter case, on “what Menger saw as one of the greatest errors” and by developing, in the former case, “an interpretation thoroughly consistent with Menger’s own work” (1990, p.135), On Menger’s view of Böhm-Bawerk’s theory of capital as “too one-dimensional” and “too technical” rather than based on individual choice, see Streissler (1972, p. 436). On Menger as a *reformer* rather than a *revolutionary* with regard to his “unified theory of price” and his aversion to the “idea of aggregation both for quantities and prices”, see Streissler (1990a, p. 129; 1990b, p. 154 and p. 180), and Streissler and Weber (1973, p. 228).

easily than in his *Principles*, the (positive and relevant) links between Smith and Böhm-Bawerk and the (negative but minor) links between Böhm-Bawerk and Menger have been highlighted by Böhm-Bawerk himself, respectively, in his *Positive Theory of Capital* and in his *History and Critique of Interest Theories*. While the (positive and relevant) links between Böhm-Bawerk and Smith reside, in spite of their different theories of value, in their explicit or implicit distinction between private (or acquisitive) and social (or productive) capital rather than in Böhm-Bawerk's undeveloped (and Smith's most important) distinction between individual and national wealth, the (negative but minor) links between Böhm-Bawerk and Menger rather reside, according to Böhm-Bawerk, in Menger's different treatment, within their common theory of value, of "relationships" between different individuals as equivalent to "goods" owned by each of them (pp. 54-5) and, more generally, in Menger's exclusive focus on subjective value rather than, as Böhm-Bawerk actually did, on objective as well as on subjective value. Some implicit links between Smith and Böhm-Bawerk can also be noticed by resorting to Jevons's concept of free, as distinct from fixed, capital (or to Marx's concept of living, as distinct from dead, labour) in so far as Jevons' concept of free capital may be associated with Smith's concept of "funds destined for the maintenance of productive labour". This further concept is developed by Smith in Book II of his *Wealth* where these funds are regarded as the capital needed for transforming *labour* into *products of labour*, or "work to be done" into "work done", in the implicit context of what will be later focused upon as time-consuming methods of production. Hence the important difference between the analysis of *individual* behaviour and the analysis of *national* wealth in the context, respectively, of a forward-looking and of a backward-looking approach to the analysis of the origins and implications of these methods.

It should be finally noted, with regard to the continuities and discontinuities between the three great authors under discussion, that it was Smith who, given the distinction (within his own theory of value) between labour embodied and labour *command* (rather than, as noted above, *commanded*), eventually provided an implicit introduction to the distinction between *commodities* (as "work done") and *labour* (as "work to be done") in the more advanced context of the whole economy. For, when it comes to the economy of an individual, the command of labour may be intended in two different senses depending on whether this command is over "work done" or "work to be done"; whereas, when it comes to the economy of the whole society, the only possible object of this command is labour in the sense of "work to be done". In such a context, any change in the forms of *dead* labour inherited from the past is possible only if the *living* labour employed in the present is exchanged for the wage goods now resulting from the time-consuming methods of production begun in a recent or more distant *past*.

References

- Alter M. ([1990] 2019), *Carl Menger and the Origins of Austrian Economics*, New York: Routledge
- Aydinonat N. E. (2008), *The Invisible Hand in Economics: How Economists explain Unintended Social Consequences*, London: Routledge
- Arena R. and S. Gloria-Palermo (2008), “Menger and Walras on Money: A Comparative View”, *History of Political Economy*, 40:2, pp. 317-43
- Böhm-Bawerk E. [1881] 1962, “Whether Legal Rights and Relationships are Economic Goods”, in *Shorter Classics of Eugen von Bohm-Bawerk*. Grove City: Libertarian Press, pp 37–190
- [1921] 1959, *Capital and Interest*, Vol. I: *History and Critique of Interest Theories*; Vol. II: *Positive Theory of Capital*; Vol. III: *Further Essays on Capital and Interest*: 4th ed., South Holland, Ill: Libertarian Press
- Braun E. (2014), “The Menger-Lachmann Trajectory on Capital: A Comment on Endres and Harper”, *Journal of the History of Economic Thought*, 36:1, pp.97-102
- (2015), “Carl Menger’s Contribution to Capital Theory”, *History of Economic Ideas*, 23.1, pp. 77-100
- Caldwell B. J. (ed.) (1990), *Carl Menger and his Legacy in Economics*, Durham and London: Duke University Press
- Eatwell J., M. Milgate and P. Newman (eds.) (1989), *The Invisible Hand*, London: Palgrave Macmillan
- Endres A. M. (1987), “The Origins of Bohm-Bawerk’s ‘Greatest Error’: Theoretical Points of Separation from Menger!”, *Journal of Institutional and Theoretical Economics*, 143:2, pp. 291-309
- (1997), *Neoclassical Microeconomic Theory. The Founding Austrian Version*, London: Routledge
- Endres A. M. and D. A. Harper (2011), “Carl Menger and his Followers in the Austrian Tradition on the Nature of Capital and its Structure”, *Journal of the History of Economic Thought*, 33:3, pp.357-84
- (2014), “Menger on the Nature of Capital and Its Structure: A Reply”, *Journal of the History of Economic Thought*, 36:1, pp. 103-9
- Faber M. (ed.) ([1986] 2013), *Studies in Austrian Capital Theory, Investment, and Time*, Berlin Heidelberg: Springer
- Garrison R. W. (1990), “Austrian capital theory: the early controversies”, *History of Political Economy*, 22 (S1). Reprinted in Caldwell B. J. (ed.) (1990), pp. 133-154
- (2001), *Time and Money. The Macroeconomics of Capital Structure*, London and New York: Routledge
- Gloria-Palermo S. (1999), *The Evolution of Austrian Economics. From Menger to Lachmann*, London and New York: Routledge
- Hayek F. A. (1941), *The Pure Theory of Capital*, London: Macmillan
- (1973), “The Place of Menger’s *Grundsätze* in the History of Economic Thought”, in Hicks J. R. and W. Weber (eds.), pp.1-14
- Hawtrey R. G. ([1937] 1952), *Capital and Employment*, London: Longmans and Green
- Hennings K. H. (1997), *The Austrian Theory of Value and Capital. Studies in the Life and Work of Eugen von Bohm-Bawerk*, Cheltenham: E. Elgar

- Hicks, J. R. and W. Weber (eds) (1973), *Carl Menger and the Austrian School of Economics*. Oxford: Clarendon Press
- Hicks J. R. (1973a), *Capital and Time*, Oxford: Oxford University Press
- (1973b), “The Austrian Theory of Capital and its Rebirth in Modern Economics”, in Hicks, J. R. and W. Weber (eds.), pp. 190-206
- Hicks J. R. (1976), “Some Questions of Time in Economics”, in Tang, A. M., F.M. Westfield and J.S: Worley (eds.), *Evolution, Welfare, and Time in Economics*, Lexington, Mass.: Lexington Books
- Hodgson G. M. (2006), “Car Menger’s theory of the evolution of money: some problems”, *Review of Political Economy*, 4:4, pp. 396-412
- (2014), “What is Capital? Economists and Sociologists have Changed its Mening: Should it be Changed Back?”, *Cambridge Joiurnal of Economics*, 38:5, pp. 1063-86
- Hutchison T.W. (1973), “Some Themes from *Investigations into Method*”, in Hicks J. R. and W. Weber (eds.), pp. 15-37
- Ikeda Y. (2008), “Carl Menger’s monetary theory: A revisionist view”, *The European Journal of the History of Economic Thought*, 15:3, pp. 455-73
- (2012), “Carl Menger’s subjectivism. ‘Types’, economic subjects, and microfoundation”, in Ikeda Y. and K. Yagi (eds), pp. 91-107
- Ikeda Y. and K. Yagi (eds) (2012), *Subjectivism and Objectivism in the History of Economic Thought*, London and New York: Routledge
- Jevons W. S. ([1871] 2013), *The Theory of Political Economy*, London: Palgrave Macmillan
- Kirzner ([1966] 2010). *An Essay on Capital*, New York: A. M. Kelley. Reprinted in Boettke P. J. and F: Sautet (eds), *Essays on Capital and Interest*, Indianapolis: Liberty Fund, pp. 14-133
- Kurz H. D. (2016), “Adam Smith on markets, competition and violations of national liberty”, *Cambridge Journal of Economics*, 40, pp. 615-38
- Malthus T.R. ([1836] 1986), *Principles of Political Economy*, London: Pickering
- Meacci F. (1985), “On disjunctive and conjunctive principles in the Austrian theory: a note and an extension”, *International Review of Economics and Business*, XXXII:12, pp. 1187-97
- (2009), “Different employment of capitals in vertically integrated sectors: Smith after the Austrians”, *Review of Austrian Economics*, 22, pp. 333-48
- (2020), “The Distinction between Relative and Positive Profit: Sir James Steuart after Adam Smith and the Classics”, *The European Journal of the History of Economic Thought*, 2020
- (2021), “Acquisitive and Productive Capital in Carl Menger’s *Zur Theorie des Kapitals*”, in Fernandez F. N., B. Kolm and V. Schmid (eds.), *Austrian Economics 150 Years after Carl Menger*, pp. 151-60, Vienna: Friedrich A. v. Hayek Institute
- Meacci F and C. Ferlito (2018), “The classical roots of the Austrian theory of capital and entrepreneurship”, *Review of Austrian Ecionomics*, 31, pp. 315-39
- Lachmann L. ([1956] 2007), *Capital and its Structure*, Auburn, Al.: Ludwig von Mises Institute
- (ed.) (1977), *Capital, Expectations, and the Market Process: Essays on the Theory of the Market Economy*, Kansas City: Sheed, Andrews & McMeel
- Menger C. ([1871] 2007), *Principles of Economics*, Auburn, Al.: Ludwig von Mises Institute

- [1883] 1985, *Investigations into the Method of the Social Sciences with Special Reference to Economics*, New York and London: New York University Press
- (1888), “Zur Theorie des Kapitals”, *Jahrbucher fur Nationalokonomie und Statistik*, 17, pp. 1-49. Reprinted in *The Collected Works of Carl Menger*, Vol. III, London School of Economics and Political Science, 1935, pp. 135-183
- ([1891] 2016), “The Social Theories of Classical Political Economy and Modern Economic Policy”, *Economic Journal Watch*, pp. 467-89
- (1892), “On the Origin of Money”, *The Economic Journal*, 2:6, pp. 239-55
- (1900), “Geld”, *Handwörterbuch der Staatswissenschaften*, 4, pp. 60–106
- Merton K. R., (1936), “The Unanticipated Consequences of Purposive Social Action”, *American Sociological Review*, 1:6, pp. 894-904
- Myrdal G. ([1939] 1965), *Monetary Equilibrium*, New York: A. M. Kelley
- Hodgson G. M. (2006), “Carl Menger's theory of the evolution of money:some problems”, *Review of Political Economy*, 4:4, pp. 396-412
- (2014), “What is Capital? Economists and Sociologists have Changed its Meaning: Should it be Changed Back?”, *Cambridge Journal of Economics*, 38:5, pp. 1063-86
- Pasinetti L. L. (1973), “The notion of vertical integration in economic analysis”, *Metroeconomica*, 25, pp. 1-29.
- Ravix J-L. (2006), “L’opposition entre Menger et Bohm-Bawerk sur la théorie du capital et de la production”, *Cahiers d’Economie Politique*, 51, pp.157-76
- Ricardo D., ([1821] 1951), *On the Principles of Political Economy and Taxation*, Cambridge: Cambridge University Press
- Robinson J.([1974] 1979), “History versus equilibrium”, in *Collected Economic Papers*, Oxford: Basil Blackwell, Vol.V, pp. 48-58
- Samuels W. J, M. F. Johnson and W. H. Perry (eds.) (2011), *Erasing the Invisible Hand*, Cambridge: Cambridge University Pres
- Schumpeter J. A. ([1954] 1994), *History of Economic Analysis*, London: Routledge
- Shackle G. L. S. (1958), *Time in Economics*, Amsterdam: North-Holland
- ([1972] 2009), *Epistemics and Economics. A critique of economic doctrines*, New Brunswick; Transaction Publishers
- Skousen M. (1990), *The Structure of Production*, New York: New York University Press
- Smith A. ([1776]1976, *An Inquiry into the Nature and Causes of the Wealth of Nations*, 2 Vols., Oxford: Oxford University Press
- Stigler G. J. (1937), “The Economics of Carl Menger”, *Journal of Political Economy*, 45:2, pp. 229-50
- Stigler G.J. ([1941] 1968), “Carl Menger”, in Stigler G. J., (1968), *Production and Distribution Theories*, New York; Agathon Press, chap.VI, pp. 134-157
- Stigler G. J. (1976), “”The successes and failures of Professor Smith”, *Journal of Political Economy*, 84:6, pp. 1199-1213

- Streissler E. (1972), “To What Extent Was the Austrian School Marginalist?”, *History of Political Economy*, 4:2, pp. 426-41
- Streissler E. W. (1973), “Menger’s Theories of Money and Uncertainty. A modern Interpretation”, in Hicks, J. R. and W. Weber (eds.), pp. 164-189
- Streissler E. W. and W. Weber (1973), “The Menger Tradition”, in Hicks, J. R. and W. Weber (eds.), pp. 226-32
- Streissler E. W. (1990a), “Carl Menger on economic policy: the lectures to Crown Prince Rudolf”, in Caldwell B. J. (ed.) (1990), pp. 107-30
- (1990b), “Menger, Bohm-Bawerk, and Wieser: The Origins of the Austrian School”, in Hennings K. H. and W. J. Samuels (eds.), pp. 151-89
- Streissler E. W. and M. Streissler (eds.) (1994), *Carl Menger’s Lectures to Crown Prince Rudolf of Austria*, Cheltenham: E. Elgar
- Strigl von R. ([1934] 2000), *Capital and Production*, Auburn, Al.: Ludwig von Mises Institute
- Steuart J. ([1770] 1997), *An Inquiry into the Principles of Political Oeconomy*, London: Pickering & Chatto
- Tomo S, (2012), “Böhm-Bawerk's objectivism beyond Menger's subjectivism”, in Ikeda Y. and K. Yagi (eds.), pp. 108-25
- Taussig F. W. ([1895] 1932), *Wages and Capital. An Examination of the Wages Fund Doctrine*, London: Macmillan
- Wicksell K. ([1934] 2007), *Lectures on Political Economy*, 2 Vols., Auburn; Al.: Ludwig von Mises Institute
- Zelmanovitz L. (2021), *The Representational Theory of Capital. Property Rights and the Reification of Capital*, London: Lexington Books