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**A CRITICAL NOTE ON MOSELEY’S
‘MACRO-MONETARY’ INTERPRETATION OF
MARX’S THEORY**

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Abstract

This note critically evaluates the ‘macro-monetary’ interpretation of Marx’s theory presented by Moseley (2000) in opposition to the traditional view rooted in the early work of Bortkiewicz. The first part argues that the textual evidence from *Capital* sharply contrasts with the basic premise of Moseley’s interpretation, i.e. the claim that the inputs of constant capital and variable capital enter directly into Marx’s theory as given sums of money. The second part shows that the theoretical construction Moseley attributes to Marx is subject to severe analytical limitations. It is accordingly concluded that Moseley’s contribution does not seriously challenge the traditional view of Marx.

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A CRITICAL NOTE ON MOSELEY'S 'MACRO-MONETARY' INTERPRETATION OF MARX'S THEORY

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1. Introduction

In a recent contribution to the *Review of Radical Political Economics*, Moseley (2000) criticized current readings of Marx's theory of value and distribution from the perspective of his own 'macro-monetary' interpretation of Marx's analysis. The first part of that essay, in particular, contains a long argument aimed at demonstrating that Moseley's 'macro-monetary' interpretation seriously challenges the traditional view of Marx's theory, i.e. the one rooted in the early work of Bortkiewicz (1907) and precisely specified in the 1970s under the impulse of Sraffa's (1960) reappraisal of the classical approach. This note argues instead that Moseley's proposed interpretation is no valid alternative to the traditional view.

The note is structured as follows. Section 2 highlights the basic premise that distinguishes the 'macro-monetary' interpretation, namely the claim that the fundamental 'primitive data' of Marx's theory of distribution

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are not the real wage and the production methods in use but the quantities of *money capital* to be invested in means of production and labour-power. Section 3 assesses the plausibility of that premise by examining Marx's determination of the inputs of constant and variable capital in the relevant parts of *Capital*. It is shown that the textual evidence contrasts sharply with Moseley's interpretation and supports instead the traditionally accepted view. Section 4 then discusses the analytical limitations of the theoretical construction that Moseley attributes to Marx. In particular, it shows that Moseley's determination of the general rate of profits relies on an artificial assumption concerning the money value of the net social product. Section 5 recapitulates the essential argument of the note and draws the conclusions.

2. The traditional view of Marx and Moseley's alternative interpretation

We shall begin our discussion by recalling the main lines of the traditional view of Marx that Moseley intends to challenge in the first part of his paper. According to this view,¹ the circumstances that are taken as 'data' (independent variables) in Marx's theory of value and distribution are (a) the wage rate expressed in physical terms, (b) the produced quantities of the various commodities, and (c) the technical production conditions of those outputs. It is then argued that the theory unfolds in two successive stages.

In the first, under the provisional hypothesis that commodities are exchanged according to the labour embodied, Marx determined the general

¹ Cf., for example, Garegnani (1984).

rate of profits as the ratio of the social surplus value s , measured by the quantity of labour embodied in the physical surplus product, to the value of social capital $(c + v)$, measured by the quantity of labour contained in the aggregate of capital goods and wage goods advanced in the economy at the beginning of the production cycle:²

$$r = \frac{s}{c + v} \quad (1)$$

Marx was, however, aware that under free competition commodities cannot generally be exchanged according to the quantities of labour necessary for their production. In the second stage of the analysis he thus argued that commodity prices must deviate from labour values so as to redistribute the social surplus value s across industries in proportion to the value of the capital advanced in each of them. And since the sectoral profit rates resulting from this proportional redistribution necessarily coincide with the general rate determined in the preceding stage of the theory, Marx concluded that the ‘production prices’ of commodities can be determined through the system

$$p_i = (c_i + v_i) (1 + r^*) \quad i = 1, \dots, n \quad (2)$$

² We implicitly assume *circulating* capital goods and no rent.

where p_i is the production price of the generic commodity i , c_i and v_i respectively denote the labour value of the aggregate of capital goods and of the aggregate of wage goods advanced in industry i , and finally r^* is the level of the general profit rate as determined by equation (1).

As is well known, this interpretation identifies a flaw in the above system of price equations. Once it is admitted that prices diverge from labour values, the expenditure on capital goods and wage goods in each industry ought to be estimated in terms of the *production prices* of those commodities and not in terms of their values, as it is in system (2). More importantly, when this error is corrected, it becomes clear that the system of price equations simultaneously determines the exchange ratios of commodities *and* the general rate of profits, thereby contradicting the separate determination of the latter in the first stage of Marx's procedure.

In his paper, Moseley rejects the traditional view, which he regards as unfaithful to Marx's treatment of capital, both in the separate determination of the general rate of profits and in the successive determination of production prices. Let us examine these two aspects of Moseley's objection in greater detail. As for the first, Moseley (2000, p. 291) argues that the general framework for Marx's theory of distribution is the analysis of the circulation of capital carried out in Part 2 of Volume 1 of *Capital*. He points out that the capital advanced in the productive sector is introduced there *as a quantity of money* that 'makes more money' according to the formula $M-C-(M+S)$, where the social surplus value $S = M$ is also expressed in terms of money (Moseley 2000, pp. 289, 291). It is further asserted (2000, p. 290) that the two components into which Marx divides social capital, i.e. the aggregate constant capital and the aggregate variable capital, are defined in

Part 2 *as two distinct amounts of money* and not as the quantities of labour embodied in the means of production employed and in the wage goods paid to the workers.

It is from these considerations that Moseley derives the basic premise of his ‘macro-monetary’ interpretation. In his opinion, the fundamental ‘primitive data’ of Marx’s theory of distribution are not the ‘physical quantities of the technical conditions of production and the real wage’ – as maintained by the traditional view – but the total *money* capital M advanced in the productive sector and its two components: the sum of money used to purchase means of production (constant capital C) and that used to purchase labour-power (variable capital V) (Moseley 2000, pp. 290, 291).

Moseley then restates Marx’s analysis of the formation of surplus value in accordance with his basic premise. The two components of the given total capital M , he expounds, play entirely different roles in the determination of the money price P of the gross social output³ and therefore in the determination of the social surplus value S estimated in money. On the one hand, the constant capital C becomes one component of the output price P . On the other, the variable capital V is replaced by current labour, and this labour produces an amount of ‘new money value’ MVA that becomes the second component of P . This new money value ‘both replaces the [...] capital invested in labor-power and provides the surplus-value of capitalists’ (Moseley 2000, p. 295). The determination of the money surplus value S that

³ Moseley (2000, p. 295) prefers to label P ‘the aggregate price of commodities’.

Moseley attributes to Marx is accordingly formalized by means of the following equations:

$$P = C + MVA \quad (3)$$

$$MVA = m L \quad (4)$$

$$S = MVA - V = m L - V \quad (5)$$

where L is the total quantity of labour currently employed in the economy and m is the money value ‘added’ to constant capital C by each unit of current labour. The magnitudes taken as ‘primitive data’ in equations (3)-(5) are the quantities of *money* capital C and V , the total labour L and the coefficient m (whose precise meaning will be discussed below). Moseley (2000, p. 303) then claims that Marx determined the general rate of profits as the ratio of the *money* surplus value S to the presupposed *money* capital M :

$$r = \frac{S}{C+V} = \frac{mL-V}{M} \quad (6)$$

Having thus reconstructed the first stage of Marx’s analytical procedure, Moseley goes on to address the determination of production prices in Volume 3 of *Capital*. He asserts that, in Marx’s view, production prices must allow for the distribution of the *money* surplus value S across industries in proportion to the *money* capital advanced in each branch. And since that distribution generates sectoral profit rates coinciding with the

general rate already determined by equation (6), he concludes that Marx determined production prices as:

$$p_i = k_i + \bar{r} k_i \quad i = 1, \dots, n \quad (7)$$

where \bar{r} is the solution to equation (6), k_i is the total *money* capital advanced in the generic industry i (so that $\sum_i k_i = M$) and the individual sectoral capitals k_1, \dots, k_n are taken as given (Moseley 2000, p. 304).

To sum up, Moseley claims that Marx first determined the general rate of profits by taking as ‘primitive data’ the quantities of money capital C and V , together with the total labour L and the coefficient m , and then calculated production prices through system (7) by taking the sectoral allocation of the total capital $M = C + V$ as an additional ‘primitive datum’. In Moseley’s opinion, this alternative interpretation has the advantage of being consistent with Marx’s general analysis of the circulation of capital in Volume 1 of *Capital*. More importantly, it reveals that there are neither errors to be corrected in Marx’s price equations nor inconsistencies between the two stages of his analysis. The essential reason is that, according to Moseley’s reconstruction, both the social capital and the capitals of the individual industries enter directly into Marx’s theory *as presupposed sums of money* and are not determined as the labour values of given aggregates of means of production and wage goods (Moseley 2000, p. 303).⁴

⁴ Moseley does not deny that, throughout most of *Capital*, Marx develops his analysis under the provisional hypothesis that commodities are exchanged according to the labour embodied. He claims, however, ‘[t]hat this provisional assumption plays no role in the

As we can see, the implications of Moseley's interpretation differ radically from those emerging from the traditional view. Our next step is to assess the plausibility of that interpretation, and in particular of the basic premise it rests on.

3. Assessing Moseley's interpretation: textual evidence.

In order to judge whether Moseley's 'macro-monetary' interpretation is really borne out by the content of Marx's writings, it will suffice to focus on few selected parts of *Capital*.

Let us begin with Volume 1. In Part 1 ('Commodities and Money') Marx investigates the exchange of goods in a capitalist economy and assumes that exchange is mediated by a special commodity – say, 'gold' – which acts as the 'general equivalent' in the sphere of circulation, i.e. plays the role of *commodity-money*. Furthermore, he explicitly assumes that the commodity-money is exchanged against other goods according to the labour embodied (Marx 1976, 2, p. 186). This last assumption, which is maintained through most of *Capital*, has two consequences for our discussion that are worth noting.

determination of constant capital and variable capital, and hence plays no role in the determination of the total surplus-value' (Moseley 2000, p. 296, emphasis in the original). The reason is that '[t]he magnitudes of constant capital and variable capital are not determined as proportional to the labor-times embodied in the means of production and wage goods, respectively. [...] Instead the magnitudes of constant capital and variable capital are taken as given, as quantities of money capital invested to purchase means of production and labor-power, whether or not these quantities of money capital are proportional to the labour-times embodied in the means of production and wage goods' (Moseley 2000, pp. 296-97, emphasis added).

First, it allowed Marx to express the ‘value’ of any commodity *interchangeably* either in terms of embodied labour or in terms of the quantity of ‘gold’ embodying the same amount of labour.⁵ Second, it allowed Marx to express the money value of a generic commodity requiring, e.g., l units of current labour for its production, as the sum of two components: the constant capital used in the commodity’s production, estimated in ‘gold’, and the ‘new money value’ created by current labour, where the latter is equal to l times the quantity of ‘gold’ that embodies one labour unit.⁶ If we now reconsider equations (3)-(4) of Moseley’s interpretation in the light of this second remark, we can verify that the money price P of gross social output is specified there in precisely that way. In particular, Moseley’s references to Marx’s analysis indicate that the given coefficient m in equation (4) simply denotes *the quantity of ‘gold’ that embodies one unit of labour*.⁷

⁵ As we shall soon see, for example, Marx expresses the value of the labour-power in both ways.

⁶ For example, Marx (1976, 12, pp. 433-34) writes:

‘If 1 hour’s labour is embodied in 6 [pence], a value of 6 [shillings] will be produced in a working day of 12 hours. Suppose that with labour of the currently prevailing productivity twelve articles are produced in these 12 hours. Let the value of the means of production used up in each article be 6 [pence]. Under these circumstances, each article costs 1 [shilling]: 6 [pence] for the value of the means of production, and 6 [pence] *for the value newly added in working with those means*. Now let some one capitalist contrive to double the productivity of labour, and to produce twenty-four instead of twelve articles in the course of a working day of 12 hours. The value of the means of production remaining the same, the value of each article will fall to 9 [pence], made up of 6 [pence] for the value of the means of production and 3 [pence] *for the value newly added by the labour*’ (emphasis added).

⁷ In order to clarify the meaning of m , Moseley (2000, p. 294) makes reference to ‘the value of money, which Marx [...] took as given [in *Capital*]’ – i.e. to the value of the commodity-money expressed in terms of labour embodied – and states that ‘ m [...] is equal

In Part 2 ('The Transformation of Money into Capital') Marx paves the way for the main issue to be analysed in Volume 1, the formation of surplus value. He focuses on the sphere of circulation, where the surplus value manifests itself in the form of the increase in money capital M , and points out that a sound explanation of that capital increase must be compatible with the principle of the 'exchange of equivalents' that regulates the circulation of commodities. In accordance with this requirement, he then argues that the money capital placed in circulation in order to implement production processes is partly spent on a particular commodity, labour-power, that has the property of 'creating value' when used in production (Marx 1976, 6, p. 270).

For the purposes of our discussion, it is important to note that in Chapter 6 ('The Sale and Purchase of Labour-Power') Marx gives a first hint of how variable capital is determined in his theory. First of all, he explicitly states that 'the value of labour-power is the value *of the means of subsistence* necessary for the maintenance of its owner' (Marx 1976, 6, p. 274, emphasis added) and that 'in a given country at a given period, the average amount of the means of subsistence necessary for the worker is a known *datum*' (Marx 1976, 6, p. 275, emphasis in the original). Then he illustrates the determination of the money wage rate as follows:

to the inverse of the value of money' (2000, p. 295). Cf. also the more explicit definition offered by Moseley in an earlier paper, where the 'macro-economic' interpretation of Marx is formalized as in Moseley (2000): ' m [...] is equal to the inverse of the labour value of a unit of money' (Moseley 1998, p. 20).

‘Suppose that [the] mass of commodities required for the average day contains 6 hours of social labour [...] This quantity of labour forms the value of a day’s labour-power [...] If half a day of average social labour is present in 3 shillings, then 3 shillings is the price corresponding to the value of a day’s labour-power [...] and [...] the owner of money [...] pays this value’ (Marx 1976, 6, p. 276)

According to Marx, this is ‘the manner of determining the value paid by the owner of money to the owner of this peculiar commodity, labour-power’ (Marx 1976, 6, p. 279).

From the above quotations we can clearly see how Marx proceeds in the determination of the money wage rate. He starts *from the given basket of goods* ensuring the worker’s subsistence. Then he derives the ‘value’ of that basket in terms of embodied labour from the *presupposed* production conditions of wage goods (*‘Suppose that...’*), and finally determines the money wage as the quantity of ‘gold’, measured in shillings, that embodies the same quantity of labour.⁸ This *endogenous* determination of the money

⁸ The assumption of a given real wage and the related derivation of the money wage are often reaffirmed by Marx in the rest of Volume 1. Consider, for example, the following quotations:

‘[The] value [of labour-power], like that of all other commodities, is determined by the labour-time necessary to produce it. If it takes 6 hours to produce the average daily means of subsistence of the worker, [...] [t]he necessary part of his working day is [...] a given quantity’ (Marx 1976, 10, p. 340)

‘In this chapter, as hitherto, the value of labour-power, and therefore the part of the working day necessary for the reproduction [...] of that labour-power, is assumed to be a given [...] magnitude [...] If, for example, the necessary labour amounts to 6 hours a day, expressed in a quantity of gold equal to 3 shillings, then 3 shillings is

wage has significant implications for our discussion. On the one hand, it is natural to expect that the same procedure will be used by Marx in order to determine the variable capital, estimated in money, that must be used to hire *any given quantity* of labour-power. On the other, this derivation of variable capital based on the given real wage clashes with Moseley's reconstruction, where the aggregate variable capital V is treated as a 'primitive datum'.⁹ More generally, we can say that the endogenous derivation of the money wage rate, and therefore of the aggregate variable capital estimated in money terms, contrasts sharply with Moseley's basic premise that the total money capital M constitutes a 'primitive datum' in the first stage of Marx's analytical procedure.

The above considerations seem to be confirmed by the content of Part 3 of Volume 1, where Marx focuses on the sphere of production in order to determine the *magnitude* of surplus value. Marx accomplishes that task in Ch. 7 by means of an illustrative example concerning the production of 'yarn', starting from a precise specification of the technical features of the production process under consideration. In particular, he assumes that 20

the daily value of one labour-power, or the value of the capital advanced to buy one labour-power' (Marx 1976, 11, p. 417)

'The value of labour-power is determined by the value of a certain quantity of means of subsistence. It is the value and not the mass of these means of subsistence that varies with the productivity of labour' (Marx 1976, 17, p. 659).

⁹ Note that the determination of the money wage based on the given real wage and production methods of wage goods is expounded by Marx in Part 2 of Volume 1. It is therefore surprising that Moseley (2000, p. 292) should accuse the traditional view of ignoring that Part of *Capital*. Given the reported content of Chapter 6, it is also surprising that Moseley (2000, p. 291) should criticise the traditional view of Marx for 'introducing out of nowhere' the assumption of a given real wage and given production methods.

pounds of yarn are produced in a 12-hour working day using 20 pounds of cotton, 1 unit of labour-power and a certain fraction of a spindle (Marx 1976, 7, p. 301). Let us now examine how the *money capital* invested to implement that process is determined. As to variable capital, Marx (1976, 7, p. 300) relies precisely on the procedure expounded in Ch. 6. He starts from the given real wage and the associated quantity of labour embodied (half a working day) and concludes that the capitalist operating the process will have to pay out as money wages the amount of ‘gold’ that contains the same quantity of labour, i.e. 3 shillings. Similarly, constant capital is determined by Marx on the basis of the quantity of labour embodied in the *presupposed* set of means of production (4 working days) and is estimated by him in terms of money as the amount of ‘gold’ which contains as much labour, i.e. 24 shillings.¹⁰ Finally, Marx notes that the output of 20 pounds of yarn contains 5 working days, thus being exchanged against a quantity of gold equal to 30 shillings, and accordingly concludes that the surplus value created in the spinning process amounts to $30 - (24 + 3) = 3$ shillings (Marx 1976, 7, p. 301).

¹⁰ It is worth recalling here that, in an example preceding that under discussion, Marx (1976, 7, pp. 293-94) considers the production of yarn on a smaller scale (10 pounds) and determines the constant capital as follows. He first notes that, in order to purchase the required means of production, the capitalist must pay the quantity of ‘gold’ which embodies as much labour as those commodities. He then *assumes* that this quantity of ‘gold’ amounts to 12 shillings, which under his usual hypothesis as regards the production conditions of the commodity-money contain 2 working days. The expositional shortcut adopted by Marx on this occasion should not obscure the fact that the quantity of ‘gold’ embodying as much labour as the presupposed set of means of production can only be calculated on the basis of the production methods of capital goods.

It is clear that, in this key example, Marx's does *not* determine the money price of output as postulated in the 'macro-monetary' interpretation, i.e. by taking the constant capital of 24 shillings as his 'primitive datum' and then proceeding in accordance with equations (3)-(4) of Moseley's model. More importantly, Marx's determination of the surplus value does *not* rely on presupposed sums of money to be invested in means of production and wage goods but is founded on precisely the set of 'data' (independent variables) that the traditional view attributes to him. It should also be noted that the same method of determining surplus value is adopted later on in a further example (Marx 1976, 9, pp. 327-28), where it is particularly evident that the constant capital expressed in 'gold' is *endogenously* derived from the given set of physically specified production inputs.¹¹ Moreover, the conception of money capital as endogenously derived from the given real wage and presupposed means of production reappears in the other two volumes of *Capital*. For instance, in Volume 2 Marx (1978, 18, p. 433) writes:

'Once the prices of the elements of production (means of production and labour-power) are given, the size of the money capital required to buy a certain quantity of these elements of production [...] is also determined. In other words, the capital value that has to be advanced is determined'

¹¹ In that example, Marx assumes that 10.000 pounds of yarn are produced in one week by employing 10.000 spindles, 10.600 pounds of cotton, 11 tons of coal plus a certain quantity of gas and oil. He then concludes – under the usual assumption that commodities are

where ‘prices’, at that stage of Marx’s analysis, stands for ‘*values* expressed in terms of money’. And in Volume 3, the *cost price* of the generic commodity – i.e. the total capital invested in the production of the commodity as estimated in money – is defined as the ‘purchase price which the capitalist has [...] paid for its production, i.e. the purchase price *determined by the production process itself*’ (Marx 1981, 1, p. 128; emphasis added).

In the light of the evidence presented so far, it seems indisputable that the quantities of money capital advanced in the individual industries are *not* taken as ‘primitive data’ either in Part 2 or in Part 3 of Volume 1, but are derived instead from the given real wage and technical conditions of production in accordance with the traditional view. This seems sufficient to refute the basic premise of the ‘macro-monetary’ interpretation, i.e. the claim that the money capital advanced in the productive sector is a fundamental ‘primitive datum’ in Marx’s determination of the social surplus value and the general rate of profits.

Moreover, Marx’s *endogenous* derivation of sectoral money capitals is also at variance with Moseley’s formulation of the price equations. Indeed, the endogenous derivation of such capitals accurately expounded in Volume 1 of *Capital*, and clearly echoed in the other two volumes, *cannot but be taken for granted* in the famous example of a five-sector economy that Marx (1981, 9, pp. 256-259) used to illustrate the determination of production prices.

exchanged against ‘gold’ according to the labour embodied – that the ‘constant part of the

As a result, the considerations put forward by Moseley to support the claim that the sectoral money capitals enter directly into the price equations as given sums of money appear quite weak. If we examine the sub-section of the paper discussing production prices, we see that the first argument provided by Moseley boils down to a mechanical extension of his basic premise to the capital of the individual industries. In particular, Moseley (2000, p. 297) asserts:

‘In Marx’s theory of prices of production, he did not suddenly adopt a different logical method, and take the physical quantities of means of production and wage goods as his initial givens. Instead, he *continued* to take as given the same quantities of money capital used to purchase the means of production and labor-power that he took as given in Volume 1, except in disaggregated quantities’ (emphasis added).

The second argument put forward by Moseley starts by pointing out (2000, pp. 301-302) that Marx denotes the ‘cost price’ of a commodity by the same letter in both the expression of the commodity’s *value* and the expression of the commodity’s *production price*. In his opinion, this indicates that the magnitude of the ‘cost price’ is independent of whether commodities are sold at their values or at their production prices, and therefore that the ‘cost price’ is regarded by Marx as a presupposed sum of money. This invariance in the formal expression of the cost price can, however, be seen more naturally as a manifestation of the inconsistency that,

value of the product’ amounts to £ 378.

according to the traditional view, undermines Marx's treatment of production prices.

Finally, Moseley offers a single quotation as *direct* confirmation of his interpretation. This quotation is drawn from the pages of Volume 3 of *Capital* where Marx discusses the implications of the divergence between values and production prices for the specification of the 'cost price' of commodities. The relevant part reads as follows:

'[E]ven if a commodity's cost price may diverge from the value of the means of production consumed in it, this error in the past is a matter of indifference to the capitalist. *The cost price of the commodity is a given precondition*, independent of his, the capitalist's, production, while the result of his production is a commodity that contains surplus-value, and therefore an excess value over and above its cost price' (Marx 1981, 9, p. 265; emphasis added).

Moseley (2000, p. 301) interprets the italicised phrase as stating that the cost price – i.e. the money capital invested in the commodity's production – is a 'given precondition' *in Marx's determination* of production prices. The context in which the phrase is framed suggests, however, that Marx is simply affirming that the cost price of the generic commodity appears as a given magnitude *to the individual capitalist* involved in the commodity's production. This alternative interpretation seems more plausible, especially when the passage under discussion is compared with the similar statements

appearing subsequently in the chapter addressing the ‘illusion’ created by competition.¹²

4. Assessing the analytical limitations of Moseley’s construction

In the foregoing section we argued that Moseley’s ‘macro-monetary’ interpretation of Marx’s theory is hardly tenable. In this section we shall point out that the determination of the profit rate and production prices presented by Moseley, as summarised in equations (3)-(7) above, is also subject to significant limitations. In order to clarify this point, we shall apply Moseley’s theoretical construction to a simple but quite general case.

Let us assume that in the economy a given sum of money \bar{M} is advanced by capitalists, that a given component \bar{C} of \bar{M} constitutes the aggregate constant capital, and that the residual component \bar{V} is the aggregate variable capital used to hire a given quantity \bar{L} of current labour. Following Moseley, we specify neither the physical set of capital goods on which \bar{C} is spent nor the physical social output that will be produced by the current labour \bar{L} . We assume, however, that the production processes operating in the economy are such that (i) only circulating capital goods are employed in each industry, and (ii) all the capital goods used up are reproduced in kind. The first assumption is introduced for the sake of

¹² Consider, for example, the following passage:

‘[I]t is completely immaterial for the individual capitalist whether commodities are sold at their values or not [...] It is a matter of complete indifference to him whether he realizes the value and surplus-value contained in the commodity on its sale or not, as long as he extracts from the price the customary profit of enterprise, or a greater profit, above *the cost price as individually given for him* by wages, interest and rent’ (Marx 1981, 50, pp. 1012-13; emphasis added).

simplicity. The second, which is not particularly restrictive, implies that at the end of the production cycle a physical *net* output will emerge in the economy. We shall denote this unspecified net output by the vector z and assume that $z \neq \mathbf{0}$.

Under these hypotheses, it is clear that at the end of the production cycle the money receipts from the sale of the net social output z will constitute the ‘fund’ allowing both the repayment of the aggregate variable capital \bar{V} and accrual of profits to the capitalists. The following identity must accordingly hold:

$$\bar{V} + S \equiv pz \tag{8}$$

where the vector p denotes the money prices of commodities and S the social surplus value (aggregate profits) expressed in terms of money.

Let us now apply Moseley’s determination of the general rate of profits to the economic system under consideration. Since the total money capital \bar{M} is given, we need only determine the magnitude of the total money profits S accruing to capitalists. According to Moseley, these aggregate profits should be calculated by subtracting the given variable capital \bar{V} from the ‘new money value’ $MVA = (\bar{V} + S)$, where the latter is in turn determined by the equation

$$\bar{V} + S = m \bar{L} \tag{9}$$

where the given coefficient m denotes the quantity of commodity-money that embodies one labour unit (cf. equations (4)-(5) of Section 2). It should be recalled, however, that in the economy under consideration the ‘new money value’ ($\bar{V} + S$) is nothing but the money fund resulting from the sale of the net social output z . Taking this into account, we realise that the magnitude of the ‘new money value’ ($\bar{V} + S$) $\equiv pz$ is determined in equation (9) *under the assumption* that the net social output is exchanged against the commodity-money according to the labour embodied. To see this, note that the net output z must embody as much labour as is currently employed in the economy, i.e. \bar{L} units, and that exactly the same quantity of labour is contained in the sum of money $m\bar{L}$ appearing in the right-hand side of (9).

The foregoing remarks reveal a serious weakness of Moseley’s construction. We have just seen that Moseley determines the ‘new money value’, and therefore the total money profits and the corresponding general profit rate, by assuming *a priori* that the exchange ratio of two particular commodities – the composite commodity net social output and the commodity-money – coincides with the ratio of the respective quantities of labour embodied. This crucial hypothesis appears wholly artificial, however, when it is admitted that individual commodities cannot generally exchange in proportion to their labour values, there being in that case no reason to expect that any composite commodity will tend to be exchanged against the commodity-money according to the labour embodied.

We can therefore conclude that the determination of the general rate of profits presented by Moseley does not rest on solid foundations. And since

the profit rate enters into Moseley's price equations as a predetermined variable, this conclusion extends to the determination of production prices.

5. Conclusions

This note critically evaluates the 'macro-monetary' interpretation of Marx's theory of distribution and production prices put forward by Moseley in opposition to the traditional view rooted in the work of Bortkiewicz. Attention is focused in particular on the basic premise of that interpretation, i.e. the claim that the inputs of constant capital and variable capital enter into Marx's theory as assumed sums of money. In this regard, it is pointed out that in the relevant parts of *Capital*, the quantities of money capital advanced in the different industries are by no means 'presupposed' but endogenously derived from the given real wage and production methods in use. It is accordingly argued that the evidence from Marx's writings is sharply at variance with Moseley's proposed interpretation and instead supports the traditional view.

It then goes on to highlight the analytical limitations of the theoretical construction that Moseley attributes to Marx. Focusing on the case of economies in which the capital goods used up are replaced in kind, we point out that Moseley's determination of the general profit rate hinges crucially on an unwarranted assumption concerning the valuation of the net social output in terms of the commodity-money, and is therefore devoid of firm foundations. Moreover, this weakness in the analysis of distribution undermines Moseley's determination of production prices, where the rate of profits is taken as a predetermined parameter.

In view of the discussion developed in this note, we therefore maintain that Moseley's attempt to challenge the traditional view of Marx does not prove successful.

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