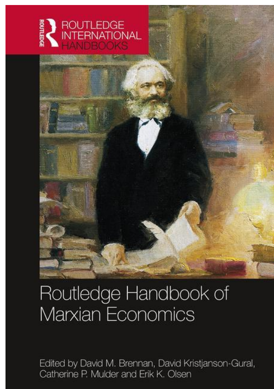
This article was downloaded by: *10.3.97.143*
On: 06 Dec 2023
Access details: *subscription number*
Publisher: *Routledge*
Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: 5 Howick Place, London SW1P 1WG, UK



Routledge Handbook of Marxian Economics

David M. Brennan, David Kristjanson-Gural, Catherine P. Mulder, Erik K. Olsen

Capital

Publication details
https://www.routledgehandbooks.com/doi/10.4324/9781315774206.ch9
Fred Moseley
Published online on: 20 Mar 2017

How to cite :- Fred Moseley. 20 Mar 2017, *Capital from:* Routledge Handbook of Marxian Economics Routledge
Accessed on: 06 Dec 2023
https://www.routledgehandbooks.com/doi/10.4324/9781315774206.ch9

PLEASE SCROLL DOWN FOR DOCUMENT

Full terms and conditions of use: https://www.routledgehandbooks.com/legal-notices/terms

This Document PDF may be used for research, teaching and private study purposes. Any substantial or systematic reproductions, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The publisher shall not be liable for an loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

Downloaded By: 10.3.97.143 At: 06:42 06 Dec 2023; For: 9781315774206, chapter9, 10.4324/9781315774206.ch9

9 CAPITAL

Fred Moseley

The title of Marx's book is of course *Capital*, thereby clearly indicating the centrality of the concept of *capital* in his theory of capitalism. As Marx put it in the *Grundrisse*, the first draft of *Capital*:

> The exact development of the *concept of capital* [is] necessary, since it [is] the *fundamental concept of modern economics*, just as capital itself, whose abstract, reflected image [is] its concept …, [is] the *foundation of bourgeois society.*
>
> *(Marx 1973, 331; brackets in the text; emphasis added, including in the quotations below)*

In *Capital*, Marx introduced his central concept of capital in Part 2 of Volume 1, which is entitled "The Transformation of *Money* into *Capital*." Chapter 4 is entitled "The General Formula for *Capital*," and this general formula for capital is expressed symbolically as:

$$M - C - M' \qquad \text{where } M' = M + \Delta M$$

in which M represents the initial money capital advanced to purchase means of production and labor-power, C represents commodities, M' represents the final money capital recovered through the sale of commodities, and ΔM represents the increment of money that emerges at the end of this circuit.

In this chapter, Marx defined capital as follows:

> *More money* is finally withdrawn from circulation than was thrown into it in the beginning. The cotton originally bought for £100 is for example resold at £100 + £10, i.e. £110. The complete form of the process is therefore *M – C – M'*, where *M' = M +* Δ*M*, i.e. the original sum [of money] advanced plus an increment [of money]. This increment or excess over the original value I call '*surplus-value*'. The value originally advanced, therefore, not only remains intact while in circulation, but increases its magnitude, adds to itself a surplus-value, or is valorized. And this movement converts it [money] into *capital*.
>
> *(Marx 1977, 251–2)*

Downloaded By: 10.3.97.143 At: 06:42 06 Dec 2023; For: 9781315774206, chapter9, 10.4324/9781315774206.ch9

We can also see from this passage that surplus-value is defined as ΔM, or the increment of money that emerges at the end of the circuit of capital. The production of surplus-value is the main purpose of capitalist production, and is the most important phenomenon to be explained by Marx's theory of capitalism (or any theory of capitalism). The general formula for capital focuses Marx's theory on this all-important question: where does the total ΔM come from and what determines its magnitude?[1] Most of Volume 1 is devoted to this central question for the economy as a whole.[2]

Later in the chapter, Marx summarized his definition of capital as follows:

> Value therefore now becomes value in process, *money in process*, and, as such, *capital*. It comes out of circulation, enters into it again, preserves and multiplies itself within circulation, emerges from it with an increased size, and starts the same cycle again and again. *M–M′, 'money which begets money'*, such is the description of *capital* given by its first interpreters, the Mercantilists.
>
> *(Marx 1977, 256)*

In an earlier draft of this chapter in the *Manuscript of 1861–63*, Marx began with a very clear question, which is the main question that his theory is about: *How does money become capital?* (Marx and Engels 1988, 9).[3] And a few pages later, Marx presented a summary definition of capital similar to the passages from Volume 1 quoted above:

> Value (*money*) resulting from circulation as adequate exchange value (money), taking on an independent form [money], but entering again into circulation, preserving and multiplying (increasing) itself in and through it, is *capital*.
>
> *(Marx and Engels 1988, 12)*

Thus we can see that Marx's concept of capital is clearly and emphatically defined in terms of *money*, as *money that becomes more money.* This definition of capital in terms of money obviously also applies to the two components into which the initial money capital advanced is divided—*constant capital* (the initial money capital advanced to purchase means of production) and *variable capital* (the initial money capital advanced to purchase labor-power) (Marx 1977, Chapter 8). Algebraically, M = C + V, all in terms of money (C here refers to constant capital, not to commodities as in the general formula for capital). Marx's distinction between constant capital and variable capital follows from the labor theory of value, according to which variable capital (or rather the labor-power purchased with variable capital) is the only source of surplus-value and constant capital only transfers its previously existing money value to the price of the product.

One common interpretation of Volume 1 is that it is only about labor-times, not money or prices; i.e. that all the variables in Volume 1 refer to quantities of labor-time, and none refer to quantities of money (e.g. Sweezy 1942; Steedman 1977). According to this "two-system" interpretation, Marx's theory deals with money and prices only in the "price system" of Volume 3. Volume 1 is about the "value system," which is only in terms of labor-times. Even the quantities of *capital* (constant capital and variable capital) in Volume 1 are often interpreted to refer to quantities of labor-time (embodied in the means of production and means of subsistence, respectively).[4] I argue that this view is a fundamental misinterpretation of Volume 1, which loses sight of the essential *monetary nature of capital* in capitalist production and in Marx's theory of capitalism. Money is derived in the very first chapter of Volume 1 (Section 3), as the *necessary form of appearance of the substance of value which is*

Downloaded By: 10.3.97.143 At: 06:42 06 Dec 2023; For: 9781315774206, chapter9, 10.4324/9781315774206.ch9

abstract labor, and from then on Marx's theory is about quantities of money that represent and thus are determined by quantities of labor-time. The core concept of Volume 1 is *capital*, and capital is defined in terms of *money* (that becomes more money). The main purpose of Volume 1 is to explain how this all-important *monetary* phenomenon happens.

Chapters 5 and 6 of Volume 1 argue that ΔM is possible (as a regular general feature of a capitalist economy) only because capitalists are able to purchase labor-power on the market and then utilize labor-power in production where it produces more value than it cost. Thus the existence of wage-labor is a necessary condition for ΔM and thus for capital.

Marx's concept of capital is sometimes interpreted as a "social relation." In my view, this formulation is only partially correct. I would say that capital is the process through which money becomes more money, but this process *requires* wage-labor, i.e. requires the social relation between capital and wage-labor as a precondition. So it is more correct to say that capital *requires* the social relation of wage-labor than to say that capital *is* a social relation. The latter formulation does not explicitly include the defining characteristic of Marx's concept of capital—money becoming more money.

Marx's concept of capital in term of money is very different from the concept of capital in neoclassical economics, which is defined in terms of heterogeneous *physical goods* – as quantities of material inputs to production (machinery, equipment, buildings, raw materials, etc.); i.e. "capital *goods*" in a production function. Thus capital is analyzed in neoclassical economics as "goods used to produce other goods," rather than as "money used to make more money," and this neoclassical concept is a general concept that applies to all types of modes of production, not just capitalism.

Marx criticized a similar general and physical concept of capital of the classical economists:

> Capital would be only a new name for a thing as old as the human race, since every form of labour, including the least developed … presupposes that the product of prior labour is used as means for direct, living labour.
>
> *(Marx 1973, 258)*

Marx's concept of capital, on the other hand (money that becomes more money) is a historically specific concept that applies primarily to the capitalist mode of production.[5]

In Chapter 48 of Volume 3, Marx criticized a similar ahistorical concept of capital in the form of the "Trinity Formula": capital–profit, land–rent, and labor–wages. In this formula, capital is combined with land and labor, which are inputs to production in all modes of production. In this way, capital is itself implicitly assumed to also be an input in all modes of production, and in effect to be "only another name" for the physical means of production. Marx's main point in this chapter is that capital is *not* "only another name" for means of production; means of production function as a particular form of capital only within the capitalist mode of production.

> The first striking thing about this formula is that alongside capital, this form of an element of production belonging to a specific mode of production, … we have ranked without further ado: the earth, on the one hand, and labour on the other, two elements of the actual labour process, which are material elements of any process of production and have nothing to do with its social form.
>
> *(Marx 1981, 955)*

Downloaded By: 10.3.97.143 At: 06:42 06 Dec 2023; For: 9781315774206, chapter9, 10.4324/9781315774206.ch9

The neoclassical definition of capital in terms of heterogeneous "capital goods" is the reason why neoclassical economics has an insoluble "aggregation problem"—because different kinds of physical means of production cannot be meaningfully added together. Marx's concept of capital, on the other hand, which is defined in terms of money, has no such "aggregation problem" because money is homogeneous by nature; there is no problem adding up quantities of money capital across the economy.

The Circuit of Money Capital

The expanded form of Marx's circuit of money capital is the well-known symbolic expression:

$$M - C \ldots P \ldots C' - (M + \Delta M)$$

where P stands for the production process. We can see that this circuit of money capital takes place in *two "spheres,"* the sphere of *circulation* and the sphere of *production*, and consists of *three phases*, consecutive in time: (1) the *advance* of money capital to purchase means of production and labor-power in the sphere of circulation, prior to production; (2) the *production* process, in the sphere of production; and (3) the *recovery* of money capital through the sale of commodities after production, again in the sphere of circulation.

Marx's circuit of money capital refers to a *real process*, which takes place in *real historical time*. Capital exists first in the form of money advanced in the sphere of circulation, then in the form of labor-power and the prices of the means of production in the sphere of production, then in the form of the prices of the commodities produced at the end of the production process, and then finally back again in the form of money recovered, including more money than was originally advanced at the beginning of this real historical process. This process takes a certain amount of real time from the advance of money capital to the recovery of more money capital. This temporal aspect of the circuit of money capital was succinctly expressed by Marx as follows: "*Before* production, we had a capital of *£500*. *After* production is over, we have a capital of *£500* plus a value increment of *£100*" (Marx 1981, 124).[6] Marx's theory explains how this all-important monetary phenomenon happens.[7]

The temporal nature of Marx's circuit of money capital is also evidenced by his emphasis throughout *Capital* on the distinction between the "old value" (or "transferred value") and the "new value" components of the price of commodities. "Old value" exists at the beginning of the circuit of money capital in the form of the initial money constant capital advanced to purchase means of production and in the form of the price of these means of production. This previously existing "old value" is transferred to the price of the output. The quantity of "transferred value" is determined by and cannot exceed the quantity of "old value" that previously existed. On the other hand, "new value" did not previously exist at the beginning of the circuit, but is instead the result of the labor in the current period, and hence is also the source of surplus-value or ΔM that is produced in the current period, and that comes to exist at the end of this period.

This circuit of money capital is the logical framework of Marx's theory of surplus-value. The main goal of Marx's theory is to explain how this all-important phenomenon happens, i.e. how the initial M at the beginning of this circuit becomes (M + ΔM) at the end of the circuit. The "general formula for capital" is *not* just incidentally introduced in Chapter 4 of Volume 1, and then plays no essential role in the rest of the theory; instead the expanded

Downloaded By: 10.3.97.143 At: 06:42 06 Dec 2023; For: 9781315774206, chapter9, 10.4324/9781315774206.ch9

circuit of money capital is the general logical framework of Marx's theory for the rest of the three volumes of *Capital*. Marx summarized this general framework as follows in the Introduction to Part 7 of Volume 1:

> The transformation of a sum of *money* into means of production and labor-power is the first phase of the movement undergone by the quantum of value which is going to function as *capital*. It takes place in the sphere of circulation. The second phase of the movement, the process of production, is complete as soon as the means of production have been converted into commodities whose value exceeds that of their component parts, and therefore contains the value originally advanced plus a surplus-value. These commodities must then be thrown back into the sphere of circulation. They must be sold, their value must be realized in *money*, this money must be transformed once again into *capital*, and so on, again and again. This cycle, in which the same phases are continually gone through in succession, forms the *circulation of capital*.
>
> *(Marx 1977, 709)*

Keynes once referred to Marx's M – C – M' circuit of capital as a "pregnant observation," and Keynes agreed with Marx that the goal of entrepreneurs in not "more product," but is instead "more money," and that a theory of an "entrepreneurial economy" should be in terms of money variables, not real variables. (Keynes 1979, 81–82) Keynes did not seem to realize that Marx's M – C – M' circuit of capital is not just a "pregnant observation," but is instead the general logical framework for Marx's theory. Unfortunately, Keynes did not adopt Marx's M – C – M' framework in his own theory, but instead adopted an aggregate supply / aggregate demand framework, in which aggregate supply is essentially aggregate costs, and costs include the prevailing rate of profit as a given. Thus ΔM is hidden as a "cost" in Keynes' theory (as it is in most of neoclassical economics) and is transformed in effect into a part of M (!), and no explanation of the all-important ΔM is provided by Keynes' theory.

Marx's logical framework of the circuit of money capital is also very different from the framework of Sraffa's theory, which consists instead of a input-output matrix in terms of *physical* quantities, a labor input vector, and a system of simultaneous equations based on these physical givens.[8] Sraffa's logical framework is a 'circular flow of production,' by which is meant the circular flow of physical inputs and outputs, not the circular flow of quantities of money capital. Sraffa's theory is not a theory of ΔM, but is instead a theory of relative prices that reproduce the initial given physical quantities of inputs.

In order to compare Sraffa's logical framework with Marx's framework, Sraffa's framework could be represented symbolically as follows:

$$Q \ldots P \ldots C'$$

where Q stands for the physical quantities of means of production and quantities of labor.[9] The most striking difference of Sraffa's framework (compared to the Marx's framework) is the *complete absence of money*, especially the absence of ΔM, the most important characteristic of capitalist economies. The first phase of the circulation of money capital in the sphere of circulation—the advance of money capital to purchase means of production and labor-power—is missing altogether. It is as if no money capital is advanced in capitalism to purchase means of production and labor-power. But this is not the case; money capital is

Downloaded By: 10.3.97.143 At: 06:42 06 Dec 2023; For: 9781315774206, chapter9, 10.4324/9781315774206.ch9

advanced in capitalism, in definite quantities, and this quantity of money capital advanced must be recovered before there can be any surplus-value (ΔM).

A controversial issue with respect to the circuit of money capital in Volume 1 is the following: do the quantities of money capital in Volume 1 refer in principle to the *actual* quantities of money constant capital and variable capital in circulation in the real capitalist economy that are equal (in long-run equilibrium) to the prices of production of the means of production and means of subsistence, *or* do the quantities of money capital in Volume 1 refer to *hypothetical* quantities of money capital that are proportional to the labor-values of the means of production and means of subsistence. The prevailing interpretation (e.g. Sweezy 1942; Steedman 1977) is the latter—that the quantities of money capital in Volume 1 are *hypothetical* quantities, which later have to be transformed from hypothetical quantities to actual quantities in Volume 3. I (and others) argue, to the contrary, that the quantities of money capital in Volume 1 are *actual* quantities of money capital from the beginning, i.e. from Chapter 4 of Volume 1.[10] The "general formula for capital" refers in principle to the actual quantities of money capital in circulation in the real capitalist economy. As Marx expressed this point at the end of Chapter 4:

> M – C – M ' is in fact therefore the general formula for capital, in the form in which it *appears directly* in the sphere of circulation.
>
> *(Marx 1977, 257)*[11]

The main purpose of Volume 1 is to explain how the actual M at the beginning of the circuit of capital becomes the actual M+ΔM at the end of the circuit, not to explain a hypothetical ΔM that would later have to be transformed into the actual ΔM in Volume 3.

These different interpretations of the circuit of money capital have important implications for the alleged "transformation problem" in Marx's theory. According to the "hypothetical" interpretation of the circuit of money capital in Volume 1, there is a transformation problem in Marx's theory because these hypothetical quantities must be transformed into actual quantities in Volume 3. And the critics argue that Marx "failed" to make this necessary transformation from hypothetical value quantities to actual price quantities in Volume 3. On the other hand, according to the "actual" interpretation of the circuit of money capital in Volume 1, *there is no transformation problem in Marx's theory*, because the quantities of money capital in Volume 1 are actual quantities from the beginning, and the same actual quantities of money capital (disaggregated) are taken as given in the Volume 3 theory of the division of the actual total ΔM (determined in Volume 1) into individual parts (equal rates of profit across industries, commercial profit, interest, and rent). For an extensive elaboration of this "actual" interpretation of the circuit of money capital, see Moseley 2016.[12]

A related issue is the following: in the case of technological change and the consequent change in the prices of means of production that occurs between the time constant capital is advanced to purchase means of production and the time the output produced with those means of production is sold (especially for long-lasting machines and equipment), should the magnitude of constant capital that is taken as given at the beginning of the circuit of money capital in the theory of ΔM be the *historical* costs of the means of production at which the means of production were purchased in the past *or* should the magnitude of constant capital be the *current* costs of the means of production at which the same means of production could be purchased today? The prevailing interpretation is that in this case constant capital should be valued at the current cost of the means of production. On the other hand, the Temporal Single System Interpretation of Marx's theory (commonly abbreviated as TSSI) argues that the

Downloaded By: 10.3.97.143 At: 06:42 06 Dec 2023; For: 9781315774206, chapter9, 10.4324/9781315774206.ch9

constant capital should be valued at the original historical cost of the means of production (Kliman 2007). In my view, the textual evidence is strongly in favor of the current cost interpretation. For example, one of the counter-acting factors to the fall in the rate of profit discussed in Chapter 14 of Volume 3 of *Capital* is the "cheapening of the elements of constant capital":

> And related to what has been said is the *devaluation of existing capital* (i.e. of its material elements) that goes hand in hand with the development of industry. This too is a factor that steadily operates to stay the fall in the rate of profit …
>
> *(Marx 1981, 343)*

This controversy has important implications for the falling rate of profit, since it affects the magnitude of the constant capital in the denominator of the rate of profit, but it has no implications for the transformation problem, since the transformation problem has to do with the determination of prices of production in a given period of time, with technology and the prices of the means of production constant for this period.

All in all, I would say that the concept of capital and the circuit of money capital as the logical framework of Marx's theory have not received the attention they deserve in the Marxian literature, although this seems to be changing of late for the better, with emphasis on the monetary nature of Marx's concept of capital by Harvey (2010) and Heinrich (2004). It is hoped that going forward that Marxist economists will pay more attention to these key concepts in Marx's theory. The title of the book is *Capital*!

Notes

1 Marx once stated that, in the circuit of money capital, ΔM is the "most striking" feature which "leaps to the eye" (Marx 1978, 140).

2 Marx clarified in Chapter 5 (1977, 266–7) that his theory of ΔM in Volume 1 is in terms of industrial capital and abstracts from commercial capital and interest-bearing capital. In Volume 3, Marx further explained commercial profit and interest as deductions from the total surplus-value produced by industrial capital. These particular forms of capital provide further evidence that Marx's concept of capital is defined in terms of money since these particular forms are clearly quantities of money. These particular forms of capital are not discussed further here.

3 This volume contains a fairly complete draft of Parts 2–4 of Volume 1 of *Capital*, which has been published only in recent decades. It is very interesting and an important bridge between the first draft of Marx's theory of surplus-value in the *Grundrisse* and the final published versions. It was published for the first time in German in 1976 in the *Marx/Engels Gesamtausgabe* (MEGA), Volume II/3.1, and in English in 1988 in the *Collected Works of Marx and Engels*, Volume 30. After this draft of Volume 1, the rest of the *Manuscript of 1861–3* is mainly the *Theories of Surplus-Value* which had been previously published, but also contains a first draft of parts of Volume 3.

4 Unfortunately, Wolff, Roberts, and Callari, in their interpretation of the transformation problem (1984), adopt this interpretation of capital in terms of labor-time not only in Volume 1, but also in Volume 3.

5 The process $M \rightarrow M + \Delta M$ can also apply to non-capitalist economies (slavery, putting out system, usury), but Marx's theory is about this process in a capitalist economy.

6 See also Marx 1977, 256 and Marx and Engels 1988, vol. 33, 79 for similar "before … after" statements.

7 The "temporal single system" interpretation (TSSI) of Marx's theory (e.g. Kliman) has also emphasized that Marx's theory of the circuit of capital is in terms of real historical time.

Downloaded By: 10.3.97.143 At: 06:42 06 Dec 2023; For: 9781315774206, chapter9, 10.4324/9781315774206.ch9

8 Sraffa also assumed a given *wage share* of total income, which ranges from 0 to 1, and thus clearly is not the same as Marx's money variable capital advanced to purchase labor-power.
9 Sraffa (1960) has described this process as "the production of commodities by means of commodities" (the title of his book). However, it would be more accurate to describe it as "the production of commodities by means of *physical quantities*," since the physical inputs are not treated as commodities with already existing prices. Mark Blaug commented that Sraffa's theory should be called "The Production of Commodities Without Anything Called Capital" (Blaug 1996, 134); this would also be a good title.
10 Mattick 1991, Ramos 1998, and Moseley 2016.
11 Marx expressed the same point in the earlier draft of this chapter in the *Manuscript of 1861–3* mentioned above: "We first examined the form of capital in which it is directly presented or *appears for observation*" (Marx 1988, 20).
12 Wolff, Roberts, and Callari (1984) also argue there is no transformation problem in Marx's theory (i.e. that constant capital and variable capital are the same in the determination of both values and prices of production). However, as mentioned above, they define constant capital and variable as quantities of labor-time rather than as quantities of money.

References

Blaug, M. 1996. *Economic Theory in Retrospect*. Cambridge: Cambridge University Press.
Harvey, D. 2010. *A Companion Guide to Marx's* Capital. London: Verso.
Heinrich, M. 2004. *An Introduction to the Three Volumes of Karl Marx's* Capital. Translated by A. Locascio. New York: Monthly Review Press.
Keynes, J. M. 1979. *The Collected Writings of John Maynard Keynes*, Volume 29, *The General Theory and After: A Supplement*, edited by D. Moggridge. London: Macmillan.
Kliman, A. 2007. *Reclaiming Marx's Capital: A Refutation of the Myth of Inconsistency*. Lanham, MD: Lexington Books.
Marx, K. 1973. *Grundrisse*. London: Penguin Books.
——. 1977. *Capital*, Volume 1. New York: Random House.
——. 1978. *Capital*, Volume 2. New York: Random House.
——. 1981. *Capital*, Volume 3. New York: Random House.
Marx, K. and F. Engels. 1988. *Marx-Engels Collected Works*, Volume 30. New York: International Publishers.
Mattick, Jr., P. 1991. "Some Aspects of the Value-Price Problem." *International Journal of Political Economy* 21(4): 9–66.
Moseley, F. 2016. *Money and Totality: A Macro-Monetary Interpretation of Marx's Logic in* Capital *and the End of the 'Transformation Problem'*. Leiden: Brill.
——. Forthcoming. "Wolff and Resnick's Interpretation of Marx's Theory of Value and Surplus-Value: Where's the Money?" In *Marxism without Guarantees: Economics, Knowledge, and Class*, T. Burczak, R. Garnett, and R. McIntyre, eds. London: Routledge.
Ramos, A. 1998. "Value and Price of Production: New Evidence on Marx's Transformation Procedure." *International Journal of Political Economy* 28(4): 55–81.
Sraffa, P. 1960, *Production of Commodities by Means of Commodities: Prelude to a Critique of Economic Theory*. Cambridge: Cambridge University Press.
Steedman, I. 1977. *Marx After Sraffa*. London: New Left Books.
Sweezy, P. 1942. *The Theory of Capitalist Development*. New York: Monthly Review Press.
Wolff, R., A. Callari and B. Roberts. 1984. "A Marxian Alternative to the 'Transformation Problem'." *Review of Radical Political Economics* 16(2–3): 115–135.